

2 PROPOSED PROJECT AND PROJECT ALTERNATIVES

This chapter describes a reasonable range of project alternatives consistent with the requirements of the National Environmental Policy Act (NEPA), the California Environmental Quality Act (CEQA), and Tahoe Regional Planning Agency (TRPA) ordinances and procedures. Tahoe Transportation District (TTD) has been conducting an alternatives formulation and review process to identify potentially feasible alternatives for the project. The build alternatives carried forward for detailed evaluation and consideration in this joint Environmental Impact Report/Environmental Impact Statement/Environmental Impact Statement (EIR/EIS/EIS) have each been formulated to accomplish most of the basic objectives of the project discussed in Section 1.3, “Purpose, Need, and Objectives.”

2.1 NEPA, TRPA, AND CEQA REQUIREMENTS FOR ALTERNATIVES

Consideration of alternatives that would achieve the purpose and need for and the basic objectives of a project is required under NEPA and its regulations, CEQA and its guidelines, and TRPA Code of Ordinances and Compact. To aid informed decision-making and public participation, four build alternatives (Alternatives B through E) were developed that comply with these requirements and meet the underlying purpose and objectives of the project to varying degrees. TTD has designated Alternative B as the “locally preferred action,” because TTD believes Alternative B would best meet the objectives of the project and it emerged as the most supported alternative following public scoping. This Draft EIR/EIS/EIS also describes and evaluates the No Project/No Build alternative (Alternative A) to provide decision-makers and the public with an overview of what could reasonably be expected to occur if none of the build alternatives were approved and implemented. The alternatives evaluated in detail in this EIR/EIS/EIS are:

- ▲ Alternative A: No Build (No Project or No Action)
- ▲ Alternative B: Triangle
- ▲ Alternative C: Triangle One-Way
- ▲ Alternative D: PSR Alternative 2
- ▲ Alternative E: Skywalk

This chapter also describes various alternatives that were considered but eliminated from detailed evaluation, because they are either infeasible, do not meet most of the basic project objectives, or do not avoid or substantially lessen one or more of the potentially significant effects of other alternatives (see Section 2.5, “Alternatives Considered but Eliminated from Further Discussion”).

2.1.1 National Environmental Policy Act Requirements

The Council on Environmental Quality Regulations for Implementing NEPA Section 1502.14 requires that an EIS:

- ▲ explore and objectively evaluate all reasonable alternatives,
- ▲ discuss reasons for eliminating considered alternatives,
- ▲ consider each alternative in a level of detail that allows for comparative evaluation,
- ▲ include reasonable alternatives not within the jurisdiction of the lead agency,
- ▲ analyze the action alternative,
- ▲ identify the lead agency’s preferred alternative, and
- ▲ include appropriate mitigation measures not already included in the locally preferred action or build alternatives.

2.1.2 Tahoe Regional Planning Agency

Environmental Impact Statements are addressed in Article VII of the TRPA Compact, which requires that TRPA prepare and consider a detailed EIS before deciding to approve or carry out a project that would result in significant environmental effects. The EIS must study, develop, and describe appropriate alternatives to the recommended courses of action for any project that involves unresolved conflicts concerning alternative use of available resources.

2.1.3 California Environmental Quality Act

In accordance with Section 15126.6 of the State CEQA Guidelines, the alternatives analysis must:

- ▲ describe a range of reasonable alternatives for the project that could feasibly attain most of the basic objectives of the project, and would substantially lessen or avoid any of the significant effects of the project;
- ▲ focus on alternatives capable of avoiding or substantially lessening any of the significant environmental impacts of the project, even if they may be more costly or could otherwise impede some of the project's objectives; and
- ▲ evaluate the comparative merits of the alternatives.

In addition to the guiding principles for analysis of alternatives set forth above, the State CEQA Guidelines require that the environmental document evaluate a no project alternative (that is, the consequences of taking no action); identify alternatives that were initially considered but then eliminated from detailed evaluation, providing the reasoning for their dismissal; and identify the “environmentally superior alternative.” In addition, CEQA Guidelines Section 15126.6(f)(2)(A) requires that the analysis of alternatives identify whether any of the potentially significant effects of the project would be avoided or substantially lessened by placing the project in another feasible location. Accordingly, this document includes a discussion of potential off-site alternatives that were considered but rejected for detailed evaluation and the reasons for their rejection (see Section 2.5, “Alternatives Considered but Eliminated from Further Discussion”).

This document provides comparable detail in the analysis of the alternatives. A reasonable range of feasible alternatives is presented for public review. The alternatives described and evaluated in detail in this document include variations on alignments, intersection configurations, and directions of traffic flow of US 50 and local streets. TTD, TRPA, and FHWA will select the alternative that best meets the project purpose and basic project objectives, while taking into account impacts on the human and physical environments and the estimated construction and operational costs.

2.2 REGIONAL AND LOCAL SETTING

The US 50/South Shore Community Revitalization Project is located in Douglas County, Nevada and in the City of South Lake Tahoe in El Dorado County, California. The build alternatives evaluated herein would either realign US 50 or would involve the construction of an elevated outdoor, decked public area located above the current US 50 alignment in the tourist core near the resort-casinos core.

For the purposes of this document, the “project site” is generally defined as extending from the intersection of US 50 and SR 207 to approximately 0.25 miles west of the intersection of US 50 and Pioneer Trail. The “project site” encompasses the infrastructure footprint and the abutting land to contain the potential construction disturbance areas of any of the alternatives. It is aligned along the existing routes of US 50 and Lake Parkway, and includes portions of the Rocky Point residential neighborhood west of the Heavenly

Village Center. To the southeast of the project site, the terrain rises quickly toward the East Peak. Edgewood Creek, Golf Course Creek, and two unnamed drainages cross the project site (Exhibit 2-1).

The “study area” of the project is a larger area surrounding the project site that is intended to capture the extent of potentially significant environmental impacts that may occur as a result of one or more of the alternatives. It is located between the foot of East Peak on the southeast and the Lake Tahoe shoreline on the north. To the east and west, the study area extends approximately one block beyond the project site boundary. The terrain within the study area slopes gently from the southeast toward the shore of Lake Tahoe. The study area contains the entire tourist core, including the resort-casinos of Stateline and Heavenly Village of South Lake Tahoe; commercial land uses to the east and west along US 50; residential and commercial land uses north of the tourist core; large portions of Van Sickle Bi-State Park and adjacent forest; and the Rocky Point neighborhood west of Heavenly Village Center (Exhibit 2-1).

Existing US 50, or Lake Tahoe Boulevard, bisects the tourist core areas of Stateline, Nevada and South Lake Tahoe, California, and is one of the most densely developed areas within the Lake Tahoe Basin. On the Nevada side, the tourist core includes four major resort-casinos and a public golf course. On the California side, amenities include: many small to mid-sized hotels and motels; the Heavenly Village complex that includes a mix of tourist accommodations, restaurants, retail shops, a movie theater, and the lower terminal of the Heavenly Mountain Resort Gondola; the Heavenly Village Center that includes restaurants, retail shops, and the Raley’s supermarket; and the commercial area located at the junction of US 50 and Pioneer Trail and extending to Ski Run Boulevard. The areas to the southeast of the Heavenly Village Center and between the shore of Lake Tahoe and West Lake Parkway include a mix of residences, small motels, and some commercial establishments. The historic Tahoe Meadows subdivision located to the southwest of the Pioneer Trail/US 50 intersection is a low density residential development separated from US 50 by a fence and Linear Park, which includes a shared-use path and landscaping features.

Outdoor recreational opportunities in the vicinity of the project site include Lakeshore Beach and Marina, Edgewood Golf Course, the Nevada Stateline-to-Stateline Bikeway (South Demonstration Project), Nevada Beach and Rabe Meadow, Kahle Community Center, Van Sickle Bi-State Park, Heavenly Mountain Resort, and Ski Run Marina. The South Tahoe Greenway Shared-Use Trail is a planned path that would extend from Van Sickle Bi-State Park to the Lake Tahoe Community College and Sierra Tract; initial phases of construction have begun west of Van Sickle Bi-State Park. These recreation site are near enough to the tourist accommodations to be accessed by foot, however the limited connectivity of pedestrian facilities and the lack of way-finding signage make this a challenge.

Currently, the majority of traffic moving through the tourist core area uses US 50. Within the project site limits, US 50 is a four-lane arterial with a continuous two-way left-turn median lane that transitions to dedicated left-turn pockets at major intersections. On the eastern side of the project site, Lake Parkway and Montreal Road (which is the continuation of Lake Parkway to the south from Heavenly Village Way) are two-lane (one lane in each direction) roadways.

Also on the eastern side of the project site, Moss Road and Echo Road are approximately 0.2-mile-long streets that run perpendicular to US 50 between Pioneer Trail and Lake Parkway/Montreal Road through a predominantly residential area (single-family homes and multi-family complexes) just west of the Heavenly Village Center. Motels, businesses, and residences are located adjacent to Pioneer Trail in this area. Local roadways (i.e., Echo Road, Moss Road, Primrose Road, Chonokis Road, and Glen Road) in this residential neighborhood are favored by commuters and increasing numbers of visitors as a cut-through option to avoid traveling through the congested US 50 tourist core.

Exhibit 2-1 shows the project site and study area boundaries, the roadway network, and surrounding features.

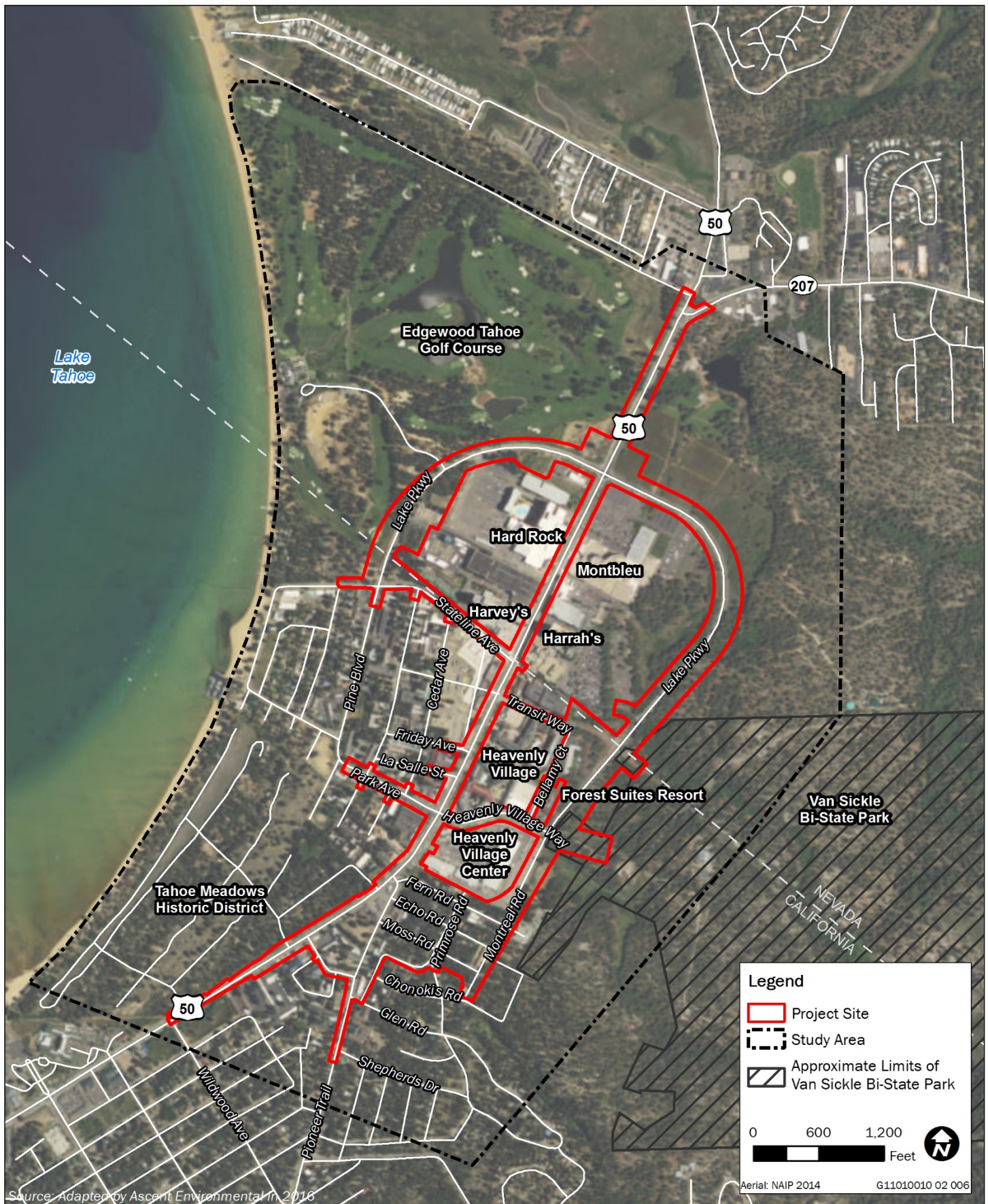


Exhibit 2-1

Project Site and Study Area Location

2.3 COMMON FEATURES OF ALTERNATIVES B THROUGH D

Alternatives B, C, and D are three build alternatives that provide for the realignment of US 50 from a point just west of the Pioneer Trail/US 50 intersection to the point where Lake Parkway meets US 50 in Nevada. Exhibits 2-2 through 2-4 provide an overview of the realignment of US 50 associated with Alternatives B through D and the related intersection improvements. More detailed preliminary engineering drawings for the transportation improvements associated with each of these alternatives are included in Appendix B.

In addition to the roadway realignment, all of the realignment alternatives (Alternatives B through D) would also include a new pedestrian bridge over the new US 50 alignment providing a connection between the tourist core and Van Sickle Bi-State Park, enhanced bicycle and pedestrian facilities and connectivity, enhanced transit features, environmental improvements, housing and business displacement, relocation assistance for displacees, and the potential for new mixed-use developments that could accommodate those that would be displaced. These common elements are described in more detail below.

2.3.1 Replacement Housing

TTD has received comments from the public expressing concern regarding the lack of housing available to residents displaced by the project, with a particular emphasis on the limited availability of affordable housing. In response to these concerns, Alternatives B, C, and D have been revised to enhance TTD's commitment to providing replacement housing for displaced residents. TTD has formalized their commitment with the approval of guiding principles for the development and implementation of the US 50 South Shore Community Revitalization Project (TTD 2016). These principles are summarized in this section.

The acquisition process of properties displaced by the project, including those properties potentially displaced by the mixed-use development, would be conducted in a manner consistent with the requirements of the federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended ("Uniform Act"). All eligible residents directly affected by the project would be relocated fairly and equitably in accordance with the federal Uniform Act. Existing developed and occupied real estate would not be removed until project construction is funded and residential and business relocation is completed. Furthermore, construction of replacement housing would be completed before removing existing housing and constructing the transportation improvements in California so that residents displaced by the project may be relocated to the newly constructed housing if they so choose during the relocation process.

Alternatives B, C, and D would construct an equal number of housing units as replacement for eligible residential units displaced by the project. TTD would replace all multi-family and single-family residential units that it acquires for road right-of-way purposes with multi-family residential units, where TTD is able to acquire the owner's development right as part of the acquisition. The replacement housing would include deed-restricted low-income and moderate-income housing to replace those displaced by the project. All of the replacement housing would be deed-restricted such that the housing units must be used for full-time residents and may not be used as second homes or for vacation rental use.

As part of the property acquisitions for the project, TTD would acquire the TRPA commodities associated with the properties, including residential and tourist accommodation unit (TAU) allocations, and commercial floor area (CFA). TTD would reserve half of the TAU commodities acquired for potential conversion to CFA should that be needed to attract a public-private partnership for the mixed-use commercial and residential development sites. The other half of the TAUs acquired would be used for any additional or future transit-oriented development (TOD) housing project(s) addressing South Shore needs related to deed restricted low-income, moderate-income, and market rate housing for full-time residents (not as second homes or for vacation rental use) in designated Town Centers. If the reserved half for possible CFA conversion is not needed, then it would be included in any additional or future TOD residential development project(s) as described.

TTD's preferred location for replacement housing would be within the project site limits, specifically within the mixed-use redevelopment sites identified in Exhibits 2-9 and 2-11 below. This is consistent with the feedback TTD has received from meetings with affected residents. However, if development of these sites is not feasible, TTD would construct replacement housing elsewhere in the South Shore area and the potential mixed-use development on these three sites would not occur. As further described in Chapter 3, "Approach to the Environmental Analysis," construction of replacement housing within one of the three mixed-use development sites identified in Exhibits 2-9 and 2-11 would require subsequent environmental review at a project level. Replacement housing constructed outside of these three sites would also require project-level environmental review.

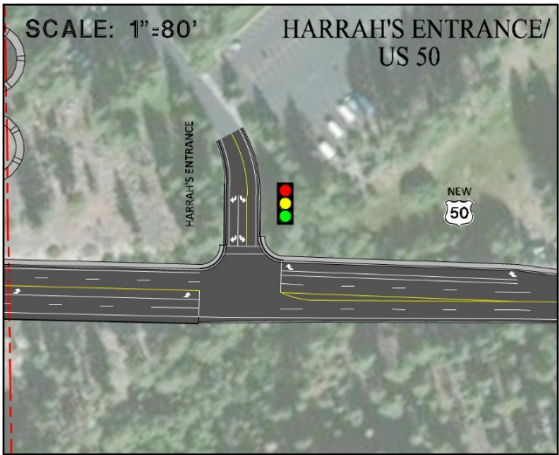
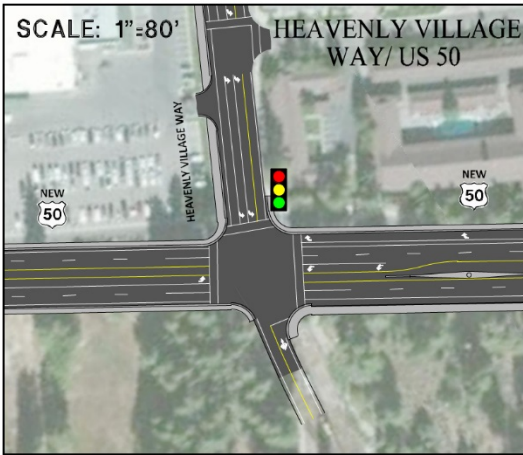
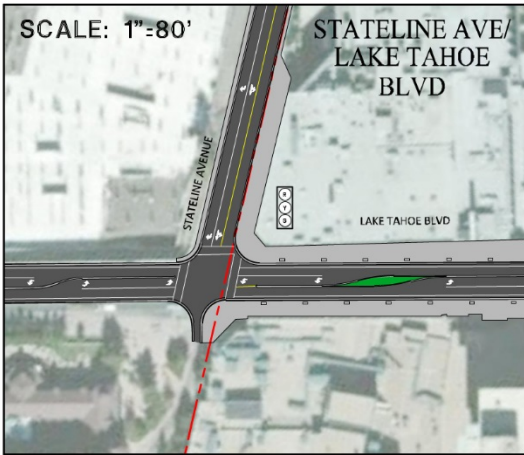
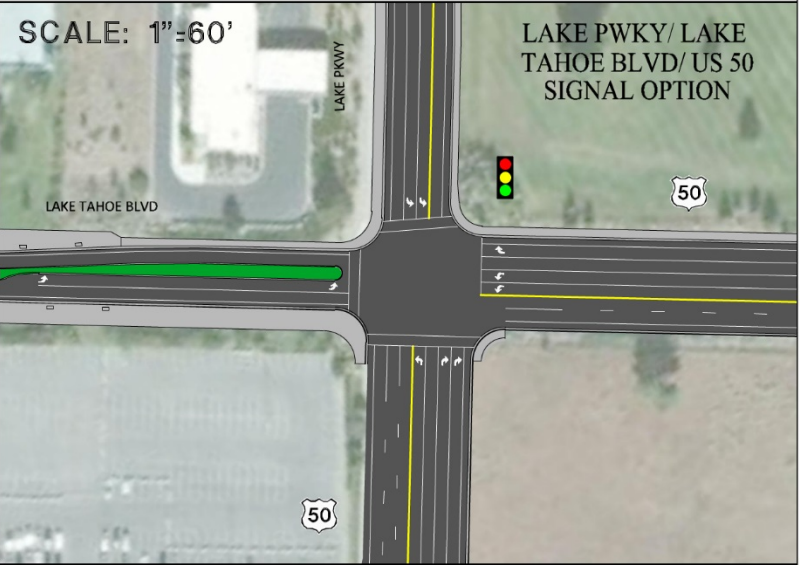
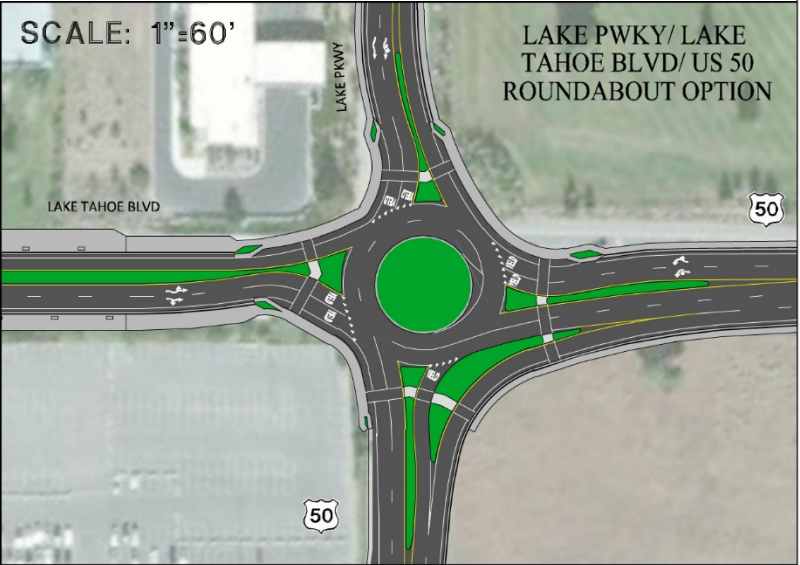
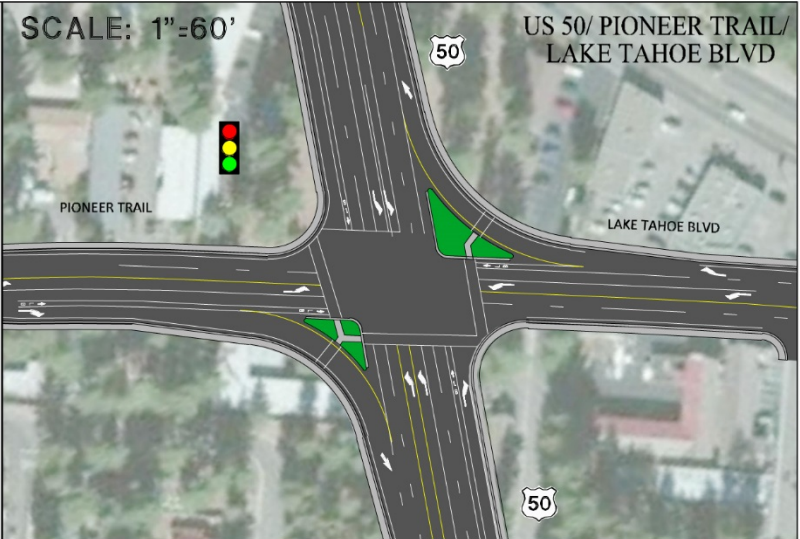
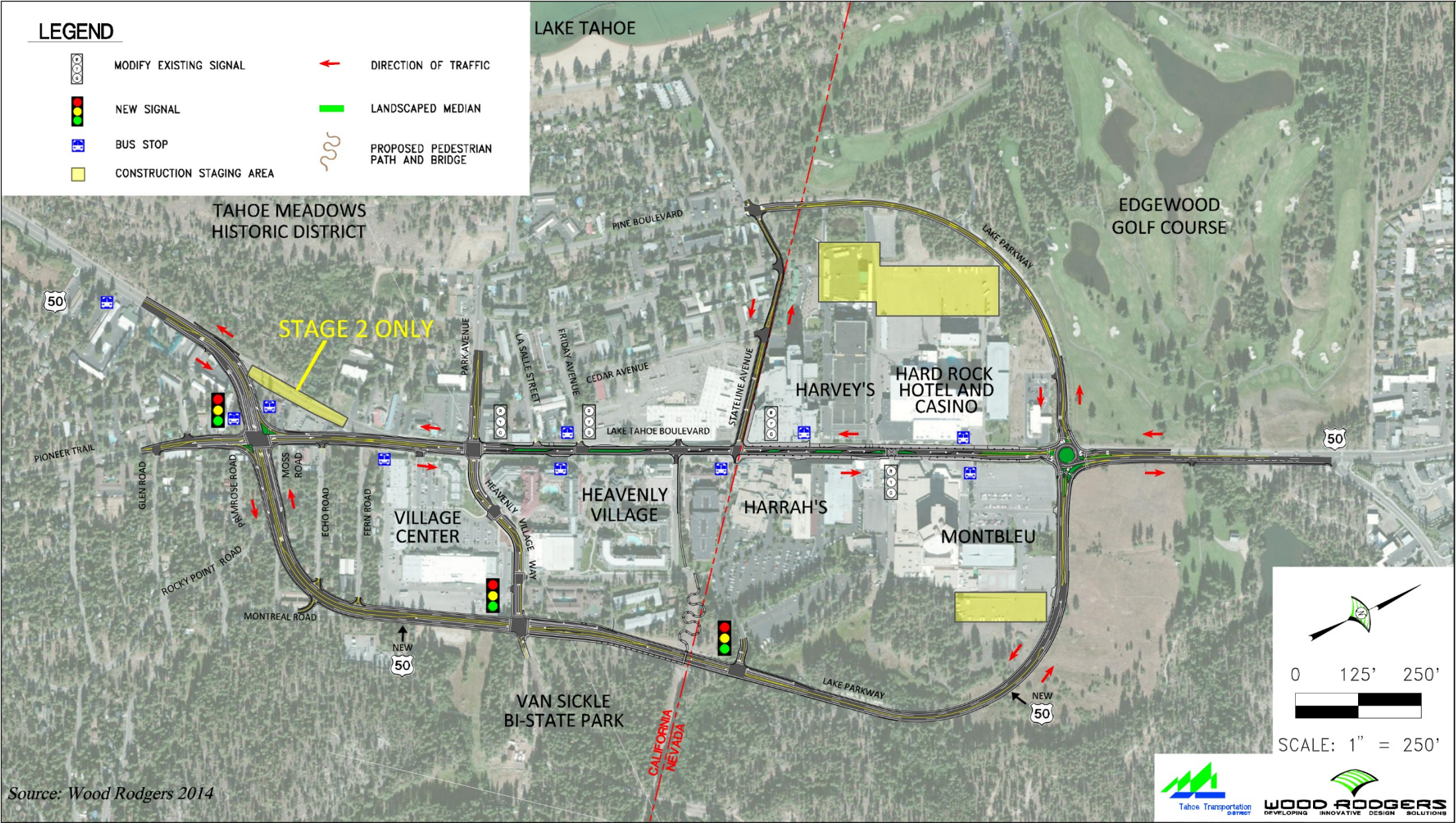
The maximum number of housing units that would be displaced by Alternatives B, C, and D are identified in Tables 2-2 and 2-4, below. The final number of displaced housing units would be determined at the final design stage of the project.

The new replacement housing constructed as part of the project prior to groundbreaking activities for transportation improvements in California would be considered "housing of last resort" as described in 49 CFR 24.404. For the purposes of constructing the transportation improvements associated with the project, in accordance with 49 CFR 24.204, TTD cannot displace persons from their residences until comparable replacement housing is made available. Construction of new replacement housing would be necessary to provide comparable replacement housing to displaced residents for the project to move forward, because there is a limited supply of comparable housing in the South Shore area. Some of the features that the comparable replacement housing (also referred to as "housing of last resort") must include, but are not limited to, are the housing unit must be:

- ▲ constructed to meet local housing and occupancy codes;
- ▲ functionally equivalent to the displaced housing;
- ▲ adequate in size to accommodate the occupants;
- ▲ in a location generally not less desirable than the location of the displaced person's dwelling and reasonably accessible to the person's place of employment; and
- ▲ within the financial means of the displaced person.

2.3.2 Pedestrian Bridge over Realigned US 50

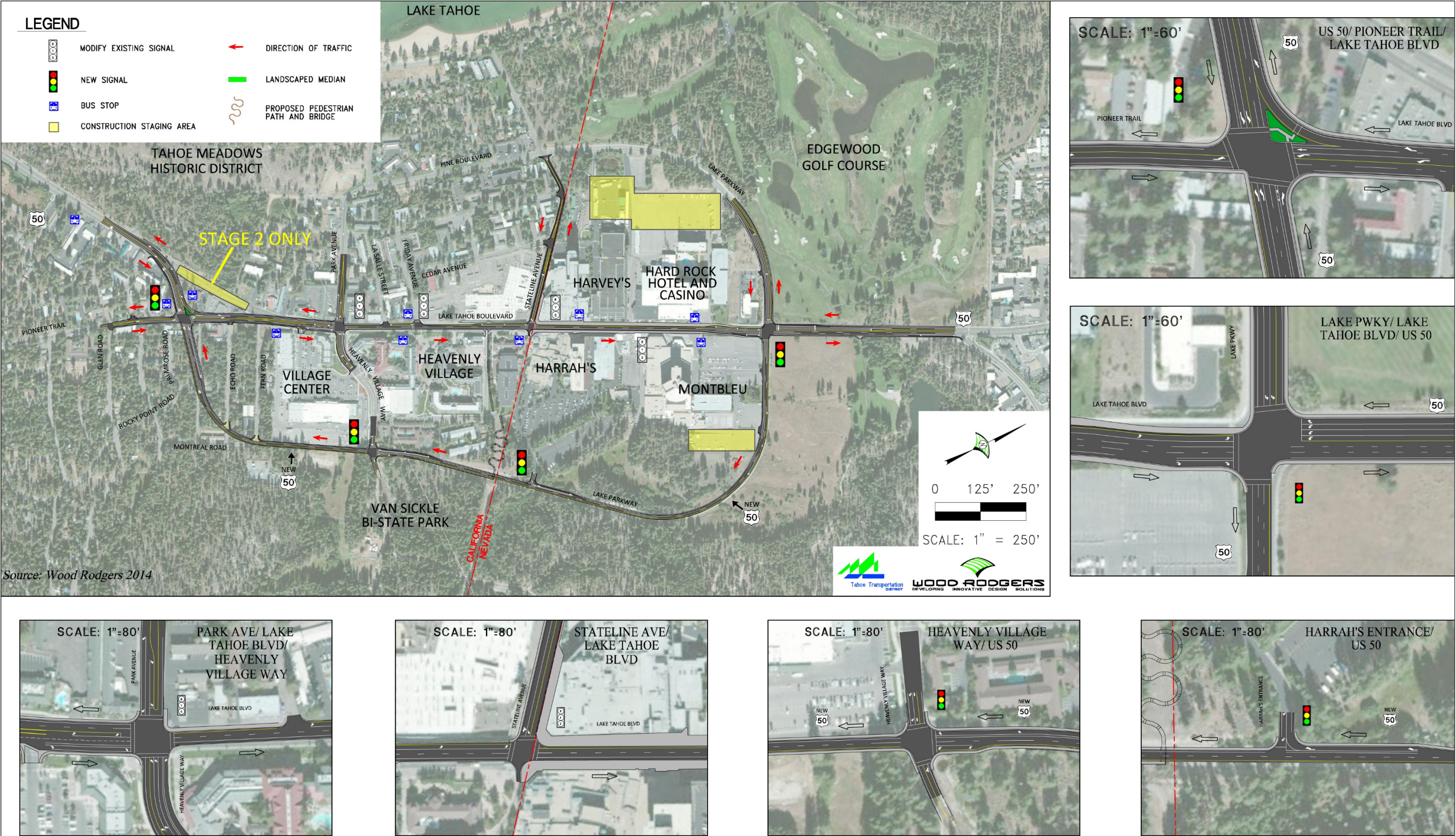
In response to public comments received during scoping and concerns expressed by the California Tahoe Conservancy (Conservancy) and Nevada Division of State Parks (NDSP) regarding access to Van Sickle Bi-State Park resulting from the highway realignment, Alternatives B through D include a new pedestrian bridge extending over US 50 at a point just west of the Harrah's entrance driveway. The bridge would be approximately 76 feet long (for Alternatives B and D, and incrementally shorter for Alternative C because of the corresponding reduction in right-of-way width) and 12 feet wide. It would provide a minimum of 18.5 feet of clearance over the highway. The bridge would likely include either a single-span, cast-in-place, concrete box girder design or steel truss bridge design. Aesthetic treatments would be included in the design and construction of the bridge to be compatible with the surrounding natural and human environment and to note the California/Nevada state line. The bridge would be designed to serve as an attraction for visitors to the area and a gateway into Van Sickle Bi-State Park from the tourist core.



X11010010 02 001

Exhibit 2-2

Alternative B: Triangle - Overview of Intersection and Transportation improvements



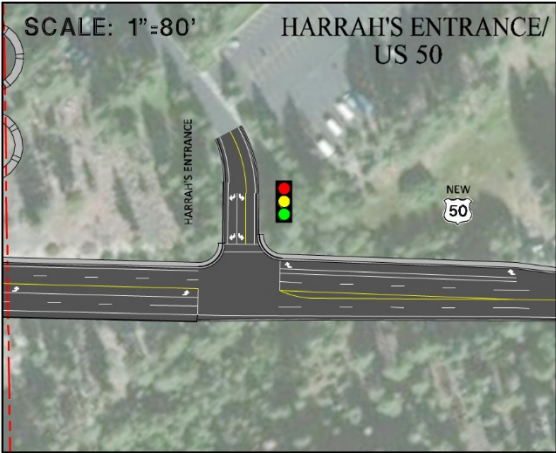
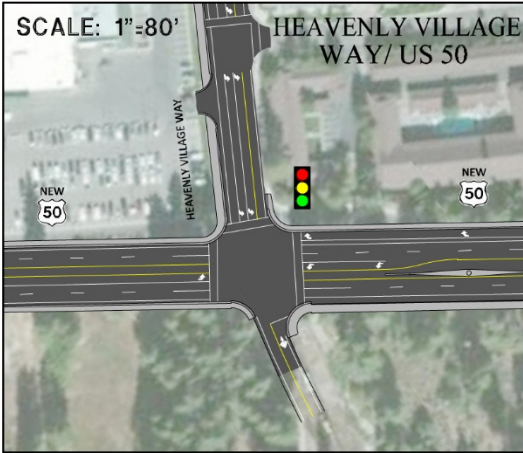
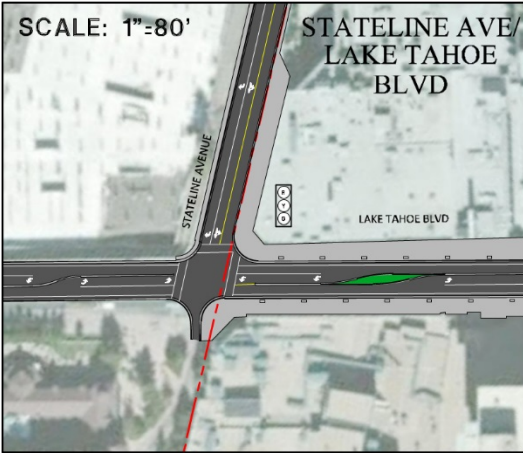
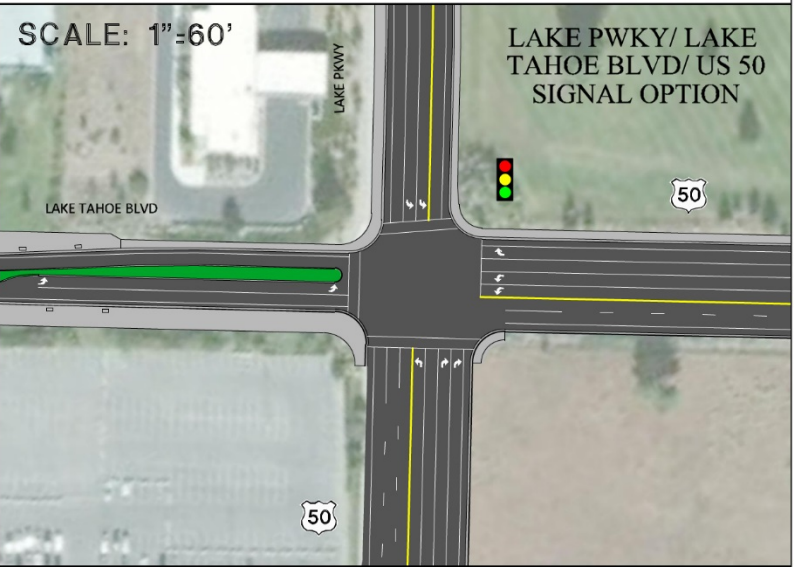
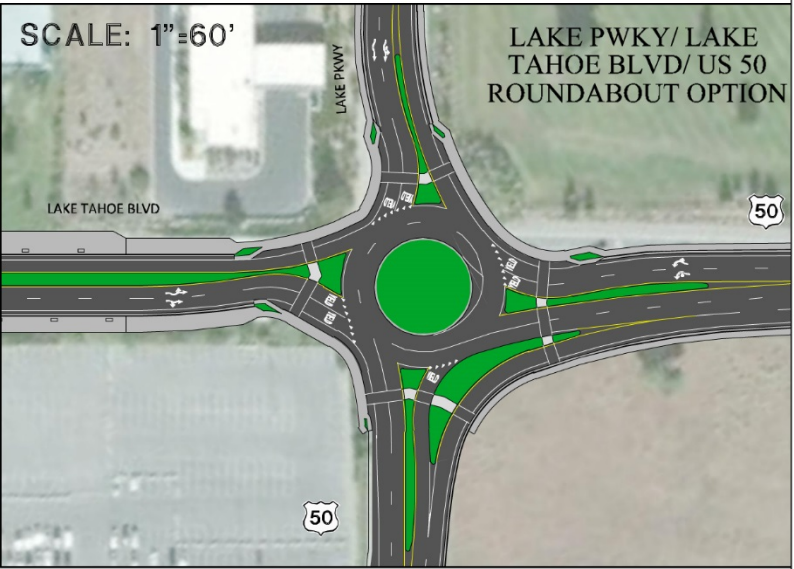
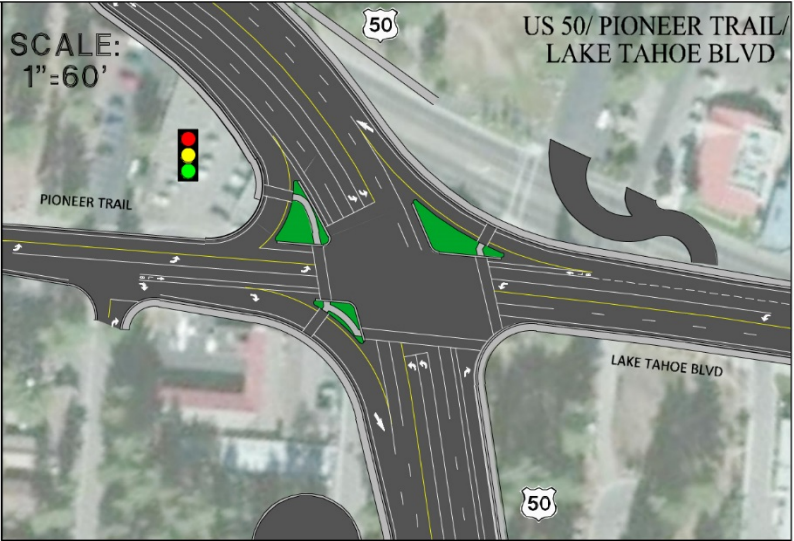
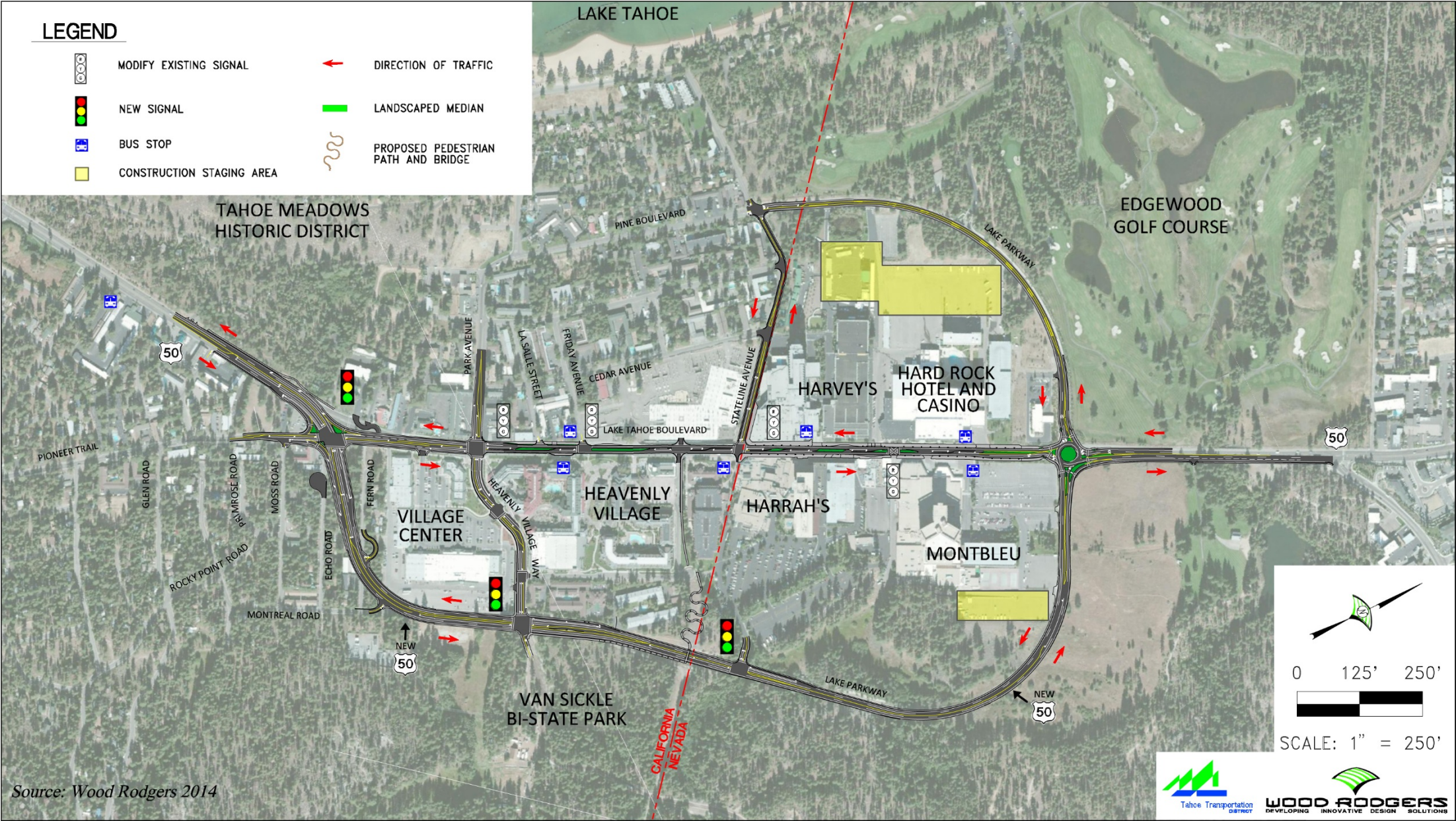


Exhibit 2-4

Alternative D: PSR Alternative 2 - Overview of Intersection and Transportation improvements

Existing View at Viewpoint 8



Visual Simulation at Viewpoint 8 for Alternative B (also applicable to Alternative D)



Source: Design Workshop and TTD 2015

X11010010 02 008

On the mountain side of realigned US 50, the pedestrian bridge would connect to a 10-foot wide sidewalk that would run parallel to and extend the length of realigned US 50 to the main park entrance at Heavenly Village Way. The sidewalk would include a marked entrance crossing and connection to the existing sidewalk on the west side of the park entrance roadway. The sidewalk would be set back from the new retaining wall and topographically separated from the realigned US 50 along most of its length.

On the lake side of realigned US 50, the pedestrian bridge would be connected to a new path that would run the length of the Conservancy parcel between the Harrah's surface parking lot and Forest Suites Resort. The path would then either skirt around Bellamy Court on the existing sidewalk and connect with the sidewalk on the western side of Transit Way, or involve construction of a new path on the north side of Transit Way, leading users to the Explore Tahoe: Urban Trailhead building, which is an inter-agency visitor center designed to promote recreation and environmental education about Lake Tahoe. The improvements along Bellamy Court and Transit Way would be limited and would include striping and new signage directing visitors to the pedestrian bridge.

It is anticipated that California Department of Transportation (Caltrans) would maintain the structural components (or base) of the bridge structure, but that a local entity (e.g., Conservancy, the City of South Lake Tahoe, or a private entity) would maintain the bridge decking, hand rails, and aesthetic treatments.

The location of the pedestrian bridge and connecting path is shown in Exhibits 2-2 through 2-4. Exhibit 2-5 shows a conceptual illustration of the proposed pedestrian bridge as viewed from the proposed signalized entrance to Harrah's. Exhibit 2-6 shows a conceptual illustration of the proposed pedestrian path on the Conservancy parcel extending from Bellamy Court to the proposed pedestrian bridge.

2.3.3 Corridor Improvements and Enhanced Bicycle, Transit, and Pedestrian Facilities

Alternatives B and D involve conversion of the existing US 50 to a local or main street—also defined as a “complete street”—through the tourist core. The existing five-lane roadway configuration would be narrowed to include one lane in each direction with left-turn pockets at Park Avenue, Heavenly Village Way, Friday Avenue, the driveway entrance to the Chateau at Heavenly Village, Transit Way, Stateline Avenue, the Harrah's driveway entrance, the Harvey's driveway entrance, and the main driveway entrance to Hard Rock just before Lake Parkway. Left turns to and from La Salle Drive and the driveway entrance between the Harvey's parking structure and Hard Rock would be eliminated. The reduced number of vehicle travel lanes would enable pedestrian, bicycle, and transit enhancements.

The reconfigured existing US 50 with Alternatives B and D would reduce the number of travel lanes such that pedestrian and bicycle enhancements could be constructed. Exhibit 2-7 shows typical cross-sections for what would be a new main (complete) street in the existing US 50 right-of-way for Alternatives B and D. The reduction in travel lanes would allow for the inclusion of 5-foot bicycle lanes on both sides of the roadway plus a 14-foot landscaped median.

With Alternative C, existing US 50 would remain as a branch of US 50 with one-way eastbound traffic only. Left turn pockets would be located at Park Avenue, Friday Avenue, and Stateline Avenue only. Left turns could also be made at La Salle Street, into the Chateau at Heavenly, Harvey's, and the Hard Rock. All other existing left turn movements from the east (e.g., left turns into Montbleu, Harrah's, and Transit Way) would be eliminated.

With Alternative C, both US 50 East and US 50 West would include a 5-foot bicycle lane in the right shoulder for on-road bicyclists. However, bicycles would be limited to one-way travel in the same direction as vehicles.

The roadway changes described above would include enhanced sidewalks with street furniture, such as benches, lighting, public art, and public gathering spaces or common areas along existing US 50.

PEDESTRIAN FEATURES

Alternatives B through D would improve and expand sidewalks throughout the project site. With Alternatives B through D, sidewalks along existing US 50 would be constructed and resurfaced with modern materials such that there is a continuous sidewalk along the length of the roadway between Pioneer Trail and Lake Parkway. New sidewalk would be constructed on both sides of the realigned US 50 (US 50 West with Alternative C) between Heavenly Village Way and the realigned US 50/Pioneer Trail intersection, with a sidewalk only on the lake side of realigned US 50 between Heavenly Village Way and US 50/Lake Parkway intersection. A new sidewalk would also be constructed on the mountain side of US 50, between realigned US 50 and SR 207, with each of these build alternatives. These build alternatives would also include the new pedestrian bridge to Van Sickel Bi-State Park, as described above.

Collectively, the improvements would enhance pedestrian path and sidewalk connectivity and provide continuous safe pedestrian access throughout the project site.

BICYCLE FACILITIES

Alternatives B and D would add 5-foot-wide, designated Class II bicycle lanes, including striping, through the tourist core from Pioneer Trail to SR 207 that would enhance connectivity and improve bicycle travel for those commuting and recreating in the area. Both alternatives would also include widened shoulders (minimum of 5 feet width) on the new US 50 alignment, which could accommodate bicycles.

Alternative B includes an option to construct a Class IV bicycle route, also known as a cycle track, through the main tourist core. A cycle track is an exclusive bicycle facility that combines the user experience of a separated path with the on-street infrastructure of a conventional bicycle lane. A cycle track is physically separated from motor vehicle traffic and distinct from the sidewalk. A cycle track is located within or next to the roadway, but is made distinct from both the sidewalk and general purpose roadway by vertical barriers or elevation differences. The cycle track option would extend a two-way track from the existing separated shared-use path that is part of the Linear Park in front of Tahoe Meadows, through the tourist core, to the final future segment of the Nevada Stateline-to-Stateline Bikeway alignment beginning at the corner of Lake Parkway and US 50. The cycle track would run parallel to the lake side of the roadway and would be separated from vehicle travel by a raised median. Exhibit 2-8 shows a cross-section near the resort-casinos illustrating the cycle track option for Alternative B.

Alternative C includes one-way eastbound travel through the tourist core and a designated Class II bicycle lane along the right side of the roadway for both the stretches of US 50 (the stretch through the tourist core and the stretch extending along existing Lake Parkway).

Existing View from Bellamy Court



Conceptual View of Pedestrian Trail from Bellamy Court

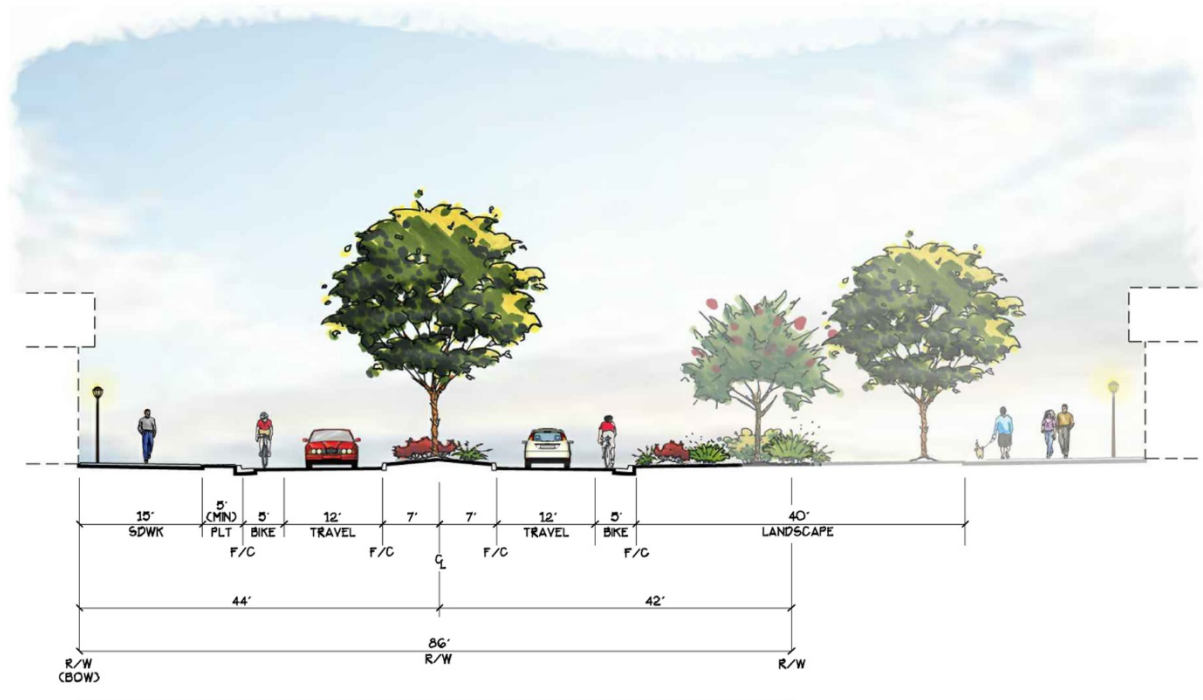


Source: Design Workshop and TTD 2015

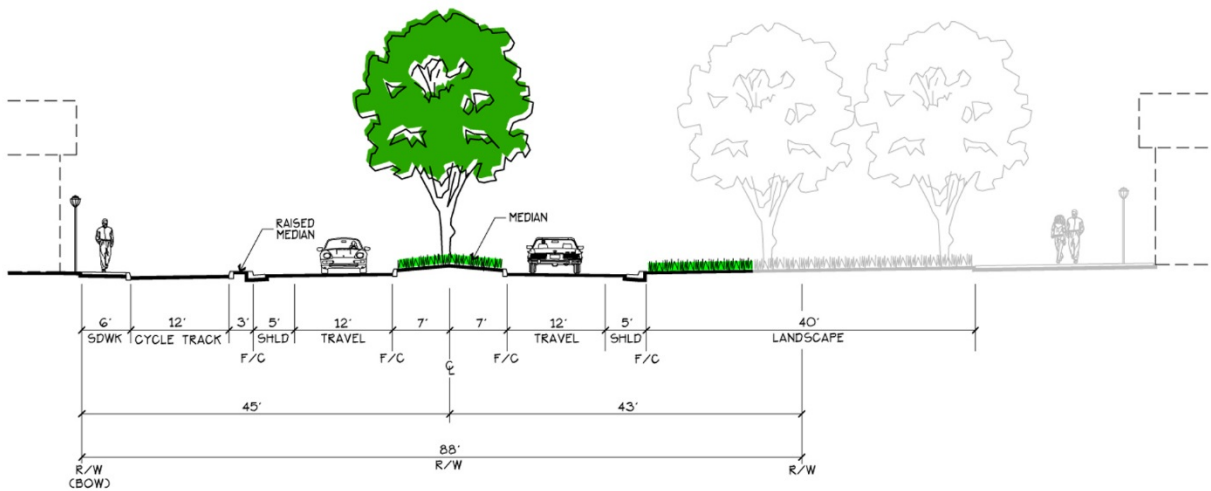
X11010010 02 005

Exhibit 2-6

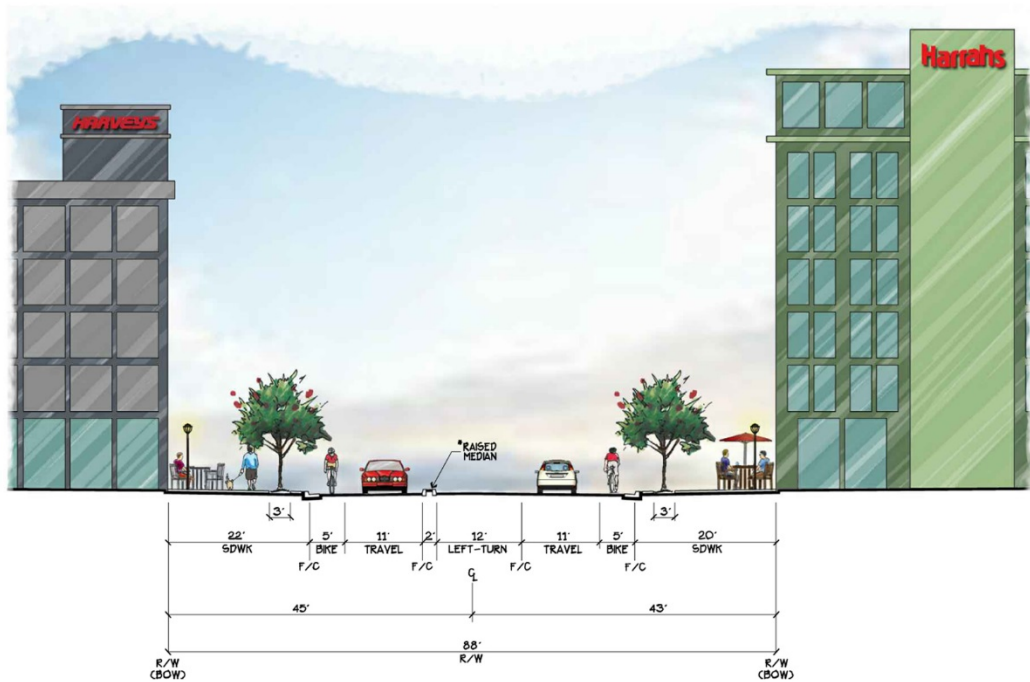
**View of Pedestrian Trail on Conservancy Parcel Connecting Bellamy Court
to the New Pedestrian Bridge**



Local Street/New Main Street Cross-Section Example with
Bicycle Lanes (Between Park Avenue & Friday Avenue)

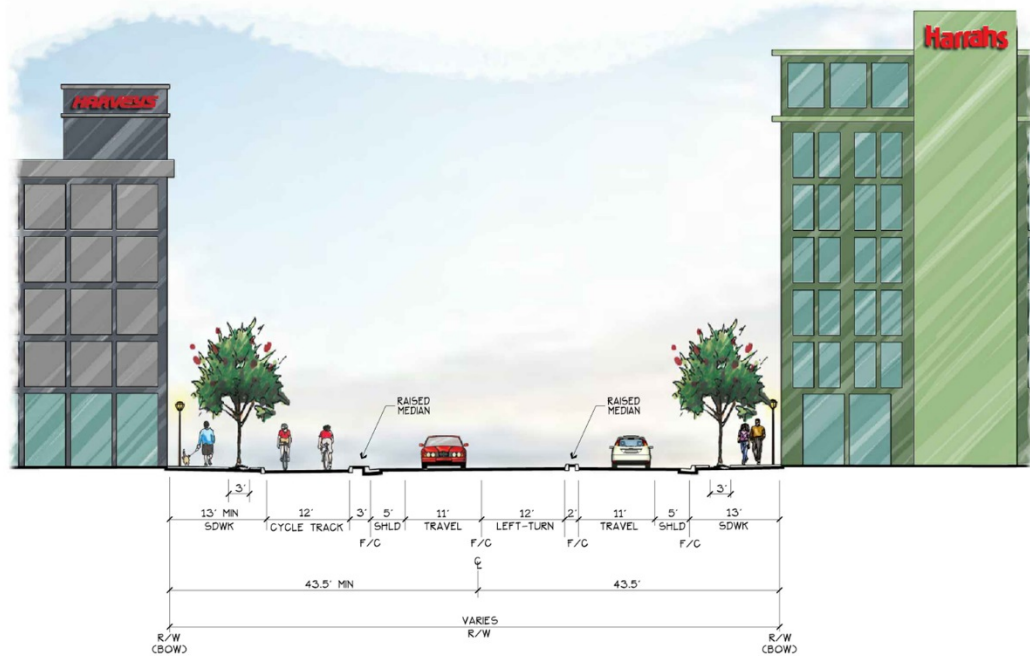


Local Street/New Main Street Cross-Section Example with
Cycle Track Option (Between Park Avenue & Friday Avenue)



* RAISED MEDIAN LOCATION VARIES TO ACCOMMODATE LEFT TURNS INTO BOTH HARVEYS AND HARRAH'S.

Local Street/New Main Street Cross-Section Example with
Bicycle Lanes (Immediately East of Stateline Avenue)



* RAISED MEDIAN LOCATION VARIES TO ACCOMMODATE LEFT TURNS INTO BOTH HORIZON AND MONTELEU.

Local Street/New Main Street Cross-Section Example with
Cycle Track Option (Immediately East of Stateline Avenue)

CHANGES IN THE LINEAR PARK

The Linear Park is an approximately 2,400-foot long path that begins at the end of the Tahoe Meadows fence that fronts on US 50, near where Wildwood Avenue meets US 50, and extends to the Holiday Inn Express driveway. The Linear Park includes an 8-foot-wide shared-use path, benches, public art, and landscaping. Implementation of Alternatives B, C, and D would affect between approximately 530 and 1,070 feet of the path, depending on alternative (see Appendix N). Changes to the Linear Park resulting from implementation of the build alternatives would include:

- ▲ Realigning the shared-use path closer to the Tahoe Meadows fence;
- ▲ Relocating seven to nine street lights adjacent to the path;
- ▲ Installing physical barriers where there is less than a 4-foot separation between the shared-use path and the roadway to meet Caltrans design standards. Barrier materials would be determined with input from the City of South Lake Tahoe, but a split rail fence is being proposed;
- ▲ Redesigning and constructing any changes to irrigation and landscaping; and
- ▲ Constructing new connections to bicycle and pedestrian facilities through the tourist core.

There would be no changes to benches, public art, or the fence separating Tahoe Meadows from the path. The width of the realigned path would remain at 8 feet, consistent with the existing path.

As described above, depending on the alternative, a Class II bicycle lane or cycle track would connect to the Linear Park and extend through the tourist core.

ENHANCED TRANSIT FEATURES

Existing US 50 is well served by BlueGo, the South Shore area's fixed-route bus service and commuter bus service connecting the area with Carson City and the Carson Valley. Existing bus stop locations are shown on Exhibits 2-2 through 2-4. BlueGo's Stateline Transit Center is located in the center of the tourist core on Transit Way.

With Alternatives B, C, and D, the proposed transportation improvements would reduce the number of travel lanes through the tourist core, making transit access more user-friendly with widened shoulders. These build alternatives would also include the construction of new bus shelters at existing bus stop locations where features are limited to signs and in some cases benches.

2.3.4 Signage Plan

With Alternatives B through D, a signage plan would be developed as more detailed design is developed after selection of a preferred alternative. Signage for transit, parking, visitor information centers, and recreation opportunities would be developed and installed at appropriate locations throughout the project site. Other informational and interpretive/educational/way finding signs, including signs that direct pedestrians towards appropriate crossings, may also be installed along the tourist core area (all build alternatives) and near the pedestrian overcrossing into Van Sickle Bi-State Park (Alternatives B, C, and D). A detailed signage plan would be prepared as part of the final design consistent with the FHWA's Manual on Uniform Traffic Control Devices (MUTCD) and TRPA Code. All proposed signage would be subject to approval by TRPA and the appropriate land manager, and Caltrans or NDOT if it falls within their respective right-of-way.

2.3.5 Lighting Plan

The build alternatives would minimize the addition of new fixed light sources to the extent possible. New fixed light sources would be added to the realigned US 50/Harrah's driveway intersection on the realigned US 50. The pedestrian bridge overcrossing would also include some light fixtures as a safety precaution for pedestrian users; pedestrian bridge lighting would be low-elevation, illuminating the foot path. A lighting plan would be developed to identify where new light fixtures would be located and where replacement of existing light fixtures would occur as more detailed design level plans are made after selection of an alternative.

2.3.6 Landscaping

Landscaping improvements, such as the addition of street trees, decorative vegetation, and landscaped medians, would be included throughout the project site as part of Alternatives B, C, and D. Along with changes to the existing US 50, landscaped medians would be added to separate eastbound and westbound lanes. Street trees and decorative vegetation would line the sidewalks paralleling the roadway to frame views of the mountains in the distance. Alternatives B and D would include a roundabout at the intersection of Lake Parkway and US 50. The islands associated with the roundabout would be landscaped with coniferous trees, native plants, and decorative boulders.

2.3.7 Lake Tahoe Environmental Improvement Program Project Implementation

The Lake Tahoe Environmental Improvement Program (EIP) is a cooperative effort to preserve, restore, and enhance the unique natural and human environment of the Lake Tahoe Region. The program defines restoration needs for attaining environmental goals or thresholds and, through a substantial investment of resources, increases the pace at which the thresholds would be attained. Key to this strategy is reliance upon partnerships with all sectors of the community, including the private sector, local, state, and federal government. The EIP has several components, which make up a comprehensive strategy for restoration and improvements. The components include capital projects, research and science, program support and technical assistance, and operations and maintenance.

The US 50/South Shore Community Revitalization Project is an EIP project (EIP Project No. 03.01.02.0024) that is identified to assist in attainment of TRPA's air quality threshold. The EIP includes two other projects within the project site boundaries. One of the projects has been identified for further attainment of TRPA's air quality threshold and the other project is identified to improve runoff water quality. Alternatives B, C, D, and E would implement the following EIP projects to varying degrees, as described below.

- ▲ **EIP Project No. 01.01.01.0011: Stateline Water Quality Improvement.** Implementation of this EIP project would add water quality treatment, flow reduction, and infiltration improvements along existing Stateline drainage ways. Additionally, it would modify and enhance existing treatment and infiltration basins to remove more fine sediment and to reduce stormwater discharges directly to Lake Tahoe from intensive commercial, multi-family residential, and roadway land uses between Stateline and Park Avenues.

Alternatives B, C, D, and E would partially implement this project. Alternatives B, C, D, and E would install curb and gutter and stabilize previously bare shoulders along the north side of Stateline Avenue. Existing collection facilities would be improved to prevent drain blockage and discharge to Lake Tahoe.

Alternative E would make water quality improvements along Stateline Avenue with the installation of curb and gutter and sediment traps.

- ▲ **EIP Project No. 03.01.02.0039: Class One/Two Bicycle Trail: Linear Park Trail to Stateline.** The goal of this project is to link the Linear Park Bike Trail to Stateline, Nevada.

Alternatives B, C, and D would fully implement this project. Alternative B would construct either a Class II bicycle lane or a cycle track that would connect the Linear Park Bike Trail to Stateline, Nevada. Alternative D would construct a Class II bicycle lane that would connect the Linear Park Bike Trail to Stateline, Nevada. Alternative C would include a designated Class II bicycle lane along the right side of the roadway for both the stretches of US 50 (the stretch through the tourist core and the stretch extending along existing Lake Parkway). Alternative E would not implement EIP Project No 03.01.02.0039.

- ▲ **EIP Project No. 03.01.02.0024: US 50 South Shore Community Revitalization Project.** This EIP project proposes to realign US 50 in South Lake Tahoe, California and Stateline, Nevada. Lake Parkway would be expanded to accommodate traffic through the area. The primary goal is to improve mobility while balancing transportation needs with community goals of economic vitality and environmental preservation.

Alternatives B and D would fully implement EIP Project No. 03.01.02.0024. Alternative C would only realign US 50 in one direction around the tourist core, which would not implement EIP Project No. 03.01.02.0024 as described in the EIP. Alternative E also would not implement this EIP project.

2.3.8 Water Quality Enhancements

Through coordination with stakeholders and a review of the strengths and weaknesses of the existing stormwater management systems within the project area, the project design team identified several measures that would enhance the ability of existing systems to protect water quality, and would create water quality benefits through the capture of currently untreated stormwater runoff. These enhancements are included as part of the Alternatives B, C, and D and are summarized below. A detailed discussion of these improvements, including exhibits showing their location, is included in Chapter 3, “Water Quality and Stormwater Runoff.”

- ▲ **US 50/SR 207 Stormwater Improvements:** Currently untreated roadway runoff that discharges directly to Edgewood Creek would be captured and infiltrated. The proposed water quality improvements include a treatment train that consists of sediment traps, an underground storm drain system to convey flows, and an infiltration basin located to the southwest of the US 50/Lake Parkway intersection.
- ▲ **Stateline Avenue Stormwater Improvements:** Curb and gutter would be installed and previously bare shoulders would be stabilized along the north side of Stateline Avenue. Existing collection facilities would be improved to prevent drain blockage and discharge to Lake Tahoe.
- ▲ **Azure Avenue Stormwater Improvements:** Currently untreated stormwater runoff from the residential block of Azure Avenue could potential be redirected into the proposed infiltration basin at Stateline Avenue. The feasibility of this enhancement depends on the depth of the existing drainage pipe beneath Azure Avenue, which would be determined during final design.
- ▲ **Sediment Traps:** All existing drainage inlets within the project site would be modified to include a sediment trap to remove sediment and applied roadway abrasives (i.e., traction sand). Approximately 85 new sediment traps would be included with the proposed transportation improvements.
- ▲ **Existing US 50 Stormwater Infrastructure Improvements:** The portion of the existing US 50 alignment between Stateline Avenue and Park Avenue currently has very few drainage inlets, which requires stormwater to travel over-ground along the unimproved road shoulder to drainage inlets near the intersection of Manzanita Avenue and Friday Avenue. The project would include the addition of stormdrain infrastructure including curb and gutter, drainage inlets spaced approximately 250 feet apart, and subsurface stormdrain pipe along existing US 50. Although these enhancements would not create a reduction in stormwater runoff, they would direct stormwater to infiltration basins through an efficient system that reduces stormwater contact with unstabilized road shoulders.

- ▲ **Fern Basin Enhancements:** Drainage from the Fern Road, Echo Road, and Moss Road area is collected via storm drains and enters two drainage basins at the intersection of Fern Road and Pioneer Trail. These basins are currently undersized and only capture 77 percent of the 20-year/one hour stormwater runoff volume (City of South Lake Tahoe 2016). The project would reconstruct (enlarge and deepen) the Fern Basins in their current location so that they are able to fully accommodate the stormwater runoff generated by their tributary area during the 20-year/1-hour storm.
- ▲ **Oversized Infiltration Basins:** The build alternatives would generate excess right-of-way, which could be utilized for features such as linear parkways and stormwater infiltration basins. The preliminary design of the project's infiltration basins indicates that, on average, they can accommodate five times the regulatory requirement (Wood Rodgers 2016) and are therefore able to accept flows from a much larger storm.

2.4 DIFFERENTIATING FEATURES OF ALTERNATIVES

Alternative A reflects the No Project/No Build alternative. Alternatives B through D most completely meet the purpose and need for the project and the basic project objectives described in Chapter 1, "Introduction." Alternative E would avoid the housing and business displacement and encroachment on Van Sickle Bi-State Park associated with the other build alternatives, but would only meet some of the basic project objectives. Major features of the alternatives evaluated in detail in this EIR/EIS/EIS are described below.

2.4.1 Alternative A: No Build (No Project or No Action)

With Alternative A there would be no improvements to existing US 50, Lake Parkway, or other roadways within the project site boundaries. The current road alignment and lane configuration would remain the same, consistent with Exhibit 2-1.

The roadway system within the project site boundaries would continue to be inadequate to meet the existing or projected traffic volumes. The continued periods of traffic congestion during the peak summer and winter seasons would degrade and discourage bicycle and pedestrian travel in the tourist core and along major roadways, and inhibit the operation of and accessibility to transit services. Cut-through traffic on local roadways would continue as it does today.

2.4.2 Alternative B: Triangle (Locally Preferred Action)

Alternative B is named the "Triangle" Alternative, because it would preserve the existing parcels that form a commercial triangle just west of the existing US 50/Pioneer Trail intersection and would, instead, realign new US 50 within the vacant city-owned parcel behind the 7-11 building. Exhibit 2-2 provides an overview of the realignment of US 50, intersection improvements, and travel patterns associated with Alternative B. Alternative B is identified as the locally preferred alternative.

ROAD NETWORK CHANGES

Alternative B would construct a new alignment of US 50 to the southeast of existing US 50 from just west of the Pioneer Trail intersection in California to Lake Parkway in Nevada. The new alignment would begin at a new Pioneer Trail intersection located to the west of the existing intersection, and proceed south along existing Moss Road. It would then turn east onto the Montreal Road alignment, passing behind (southeast of) the Heavenly Village Center shopping complex, and continuing along the existing Montreal Road and Lake Parkway alignments before ending at a new two-lane roundabout at the existing US 50/Lake Parkway intersection.

The new US 50 alignment would have four 11-foot wide travel lanes, 5-foot wide shoulders, and turn pockets at major intersections and driveways. New signalized intersections along the realigned US 50 would be located at Heavenly Village Way and the driveway entrance to Harrah's. The existing segment of US 50 between Pioneer Trail and Lake Parkway would be relinquished to the City of South Lake Tahoe in California, and Douglas County in Nevada. Realigned US 50 would become Caltrans and Nevada Department of Transportation (NDOT) right-of-way.

Between Park Avenue and Lake Parkway, the existing US 50 would be reduced to one travel lane in each direction, with landscaped medians, and left-turn pockets at major intersections and driveways. Bicycle lanes and sidewalks would be added and/or upgraded throughout the project site. A pedestrian bridge would be constructed over the new US 50 alignment approximately 250 feet south of the proposed new intersection at the Harrah's entrance driveway near the California/Nevada state line connecting the Van Sickle Bi-State Park to the tourist core area.

The realignment would result in the following changes to local roadways in the Rocky Point residential neighborhood just west of Heavenly Village Center:

- ▲ Montreal Road, Echo Road, and Fern Road would have right in and right out access only to realigned US 50.
- ▲ Primrose Road would be closed between Rocky Point Road and Echo Road and would not have access to realigned US 50.
- ▲ Moss Road would have no direct access to Pioneer Trail.

Alternative B would include restriping Stateline Avenue between Cedar Avenue and existing US 50 to include two southeast bound lanes to accommodate summer concert travelers exiting the Harvey's parking lot.

Between Lake Parkway and Cedar Avenue, Stateline Avenue would be slightly realigned to the east and would be improved with new curb, gutter, and sidewalk.

Additionally, Alternative B includes an option to restripe Lake Parkway on the lake side, between Stateline Avenue and US 50, to include four lanes. Lake Parkway is currently a three-lane roadway (one travel lane in each direction with a dedicated left-turn lane and wide shoulders) that is wide enough to accommodate this by restriping the roadway. However, this option would preclude bicycle lanes and widened shoulders along this segment. Bicycle traffic would be Class 3 or shared travel lane with vehicular traffic.

Alternative B also includes a three-lane option for Lake Tahoe Boulevard between Pioneer Trail and Park Avenue to three lanes. This option would include a center left turn lane with left turn pockets at the US 50/Pioneer Trail and Lake Tahoe Boulevard/Park Avenue intersections.

Posted speed limits for existing US 50 through the tourist core are 25 miles per hour (mph) in Nevada and 35 mph in California. Posted speed limits for the realigned US 50 would be 40 mph. Posted speed limits for the existing US 50 through the tourist core could be up to 25 mph.

INTERSECTION IMPROVEMENTS

Alternative B would affect the following intersections within the existing or realigned US 50 within the project site limits:

- ▲ US 50 US 50/Pioneer Trail: This intersection would be reconfigured and relocated to the west.
- ▲ US 50/Park Ave/Heavenly Village Way: This intersection would be reconfigured to reflect the reduced number of through lanes on old US 50 east of the intersection.

- ▲ US 50/La Salle Street: The new center median on old US 50 would preclude left turns onto La Salle Street. Vehicles on La Salle Street would have right-in-right-out access only to old US 50.
- ▲ US 50/Friday Avenue: This intersection would be reconfigured to reflect the reduced number of through lanes on old US 50. The existing traffic signal would remain.
- ▲ US 50/Stateline Avenue: This intersection would be reconfigured to reflect the reduced number of through lanes on old US 50. The existing traffic signal would remain.
- ▲ Lake Parkway/Montreal Road/Heavenly Village: This intersection would be signalized, and the number of through lanes would be expanded to reflect the width of new US 50.
- ▲ Lake Parkway/Harrah's Driveway: This intersection would be signalized, and the number of through lanes would be expanded to reflect the width of new US 50.
- ▲ US 50/Lake Parkway: The existing signalized intersection would be replaced with a 2-lane roundabout.
- ▲ Stateline Avenue/Lake Parkway/Pine Boulevard: This intersection would have pedestrian facilities installed.
- ▲ Option: As an alternative to the 2-lane roundabout, this option includes a signalized intersection similar to the existing signal, but reconfigured to reflect the proposed roadway changes.

The configuration of these intersections with Alternative B are shown in Exhibit 2-2.

RIGHT-OF-WAY ACQUISITION NEEDS

The Alternative B realignment of US 50 would require the acquisition of right-of-way. The right-of-way needs would include both partial and full acquisition of parcels within the project site. Table 2-1 summarizes the total number of affected parcels, by state. Table 2-2 provides a summary description of the types of uses and number of units affected for those parcels listed as full acquisitions in Table 2-1. Alternative B would affect 99 parcels, and would displace residents in 75 housing units and four hotel/motels containing 114 rooms. Alternative B would also require right-of-way from and encroach on Van Sickle Bi-State Park. A full list of specific parcels affected by Alternative B is included in Appendix B. Appendix B also includes exhibits that distinguish full and partial parcel acquisitions for Alternative B. The project would construct replacement parking either on adjacent right-of-way areas or on other portions of the parcel for parcels subject to partial acquisition that lose parking, which could include Assessor Parcel Numbers (APNs) 029-170-04, 029-351-01, 029-351-20, and 029-371-01.

Table 2-1 Total Number of Parcels Affected by Transportation Improvements for Each Alternative

Alternative	Number of Full Parcel Acquisitions		Number of Partial Parcel Acquisitions		Total Affected Parcels		
	California	Nevada	California	Nevada	California	Nevada	Total
A: No Build	NA	NA	NA	NA	NA	NA	NA
B: Triangle	42	0	46	11	88	11	99
C: Triangle One-Way	40	0	46	11	86	11	97
D: PSR Alternative 2	37	0	30	11	67	11	78
E: Skywalk	NA	NA	NA	NA	NA	NA	NA

Source: Compiled by Wood Rodgers in 2016

Table 2-2 Types of Uses Displaced by Transportation Improvements for Each Alternative

Alternatives	Housing				Tourist Accommodations		Businesses ¹		Vacant
	# of Parcels	# of Multi-Family Units	# of Single-Family Units	Unit Total	# of Parcels	# of Units	# of Parcels	# of Businesses	# of Parcels
A: No Build	NA	NA	NA	NA	NA	NA	NA	NA	NA
B: Triangle	27	64	12	76	4	114	4	4	11
C: Triangle One-Way	26	59	12	71	4	114	4	4	10
D: PSR Alternative 2	21	59	9	68	2	41	4	7	12
E: Skywalk	NA	NA	NA	NA	NA	NA	NA	NA	NA

¹ For Alternatives B and C, the businesses that would be displaced include:

- National 9 Inn (APN 029-162-02)
- Trailhead Motel (APN 029-162-07)
- South Shore Inn (APN 029-371-16)
- Elizabeth Lodge (APN 029-352-10)

The former Wildman Coffee Shop (APN 029-371-12) is now vacant and is not included in the business totals for Alternatives B and C.

For Alternative D, the businesses that would be displaced include:

- Powder House, Vinny's Pizza, and the Naked Fish (APN 029-170-04)
- Tahoe Bottle Shop and Alpaca store (APN 029-170-05)
- Traveler's Inn (APN 029-351-20)
- Thunderchief Inn (APN 029-351-01)

Note: Tourist accommodation parcels are also included in the business parcel totals, and therefore the totals in this table do not match those in Table 2-1.

Source: Compiled by Wood Rodgers in 2016

MIXED-USE REDEVELOPMENT SITES

Alternative B provides an opportunity for potential future redevelopment of three sites within the project site to include a mix of residential and commercial uses. The purpose of the redevelopment sites would be to provide potential relocation opportunities for dislocated residents and business owners in the immediate vicinity and further achieve the revitalization objective of the project. At the time of final design, TTD would determine which of the three mixed-use development sites would be constructed to plan for construction of replacement housing needs. The final design of the mixed-use development would adhere to applicable standards set forth by the City of South Lake Tahoe Public Improvement and Engineering Standards and any other applicable engineering requirements and design standards. The City of South Lake Tahoe has a Delegation Memorandum of Understanding (MOU) with TRPA for permitting authority over certain types of projects. Approval authority for the mixed-use development would either be TPRA or the City of South Lake Tahoe, under the MOU, and would be determined at the time of project-level environmental review for the mixed-use development. Exhibits 2-9 and 2-10 show the location and potential mix of uses that could be developed at these sites through a future public private partnership.

The right-of-way acquisition needed for Alternative B would result in banked TRPA commodities that TTD would use to construct replacement housing. The banked commodities, including commercial floor area (CFA), could be used to incentivize a partnership with a private developer to participate in redeveloping any of these sites as mixed-use with TTD. The extent of redevelopment could accommodate displaced residents affected by the project. These mixed-use development sites are identified as the preferred location for replacement housing for displaced residents. Displaced residents would have first right of refusal for relocating to replacement housing located at one of these mixed-use development sites. TTD would construct replacement housing for the displaced residents, as described above, at these mixed-use sites or elsewhere whether a private developer partners with TTD or not.

The maximum allowable development that could occur under the existing zoning for the three sites altogether could include up to 229 housing units, 46,250 square feet (sq. ft.) of CFA, and 534 parking spaces. The conceptual plan for the three sites is illustrated in Exhibit 2-10 and analyzed programmatically in this EIR/EIS/EIS would include up to 227 housing units, 46,250 sq. ft. CFA, and 534 parking spaces.

Potential future redevelopment of these sites would use some of the parcels that would otherwise be acquired for the realigned US 50 right-of-way, but would require additional property acquisition as summarized in Table 2-3. No parcels in Nevada would be acquired for the mixed-use development. Table 2-4 provides a summary description of the types of uses and number of units affected by the full parcel acquisitions that would be needed to accommodate the mixed-use development. The mixed-use development under Alternative B would displace residents in an additional 12 housing units, two hotel/motels containing 41 rooms, and eight other businesses (i.e., restaurants and retail stores).

Table 2-3 Total Number of Additional Full Parcel Acquisitions Required for Mixed-Use Development Sites Associated with Alternatives B, C, and D

Alternative	Number of Additional Full Parcel Acquisitions	
	California	Nevada
A: No Build	NA	NA
B: Triangle	9	0
C: Triangle One-Way	9	0
D: PSR Alternative 2	11	0
E: Skywalk	NA	NA
Source: Compiled by Wood Rodgers in 2016		

Table 2-4 Additional Uses Displaced by Mixed-Use Development for Alternatives B, C, and D

Alternatives	Housing				Tourist Accommodations		Businesses ¹		Vacant
	# of Parcels	# of Multi-Family Units	# of Single-Family Units	Unit Total	# of Parcels	# of Units	# of Parcels	# of Businesses	# of Parcels
A: No Build	NA	NA	NA	NA	NA	NA	NA	NA	NA
B: Triangle	1	12	0	12	2	41	5	10	3
C: Triangle One-Way	1	12	0	12	2	41	5	10	3
D: PSR Alternative 2	5	8	2	10	0	0	1	3	5
E: Skywalk	NA	NA	NA	NA	NA	NA	NA	NA	NA

¹ For Alternatives B and C, the businesses that would be displaced include:

- Subway, Taco Taqueria, and 7 Eleven (APN 029-170-03)
- Powder House, Vinny's Pizza, and the Naked Fish (APN 029-170-04)
- Tahoe Bottle Shop and Alpaca store on (APN 029-170-05)
- Traveler's Inn (APN 029-351-20)
- Thunderchief Inn (APN 029-351-01)

For Alternative D, the businesses that would be displaced include:

- Subway, Taco Taqueria, and 7 Eleven (APN 029-170-03)

Note: Tourist accommodation parcels are also included in the business parcel totals, and therefore the totals in this table do not match the totals in Table 2-3.

Source: Compiled by Wood Rodgers in 2016

2.4.3 Alternative C: Triangle One-Way

Alternative C is named "Triangle One-Way." because it would, like Alternative B, preserve the commercial triangle properties just west of the existing US 50/Pioneer Trail intersection and would also use the vacant, city-owned parcel behind the 7-11 building. The alignment of Alternative C would be the same as Alternative B for the route along existing Montreal Road and Lake Parkway. However, Alternative C would involve one-way travel within the tourist core and on the realigned highway to the southeast. It would reduce right-of-way needs relative to Alternative B, as described herein. Exhibit 2-3 provides an overview of the roadway network, intersection improvements, and travel patterns associated with Alternative C.

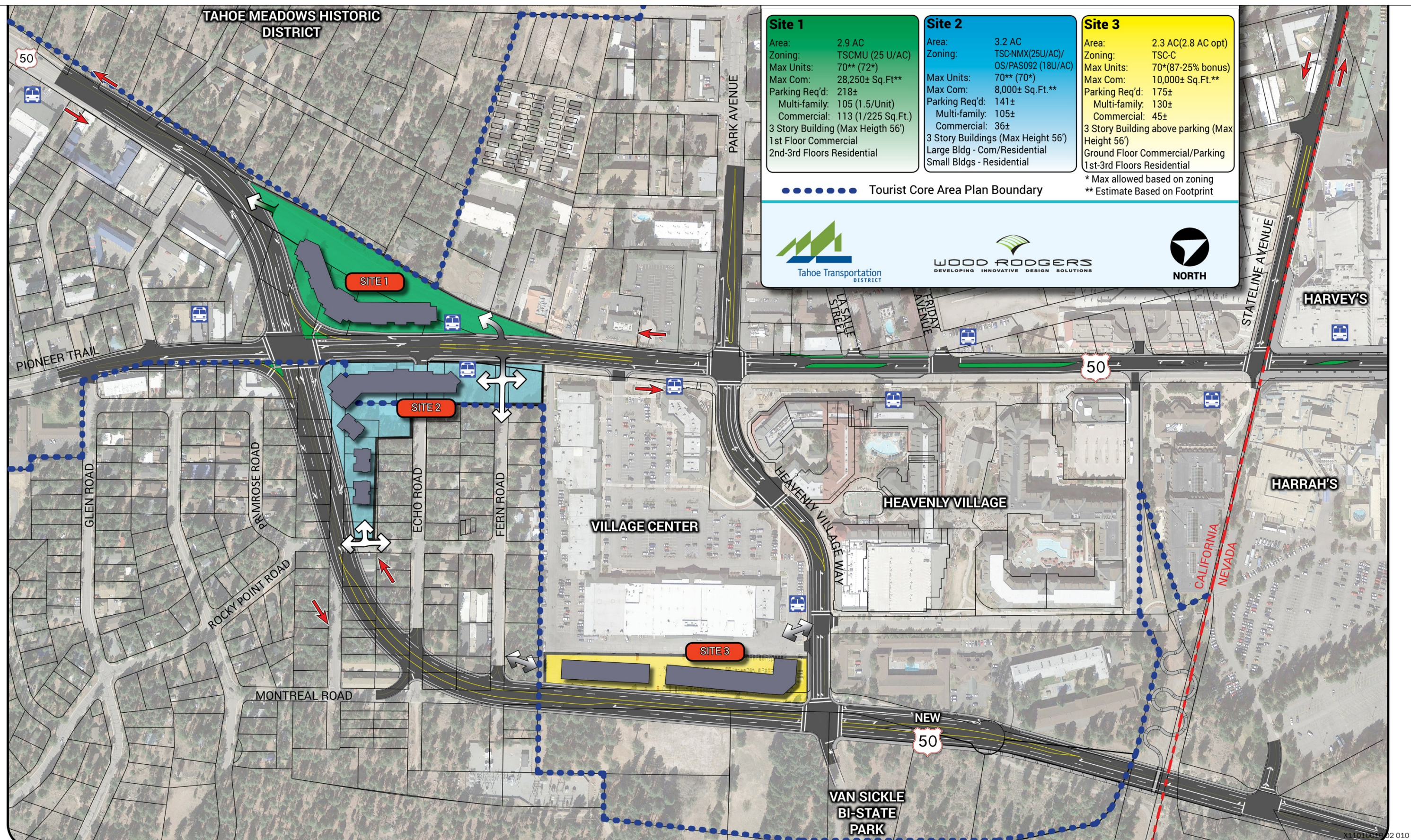


Exhibit 2-9

Alternative B and C Mixed-Use Development Sites



Site 1

Site Area: 2.9± AC

City of South Lake Tahoe Tourist Core Area Plan

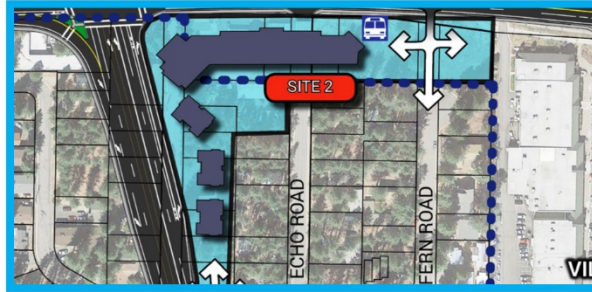
Zoning: Tourist Center Mixed Use (Multi-Family - 25 Units/AC) - Max Units Allowed: 72

Conceptual Plan:

The Footprint shown represents a 3 Story Building with a 56' height limit. Each floor is approximately 28,250± square feet. Commercial and Residential require a total of 218 spaces, a mix of surface and subsurface parking.

Commercial Option - 1st Floor includes approximately 28,250 sqft commercial. Assuming an average parking requirement of 1 space/225 sqft = 113 spaces required.

Residential Option - 2nd and 3rd Floor includes approximately 35 units each with an average of 750± sqft/unit for a total of 70 units. Assuming a parking reduction to 1.5 spaces/unit = 105 spaces.



Site 2

Site Area: 3.2± AC

City of South Lake Tahoe Tourist Core Area Plan/Plan Area Statement 092 (Pioneer/Ski Run)

Zoning: Tourist Center Neighborhood Mixed Use (MF-25 Units/AC); Open Space (would require zone change); & PAS092 (MF - 18 units/AC) - Max Units Allowed: 70

Conceptual Plan:

The Footprint shown represents a main 3 Story Building with 20,625± sqft per floor, with three smaller 2 story buildings with 3,120± sqft per floor. This concept assumes TSC-NMX is changed to TSC-MU with a 56' height limit, which is consistent with the surrounding uses. There is a 42' height limit in PAS092. Commercial and residential require a total of 141 parking spaces, a mix of surface, subsurface, & covered.

Commercial/Parking Option - Main building 1st floor includes 8,000± sqft corner commercial, 4,000± sqft covered parking, and 8,625± sqft of community amenities (lobby, weight room, laundry, etc). Assuming an average parking requirement of 1 space/225 sqft = 36 spaces req.

Residential Option - Main building 2nd floor and 3rd floors include 23 residential units each, average of 750± sqft/unit. The three smaller units have 8 units each, average of 700± sqft/unit. Total unit count = 70 residential units. Assuming a parking reduction to 1.5 spaces/unit = 105 spaces req.



Site 3

Site Area: 2.3± AC {2.8 AC option*}

City of South Lake Tahoe Tourist Core Area Plan

Zoning: Tourist Center (MF - 25 Units/AC) - Max Units Allowed: 57 (71 with 25% density bonus)
*{70 (87 with 25% density bonus)}

Conceptual Plan:

The Footprint shown represents a 3 Story Building above podium level parking. Tourist Center has a 56' height limit. Each floor is approximately 40,000± square feet. Commercial and Residential require a total of 175 parking spaces, a mix of garage and surface parking.

Commercial/Parking Option - Ground/Podium level includes approximately 10,000± sqft corner commercial and 30,000± sqft of podium level parking. Assuming an average parking requirement for commercial of 1 space/225 sqft = 45 spaces required.

Residential Option - 1st Floor includes approximately 26 units with an average of 800± sqft/unit, and 15,000± sqft of amenities (lobby, indoor rec facility, & laundry). 2nd Floor includes approximately 34 units with an average of 900± sqft/unit, and 5,400± sqft of amenities (lobby & laundry). 3rd Floor includes 27 units with average of 1,000± sqft/unit, and 9,000± sqft of amenities (lobby & laundry). All three floors would include a total of 87 units. Assuming a parking reduction to 1.5 spaces/unit = 130 spaces req.

ROAD NETWORK CHANGES

With Alternative C, the segment of US 50 between the US 50/Pioneer Trail intersection and Park Avenue (adjacent to the Heavenly Village Center) would retain two-way travel consistent with the existing configuration along this segment.

Alternative C would split eastbound and westbound directions on US 50 from the Park Avenue/Heavenly Village/US 50 intersection in California to Lake Parkway/US 50 intersection in Nevada. Eastbound US 50 would remain in place as under existing conditions, while westbound US 50 would be realigned onto a new alignment along Lake Parkway southeast of existing US 50. The existing US 50 alignment between Park Avenue and Lake Parkway would be reduced to a one-way, two-lane roadway, with traffic only allowed in the eastbound direction. Beginning at the Lake Parkway intersection, westbound US 50 would proceed south along the existing Lake Parkway alignment and continue onto the Montreal Road alignment on a one-way two-lane roadway, with traffic only allowed in the westbound direction. Westbound US 50 would continue to the southeast of Heavenly Village Center before turning west along existing Moss Road and rejoining eastbound US 50 at a new Pioneer Trail/US 50 intersection. Both eastbound and westbound US 50 would have turn pockets at major intersections and driveways, and would add and/or upgrade bicycle lanes and sidewalks.

Travel lanes along the eastbound and westbound segments would be 11 feet wide. New signalized intersections would be located on westbound US 50 at Heavenly Village Way and the entrance driveway off existing Lake Parkway to Harrah's. Caltrans and NDOT would be required to accept the right-of-way along both segments of US 50 for those portions in their respective state, and the City of South Lake Tahoe and Douglas County would need to relinquish the right-of-way along Lake Parkway, Montreal Road, and other local roadways affected by Alternative C. A pedestrian bridge would be constructed over westbound US 50 near the California/Nevada state line connecting the Van Sickle Bi-State Park to the Stateline area.

As with Alternative B, Alternative C would include restriping Stateline Avenue between Cedar Avenue and existing US 50 to include two southeast bound lanes to accommodate summer concert travelers exiting the Harvey's parking lot. Between Lake Parkway and Cedar Avenue, Stateline Avenue would be slightly realigned to the east and would be improved with new curb, gutter, and sidewalk.

Additionally, Alternative C includes the same Alternative B option to restripe Lake Parkway on the lake side, between Stateline Avenue and US 50, to include four lanes.

Alternative C would result in the following changes to local roadways in the residential neighborhood just west of Heavenly Village Center:

- ▲ Montreal Road and Moss Road would each end with a cul-de-sac at westbound US 50, with no direct access to the realigned highway.
- ▲ Moss Road would not have direct access to Pioneer Trail.
- ▲ Echo Road and Fern Road would have right-in and right out access only to both segments of US 50.
- ▲ Primrose Road would be closed between Rocky Point Road and Echo Road, with no direct access to the realigned highway.

INTERSECTION IMPROVEMENTS

Alternative C would affect the following intersections in the project site limits:

- ▲ US 50/Pioneer Trail: This intersection would be at the same location as with Alternative B, but would include a different configuration to accommodate the one-way travel on westbound US 50.
- ▲ US 50/Park Ave/Heavenly Village Way: This intersection would be reconfigured to reflect the one-way travel through the tourist core.

- ▲ US 50/La Salle Street: This intersection would be reconfigured to allow left turns only from US 50 onto La Salle Street. This alternative would preclude right turns onto US 50 from La Salle Street.
- ▲ US 50/Friday Ave: This intersection would be reconfigured to allow left turns only from US 50 onto Friday Avenue. This alternative would preclude right turns onto US 50 from Friday Avenue.
- ▲ US 50/Stateline Avenue: This intersection would be reconfigured to reflect the one-way travel through the tourist core. This alternative would preclude right turns onto US 50 from Stateline Avenue.
- ▲ US 50/Heavenly Village: This intersection would be signalized, but would have a different configuration than Alternative B.
- ▲ US 50/Harrah's Driveway: This intersection would be signalized, but would have a different configuration than Alternative B.
- ▲ US 50/Lake Parkway: This intersection would be signalized, but would have a different configuration than Alternative B.
- ▲ Stateline Avenue/Lake Parkway/Pine Boulevard: This intersection would have pedestrian facilities installed.

The configurations of these intersections with Alternative C are shown in Exhibit 2-3.

RIGHT-OF-WAY ACQUISITION NEEDS

The Alternative C realignment of US 50 would require the acquisition of right-of-way. The right-of-way needs would include both partial and full acquisition of parcels within the project site. Table 2-1 summarizes the total number of affected parcels, by state. Table 2-2 provides a summary description of the types of uses and number of units affected for those parcels listed as full acquisitions in Table 2-1. Alternative C would affect 97 parcels, and would displace residents in 70 housing units and four hotel/motels containing 114 rooms. Alternative C would also require right-of-way from and encroach on Van Sickle Bi-State Park. A full list of specific parcels affected by Alternative C is included in Appendix B. Appendix B also includes exhibits that distinguish full and partial parcel acquisitions for Alternative C. The project would construct replacement parking either on adjacent right-of-way areas or on other portions of the parcel for parcels subject to partial acquisition that lose parking, which could include APNs 029-170-04, 029-351-01, 029-351-20, and 029-371-01.

MIXED-USE REDEVELOPMENT SITES

Alternative C includes the potential future redevelopment of the same three sites within the project site as Alternative B for the purpose of providing relocation opportunities to the dislocated residents and business owners, the same as described above for Alternative B. Exhibits 2-9 and 2-10 show the location and redevelopment potential for Alternative C. The maximum amount of development that could occur on these three sites under Alternative C would be the same as that described above for Alternative B.

Potential future redevelopment of these sites under Alternative C would acquire most of the same parcels as that which would occur under Alternative B. For this reason, Alternative C would also displace the same number of residents, hotel/motels, and businesses as Alternative B.

2.4.4 Alternative D: PSR Alternative 2

Alternative D is named "PSR Alternative 2," because it reflects the preferred alternative concept selected in the Project Study Report (PSR) approved by Caltrans in 2010. Alternative D is similar to Alternative B in that it would construct a new alignment for US 50 to the southeast of existing US 50 from the Pioneer Trail

intersection in California to Lake Parkway in Nevada. The relocated US 50/Pioneer Trail intersection would be further north than the Alternative B alignment, and would cut through the business triangle preserved by Alternative B. Exhibit 2-4 provides an overview of the realignment of US 50, intersection improvements, and travel patterns associated with Alternative D.

ROAD NETWORK CHANGES

The new US 50 alignment associated with Alternative D would begin at a reconstructed Pioneer Trail intersection, and proceed east on a new roadway between existing Echo Road and Fern Road. It would then turn north onto the Montreal Road alignment, passing behind the Heavenly Village Center shopping complex, and continuing along the existing Montreal Road and Lake Parkway alignments before ending at a new two-lane roundabout at the existing US 50/Lake Parkway intersection.

The new US 50 alignment would have four 11-foot wide travel lanes, 5-foot wide shoulders, and turn pockets at major intersections and driveways. New signalized intersections would be located at US 50/Heavenly Village Way and the driveway entrance to Harrah's from US 50. The existing segment of US 50 between Pioneer Trail and Lake Parkway would be relinquished to the City of South Lake Tahoe in California and to Douglas County in Nevada. Realigned US 50 would become Caltrans and NDOT right-of-way.

Between Park Avenue and Lake Parkway, the existing US 50 would be reduced to one lane in each direction, with landscaped medians and left-turn pockets at major intersections and driveways. Bicycle lanes and sidewalks would be added and/or upgraded throughout the project site. A pedestrian bridge would be constructed over the new US 50 alignment near the California/Nevada State Line connecting the Van Sickle Bi-State Park to the Stateline area.

Between Lake Parkway and Cedar Avenue, Stateline Avenue would be slightly realigned to the east and would be improved with new curb, gutter, and sidewalk.

The realignment would result in the following changes to local roadways in the residential neighborhood just west of Heavenly Village Center:

- ▲ Primrose Road would be closed between Echo Road and Fern Road and would not connect to US 50;
- ▲ Montreal Road would have right in and right out access only to realigned US 50;
- ▲ Echo Road would end with a cul-de-sac, with no direct access to the realigned highway; and
- ▲ Fern Road would have right in and right out access only to realigned US 50, with a reconfigured section extending from realigned US 50.

As with Alternative B, Alternative D includes restriping Stateline Avenue and an option to restripe Lake Parkway on the lake side to include four lanes.

INTERSECTION IMPROVEMENTS

The intersection improvements associated with Alternative D would be the same as Alternative B, except the location of the relocated US 50/Pioneer Trail intersection; the alignment of this intersection would be further north relative to Alternative B. Alternative D also includes a proposed 2-lane roundabout at the Lake Parkway/US 50 intersection with an option to signalize this intersection.

RIGHT-OF-WAY ACQUISITION NEEDS

The Alternative D realignment of US 50 would require the acquisition of right-of-way. The right-of-way needs would include both partial and full acquisition of parcels within the project site. Table 2-1 summarizes the

total number of affected parcels, by state. Table 2-2 provides a summary description of the types of uses and number of units affected for those parcels listed as full acquisitions in Table 2-1. Alternative D would affect 78 parcels, and would displace residents in 68 housing units and two hotel/motels containing 41 rooms. Alternative D would also require right-of-way from and encroach on Van Sickle Bi-State Park. A full list of specific parcels affected by Alternative D is included in Appendix B. Appendix B also includes exhibits that distinguish full and partial parcel acquisitions for Alternative D. Alternative D does not propose to provide replacement parking because this alternative would not result in loss of parking at APNs 029-170-04, 029-351-01, 029-351-20, and 029-371-01.

MIXED-USE REDEVELOPMENT SITES

Like Alternative B, Alternative D includes the potential future redevelopment of three sites within the project site to include a mix of residential and commercial uses that could also be relocation opportunities for dislocated residents and business owners. Because the highway realignment differs from Alternative B, the configuration of Sites 1 and 2 are different for Alternative D. Exhibits 2-11 and 2-12 show the location and a potential mix of uses that could be developed at these sites through a future public private partnership.

TTD would construct replacement housing for the displaced residents, as described above for Alternative B, at these mixed-use sites or elsewhere whether a private developer partners with TTD or not. The maximum allowable development that could occur under the existing zoning on each of the three sites include up to 224 housing units, 48,000 sq. ft. of CFA, and 472 parking spaces. The conceptual plan for the three sites described in Exhibit 2-12 and analyzed in this EIR/EIS/EIS would include up to 210 housing units, 35,000 sq. ft. CFA, and 472 parking spaces.

Potential future redevelopment of these sites would utilize some of the parcels acquired for the realigned US 50 right-of-way, but would require additional property acquisition as summarized in Table 2-3. No parcels in Nevada would be acquired for the mixed-use development. Table 2-4 provides a summary description of the types of uses and number of units affected by the full parcel acquisitions for the mixed-use development. The mixed-use development under Alternative D would displace residents in 10 housing units and three businesses.

2.4.5 Alternative E: Skywalk

Recognizing that right-of-way acquisition and displacement of residents and business owners would be necessary for other build alternatives, it is important to consider an alternative that could avoid the need to acquire property and displace uses and people in the existing community. Alternative E would feature a concrete deck over the entire width and length of existing US 50 within the tourist core between approximately 100 feet south of Stateline Avenue and near the northern end of the Montbleu Resort (about 450 feet south of Lake Parkway). The deck would serve as a pedestrian “skywalk” facility or pedestrian walkway along the resort-casinos. The width would be approximately 75 feet. The skywalk would be constructed on 4-foot wide columns spaced approximately 20 feet on center running along both sides of the highway for the entire length of the bridge. The purpose of the skywalk would be to enhance pedestrian facilities and separate pedestrians from the highway through the tourist core near the resort-casinos to allow for improved traffic flow. Implementation of this alternative would preclude construction of bicycle lanes through the resort-casino portion of the tourist core because the space available in the road currently does not, and would continue to not, meet space requirements for bicycle lanes.

The skywalk would be accessible by four elevators and escalators located near the walkway endpoints. A goal of Alternative E is to evaluate whether a feasible concept can be developed that avoids substantial right-of-way acquisition, residential and business dislocation, and encroachment on Van Sickle Bi-State Park. The skywalk would be constructed entirely within the existing US 50 right-of-way such that parcel acquisitions would not be necessary.

Exhibits 2-13 shows a plan view illustrating the conceptual layout of Alternative E. Exhibits 2-14 shows a conceptual illustration of the skywalk as viewed from US 50 near Stateline Avenue. Exhibit 2-15 shows a conceptual illustration of the skywalk as viewed from Stateline Avenue looking toward existing US 50.

ROAD NETWORK CHANGES

The configuration of US 50 would remain as it is today, except that the signal and at-grade pedestrian scramble between Hard Rock Hotel and Montbleu would be removed.

The improvements on Stateline Avenue would be the same as describe for Alternative B.

INTERSECTION IMPROVEMENTS

Alternative E would affect the following intersections in the project site limits:

- ▲ US 50/Stateline Avenue: This intersection would be reconfigured to reflect the two southeast bound lanes to accommodate concert travelers exiting the Harvey's parking lot.
- ▲ The signal and at-grade pedestrian scramble between Hard Rock Hotel and Montbleu would be removed.

RIGHT-OF-WAY ACQUISITION NEEDS

Alternative E would be constructed entirely within the existing US 50 right-of-way and would not require any property acquisitions. Alternative E would not displace any residents or businesses.

MIXED-USE REDEVELOPMENT SITES

Alternative E does not include the potential future redevelopment sites associated with Alternatives B through D. Because Alternative E would not displace any residents or businesses, it would not be necessary to provide replacement housing or commercial space as part of this alternative.

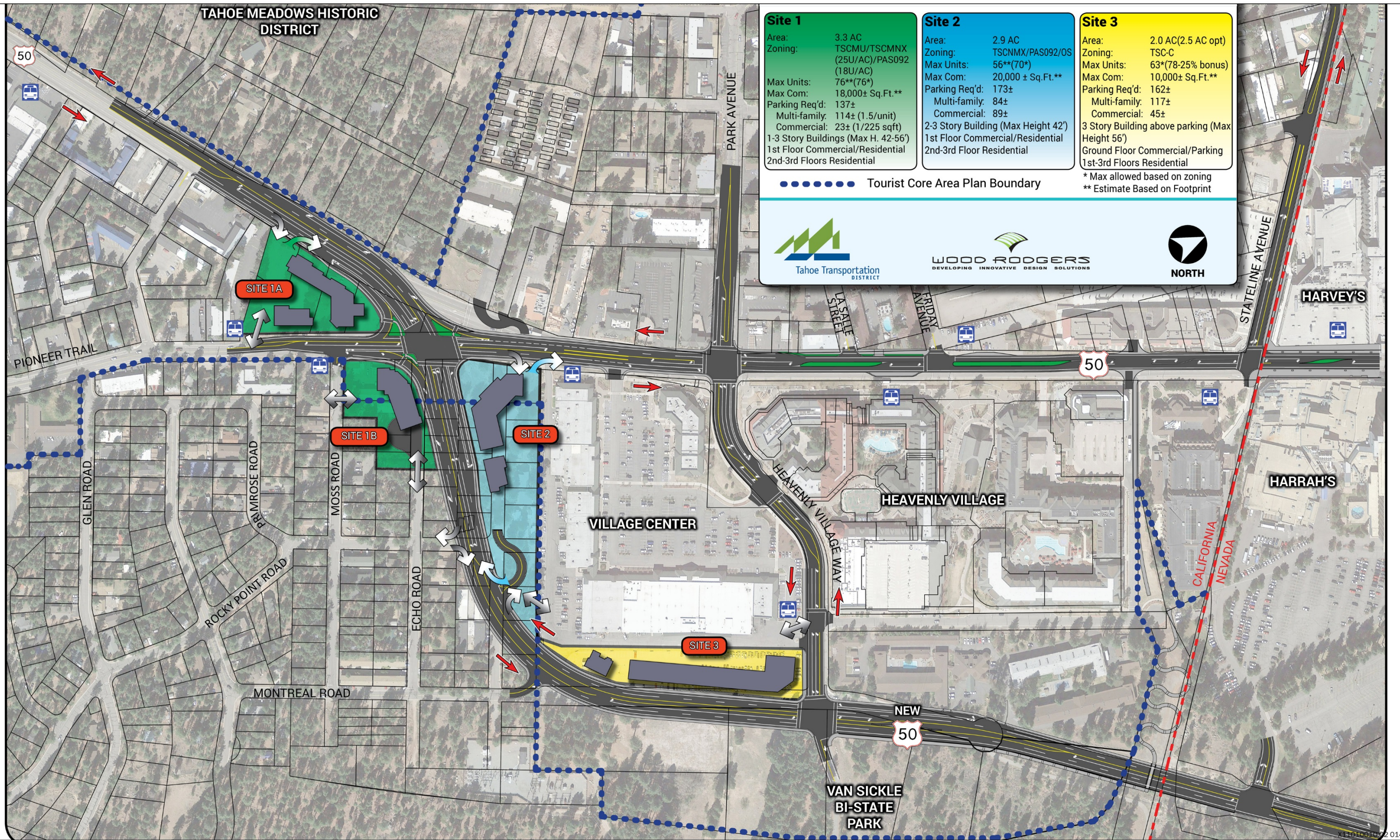


Exhibit 2-11

Alternative D Mixed-Use Development Sites



Site 1

Site Area: 3.3± AC

City of South Lake Tahoe Tourist Core Area Plan/Plan Area Statement 092 (Pioneer/Ski Run)

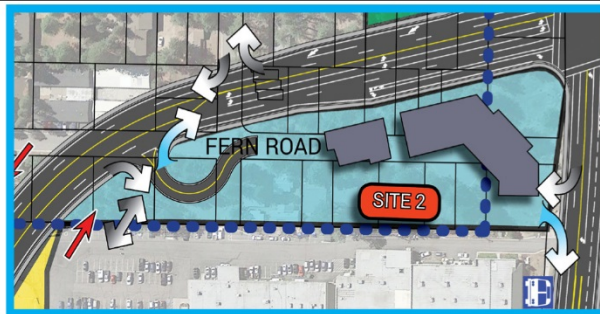
Zoning: Tourist Center Mixed Use/Tourist Center Neighborhood Mixed Use (Multi-Family - 25 Units/AC); & PAS092 (MF - 18 units/AC) - Max Units Allowed: 76

Conceptual Plan:

Site 1A Footprint includes a main 3 Story Building with 14,000± sqft/floor, with a smaller 2 story building with 7,000± sqft per floor. Site 1B Footprint shown includes a two story 13,000± sqft/floor building. There is a 36' height limit in TSC-NMX, a 42' height limit in PAS092, and a 56' height limit in TSC-MU. Commercial and residential require a total of 137 parking spaces for both 1A and 1B, a mix of surface & subsurface garage parking.

Commercial Option - Site 1A main building 1st floor includes a total of 5,000± sqft corner commercial. At an average parking requirement of 1 space/225 sqft = 23 spaces required.

Residential Option - Site 1A main building 1st floor includes 10 units, 2nd and 3rd floors include 30 units (15 units/floor), and the smaller building includes 16 units (8 units/floor). Site 1B building includes 30 units (15 units/floor). Total unit count=76 residential units at 750± sqft each. Parking reduction at 1.5 spaces/unit= 114 spaces req.



Site 2

Site Area: 2.9± AC

City of South Lake Tahoe Tourist Core Area Plan/Plan Area Statement 092 (Pioneer/Ski Run)

Zoning: Tourist Center Mixed Use (MF-25 Units/AC) (assumes zone change of existing open space); & PAS092 (MF - 18 units/AC) - Max Units Allowed: 70

Conceptual Plan:

The Footprint shown represents a main 3 Story Building with 20,000± sqft per floor, with one smaller 2 story building at 4,000± sqft per floor. There is a 56' height limit in TSC-MU, and 42' in PAS092. Commercial and residential require a total of 173 parking spaces, a mix of surface & subsurface garage parking.

Commercial Option - Main building 1st floor includes 20,000± sqft commercial. Assuming an average parking requirement of 1 space/225 sqft = 89 spaces required.

Residential Option - The main building 2nd and 3rd floors would include 48 units (24 per floor) with an average of 750± sqft each. The smaller building would include 8 units (4 per floor) at 750± sqft/unit. Total unit count = 56 residential units. Assuming a parking reduction to 1.5 spaces/unit = 84 spaces required.



Site 3

Site Area: 2.0± AC {2.5 AC option*}

City of South Lake Tahoe Tourist Core Area Plan
Zoning: Tourist Center (MF - 25 Units/AC) - Max Units Allowed: 50 (62 with 25% density bonus)
*{63 (78 with 25% density bonus)}

Conceptual Plan:

The Footprint shown represents a 3 Story Building above podium level parking. Tourist Center has a 56' height limit. Each floor is approximately 40,000± square feet. Commercial and Residential require a total of 162 parking spaces, a mix of garage and surface parking.

Commercial/Parking Option - Ground/Podium level includes approximately 10,000± sqft corner commercial and 30,000± sqft of podium level parking. Assuming an average parking requirement for commercial of 1 space/225 sqft = 45 spaces required.

Residential Option - 1st Floor includes approximately 26 units with an average of 800± sqft/unit, and 15,000± sqft of amenities (lobby, indoor rec facility, & laundry). 2nd Floor includes approximately 30 units with an average of 1,000± sqft/unit, and 6,000± sqft of amenities (lobby & laundry). 3rd Floor includes 22 units with average of 1,200± sqft/unit, and 9,600± sqft of amenities (lobby & laundry). All three floors would include a total of 78 units. Assuming a parking reduction to 1.5 spaces/unit = 117 spaces req.



Exhibit 2-13

Alternative E: Skywalk – Overview of Skywalk

Existing view from US 50 near the California/Nevada border at Stateline Avenue



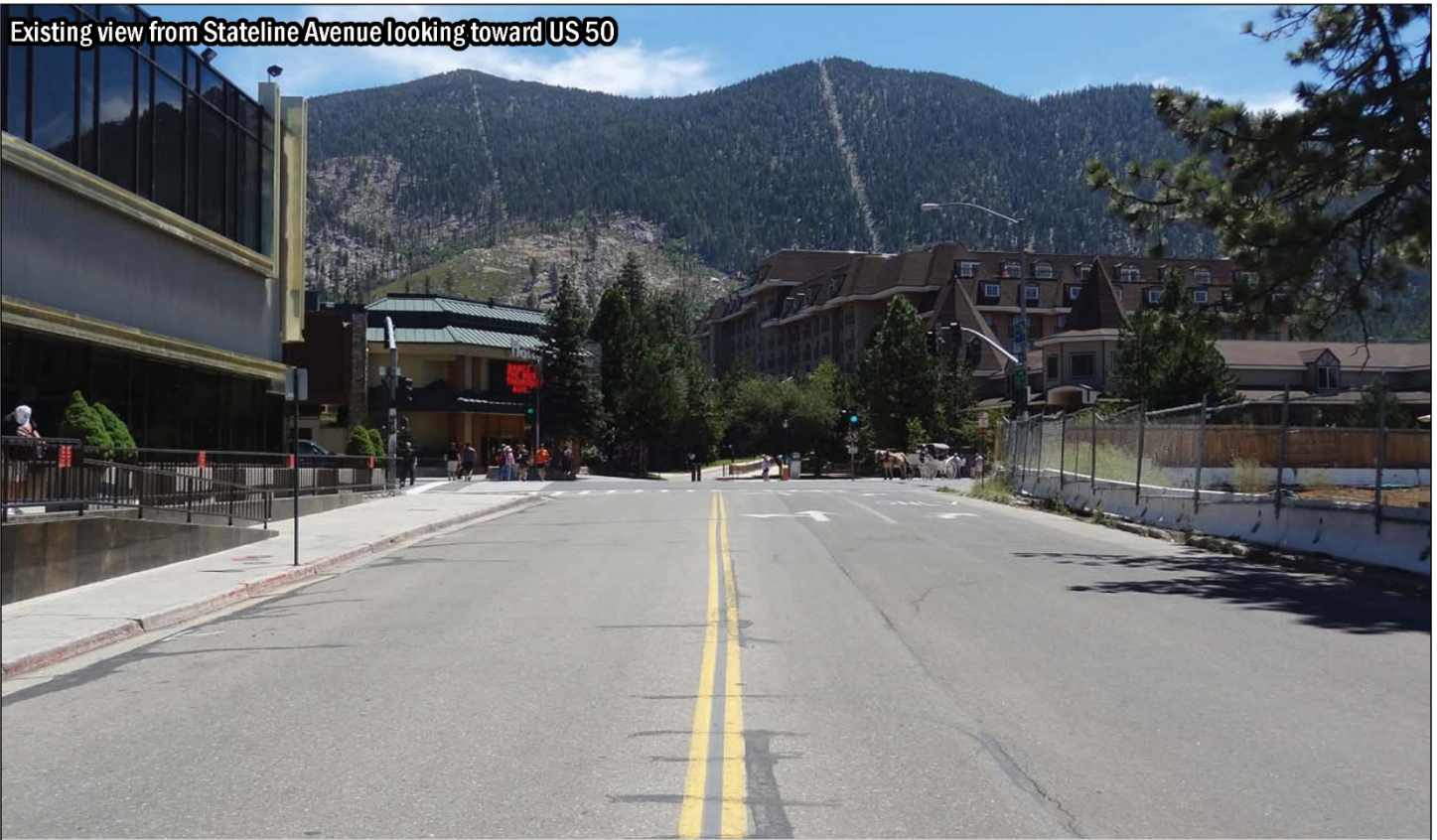
Conceptual view of Skywalk from US 50 near the California/Nevada border at Stateline Avenue



Source: TRPA 2014

X11010010 02 020

Existing view from Stateline Avenue looking toward US 50



Conceptual view of Skywalk from Stateline Avenue looking toward US 50



Source: TRPA 2014

X11010010 02 021

2.4.6 Construction Overview

CONSTRUCTION PHASING AND SCHEDULE OVERVIEW

Construction of the project would commence as soon as possible after project approval and acquisition of initial permits and would be completed over multiple years. Construction of replacement housing would be completed prior to beginning any earth moving activities for the transportation improvements in the California portion of the project site. It is assumed for the purposes of this EIR/EIS/EIS that Site 3 would be constructed first and would accommodate the replacement housing needs of any of the build alternatives. It is also assumed that construction of mixed-use development Sites 1 and 2 would occur after completion of the transportation improvements. A detailed constructing phasing plan would be developed following project approval and securing funding. For the purposes of this EIR/EIS/EIS, it is conservatively described that initial construction could begin in 2017, with final project completion of the transportation improvements occurring by 2020. These are the years that have been contemplated through the lengthy project development phase. This construction schedule is not certain, however, and may be delayed. It may be that construction is delayed by several years, (e.g., until 2025) for reasons that could include funding uncertainty and right-of-way acquisition.

Construction activities would be continuous during the construction season of May to October (potentially extendable, depending on weather and approval by regulatory agencies). During winter months, activities involving earth moving would cease for a period of time. Non-grading construction activity could be conducted between October and May, weather permitting. Grading and earth moving activities would be limited to between May 1 and October 15, per Chapter 33 of the TRPA Code.

Construction activities for Alternatives B through D would occur between 8:00 a.m. and 6:30 p.m.; it is not anticipated that any construction activities would be required outside these hours. Construction of Alternative E would require closure of existing US 50 through the affected area at times during construction. It is likely that Alternative E would require construction outside of the established daytime hours to minimize traffic conflicts; however, all pile driving would be performed during daytime hours. Such work would be coordinated with and require authorization by TRPA and the City of South Lake Tahoe and/or Douglas County, as well as emergency service providers and any local residents and businesses that could be affected by construction activities outside of the established daytime hours. The city and county could impose conditions on construction outside of typical hours.

Construction operations would be expected to include standard equipment used in roadway and highway construction such as haul trucks and mixers, excavators, compactors, dozers, loaders, pavers, scrapers, or graders. Demolition activities associated with Alternatives B, C, and D would likely include use of cranes, excavators, bulldozers, and haul trucks to off-haul demolition material. Demolition activities associated with Alternative E would involve similar equipment but would be limited to removal of sidewalk areas. The pedestrian platform associated with Alternative E, and possibly the pedestrian bridge associated with Alternatives B, C, and D, could involve the use of pile driving equipment for columns that would support the bridge structures.

Construction of Alternatives B, C, and D would occur in three phases. The first phase would include right-of-way acquisition, construction of replacement housing, building demolition, and utility relocations and improvements. The second phase would include construction of the new realigned US 50. The last phase would include construction on existing US 50 through the tourist core. Each of these phases is expected to require one year, or rather one construction season. Traffic on affected roadways would either be carried through or detoured onto other roadways. Construction of the roundabout at US 50/Lake Parkway would be phased to allow through access during construction. Access to Van Sickle Bi-State Park and all businesses would be maintained for the duration of construction activities. Haul trips to export material and debris from the project site would occur during each phase of construction. Construction of Alternative E would occur in a single phase.

TRAFFIC CONTROL MEASURES

Traffic control would be required during construction of the project to minimize lane closure requirements, preserve access to businesses, and minimize travel delays. These strategies would be implemented in conformance with Caltrans, NDOT, City of South Lake Tahoe, and Douglas County standards as they apply to each phase of construction.

To the extent feasible, project construction would be scheduled in late spring or early fall, rather than the summer peak tourist season, to reduce effects on businesses, residents, and visitors. Emergency service providers, businesses, and other affected public would be notified about any planned lane closures and reduced lane widths, and a traffic management plan would be prepared to specify how emergency services would be provided during construction. Traffic control measures may include: temporary signage, lane width reductions, reduced speeds, lane closures, and detours.

CONSTRUCTION STAGING AREAS

Construction staging areas would be necessary to store project-related construction equipment and materials. A containment plan and best management practices (BMPs) for storage activities would be incorporated into the construction contracts and project specifications to ensure that there are no permanent environmental effects related to the storage of these materials and equipment. There are several potential construction staging areas proposed for the alternatives that would be in the following areas:

- ▲ Montbleu Resort and Casino parking lot;
- ▲ Harvey's and Hard Rock Hotel and Casino parking lots; and/or
- ▲ the existing US 50 right-of-way abandoned after the construction of the new alignment of US 50, which would be used during construction of the tourist core improvements only.

Construction staging areas at the casino parking lots would be implemented through a willing agreement between the property owner and construction contractor. If the Harvey's parking lot would be used for construction staging, the use of the parking lot would only occur outside of the period during which the parking lot is used for the annual summer concert series (in general, before July and after mid-September). Exhibits 2-2 through 2-4 show potential construction staging locations.

2.4.7 Realignment of Utility Lines

The project site includes numerous existing utilities, including the following:

- ▲ Liberty Energy overhead and underground electrical power lines,
- ▲ Southwest Gas Corporation underground natural gas pipelines,
- ▲ Charter Communications overhead and underground cable TV and fiber optic lines,
- ▲ South Tahoe Public Utility District underground water and wastewater pipelines,
- ▲ a Verizon Communications underground fiber optic line,
- ▲ Douglas County Sewer Improvement District sewer pipelines,
- ▲ Paiute underground natural gas pipelines,
- ▲ AT&T overhead and underground telephone lines, and
- ▲ Kingsbury General Improvement District underground water pipelines.

Many of these utilities would require relocation, particularly utilities in the residential area just west of the Heavenly Village Center along the new US 50 alignment. Additionally, existing fire hydrants in the Rocky Point neighborhood would be relocated during project construction to coincide with the new alignment. Fire hydrants along the mountain side of Lake Parkway also have the potential to be relocated as part of the project.

Utilities currently along the existing US 50 corridor are anticipated to remain, with only minor impacts expected. These could include, but not be limited to, relocating valves, poles, meters, and manholes.

With Alternatives B through D, overhead utilities lines located along the realigned US 50 would be relocated within the highway footprint and would be relocated underground where feasible. Existing sewer, water, and gas mains within the impacted residential areas would be upgraded to current standards in their current locations, or be relocated out of the realigned US 50 alignment. Service connections to demolished residences and business would be capped off and abandoned or removed. Service connections to remaining residences and businesses would be modified as needed to maintain utility service. Every effort would be made to limit longitudinal encroachments into Caltrans right-of-way, and limit utilities to just crossings of US 50, per Caltrans preference. During construction, as specified in the construction documents, a certain number of fire hydrants would have to remain operational at all times. Any realignment of utilities would be required to adhere to applicable standards set forth by the City of South Lake Tahoe Public Improvement and Engineering Standards, Douglas County Design Criteria and Improvement Standards, Caltrans requirements, and any other applicable engineering requirements or design standards.

Within the existing US 50 right of way, the cost to move and/or modify existing utilities would be determined by existing agreements between the utility providers and Caltrans and NDOT. Along the new US 50 alignment, it is anticipated that the project would be responsible for most, if not all, costs associated with relocations and modifications to existing utilities. TTD would oversee both the project contractor and utility relocation work during construction.

2.4.8 Further Development of Project Design

Throughout the preparation of the environmental document, the development of the five alternatives assessed herein and design concepts of these alternatives have been and would continue to be refined as preliminary engineering progresses. The development of alternatives and project refinements has occurred in response to input from the Project Development Team (PDT; a collaboration of public agency staff members assisting the lead agencies in project planning), other interested agencies, and members of the public in an effort to reduce cost and minimize areas of disturbance (temporary and permanent). After completion of the environmental review and through the permitting process and completion of the final design, project design refinements (e.g., lane widths, intersection lane configurations, and staging areas) would occur within the project footprint and the scope of project components that are analyzed in this Draft EIR/EIS/EIS. The final design of the transportation improvements would adhere to applicable standards set forth by the City of South Lake Tahoe Public Improvement and Engineering Standards, Douglas County Design Criteria and Improvement Standards, Caltrans requirements, and any other applicable engineering requirements or design standards.

Design information has been refined and presented, as it became available, to the PDT, public, and decision makers. This is consistent with the information included in Section 1.5, "Summary of Public Involvement," which states that changes and refinements to the project will occur as a result of on-going planning or comments received during the public review period. As stated in the CEQA Guidelines Section 15203, a review period for an EIR does not require a halt in other planning or evaluation activities related to a project. Planning should continue in conjunction with environmental evaluation.

The following are project design refinements consisting of nonstandard design features that deviate from project detail included in earlier technical studies prepared to support this environmental document. These refinements also deviate from some design requirements set forth by Caltrans and/or NDOT. The following design refinements have been considered during the evaluation of environmental impacts in this Draft EIR/EIS/EIS. Nonstandard design features that have been developed to make refinements to project details include:

- ▲ Features that reduce the roadway footprint:
 - Five-foot sidewalk in the eastbound shoulder west of Midway Road; the standard width is 6 feet.
 - Five-foot shoulders on US 50; the standard shoulder width is 8 feet.
 - 11-foot travel lanes; the standard width is 12 feet.
 - 11-foot median/two-way left-turn lane in some areas on US 50. Standard width is 12 feet.
- ▲ 2:1 fill slopes; the standard is 4:1 or flatter fill slopes.
- ▲ No pedestrian refuge island in the crosswalk across US 50 at Pioneer Trail intersection. Standard is to have a 6-foot pedestrian refuge island.
- ▲ Distance from a proposed fence separating the Linear Park Bike Trail from US 50 is only about 1 foot; the standard is 1.5 feet minimum.
- ▲ Distance between the edge of pavement of the Linear Park Bike Trail and obstructions along the trail would be zero feet; the standard width is a minimum of 2 feet.
- ▲ Distance between the edge of pavement of the Linear Park Bike Trail and the edge of travel way on US 50 would be a minimum of 6 feet; the standard width is a minimum of 13 feet.

2.5 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER DISCUSSION

Additional alternatives were considered during the initial planning for the US 50/South Shore Revitalization Project. FHWA guidance provides that the alternatives analysis should explain why and how alternatives were eliminated from consideration. The CEQA Guidelines Section 15126.6(c) includes three factors that may be used to eliminate alternatives from detailed consideration in an EIR: “i. failure to meet most of the basic project objectives, ii. infeasibility, or iii. inability to avoid significant environmental impacts.” Table 2-5 describes the alternatives that were considered and the rationale for eliminating them from detailed evaluation in this draft EIR/EIS/EIS. Maps that correspond to the alternatives described below are included in Appendix C of this EIR/EIS/EIS.

Table 2-5 Alternatives Considered but Eliminated from Further Discussion

Alternative	Description	Year Developed	Capital Cost (Estimated)	Reasons Alternative Dropped from Consideration
1991 EIR/EIS - One-Way Alternative	This alternative would use both sides of the Loop Road, meaning use of both the mountain and lake sides of Lake Parkway. The one-way alternative was proposed to reduce the amount of traffic passing through the tourist core by making US 50 a one-way travel corridor. The North Loop (Pine Boulevard) would have three one-way, westbound lanes and would be designated as US 50 westbound. Lake Tahoe Boulevard (existing US 50), between the proposed Loop Road Intersections, would be designated as US 50 eastbound and would be widened to three lanes. The present five-lane roadway would be restriped to three lanes between West and East Loop Road intersection and flared out slightly at the Park Avenue and Stateline Avenue intersections to allow for turn lanes. The new alignment would include an extension of Pine Boulevard at its western end such that it would encroach on the Tahoe Meadows Historic District.	1991	\$100 to \$125 million	This alternative was eliminated from consideration because it would require more infrastructure (i.e., a larger footprint than current realignment alternatives), would have a higher cost and similar housing and business displacements in the neighborhood west of the Heavenly Village Center to the locally preferred action and other realignment alternatives evaluated in this EIR/EIS/EIS, and would also impact an existing historic district. Further, it would not avoid significant environmental impacts of the project. This alternative also does not meet the project objective to create a complete street through the tourist core for all users. Corresponds to Map 12 in Appendix C.
1991 EIR/EIS - Five Lane Alternative	This alternative would use both sides of the Loop Road, meaning use of both the mountain and lake sides of Lake Parkway. The five-lane alternative consisted of the tourist core between the West and East Loop Road intersection to remain as is with two travel lanes in each direction and a center turn lane. The North Loop Road (Pine Boulevard) would be three lanes wide and would allow two-directional traffic with one lane in each direction and a center turn lane. The South Loop Road would be five lanes wide, two-directional, with two turn lanes in each direction and a center left-turn lane. The South Loop Road would be designated as US 50 from the proposed Loop Road west intersection to the Loop Road east intersection. The new alignment would include an extension of Pine Boulevard at its western end such that it would encroach on the Tahoe Meadows Historic District.	1991	\$125 to \$135 million	This alternative was eliminated from consideration because it would require more infrastructure (i.e., a larger footprint than current realignment alternatives), would have a higher cost and similar housing and business displacements in the neighborhood west of the Heavenly Village Center to the locally preferred action and other realignment alternatives evaluated in this EIR/EIS/EIS, and would also impact an existing historic district. Further, it would not avoid significant environmental impacts of the project. This alternative also does not meet the project objective to create a complete street through the tourist core for all users. Corresponds to Map 13 in Appendix C.
1991 EIR/EIS - Three Lane Alternative	This alternative would use both sides of the Loop Road, meaning use of both the mountain and lake sides of Lake Parkway. The three-lane alternative would be the same as the five-lane alternative except that the core route between the West and the East Loop Road intersections would be reduced from five to three lanes, one travel lane in each direction and a center turn lane, which would be accomplished by restriping the existing roadway. The South Loop Road from the proposed Loop Road west intersection to the proposed Loop Road east intersection would be designated as US 50.	1991	\$125 to \$135 million	This alternative was eliminated from consideration because it would require more infrastructure (i.e., a larger footprint than current realignment alternatives), would have a higher cost and similar housing and business displacements in the neighborhood west of the Heavenly Village Center to the locally preferred action and other realignment alternatives evaluated in this EIR/EIS/EIS, and would also impact an existing historic district. Further, it

Table 2-5 Alternatives Considered but Eliminated from Further Discussion

Alternative	Description	Year Developed	Capital Cost (Estimated)	Reasons Alternative Dropped from Consideration
				would not avoid significant environmental impacts of the project. Corresponds to Map 14 in Appendix C.
1991 EIR/EIS - North Park Avenue Alternative	This alternative is similar to the three-lane alternative described above. The major difference being that with the North Park Avenue Alternative, Pine Boulevard would not extend through the Tahoe Meadows Historic District to the west intersection. Rather, the North Loop Road would follow existing Pine Boulevard and then North Park Avenue to the intersection of Park Avenue and Lake Tahoe Boulevard (existing US 50). This would create a system where the north and south elements of the loop were offset at the west end. The section of Lake Tahoe Boulevard between Park Avenue and east intersections would be restriped to three lanes. Implementing the North Park Avenue Alternative would require reconfiguration of the proposed Loop Road west intersection and the Park Avenue and Lake Tahoe Boulevard intersection. In all other ways the North Park Alternative would be the same as the three-lane alternative. The South Loop Road from the proposed Loop Road west intersection to the proposed Loop Road east intersection would be designated as US 50.	1991	\$125 to \$135 million	This alternative was eliminated from consideration because it would require more infrastructure (i.e., a larger footprint than current realignment alternatives) and would have a higher cost and similar housing and business displacements in the neighborhood west of the Heavenly Village Center to the locally preferred action and other realignment alternatives evaluated in this EIR/EIS/EIS. Further, for the purposes of CEQA and TRPA, this alternative would not avoid significant environmental impacts of the project. Corresponds to Map 15 in Appendix C.
Stateline/Ski Run Community Plan Alternative	This alternative is similar to the North Park Avenue Alternative. The major difference is that in this alternative US 50 is a through movement at the US 50/Lake Tahoe Boulevard intersection in California, and in Nevada at the US 50/Lake Tahoe Boulevard Intersection the free rights do not exist.	1994	\$125 to \$135 million	This alternative was eliminated from consideration because it would require more infrastructure (i.e., a larger footprint than current realignment alternatives) and would have a higher cost and similar housing and business displacements in the neighborhood west of the Heavenly Village Center to the locally preferred action and other realignment alternatives evaluated in this EIR/EIS/EIS. Further, for the purposes of CEQA and TRPA, this alternative would not avoid significant environmental impacts of the project. Corresponds to Map 4 in Appendix C.
2004 US 50/ Stateline Area Transportation Study - Alternative A	US 50, between Park Avenue and Lake Parkway, would be converted to two eastbound traffic lanes; this segment would include one-way traffic only. Lake Parkway West, Pine Boulevard, and Park Avenue to the lake side of US 50 would be improved to provide two through lanes westbound, plus a single eastbound lane for local access and a center two-way left-turn lane. Existing US 50 would be re-designated as US 50 East, while the Lake Parkway West/Pine Boulevard/Park Avenue alignment would become US 50 West. This alternative would eliminate housing and business displacement just west of the Heavenly Village Center.	2004	\$90 Million	This alternative was eliminated from consideration because it would require a separate frontage road and driveway consolidation to meet Level of Service (LOS) requirements. Constructability and cost impacts outweigh the benefits of this alternative. This alternative also does not meet the project objective to create a complete street through the tourist core for all users. Corresponds to Map 6 in Appendix C.

Table 2-5 Alternatives Considered but Eliminated from Further Discussion

Alternative	Description	Year Developed	Capital Cost (Estimated)	Reasons Alternative Dropped from Consideration
2004 US 50/ Stateline Area Transportation Study and 2010 Project Study Report - Alternative B	US 50 between Park Avenue and Lake Parkway would be converted to two eastbound general traffic lanes plus one transit-only lane; this segment would include one-way traffic only. Lake Parkway West, Cedar Avenue, and Park Avenue to the lake side of existing US 50 would be improved to provide two through lanes westbound, plus a single eastbound lane for local access and a center two-way left-turn lane. Existing US 50 would be re-designated as US 50 East, while the Lake Parkway West/Cedar Avenue/Park Avenue alignment would become US 50 West. A new transition roadway segment would be required between the Cedar Avenue/Stateline Avenue intersection and the existing Lake Parkway West alignment north of the Harvey's casino building, but bisecting the Harvey's rear surface lot used for summertime outdoor concert events. Signal improvements would be implemented as needed at existing signalized intersections, and new signals would be provided at US 50 West/Stateline Avenue.	2004/2010	\$90 to \$100 Million	This alternative was eliminated from consideration because it would require a separate frontage road and driveway consolidation to meet LOS requirements. Rejected during Project Initiation Document (PID) for geometrics, and because constructability and cost impacts outweigh the benefits of this alternative. This alternative also does not meet the project objective to create a complete street through the tourist core for all users. Corresponds to Map 7 in Appendix C.
2004 US 50/ Stateline Area Transportation Study - Alternative C	US 50, between Park Avenue and Lake Parkway would be converted to two eastbound travel lanes and one transit only lane; this segment would include one-way traffic only. Montreal Road/Lake Parkway would become US 50, and be widened to provide two travel lanes in each direction, with turn pockets at major intersections and driveways. The roadway would extend west of Park Avenue, passing to the south and west of the Heavenly Village Center shopping complex, to a new intersection near the existing US 50/Pioneer Trail intersection.	2004	\$80 Million	This alternative was modified to include one lane in each direction with additional streetscape type improvements to improve the pedestrian and bicycle experience. This alternative is an early version of Alternative D analyzed in this EIR/EIS/EIS. Corresponds to Map 9 in Appendix C.
US Highway 50/ Stateline Area Transportation Study - Alternative D	Same as Alternative C above; however, a two-lane roundabout would replace the current US 50/Lake Parkway signalized intersection.	2004	\$70 Million	This alternative was modified to include one lane in each direction with additional streetscape type improvements to improve the pedestrian and bicycle experience. This alternative is an early version of Alternative D analyzed in this EIR/EIS/EIS. Corresponds to Map 8 in Appendix C.
VA Study - Tunnel Beneath Existing US 50 Alternative	Construct a tunnel under the current US 50 alignment through the downtown area. Local traffic and traffic from Pioneer Trail would use the existing US 50 above the tunnel and through traffic would utilize the tunnel. Westbound traffic would enter the tunnel west of Lake Parkway and surface on US 50 west of Pioneer Trail. The approximate length of the tunnel is 3,500 feet with 2,500 foot transitions on each end of the tunnel. The tunnel width would include two 12-foot lanes each way with a 4-foot wide center divider and sidewalk for emergency access. The Pioneer Trail/US 50 intersection would be eliminated with this alternative. This alternative also includes a frontage road along US 50 west of the Pioneer Trail to allow business access after construction.	2010	\$750 to \$800 million	This alternative was eliminated from consideration because it would have an extremely high cost and would require challenging construction techniques that would require a specialized contractor, which deemed this alternative infeasible. Would require complex traffic handling/detours for multiple years. Constructability and cost impacts outweigh benefits of this alternative. Corresponds to Map 10 in Appendix C.

Table 2-5 Alternatives Considered but Eliminated from Further Discussion

Alternative	Description	Year Developed	Capital Cost (Estimated)	Reasons Alternative Dropped from Consideration
VA Study - Tunnel Beneath Residential Area Alternative	This alternative would construct a tunnel under the housing area that would be impacted by the highway under Alternatives B and C evaluated in this EIR/EIS/EIS. The tunnel would start west of Pioneer Trail going eastbound and then surface the tunnel at the curve on the mountain side. To construct the tunnel the housing would have to be removed during construction and then reconstructed after completion of the tunnel. The businesses west of the Pioneer Trail intersection would maintain access via Frontier Road along the tunnel entrance. The tunnel construction would require relocation of the gondola pole. The existing topography makes this alternative infeasible to construct.	2010	\$300 to \$350 million	This alternative was eliminated from consideration because it would have an extremely high cost and challenging construction, which would require a specialized contractor, which deemed this alternative infeasible. Would require complex traffic handling/detours for multiple years. Constructability and cost impacts outweigh benefits and housing and business displacement, albeit temporarily, would not be avoided. Corresponds to Map 11 in Appendix C.
PSR Alternative A - Lakeside Alternative	US 50 between Park Avenue and Lake Parkway would be converted to two eastbound traffic lanes. Lake Parkway West, Pine Boulevard, and Park Avenue to the lake side of US 50 would be improved to provide two through lanes westbound, plus a single eastbound lane for local access and a center two-way left-turn lane. Existing US 50 would be re-designated as US 50 East, while the Lake Parkway West/Pine Boulevard/Park Avenue alignment would become US 50 West. A frontage road would be constructed parallel to Pine Boulevard to consolidate driveways.	2010	\$90 Million	This alternative was eliminated from consideration because it was rejected by the PDT on March 17, 2011. Constructability and cost impacts outweighed benefits. Also creates significant commercial and residential access impacts. Corresponds to Map 5 in Appendix C.
Open House Public Alternative 1 - The One-Way Alternative	This alternative is similar to the 1991 EIR/EIS One-Way Alternative. The major differences being that with the Open House One-Way Alternative, the western Eastbound/Westbound US 50 split would be moved to the west to the existing US 50/Midway Road intersection to allow a US 50/Pioneer Trail intersection, and the existing US 50 (Lake Tahoe Boulevard) between Park Avenue and Lake Parkway would be closed and converted to a pedestrian-friendly walkable area. The mountain side of the loop would be a two-lane one-way roadway designated as US 50 East and the lake side of the loop would be a two-lane one-way roadway designated as US 50 West.	2012	\$100 to \$125 million	This alternative was eliminated from consideration because it would require more infrastructure (i.e., a larger footprint than current realignment alternatives), would have a higher cost and similar housing and business displacements in the neighborhood west of the Heavenly Village Center to the locally preferred action and other realignment alternatives evaluated in this EIR/EIS/EIS, and would also impact an existing historic district. Further, it would not avoid significant environmental impacts of the project. This alternative also does not meet the project objective to create a complete street through the tourist core for all users. No specific map for this alternative was prepared, but it is similar to Map 12 in Appendix C and the differences between these alternatives are described herein.

Table 2-5 Alternatives Considered but Eliminated from Further Discussion

Alternative	Description	Year Developed	Capital Cost (Estimated)	Reasons Alternative Dropped from Consideration
Open House Alternative 2 - The Wildwood Alternative	This alternative is similar to the Triangle Alternative. The major differences being that with the Wildwood Alternative, the western end of the new US 50 alignment would be moved to the west to the Wildwood Avenue intersection, impacting different residences and businesses than the Triangle Alternative.	2012	\$80 to \$90 million	The new US 50 alignment with this alternative would bisect the residential neighborhood west of the Heavenly Village Center but would not decrease impacts to residences and businesses. The very similar Triangle Alternative is evaluated in this document as Alternative B. Alternative B in this EIR/EIS/EIS was considered less detrimental to neighborhood character (disturbs the edge or the neighborhood rather than cutting through the center). No specific map for this alternative was prepared, but it is similar to Exhibit 2-2 in this chapter. The differences between these alternatives are described herein.
Open House Alternative 3 - Heavenly Village Way Alternative	This alternative would realign US 50 along Heavenly Village Way between Park Avenue and Montreal Road/Lake Parkway, and along Lake Parkway between Montreal Road and existing US 50. These road segments would be widened to two travel lanes in each direction, up to seven lanes to accommodate turn pockets. Existing US 50 between Park Avenue and Lake Parkway would be converted to one lane each direction with bicycle and pedestrian improvements. A two-lane roundabout would replace the current US 50/Lake Parkway signalized intersection.	2012	\$55 to \$65 million	This alternative was eliminated from further consideration and deemed infeasible, because Caltrans would not approve the geometrics that would be required for this short stretch of highway. Additionally, this alternative would bisect the tourist and pedestrian core and decrease walkability. No specific map for this alternative was prepared.
Open House Alternative 4 - The Lakeview Alternative	Beginning at Wildwood Avenue, this alternative would realign US 50 to the northwest through Tahoe Meadows, paralleling Lake Tahoe and Lakeshore Boulevard, turning onto Lake Parkway near Stateline Avenue, and rejoining existing US 50 at the US 50/Lake Parkway intersection. The new roadway would be two-lanes each direction with turn pockets at intersections. Existing US 50 between Wildwood Avenue and Lake Parkway would become a local street but would remain in its current configuration.	2012	\$75 to \$100 million	This alternative was eliminated from further consideration because of the impacts to the historic district and the effect on lake access from the tourist core. This alternative does not meet the purpose and need for improved bicycle and pedestrian infrastructure. No specific map for this alternative was prepared.

Source: TTD 2012; compiled by Ascent Environmental in 2016

This page is intentionally left blank.