Chapter 2. Alternatives

2.1 Alternatives

The TRPA, CEQA, and NEPA require that consideration be given to a range of alternatives that could feasibly achieve the action's goals. The purpose of the alternatives analysis is to facilitate meaningful public participation through an informed decision-making process. A comparative analysis of the alternatives aids in defining the issues and provides a clear basis for choice by the decision makers and the public. There are currently four build alternatives and a no-build alternative under consideration. Since publication of the Draft EA/EIR/EIS, Placer County has identified a Preferred Alternative, which is a hybrid of Alternatives 2 and 4, which were previously analyzed in the Draft EA/EIR/EIS. All build alternatives (Alternatives 2 through 4 and the hybrid) are illustrated in Figure 2-1.

Since the publication and circulation of the Draft EA/EIR/EIS, public comments were received on the Draft EA/EIR/EIS. The Final EA/EIR/EIS includes responses to comments received on the DEA/DEIR/DEIS, and the preferred alternative has been determined based, in part, on the public comments that have been received, as well as potential impacts associated with all alternatives. Following circulation of the Final EA/EIR/EIS, Placer county and Caltrans will take action on the proposed project.

2.2 Project Goals

Project-related needs and purposes are identified in *Chapter 1* of this document. These needs and purposes are employed here as project goals that structure the alternatives definition and screening process. The identified needs and purposes are summarized below.

2.2.1 Identified Purposes

- Enhance pedestrian and bicycle mobility and safety through project design features.
- Improve water quality through the construction of new collection and conveyance infrastructure.
- Enhance the scenic and aesthetic character of the KBCC through project design features.
- Implement TRPA EIP and Community Involvement Plan (CIP) Projects.

2.2.2 Identified Needs

- Currently, pedestrian traffic is heavy at times, especially during the tourist season, and bicycle traffic is increasing. Pedestrian paths include standard sections of sidewalk and informal paths of native decomposed granite. Bike paths and roadside parking spaces are not clearly defined. Where parking is present, pedestrians are forced to walk on the road shoulder. Improvements associated with the proposed action will help to address this need and will facilitate pedestrian and bicycle mobility and safety along the KBCC.
- Several drainage systems within the project area have been found to be deficient and will be improved with this project. Improvements associated with the proposed action will improve water quality and water conveyance infrastructure within the KBCC to meet appropriate standards.
- Historically, Kings Beach has been one of the primary commercial and recreational centers in the Tahoe Basin. However, because most of the business infrastructure (motels, businesses, rentals) that was developed in the 1950s remains unchanged and continues to decline, the area has suffered with respect to scenic quality and aesthetics. The commercial core area is located within Scenic Roadway Unit 20. This Unit has been defined by the TRPA as being below the Scenic threshold value, and therefore Out-Of-Attainment with the Basin's Scenic Threshold. Improvements

associated with the proposed action will enhance the aesthetic character of the KBCC to meet appropriate standards.

- Implementation of the proposed action will help to fully or partially implement some of the some of the projects listed in the Capital Improvement Projects and Lake Tahoe Basin Environmental Improvement Program, which would make a substantial contribution toward achieving community and regional planning objectives set for the KBCC.

2.3 Alternatives Evaluated

Placer County is proposing to improve the segment of SR 28 that runs through the unincorporated community of Kings Beach, located along the north shore of Lake Tahoe. This segment of SR 28 runs from the intersection of SR 28/SR 267 to the intersection of SR 28/Chipmunk Street. Three build alternatives were evaluated in the Draft EA/EIR/EIS: Alternatives 2, 3, and 4. Since publication of the Draft EA/EIR/EIS, Placer County has identified a Preferred Alternative, which is a hybrid of Alternatives 2 and 4, which were previously analyzed in the Draft EA/EIR/EIS. Table 2-1 presents a comparison between each of these alternatives, along with the no-build alternative. Each build alternative includes construction of sidewalks and bike lanes in both directions; improved pedestrian access and public parking areas; water quality improvements; and improvements to the SR 28 intersections with SR 267, and Bear, and Coon Streets.

The following alternatives are evaluated.

2.3.1 Alternative 1 (No Build)

The existing roadway configuration would be unchanged. Because there are no improvements under this alternative, there would be no improvements to water quality, aesthetics, or other resource areas.

2.3.2 Alternative 2: Three Lanes with On-Street Parking and Two Roundabouts

Under Alternative 2, SR-28 would be modified from a four-lane cross section roadway to a three-lane cross section roadway. Alternative 2 also proposes single-lane roundabouts at Bear and Coon Streets, as a roundabout would operate better than a signalized intersection with a 3-lane cross section. When properly designed, a roundabout can move traffic efficiently through an intersection without a traffic signal (because the roundabout's circular traffic is always moving), reduce accidents compared with other types of intersection controls, and provide an opportunity for landscaping. To accommodate the roundabouts, travel lanes would be reduced to one 3.6-meter (12.0-foot) lane in each direction with a continuous 3.6-meter (12.0-foot) two-way left-turn lane. Parallel parking and designated bike lanes would be provided on both sides of the roadway, and 2.9-meter (9.5-foot) pedestrian sidewalks with landscaped amenities would be provided on each side. Enhanced and clearly marked pedestrian crossings at the SR 267, Deer, Bear, Coon, Fox, and Chipmunk intersections (with a signal at the SR 267 intersection) would be included as part of this alternative. The SR 28 signalized intersection with SR 267 would be maintained with four lanes and turn pockets. A transition from four lanes to two lanes would occur on SR 28 between SR 267 and Secline Street. A two-way left-turn lane would be provided and parallel parking prohibited within this section of SR 28. Sidewalks would be 1.7 meters (5.5 feet) wide on each side of SR 28. The standard two-lane section with two-way left-turn lane would begin east of Secline Street. Bike lanes, sidewalks, and parallel parking would be provided eastward to Chipmunk Street. Parallel parking would be prohibited at driveways and bus turnouts and within intersection sight lines. A 2.4-meter (8.0-foot) parking lane would be created in each direction, and on-street parking would be prohibited during the peak summer season. Restrictions would be accomplished by signage, temporary barricades, and enforcement. The on-street parking loss would be compensated by the newly created off-site parking spaces proposed as part of the proposed action.

Table 2-1. Relative Alternative Comparisons[1]

Alternative 1	Alternative 2	Alternative 3	Alternative 4	Hybrid Alternative
No Project	3 Lane/Roundabouts/Seasonal On-Street Parking	4 Lanes/Traffic Signals	3 Lanes/Roundabouts/No On-Street Parking	3 Lane/Roundabouts/Limited On-Street Parking
Pedestrian/Bicycle Mobility				
Pros 1. No temporary impacts related to project construction	**Pros** 1. Wider sidewalks (9.5 feet wide) encourage walking. 2. Narrower street and median islands improve pedestrian crossings. 3. Bike lanes encourage and make bicycle use safer. 4. Roundabouts help serve as median islands to improve pedestrian crossings. 5. Shorter pedestrian crossings at unsignalized intersections.	**Pro** 1. Sidewalks (5 feet wide) would improve walking. 2. Bicycle lanes encourage and make bicycle use safer. 3. Signals would provide safe pedestrian crossings.	**Pros** 1. Widest sidewalks (17 feet plus wide) encourage walking. 2. Narrowest street and median islands improve pedestrian crossings. 3. Bike lanes encourage and make bicycle use safer, particularly with no parking conflicts . 4. Roundabouts help serve as median islands to improve pedestrian crossings. 5. Shorter pedestrian crossings at unsignalized intersections.	**Pros** 1. Wider sidewalks (9.5 feet wide) encourage walking. 2. Narrower street and median islands improve pedestrian crossings. 3. Bike lanes encourage and make bicycle use safer. 4. Roundabouts help serve as median islands to improve pedestrian crossings. 5. Shorter pedestrian crossings at unsignalized intersections.
Cons 1. No sidewalks for pedestrians 2. No dedicated areas for bicycles 3. Difficulty crossing at non-controlled intersections	**Con** 1. Bicyclists may be unfamiliar with riding through roundabouts.	**Con** 1. 5-lane pedestrian crossing at non-signalized intersections. 2. Sidewalk width is limited.	**Con** 1. Bicyclists may be unfamiliar with riding through roundabouts.	**Con** 1. Bicyclists may be unfamiliar with riding through roundabouts.
Traffic Circulation				
Pros 1. No anticipated impact to traffic circulation	**Pros** 1. Roundabouts will allow continual flow of traffic (traffic need not stop at signals).	**Pros** 1. Left turn lanes on highway may slightly improve circulation. 2. Signal lights will improve access from side streets.	**Pros** 1. Roundabouts will allow continual flow of traffic (traffic need not stop at signals).	**Pros** 1. Roundabouts will allow continual flow of traffic (traffic need not stop at signals).

[1] This is a summary table that is provided only to assist the reader in understanding the different alternatives. The information within the table is generalized and should not be relied upon without reference to the full text.

Table 2-1. Continued

Alternative 1	Alternative 2	Alternative 3	Alternative 4	Hybrid Alternative
No Project	3 Lane/Roundabouts/Seasonal On-Street Parking	4 Lanes/Traffic Signals	3 Lanes/Roundabouts/No On-Street Parking	3 Lane/Roundabouts/Limited On-Street Parking
Cons 1. May be difficult to access highway from side streets at peak periods	**Cons** 1. Substantial traffic congestion during peak summer season and growing with time. 2. Future traffic congestion would lead to cut through traffic through residential neighborhood.	**Cons** 1. Stop and go environment exists with traffic lights.	**Cons** 1. Substantial traffic congestion during peak summer season and growing with time. 2. Future traffic congestion would lead to cut through traffic through residential neighborhood.	**Cons** 1. Substantial traffic congestion during peak summer season and growing with time. 2. Future traffic congestion would lead to cut through traffic through residential neighborhood.
Traffic Safety/Speeds				
Pros	**Pros** 1. Speeds likely reduced through two lane section.. 2. Fewer injury accidents because of slower speeds in roadway. 3. Less passing mentality when hitting the commercial core.	**Pros** 1. Signals could better control traffic through the commercial area.	**Pros** 1. Speeds likely reduced through two lane section. 2. Fewer injury accidents because of slower speeds in roadway. 3. Less passing mentality when hitting the commercial core.	**Pros** 1. Speeds likely reduced through two lane section. 2. Fewer injury accidents because of slower speeds in roadway. 3. Less passing mentality when hitting the commercial core.
Cons 1. No change	**Cons** 1. Cut through traffic on neighborhood streets during peak periods could cause safety concerns. 2. Traffic congestion could lead to safety concerns.	**Cons** 1. Speeding and passing behaviors would continue 2. Safety problems would continue at the uncontrolled intersections.	**Cons** 1. Cut through traffic on neighborhood streets during peak periods could cause safety concerns. 2. Traffic congestion could lead to safety concerns.	**Cons** 1. Cut through traffic on neighborhood streets during peak periods could cause safety concerns. 2. Traffic congestion could lead to safety concerns.

Table 2-1. Continued

Alternative 1	Alternative 2	Alternative 3	Alternative 4	Hybrid Alternative
No Project	3 Lane/Roundabouts/Seasonal On-Street Parking	4 Lanes/Traffic Signals	3 Lanes/Roundabouts/No On-Street Parking	3 Lane/Roundabouts/Limited On-Street Parking
Transit Operations				
Pros	**Pros**	**Pros**	**Pros**	**Pros**
1. No impacts	1. Improved walkability (i.e., wider sidewalks) and more structured parking nodes may encourage transit ridership.	1. Improved walkability (i.e., a sidewalk) and more structured parking nodes may encourage transit ridership.	1. Improved walkability (i.e., wider sidewalks) and more structured parking nodes may encourage transit ridership.	1. Improved walkability (i.e., wider sidewalks) and more structured parking nodes may encourage transit ridership.
	2. Better bus turnouts and shelters will enhance transit experience.	2. Better bus turnouts and shelters will enhance transit experience.	2. Better bus turnouts and shelters will enhance transit experience.	2. Better bus turnouts and shelters will enhance transit experience.
	Cons		**Cons**	**Cons**
	1. Increased periods of traffic congestion will delay busses caught in traffic.		1. Increased periods of traffic congestion will delay busses caught in traffic.	1. Increased periods of traffic congestion will delay busses caught in traffic.

Table 2-1. Continued

Alternative 1	Alternative 2	Alternative 3	Alternative 4	Hybrid Alternative
No Project	3 Lane/Roundabouts/Seasonal On-Street Parking	4 Lanes/Traffic Signals	3 Lanes/Roundabouts/No On-Street Parking	3 Lane/Roundabouts/Limited On-Street Parking
Aesthetics				
	Pros 1. Wider sidewalk provides more room for aesthetic treatment and less pavement 2. More organized parking. 3. Roundabouts can be considered distinctive. 4. Narrower road provides greater pedestrian ambiance. 5. More impetus for business and property owners to improve their facades and overall appearance. 6. Sidewalks would allow for alternative uses such as outdoor cafes, music, sidewalk sales, and community events.	**Pros** 1. Some sidewalk differentiates traffic areas from pedestrian areas. 2. More organized parking.	**Pros** 1. Wider sidewalk provides more room for aesthetic treatment and less pavement. 2. More organized parking. 3. Roundabouts can be considered distinctive. 4. Narrower road provides greater pedestrian ambiance. 5. No on street parking will open view corridors and provide less visual "clutter". 6. More impetus for business and property owners to improve their facades and overall appearance. 7. Sidewalks would allow for alternative uses such as outdoor cafes, music, sidewalk sales, and community events.	**Pros** 1. Wider sidewalk provides more room for aesthetic treatment and less pavement. 2. More organized parking. 3. Roundabouts can be considered distinctive. 4. Narrower road provides greater pedestrian ambiance. 5. More impetus for business and property owners to improve their facades and overall appearance. 6. Sidewalks would allow for alternative uses such as outdoor cafes, music, sidewalk sales, and community events.
Cons 1. No improvement	**Cons** 1. On-street parking will cause visual barriers and clutter on the roadway.	**Cons** 1. Signal lights often considered unattractive. 2. Dedicated left turn lanes require more pavement. 3. 5-foot sidewalks would not encourage as much physical improvement to surrounding buildings and landscapes. 4. On-street parking will cause visual barriers and clutter on the roadway.		**Cons** 1. On-street parking will cause visual barriers and clutter on the roadway.

Table 2-1. Continued

Alternative 1	Alternative 2	Alternative 3	Alternative 4	Hybrid Alternative
No Project	3 Lane/Roundabouts/Seasonal On-Street Parking	4 Lanes/Traffic Signals	3 Lanes/Roundabouts/No On-Street Parking	3 Lane/Roundabouts/Limited On-Street Parking
Water Quality				
Pros	**Pros** 1. Substantial water quality improvements.	**Pros** 1. Substantial water quality improvements.	**Pros** 1. Substantial water quality improvements.	**Pros** 1. Substantial water quality improvements.
Cons 1. No improvement				
Biology				
Pros No impacts	**Pros**	**Pros**	**Pros**	**Pros**
	Cons 1. Some trees removed for parking construction.	**Cons** 1. Some trees removed for parking construction.	**Cons** 1. Some trees removed for parking construction.	**Cons** 1. Some trees removed for parking construction.
Parking				
Pros 1. No change in number or type of parking	**Pros** 1. More parking provided for general public use. 2. Provide safer and more organized off-street parking.	**Pros** 1. More parking provided for general public use. 2. Provide safer and more organized off-street parking.	**Pros** 1. More parking provided for general public use. 2. Provide safer and more organized off-street parking.	**Pros** 1. More parking provided for general public use. 2. Provide safer and more organized off-street parking.
Cons 1. Inefficient and sometimes unsafe use of available parking areas	**Cons** 1. Some specific parking areas are relocated away from their current area. 2. On-street parking removed during the peak traffic/summer tourist season .	**Cons** 1. Some specific parking areas are relocated away from their current area.	**Cons** 1. Some specific parking areas are relocated away from their current area. 2. No on-street parking.	**Cons** 1. Some specific parking areas are relocated away from their current area. 2. On-street parking removed during the peak traffic/summer tourist season. 3. Less on-street parking than Alternative 2 during winter peak periods.

Table 2-1. Continued

Alternative 1	Alternative 2	Alternative 3	Alternative 4	Hybrid Alternative
No Project	3 Lane/Roundabouts/Seasonal On-Street Parking	4 Lanes/Traffic Signals	3 Lanes/Roundabouts/No On-Street Parking	3 Lane/Roundabouts/Limited On-Street Parking
Right of Way Acquisition				
Pros 1. No acquisition required	**Pros** 1. No structures are directly affected. 2. Wider sidewalks provide more area to transition into private property.	**Pros** 1. Minor permanent right of way needed.	**Pros** 1. No structures are directly affected. 2. Wider sidewalks provide more area to transition into private property.	**Pros** 1. No structures are directly affected. 2. Wider sidewalks provide more area to transition into private property.
	Cons 1. Acquisition required at roundabout locations.	**Cons** 1. Substantial temporary construction easements needed to transition proposed .improvements to private property.	**Cons** 1. Acquisition required at roundabout locations.	**Cons** 1. Acquisition required at roundabout locations.
Constructability				
Pros 1. No construction.	**Pros** 1. Narrowing road provides more room for construction. 2. Provides for quicker construction, reducing construction impacts on community.		**Pros** 1. Narrowest road provides most room for construction. 2. Provides for quicker construction, reducing construction impacts on community.	**Pros** 1. Narrowing road provides more room for construction. 2. Provides for quicker construction, reducing construction impacts on community.
		Cons 1. Pavement to within 5 feet of buildings in some areas will be difficult. 2. Narrower sidewalks provide less area to transition road (drainage facilities) to private property. 3. Maintaining 4 traffic lanes during construction will be expensive and take more time to construct.		

Table 2-1. Continued

Alternative 1	Alternative 2	Alternative 3	Alternative 4	Hybrid Alternative
No Project	3 Lane/Roundabouts/Seasonal On-Street Parking	4 Lanes/Traffic Signals	3 Lanes/Roundabouts/No On-Street Parking	3 Lane/Roundabouts/Limited On-Street Parking
Emergency Response				
Pros	**Pros**	**Pros**	**Pros**	**Pros**
1. No change	1. Emergency vehicles can use parking lane during congested times.	1. Emergency vehicles can use parking lane during congested times.	1. Emergency vehicles can use parking lane during congested times.	1. Emergency vehicles can use parking lane during congested times.
	2. Emergency vehicles can use left turn lane	2. Emergency vehicles can use left turn lane	2. Emergency vehicles can use left turn lane	2. Emergency vehicles can use left turn lane.
	3. Lanes easier to close if emergency occurs.	3. Lanes easier to close if emergency occurs.	3. Lanes easier to close if emergency occurs.	3. Lanes easier to close if emergency occurs.
		Cons		
		1. Congestion could cause minor delays.		
Estimated Cost (Construction)				
$0	**$43.6**	**$37.9**	**$43.5**	**$43.9**

Alternative 2 would include the following elements:

- Pedestrian markings;
- Single 3.6-meter (12.0-foot) traffic lane in each direction;
- Single 3.6-meter (12.0-foot) dual-access center turn lane;
- 2.9-meter (9.5-foot) sidewalk and landscape area in each direction;
- 1.5-meter (5.0-foot) bike lane on each side;
- 2.4-meter (8.0-foot) parking lane in each direction, with on-street parking prohibited during the peak summer season;
- Off-street parking on side streets and in new parking lots (parking effects and parking compensation for each alternative are described in *Section 3.7*); and
- Roundabouts at intersections with Bear and Coon Streets.

Alternative 2 would also have the option of reducing the sidewalk width on both sides by 0.6 meter (2.0 feet). This 0.6 meter (2.0 feet) would be added to the parking and bike lane width throughout the action area. This option would be constructed to reduce the effect of on-street parking on through traffic.

The Alternative 2 Option would result in the following changes to Alternative 2:

- 2.3-meter (7.5-foot) sidewalk and landscape area in each direction;
- 2.7-meter (9.0-foot) parking lane in each direction; and
- 1.8-meter (6.0-foot) bike lane in each direction.

2.3.3 Alternative 3: Four Lanes with On-Street Parking

Alternative 3 includes improvements to pedestrian and bicycle access, bus stops, and parking. Under Alternative 3, SR 28 would remain a four-lane cross-section roadway with two 3.3-meter (11-foot) east/west traffic lanes until just east of the Fox Street

intersection. Between the Fox Street and Chipmunk Street intersections, SR 28 would become a three-lane roadway, with one traffic lane in each direction and a two-way left-turn lane. Traffic signals would be installed at Bear Street and modified at SR 267 and Coon Street. Left-turn lanes, which are based upon traffic volumes, would be provided at SR 267, Bear Street, Fox Street, Coon Street, Chipmunk Street, and Secline Street. A 1.5-meter (5-foot) bike lane and 2.4-meter (8-foot) parking lane would be created in each direction. Along the roadway, a 1.7-meter (5.6-foot) sidewalk would be installed on both sides of SR 28. Enhanced and clearly marked pedestrian crossings at the SR 267, Deer, Bear, Coon, Fox, and Chipmunk intersections (with signals at the SR 267, Bear, and Coon intersections) would also be included as part of this alternative. The narrow ROW width of 24.4 meters (80.0 feet) would restrict the travel lanes to 3.3 meters (11 feet) and the sidewalks to 1.7 meters (5.6 feet) on each side.

Alternative 3 would include the following components:

- Two 3.3-meter (11-foot) traffic lanes in each direction;
- Traffic signals at SR 267, Bear Street, and Coon Street;
- Left-turn lanes at SR 267, Bear Street, Fox Street, Coon Street, Chipmunk Street, Deer Street, and Secline Street;
- A 1.5-meter (5-foot) bike lane in each direction;
- A 2.4-meter (8-foot) parking lane in each direction, as in Alternative 2;
- A 1.7-meter (5.6-foot) sidewalk in each direction;
- Off-street parking on side streets and in new parking lots; and
- Pedestrian crossings at SR 267, Secline Street, Deer Street, Bear Street, Coon Street, Fox Street, and Chipmunk Street. Only crossings at SR 267, Bear, and Coon would be controlled with signals.

2.3.4 Alternative 4: Three Lanes with Two Roundabouts and Without On-Street Parking

Alternative 4 is similar to Alternative 2 in that SR 28 would be modified from a four-lane cross-section roadway to a three-lane cross-section roadway. The significant difference is that parallel parking is not provided along the entire length of the action area. The loss of on-street parking on SR 28 would be offset through side-street parking and newly constructed parking lots to mitigate this loss. One 3.6-meter (12-foot) east/west traffic lane and a two-way left-turn lane of the same width would be provided. Along the roadway, a single 1.5-meter (5.0-foot) bike lane would be created in each direction; however, on-street parking would not be included in this alternative. The width saved from parking spaces is incorporated into the sidewalks and landscaped planting area, making them 5.3 meters (17.4 feet) wide on each side. Bus stop turnouts are provided under Alternative 4, and at these locations the sidewalk narrows to 2.9 meters (9.5 feet). Two roundabouts would be created at the SR 28 intersections with Bear and Coon Streets. Enhanced and clearly marked pedestrian crossings at the SR 267, Deer, Bear, Coon, Fox, and Chipmunk intersections (with signals at the SR 267 intersection) would also be included.

Alternative 4 would include the following components:

- Single 3.6-meter (12.0-foot) traffic lane in each direction;
- Single 3.6-meter (12.0-foot) dual-access center turn lane;
- No on-street parking on SR 28;
- Off-street parking on side streets and in new parking lots;
- A 1.5-meter (5.0-foot) bike lane in each direction;
- A 5.3-meter (17.4-foot) sidewalk landscape area in each direction;
- Roundabouts at the SR 28 intersections with Bear and Coon Streets; and

- Pedestrian crossings at SR 267, Secline Street, Deer Street, Bear Street, Coon Street, Fox Street, and Chipmunk Street. Only the crossing at SR 267 would be controlled with a signal.

2.3.5 Preferred Alternative—Hybrid Alternative (Three Lanes with Two Roundabouts and Limited On-Street Parking)

County staff has identified a "Hybrid Alternative" as the preferred alternative that includes three travel lanes, bike lanes, seasonal on-street parking and sidewalks. Roundabouts are included at the intersections of SR 28/Bear Street and SR 28/Coon Street (Figure 2-4). The Hybrid Alternative would include $100,000 in traffic calming improvements in the adjacent neighborhood to minimize some effects of anticipated cut through traffic identified in the Final EA/EIR/EIS. Although all alternatives will replace parking off the highway, the Hybrid Alternative will replace more parking off highway than other alternatives. The Hybrid Alternative and Alternative 2 are identical in that they both restrict parking during the peak summer periods. However, during the non-peak winter periods, the number of available parking spaces under the Hybrid Alternative would be reduced to 63 spaces compared to 198 spaces under Alternative 2. Parallel parking would be eliminated at driveways, bus turn outs, and within the sight lines of intersections and driveways, and is prohibited during the peak summer season. In the areas where on-street parking would be prohibited, larger 5.3 m (17.4 ft) sidewalk and planting areas would be installed. Implementation of the Hybrid Alternative would result in impacts identical to those identified for Alternative 2 for all resources areas. With regards to differences in parking between the Hybrid Alternative and Alternative 2, the Hybrid Alternative would result in 63 on-street parking spaces during the winter months, compared to the 198 spaces proposed under Alternative 2. The reduction in the number of parking spaces during the non-peak winter season is not expected to adversely affect the parking supply since the demand for parking during the winter season is lower than during the peak summer season; because of limited demand during the winter months, the 63 on-street parking spaces is sufficient to meet the limited winter parking demand.

Consequently, the Hybrid Alternative would not result in any newer or more severe impacts than identified for Alternatives 2 through 4.

Under the Preferred Alternative, SR-28 would be modified from a four-lane cross section roadway to a three-lane cross section roadway. The Preferred Alternative also proposes single-lane roundabouts at Bear and Coon Streets, as a roundabout would operate better than a signalized intersection with a 3-lane cross section. When properly designed, a roundabout can move traffic efficiently through an intersection without a traffic signal (because the roundabout's circular traffic is always moving), reduce accidents compared with other types of intersection controls, and provide an opportunity for landscaping. To accommodate the roundabouts, travel lanes would be reduced to one 3.6-meter (12.0-foot) lane in each direction with a continuous 3.6-meter (12.0-foot) two-way left-turn lane. Parallel parking and designated bike lanes would be provided on both sides of the roadway, and 2.9-meter (9.5-foot) pedestrian sidewalks with landscaped amenities would be provided on each side. Enhanced and clearly marked pedestrian crossings at the SR 267, Deer, Bear, Coon, Fox, and Chipmunk intersections (with a signal at the SR 267 intersection) would be included as part of this alternative. The SR 28 signalized intersection with SR 267 would be maintained with four lanes and turn pockets. A transition from four lanes to two lanes would occur on SR 28 between SR 267 and Secline Street. A two-way left-turn lane would be provided and parallel parking prohibited within this section of SR 28. Sidewalks would be 1.7 meters (5.5 feet) wide on each side of SR 28. The standard two-lane section with two-way left-turn lane would begin east of Secline Street. Bike lanes, sidewalks, and parallel parking would be provided eastward to Chipmunk Street. Parallel parking would be prohibited at driveways and bus turnouts and within intersection and driveway sight lines. A 2.4-meter (8.0-foot) parking lane would be created in each direction, and on-street parking would be prohibited during the peak summer. Restrictions would be accomplished by signage, temporary barricades, and enforcement. The on-street parking loss would be compensated by the newly created off-site parking spaces proposed as part of the proposed action (Figure 2-4).

The Preferred Alternative would include the following elements:

- Pedestrian markings;
- Single 3.6-meter (12.0-foot) traffic lane in each direction;
- Single 3.6-meter (12.0-foot) dual-access center turn lane;
- 2.9-meter (9.5-foot) sidewalk and landscape area in each direction;
- 1.5-meter (5.0-foot) bike lane on each side;
- 2.4-meter (8.0-foot) parking lane in each direction, with 63 on-street parking spaces (on-street parking would be prohibited during the peak summer season;
- Off-street parking on side streets and in new parking lots (parking effects and parking compensation for each alternative are described in *Section 3.7*); and
- Roundabouts at intersections with Bear and Coon Streets.

The Hybrid Alternative was selected as the preferred alternative based on obtaining the best balance of 1) maximizing the project purpose and need; 2) minimizing environmental impacts; 3) addressing the community need for on-street parking. It was determined that the Hybrid Alternative would help to enhance pedestrian mobility to a greater extent by providing additional space for pedestrians (wider sidewalks) and shortening crossing distances across the highway, while still maintaining seasonal on-street parking, which was identified by the community as a major need.

2.4 Features Common to all Alternatives

2.4.1 Pedestrian and Bicycle Mobility

Features implemented as part of the proposed action that will serve to enhance and facilitate pedestrian and bicycle mobility through the action area include sidewalks and Class II bike lanes along both sides of SR 28 through the commercial core area, as well as signals, roundabouts, and enhanced and clearly marked pedestrian crossings. The sidewalks and bike lanes will allow pedestrians and bicyclists to easily navigate through

the action area while signals, roundabouts, and enhanced and clearly marked pedestrian crossings will provide a substantially improved pedestrian crossing opportunity of SR 28.

2.4.2 Water Quality Improvements

Water quality improvements associated with the proposed action include the construction of new collection and conveyance infrastructure (including, but are not limited to, sedimentation basins, swales, sediment traps, box culverts, infiltration basins, new roadway curbs and gutters, storm drains, ditches, man-made channels, collection/detention basins, and other conveyance infrastructure) leading to the water treatment and conveyance facilities identified in the proposed Kings Beach Watershed Improvement Project (WIP). Appendix B contains the *Kings Beach Watershed Improvement Project Final Watershed Improvement Plan Memorandum* (Entrix 2006a), which details the planning process for the proposed WIP. Figure 2-2 indicates the water quality improvements associated with the proposed WIP, in addition to the improvements that will be implemented as part of the proposed action. The water quality improvements associated with the proposed action are located within the brown boundary on Figure 2-2. Water quality elements that will be installed include, but are not limited to, the following items:

- Constructing grass-lined swales where they can be supported to convey runoff along the ROW and promote infiltration;
- Constructing rock lined channels to convey water along the ROW and promote infiltration;
- Installing basins to collect and retain runoff;
- Constructing infiltration galleries to retain runoff; and
- Installing media filters, or advanced treatment technologies, to treat runoff from KBCC and Brockway Vista Avenue. (Entrix 2006a.)

On the streets upstream of SR 28, curbs and gutters will be installed as best management practices (BMPs) to help collect and direct runoff from the potential on-street parking sites (Figure 2-3), as well as runoff flowing into the action area from areas upstream of the action area. These improvements would serve to mitigate increased runoff due to the creation of new hard coverage from the parking lots. Currently, there are no collection and conveyance features on these upstream streets to adequately direct the upstream runoff through the action area; instead, the runoff flows directly through the action area and into Lake Tahoe. With the installation of the curbs and gutters as part of the proposed action, this runoff will be directed to collection basins, vaults, and media filters that will be upgraded and installed as part of the proposed action (Figure 2-2), and water would not flow untreated into Lake Tahoe, as under current conditions. In addition, improvements associated with the proposed WIP will further increase water treatment capacity.

At the potential off-site parking lots (Figure 2-3), no culverting or conveyance improvements would be constructed to direct runoff from these lots off site. Instead, runoff would be entirely contained onsite with the incorporation of BMPs (i.e., underground infiltration beds) into the parking lot design. The off-site parking lots would be designed to maintain runoff from a 20-year, 1-hour storm flow entirely on-site, while erosion control measures to protect water quality would also be incorporated into the design. The water collection and infiltration features incorporated into the off-site parking lots are designed to mitigate runoff associated with the additional hard coverage from the parking lots. And, because water would be contained entirely onsite, the off-site lots would not worsen water quality in the region.

Along SR 28, curbs and gutters will be installed to help direct runoff through the action area, while storm drain inlets and interceptors will be constructed to direct collected runoff to the collection basins, vaults, and media filters that will be upgraded and installed as part of the proposed action. The proposed vaults and media filters located outside the brown boundary on Figure 2-2 are not associated with the proposed action. Instead, they are considered water quality improvements that will be implemented as part

of the proposed WIP, which will further increase water treatment capacity. Vaults and media filters installed beneath Placer County roads (Coon Street and Secline Street/Brockway Vista Avenue) will be located entirely within the roadway ROW. Construction activities, including equipment staging and parking must occur entirely within the ROW, and no temporary construction easements will be obtained to allow construction activities/staging outside of the ROW. In addition, the vault and media filter proposed at Secline Street may be moved to Brockway Vista Avenue if conditions prohibit the placement of the facility at Secline Street.

The capacity of upstream facilities affected by the proposed action that tie into and interface with the proposed WIP improvements would be enlarged to allow for the collection and conveyance of both upstream flows and stormwater flows generated by the roadway itself. Facilities would be designed and constructed so that they can accommodate stormwater generated in the area as well as stormwater conveyed into the area from upstream. Drainage, collection, conveyance, and treatment improvements are among those included in the proposed WIP to improve water quality in the Kings Beach region as well as in the action area.

2.4.3 Scenic and Aesthetic Improvements

Scenic and aesthetic improvements that would enhance the scenic integrity of the KBCC include entry statements at the east and west ends of the KBCC; the installation of streetlights, benches, transit facilities, planters, bicycle racks, and trash receptacles; organized parking; and additional landscaping.

2.4.4 Property Acquisitions

The three build alternatives would involve minor partial acquisitions of properties adjacent to the SR-28 ROW as well as parcels for the parking lots. The ROW would be acquired in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, and property owners would receive just compensation for any acquisitions. No building acquisitions (including demolitions or relocations) or damage to property would result from implementation of the build

alternatives, although construction of the off-street parking lots may result in building acquisitions, depending on which of the potential off-site parking lots (Figure 2-3) are eventually chosen. However, no acquisitions of culturally significant buildings would occur.

2.4.5 Parking

To fully compensate for the loss of parking associated with each build alternative, Placer County has committed to providing new off-site parking spaces. New parking spaces would be provided in a manner that addresses the parking requirements of each block affected in order to ensure that adequate parking conditions are maintained. Figure 2-3 shows the potential locations of new off-site parking lots and spaces, while Table 2-2 summarizes components associated with these locations. To date, three parking lots (63 spaces) have been identified as compensation for the parking spaces that would be removed by the build alternatives, and construction of these lots will occur before implementation of the proposed action. Several additional parking sites have also been identified as potential candidates for new parking lots and are evaluated in this document (see discussion in *Section 3.7*). No property acquisitions (including demolitions or relocations) would be associated with the provision of new parking spaces. Under all alternatives (except Alternative 1), Brook Avenue between Bear to Coon Streets would be converted to one-way eastbound, providing the opportunity for additional on-street parking. Alternative 3 is the only alternative that has a nonstandard design feature—3.3-meter (11.0-foot) lanes. Alternatives 2 and 4 do not have any nonstandard design features.

2.5 Environmentally Preferable Alternative

CEQA and NEPA require that an environmentally preferred alternative be identified in the environmental document. Chapter 3 provides a summary of the impacts of each alternative and Table 2-1 compares the alternatives. Although the No-Project Alternative would not result in any construction-related impacts, it does not meet the purpose and need of the proposed project, which is to improve bicycle and pedestrian mobility,

Table 2-2. Summary of Potential Parking Components

Element	APN	Existing land use & Ownership	Number of parking spaces	TRPA Land Classification	Area (acres)[1]	Hard coverage (acres)[2]	LSOGs Severely Damaged	LSOGs Removed	Trees Severely Damaged[b]	Trees Removed	LSOG Quantity	Tree Quantity
Potential parking locations												
1	NA	Vacant/Private	14	5	0.09	0.04	3	0	2	2	3	7
3	090-122-030 090-122-031	Vacant/Public (Stoker Prop.)	41	1b/5	0.50	0.25	9	0	1	3	10	16
4	090-126-017	Vacant/Private	5	1b	0.14	0.07	3	0	2	2	3	7
6	090-133-008 090-133-009	Residential Motel/Private	37	5	0.42	0.21	5	0	1	3	8	7
7	090-221-013 090-221-014 090-221-020	Abandon Fuel Station/Private	40	1b/5	0.47	0.23	1	0	0	0	1	2
8	090-192-030	Vacant/Private	28	5	0.39	0.20	5	0	4	6	7	20
9	090-133-006 090-133-007	Vacant/Private	27	5	0.31	0.15	5	0	2	7	8	7
10[3]	NA	County ROW	38	1b/5	0.20	0.10	0	0	0	0	0	0
14	090-134-042	Vacant/Private	24	5	0.27	0.13	3	0	1	8	3	12
15	090-134-007	Parking/Private	11	5	0.25	0.13	1	0	4	3	2	13
17	090-134-008	Business/Private	24	5	0.25	0.13	2	0	1	2	2	11
18	090-134-006	Business/Private	11	5	0.11	0.05	0	0	0	0	0	3
19	NA	County ROW	9	5	0.05	0.03	0	0	0	3	0	3
20[3]	NA	County ROW	5	5	0.03	0.01	0	0	0	0	0	0
21	NA	County ROW	11	5	0.06	0.03	1	0	4	1	2	6
22	NA	County ROW	14	5	0.07	0.04	3	0	1	0	3	4
23	090-122-001	Vacant/Private	12	1b	0.12	0.06	2	0	0	1	2	3

Table 2-2. Continued

Element	APN	Existing land use & Ownership	Number of parking spaces	TRPA Land Classification	Area (acres)[1]	Hard coverage (acres)[2]	LSOGs Severely Damaged	LSOGs Removed	Trees Severely Damaged[b]	Trees Removed	LSOG Quantity	Tree Quantity
24	NA	County ROW	6	5	0.03	0.02	0	0	1	0	0	1
25	090-122-023 090-122-036 090-122-035	Vacant/private	24	5	0.36	0.18	10	0	2	7	10	23
26	NA	County ROW	14	1b/5	0.07	0.04	1	0	2	1	1	4
27	NA	County ROW	21	1b	0.12	0.06	0	0	3	5	0	8
28[3]	NA	County ROW	4	1b	0.02	0.01	0	0	0	0	0	0
29	NA	County ROW	9	5	0.04	0.02	1	0	4	1	1	6
30	NA	County ROW	13	5	0.08	0.04	3	0	1	0	3	4
31	NA	County ROW	10	1b/5	0.04	0.02	1	0	0	0	1	1
32	090-192-025	Vacant/private	30	5	0.05	0.03	0	0	2	4	0	30
33	NA	County ROW	16	1b/5	0.08	0.04	1	0	2	0	1	6
34	NA	County ROW	6	5	0.03	0.02	1	0	1	4	1	6
Totals:	NA	NA	504	NA	**4.65**	**2.33**	**61**	0	**41**	**63**	**72**	**210**
Parking locations considered and withdrawn[4]												
A	090-071-017 090-071-033	Vacant/private	42	5	0.55	0.28	NA	NA	NA	NA	NA	NA
B	090-074-023 090-074-024	Residential/private	80	5	0.94	0.47	NA	NA	NA	NA	NA	NA
C	090-071-009	Residential/private	24	5	0.29	0.14	NA	NA	NA	NA	NA	NA
Totals:	NA	NA	146	NA	**1.77**	**0.89**	NA	NA	NA	NA	NA	NA

Table 2-2. Continued

Element	APN	Existing land use & Ownership	Number of parking spaces	TRPA Land Classification	Area (acres)[1]	Hard coverage (acres)[2]	LSOGs Severely Damaged	LSOGs Removed	Trees Severely Damaged[b]	Trees Removed	LSOG Quantity	Tree Quantity
\Parking locations built before completion of the CCIP												
D	090-122-019	Existing parking lot/vacant/Placer County	20	5	0.29	0.14	NA	NA	NA	NA	NA	NA
E	090-126-020	Vacant/Placer County	22	5	0.21	0.11	NA	NA	NA	NA	NA	NA
F	090-192-025	Vacant/Placer County	21	5	0.21	0.10	NA	NA	NA	NA	NA	NA
Totals:	NA	NA	**63**	NA	**0.71**	**0.35**	NA	NA	NA	NA	NA	NA

Notes:

[1] Projected area: actual area will be determined once project final design is completed.

[2] Assumes 50% coverage of total lot acreage; total area of hard coverage will be determined once project final design is completed.

[3] No trees would be removed from these potential parking locations.

[4] Parking lots have been withdrawn due to existing land use conflicts or other environmental constraints.

aesthetics, and water quality in the KBCC. The No-Project Alternative would also be inconsistent with the TRPA Environmental Improvement Plan.

All of the proposed build alternatives meet the project purpose and need to some extent and all have various positive and negative attributes as summarized in Table 2-1, Relative Alternative Comparison. Selection of the preferred alternative was based on the engineering and environmental analysis as well as extensive public input received on the project.

All alternatives are fairly equal in meeting the project purposes of improving water quality and enhancing bicycle mobility. The three lane alternatives (2, 4 and hybrid) enhance pedestrian mobility to a greater extent by providing additional space for pedestrians (wider sidewalks) and shortening crossing distances across the highway. The three lane alternatives also provide additional opportunities and space for aesthetic enhancement.

The three-lane alternatives do have more significant and unavoidable impacts associated with traffic congestion on the highway leading to impacts on transit operations and cut-through traffic in the adjacent residential neighborhood. Alternative 3 provides the most on-street parking year around and does not have significant and unavoidable traffic impacts associated with traffic congestion on the highway, while Alternatives 2 and the hybrid provide some level of seasonal on-street parking which was identified by the community as a major need. Below is a comprehensive discussion of Alternatives 2, 3, and 4, and their impacts and benefits to different resource areas.

2.5.1 Alternative 2

- Alternative 2 would include ROW sliver or corner acquisitions from parcels adjacent to the existing SR 28 ROW. It would not result in substantial effects on existing land uses, but several of the acquisitions would displace uses within the existing or proposed new ROW. The size of the acquisitions for the affected parcels would be limited to a few feet.

- Approximately 63 trees would be removed from the action area during construction under Alternative 2.
- Under Alternative 2, 124 parking spaces would be eliminated during the peak summer season, while 78 private parking spaces would be eliminated year round.
- In 2028, the TRPA LOS standard would be exceeded every one of the 108 days in the summer season in the westbound direction and 104 days per summer season in the eastbound direction, as well as in both directions on a peak winter day.
- Under Alternative 2, residential streets would experience substantial increases in traffic levels due to diverted traffic in 2028.
- Under Alternative 2, the proposed single-lane configuration of the SR 28/Bear Street and SR 28/Coon Street roundabouts would provide unacceptable LOS F conditions on eastbound and westbound approaches in 2028, as well as on the SR 28/Coon Street roundabout in 2008.
- Under Alternative 2, traffic speeds would potentially decrease, which would improve safety conditions for bicyclists and pedestrians. However, safety in residential neighborhoods could decrease due to diverted traffic.

2.5.2 Alternative 3

- In addition to land acquisitions required for Alternative 2, partial acquisitions under Alternative 3 would be required from three additional properties. These acquisitions consist of frontage or corner acquisitions from parcels adjacent to the existing SR 28 ROW and would not result in substantial effects on existing land uses. The estimated size of the acquisitions for affected parcels would be limited to a few feet.
- Approximately 63 trees would be removed from the action area during construction under Alternative 3.

- Under Alternative 3, 105 on-street spaces would be maintained along both sides of SR 28 year-round. Alternative 3 would result in a loss of 16 on-street parking spaces and 78 private parking spaces.
- Under Alternative 3, the TRPA LOS standard would be attained in both 2008 and 2028 for both the summer and winter design periods in both directions.
- Alternative 3 is not anticipated to experience diverted traffic in excess of 3,000 average daily traffic (ADT) on residential streets for 2008 and 2028 conditions.
- Under Alternative 3, the SR 28/SR 267 intersection would provide unacceptable LOS F conditions in 2028 (but not in 2008).
- Under Alternative 3, speeding and passing behaviors would continue, and vehicular safety would remain low.

2.5.3 Alternative 4

- Partial acquisitions under Alternative 4 would be similar to Alternative 2.
- Approximately 63 trees would be removed from the action area during construction under Alternative 4.
- Under Alternative 4, on-street parking would be prohibited year round on SR 28, resulting in a loss of 124 on-street parking spaces and 78 private parking spaces.
- Under Alternative 4, the TRPA LOS standard would be exceeded on 104 days per summer in the eastbound direction and 108 days in the westbound direction. In addition, the TRPA LOS standard would be exceeded in both directions on a peak winter day.
- Under Alternative 4, residential streets would experience substantial increases in traffic levels due to diverted traffic in 2028.
- The intersection LOS reported above for Alternative 2 also applies to Alternative 4 because there is no difference in the intersection configuration between these two alternatives.

- Under Alternative 4, traffic speeds would potentially decrease, which would improve safety conditions for bicyclists and pedestrians. There would also be benefits for emergency response vehicles. However, safety in residential neighborhoods could decrease due to diverted traffic.

2.5.4 Hybrid Alternative

- The Hybrid Alternative would include ROW sliver or corner acquisitions from parcels adjacent to the existing SR 28 ROW. It would not result in substantial effects on existing land uses, but several of the acquisitions would displace uses within the existing or proposed new ROW. The size of the acquisitions for the affected parcels would be limited to a few feet.
- Approximately 63 trees would be removed from the action area during construction under the Hybrid Alternative.
- Under the Hybrid Alternative, 124 on-street parking spaces would be eliminated during the peak summer season, while 78 private parking spaces would be eliminated year round. During the winter season, there would be 63 on-street parking spaces.
- In 2028, the TRPA LOS standard would be exceeded every one of the 108 days in the summer season in the westbound direction and 104 days per summer season in the eastbound direction, as well as in both directions on a peak winter day.
- Under the Hybrid Alternative, residential streets would experience substantial increases in traffic levels due to diverted traffic in 2028.
- Under the Hybrid Alternative, the proposed single-lane configuration of the SR 28/Bear Street and SR 28/Coon Street roundabouts would provide unacceptable LOS F conditions on eastbound and westbound approaches in 2028, as well as on the SR 28/Coon Street roundabout in 2008.
- Under the Hybrid Alternative, traffic speeds would potentially decrease, which would improve safety conditions for bicyclists and pedestrians. However, safety in residential neighborhoods could decrease due to diverted traffic.

Of the three build alternatives, Alternative 3 would generally result in fewer environmental impacts than Alternatives 2, 4, and the Hybrid Alternative. It would particularly have fewer traffic and parking impacts. Alternatives 2, 4, and the Hybrid Alternative would include wider sidewalks, which would result in more pedestrian and bicycle mobility than Alternative 3. However, all Alternatives are improvements over existing conditions. Alternatives 2, 3, and 4, and the Hybrid all contain measures to increase and improve bicycle and pedestrian mobility, aesthetics, and water quality facilities in the KBCC. Alternative 3 would require 3 additional ROW acquisitions than Alternatives 2, 4, and the Hybrid, but these acquisitions would not result in substantial effects on existing land uses. Alternative 3 meets the purpose and need of the proposed project, with the fewest impacts to traffic.

2.6 Alternatives Considered and Withdrawn

Caltrans and Placer County undertook a comprehensive screening process to evaluate potential alternatives for consideration during the environmental review process. Potential alternatives were selected on their ability to meet the action objectives. In addition, factors such as cost, environmental effects, operational efficiency, construction phasing, and maintainability of the built system were considered. Based on this screening process Caltrans and Placer County identified the build alternatives (described in *Section 2.3*) for environmental review. Since publication of the Draft EA/EIR/EIS, Placer County has identified a Preferred Alternative, which is a hybrid of Alternatives 2 and 4, which were previously analyzed in the Draft EA/EIR/EIS.

In addition to the build alternatives discussed in *Section 2.3*, the following alternatives were evaluated but withdrawn from further consideration.

2.6.1 Roundabout Alternative

This would involve a third roundabout located at the intersection of SR-28 and SR-267 under Alternatives 2, 4, and 5. The roadway from the west edge of the Safeway parking lot to just east of the SR-28/Secline Street intersection would be shifted north to

accommodate the roundabout. However, extensive roadway and driveway modifications and ROW acquisitions would not meet the purpose and need to limit such intrusions. Additional geometric difficulties made this alternative infeasible. This rejected alternative is illustrated in Figure 2-5.

2.6.2 Alternative 5: Two Westbound Lanes, One Eastbound Lane, Two-Way Left-Turn Lane, Westbound On-street Parking and Two Roundabouts

This alternative consists of two westbound travel lanes with adjacent on-street parking, a center turn lane, a single eastbound through lane without adjacent on-street parking (year-round), and roundabouts at the SR 28 intersections with Bear and Coon Streets. Brook Avenue would be converted to one-way eastbound from Bear Street to Coon Street.

This alternative as a stand-alone alternative was initially considered but subsequently dropped from further consideration because the Bear Street hybrid roundabout would result in the loss of 14 parking stalls in the State Park parking lot and a complete circulation reconfiguration, while the Coon Street hybrid roundabout would result in the unacceptable level of acquisitions of land from the southeast and southwest corner parcels. These potential intrusions met the action's purpose, but were considered infeasible due to Section 4(f) conflicts and the expected cost of property acquisitions. This rejected alternative is illustrated in Figure 2-6.

2.6.3 Alternative 3a with Signals at Deer, Fox, and Secline Streets

Alternative 3a is the same as Alternative 3, with the addition of signals at Deer and Fox Streets. An updated traffic signal warrant analysis (LSC 2008) indicates that both intersections meet three signal warrants, under existing, 2008, and 2028 summer conditions. Therefore, signalization of these intersections is a possible option, though meeting the warrant levels does not necessarily require provision of a signal. However, public input received over the course of the project design process indicates a strong desire to avoid the total of five signals along SR 28 in Kings Beach that this sub-alternative would provide. In addition, there are several relatively major development

projects currently in the planning stages in the study area, which could significantly change traffic patterns on the north-south local streets, but for which detailed plans that would be needed to specify the ultimate traffic impacts are not presently available. For these reasons, the decision was made to drop these additional signals from consideration. If Alternative 3 is ultimately implemented, roundabouts or signals at these locations could be considered as part of a future roadway improvement project if they are determined to provide an overall benefit, and would need to be evaluated in coordination with traffic control elements already in place at that time. The intersection at Fox is likely to require traffic control (a roundabout or traffic signal) in the future. If a traffic signal is found to be necessary, it would require four lanes to operate acceptably.

2.6.4 Alternative 2b with Roundabouts at Deer Street and Fox Street

Alternative 2b is the same as Alternative 2, with the addition of roundabouts at Deer and Fox Streets. This alternative as a stand-alone alternative was initially considered but subsequently dropped from further consideration because it would involve substantial intrusions onto private property (i.e., building and parking acquisitions). These potential intrusions did not meet the action purpose and need to limit such intrusions to the extent practicable and would add costs to the project. If a three-lane alternative is implemented, roundabouts at these locations could be considered as part of a future project if they are determined to provide an overall benefit. The intersection at Fox is likely to require traffic control (a roundabout or traffic signal) in the future. If a traffic signal is found to be necessary, it would require four lanes to operate acceptably. If a roundabout is found to be necessary, it would operate with a three lane SR 28 cross-section similar to the level of service identified for the Coon street roundabout.

2.6.5 Alternative 4b with Roundabouts at Deer Street and Fox Street

Alternative 4b is the same as Alternative 4, with the addition of roundabouts at Deer and Fox Streets. This alternative as a stand-alone alternative was initially considered but subsequently dropped from further consideration because it would involve substantial intrusions onto private property (i.e., building and parking acquisitions). These potential

intrusions did not meet the action purpose and need to limit such intrusions to the extent practicable and would add costs to the project. If a three-lane alternative is implemented, roundabouts at these locations could be considered as part of a future project if they are determined to provide an overall benefit. The intersection at Fox is likely to require traffic control (a roundabout or traffic signal) in the future. If a traffic signal is found to be necessary, it would require four lanes to operate acceptably. If a roundabout is found to be necessary, it would operate with a three lane SR 28 cross-section similar to the level of service identified for the Coon street roundabout.