

**TAHOE REGIONAL PLANNING AGENCY**  
P.O. Box 5310  
128 Market Street  
Stateline, Nevada 89449-5310  
Phone: (775) 588-4547  
Fax: (775) 588-4527



**U.S. DEPARTMENT OF AGRICULTURE  
FOREST SERVICE  
LAKE TAHOE BASIN MANAGEMENT UNIT**  
35 College Drive  
South Lake Tahoe, CA 96150  
(530) 543-2600  
Fax: (530) 543-2693



**U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION**  
Nevada Division  
705 North Plaza Street, Suite 220  
Carson City, NV 89701-0602  
(775) 687-1204  
Fax: (775) 687-3803



This notice is being issued jointly by the Tahoe Regional Planning Agency (TRPA) and the Federal Highway Administration (FHWA) in preparation of a joint TRPA Environmental Assessment (EA) and National Environmental Policy Act (NEPA) EA. This notice also serves as scoping for the preparation of a U.S. Forest Service (USFS) NEPA Decision Memo (DM).

## NOTICE OF PREPARATION

**To:** Nevada State Clearinghouse  
California State Clearinghouse  
Other Interested Public Agencies  
Interested Parties and Organizations  
Affected Property Owners (within 300 feet)

**Subject:** Notice of Preparation of a joint TRPA EA and NEPA EA, and NEPA DM for the Nevada Stateline-to-Stateline Bikeway, North Demonstration Project.

**Lead Agencies:**

TRPA  
P.O. Box 5310  
128 Market Street  
Stateline, NV 89449-5310

USFS  
Lake Tahoe Basin Management Unit  
35 College Drive  
South Lake Tahoe, CA 96150-4500

FHWA  
Nevada Division  
705 North Plaza Street, Suite 220  
Carson City, NV 89701-0602

Contact: Brian Judge  
Acting Assistant Branch Chief  
Phone: (775) 589-5262  
Fax: (775) 588-4527  
Email: [bjudge@trpa.org](mailto:bjudge@trpa.org)

Contact: Garrett Villanueva  
Assistant Forest Engineer  
Phone: (530) 543-2762  
Fax: (530) 543-2693  
Email: [gvillanueva@fs.fed.us](mailto:gvillanueva@fs.fed.us)

Contact: Del Abdalla  
Environmental Programs Manager  
Phone: (775) 687-1231  
Fax: (775) 687-3803  
Email: [Abdelmoez.Abdalla@fhwa.dot.gov](mailto:Abdelmoez.Abdalla@fhwa.dot.gov)

**Project Title:** Nevada Stateline-to-Stateline Bikeway, North Demonstration Project

**Project Location:** The project site is located in Nevada on the east shore of Lake Tahoe, between Incline Village and the Sand Harbor unit of Lake Tahoe Nevada State Park. The proposed project includes an approximately 3-mile, shared-use path that would generally include a 10-foot wide paved path with 2-foot shoulders. The project would also include a sidewalk on the west side of State Route (SR) 28 between Lakeshore Boulevard and the guard rail north of Hidden Beach, trailhead parking, and a drop-off/turnaround area just north of Tunnel Creek that could include minimal parking.

The lead agencies, Tahoe Regional Planning Agency (TRPA), Federal Highway Administration (FHWA), and U.S. Forest Service (USFS), are seeking comments on the possible environmental effects of two potential alignments being considered for the shared-use path. The environmental document for the proposed project is a joint TRPA/FHWA Environmental Assessment (EA) prepared pursuant to the National Environmental Policy Act (NEPA) and the regulations implementing NEPA, and TRPA's Bi-State Compact and its implementing code and

rules of procedure. Additionally, a NEPA DM is being prepared by the USFS in order to issue a special use permit for the approximately 800-foot section of the shared-use path that would cross a single parcel of National Forest System (NFS) land.

The North Demonstration Project is a high priority section of the larger Nevada Stateline-to-Stateline Bikeway, which encompasses an approximately 30-mile corridor between the Nevada state line in Crystal Bay and the casino core in Stateline, Nevada. This notice addresses only the North Demonstration Project. The first section of the overall project, the South Demonstration Project, between the Stateline casino core and Round Hill Pines Beach, has been approved and construction of this segment is scheduled for the summer of 2012. The alignment between the South and North Demonstration Projects and the alignment between Incline Village and Crystal Bay are undergoing additional alignment planning; future implementation phases will be subject to their own environmental review and are not being evaluated as part of this effort, except in the cumulative context.

While there is no requirement for preparation of a Notice of Preparation for an EA, the lead agencies would like to solicit the views of interested persons, organizations, and agencies as they relate to the scope and content of the information to be included and analyzed in the environmental document. Agencies should comment on the elements of the environmental information that are relevant to their legal authority and statutory responsibilities in connection with the proposed project. If you would like to review the project description and alignment map, they can be accessed on the project website at [www.nvtahoebikeway.com](http://www.nvtahoebikeway.com) in the Document Library folder, on TRPA's website at [www.trpa.org](http://www.trpa.org), or by contacting the lead agencies with the contact information provided above.

**Public Scoping:** One public scoping meeting is being conducted to provide you with the opportunity to learn more about the North Demonstration Project and to express oral comments about the content of the EA and DM, in addition to your opportunity to submit written comments. The scoping meeting will be held at the following time and location:

Wednesday, October 5, 2011  
Beginning at 6:00 p.m.  
The Chateau at Incline Village  
955 Fairway Boulevard  
Incline Village, NV 89451

The designated public scoping period will extend for 30 calendar days beginning on September 21, 2011 and concluding at midnight on October 21, 2011. Comments would be most helpful if received within this 30-day scoping period. Please send your written responses to Brian Judge, Acting Assistant Branch Chief, at TRPA at P.O. Box 5310, Stateline, Nevada 89449-5310. Responses should include the name of a contact person at your agency or organization.

# NEVADA STATELINE-TO-STATELINE BIKEWAY, NORTH DEMONSTRATION PROJECT PROJECT DESCRIPTION

## BACKGROUND

The proposed North Demonstration Project is an approximately 3-mile section of the larger Nevada Stateline-to-Stateline Bikeway Project, a project to build a premier shared-used path on the east side of Lake Tahoe between the Nevada state line in Crystal Bay and the casino core in Stateline, Nevada. Washoe County is the lead project proponent for the North Demonstration Project described herein.

The Nevada Stateline-to-Stateline Bikeway Project (Bikeway) is a joint proposal of local, state, regional, and federal agencies with responsibilities on the Nevada side of the Lake Tahoe Basin. The sponsoring agencies are Douglas County, Washoe County, Carson City, Incline Village General Improvement District (IVGID), Tahoe Transportation District (TTD), Nevada Division of State Parks (NDSP), Nevada Division of State Lands, TRPA, and USFS. The Nevada Department of Transportation (NDOT) and the Washoe Tribe are partnering entities. A "Working Group" has been formed to oversee the Bikeway project; it consists of the staff from the sponsoring and partnering agencies that are helping to direct the project planning, environmental review, and bikeway design.

The North Demonstration Project is the second of two demonstration projects identified by the Bikeway project Working Group for initial development. Initial development includes preparation of detailed design and construction documents, public scoping, environmental review, and permit acquisition. The other demonstration project was the Nevada Stateline-to-Stateline Bikeway, South Demonstration Project, an approximately 3.2-mile section of the Bikeway between the Stateline casino core and Round Hill Pines Beach. Environmental review for the South Demonstration Project has been completed; the project has been approved and construction is expected to begin in the summer of 2012. Both initial demonstration projects begin and end at logical origins and destinations such that each path has independent utility, regardless of the implementation of the remainder of the Bikeway. The sections of the Bikeway between the demonstration projects and between Incline Village and Crystal Bay are undergoing additional alignment planning and are not being evaluated as part of this effort, except in the cumulative context. Implementation of future project sections will include additional and independent environmental review.

Additional information on the Nevada Stateline-to-Stateline Bikeway may be obtained at [www.nvtahoebikeway.com](http://www.nvtahoebikeway.com).

## PURPOSE AND NEED

### Purpose

The purpose of the Nevada Stateline-to-Stateline Bikeway, North Demonstration Project is to provide a non-auto transportation opportunity that links recreation areas, community centers, and transportation facilities in order to reduce vehicle miles travelled and to expand recreational access and transportation choices for residents and visitors to the Tahoe Basin.

## Need

Existing bikeways in the Basin are extremely popular and public surveys show that expansion of the system around the entire lake is desired. Separated bicycle facilities are not available along most of the Nevada side of Lake Tahoe. The proposed North Demonstration Project would connect Incline Village to Sand Harbor with connections to Hidden Beach and Memorial Point, as well as the Flume Trail and the Tahoe Rim Trail. Providing bicycle and pedestrian links to recreation areas is an important step toward reducing vehicle impacts, improving multi-modal transportation options for residents and visitors, improving safety, and providing an unparalleled recreation experience in the Bikeway itself. Bicycle trail expansion has been identified as an important element of the Environmental Improvement Program (EIP) for air quality and recreation purposes and to encourage use of alternative modes of transportation. Although high quality trails exist in the Tahoe Basin, necessary connections for an integrated network of bicycle trails have been identified as a future need.

## GUIDING PRINCIPLES/GOALS AND OBJECTIVES

### Goal

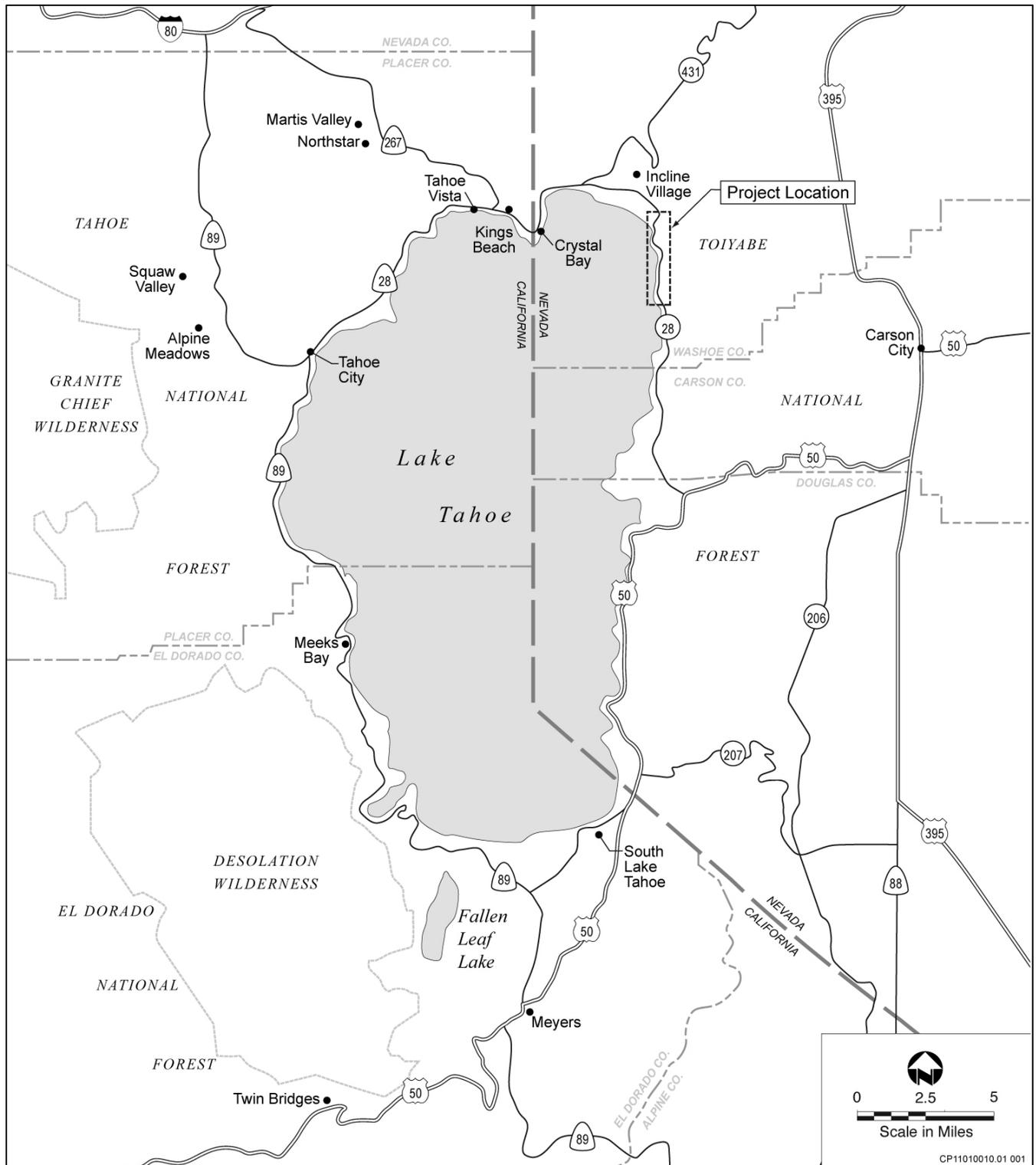
The primary goal of the North Demonstration Project is to design and construct a demonstration bicycle and pedestrian facility to showcase the potential for creating the Nevada portion of a premier separated bikeway circling Lake Tahoe.

### Project Objectives

- ▲ Create a separated, shared-use path from Incline Village to Sand Harbor with connections to Hidden Beach and Memorial Point.
- ▲ Develop a separated shared-use path that provides a high-quality user experience.
- ▲ Provide a new high-quality recreation opportunity while protecting the quality, integrity, and character of existing recreation opportunities.
- ▲ Serve a broad spectrum of users by meeting American Association of State Highway and Transportation Officials (AASHTO) and Americans with Disabilities Act (ADA) design standards, wherever feasible.

## PROJECT DESCRIPTION

Two alignment alternatives of the North Demonstration Project shared-use path are proposed for evaluation in the joint TRPA EA and NEPA EA. The northern terminus of the North Demonstration Project shared-use path would be approximately 0.3 miles north of Lakeshore Boulevard on the east side of SR 28 in the NDOT right-of-way (R/W) fronting the southernmost corner of the Ponderosa Ranch property (Exhibits 1 and 2). The North Demonstration Project would provide a connection to the existing separated shared-use path that runs parallel to Lakeshore Boulevard from SR 28 at its western end. The North Demonstration Project would extend south approximately 3 miles parallel to SR 28 and end at the main entrance to the Sand Harbor unit of Lake Tahoe Nevada State Park. The terrain over the 3 miles rises rapidly to the east of SR 28 beginning immediately south of Incline Village, and drops sharply toward Lake Tahoe on the west side of the highway. Geographic features along this segment include rock outcrop areas and Tunnel Creek and Bonpland Creek, both of which run through steep-walled canyons into Lake Tahoe. Existing facilities along this segment include: The Flume Trail and Tahoe Rim Trail access; the former Ponderosa Ranch; Hidden Beach, a popular east shore destination; Memorial Point, which is an improved vista point with a parking lot and restrooms; and Lake Tahoe Nevada State Park at Sand Harbor, which has several parking lots, swimming beaches, boat launch facilities, restrooms, snack bar, and a performing arts facility.



Source: Adapted by Ascent Environmental in 2011

**Exhibit 1**

**North Demonstration Project Regional Location**

In addition to the proposed shared-use path, the North Demonstration Project includes the following project components common to both action alternatives being considered: 1) up to four at-grade or tunnel crossings on SR 28, depending on alignment selection; 2) a sidewalk extending from Lakeshore Boulevard south along the west side of SR 28 to the guard rail along the highway above Hidden Beach; 3) trailhead parking (the proposed number of parking spaces will be determined as part of the environmental review process; potential locations are shown on Exhibit 2); and, 4) a potential drop-off/turnaround and small parking area just north of Tunnel Creek. These elements are expected to be constructed within the NDOT R/W, but may require construction easements and temporary disturbance outside the R/W. Other amenities include interpretive signage and possibly trash receptacles, picnic benches, bicycle racks, and restroom facilities.

The proposed separated, shared-use path would be paved, generally conforming to AASHTO standards, with some variances where physically constrained, consistent with recommendations of NDOT and in accordance with the Design and Maintenance Recommendation of TRPA/Tahoe Metropolitan Planning Organization's 2010 Pedestrian and Bicycle Master Plan. These standards generally require a 10-foot-wide paved path with 2-foot shoulders on both sides. In some circumstances, such as when the path is within 5 feet of a highway, AASHTO also requires a safety railing at least 42 inches high to separate the path from the highway. A safety railing also would be constructed along pathway edges where retaining wall heights exceed 30 inches on the downhill side.

To meet the ADA criterion for longitudinal slope, the North Demonstration Project would be designed, as much as feasible, to avoid path sections in excess of 5%. It may not be feasible for the proposed crossing at Tunnel Creek to meet the ADA criteria, because of existing steep terrain in the creek corridor leading up to the proposed tunnel on the east side of SR 28.

In addition to the AASHTO and ADA standards, the North Demonstration Project would be designed to meet the 15 design principles established by the Working Group for the larger Nevada Stateline-to-Stateline Bikeway Project. These principles are:

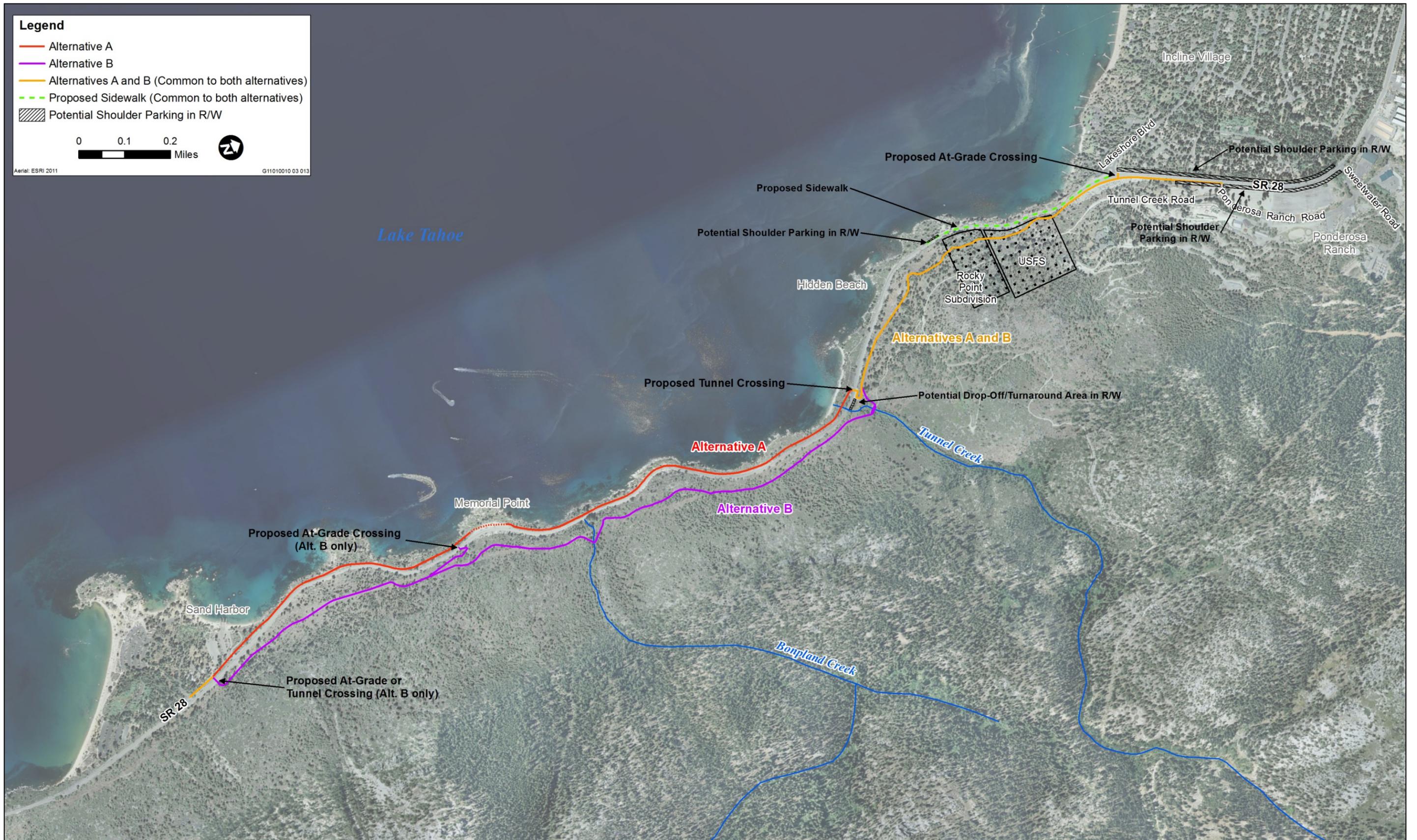
1. Identify and provide convenient buildable connections to communities, public facilities, public lands, the lakeshore, and open space.
2. Establish separated bikeway alignments wherever feasible.
3. Serve both recreation and commuter needs, with recreation needs receiving first priority where choices must be made.
4. Support the protection, restoration, and sustainability of natural and cultural resources.
5. Anticipate future growth in the surrounding communities in Nevada and California.
6. Provide for a variety of bicycle and pedestrian uses on the bikeway, while recognizing and managing potential conflicts.
7. Provide adequate public and private support facilities.
8. Remain sensitive to the cultural resources and traditions of the Washoe Tribe.
9. Design the bikeway to create social and economic benefits.
10. Provide interpretive opportunities along the bikeway for natural, cultural, and historic resources.

**Legend**

- Alternative A
- Alternative B
- Alternatives A and B (Common to both alternatives)
- - - Proposed Sidewalk (Common to both alternatives)
- ▨ Potential Shoulder Parking in R/W

0 0.1 0.2 Miles

Aerial: ESRI 2011 G11010010 03 013



Source: Lumos & Associates 2011



11. Minimize the number of at-grade crossings on SR 28 and U.S. Highway 50.
12. Provide connections to existing or new trails to recreation areas, transportation facilities, and community centers along the bikeway.
13. Where appropriate, enhance and use existing disturbed area, such as old logging and fire access roads, and take advantage of joint parking opportunities, such as at school sites.
14. Include opportunities for ADA accessibility.
15. Provide visitor amenities, such as rest areas and vistas, to make the bikeway an enjoyable experience.

In addition to the guiding principles, the Working Group identified 10 objectives for the Bikeway. The following eight objectives apply to the North Demonstration Project:

1. Complete long-term maintenance, resource management, and operations plans for Bikeway segments prior to construction.
2. Establish partnerships for operations and maintenance for each segment prior to approval of construction.
3. Encourage the shift in travel demand for East Shore recreation areas from driving to bicycling, walking, and transit.
4. Respect the Washoe community by involving them in determining ways to protect and interpret Washoe cultural, historic, and natural resources values.
5. Maximize funding source opportunities for timely project implementation and for long-term operation.
6. Provide opportunities for existing local businesses to participate in the process so they can help enhance the visitor experience on, and access to, the Bikeway.
7. Coordinate Bikeway decisions with recommendations in the East Shore Access Plan and consider other alternative transportation choices.
8. Coordinate with appropriate agencies to incorporate the Bikeway in new development plans and avoid conflict with road and highway projects.

## **PROPOSED ALIGNMENTS**

The two alignment alternatives being considered for the North Demonstration Project are shown in Exhibit 2. The two alignments are described below as action alternatives, Alternatives A and B. These alternatives and the No Project/No Action Alternative (Alternative C) are proposed for evaluation in the joint TRPA EA and NEPA EA. The USFS DM will evaluate the short stretch of the shared-use path common to both action alternatives that would cross National Forest System (NFS) land (Exhibit 2).

### **ALTERNATIVE A – PROPOSED ACTION**

The Alternative A alignment would generally run parallel to SR 28 on the mountain side (east side) of SR 28 between the south end of the Ponderosa Ranch area and Tunnel Creek for approximately 1 mile. At Tunnel

Creek, it would cross under SR 28 through a constructed tunnel and extend south on the west side of SR 28 to Sand Harbor.

The northern terminus of Alternative A would be approximately 0.3 miles north of Lakeshore Boulevard along SR 28 in the NDOT R/W at Ponderosa Ranch Road. From this point the shared-use path would run adjacent to SR 28 on its eastern edge until several hundred feet south of Lakeshore Boulevard. Here, the path would climb at a 5% or less uphill grade, and cross an approximately 800-foot stretch of a single NFS land parcel managed by the USFS. The alignment would then cross through the undeveloped portion of the Rocky Point Subdivision (Exhibit 2) generally either within the County street R/W or through existing private parcels, if easements were granted. Depending on the final alignment through this section, the shared-use path would be uphill and within 40 to 110 feet of existing Rocky Point residential structures on the east side of SR 28. The shared-use path along this section could require retaining walls as high as 12 feet where the path leaves the edge of SR 28 and begins the climb to the Rocky Point Subdivision.

South of the Rocky Point Subdivision the path enters Nevada state lands managed by NDSP and continues climbing to a point approximately 400 feet south of the subdivision before beginning a descent to Tunnel Creek Road at SR 28. Most of this section is at or below 5% grade, with one segment of about 120 feet at 7% grade just south of the high point, and another 300 foot segment at 8% grade as the path approaches Tunnel Creek Road.

Just north of Tunnel Creek Road the shared-use path would cross under SR 28 (through a proposed tunnel) to the lake side (west side) of the highway. Alternative A would run adjacent to SR 28 on the lake side of SR 28 through the existing path in the parking lot at Memorial Point to its southernmost terminus at the main entrance to Sand Harbor. The portion of Alternative A on the west side of SR 28 would be constructed below the grade of the highway, to the greatest extent practical, to protect views of Lake Tahoe from SR 28. Due to its proximity to the road, the majority of the shared-use path south of Tunnel Creek would be within NDOT's R/W. Portions of the shared-use path that deviate from NDOT's R/W would be on State of Nevada-owned lands.

Alternative A would require the construction of sections of the path on a cantilevered or column-supported structure in locations where the bank drops off steeply to the lake. The structure segments of the path would have a minimum clear width of 12 feet and a 42-inch guard rail (safety barrier) would be constructed on the lake side of the structure with a 42-inch barrier constructed between the path and SR 28. Tunnel Creek would be spanned by a bridge and the path would cross Bonpland Creek over the existing SR 28 culvert.

Alternative A would include two SR 28 crossings: 1) an at-grade crossing near Lakeshore Boulevard, and 2) a proposed tunnel crossing just north of Tunnel Creek. Any crossings from the east to the west side of SR 28 or construction within NDOT's R/W would require an NDOT encroachment permit. Any tunnel crossings may require relocation of Incline Village General Improvement District's (IVGID) treated effluent pipeline located under SR 28.

## **ALTERNATIVE B**

Alternative B is identical to Alternative A between Ponderosa Ranch Road and Tunnel Creek. At Tunnel Creek, rather than cross to the lake side of SR 28, the route would cross Tunnel Creek on a bridge and continue on the mountain side of SR 28 until the alignment is opposite Sand Harbor. This section would also include a tunnel under SR 28 for access to Hidden Beach and a bridge over Bonpland Creek. Between Memorial Point and Sand Harbor, the shared-use path would reach a maximum of about 90 feet in elevation above SR 28, offering views of the lake and west shore, before descending to highway level across from Sand Harbor. At Sand Harbor, the path crosses the driveway of the ranger residence and continues south until about 300 feet north of the main

entrance. Here, the shared-use path would cross SR 28 at-grade or through a tunnel and then continue south to the main entrance of Sand Harbor on the west side of SR 28.

Alternative B would require substantial grading of the mountainous terrain east of SR 28. The entirety of this alignment south of Tunnel Creek would be on Nevada state-owned lands managed by NDSP or within NDOT's R/W.

Alternative B would include four SR 28 crossings: 1) an at-grade crossing near Lakeshore Boulevard; 2) a proposed tunnel crossing just north of Tunnel Creek to provide safe access to Hidden Beach; 3) a spur trail and an at-grade crossing at Memorial Point; and 4) an at-grade or tunnel crossing at Sand Harbor State Park.

## **PROJECT DESIGN FEATURES**

Project design features are elements of the project design developed to reduce or avoid negative environmental effects of either action alternative (Alternative A or B). Design features will likely incorporate context sensitive design elements, monitoring effectiveness, and adaptive management elements to address unanticipated adverse resource effects or effects to sensitive sites. Project design features would address the following resource areas: recreation; visual resources; cultural resources; biological resources (wildlife, fisheries and aquatic resources, and vegetation [including non-native invasive plant species]); soils, hydrology, and water quality; and transportation, parking, and safety (including emergency access during construction).

### **Alternative C (No Project/No Action)**

With Alternative C, the project would not be constructed. Existing conditions on the project site would be projected into the future.

## **ALTERNATIVES CONSIDERED AND DISMISSED FROM DETAILED EVALUATION**

The following alternatives were considered and dismissed from further evaluation either because they did not meet the project objectives, were not feasible, or did not reduce adverse environmental effects.

### **Rocky Point Alignment Along West Side of SR 28**

A possible alignment of the North Demonstration Project with its northernmost terminus on the west side of SR 28 at the intersection of SR 28 and Lakeshore Boulevard was considered. Under this alternative the shared-use path would have run along the west side of SR 28 to its terminus at Sand Harbor, thereby avoiding any crossing of SR 28 and seamlessly connecting to the bicycle facility on Lakeshore Boulevard. This alternative was dismissed from further evaluation due to the narrow shoulder width and private property constraints along the west side of SR 28 between Lakeshore Boulevard and Hidden Beach. At Rocky Point there are several homes with very short setbacks from SR 28. Due to the limited space to construct a shared-use path up to 14 feet wide in this area, this alternative was deemed infeasible.

### **Mountain Side Alignment Along Tunnel Creek Road**

This alignment is similar to the northern alignment currently proposed as the northern part of Alternatives A and B, but would follow the existing alignment of Tunnel Creek Road until just north of Tunnel Creek. At Tunnel Creek, the alignment of the shared-use path would follow either Alternative A or B. The unpaved portion of Tunnel Creek Road is currently managed by NDSP and used by hikers and mountain bikers to access the Tahoe Rim Trail and Flume Trail. The advantage of aligning the proposed path along Tunnel Creek Road is that it would utilize the existing road for the first 2,000 feet or more of path, minimizing the need for substantial grading, additional coverage, and vegetation removal. However, at the north end of the alignment, Tunnel Creek

Road climbs steeply from SR 28 at a grade of nearly 13% for about 1,000 feet, which does not meet AASHTO or ADA design guidelines. This alternative was dismissed from further evaluation because of the significant grade challenge to access the trail from SR 28, the redirection of shared-use path users continuing from the bike trail on Lakeshore Boulevard that would need to travel north on SR 28 to access the trail, the potential historic nature of the unpaved Tunnel Creek Road, potential conflicts with NDSP maintenance activities along this trail, and because of the significant grade challenges and new disturbance that would be required to bring the shared-use path back to SR 28 for a safe crossing to Hidden Beach.

## POTENTIAL ENVIRONMENTAL EFFECTS

The following subject areas include potential environmental effects that will be analyzed in the joint TRPA EA and NEPA EA. The USFS DM will focus on the seven extraordinary circumstances found in Forest Service Handbook 1909.15, Chapter 30.4 for the approximately 800-foot path section that crosses NFS land managed by the USFS just north of the undeveloped Rocky Point Subdivision. For the section on NFS lands, this project falls within the category under 36 Code of Federal Regulations (CFR) 220.6 (e)(3) – *Approval, modification, or continuation of minor special uses of NFS lands that require less than five contiguous acres of land.*

**Land Use.** Land use impacts to be addressed in the EA include changes to onsite uses, community character, compatibility with adjacent land uses, and development outside the urban boundary. The EA will also address consistency with the applicable TRPA plan area statement (PAS) and adjacent community plan requirements, ordinances, and goals and policies; USFS planning guidance (Forest Plan); and the NDSP General Management Plan.

**Hydrology and Water Quality.** The alternatives being considered will cross several drainages, including Tunnel Creek and Bonpland Creek; trail crossings could affect hydrologic function/connection with these drainage ways and stream environment zone (SEZ) areas. In addition, project construction could create short-term increases in sediment loads at locations immediately adjacent to Lake Tahoe during the construction period. Any tunnel crossings under SR 28 could encounter seasonal high groundwater. Both pre- and post-construction impacts will be identified and analyzed in the environmental document. This will include non-point pollution sources from the project, potential contaminants, proposed source control methods, and proposed temporary and permanent best management practices (BMPs) to address potential impacts on water quality. The EA will also address potential hazardous material issues, evaluate potential short-term and long-term changes in sediment rate and transport as it relates to altered landscapes, total maximum daily load (TMDL) effects, source water protection (wells and intake lines), and address long-term water quality monitoring needs. Mitigation measures (temporary and permanent) will be proposed, if needed.

**Biological Resources: Fisheries and Aquatic Resources, Vegetation, and Wildlife.** Construction and use of the action alternatives could affect the distribution, extent, and quality of sensitive and common biological resources that may be located within the project site. Osprey nests and suitable habitat near Memorial Point could be adversely affected by the action alternatives. In addition, streams and associated SEZs would be crossed by the shared-use path. Habitat that may be suitable for sensitive plant species occurs in the project area, particularly in riparian zones, SEZ and wetland areas, and along streams. The relationship of the TRPA vegetation and wildlife threshold carrying capacities will be discussed along with tree removal related to construction of the action alternatives. Impacts on native vegetation, fisheries and aquatic resources, and wildlife will be described based on the proposed site development. The potential for the project to result in the spread of noxious weeds (e.g., cheatgrass) will also be discussed. Mitigation measures (temporary and permanent) will be proposed where needed.

**Earth Resources: Geology and Soils, and Land Capability and Coverage.** The project would involve substantial excavation and placement of fill material and new coverage for shared-use path construction, bridges, and retaining walls. The project would also potentially impact rock outcroppings. Because the corridor in which the North Demonstration Project is located is primarily located on Class 1a (steep and erosive) soils and in a TRPA hydrologic transfer area with limited coverage available, coverage for the project could be costly and challenging to obtain. Potential environmental effects related to land capability and coverage, soils and geology, topographic alteration, seismic hazards, slope stability, and erosion will be described. If soil export outside of the study area is necessary, potential disposal sites will be identified and evaluated. Mitigation measures (temporary and permanent) will be proposed, if needed.

**Scenic Resources.** Shared-use path construction would result in changes to natural elements that contribute to the scenic quality of the study area (e.g., tree removal, rock outcrop impacts, hillside cuts, vegetation disturbance), as well as changes related to the installation of recreation-related structures (e.g., paved path, structure-supported path, trailhead parking). The project would introduce manmade features that could be visible from SR 28 and Lake Tahoe. Obstruction of views of Lake Tahoe from SR 28 could cause a decrease in TRPA scenic threshold ratings, which would not be allowed by the TRPA Compact. The construction of the west side alignment would also require structural and design elements that maintain scenic thresholds ratings of the east shore from the lake. This would require staying within the TRPA calculated composite contrast rating for bridge structures, retaining walls, guard rails, and other constructed bikeway elements. The EA will evaluate the North Demonstration Project's potential effects to scenic resources through the use of ground-level site photographs from sensitive viewpoints on or near the project site and photorealistic visual simulations. Scenic effects will be evaluated in terms of visibility of the alternatives, alteration of the visual setting, sensitivity of viewpoints, as well as the effect of the project on TRPA scenic thresholds. Mitigation measures (temporary and permanent) will be proposed, if needed.

**Public Access, Recreation, and Section 4(f).** The majority of the shared-use path would be constructed within lands managed by NDSP. Construction and operation of the path would result in changes in existing public access to and recreational uses of the study area. The project would provide a new recreation amenity in the shared-use path, and would facilitate beach access consistent with regional recreational goals. Hidden Beach and Sand Harbor currently experience peak days during holidays and weekends from late June through early September. Parking for both facilities often spills to the west and east shoulders of SR 28. The North Demonstration Project has the potential to change demand for these facilities. The effects of a potential change in demand addressed in the EA will include user experience, natural resources effects, and NDSP staffing. The EA will evaluate the changes to the demand for and use of these recreation areas relative to facility capacity, the effect on TRPA recreation thresholds, and consistency with TRPA, and NDSP recreation goals. The EA will also include a Section 4(f) evaluation. Mitigation measures (temporary and permanent) will be proposed where needed.

**Archeological and Historical Resources.** Much of the shared-use path corridor is located on undeveloped land. The potential for cultural resources to be located on or near the shared-use path alignments and the potential for disturbance of known and/or undiscovered cultural resources due to implementation of the project will be analyzed. A review of previous investigations, historical maps, overview studies, and other existing data on file at the Nevada State Museum and the USFS's offices, has resulted in the identification of several resources that have been documented within the study area. The evaluation methodology will include consultation with the Washoe Tribe, field reconnaissance in areas where previous investigations have not occurred, and evaluation of potentially significant resources in accordance with Section 106 of the National Historic Preservation Act. Mitigation measures (temporary and permanent) will be proposed, if needed.

**Transportation, Parking, and Circulation.** Alternative A would require use of NDOT's R/W, which may generate some safety concerns and road maintenance challenges. Safety concerns related to the use of NDOT R/W include at-grade crossings of SR 28, icing in areas where walls are constructed to separate the shared-use path from SR 28, assuring proper sight distances for crossings and parking areas, and adherence to roadside safety design standards. Maintenance issues associated with use of NDOT R/W include the potential loss of snow storage areas for SR 28 and storage of snow from the shared-use path if it were cleared during the winter. The EA will include an evaluation of these concerns and challenges and identify potential mitigation measures.

Shared-use path construction would generate short-term construction-related traffic, and could result in lane closures for construction periods during peak summertime conditions. Long-term traffic generated by trail users will also be discussed, but it is anticipated that the shared-use path would provide an alternative to the use of the automobile, which will offset new trips from recreational users. Therefore, the analysis will also discuss potential transportation benefits (e.g., trip and vehicle miles of travel [VMT] reduction) that may result from shared-use path construction and use. The transportation analysis will include identification of major roadways and intersections that may be affected by the proposed Bikeway construction, traffic volumes on those roadways, and potential neighborhood effects from parking on residential streets near the project corridor. Effects on local circulation patterns will also be discussed in these locations. Mitigation measures (temporary and permanent) will be proposed, if needed.

**Air Quality.** The project would involve temporary construction emissions and generation of fugitive dust, as well as generate construction traffic in the area, contributing pollutants to the air basin. The EA will include an assessment of ambient air quality conditions as well as short-term (i.e., construction) air quality impacts and long-term (i.e., operational) regional air pollutant emissions, including mobile and area source emissions. The potential for long-term air quality benefits will also be evaluated from its use as an alternative to the private automobile and potential reduction in VMT. Mitigation measures (temporary and permanent) will be proposed, if needed.

**Noise.** The EA will assess potential short-term (i.e., construction) noise impacts relative to sensitive receptors and their potential exposure, as well as stringent noise standards that apply to recreation PASs. Noise levels of specific construction equipment will be determined and resultant noise levels at nearby receptors (at given distances from the source) will be calculated. Long-term (i.e., operational) noise impacts, including increased noise from mobile, stationary, and area sources will be assessed. Mitigation measures (temporary and permanent) will be proposed, if needed.

**Public Services and Utilities.** The public services and utilities section of the EA will evaluate impacts on power, solid waste collection and disposal, police services, fire protection services, fire fuel management, water treatment and distribution and wastewater collection – including any impacts associated with disturbance or relocation of the treated effluent pipeline at identified locations under SR 28. Mitigation measures (temporary and permanent) will be proposed, if needed.

**Hazards and Hazardous Materials.** The EA will map and address potential hazardous materials located on the project site such as petroleum products (including aerially deposited lead), fertilizers, and pesticides. The EA will also address hazardous materials issues related to adjoining properties. Mitigation measures (temporary and permanent) will be proposed, if needed.

**Agricultural and Mineral Resources.** The proposed alternatives are not expected to affect agricultural or mineral resources in the study area. Existing resources will be verified and discussed.

**Socioeconomics and Environmental Justice.** With the potential exception of recreation and land use compatibility, discussed above, the proposed alternatives are not expected to adversely affect socioeconomic factors within the study area or to result in any environmental justice concerns.

**Growth-Inducement.** The effects of the shared-use path on growth inducement will be addressed. However, the North Demonstration Project is not expected to induce or result in the growth of population in the region, cause an increase in demand for employment opportunities, or cause an increase in other public needs.

**Cumulative Effects.** The EA will identify and describe recently approved and reasonably anticipated projects and planning efforts in the vicinity of the North Demonstration Project, including the TRPA Regional Plan Update, the NDSP General Management Plan update, NDOT water quality improvement projects, the SR 28 Corridor Management Plan, future phases of the Nevada Stateline-to-Stateline Bikeway, and potential future development at the Ponderosa Ranch or within the undeveloped Rocky Point subdivision. The EA will evaluate the project's direct and indirect contribution to the combined effects of these activities.

**TRPA Threshold Carrying Capacities:** The EA will include assessment of the Bikeway alternatives' compliance with and contribution to the attainment and maintenance of threshold carrying capacities adopted by TRPA.

## **INTENDED USES OF THE EA AND DM**

The FHWA and TRPA will use this EA to consider the potential environmental effects, design features, mitigation measures, and alternatives, when reviewing the North Demonstration Project for approval. The EA will serve as FHWA's NEPA compliance document and as TRPA's compliance document with respect to its Compact and implementing regulations. Given the extent of the Bikeway that would be located within or adjacent to NDOT R/W, NDOT will act as a co-lead agency to FHWA for NEPA review purposes. The USFS will use the DM to issue a special use permit to Washoe County for the construction and maintenance of the 800-foot section that crosses NFS land. It is expected that NDSP will also use this document to evaluate the use of the lands they manage for the North Demonstration Project. State agencies and other agencies with permitting authority over the project may also use the EA and DM, as needed, for subsequent discretionary actions. Information provided in the EA will also be used by agencies in their permitting process, including but not limited to, TRPA and Washoe County construction permits, NDOT encroachment permits, a United States Army Corps of Engineers Section 404 Permit, and a Nevada Department of Environmental Protection National Pollutant Discharge Elimination System (NPDES) Stormwater Permit.