3.15 CULTURAL RESOURCES

3.15.1 INTRODUCTION

This section describes the existing cultural resources that are known or have the potential to occur in the study area. Cultural resources include archaeological, paleontological and historical resources. Federal, state, and local regulations related to cultural resources are summarized. Potential impacts of the proposed alternatives are analyzed, and mitigation measures are provided for those impacts determined to be significant. Cumulative cultural resources impacts are addressed in Chapter 4, Cumulative Impacts.

3.15.2 REGULATORY BACKGROUND

Cultural resources are regulated at the federal, state and local levels. Applicable plans, ordinances, and guidelines related to cultural resources are described below.

TAHOE REGIONAL PLANNING AGENCY

REGIONAL PLAN

TRPA regulates growth and development in the Lake Tahoe Region through the Regional Plan, which includes the Goals and Policies, Code of Ordinances (Code), and other components.

Goals and Policies

The Goals and Policies document establishes guiding policies for each resource element. The Conservation Element (Chapter IV) of the Goals and Policies document includes a Cultural Subelement, with the following goal (TRPA 1987, IV-27):

Goal 1: Identify and preserve sites of historical, cultural, and architectural significance within the Region.

The Tahoe Region has a heritage that should be recognized and appropriately protected. Due to the harsh weather conditions, changing development standards, and changing uses of the Region, many structures that had significant historical or architectural value have been destroyed or lost.

Policies:

1. Historical or culturally significant landmarks in the Basin shall be identified and protected from indiscriminate damage or alteration; and
2. Sites and structures designated as historically, culturally, or archaeologically significant shall be given special incentives and exemptions to promote the preservation and restoration of such structures and sites.

Code of Ordinances

The Code is a compilation of the rules, regulations, and standards to implement the Regional Plan Goals and Policies. Adopted standards in the Code must be met by projects. Chapter 67 of the Code includes standards to protect significant cultural, historical, archaeological, and paleontological resources. Regulations include protection of such resources in project areas in which they are known or suspected. Chapter 67 also provides for consultation with state historical agencies as well as the Washoe Tribe. Additionally, Standard 33.3.7 in Chapter 33 (Grading and Construction, Section 33.3, Grading Standards) addresses discovery of historical resources.
FEDERAL

SECTION 106 OF THE NATIONAL HISTORIC PRESERVATION ACT (NHPA)

Federal protection of resources is legislated by (a) the National Historic Preservation Act (NHPA) of 1966 as amended by 16 U.S. Code 470, (b) the Archaeological Resource Protection Act of 1979, and (c) the Advisory Council on Historical Preservation. These laws and organizations maintain processes for determination of the effects on historical properties eligible for listing in the National Register of Historic Places (NRHP).

Section 106 of the National Historic Preservation Act constitutes the main federal regulatory framework guiding cultural resources investigations and requires consideration of effects on properties that are listed in, or may be eligible for listing in the National Register of Historic Places (NRHP). The NRHP is the nation’s master inventory of known historic resources. It is administered by the National Park Service and includes listings of buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, and cultural districts that are considered significant at the national, state, or local level.

The formal criteria (36 CFR 60.4) for determining NRHP eligibility are as follows:

1. The property is at least 50 years old (however, properties under 50 years of age that are of exceptional importance or are contributors to a district can also be included in the NRHP);
2. It retains integrity of location, design, setting, materials, workmanship, feeling, and associations; and
3. It possesses at least one of the following characteristics:
   a. Association with events that have made a significant contribution to the broad patterns of history (events).
   b. Association with the lives of persons significant in the past (persons).
   c. Distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant, distinguishable entity whose components may lack individual distinction (architecture).
   d. Has yielded, or may be likely to yield, information important to prehistory or history (information potential).

UNITED STATES FOREST SERVICE - LAKE TAHOE BASIN MANAGEMENT UNIT

Approximately 75 percent of the land within the Region is public land managed by the Lake Tahoe Basin Management Unit (LTBMU) (U.S. Forest Service 2011a). In managing National Forest System land, LTBMU adheres to the National Historic Preservation Act and coordinates and consults with the Washoe Tribe, TRPA, and the California and Nevada State Historic Preservation offices, as appropriate. The LTBMU Forest Plan provides guidelines for historic and archaeological resource protection (U.S. Forest Service 2011b).

STATE

CALIFORNIA

California Environmental Quality Act
Projects in California would be subject to environmental analysis pursuant to the California Environmental Quality Act (CEQA). CEQA requires public agencies to consider the effects of their actions on both “historical resources” and “unique archaeological resources.” Pursuant to Public Resources Code (PRC) Section 21084.1, a “project that may cause a substantial adverse change in the significance of an historical resource is a project that
may have a significant effect on the environment.” Section 21083.2 requires agencies to determine whether proposed projects would have effects on unique archaeological resources.

**Historical Resources**

“Historical resource” is a term with a defined statutory meaning (PRC, Section 21084.1; determining significant impacts to historical and archaeological resources is described in the State CEQA Guidelines, Sections 15064.5[a] and [b]). Under State CEQA Guidelines Section 15064.5(a), historical resources include the following:

1. A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Public Resources Code, Section 5024.1).
2. A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, will be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
3. Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency’s determination is supported by substantial evidence in light of the whole record. Generally, a resource will be considered by the lead agency to be historically significant if the resource meets the criteria for listing in the California Register of Historical Resources (Public Resources Code, Section 5024.1), including the following:
   a) Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
   b) Is associated with the lives of persons important in our past;
   c) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
   d) Has yielded, or may be likely to yield, information important in prehistory or history.
4. The fact that a resource is not listed in or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to Section 5020.1(k) of the Public Resources Code), or identified in a historical resources survey (meeting the criteria in Section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in PRC Section 5020.1(j) or 5024.1.

**Unique Archaeological Resources**

CEQA also requires lead agencies to consider whether projects will impact unique archaeological resources. Public Resources Code Section 21083.2, subdivision (g), states that unique archaeological resource means an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.
California Register of Historical Resources
California Public Resources Code, Section 5024.1 established the California Register of Historical Resources (CRHR) in 1992. The California Register is an authoritative guide in California to be used by state and local agencies, private groups, and citizens to identify the state’s historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change. A resource may be listed as an important resource if it meets any of the NRHP criteria, stated above.

California Public Resources Code Section 5024.5 and State-owned Lands
Historical and archaeological resources on state-owned lands are subject to the requirements of Section 5024.5 PRC. The provisions are intended to protect significant historical and prehistorical features by requiring notification of the State Historic Preservation Officer (SHPO) during the planning process. If the SHPO determines that a proposed action would have an adverse effect on a listed historical resource, California State Parks and the SHPO shall adopt prudent and feasible measures that will eliminate or mitigate the adverse effects. California State Parks maintains written documentation of the SHPO’s concurrence with proposed actions that would have an effect on an historical resource on the master list.

NEVADA

Nevada Office of Historic Preservation
The Nevada State Historic Preservation Office (Nevada SHPO) is a state agency created by the National Historic Preservation Act of 1966, as amended (NHPA). This agency’s responsibility is restricted to recommendations and comments on a federal agency’s determinations. As a service to state and local agencies, Nevada SHPO reviews projects for potential impacts on historic properties.

The Nevada SHPO keeps an inventory of the state’s cultural resources to assist federal, state, and local agencies in planning projects to avoid impacts to important cultural resources. The Nevada Cultural Resource Information System (NVCRIS) is a collection of online GIS database services that contain recorded archaeological and architectural resources and inventories for the state. Additionally, the Nevada SHPO acts as a clearinghouse for nominations of sites and features to the National Register of Historic Places (NRHP). Nominations are first submitted to the Nevada SHPO in Carson City for review by the Nevada SHPO and the History and Museum Board of Directors. With their approval, it is forwarded to the Keeper of the National Register in Washington D.C.

The Nevada SHPO plays an advisory role to TRPA during project review of structures 50 years or older. TRPA staff request comment in such circumstances and often coordinate with the Nevada SHPO on required study and mitigation measures. Additionally, TRPA consults with the Nevada SHPO during the scoping process for all EISs and submits these documents for comment during the public comment period.

LOCAL

Six local jurisdictions are included in the Lake Tahoe Region. These jurisdictions have adopted various planning documents to guide development within their boundaries.

PLACER COUNTY

The Recreational and Cultural Resources Section (Section 5) of the Placer County General Plan (Placer County 1994) includes a goal to “identify, protect, and enhance Placer County’s important historical, archaeological, paleontological, and cultural sites and their contributing environment.” This plan also includes policies to protect and enhance cultural resources through various means, including: incentive programs for private property owners, public education, avoidance and mitigation of cultural resource impacts in discretionary development...
projects, coordination with the local Native American community and NAHC, and assisting private citizens seeking historic landmark designations for their property.

**EL DORADO COUNTY**

The Conservation and Open Space Element of the El Dorado County General Plan (adopted July 19, 2004, amended December 2009) includes a goal to ensure the preservation of the County’s important cultural resources. Several objectives are noted for this goal, below. Numerous policies are provided to direct each of these objectives.

**Objectives:**
- Protection of cultural heritage through the creation of an identification and preservation program for the County’s cultural resources.
- Maintenance of the visual integrity of historic resources.
- Recognition of the value of the County’s prehistoric and historic resources to residents, tourists, and the economy of the County, and promotion of public access and enjoyment of prehistoric and historic resources where appropriate.
- Preservation and protection of existing cemeteries including access and parking.

**CITY OF SOUTH LAKE TAHOE**

The Natural and Cultural Resources Element of the City of South Lake Tahoe General Plan (adopted May 17, 2011) includes a goal to preserve and maintain sites and structures that serve as major, visible connections to South Lake Tahoe’s social, cultural, and architectural history. This plan also includes policies to preserve sites of historical, cultural and architectural significance; designate structures or sites as local historic landmarks; require archaeological investigations for applicable discretionary projects; require paleontological resources evaluations when fossils are discovered; and require projects to stop work if human remains are discovered.

**DOUGLAS COUNTY**

The Historic Preservation Element (Chapter 9) of the Douglas County Master Plan (adopted January 4, 2007) includes a goal to preserve Douglas County’s historic, cultural, and archaeological resources as physical reminders of the county’s past and as unique focal points to shape the county’s identity, now and in the future. This plan also includes policies to: support preservation of the County’s cultural heritage, including the establishment of historic districts; encourage the development of historical preservation efforts of the towns, the Washoe Tribe, and other entities in the County; consider adoption of an ordinance for the designation and protection of historic properties; work with towns to preserve and enhance historic resources; coordinate with the Washoe Indian Tribe in the identification and preservation of cultural resources; pursue incentives for preservation of historic resources; prepare educational materials for County residents; and include routes of historic trails in the County’s network of scenic resources.

**WASHOE COUNTY**

The Conservation Element of the Washoe County Master Plan (amended September 2010) describes some of the prehistoric archaeological, architectural and historical resources of the Tahoe Basin within Washoe County and encourages the protection and enhancement of natural resources and existing views. This plan includes policies that direct building and landscaping design to blend with the natural environment and that encourage attainment and maintenance of TRPA’s scenic quality threshold standards.
CARSON CITY

Guiding Principle #5 of the Carson City Master Plan (adopted July 6, 2006) provides for “A Strong Diversified Economic Base.” This guiding principle includes a goal to promote tourism activities and amenities that highlight the city’s historic and cultural resources. This goal includes policies to: support tourism activities associated with the major historic resources within the community; and to encourage the development of historical opportunities, interpretive signage, and other amenities that complement and enhance the City’s historic resources.

3.15.3 AFFECTED ENVIRONMENT

PREHISTORIC ARCHAEOLOGICAL CONTEXT

The cultural chronology for the Lake Tahoe Region recognizes the following distinct phases, each of which can be defined in large part by the presence of specific resources found on archaeological sites. Phases are described from oldest to most recent:

- Pre-Archaic / Tahoe Reach Phase (ca. 10,000–8000 Before Present [B.P.])
- Early Archaic / Spooner Phase (ca. 8000–5000 B.P.)
- Middle Archaic / Martis Phase (ca. 5000–1300 B.P.)
  - Early Martis Phase (ca. 5000–3000 B.P.)
  - Late Martis Phase (ca. 3000–1300 B.P.)
- Late Archaic / Kings Beach Phase (ca. 1300–150 B.P.)
  - Early Kings Beach Phase (ca. 1300–800 B.P.)
  - Late Kings Beach Phase (ca. 800–150 B.P.)

Pre-Archaic / Tahoe Reach Phase (10000–8000 B.P.). This phase has not been well defined, but is generally equated with small, highly mobile groups whose economy was focused on game hunting. Little evidence for sites of this phase has been found in the Sierra Nevada. Its presence in the area is postulated based on sites of this age at lower elevations.

Early Archaic / Spooner Phase (8000–5000 B.P.). Described as “a hypothetical construct to name the interval for which little archaeological data existed, and it remains poorly known to the present.” This cultural phase has been characterized by the presence of projectile points of the Pinto (Gatecliff) Split Stem series and Humboldt series found predominantly in the Great Basin. Paleo-environmental conditions during this period reflect a widespread Middle Holocene warming and drying trend. General cultural patterns attributed to the Early Archaic include small game hunting, increased milling of hard seeds, and a mixed-mode, forager-collector subsistence strategy (California State Parks et al. 2010, 3.9-5).

Middle Archaic / Martis Phase (ca. 5000–1300 Before Present [B.P.]). Represented by the Early Martis (5000–3000 B.P.) and the Late Martis (3000–1300 B.P.) phases. This period was defined by a heavy reliance on flaked basalt implements and milling stones and slabs for the grinding of seed foods. The predominance of flaked and ground stone artifacts on archaeological sites of this time appears to reflect an economic focus on hunting and seed gathering. During this time, conditions became cooler and wetter, similar to the climate experienced today. Human populations increased and diversified, though remained small enough to prevent resource overexploitation (California State Parks et al. 2010, 3.9-5).

Late Archaic / King’s Beach Phase (ca. 1300–150 B.P.). Represented by the Early Kings Beach Phase (1300–700 B.P.) and Late Kings Beach Phase (700–150 B.P.). In contrast with the Middle Archaic / Martis phase, technology
ETHNOGRAPHIC CONTEXT

The Washoe Tribe inhabited the Tahoe Basin at the time of Euro-American contact in the early 1840s. The largest Washoe settlements were found in the larger valleys on and along the eastern slope of the Sierra Nevada between Honey Lake to the north and Little Antelope Valley to the south. Although most Washoe resided in long-term or “winter” settlements in the lowland valleys east of the Sierra crest, Lake Tahoe was the spiritual and geographic center of the Washoe world. The Washoe, members of the widespread Hokan linguistic group, are the only Great Basin group to speak a non-Numic language. Although the evidence is far from conclusive, it has been postulated that an early relationship existed (more than 4,500 years ago) between the Hokan-speaking Washoe and other Hokan speakers in California (California State Parks et al. 2010, 3.9-6).

The Washoe were economically and socially organized into basic household or extended family units residing in multifamily communities. Groups maintained ties with each other and with neighboring Penutian-speaking groups, including the Maidu, Miwok, and Paiute. The territory of ethnographic Washoe, like the territories of most native California groups, was fluid; it was also utilized by non-Washoe neighboring groups, particularly when resources were abundant, or as a trade/travel corridor. Joint land use, particularly in areas where resources were abundant or that served as trade and travel corridors, was usually accommodated by negotiation (California State Parks et al. 2010, 3.9-6).

With a relatively abundant environment and some of the highest pre-contact population densities in the area, the Washoe pursued an “intensive subsistence strategy and a demographically packed settlement pattern” (California State Parks et al. 2010, 3.9-7). This pattern of land use involved high seasonal mobility, mixed strategies of foraging and collecting, and intensive exploitation of resources. Areas such as the upper Truckee River watershed include several types of microenvironments—meadows, marshes, and riparian corridors—and each supported a diverse range of floral and faunal species available for use by the Washoe (California State Parks et al. 2010, 3.9-7).

Fishing was one of the most important forms of subsistence available to the Washoe, and this activity provided the most predictable and consistent source of year-round food during prehistoric and ethnographic times. Seasonal fish runs occurred in all of the major rivers and streams along the eastern side of the Sierra Nevada. Runs in the streams surrounding Lake Tahoe included varieties of Tahoe sucker (Catostomus tahoensis) and Lahontan cutthroat trout (Salmo clarki henshawi) in the spring and summer, and mountain whitefish (Prosopium williamsoni) in the fall and winter. Fishing was accomplished through the use of spears, traps, weirs, hooks and lines, and angling through ice-holes during the winter months (California State Parks et al. 2010, 3.9-7).

The hunting of large and small mammals provided hides, bone, ligament, and other important materials as well as another important food source. The late summer and early fall were preferred hunting seasons when species such as mule deer, pronghorn antelope, and mountain sheep were at their most robust. Hares and jackrabbits (white-tailed jackrabbit, cottontail, and snowshoe hare) also supplied an abundant meat source, and drives were organized in late fall to take advantage of this important resource (California State Parks et al. 2010, 3.9-7).
The wide variety of flora available provided a substantial part of the diet of the Washoe, and many species were valued for their medicinal properties. The varied distribution of seasonally available plants was a major factor in the dispersal of Washoe groups and their frequent movements over a large range. Two of the most important Washoe staple foods, pine nuts (*ta gim*) and acorns (*malin*), were available mostly in the late fall and winter when other plant resources were becoming scarce (California State Parks et al. 2010, 3.9-7).

In general, Washoe lifeways remained largely unchanged for centuries until the middle decades of the 19th century. Would-be miners, loggers, ranchers, and Euro-American settlers began to flood the area following the gold strikes in the Sierra Nevada foothills and the silver discoveries in the nearby Nevada Comstock Lode. Like many Native American groups in California and Nevada, the Washoe suffered greatly from the loss of their traditional territory and lifeways, and their population decreased dramatically and soon became marginalized (California State Parks et al. 2010, 3.9-7).

Today, however, the Washoe people constitute a thriving native community that is reinvesting in its heritage and culture through newfound political, economic, and social influence throughout the Basin and the surrounding area. Currently, the Washoe are a recognized tribe by the U.S. government and have maintained an established land base. Its 1,200 tribal members are governed by a tribal council that consists of members of the Carson, Dresserville, Woodfords, and Reno-Sparks Indian groups, as well as members from non-reservation areas (TRPA 2009, 4.7-2).

**HISTORIC CONTEXT**

Although the earliest documented Euro-American presence in the Lake Valley area occurred in the late 1840s and the early to mid-1850s as travelers and surveyors passed through the area, the Comstock mining boom in Nevada starting in 1859 led to rapid development of the Tahoe Basin. The surge in freight and passenger traffic through the Sierra Nevada quickly led to the creation of improved transportation routes, the harvesting of vast stands of timber, and the eventual development of ranching, all of which have played important roles in the economic and social history of the Lake Valley area (California State Parks et al. 2010, 3.9-7).

**TRANSPORTATION**

A prominent historic-era transportation feature in the Basin is present-day US 50, which has largely followed the existing roadway alignment since at least the 1860s. Formerly known as the Johnson Pass Road, the Placerville–Lake Tahoe Road, the Lake Bigler Toll Road, and the Lincoln Highway, US 50 was originally part of a series of routes informally referred to in the 19th century as the Bonanza Road System in reference to its connection with the rich Comstock Lode mines, located just over the Sierra crest in Nevada (California State Parks et al. 2010, 3.9-8).

**TIMBER PRODUCTION**

Logging in the Tahoe Basin generally began in support of the Nevada Comstock mines in 1859 and expanded to support the rapid economic and population growth in Carson City, Reno, and Northern California. By the early 1880s, timber production was the single most important regional industry, substantially outpacing the economic output of ranching and agriculture in the Basin (California State Parks et al. 2010, 3.9-8).

**RANCHING AND DAIRY FARMING**

In the 1800’s, the ranching and dairy farming industries were established in the Lake Valley area. The prominence of this endeavor is reflected in the 1870 California Products of Agriculture census, which shows production of 228 tons of hay and 500 tons of butter in Lake Valley alone (California State Parks et al. 2010, 3.9-9). With the rise in timber production, dairy farming and ranching in Lake Valley decreased during the latter
decades of the 19th century. By the turn of the century, when most of the profitable stands of timber had been cut in the Basin, dairy farming expanded once again, revived in part by the increased pasturage made available by the lack of dense stands of timber (California State Parks et al. 2010, 3.9-9).

RESORT, CASINO AND RECREATIONAL DEVELOPMENT

By the late 19th century, Lake Tahoe had become a popular vacation location for affluent San Francisco residents. The Tahoe House, Tahoe Tavern, Glenbrook Inn, Tallac House, and Brockway Springs Hotel were some of the first retreats developed. Guests staying at these resorts could take a South Pacific train from San Francisco all the way to Truckee. The Lake Tahoe Railway would then take them into Tahoe City, where they either settled down into one of the nearby lodging options, or climbed aboard a steamship that could deliver them to several spots around the Lake (North Lake Tahoe Visitors Bureau 2011).

Modern recreational skiing in the Sierra dates back to 1938, when Sugar Bowl officially opened. The resort would go on to build the first ski lift in California. Meanwhile, the Lake Tahoe Ski Club had already established the North Shore as an important winter recreation area, having hosted the 1931 Winter Olympic Tryouts, as well as the 1932 National Jumping and Cross-Country competitions. This all took place at present-day Granlibakken, then known as Olympic Hill, which was owned by the Tahoe Tavern. In 1960, Tahoe’s reputation for winter sports gained international recognition when Squaw Valley hosted the Winter Olympics. These were the first Olympic Games to be televised. Many of the resorts, motels, restaurants and ski lifts built to accommodate the influx of Olympians and fans still host guests today (North Lake Tahoe Visitors Bureau 2011).

KNOWN CULTURAL RESOURCES IN THE REGION

Federal, state and regional regulatory agencies maintain inventories of historic and archaeological resources in the Basin. As described above, the NRHP and the CRHR are comprehensive inventories of cultural resources. Additionally, LTBMU and the Nevada State Office of Historic Preservation both keep inventories of cultural resources. The Nevada SHPO administers the Nevada Cultural Resource Information System (NVCRIS), which contains recorded archaeological and architectural resources and inventories for the state.

Regionally, TRPA maintains a Historic Resources Map that identifies known archaeological, ethnographic, and historical sites. Geographic Information System (GIS) data is currently used by TRPA to map known resources. Recognized sites are shown graphically on Exhibit 3.15-1. Currently, TRPA recognizes 112 sites of historical or archaeological significance. These sites are categorized by two physical types: linear features and non-linear features. Linear features account for 33 of the recognized sites and non-linear features account for 79 of the sites.

- **Linear features** include: roads, grades, passes, railroads, trestles, flumes, trails, etc.
- **Non-linear features** include: houses, lodges, chapels, ranger stations, ranches, toll houses, sawmills, bridges, dairies, historic districts, logging/lumber camps, railroad tunnels, cabins, taverns, mansions/estates, piers, hotels, resorts, beaches, points, creek/river mouths, marshes, Native American function sites, springs, bays, harbors, etc.

These 112 features are also categorized as either historical or archaeological sites. All 33 of the linear features are categorized as historic features. The non-linear features are comprised of 55 historic features, 20 archaeological features, and four (4) features that are listed as both an historic and archaeological feature. A few examples of these types of sites include:

- **Cave Rock Tunnels**: A large rock located on the East Shore of Lake Tahoe in Douglas County. Cave Rock is a place of historic legend, and cultural and spiritual significance to the Washoe people.
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**Cultural Resources**

- **Vikingsholm**: A Scandinavian architectural style mansion built in 1929 and located on an island in Emerald Bay
- **Camp Richardson Historic Resort**: A recreational resort built in the 1920s that is still in operation today. Located on the South Shore of Lake Tahoe
- **Mouth of Truckee River**: Truckee River is the sole outlet of Lake Tahoe and drains into Pyramid Lake
- **Emigrant Road**: Constructed in 1852, this road traversed the Truckee River Canyon (Highway 89) and Tahoe’s north shore (Highway 28)

In addition to linear and non-linear features shown on the Historic Resources Map, there are many small sites around the Lake where a variety of artifacts have been discovered. As described above, under the Prehistoric Archaeological Context and Ethnographic Context, evidence of human settlements appears throughout the area. Artifacts discovered at various sites include flaked basalt implements and milling stones, slabs for the grinding of seed foods, chert and obsidian toolstone, bedrock mortars, and smaller projectile points. Because historic and archaeological resources are site-specific, these resources are inventoried on a case-by-case basis for individual projects within the Region.

### 3.15.4 ENVIRONMENTAL CONSEQUENCES AND RECOMMENDED MITIGATION MEASURES

**METHODS AND ASSUMPTIONS**

Because of the geographic scale of the Tahoe Region, this impact analysis is intended as a general assessment of potential impacts on important cultural resources that could occur as a result of future projects in the Region. Therefore, impacts on specific cultural resources that could result from individual projects are not addressed in this document but would be assessed through additional analysis as projects are defined and proposed.

**SIGNIFICANCE CRITERIA**

The following criteria are taken from the TRPA Initial Environmental Checklist and the CEQA Guidelines. For the purposes of this environmental analysis, implementation of the RTP/SCS would be considered to result in significant cultural resources impacts if it would:

- Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5 of the CEQA Guidelines;
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5 of the CEQA Guidelines;
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature (CEQA Guidelines);
- Disturb any human remains, including those interred outside of formal cemeteries; or
- Cause physical change that would affect unique ethnic cultural values or restrict historic or prehistoric religious or sacred uses within the region.
IMPACT ANALYSIS AND MITIGATION MEASURES

**Impact 3.15-1**  
**Historical Resources.** Demolition, alteration, or disturbance of existing features, buildings, and structures could result in changes to or destruction of historical resources. Roadway realignments, bicycle lanes, removal or replacement of bridges, and new or improved facilities (stormwater, parking, and restroom) could result in the disturbance or demolition of historic resources. Because future projects constructed under all of the alternatives could result in demolition or alteration of historical resources, this impact is potentially significant for Alternatives 1, 2, 3, 4, and 5.

Historical resources are physical manifestations of cultural activity. As such, they constitute an important non-renewable resource that has the potential to increase the public’s understanding of history. The Lake Tahoe Region includes numerous identified historical resources and known historic uses, as described in the environmental setting, above.

Projects such as the State Route 89/Fanny Bridge Community Revitalization Project, Kings Beach Commercial Core Improvement Project, Sierra Boulevard Complete Streets Project from US 50 to Barbara Avenue, US 50 South Shore Community Revitalization Project (Loop Road), and the Lake Tahoe Waterborne Transit Project would involve construction activities for roadway realignments, sidewalks, bike lanes, new/improved stormwater facilities, landscaping, new or expanded parking facilities, new or improved ferry piers, and new or improved bridge and pile-supported structures. Bicycle and pedestrian projects and water quality (TMDL) projects along existing linear features (roads, trails, etc.) would have many of the same types of potential physical activities. Bicycle and pedestrian projects would include bicycle lanes, sidewalks, landscaping, new parking facilities, new/improved stormwater facilities, restroom facilities, crossings on streets and roads, as well as paved, multi-use paths, and unpaved parallel trails. Water quality projects would include work on road shoulders, trenches, detention basins, wetlands, and other groundwork activities. Physical alterations to bridges could result in adverse changes to historical resources if any affected bridges are designated as historical resources. Additionally, linear features that are identified historical resources (including roads, grades, passes, railroads, trestles, flumes, and trails) could be physically altered by RTP/SCS projects that involve roadway realignments, paths, trails, or new bike lanes, if those resources are on or adjacent to project parcels. For example, historical structures adjacent to proposed realignments of roadways could be damaged by construction vibration from heavy equipment use. The proposed alignments of roads (i.e., US 50 South Shore Community Revitalization Project [Loop Road] and State Route 89/Fanny Bridge Community Revitalization Project) could go through existing historical buildings or structures, requiring the demolition of these features. Historical linear features such as historic roads and trails could be paved over or modernized by realigned roadways in the RTP/SCS if projects are proposed for the same alignment as existing historical features. Excavation of soil for roads, bike lanes, sidewalks, parking facilities, bridge foundations (Fanny Bridge or other bridges) and building foundations (i.e. ferry buildings associated with the Lake Tahoe Waterborne Transit Project and new and expanded buildings at the Lake Tahoe Airport) could uncover known or unknown resources. Vibration from pile driving associated with bridge abutments or building foundations could damage historical structures on or near construction sites.

Operations and maintenance projects, and transit and ITS strategies are not expected to physically damage or destroy historical features. Transit facilities and ITS strategies would primarily result in operational changes and improvements to transit schedules and routes, and would not include ground work, realignments of linear features, or demolition or disturbance of structures. Operations and maintenance projects for existing facilities would include general roadway repair (resurfacing, repairing potholes and repainting lines) and emergency roadway repairs (mud slides and accidents), and would not remove features, realign routes, or add new features that could potentially alter historical structures or features.
ALTERNATIVE 1: NO PROJECT

Alternative 1 includes the group of projects listed under Transportation Strategy Package A. Transportation Strategy Package A includes operation and maintenance of the existing transportation system and the construction of projects on the financially constrained project list that are already substantially in progress. Transportation Strategy Package A includes the Lake Tahoe Waterborne Transit Project, City of South Lake Tahoe Aviation Capital Project, Kings Beach Commercial Core Improvement Project, State Route 89/Fanny Bridge Community Revitalization Project, various bicycle and pedestrian projects, TMDL projects, Transportation System Management and ITS strategies, and operations and maintenance projects for existing facilities. Transportation Strategy Package A has the fewest bicycle and pedestrian projects of the three Transportation Strategy Packages.

As described above, impacts to historical resources could occur during construction of RTP/SCS projects from construction and excavation activities, including vibration effects and excavation of underground resources. Additionally, the siting of linear projects (roads, bike paths, etc.) may occur in locations that would pass through or over existing historical features, interrupting these features, or requiring the demolition or destruction of these features.

Federal, state, and TRPA regulations and codes are in place to address protection of these resources. Federal and state regulations are described above, under the Regulatory Background. Federal regulations include Section 106 of the National Historic Preservation Act (NHPA), the National Register of Historic Places (NRHP), and Lake Tahoe Basin Management Unit (LTBMU) of the U.S. Forest Service consultation with responsible parties. At the state level the California Environmental Quality Act (CEQA) requires public agencies to consider the effects of their actions on both “historical resources” and “unique archaeological resources” in California. The California Register of Historic Places identifies historic resources and indicates which properties are to be protected. On state-owned lands, historical and archaeological resources are subject to the requirements of Section 5024.5 of the Public Resources Code (PRC), which requires notification of the State Historic Preservation Officer (SHPO) during the planning process. In Nevada, the Nevada State Historic Preservation Officer (Nevada SHPO) reviews projects for potential impacts upon historic properties.

The TRPA Code of Ordinances standards also provide protection for these resources. In the Grading Standards section (33.3), it is required that cessation of grading and consultation with government agencies occur whenever historical, pre-historical, or paleontological materials appearing to be 50 years or older are discovered during grading activity (Code Standard 33.3.7). The Historic Resource Protection Chapter (67) includes standards which require evaluation by a qualified archaeologist of any potential archaeological, cultural, or historical resources discovered during project construction (Code Standard 67.3.1). TRPA also requires that projects in areas with known or newly discovered sites of cultural or historic significance include a site survey (performed by a qualified archaeologist) prior to TRPA approval (Code Standard 67.3.2). This standard also requires consultation with the Washoe Tribe on all site surveys in order to determine if tribally significant sites are present. If resources are discovered and deemed significant, then a resource protection plan is required. Such a plan shall be prepared by a qualified professional and may provide for surface or subsurface recovery of data and artifacts and recordation of structural and other data (Code Standard 67.3.3). Additionally, grading, operation of equipment, or other soil disturbance is prohibited in areas where a designated historic resource is present, or could be damaged, except in accordance with a TRPA-approved resource protection plan (Code Standard 67.3.4). Finally, upon discovery of a previously unknown site, object, district, structure or other resource, potentially meeting criteria designating it as a historic resource (as outlined in Code Standard 67.6) TRPA shall consult with the applicable state historic preservation officer (SHPO), and with the Washoe Tribe if it is a Washoe site.
Historical resources impacts are site specific and depend on the location and type of development and individual effect on resources. Although standards are in place to protect these resources, project activities could still damage or destroy resources. Additionally, project designs could include alignments that overlap existing historical resources. Alternative 1 includes the same project list as Alternative 5 (below), and therefore, the same magnitude of physical activities and impacts. Inclusion of the Lake Tahoe Waterborne Transit Project and Aviation Project could result in increased physical impacts to historical resources compared to Alternative 2, because the physical area required for building foundations (for ferry buildings and airport buildings) would be increased. Impacts related to building foundations would be the same as for Alternatives 3 and 4, which include both the Lake Tahoe Waterborne Transit Project and City of South Lake Tahoe Aviation Capital Project. Because Alternative 1 includes fewer bike and pedestrian projects than Alternatives 2, 3, and 4, physical changes related to these linear projects (interruption of existing historical linear features and excavation of soils for bike trails) for this alternative would be slightly reduced and could result in a smaller risk of potential impact compared to those alternatives. This impact is potentially significant for Alternative 1. Mitigation Measures 3.15-1a, 3.15-1b, and 3.15-1c would be required.

**ALTERNATIVE 2: LOW DEVELOPMENT, INCREASED REGULATION**

Alternative 2 includes the group of projects listed under Transportation Strategy Package B. Transportation Strategy Package B represents a scenario that assumes additional revenue in the future. It includes all the projects on the unconstrained list and almost all of the projects on the constrained list, except the Lake Tahoe Waterborne Transit Project and the City of South Lake Tahoe Aviation Capital Project. Transportation Strategy Package B adds the Sierra Boulevard Complete Streets Project from US 50 to Barbara Avenue and US 50 South Shore Community Revitalization Project (Loop Road) to the other roadway projects in Strategy Package A. In addition, as with Alternative 1, Alternative 2 includes Transit Facilities and Strategies (including BlueGO and TART), Kings Beach Commercial Core Improvement Project, and State Route 89/Fanny Bridge Community Revitalization Project, Transportation System Management and ITS strategies, and operations and maintenance projects for existing facilities. Alternative 2 also includes many additional bicycle and pedestrian projects and TMDL projects from the unconstrained project list. Transportation Strategy Package B has the greatest number bicycle and pedestrian trail projects of the three Transportation Strategy Packages.

Alternative 2 includes the same types of physical changes as Alternative 1, but potentially to a larger extent. Compared to Alternative 1, Alternative 2 would not include the Lake Tahoe Waterborne Transit Project or the City of South Lake Tahoe Aviation project, but would add the US 50 South Shore Community Revitalization Project (Loop Road) and Sierra Boulevard Complete Streets Project from US 50 to Barbara Avenue. It would also have a greater number of bicycle and pedestrian projects than Alternative 1. Without the Lake Tahoe Waterborne Transit Project or Aviation project, potential physical impacts to historical resources would be reduced, because the physical area required for building foundations (for ferry buildings and airport buildings) would be reduced. This would reduce the amount of grading, excavation, and potential pile driving that can affect resources. However, inclusion of the US 50 South Shore Community Revitalization Project (Loop Road), Sierra Boulevard Complete Streets Project from US 50 to Barbara Avenue, and a greater number of bicycle and pedestrian projects would increase potential physical changes from an increase in new linear features that would increase the amount of grading and excavation and increase the possibility for projects to pass through historical features. See Alternative 1 for a discussion of regulatory requirements that would address this impact. Because Alternative 2 includes the greatest total number of new projects, including the greatest number of new linear features, it could result in the most excavation and construction that could affect resources, as described previously. Therefore, Alternative 2 would have a greater potential impact as compared to Alternatives 1, 3, 4 and 5. This impact is potentially significant. Mitigation Measures 3.15-1a, 3.15-1b, and 3.15-1c would be required.
ALTERNATIVE 3: LOW DEVELOPMENT, HIGHLY INCENTIVIZED REDEVELOPMENT

Alternative 3 includes the group of projects listed under Transportation Strategy Package C. Transportation Strategy Package C represents the financially constrained projects list and includes the Lake Tahoe Waterborne Transit Project, City of South Lake Tahoe Aviation Capital Project, Sierra Boulevard Complete Streets Project from US 50 to Barbara Avenue, US 50 South Shore Community Revitalization Project (Loop Road), Transit Facilities and Strategies (Including BlueGO and TART), Kings Beach Commercial Core Improvement Project, State Route 89/Fanny Bridge Community Revitalization Project, various bicycle and pedestrian projects, TMDL projects, Transportation System Management and ITS strategies, and operations and maintenance projects for existing facilities. Transportation Strategy Package C has many more bicycle and pedestrian projects compared to Alternative 1, but fewer than Alternative 2.

Alternative 3 includes the same types of physical activities as Alternatives 1 and 2, but potentially to a larger extent than Alternative 1 (and 5, below) and a lesser extent than Alternative 2. Alternative 3 includes the same project list as Alternative 4 (below), and therefore the same types and magnitude of physical activities. Like Alternatives 1 and 5, Alternative 3 includes the Lake Tahoe Waterborne Transit Project and the City of South Lake Tahoe Aviation project. It would have a greater number of bicycle and pedestrian projects than Alternative 1, but fewer than Alternative 2. See Alternative 1 for a discussion of regulatory requirements that would address this impact. Inclusion of the Lake Tahoe Waterborne Transit Project and Aviation project could result in increased physical impacts to historical resources compared to Alternative 2, because the physical area required for building foundations (for ferry buildings and airport buildings) would be increased. Alternative 3 would have equal physical impacts associated with building foundations when compared to Alternatives 1, 4 and 5, which also include the Lake Tahoe Waterborne Transit Project and City of South Lake Tahoe Aviation Capital Project. Alternative 3 includes more linear projects (bicycle and pedestrian projects) than Alternatives 1 and 5 and fewer than Alternative 2. Therefore, physical changes associated with linear projects would be slightly greater than those for Alternatives 1 and 5 and slightly less than those for Alternative 2. As described above, those changes include increased grading and excavation, as well as increased possibility for projects to pass through historical features, interrupting these features, or requiring their demolition or destruction. This impact is potentially significant. Mitigation Measures 3.15-1a, 3.15-1b, and 3.15-1c would be required.

ALTERNATIVE 4: REDUCED DEVELOPMENT, INCENTIVIZED REDEVELOPMENT

Alternative 4 corresponds to the Regional Plan Update Alternative 4 and also includes the group of projects listed under Transportation Strategy Package C, as described above for Alternative 3.

Alternative 4 includes the same project list as Alternative 3, and therefore the same types and magnitude of physical activities. See Alternative 3 for a complete discussion of the potential impact. See Alternative 1 for a discussion of regulatory requirements that would address this impact. This impact is potentially significant. Mitigation Measures 3.15-1a, 3.15-1b, and 3.15-1c would be required.

ALTERNATIVE 5: SIMILAR RATE OF DEVELOPMENT AND REGULATORY STRUCTURE TO THE 1987 REGIONAL PLAN

Alternative 5 corresponds to the Regional Plan Update Alternative 5 and also includes the group of projects listed under Transportation Strategy Package A, as described above under Alternative 1.

Alternative 5 includes the same project list as Alternative 1, and therefore the same types and magnitude of physical activities. See Alternative 1 for a complete discussion, including the regulatory requirements that would address this impact. This impact is potentially significant. Mitigation Measures 3.15-1a, 3.15-1b, and 3.15-1c would be required.
MITIGATION MEASURES

As discussed above, where applicable, project implementation would be consistent with Section 106 of the NHPA, Section 5024.5 of the Public Resources Code, CEQA, the TRPA Code of Ordinances, and the procedures of the LTBMU. These regulations, ordinances, and procedures would ensure notification and consultation with SHPO and Washoe Tribe. They would also result in resource surveys and preparation of a resource protection plan, when needed. Compliance with these regulations and procedures would be similar to Mitigation Measures 3.15-1a and 3.15-1b. However, the following mitigation measures provide additional minimal requirements to complete an inventory report and survey report, and they prescribe additional measures for preparation of a treatment plan to ensure that any resources that are discovered are either avoided or protected. In addition, Mitigation Measure 3.15-1c would require the additional measure to document a potentially impacted historical architectural resource in the event that avoidance of the resource or implementation of a treatment plan is not feasible. The following mitigation applies for Alternatives 1, 2, 3, 4, and 5.

Mitigation Measure 3.15-1a: Prepare a Site-Specific Historic Resources Inventory Report

To adequately address the level of potential impacts for a specific project and thereby design appropriate mitigation measures, the project proponent (e.g., Tahoe Transportation District (TTD), local County, Caltrans, NDOT) will survey, inventory, and determine the significance of the historic resources within the defined area of potential effect (APE) of specific projects that include construction of facilities. The following are steps typically taken to assess and mitigate potential impacts to historic resources:

- Define the APE, based on relevant standards (i.e., California, Nevada, TRPA, and federal procedures, as applicable)
- Identify both previously recorded historic resources and those not previously recorded.
- Evaluate the significance of historic resources using California, Nevada, TRPA, and federal (Section 106) guidelines, as applicable.
- Identify the significance of impacts of the proposed project under California, Nevada, TRPA, and federal (Section 106) guidelines, as applicable.
- Develop and implement mitigation measures designed to avoid, minimize, rectify, reduce or eliminate the effects of the project on significant historic resources.

Minimally, an historic resources inventory will consist of an historic resources records search to be conducted at the North Central Information Center of the California Historical Resources Information System located at California State University, Sacramento or at the Nevada State Historic Preservation Office (depending on the location of the project); review of TRPA’s cultural resources database and mapping of eligible sites; consultation with the Native American Heritage Commission (NAHC) and with interested Native Americans identified by the NAHC (i.e., Washoe Tribe in this Region); a field survey (if one has not previously been conducted); recording of all identified historic buildings and structures on California Department of Parks and Recreation 523 Site Record forms (in California); and preparation of an historic resources inventory report describing the project setting, methods used in the investigation, results of the investigation, and recommendations for management of identified resources.

Identified historic resources in California jurisdictions that may be impacted by a project will be evaluated for eligibility on the California Register of Historical Resources (CRHR). Historic resources that are eligible for the CRHR are considered to be significant historic resources. Historic resources that are identified within project areas subject to federal approval, permits, or funding will also be evaluated for eligibility for listing on the National Register of Historic Places (NRHP), in accordance with Section 106 of the National Historic Preservation Act (NHPA). Historic resources determined to be eligible for listing on the NRHP are automatically eligible for listing on the CRHR and are considered to be significant historic resources.
Mitigation Measure 3.15-1b: Survey for Historic Resources
In accordance with existing regulations, for any project that implements the RTP, the project proponent will survey and evaluate the area of potential effect of any development or other ground-disturbing activities that contain structures 50 years old or older for their historic significance prior to TRPA’s approval of project plans. The survey will be carried out by a qualified historian or architectural historian who is acceptable to the lead agency and who meets the Secretary of the Interior’s Standards for Architectural History. If potentially significant historic resources are encountered during the survey, demolition, substantial alteration, and other adverse effects to such resources will be avoided. If avoidance of identified historic resources is deemed infeasible, with TRPA concurrence, the project proponent will prepare a treatment plan to minimize adverse effect, relocate resources, if appropriate, and photo-document and interpret any adversely affected resource. Any alterations, including relocation, to historic buildings or structures will conform to the Secretary of the Interior’s Standards for the Treatment of Historic Properties and Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings.

Mitigation Measure 3.15-1c: Record Historic Buildings or Structures
As noted in Mitigation Measure 3.15-1b, to the extent feasible, proponents of a project that implements the RTP will avoid adverse effects to historic resources. If adverse effects cannot be avoided, the proponent will prepare and implement a treatment plan in accordance with existing regulations. If avoidance or implementation of a treatment plan to protect an historic resource is not feasible, the project proponent will ensure that a qualified architectural historian will be retained to document the impacted historical architectural resource to Historic American Buildings Survey (HABS) and Historic American Engineering Record (HAER) standards. HABS and HAER documentation packages will be entered into the Library of Congress as well as the North Central California Information Center of the California Historical Resources Information System.

The project proponent will engage a qualified or architectural historian who is acceptable to the lead agency for the project. The historian, in cooperation with the appropriate federal, state, and local agencies, will develop and implement the approach for data recovery and building recordation that is consistent with agency requirements.

Significance After Mitigation
Implementation of Mitigation 3.15-1 would reduce potentially significant impacts to historic resources because site-specific cultural resources inventory reports and surveys for historic resources would be used in coordination with the appropriate federal, state, and/or local agency(ies) to avoid, move, record, or otherwise treat the resource appropriately, in accordance with pertinent laws and regulations. By providing an opportunity to avoid destruction of historic resources, this impact would be reduced to a less-than-significant level for all alternatives.

Archaeological Resources. Archaeological artifacts and sites have been found throughout the Lake Tahoe Region, because people have inhabited it for approximately 10,000 years. Additional, unknown archaeological resources are likely to exist given that archaeological sites tend to be located in environments that were desirable for human settlement, such as Lake Tahoe. Construction and excavation activities associated with project activities could result in sediment disturbance and removal, which can adversely affect archaeological resources. Because RTP/SCS projects would allow excavation and other ground-disturbing activities, all of the alternatives could result in adverse physical effects to known and unknown archaeological resources. This impact is potentially significant for Alternatives 1, 2, 3, 4 and 5.

Archaeological resources are physical manifestations of cultural activity. As such, they constitute an important non-renewable resource, which has the potential to increase our understanding of history and pre-history. Archaeological sites may consist of both surface and subsurface components, often with more extensive evidence beneath the surface than what is visible at the surface.
Impacts to archaeological resources are more likely to occur in previously undisturbed and undeveloped areas, where excavation and ground-disturbing activities have not already affected resources. Most physical project components include some type of ground-disturbing activities. Projects such as the State Route 89/Fanny Bridge Community Revitalization Project, Kings Beach Commercial Core Improvement Project, Sierra Boulevard Complete Streets Project from US 50 to Barbara Avenue, US 50 South Shore Community Revitalization Project (Loop Road), and the Lake Tahoe Waterborne Transit Project would involve earthwork (grading and excavation) related to roadway realignments, new sidewalks, bike lanes, lighting fixtures, new/improved stormwater facilities, landscaping, new parking facilities, and new/improved bridge structures. Bicycle and pedestrian projects and water quality (TMDL) projects along existing linear features (roads, trails, etc.) would have the same types of ground-disturbing activities. Excavation of soil for roads, bike lanes, sidewalks, parking facilities, bridge foundations (Fanny Bridge or other bridges) and building foundations (i.e. ferry buildings associated with the Lake Tahoe Waterborne Transit Project and new and expanded buildings at the Lake Tahoe Airport) could uncover known or unknown resources. Vibration from heavy equipment associated with all construction, and specifically pile driving associated with bridge abutments or building foundations could damage archaeological resources in the substrate on or near construction sites.

Operations and maintenance projects, and Transit and ITS strategies are not expected to physically impact archaeological features. Transit facilities and ITS strategies would primarily result in changes and improvements to transit schedules and routes, and would not include ground work that could disturb archaeological resources. Operations and maintenance projects for existing facilities would include general roadway repair (resurfacing, repairing potholes and repainting lines) and emergency roadway repairs (mud slides and accidents), and would not involve groundwork to undisturbed or undeveloped sites.

For many RTP/SCS projects, ground-disturbing activities would occur in previously disturbed areas, which have a lower potential for previously undiscovered or intact archaeological resources. However, some activities may be in undisturbed areas, with a higher potential for previously undiscovered archaeological resources.

**ALTERNATIVE 1: NO PROJECT**

Alternative 1 includes implementation of Transportation Strategy Package A, which would include roadway improvements, community revitalization projects, construction of bicycle and pedestrian trails, and the Lake Tahoe Waterborne Transit Project. Transportation Strategy Package A includes relatively few other transit service upgrades.

Projects included in RTP/SCS Alternative 1 could be constructed in areas containing significant archaeological resources, known and unknown. Ground-disturbing activities, such as grading and excavation, could result in the disturbance of these resources. For example, buried artifacts could be crushed or damaged by excavation equipment. Additionally, the location of resources within a site can provide unique information. Items removed from the substrate undamaged could still alter the integrity of a site by removing the resource from its spatial context.

Federal, state, and TRPA regulations and codes are in place to address protection of these resources. See Impact 3.15-1, above, for a complete discussion of applicable regulations and codes. These standards are required by law and there is very little discretion left up to the project proponent when complying with this law. Therefore these regulations and codes are not considered mitigation measures.

Archaeological resources impacts are site specific and depend on the location and type of physical changes, specifically ground-disturbing activities. Although standards are in place to protect these resources, project activities could still uncover or destroy resources during grading and excavation, pile driving and heavy equipment use. As discussed in Section 3.1, Approach to the Environmental Analysis, where existing laws or
regulations specify a mandatory permit process for future projects, performance standards without prescriptive actions to accomplish them, or other requirements that allow substantial discretion in how they are accomplished, or have a substantial compensatory component, the level of significance is determined before applying the influence of the regulatory requirements. Therefore, this impact is **potentially significant** for Alternative 1. Mitigation Measures 3.15-2a, 3.15-2b, 3.15-2c, and 3.15-2d would be required.

**ALTERNATIVE 2: LOW DEVELOPMENT, INCREASED REGULATION**

Alternative 2 would implement Transportation Strategy Package B, which includes similar types of projects as Transportation Strategy Package A, but with a substantially greater number of bicycle and pedestrian improvements and inter-regional bus services and without the Lake Tahoe Waterborne Transit Project and the City of South Lake Tahoe Aviation Capital Project.

Alternative 2 includes the same types of physical changes as Alternative 1, but potentially to a larger footprint. Compared to Alternative 1, Alternative 2 would not include the Lake Tahoe Waterborne Transit Project or the City of South Lake Tahoe Aviation project, but would add the US 50 South Shore Community Revitalization Project (Loop Road) and Sierra Boulevard Complete Streets Project from US 50 to Barbara Avenue. It would also have a greater number of bicycle and pedestrian projects than Alternative 1. Without the Lake Tahoe Waterborne Transit Project or Aviation project, potential ground-disturbing changes and impacts to archaeological resources would be reduced, however, inclusion of US 50 South Shore Community Revitalization Project (Loop Road) and Sierra Boulevard Complete Streets Project from US 50 to Barbara Avenue would increase potential physical changes. See Alternative 1 for a discussion of regulatory requirements that would address this impact. Because Alternative 2 includes the greatest total number of new projects, it could result in a greater footprint of ground-disturbing activities and therefore a greater impact as compared to Alternatives 1, 3, 4 and 5. This impact is **potentially significant**. Mitigation Measures 3.15-2a, 3.15-2b, 3.15-2c, and 3.15-2d would be required.

**ALTERNATIVE 3: LOW DEVELOPMENT, HIGHLY INCENTIVIZED REDEVELOPMENT**

Alternative 3 would implement Transportation Strategy Package C, which includes the financially constrained list of projects for the RTP, including new bicycle and pedestrian facilities, corridor revitalization projects, transit service and capital enhancements, and the Lake Tahoe Waterborne Transit Project, but not as many new pedestrian/bicycle facilities as included in Alternative 2.

Alternative 3 includes the same types of physical activities as Alternatives 1 and 2, but potentially with a larger footprint than Alternatives 1 and 5 and a smaller footprint compared to Alternative 2. Like Alternative 1, Alternative 3 includes the Lake Tahoe Waterborne Transit Project and the City of South Lake Tahoe Aviation project, it also adds the US 50 South Shore Community Revitalization Project (Loop Road) and Sierra Boulevard Complete Streets Project from US 50 to Barbara Avenue (like Alternative 2). This alternative would have a greater number of bicycle and pedestrian projects than Alternatives 1 and 5, but fewer than Alternative 2. See Impact 3.15-1 for a discussion of regulatory requirements that would address this impact. Because Alternative 3 includes more total projects than Alternatives 1 and 5 and fewer total projects than Alternative 2, the total footprint where ground-disturbing activities could occur would be slightly greater than for Alternatives 1 and 5 and slightly less than for Alternative 2. This impact is **potentially significant**. Mitigation Measures 3.15-2a, 3.15-2b, 3.15-2c, and 3.15-2c would be required.

**ALTERNATIVE 4: REDUCED DEVELOPMENT, INCENTIVIZED REDEVELOPMENT**

Alternative 4 also includes the group of projects listed under Transportation Strategy Package C, as described above.
Alternative 4 includes the same project list as Alternative 3, and therefore the same types and magnitude of ground-disturbing activities (see Alternative 3 for a complete discussion). This impact is potentially significant. Mitigation Measures 3.15-2a, 3.15-2b, 3.15-2c, and 3.15-2d would be required.

**ALTERNATIVE 5: SIMILAR RATE OF DEVELOPMENT AND REGULATORY STRUCTURE TO THE 1987 REGIONAL PLAN**

Alternative 5 also includes the group of projects listed under Transportation Strategy Package A, as described above under Alterative 1.

Alternative 5 includes the same project list as Alternative 1, and therefore the same types and magnitude of physical activities (please see Alternative 1 under Impact 3.15-1 for a complete discussion, including the regulatory requirements that would address this impact). This impact is potentially significant. Mitigation Measures 3.15-2a, 3.15-2b, 3.15-2c, and 3.15-2d would be required.

**MITIGATION MEASURES**

As discussed above, where applicable, project implementation would be consistent with Section 106 of the NHPA, Section 5024.5 of the Public Resources Code, CEQA, the TRPA Code of Ordinances, and the procedures of the LTBMU. These regulations, ordinances, and procedures would ensure notification and consultation with SHPO and Washoe Tribe with regards to archaeological resources. They would also result in resource surveys and preparation of a resource protection plan, when needed. Compliance with these regulations and procedures would be similar to Mitigation Measures 3.15-2a and 3.15-2b. However, the following mitigation measures provide additional minimal requirements to complete a site-specific archaeological resources inventory report and data recovery plan. In addition, Mitigation Measures 3.15-2c and 3.15-2d provide additional measures for conducting archaeological monitoring and for evaluating and documenting any potentially discovered resource. Therefore, the following mitigation applies for Alternatives 1, 2, 3, 4, and 5.

**Mitigation Measure 3.15-2a: Prepare a Site-Specific Archaeological Resources Inventory Report**

To adequately address the level of potential impacts for a specific project and thereby design appropriate mitigation measures, in accordance with existing regulations, the project proponent will survey, inventory, and determine the significance of the archaeological resources within the defined area of potential effect (APE) of specific projects that include construction of facilities. The following are steps typically taken to assess and mitigate potential impacts to archaeological resources:

- Define the APE, based on relevant standards (i.e., California, Nevada, TRPA, and federal procedures, as applicable)
- Identify both previously recorded archaeological resources and those not previously recorded.
- Evaluate the significance of archaeological resources using California, Nevada, TRPA, and federal (Section 106) guidelines, as applicable.
- Identify the significance of impacts of the proposed project under California, Nevada, TRPA, and federal (Section 106) guidelines, as applicable.
- Develop and implement mitigation measures designed to avoid, minimize, rectify, or reduce or eliminate the effects of the project on significant archaeological resources.

Minimally, an archaeological resources inventory will consist of an archaeological resources records search to be conducted at the North Central Information Center of the California Historical Resources Information System located at California State University, Sacramento or at the Nevada State Historic Preservation Office.
(depending on the location of the project); review of TRPA’s cultural resources database and mapping of eligible sites; consultation with the Native American Heritage Commission (NAHC) and with interested Native Americans identified by the NAHC (i.e., Washoe Tribe in this Region); a field survey (if one has not previously been conducted); recordation of all identified archaeological resources on California Department of Parks and Recreation 523 Site Record forms (in California); and preparation of an archaeological resources inventory report describing the project setting, methods used in the investigation, results of the investigation, and recommendations for management of identified resources.

Identified archaeological resources in California jurisdictions that may be impacted by a project will be evaluated for eligibility on the California Register of Historical Resources (CRHR). Archaeological resources that are eligible for the CRHR are considered to be significant archaeological resources. Archaeological resources that are identified within project areas subject to federal approval, permits, or funding will also be evaluated for eligibility for listing on the NRHP, in accordance with Section 106 of the NHPA. Archaeological resources determined to be eligible for listing on the NRHP are automatically eligible for listing on the CRHR and are considered to be significant.

Mitigation Measure 3.15-2b: Conduct Archaeological Testing and Data Recovery
If it is infeasible to avoid impacts on significant archaeological sites that have been determined to be eligible for listing by the TRPA or on the CRHR or the NRHP, additional research will be conducted, in accordance with relevant procedures, based on the location of the project and the involved agencies. Archaeological excavation will be conducted (CCR Section 15126.4[b][3][C]). This work will be conducted by a qualified archaeologist and will include preparation of a research design, additional archival and historical research, archaeological excavation, analysis of artifacts, features, and other attributes of the resource, and preparation of a technical report documenting the methods and results of the investigation in accordance with the California Office of Historic Preservation Guidelines for Archaeological Research Design. The purpose of this work is to recover a sufficient quantity of data to compensate for damage to or destruction of the resource. The procedures to be employed in this data recovery program will be determined in consultation with responsible agencies and interested parties, as appropriate, potentially including the development and implementation of an Archaeological Research Design and Testing Plan (ARDTP) or Historic Properties Treatment Plan (HPTP). Where necessary, future project proponents would seek Native American input and consultation.

Mitigation Measure 3.15-2c: Conduct Archaeological Monitoring
In accordance with existing regulations, for ground-disturbing activities that have the potential to impact archaeological remains and that will occur in an area that has been determined by a qualified archaeologist to be an area that is sensitive for the presence of buried archaeological remains, the project proponent (e.g., TTD, local county, Caltrans, NDOT) will require the construction contractor to retain a qualified archaeologist to monitor those activities. Archaeological monitoring will be conducted in areas where there is likelihood that archaeological remains may be discovered but where those remains are not visible on the surface. Monitoring will not be considered a substitute for efforts to identify and evaluate cultural resources prior to the project initiation. Where necessary, the project proponent will seek Native American input and consultation.

Mitigation Measure 3.15-2d: Stop Work in the Event of an Archaeological Discovery
If potentially significant cultural resources are discovered during ground-disturbing activities associated with individual project preparation, construction, or completion, the project proponent will require the construction contractor to stop work in that area until a qualified archaeologist can access the significance of the find, and, if necessary, develop appropriate treatment measures in consultation with TRPA and other appropriate agencies and interested parties. A qualified archaeologist will follow accepted professional standards in recording any find including submittal of the standard Department of Parks and Recreation (DPR) Primary Record forms (Form DPR 523) and location information to the California Historical Resources Information Center office (North Central Information Center) for California projects. The consulting archaeologist will also evaluate such resources for significance per California Register of Historical Resources eligibility criteria (PRC Section 5024.1; Title 14 CCR Section 4852). Consultation with the Nevada State Historic Preservation Officer will be undertaken for Nevada projects.
If the archaeologist determines that the find does not meet the TRPA standards of significance for cultural resources, construction may proceed. If the archaeologist determines that further information is needed to evaluate significance, the lead agency will be notified and a data recovery plan will be prepared.

Significance After Mitigation
Implementation of Mitigation 3.15-2 would reduce potentially significant impacts to archaeological resources because mitigation would be developed in coordination with the appropriate federal, state, and/or local agency(ies) to avoid, move, record, or otherwise treat the resource appropriately, in accordance with pertinent laws and regulations. By providing an opportunity to avoid disturbance, disruption, or destruction of archaeological resources, this impact would be reduced to a less-than-significant level for all alternatives.

| Impact 3.15-3 | Accidental Discovery of Human Remains. The location of grave sites and Native American remains are potentially not known in advance, and can occur outside of identified cemeteries or burial sites. As with archaeological resources, disturbance of human remains are more likely to occur in previously undisturbed and undeveloped areas, where excavation and ground-disturbing activities have not already resulted in discovery. However, human remains may be discovered in developed and disturbed areas, as well, and may also be of recent origin. Construction and excavation activities associated with development activities result in sediment disturbance and removal, which can unearth human remains if they are present. Because RTP/SCS projects would allow excavation and other ground-disturbing activities, all of the alternatives could result in accidental discovery of human remains. This impact is potentially significant for Alternatives 1, 2, 3, 4 and 5. |

Most physical project components include some type of ground-disturbing activities which could result in the discovery of human remains. Projects such as the State Route 89/Fanny Bridge Community Revitalization Project, Kings Beach Commercial Core Improvement Project, Sierra Boulevard Complete Streets Project from US 50 to Barbara Avenue, US 50 South Shore Community Revitalization Project (Loop Road), and the Lake Tahoe Waterborne Transit Project would involve earthwork (grading and excavation) related to roadway realignments, new sidewalks, bike lanes, lighting fixtures, new/improved stormwater facilities, landscaping, new parking facilities, and new/improved bridge structures. Bicycle and pedestrian projects and water quality (TMDL) projects along existing linear features (roads, trails, etc.) would have the same types of ground-disturbing activities. Excavation of soil for roads, bike lanes, sidewalks, parking facilities, bridge foundations (Fanny Bridge or other bridges) and building foundations (i.e. ferry buildings associated with the Lake Tahoe Waterborne Transit Project and new and expanded buildings at the Lake Tahoe Airport) could uncover human remains.

Operations and maintenance projects, and Transit and ITS strategies are not expected to affect human remains. Transit facilities and ITS strategies would primarily result in changes and improvements to transit schedules and routes, and would not include ground work that could disturb human remains. Operations and maintenance projects for existing facilities would include general roadway repair (resurfacing, repairing potholes and repainting lines) and emergency roadway repairs (mud slides and accidents), and would not involve groundwork to undisturbed or undeveloped sites.

For many RTP/SCS projects, ground-disturbing activities would occur in previously disturbed areas, which have a lower potential for undiscovered human remains. The potential still exists, even in previously disturbed sites, for the accidental discovery of human remains. Additionally, some activities may occur in undisturbed areas, which have a higher potential for discovery of human remains.
ALTERNATIVE 1: NO PROJECT

Alternative 1 includes implementation of Transportation Strategy Package A, which would include roadway improvements, community revitalization projects, construction of bicycle and pedestrian trails, and the Lake Tahoe Waterborne Transit Project. Transportation Strategy Package A includes relatively few other transit service upgrades.

Alternative 1 includes the same project list as Alternative 5 (below), and therefore the same magnitude of physical activities. Because Alternative 1 includes fewer projects than Alternatives 2, 3, and 4, physical changes for this alternative would be slightly reduced and could result in a smaller potential impact compared to those alternatives. Accidental discovery of human remains cannot be predicted based on site locations or features. Although disturbance of human remains are more likely to occur in previously undisturbed and undeveloped areas where excavation and ground-disturbing activities have not already resulted in discovery, these discoveries can occur anywhere. Construction and excavation activities associated with development activities result in sediment disturbance and removal, which can unearth human remains if they are present. For projects in California, state regulations address accidental discovery. Specifically, Section 7050.5(b) of the California Health and Safety Code (CHSC) specifies protocol when human remains are discovered. Similarly, Nevada Revised Statutes (NRS) Chapter 383 Historic Preservation and Archaeology provides protection of Indian burial sites discovered in Nevada. NRS requires, amongst other things, immediate consultation with the appropriate tribal authorities upon discovery of a native burial site. Although standards are in place to protect human remains, project activities could still result in accidental discovery during grading and excavation. This impact is potentially significant. Mitigation Measure 3.15-3 would be required.

ALTERNATIVE 2: LOW DEVELOPMENT, INCREASED REGULATION

Alternative 2 would implement Transportation Strategy Package B, which includes similar types of projects as Transportation Strategy Package A, but with a substantially greater number of bicycle and pedestrian improvements and inter-regional bus services and without the Lake Tahoe Waterborne Transit Project and the City of South Lake Tahoe Aviation Capital Project.

Alternative 2 includes the same types of physical changes as Alternative 1, but potentially to a larger footprint. Compared to Alternative 1, Alternative 2 would not include the Lake Tahoe Waterborne Transit Project or the City of South Lake Tahoe Aviation project, but would add the US 50 South Shore Community Revitalization Project (Loop Road) and Sierra Boulevard Complete Streets Project from US 50 to Barbara Avenue. It would also have a greater number of bicycle and pedestrian projects than Alternative 1. Without the Lake Tahoe Waterborne Transit Project or Aviation project, potential ground-disturbing activities that could disturb undiscovered human remains would be reduced, however, inclusion of US 50 South Shore Community Revitalization Project (Loop Road) and Sierra Boulevard Complete Streets Project from US 50 to Barbara Avenue would increase potential physical changes. See Alternative 1 for a discussion of regulatory requirements that would address this impact. Because Alternative 2 includes the greatest total number of new projects (constrained and unconstrained list), it could result in a greater footprint of ground-disturbing activities and therefore a greater impact as compared to Alternatives 1, 3, 4 and 5. This impact is potentially significant. Mitigation Measure 3.15-3 would be required.

ALTERNATIVE 3: LOW DEVELOPMENT, HIGHLY INCENTIVIZED REDEVELOPMENT

Alternative 3 would implement Transportation Strategy Package C, which includes the financially constrained list of projects for the RTP, including new bicycle and pedestrian facilities, corridor revitalization projects, transit service and capital enhancements, and the Lake Tahoe Waterborne Transit Project, but not as many new pedestrian/bicycle facilities as included in Alternative 2.
Alternative 3 includes the same types of physical activities as Alternatives 1 and 2, but potentially a larger footprint than Alternatives 1 and 5 and a smaller footprint compared to Alternative 2. Like Alternative 1, Alternative 3 includes the Lake Tahoe Waterborne Transit Project and the City of South Lake Tahoe Aviation project, it also adds the US 50 South Shore Community Revitalization Project (Loop Road) and Sierra Boulevard Complete Streets Project from US 50 to Barbara Avenue (like Alternative 2). This alternative would have a greater number of bicycle and pedestrian projects than Alternatives 1 and, but fewer than Alternative 2. See Alternative 1 under Impact 3.15-1 for a discussion of regulatory requirements that would address this impact. Because Alternative 3 (constrained list) includes more total projects than Alternatives 1 and 5 and fewer total projects than Alternative 2, the total footprint of ground-disturbing activities would be slightly greater than that for Alternatives 1 and 5 and slightly less than that for Alternative 2. This impact is potentially significant. Mitigation Measure 3.15-3 would be required.

**ALTERNATIVE 4: REDUCED DEVELOPMENT, INCENTIVIZED REDEVELOPMENT**

Alternative 4 also includes the group of projects listed under Transportation Strategy Package C, as described above under Alternative 3.

Alternative 4 includes the same project list as Alternative 3, and therefore the same types and magnitude of ground-disturbing activities (see Alternative 3 for a complete discussion). See Alternative 1 under Impact 3.15-1 for a discussion of regulatory requirements that would address this impact. This impact is potentially significant. Mitigation Measure 3.15-3 would be required.

**ALTERNATIVE 5: SIMILAR RATE OF DEVELOPMENT AND REGULATORY STRUCTURE TO THE 1987 REGIONAL PLAN**

Alternative 5 also includes the group of projects listed under Transportation Strategy Package A, as described above under Alternative 1.

Alternative 5 includes the same project list as Alternative 1, and therefore the same types and magnitude of physical activities (see Alternative 1 under Impact 3.15-1 for a complete discussion, including the regulatory requirements that would address this impact). This impact is potentially significant. Mitigation Measure 3.15-3 would be required.

**MITIGATION MEASURES**

The following mitigation applies for Alternatives 1, 2, 3, 4, and 5.

**Mitigation Measure 3.15-3: Stop Work if Human Remains are Discovered**

In accordance with existing regulations, if any human remains are discovered or recognized in any location on an individual project site, the project proponent will ensure that there will be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:

a) The applicable County Coroner/Sheriff has been informed and has determined that no investigation of the cause of death is required; and

b) If the remains are of Native American origin,

1. The descendants of the deceased Native Americans have made a recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98, or


2. The Native American Heritage Commission was unable to identify a descendant or the descendant failed to make a recommendation within 24 hours after being notified by the commission.

**Significance After Mitigation**

Implementation of Mitigation 3.15-3 would reduce potentially significant impacts to human remains because mitigation would be developed in coordination with the appropriate federal, state, and/or local agency(ies) to avoid, move, record, or otherwise treat the resource appropriately, in accordance with pertinent laws and regulations. By providing an opportunity to avoid disturbance, disruption, or destruction of archaeological resources, this impact would be reduced to a less-than-significant level for all alternatives.

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<tr>
<th>Impact</th>
<th>Undiscovered Paleontological Resources.</th>
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<td>3.15-4</td>
<td>There have been no recent discoveries of paleontological resources in the Tahoe Region. Basin surfaces were created by geologic uplift and have deep granitic bedrock and shallow surface soils. Because the Tahoe Region is not underlain with sedimentary rock formations (which are most likely to contain fossils), it is not likely to contain major paleontological resources. Although ground disturbing activities associated with RTP/SCS projects in all alternatives could affect subsurface resources, because the area has a low likelihood to contain paleontological resources, this impact would be less than significant for all alternatives.</td>
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There is no evidence identifying any sensitivity for paleontological resources in the Region area where RTP/SCS projects are located. Basin surfaces were created by geologic uplift and have deep granitic bedrock and shallow surface soils. Because this area is not underlain with sedimentary rock formations (which are most likely to contain fossils), it is not likely to contain major paleontological resources. Ground-disturbing activities, such as grading and excavation, are activities that can result in the disturbance of paleontological resources, in areas where they may be present. Most of the projects would include some type of ground-disturbing activities and earthwork (grading and excavation). Although ground disturbing activities associated with RTP/SCS projects in all alternatives could affect subsurface resources, because the area has a low likelihood to contain paleontological resources it is unlikely that these resources would be affected.

**ALTERNATIVE 1: NO PROJECT**

Alternative 1 corresponds to Regional Plan Update Alternative 1 and includes the group of projects listed under Transportation Strategy Package A. Transportation Strategy Package includes operation and maintenance of the existing transportation system and the construction of projects on the constrained project list that are already substantially in progress. Transportation Strategy Package A includes the Lake Tahoe Waterborne Transit Project, City of South Lake Tahoe Aviation Capital Project, Kings Beach Commercial Core Improvement Project, State Route 89/Fanny Bridge Community Revitalization Project, various bicycle and pedestrian projects, TMDL projects, Transportation System Management and ITS strategies, and operations and maintenance projects for existing facilities. Transportation Strategy Package A has the fewest bicycle and pedestrian projects of the three Transportation Strategy Packages.

Although ground disturbing activities associated with RTP/SCS projects could affect subsurface resources, because the area has a low likelihood to contain paleontological resources, this impact would be less than significant.
ALTERNATIVE 2: LOW DEVELOPMENT, INCREASED REGULATION

Alternative 2 would implement Transportation Strategy Package B, which includes similar types of projects as Transportation Strategy Package A, but with a substantially greater number of bicycle and pedestrian improvements and inter-regional bus services and without the Lake Tahoe Waterborne Transit Project and the City of South Lake Tahoe Aviation Capital Project.

Although ground disturbing activities associated with RTP/SCS projects could affect subsurface resources, because the area has a low likelihood to contain paleontological resources, this impact would be less than significant.

ALTERNATIVE 3: LOW DEVELOPMENT, HIGHLY INCENTIVIZED REDEVELOPMENT

Alternative 3 would implement Transportation Strategy Package C, which includes the financially constrained list of projects for the RTP, including new bicycle and pedestrian facilities, corridor revitalization projects, transit service and capital enhancements, and the Lake Tahoe Waterborne Transit Project, but not as many new pedestrian/bicycle facilities as included in Alternative 2.

Although ground disturbing activities associated with RTP/SCS projects could affect subsurface resources, because the area has a low likelihood to contain paleontological resources, this impact would be less than significant.

ALTERNATIVE 4: REDUCED DEVELOPMENT, INCENTIVIZED REDEVELOPMENT

Alternative 4 corresponds to the Regional Plan Update Alternative 4 and also includes the group of projects listed under Transportation Strategy Package C, as described for Alternative 3.

Although ground disturbing activities associated with RTP/SCS projects could affect subsurface resources, because the area has a low likelihood to contain paleontological resources, this impact would be less than significant.

ALTERNATIVE 5: SIMILAR RATE OF DEVELOPMENT AND REGULATORY STRUCTURE TO THE 1987 REGIONAL PLAN

Alternative 5 corresponds to the Regional Plan Update Alternative 5 and also includes the group of projects listed under Transportation Strategy Package A, as described above under Alternative 1.

Although ground disturbing activities associated with RTP/SCS projects could affect subsurface resources, because the area has a low likelihood to contain paleontological resources, this impact would be less than significant.

MITIGATION MEASURES

No mitigation is required for any of the alternatives.
Impact 3.15-5 **Ethnic and Cultural Values.** Development in the Tahoe Region could result in physical changes to sites, structures, and areas that have religious or sacred significance or other cultural significance to the Washoe people. These could be permanent changes that alter, remove, or modernize features or temporary changes such as restriction of access from construction.

Because RTP/SCS projects could result in physical changes to historic and prehistoric sites, unique ethnic cultural values could be affected, and historic or prehistoric religious or sacred uses within the region could be restricted. Consultation with the Washoe tribe is required by federal, state and TRPA regulations, however, project activities could still uncover or destroy historic or archaeological resources as identified in Impacts 3.15-1 (historic) and 3.15-2 (archaeological). Additionally, as described in Impact 3.15-3 (human remains), project activities could result in accidental discovery of remains during grading and excavation. Accidentally discovered remains could be of Native American origin. Therefore, this impact is potentially significant for Alternatives 1, 2, 3, 4, and 5.

An example of a site with unique ethnic value is Cave Rock, a large rock located on the east shore of Lake Tahoe in Douglas County. Cave Rock is a place of cultural and spiritual significance to the Washoe people. Other religious and sacred sites or structures around the Basin may be in use by current residents and visitors, or be of intrinsic value because of their prehistoric or historic significance for the Washoe people and others. RTP/SCS projects could result in physical changes to sites, structures, and areas that have religious or sacred significance. These could be permanent changes that alter or remove features or develop adjacent land uses that detract from user experiences. Temporary changes could involve restriction of access to sites during construction activities for projects.

Projects such as the State Route 89/Fanny Bridge Community Revitalization Project, Kings Beach Commercial Core Improvement Project, Sierra Boulevard Complete Streets Project from US 50 to Barbara Avenue, US 50 South Shore Community Revitalization Project (Loop Road), and the Lake Tahoe Waterborne Transit Project would involve roadway realignments, sidewalks, bike lanes, new parking facilities, and new/improved bridge structures. These changes could infringe on sacred sites or uses that are adjacent to or within the boundaries of projects. Bicycle and pedestrian projects would have the same types of potential physical disturbances and could result in the same potential impacts to ethnic and cultural sites. For example, the proposed alignments of roads (i.e., US 50 South Shore Community Revitalization Project (Loop Road) and State Route 89/Fanny Bridge Community Revitalization Project) or bike paths could go through existing sacred sites, reducing the intactness of the site. Linear projects could also be aligned to pass in close proximity to sacred sites. This could result in the addition of vehicular and pedestrian noise and visual changes to the landscape, which could reduce the user experience of these sacred sites.

Water quality projects would include work on road shoulders, trenches, detention basins, wetlands, and other groundwater activities. Because these are already developed areas, and the types of use and activities would be similar to existing uses, these types of projects are not expected to affect ethnic and cultural values. Transit facilities and ITS strategies would primarily result in changes and improvements to transit schedules and routes, and would not include disturbance of sites. Operations and maintenance projects for existing facilities would include general roadway repair (resurfacing, repairing potholes and repainting lines) and emergency roadway repairs (mud slides and accidents), and would not remove features, realign routes, or add new features that could potentially alter cultural or ethnic sites.

**ALTERNATIVE 1: NO PROJECT**

Alternative 1 includes implementation of Transportation Strategy Package A, which would include roadway improvements, community revitalization projects, construction of bicycle and pedestrian trails, and the Lake
Tahoe Waterborne Transit Project. Transportation Strategy Package A includes relatively few other transit service upgrades.

Federal, state and TRPA regulations and codes are in place to address protection of ethnic and cultural resources. At the federal level, the LTBMU consults with the Washoe Tribe and the LTBMU Forest Plan provides guidelines for historic and archaeological resource protection. At the state level, California Public Resources Code (PRC Section 5097) provides direction from the Native American Heritage Commission regarding what to do if human remains are discovered during project construction activities.

At the regional level, TRPA has Regional Plan Code of Ordinance standards to protect and preserve tribal resources that may contribute to the ethnic and cultural values of the Region. TRPA requires that projects in areas with known or newly discovered sites of cultural or historic significance include a site survey (performed by a qualified archaeologist) prior to TRPA approval (Code Standard 67.3.2). This standard requires consultation with the Washoe Tribe on all site surveys in order to determine if tribally significant sites are present. If resources are discovered and deemed significant, then a resource protection plan is required. Such a plan would be prepared by a qualified professional and may provide for surface or subsurface recovery of data and artifacts and recordation of structural and other data (Code Standard 67.3.3). Additionally, grading, operation of equipment, or other soil disturbance is prohibited in areas where a designated historic resource is present or could be damaged, except in accordance with a TRPA-approved resource protection plan (Code Standard 67.3.4). Finally, upon discovery of a previously unknown site, object, district, structure or other resource potentially meeting criteria designating it as a historic resource (as outlined in Code Standard 67.6), TRPA would consult with the applicable state historic preservation officer (SHPO), and with the Washoe Tribe if it is a Washoe site.

It is possible that RTP/SCS projects included in Alternative 1 could be constructed adjacent to or on parcels containing sites, structures, and other features that have religious or sacred significance. Consultation with the Washoe tribe is required by federal, state and TRPA regulations, noted above. Consultation requires that sensitive resources be avoided or protected. If any tribal resources are also considered significant historic or archaeological resources, Code standards are in place to protect these resources. However, as identified in Impact 3.15-1 (historic) and 3.15-2 (archaeological), project activities could still uncover or destroy historic or archaeological resources during grading and excavation, pile driving and heavy equipment use or include alignments that overlap existing historical resources. Additionally, as described in Impact 3.15-3 (human remains), although standards are in place to protect human remains, project activities could still result in accidental discovery during grading and excavation. Accidentally discovered remains could be of Native American origin. Therefore, this impact is potentially significant for Alternative 1.

**ALTERNATIVE 2: LOW DEVELOPMENT, INCREASED REGULATION**

Alternative 2 would implement Transportation Strategy Package B, which includes similar types of projects as Transportation Strategy Package A, but with a substantially greater number of bicycle and pedestrian improvements and inter-regional bus services and without the Lake Tahoe Waterborne Transit Project and the City of South Lake Tahoe Aviation Capital Project.

Alternative 2 includes the same types of physical changes as Alternative 1, but potentially to a larger extent. Because Alternative 2 includes the greatest total number of bicycle and pedestrian projects, physical changes related to these linear projects (alignments of linear features passing through or directly adjacent to sacred sites) for this alternative would be greater than compared to Alternatives 1, 3, 4 and 5. As described above, in Alternative 1, impacts to ethnic and cultural values would be avoided and minimized through federal and state regulations, and TRPA Code of Ordinance standards. However, as identified in Impact 3.15-1 (historic) and 3.15-2 (archaeological), project activities could still uncover or destroy historic or archaeological resources during
grading and excavation, pile driving and heavy equipment use or include alignments that overlap existing historical resources. Additionally, as described in Impact 3.15-3 (human remains), although standards are in place to protect human remains, project activities could still result in accidental discovery during grading and excavation. Accidentally discovered remains could be of Native American origin. Therefore, this impact is potentially significant for Alternative 2.

**ALTERNATIVE 3: LOW DEVELOPMENT, HIGHLY INCENTIVIZED REDEVELOPMENT**

Alternative 3 would implement Transportation Strategy Package C, which includes the financially constrained list of projects for the RTP, including new bicycle and pedestrian facilities, corridor revitalization projects, transit service and capital enhancements, and the Lake Tahoe Waterborne Transit Project, but not as many new pedestrian/bicycle facilities as included in Alternative 2.

Alternative 3 includes the same types of physical activities as Alternatives 1 and 2, but potentially to a larger extent than Alternative 1 (and 5, below) and a smaller extent compared to Alternative 2. Because Alternative 3 includes more bike and pedestrian projects than Alternatives 1 and 5 and fewer than Alternative 2, physical changes related to these linear projects (alignments of linear features passing through or directly adjacent to sacred sites) would be slightly greater than those for Alternatives 1 and 5 and slightly less than those for Alternative 2. As described above, in Alternative 1, impacts to ethnic and cultural values would be avoided and minimized through federal and state regulations, and TRPA Code of Ordinance standards. However, as identified in Impact 3.15-1 (historic) and 3.15-2 (archaeological), project activities could still uncover or destroy historic or archaeological resources during grading and excavation, pile driving and heavy equipment use or include alignments that overlap existing historical resources. Additionally, as described in Impact 3.15-3 (human remains), although standards are in place to protect human remains, project activities could still result in accidental discovery during grading and excavation. Accidentally discovered remains could be of Native American origin. Therefore, this impact is potentially significant for Alternative 3.

**ALTERNATIVE 4: REDUCED DEVELOPMENT, INCENTIVIZED REDEVELOPMENT**

Alternative 4 also includes the group of projects listed under Transportation Strategy Package C, as described above under Alternative 3.

Alternative 4 includes the same project list as Alternative 3, and therefore the same types and magnitude of physical activities (see Alternative 3 for a complete discussion). See Alternative 1 for a discussion of regulatory requirements that would address this impact. As described above, in Alternative 1, impacts to ethnic and cultural values would be avoided and minimized through federal and state regulations, and TRPA Code of Ordinance standards. However, as identified in Impact 3.15-1 (historic) and 3.15-2 (archaeological), project activities could still uncover or destroy historic or archaeological resources during grading and excavation, pile driving and heavy equipment use or include alignments that overlap existing historical resources. Additionally, as described in Impact 3.15-3 (human remains), although standards are in place to protect human remains, project activities could still result in accidental discovery during grading and excavation. Accidentally discovered remains could be of Native American origin. Therefore, this impact is potentially significant for Alternative 4.

**ALTERNATIVE 5: SIMILAR RATE OF DEVELOPMENT AND REGULATORY STRUCTURE TO THE 1987 REGIONAL PLAN**

Alternative 5 also includes the group of projects listed under Transportation Strategy Package A, described above under Alternative 1.
Alternative 5 includes the same project list as Alternative 1, and therefore the same types and magnitude of physical activities (see Alternative 1 for a complete discussion, including the regulatory requirements that would address this impact). As described above, in Alternative 1, impacts to ethnic and cultural values would be avoided and minimized through federal and state regulations, and TRPA Code of Ordinance standards. However, as identified in Impact 3.15-1 (historic) and 3.15-2 (archaeological), project activities could still uncover or destroy historic or archaeological resources during grading and excavation, pile driving and heavy equipment use or include alignments that overlap existing historical resources. Additionally, as described in Impact 3.15-3 (human remains), although standards are in place to protect human remains, project activities could still result in accidental discovery during grading and excavation. Accidentally discovered remains could be of Native American origin. Therefore, this impact is potentially significant for Alternative 5.

**MITIGATION MEASURES**

As discussed above under Impact 3.15-1, project implementation would be consistent, where applicable, with Section 106 of the NHPA, Section 5024.5 of the Public Resources Code, CEQA, the TRPA Code of Ordinances, and the procedures of the LTBMU. These regulations, ordinances, and procedures would ensure notification and consultation with SHPO and Washoe Tribe. They would also result in resource surveys and preparation of a resource protection plan, when needed. Compliance with these regulations and procedures would be similar to Mitigation Measures 3.15-1a, 3.15-1b, 3.15-2a, and 3.15-2b. However, the following mitigation measures would provide additional minimal requirements to complete a site-specific inventory report, survey report or data recovery plan; prescribe additional measures for preparation of a treatment plan to ensure that any resources that are discovered are either avoided or protected; provide additional measures for conducting archaeological monitoring and for evaluating and documenting any potentially discovered resource; and would require the additional measure to document a potentially impacted historical architectural resource in the event that avoidance of the resource or implementation of a treatment plan is not feasible. Therefore, the following mitigation applies for Alternatives 1, 2, 3, 4, and 5.

**Mitigation Measure 3.15-5. Implement Other Cultural Resources Mitigation Measures**


**Significance After Mitigation**

Mitigation Measures 3.15-1a, 3.15-1b, 3.15-1c, 3.15-2a, 3.15-2b, 3.15-2c, 3.15-2d, and 3.15-3 would reduce this impact to a less-than-significant level for all alternatives because they would require 1) consultation with the Native American Heritage Commission and the Washoe Tribe; 2) require avoidance, preservation in place, excavation, documentation, and/or data recovery of historical and archaeological resources, and 3) require assessment of and adherence to a formal recommendation for any discovered human remains.
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