
3.12 CULTURAL RESOURCES

Introduction

This section discusses cultural resources known or reasonably suspected to be present throughout Napa County. Cultural resources include prehistoric and historic archaeological sites, historic districts, and prehistoric objects; historic architectural and engineering features and structures; and sites and resources of traditional cultural significance to Native Americans and other groups. This section describes the prehistoric, ethnographic, and historic setting, identification of known cultural resources, applicable laws and regulations governing cultural resources, and the proposed transportation improvement expenditure plan's impacts on cultural resources. Information provided in this section is gathered from communications with the NCTPA and data gathered from county and city general plans.

Environmental Setting

Prehistoric Setting

The first recorded archaeological work in Napa County was conducted in 1909 by Nelson; his work included extensive surveys and recording of many of the large shellmounds around San Francisco Bay. Nelson noted that the shellmounds in Napa County exhibited large concentrations of ash and earth, which suggest a broad subsistence base, unlike the shellmounds in the East Bay and on the coast, which contained primarily shellfish remains. There was minimal archaeological work in the years that followed, until the Napa region became the focus of research for professors and students of the University of California (UC), Berkeley, in the 1940s. Early archaeological investigations in Napa County in the 1940s concentrated on excavation of large habitation sites. At this time, UC archaeologists conducted extensive surveys and large-scale excavations. *Archaeology of the Napa Region* presents a comprehensive summary of this work and remains the definitive document for early archaeological study in Napa County.

From the late 1940s to the mid- and late 1960s, American archaeologists were moving away from the presentation of simple culture histories based on sequences of diagnostic artifacts. The change to a cultural/theoretical approach came to be known as "New Archaeology." The "new" archaeologists now wanted to know more than "when people were doing what" in prehistoric times. Researchers also wanted to know how and why people chose to organize, develop, modify, or discard certain modes of adaptation. Research themes shifted to focus on areas including food procurement (e.g., hunting vs. collecting); exchange/trade of ideas, stylistic items, raw materials, and other items (e.g., production specialization, shell beads, obsidian); interaction across cultural boundaries (e.g., alliances for economic/defensive purposes); and environmental knowledge (e.g., utility of particular gathering locations).

Artifacts recovered from sites and eventually larger spatial units (e.g., localities and districts) are used to define prehistoric people's adaptive mode or "pattern." During the Early Archaic Period (6000 to 3000 B.C.), subsistence strategies were thought to be focused on both hunting and the processing of hard seeds, as suggested by large numbers of projectile points and the presence of milling slabs in occupation sites. The Middle Archaic Period (3000 to 500 B.C.) was extremely problematic in regard to the adaptive mode. Although a stylistic change of artifacts (e.g., from wide-stem to concave-base projectile points) is evident, no concurrent settlement shift has been documented. The appearance of the mortar and pestle suggests, however, that new lifeways were being pursued. During the period between 500 B.C. and A.D. 500 major changes in artifact inventories and settlement locations became apparent. These changes signified the onset of a sedentary adaptive mode in which both hunting and acorn collecting played essential roles. The Lower Emergent Period (A.D. 500 to A.D. 1500) represented a continued population expansion (suggested by a slight increase in the number of sites occupied) concurrent with development of the bow and arrow, and was thought to include regularized exchange and the beginnings of stratified social organization. Regulation of exchange by a managerial elite and craft specialization during the Upper Emergent Period (A.D. 1500 to contact) suggests a high degree of economic sophistication. This period also marked a noticeable decline in both the number of sites inhabited and the amount of obsidian present at sites. Amaroli (1982a) proposed three alternative explanations for this apparent decline. First, craft specialization decreased flaked stone debris by restricting the number of people working with obsidian. Second, a managerial elite controlled subsistence activities, resulting in consolidation of scattered hamlets into a few major villages. Third, population decline occurred because of exposure to European diseases reaching California before the Europeans themselves, resulting in decreased obsidian use and fewer sites.

Many of the recent archaeological investigations have aided in the understanding of the prehistoric people who inhabited the Napa region and have begun to answer many of the current research themes. Recent archaeological investigations throughout the region have advanced knowledge of the climate, natural environment, as well as the adaptive strategies used by the prehistoric cultures. Archaeological method and theory have made understanding the adaptive processes of the prehistoric cultures more accessible through such techniques as the study of obsidian hydration dating techniques, trace element analysis, and radiocarbon dating. Archaeologists are also examining innovative techniques in tool manufacture and subsistence strategies through the study of material remains recovered from archaeological sites throughout the Napa region. However, current archaeological investigations have been limited to site-specific mitigation goals, not to the contribution of knowledge to the overall prehistory of the region.

Ethnographic Setting

The earliest evidence of human occupation in Napa Valley began approximately 5,000 years ago. Archaeological records show that the Napa region was primarily inhabited in prehistoric times by the Wappo, Lake Miwok, and Patwin tribal groups. The major differences between these Native American groups were the origins of their tribal languages and territorial boundaries. However, their lifestyles, technologies, subsistence strategies, and settlement patterns were similar.

Wappo

Wappo is a dialect of the Yuki language, and also the name given by the Spanish to the Wappo-speaking people. The Wappo dialects were spoken in a territory that consisted of two divisions. The small division existed in just a 5-square-mile radius, south of Clear Lake. The larger division extended from just north of Napa and Sonoma in the south to Cloverdale and Middletown in the north. Wappo territory extended farther in summer, as there is evidence that the Wappo made annual trips to Clear Lake and the Pacific Ocean. Research in Napa suggests that the Wappo may have been among the first settlers and groups to use the Napa Glass Mountain area around 2000 B.C. Later in Wappo history, the Wappo were influenced by the surrounding cultures and languages. Evidence points to the possibility that differences among the surrounding groups were a result of Wappo migration into the area. The Wappo were generally a minority in their region, but they appeared to have maintained generally good relationships with neighboring groups with some exceptions. The sociopolitical unit of the Wappo was the village, which was generally located along a creek or another water source and included either one or two sweathouses, depending on the size of the village. Although it is believed that the population of the Wappo never exceeded 1,000 people, later evidence suggests that the Wappo had a minimum of seven villages in the Geyserville area and that the population of Wappo in this region alone may have exceeded 1,500 people. The Wappo's unsuccessful battle against the Spanish is evident in the mission records of the period. Most Wappo from all territories were brought to Mission at Sonoma between 1823 and 1834, and many of the remaining Wappo were used for labor. In 1854, the Wappo of the Russian River Valley, whose population likely included Wappo from territories within Napa County, were moved to a reservation in Mendocino. Within two years, nearly half of the population had died; the reservation was closed in 1867 with approximately 500 Wappo remaining in the Napa Valley in 1855.

Patwin

Portions of Napa County were also once inhabited by the Patwin, who held an extensive region within north-central California. Patwin territory included the lower portion of the western Sacramento Valley, west of the Sacramento River from about Princeton in the north to Benicia in the south. The Patwin were bordered to the north, northeast, and east by other Penutian-speaking peoples, and to the west by the Pomo and other coastal groups. Within this large territory, the Patwin have traditionally been divided geographically into River, Hill, and Southern Patwin groups, although a more complex set of linguistic and cultural differences actually existed than is indicated by these divisions. The Patwin are believed to have reached the Carquinez/Suisun area by about 1,500 B.P. The arrival of Euroamericans brought the end of Patwin culture. By 1871 to 1872, when Powers surveyed California gathering ethnographic information, the Patwin culture appeared virtually extinct.

Wappo and Patwin Culture

As with most of the hunting-gathering groups of California, the 50- to 150-person tribe represented the basic social and political unit of both the Wappo and Patwin. Typically, a tribal chief would reside in a

major village in which ceremonial events were usually held. The status of such individuals was inherited patrilineally among the Patwin, although village elders had considerable power in determining who actually succeeded to particular positions. Apparently, a Patwin chief had more authority than his counterparts in many of the other central California tribes. The Wappo village chief was either elected or appointed, and generally rejected the tendency to impose authority over other members of the group. Whether the chief was man or woman, the chief's main functions in both groups included maintaining relationships with other villages and neighboring groups, overseeing internal operations of the village, directing ceremonies and dances, and disseminating and receiving information. Such individuals often decided when and where various fishing, hunting, or gathering expeditions would occur and similarly made critical decisions concerning more elaborate ceremonial activities. The chief also played a central role in resolving conflicts within the community or during wars, which occasionally broke out with neighboring groups.

The acorn was the primary plant food, along with a variety of roots, bulbs, grasses, and other edible greens. Deer, elk, and antelope were the primary big game. Smaller game, such as rabbits, squirrels, and birds, was also important. Fish were caught but may not have been as important as terrestrial animals, which were abundant in the grassy valleys. A variety of raw materials were available for the manufacture of hunting, gathering, and processing implements. Stone may have been the most important. The Wappo and Patwin, similar to every other Indian group in California, used stone in almost every aspect of their lives. Napa Glass Mountain, a regionally important obsidian site and quarry, and other local obsidian sources are situated within Wappo territory proper. Other major obsidian sources lay near the eastern and southern edges of the Russian River Subregion in the Clear Lake District (i.e., Borax Lake and Mount Konocti sources) and the Santa Rosa Locality (i.e., Annadel source).

Obsidian was used for projectile points, knives, scrapers, drills, and many other tools. Chert, found naturally throughout the north Coast Ranges, was also used for a wide range of tools, including projectile points, knives, scrapers, cobble tools, and other tools. This sedimentary stone was sometimes found in concentrations or outcrops that became quarry locations. More commonly it was found in drainages and alluvial fans throughout the region. Basalt was also used for tool manufacture, quite often as heavy items that did not require detailed flaking, but it was not the preferred material. Men generally created the tools that were used in hunting large and small mammals. Women were generally thought to have a lesser role in stone tool manufacturing. Bone tools were generally made from bird and deer bone and antler. The Wappo used bone awls, needles, whistles (bird bone), perforators, and many other bone tools.

Trade or visits with people outside a given linguistic group's territory was also common during ethnohistorical times. The Pacific coast or San Francisco Bay would have been important for marine resources (e.g., surf fish, shell, salt). Inland locations or locations outside a group's territory also would have been important for food resources (e.g., acorns, grass seeds, waterfowl) or other raw materials (e.g., obsidian). Because Napa Glass Mountain obsidian was known for its high quality, it

was a valuable trade commodity and spread to areas across the western states. This gave the Wappo strong trading power.

Lake Miwok

The Lake Miwok people spoke the Penutian language, and their native territory was geographically isolated from other Miwok groups located to the south. They were, however, in regular contact with their neighbors of different linguistic origins, such as the Wappo, Patwin, and Eastern and Southeastern Porno. The Lake Miwok language is related to that of the Coast Miwok of Marin County and coastal Sonoma County and the Eastern Miwok of the Sierra Nevada. The Miwok groups are also related to the Costanoan (Ohlone) group that occupied the area from San Francisco to Monterey County. The Lake Miwok inhabited an area that extended south from Clear Lake to Pope Valley, west to Cobb Mountain in Lake County (where they shared borders with the Porno and Wappo) and east to Patwin territory (including Jerusalem Valley, Soda Creek, and Putah Creek). The primary ruling village for the northern part of Lake Miwok territory was situated just south of Lower Lake, and the central village in the southern part of Lake Miwok territory was located in the Coyote Valley along Putah Creek. During European and American settlement in the early nineteenth century, many Lake Miwok were taken from their settlements and homes to work as laborers on ranches in the area; others were massacred. Estimates of the Lake Miwok population showed there were no more than 500 individuals prior to European and American settlement. In 1841, the US Census revealed the presence of only 41 people of Lake Miwok descent. The 1910 US Census indicated that there were seven individuals remaining.

Coast Miwok

The Coast Miwok people were also involved in frequent trade with the inhabitants of Napa County. The Coast Miwok language, a member of the Miwokan subfamily of the Utian family, is divided into two dialect groups: Western (Bodega) and Southern. The Coast Miwok territory extended from Duncan's Point on the Sonoma County coast to the end of the Marin County peninsula. To the east, Coast Miwok territory extended as far as midway between the Sonoma and Napa Rivers. Some of the main tribes in Coast Miwok territory included the Omiomi, Alaguali, Olompali, Petaluma, Tamal, and several others. The Alaguali tribe was located on the marshland borders of the northern shores of San Pablo Bay, northeast of the Omiomi tribe in Novato. The Olompali tribe was located northwest of the Omiomi tribe in an inland valley. The distinction between tribal territories is sometimes difficult to ascertain.

Coast Miwok sociopolitical organization did not extend beyond the village. Larger villages had a chief, whose position was nonhereditary. Other important leaders included the woman chief and the máien. The woman chief appears to have been primarily a ceremonial leader who was involved in the Bird Cult and coordinated the Acorn Dance and Siinwele Dance. The máien was the head of the female ceremonial house, directed the construction of new dance houses, had wood hauled for festivals, supervised the preparation of foods for special events, sent invitations to dances, and sometimes selected dance performers.

Coast Miwok villages were usually located near major inland watercourses and sometimes along the coast. The villages were composed of several types of structures, including dwelling houses, sweathouses (in larger villages), and dance houses (in larger villages).

The Coast Miwok subsistence strategy focused on the coast and adjacent inland areas (e.g., throughout Napa County) for much of the year, where salmon and other fish, deer, crab, kelp, seeds, mudhens, geese, mussels, and clams were available. During summer, the focus of hunting and plant-gathering activities shifted to the hills, where rabbit, bear, elk, deer, squirrels, gophers, seeds, greens, and acorns were plentiful. Acorns were pounded into meal, leached, and boiled with hot stones to make mush; tanbark acorns were preferred. Adult men smoked tobacco, which was gathered along Healdsburg and Santa Rosa Creeks.

Coast Miwok technology consisted of items fashioned from wood, stone, shell, and animal materials. The Coast Miwok polished and sometimes perforated stone for use as hunting and fishing charms. Hunters used long obsidian blades as charms when hunting bear. Obsidian was obtained from the Wappo for manufacturing butchering knives and arrow points. Coast Miwok traded clamshell disk beads with the Wappo in exchange for unworked obsidian. General utility knives were made from green chalcedony. Women made basketry, and men made willow containers for hunting implements, as well as burden baskets and mortar hoppers. Many of the Coast Miwok were taken to San Francisco Mission Dolores, established in 1776; Mission San Jose de Guadalupe, established in 1797; and Mission San Rafael Arcangel, established in 1817, to be converted to Christianity. Large groups were taken, ranging in size from approximately 40 to 150 tribal members at a time. Their numbers decreased rapidly, as did all Native American populations throughout the Bay Area and California.

Early Exploration

Francisco Castro made the first recorded exploration of Napa County in 1823. The expedition party, which included José Sánchez and Father José Altamira, explored the region north of San Francisco Bay before founding Mission San Francisco Solano in the present city of Sonoma. The Napa region was selected as a Mission cattle ranch.

Rancho Period

Rancho Caymus

George C. Yount was the first Euroamerican pioneer to settle in Napa County. Born in North Carolina in 1794, Yount arrived at Fort Yuma with a group of trappers known as the Wolfskill party in 1827. They departed Missouri and came to California in 1831 to hunt and trap sea otters. Yount eventually settled in San Rafael, where he worked at odd jobs in the region, including the Sonoma Mission and at General Vallejo's residence in Sonoma. In 1836, Yount was baptized as Jorge Concepcion Yount and became a Mexican citizen. He received the Rancho Caymus land grant in the Napa Valley, which included more than 11,000 acres, from the Mexican government. Yount built an adobe house and later a Kentucky-style blockhouse and gristmill on his property. From 1836 to 1846, most of the rancho

was used for open grazing for horses, cattle, and sheep. A lesser portion was used for cultivation, including wheat, which was the most popular crop at the time. Historic records indicate that by the late 1870s, some of the landowners who lived in the general area conducted multi-crop farming, consisting mainly of wheat, fruit orchards, and vineyards. Prune orchards were also historically cultivated throughout the valley. In 1855, Yount laid out a town grid on his property, which he called Sebastopol. After Yount's death in 1865, a large remaining portion of his rancho (after allotments were made to relatives and assigned acreage cultivated by tenants) was subdivided into several blocks containing various-sized lots, which were then sold. The town was renamed Yountville sometime after his death.

Rancho Carne Humana

Dr. Edward Turner Bale was another early settler in Napa County. He served as surgeon-in-chief of the Mexican army in Alta California. After marrying General Vallejo's niece Maria Ignacia Sobrantes in 1839, Bale was granted almost 18,000 acres, just north of Yount's property, called Rancho Carne Humana. Bale commissioned the building of a gristmill just north of Mill Creek. The gristmill, with a granary nearby, was used to grind the corn and wheat for northern valley farmers. Wheat continued to be an important crop through the 1860s, when much of the exported hay harvested in Napa County was shipped to England. Other settlers during this period included Ralph L. Kilburn, Thomas Kittleman, Florentine Kellogg, and Sarah Graves Fosdick. In July 1847, Fosdick opened the first school in Napa Valley and the second American school in California.

Rancho Catacula

Joseph Ballinger Chiles was amongst the first Americans to settle in California in the early 1840s. In the 1840s and 1850s, he made several journeys between California and Missouri. Chiles and his party blazed several trails across the Sierra Nevada on early expeditions. In 1844, Chiles obtained title to Rancho Catacula, which was located in the valley that later bore his name. For decades, the valley was used to graze both cattle and horses. Chiles built an adobe house on Rancho Catacula in 1846 and settled down to farm the land and raise Missouri mules and Durham cattle, for which he became well known. Chiles also built a gristmill on the rancho in 1846, which was among the first built in northern California. The mill was in operation until the 1880s, producing nine barrels of flour daily as the demand for commodities skyrocketed during the Gold Rush in 1849. Chiles also manufactured whiskey until the late 1870s under the Catacula label, touted as a sign of excellence.

Mallacomes Rancho

The history of Mallacomes Rancho, a portion of which extends into Napa County, began with the settlement of Jose de los Santos Berryessa, former Alcalde of Sonoma under General Vallejo in Knights Valley. Spanish governor Manuel Micheltorena approved the formal grant of the Mallacomes Rancho, or *Muristal y Plan de Agua Caliente* (about 17,754 acres), to Berryessa in 1843. In 1850, after California became part of the United States, the majority of Spanish settlers (including Berryessa) living in the new state returned to Mexico. In 1853, Thomas B. Knight purchased a large portion of

Berryessa's rancho and named it Rancho Muristood. Knight had participated in the 1846 uprising of American settlers in California known as the Bear Flag Revolt. Knight's rancho eventually became known as Knights Valley.

Early American Settlement

Napa County was created in 1850. The word *napa* is of Indian derivation and has been variously translated as "grizzly bear," "house," "motherland," or "fish." Of the many explanations of the name's origin, the most plausible seems to be that it is derived from the Patwin word *napo*, meaning house.

In the 1830s, the Napa Valley became one of the first in California to be settled by American farmers. When California was granted statehood in 1850, the Napa Valley was in the territory of California, district of Sonoma. In 1850, when counties were first being organized, Napa became one of the original 27 counties of California with Napa City (later shortened to Napa) as the county seat. By 1870, Euroamericans were the primary occupants of the Napa Valley; the Native American population had been almost completely decimated by violence, starvation, and disease. In 1848, Nathan Coombs laid out Napa City on property he acquired from Nicholas Higuera's Rancho Entre-Napa, an 1836 Mexican land grant.

The Gold Rush of the early 1850s caused Napa City to grow. After the first severe winter in the gold fields, miners sought warmer refuge in the new city. There was plenty of work on the cattle ranches and in the lumber industry. Sawmills in the valley cut timber that was hauled by horse team to Napa City, where it was then shipped out via the Napa River to Benicia and San Francisco. The Napa Valley is now known mostly for its premier wines. At the start of the industry, Euroamerican settlers planted vineyards with cuttings supplied by Catholic priests from Sonoma and San Rafael. In 1861, Riesling cuttings were introduced to the valley. From these small beginnings, the Napa Valley has become noted as one of the premier winemaking regions of the world.

Viticulture Industry

In California, the Spanish and then Mexican missions are credited with planting the first grapevines and making the first wines, initially for sacramental and then general use. Although these vines produced abundant fruit, the resulting wine was described as bland and heavy, with a high sugar and alcohol content. The first grape vines grown in the Napa Valley are credited to George Yount, who in 1838 planted table grapes. Production increased between 1845 and 1847, when William Nash and F. E. Kellogg planted orchards and vines near Bale Mill and sold their products in San Francisco. Little effort was made to improve the variety of mission grapes, growing techniques, or winemaking process until the mid-1850s, when Agoston Haraszthy concentrated his efforts on these goals. He is credited with introducing zinfandel into California in 1852. He also planted additional European varieties in the Napa Valley in the 1860s. During this time, the United States market for California wines was generally based on inexpensive price, rather than a sophisticated palate.

In 1865, France and Spain experienced an outbreak of phylloxera, with wine production reduced by half. Vineyards in the United States were initially unaffected and for a brief time profited from Europe's misfortune. The California legislature removed the tax from wines in 1866 to encourage the industry and to provide opportunities for those abandoning unprofitable gold mining ventures. In addition, the construction of the Napa Valley Railroad in 1868 increased the marketing potential for grain and grape growers, allowing easy shipment of their crops to Napa and then via steamer to San Francisco and beyond. These changes created a large impact on the burgeoning Napa Valley wine industry and settlement in the region.

The 1870s marked a period of tremendous growth in the Napa Valley wine industry, with the number of wineries between Calistoga and Oakville doubling from 15 to 30. Wine production employed more workers than any other form of California agriculture, leading to an increase in the use of Chinese laborers. Dozens of Chinese laborers arrived in the valley to build the Napa Valley Railroad and remained to work in viticulture.

Napa Valley growers began to focus on improving the taste of their product, which was enhanced by the use of underground wine cellars. An economic depression in the mid-1870s and a phylloxera outbreak in the Napa Valley affected the direction of winemaking by eliminating many struggling wine businesses. By the mid-1870s, grapes had become a major crop as wheat declined and agricultural diversity was on the increase. St. Helena became the focal point of wine growing in the Napa Valley.

By the late 1870s and early 1880s, overproduction of wine, the poor quality of the product, and a tax on brandy posed serious challenges for winemakers in the Napa Valley. To face these challenges, wine growers gradually replaced old or diseased vines with a variety of the best European varieties. With experience, growers extended their vineyards into hillier terrain, where vines were less affected by hard valley frost, and planted other varieties, such as cabernet sauvignon, cabernet franc, and merlot. While total output varied over the years, California saw a relatively steady increase in wine production. With four million gallons of new wine in 1877 increasing to 17 million in 1888. Napa County was producing as much wine as the United States was importing from other countries.

In the early 1890s, a phylloxera infestation seriously affected half of the vineyards in Napa County. Wine production fell from roughly five million gallons in 1890 to two million gallons in 1892. A native eastern United States grapevine resistant to phylloxera was used as root stock for grafting the European varietal vines; by the mid-1890s, the wine industry was beginning to re-establish itself as an important agricultural industry.

While viticulture remained the dominant agricultural activity in the valley in the late 1800s, agricultural diversity began to increase in response to the problems that faced the wine and wheat industries. Fruit growing (mostly apples and peaches) was a major enterprise in the late nineteenth century. By the 1880s, olives and prunes also became important tree crops; by the turn of the century, prunes had become the main fruit crop in Napa Valley. The wine industry had another setback with the San Francisco earthquake of 1906, as San Francisco was California's center for shipping, trading, and cellaring of wine. The California Wine Association alone lost more than nine million gallons of wine in the earthquake.

The industry rebounded once again, only to be limited again by prohibition, established by the eighteenth Amendment to the Constitution in January 1920. A few viticulturists survived by producing limited amounts of wine for medicinal, sacramental, or cooking purposes. Creative ways to acquire wine were enlisted, with local doctors prescribing wine to cure ills and families taking up at-home winemaking, which was still legal if a family produced 200 gallons or fewer annually. Among those that survived was the Christian Brothers, a religious teaching order of the Roman Catholic Church that moved its winemaking operation from Martinez to Mont La Salle in the Napa Valley in 1932 and purchased the Greystone Cellars in 1950. The wine industry did not recover until the 1950s, after the Great Depression and World War II.

Identification of Cultural Resources

Napa County

Because of the programmatic nature of this document, formal cultural resources records searches and consultation with the Native American Heritage Commission (NAHC) and other interested parties were not conducted. These steps would be completed prior to implementation of any specific project under the proposed transportation improvement expenditure plan. Tables 3.12-1 and 3.12-2 identify previously recorded and known prehistoric and historic-period resources in Napa County.

Evaluation Area	Number of Occurrences		
	Prehistoric Archaeological Site	Historic and Prehistoric	Unknown ¹
Lower Napa Valley	18	3	549
Napa Valley Floor	2		70
Western Mountains	3		14
Angwin/Livermore Ranch Area	5		117
Eastern Mountains	11		121
Pope Valley	2		35
Central Interior Valleys	15		24
Southern Interior Valleys	6		99
Berryessa Area	1	1	70
Knoxville Area	2		24
Carneros	5		22
Jamieson/American Canyon	18	3	549
Napa River Marshes	—	—	—
Total	88	7	1,694

Source: Napa County Transportation Planning Agency, July 2005.

Note:

¹ The “unknown” category includes all recorded sites for which it could not be determined which site type the record was assigned based on lack of information as to the assigned site type.

**Table 3.12-2
Historic-Period Architectural Features Known to
Occur in Napa County**

Evaluation Area	Number of Occurrences
Napa Valley Floor	1,471
Western Mountains	38
Angwin/Livermore Ranch Area	5
Eastern Mountains	34
Pope Valley	52
Central Interior Valleys	8
Southern Interior Valleys	1
Berryessa Area	1
Knoxville Area	5
Carneros Area	14
Napa River Marshes	3
Jamieson/American Canyon	3
Total	1,635

Source: Napa County Transportation Planning Agency, July 2005.

Several areas within Napa County are highly sensitive for the presence of archaeological resources. Indigenous populations had access to the abundant floral and faunal resources in the river valleys, riparian areas, and mineral resources, such as obsidian, from Napa Glass Mountain, which was a highly coveted trade item. Access to the coast was easy and provided the prehistoric people of Napa a way to acquire coastal resources, such as shell for beads and marine food sources. Archaeological sites are most frequently situated near a year-round water source, at low elevation, and away from steep slopes and mountainous terrain. Euroamerican settlers have used the Napa County landscape since the early days of exploration. The abundance of historic-period architectural features and structures in Napa County reflect the history of human use of the region for homes, ranches, farms, and infrastructure such as trails, roads, and railroads. Not all cultural resources in Napa County have been evaluated for eligibility for listing in the National Register of Historic Places (NRHP) or the California Register of Historical Resources (CRHR). Research into each known or recorded resource would be required for project-specific environmental reviews, in addition to studies to determine the presence of previously unknown cultural resources.

American Canyon

Four prehistoric sites are known to exist within American Canyon, according to a records search and literature review conducted by the California Archaeological Inventory at Sonoma State University in 1991. The Napa County Airport Specific Plan and EIR (1986) identified a number of land features that are considered highly sensitive for the presence of archaeological resources. These include Soscol Creek, the Fagan and Sheehy Streams, the 20-foot contour elevation at the edge of the Napa River floodplain, and various rock outcroppings, alluvial deposits, and seasonal wetlands. Archaeological

sites with burials were also found near Soscol Creek. Historic-period structures within the City's Sphere of Influence include the Soscol House (Villa Romano Restaurant) at 1011 Soscol Ferry Road, which is listed on the NRHP, and a residence at 129 Devlin Road, which is on the local list of historic structures.¹

Calistoga

In Calistoga, approximately 150 historic properties are listed and approximately 300 properties are determined to be eligible for listing under the NRHP. Calistoga's richest stock of historic-period buildings is the concentration of single-family homes within the original town. Approximately 90 houses in this area have been identified as significant historic structures, including 30 houses from the 1870 to 1900 period and 60 houses from the 1900 to 1955 period.²

St. Helena

Over 200 historic-period resources were identified in St. Helena's 1978 historic resources inventory.

Yountville

Native American burials are believed to exist within the Pioneer Cemetery and Indian Burial Ground near Yountville Park at the north end of the town; however, investigations to date have not revealed findings of any significance. The Town Manager stated that there have been no indications that anything of archaeological significance exists.³

Napa

Napa has over 2,800 properties listed in its Historic Resources Inventory. The City designates four possible historic resource types (or combinations of the four types) for each property. Properties identified as Landmark Properties (LP) are designated by City Council resolution as worthy of protection as a Landmark. Properties identified as Landmark Districts (LD) are groupings of related cultural resources the City Council has officially designated. Properties indicated as Neighborhood Conservation Properties (NCP) are those cultural resources which the City Council has officially designated for conservation. Properties indicated as Historic Resources Inventory Properties (HRI) are previously inventoried properties that have historic significance to the city. As of March 2004, 41 of the properties listed on the city's Historic Resources Inventory are listed on the NRHP and 50 are designated as City Landmarks.⁴

¹ Osmond, Dale. Personal communication with American Canyon Chamber of Commerce, President and CEO, 30 September 2005.

² City of Calistoga 2003 *General Plan*. Open Space and Conservation Element.

³ Yountville *General Plan*, Environment Element. May 2005.

⁴ City of Napa, Landmark Designations List, 3 March, 2004

Regulatory Setting

The criteria for eligibility for listing on the CRHR are very similar to those that qualify a property for listing on the NRHP, which is the significance assessment tool used under the National Historic Preservation Act. The proposed transportation improvement expenditure plan is evaluated under both sets of criteria because specific projects may receive federal funding. A property that is eligible for listing on the NRHP is also eligible to be listed on the CRHR. All potential impacts to “significant” resources under a federal agency must be assessed and addressed under the procedures of Section 106 of the NHPA, set forth at 36 CFR 800.

Federal Regulations

National Register of Historic Places

The National Historic Preservation Act (NHPA) of 1966, as amended, established the NRHP, which contains an inventory of the nation’s significant prehistoric and historic properties. In considering impact significance under the NEPA, there are four evaluation criteria to determine a resource’s eligibility for listing on the NRHP. These evaluation criteria, listed below, are used to determine what properties should be considered for protection from destruction or impairment as a result of project-related activities (36 CFR 60.2).

The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- a. That are associated with events that have made a significant contribution to the broad patterns of our history; or
- b. That are associated with the lives of significant persons in or past; or
- c. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- d. That have yielded or may be likely to yield, information important in history or prehistory.

State Regulations

California Register of Historical Resources

As defined by Section 15064.5(a)(3)(A-D) of the State CEQA Guidelines, a resource shall be considered historically significant if the resource meets the criteria for listing on the CRHR. The CRHR and many local preservation ordinances have employed the criteria for eligibility to the NRHP

as a model, since the NHPA provides the highest standard for evaluating the significance of historic resources. A resource that meets the NRHP criteria is clearly significant. In addition, a resource that does not meet the NRHP standards may still be considered historically significant at a local or state level. CEQA regulations specifically state that a resource need not be listed on any register to be found historically significant (Public Resources Code Section 21084.1).

Section 15064.5(c) of the State CEQA Guidelines applies to the analysis of effects on archaeological sites. When a project will affect an archaeological site, a lead agency must determine whether the site is a historic resource, and therefore subject to the NRHP criteria listed above (particularly Criterion D), or whether the site is a *unique archaeological resource*, as defined in Section 21083.2 of CEQA, and whether the provisions of that section for mitigation apply. If a lead agency determines that an archaeological site is neither historic nor unique, Section 21083.2(h) of CEQA states that the resource requires no further consideration, other than recordation.

Local Regulations

Preservation of cultural resources is guided by the Napa County *General Plan* and the general plans of incorporated cities and town in Napa County. The Napa County *General Plan* encompasses all of the unincorporated areas in Napa County. The following discussion summarizes the relevant cultural resources goals and policies of the county and city general plans.

Napa County

- **Conservation and Open Space Element, Goal III B (Areas of Outstanding Historical and Archaeological Value), Policy 3:** Encourage preservation and scientific study of areas of unique historical and archaeological value. To accomplish this, the Plan suggests that the following actions, which have not to date been implemented:
 - Prepare a priority list identifying critical areas and features threatened with destruction and encourage their inclusion in a natural resources conservation or open space easement with features similar to those recommended for protecting ecologically important areas (see Conservation Policy I B [Areas Required for Ecological and Other Scientific Study Purposes]). See SB 18 regarding tribal consultation and conservation easements and identification of sacred sites.
 - Prepare specific plans (within the meaning of Sections 65451-2 of the Government Code), and establish plan lines or other appropriate devices to protect sites and provide a protective buffer zone.
 - Protect existing or potential sites for scientific purposes.
- **Conservation and Open Space Element, Goal III C (Areas of Scenic Value), Policy 3:** Encourage preservation of and provide visual access to the natural beauty of

Napa County, thereby enriching the lives of its citizens and enhancing and maintaining one of the County's primary industries, the tourist industry. One of the actions recommended to accomplish this, which has to date only been partially implemented, is as follows:

- Identify and preserve the area's architectural and historical landmarks.

American Canyon

- **Natural and Historic/Cultural Resources Element Policy 8.19.1:** Conduct a comprehensive survey of archaeological and cultural resources and historic vegetation that is eased on established criteria and encompasses the entire City and its Sphere of Influence.
- **Natural and Historic/Cultural Resources Element Policy 8.19.2:** Adopt a Preservation Ordinance that will authorize the City to designate appropriate vegetation or archaeological sites deemed to be of historic, archaeological, or cultural significance an American Canyon City Historic Point, Site, or District. Such an ordinance shall conform to state and federal criteria for establishing a preservation ordinance.
- **Natural and Historic/Cultural Resources Element Policy 8.19.3:** Explore various methods for the future preservation of historic vegetation and archaeological and cultural resources. For example, consider establishing "receiver site" and "adopt a building" programs to preserve historic structures that must be removed from their sites. Additionally, consider utilizing the Secretary of the Interior Standards for Historic Rehabilitation and standards and guidelines prescribed by the State Office of Historic Preservation as the architectural and landscape design standards for rehabilitation, alteration, or additions to sites containing historic resources in order to preserve these structures in a manner consistent with the sites' architectural and historic integrity.

Calistoga

- **Community Identity Element Policy OSC-4.3-P2:** The City shall consider expanding the Pioneer Cemetery as a cultural and historic resource in Calistoga.
- **Community Identity Element Policy CI-3.1-A2:** Consider studies to consider the designation of one or more official historic districts and to create development regulations for these districts.

Napa

- **Historic Resources Element Policy HR-1.1:** The City shall identify historical buildings sites, features and districts that are reminders of the past eras, events and people; significant examples of architectural styles; irreplaceable assets; or, examples of how past generations lived.
- **Historic Resources Element Policy HR-1.15:** The City shall identify and reinforce historic linkages between the natural and built environment.
- **Historic Resources Element Policy HR-1.17:** When planning for transportation routes, the City shall seek routes and improvements that recognize and protect historic neighborhoods.
- **Historic Resources Element Policy HR-1.M:** The City shall adopt design guidelines and standards to guide rehabilitation, infill, and new development in historic areas.
- **Historic Resources Element Policy HR-5.B:** The City shall develop a paving standard, using historic grid patterns, for fixing and maintaining safe and walkable sidewalks in historic neighborhoods.

St. Helena

- **Historic Resources Element Policy 7.5.4:** Include the preservation of the City's historic resources in all future planning decisions where identified historic resources may be affected.
- **Historic Resources Element Policy 7.5.9:** Require new development in or adjacent to historic areas or buildings, to be compatible in pattern and character with existing historic buildings.

Yountville

- **Environment Element Policy 8:** Preserve existing Native American burial grounds.
- **Environment Element Policy 8.1:** Work with California Archaeological Inventory to determine existence of Native American burial grounds.
- **Environment Element Policy 8.2:** Do not allow disturbance of existing burial grounds in the event they are recorded to exist.

Impacts and Mitigation Measures

Methodology

Potentially significant effects to cultural resources were determined by reviewing the general locations of the proposed transportation improvement expenditure plan programs and evaluating whether the programs would impact cultural resources known to occur in Napa County. Potentially significant impacts would occur if the programs could result in significant adverse effects on a significant cultural resource as defined by NEPA or CEQA. Given that ground surface examination in a built environment usually cannot reveal the potential presence of archaeological deposits, this analysis assumes that archaeological resources, including human burials, could be present anywhere in the general locations of the program areas and, therefore, could be affected by any activity that potentially disturbs the ground surface or subsurface, including grading or excavation. Surface examination often cannot reveal whether paleontological resources are present at a specific project location. Assessment of the potential for paleontological impacts is based on a general assessment of the paleontological sensitivity of the geological formations that underlie the general locations of the program areas. This analysis assumes that any ground-disturbing activity that could be undertaken with the proposed transportation improvement expenditure plan programs could affect paleontological resources that may be present.

Significance Criteria

The proposed transportation improvement expenditure plan programs would have significant environmental impacts related to cultural resources if they would:

- Cause a substantial adverse change in the significance of a historical resource;
- Cause a substantial adverse change in the significance of an archaeological resource;
- Directly or indirectly destroy a unique paleontological resource or unique geological feature; or
- Disturb any human remains, including those interred outside of formal cemeteries.

Impacts Related to the Jamieson Canyon Corridor Program

CR-1. Implementation of the proposed Jamieson Canyon Corridor Program projects could cause a substantial adverse change in the significance of a historic resource. (PS)

As described under “Environmental Setting,” there are 1,635 known historic-period architectural features within Napa County. Many of these resources could occur within or adjacent to the project limits of the proposed Jamieson Canyon Corridor Program projects. Implementation of the Jamieson Canyon Corridor Program projects could result in the demolition, destruction, or alteration of an historic-period structure or feature. This impact is considered potentially significant.

MITIGATION MEASURE. The following mitigation measure would reduce potentially significant impacts on a historic resource resulting from implementation of the proposed transportation improvement expenditure plan programs to a less than significant level. However, if a historic resource cannot be avoided, the historic resource could be permanently demolished with implementation of the Jamieson Canyon Corridor Program projects. In those cases, this impact would remain significant and unavoidable. (SU)

CR-1.1 The Lead Agencies of a Specific Project Shall Hire a Professional Who Meets the Secretary of the Interior's Standards for Architectural Historian to Evaluate All Historic Structures or Features that Could Be Affected by Project Implementation. The Architectural Historian shall prepare a draft technical report that meets the Secretary of the Interior's Standards for Historic Preservation. The report shall include formal recordation and evaluation of all historic structures or features that could be affected by project implementation and recommendations to reduce project impacts to a less-than-significant level or avoid impacts altogether. The technical report shall be submitted to the lead agencies' Environmental Review Officer (ERO) for the ERO to review and comment, and shall be considered a draft report subject to revision until final approval by the ERO. A final copy of the report shall be submitted to the ERO and to the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS) at Sonoma State University. The lead agencies of a specific project shall implement all measures included in the final report to reduce or avoid any potential impacts to historic structures or resources.

CR-2. Implementation of the proposed Jamieson Canyon Corridor Program projects could cause a substantial adverse change in the significance of an archaeological resource. (PS)

As described under "Environmental Setting," within Napa County there are 1,600 known and recorded prehistoric and historic-period sites. Many of these resources could occur within or adjacent to the project limits of the proposed Jamieson Canyon Corridor Program projects. Construction of the Jamieson Canyon Corridor Program projects could result in ground-disturbing activities that could damage previously identified and previously unidentified buried archaeological resources. This impact is considered potentially significant.

MITIGATION MEASURES. The following mitigation measures would reduce potentially significant impacts resulting from implementation of the proposed Jamieson Canyon Corridor Program projects to a less-than-significant level. (LTS)

CR-2.1 Based on a reasonable presumption that archeological resources may be present within a project site, the following measures shall be undertaken to avoid any potentially significant adverse effect from a proposed project on buried or submerged historical resources. The lead agencies of a specific project shall retain the services of a qualified archeological consultant having expertise in California

prehistoric and urban historical archeology. The archeological consultant shall undertake an archeological testing program as specified herein. In addition, the consultant shall be available to conduct an archeological monitoring and/or data recovery program if required pursuant to this measure. The archeological consultant's work shall be conducted in accordance with this measure at the direction of the lead agencies' ERO. All plans and reports prepared by the consultant as specified herein shall be submitted first and directly to the ERO for review and comment, and shall be considered draft reports subject to revision until final approval by the ERO. Archeological monitoring and/or data recovery programs required by this measure could suspend construction of the project for up to a maximum of four weeks. At the direction of the ERO, the suspension of construction could be extended beyond four weeks only if such a suspension is the only feasible means to reduce to a less-than-significant level potential effects on a significant archeological resource.

Archeological Testing Program. The archeological consultant shall prepare and submit to the ERO for review and approval an archeological testing program (ATP). The archeological testing program shall be conducted in accordance with the approved ATP. The ATP shall identify the property types of the expected archeological resource(s) that potentially could be adversely affected by the proposed project, the testing method to be used, and the locations recommended for testing. The purpose of the archeological testing program will be to determine to the extent possible the presence or absence of archeological resources and to identify and to evaluate whether any archeological resource encountered on the site constitutes an historical resource under NEPA or CEQA.

At the completion of the archeological testing program, the archeological consultant shall submit a written report of the findings to the ERO. If based on the archeological testing program the archeological consultant finds that significant archeological resources may be present, the ERO in consultation with the archeological consultant shall determine if additional measures are warranted. Additional measures that may be undertaken include additional archeological testing, archeological monitoring, and/or an archeological data recovery program. If the ERO determines that a significant archeological resource is present and that the resource could be adversely affected by a proposed project, at the discretion of the appropriate lead agencies either:

- a. A proposed project shall be re-designed so as to avoid any adverse effect on the significant archeological resource; or

- b. A data recovery program shall be implemented, unless the ERO determines that the archeological resource is of greater interpretive than research significance and that interpretive use of the resource is feasible.

Archeological Monitoring Program. If the ERO in consultation with the archeological consultant determines that an archeological monitoring program (AMP) shall be implemented the archeological monitoring program shall minimally include the following provisions:

- The archeological consultant and ERO shall meet and consult on the scope of the AMP reasonably prior to any project-related soils disturbing activities commencing. The ERO in consultation with the archeological consultant shall determine what specific project activities shall be archeologically monitored. In most cases, any soils-disturbing activities, such as demolition, foundation removal, excavation, grading, utilities installation, foundation work, driving of piles (foundation, shoring, etc.), site remediation, etc., shall require archeological monitoring because of the risk these activities pose to potential archaeological resources and to their depositional context;
- The archeological consultant shall advise all project contractors to be on the alert for evidence of the presence of the expected resource(s), of how to identify the evidence of the expected resource(s), and of the appropriate protocol in the event of apparent discovery of an archeological resource;
- The archeological monitor(s) shall be present on the project site according to a schedule agreed upon by the archeological consultant and the ERO until the ERO has, in consultation with project archeological consultant, determined that project construction activities could have no effects on significant archeological deposits;
- The archeological monitor shall record and be authorized to collect soil samples and artifactual/ecofactual material as warranted for analysis;
- If an intact archeological deposit is encountered, all soils-disturbing activities in the vicinity of the deposit shall cease. The archeological monitor shall be empowered to temporarily redirect construction activities and equipment until the deposit is evaluated. The archeological consultant shall immediately notify the ERO of the encountered archeological deposit. The archeological consultant shall make a reasonable effort to assess the identity, integrity, and significance of the encountered archeological deposit and present the findings of this assessment to the ERO.

Whether or not significant archeological resources are encountered, the archeological consultant shall submit a written report of the findings of the AMP to the ERO.

Archeological Data Recovery Program. The archeological data recovery program shall be conducted in accord with an archeological data recovery plan (ADRP). The archeological consultant, lead agencies of a specific project, and ERO shall meet and consult on the scope of the ADRP prior to preparation of a draft ADRP. The archeological consultant shall submit a draft ADRP to the ERO. The ADRP shall identify how the proposed data recovery program will preserve the significant information the archeological resource is expected to contain. That is, the ADRP will identify what scientific/historical research questions are applicable to the expected resource, what data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, should be limited to the portions of the historical property that could be adversely affected by the proposed project. Destructive data recovery methods shall not be applied to portions of the archeological resources if nondestructive methods are practical.

Human Remains and Associated or Unassociated Funerary Objects. The treatment of human remains and of associated or unassociated funerary objects discovered during any soils disturbing activity shall comply with applicable state and federal laws. This shall include immediate notification of the Napa County Coroner and in the event of the Coroner's determination that the human remains are Native American remains, notification of the California State Native American Heritage Commission (NAHC) who shall appoint a Most Likely Descendant (MLD). The archeological consultant, lead agencies of a specific project, and MLD shall make all reasonable efforts to develop an agreement for the treatment of, with appropriate dignity, human remains and associated or unassociated funerary objects. The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects.

Final Archeological Resources Report. The archeological consultant shall submit a Draft Final Archeological Resources Report (FARR) to the ERO that evaluates the historical significance of any discovered archeological resource and describes the archeological and historical research methods employed in the archeological testing/monitoring/data recovery program(s) undertaken. Information that may put at risk any archeological resource shall be provided in a separate removable insert within the final report.

Once approved by the ERO, copies of the FARR shall be distributed as follows: the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS) at Sonoma State University shall receive one (1) copy and the ERO shall receive a copy of the transmittal of the FARR to the NWIC. The Napa County Planning Department shall receive three copies of the FARR along with copies of any formal site recordation forms (CA DPR 523 series) and/or documentation for nomination to the National Register of Historic Places/California Register of Historical Resources. In instances of high public interest in or the high interpretive value of the resource, the ERO may require a different final report content, format, and distribution than that presented above.

CR-3. Implementation of the proposed Jamieson Canyon Corridor Program projects could directly or indirectly destroy a unique paleontological resource or site or unique geological feature. (PS)

The proposed Jamieson Canyon Corridor Program projects are located within paved roadways and other adjacent developed areas that have experienced extensive disturbance during development of Napa County in the recent past. While most of these areas are urban developed landscapes, it is possible that known or unknown paleontological resources may be found at depths greater than previously disturbed within the limits of the proposed Jamieson Canyon Corridor Program projects. Therefore, the proposed Jamieson Canyon Corridor Program projects could directly or indirectly destroy a unique paleontological resource or site or unique geological feature. This impact is considered potentially significant.

MITIGATION MEASURES. The following mitigation measures would reduce potentially significant impacts resulting from implementation of the proposed Jamieson Canyon Corridor Program projects to a less- than-significant level. (LTS)

CR-3.1 Conduct Site Specific Studies and Surveys to Determine Presence of Paleontologic Resources or Unique Geological Features. The lead agencies of a specific project shall hire a qualified professional to conduct site-specific studies and surveys to determine presence of paleontological resources or unique geological features that could be affected by a specific project implementation. The lead agencies of a specific project shall implement the recommendations of the qualified professional to reduce or avoid potential impacts to paleontological resources or unique geological features.

CR-4. Implementation of the proposed Jamieson Canyon Corridor Program projects could disturb human remains, including those interred outside of formal cemeteries. (PS)

Areas within Napa County where transportation improvements are proposed could be located on or adjacent to previously identified or previously unidentified human burial sites. Construction of the proposed Jamieson Canyon Corridor Program project could result in

ground-disturbing activities and cause damage to known or unknown human burial sites. This impact is considered potentially significant.

MITIGATION MEASURE. The following mitigation measure would reduce potentially significant impacts resulting from implementation of the Jamieson Canyon Corridor Program projects to a less- than-significant level. (LTS)

CR-4.1 Halt Construction Activities and Contact County Coroner. If human remains and/or associated or unassociated funerary objects are discovered during any soils-disturbing activity, the soils-disturbing activity shall be halted within 100 feet of the find and the Napa County Coroner shall be notified immediately. In the event of the Coroner's determination that the human remains are Native American remains, notification of the California State Native American Heritage Commission (NAHC) should occur, who shall appoint a Most Likely Descendant (MLD). The archeological consultant, lead agencies of a specific project, and MLD shall make all reasonable efforts to develop an agreement for the treatment of, with appropriate dignity, human remains and associated or unassociated funerary objects. The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects.

Impacts under the Transportation Demand Management Program

Exact locations of specific projects proposed under the TDM program are not known at this time. Construction of the Napa VINE Transit Center, could occur within or adjacent to areas where historic, archeological, or paleontological sites are identified, or where unknown sites could be located. Impacts on these cultural resources resulting from implementation of this component of the TDM Program would not differ from those described above under impacts related to the Jamieson Canyon Corridor Program projects. Therefore, construction of the Napa VINE Transit Center would result in potentially significant impacts related to cultural resources. Implementation of Mitigation Measures CR-1.1, CR-2.1, CR-3.1, and CR-4.1, described above, would reduce these impacts, but not necessarily to a less-than-significant level; in those cases, these impacts would remain significant and unavoidable.

Other aspects of the TDM program, such as employer and employee education, guaranteed ride home, preferential carpool parking, and express bus service, would not involve construction and thus would have no adverse impact on cultural resources.

Impacts under the Safe Streets and Roads Maintenance and Congestion Relief Program

Projects under the Safe Streets and Roads Maintenance and Congestion Relief Program would include local roadway improvements, signal installations, and programs on safety, bicycles, pedestrians, and congestion relief. These improvements could occur within or adjacent to areas where historic,

archeological, or paleontological sites are identified, or where unknown sites could be located. Improvements such as road and street maintenance, rehabilitation, reconstruction including street widening and signalization could result in impacts similar to those described above under the Jamieson Canyon Corridor Program projects. Therefore, implementation of the Safe Streets and Roads Maintenance and Congestion Relief Program would result in potentially significant impacts related to cultural resources. Implementation of mitigation measures CR-1.1, CR-2.1, CR-3.1, and CR-4.1, described above, would reduce these impacts, but not necessarily to a less-than-significant level; in those cases, these impacts would remain significant and unavoidable.