

# Chapter 16 Historic and Cultural Resources

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## 1 What is the definition of historic, cultural, and archaeological resources?

A historic or cultural resource is any site, building, structure, object, district, traditional cultural place, or cultural/historic landscape that has historical significance at the local, state, or federal level. The Washington State Department of Archaeology and Historic Preservation (DAHP) uses the phrase “cultural and historic resources” for property types representing human culture and heritage, including sites, buildings, structures, objects, districts, traditional cultural places, and cultural/historic landscapes that have been identified and documented as being significant in local or state history, architecture, archaeology, engineering, or culture.

This chapter focuses on resources that qualify for listing in the Washington Historic Register, the National Register of Historic Places (NRHP), and local registers or landmark registries.

An archaeological resource is an artifact, feature, or site that helps us understand the human past. Archaeology uses scientific methods to explain how human societies developed over time and how they used their environment.

## 2 What are the different types of resources?

### Archaeological Sites

Archaeological sites include shell middens, open sites or campsites, pictographs and petroglyphs, caves or rockshelters, wet sites, lithic sites, quarries, culturally modified trees, and burial sites or cemeteries. Most sites reflect cultural uses by

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**Which elements of Washington Administrative Code (WAC) 197-11-444 are addressed in this chapter?**

This chapter addresses:

- Section (2)(b)(vi) Historic and cultural preservation

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**What is the Washington State Department of Archaeology and Historic Preservation (DAHP)?**

DAHP is Washington state’s primary expert on historic preservation and cultural heritage. The agency was established in 1967 in response to the National Historic Preservation Act.

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**What qualifies a resource to be listed on the Washington Historic Register?**

A resource qualifies for the Washington Historic Register when it is:

- In the National Register of Historic Places
  - At least 50 years old and has retained important characteristics from its historic period
  - Or if less than 50 years old, displays exceptional significance
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hunter-fisher-gatherer groups that go back as far as 12,000 years when humans first crossed the land bridge in the Bering Sea, from Asia to North America. Such uses include villages, camps, food gathering, and other seasonal activities. In the central Puget Sound region, these sites are often found along shoreline areas and waterways.

More recent archaeological sites include fur trade sites and early missions, military and homestead sites, as well as logging, mining, and railroad features.

Above-ground evidence of pre-historic sites is rare. The development of cities and communities along shoreline areas in the Puget Sound region has destroyed most above-ground evidence. There still may be below-ground evidence of pre-historic sites.

### **Traditional Cultural Properties**

Traditional cultural properties reflect the role a place or property plays in reflecting the beliefs, customs, and practices of a living community of people. In the central Puget Sound region, these resources most commonly reflect the history of Native American tribes. Both federally and nonfederally recognized tribes are allowed to identify traditional cultural properties.

### **Historic properties**

Historic properties reflect the history of the region. The historic era dates back to the early 1790s when the first contact between Native American tribes and European explorers was established. Euro-American settlement in the central Puget Sound region began in the 1850s. Early settlers farmed, logged, ranched, and mined in the area. Railroad construction connected communities in the 1870s, and the transcontinental railroad arrived in Seattle in 1893. The Klondike gold discovery in 1896 sparked a population and development boom throughout the Puget Sound region. Evidence of early Euro-American settlements is widespread in the region. Many historic buildings, bridges, and sites are listed on the NRHP,

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#### **What is an archaeological resource?**

Archaeological resources are physical sites where evidence of past activity is preserved. Past activities can include prehistoric, historic and contemporary activities.

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#### **What qualifies a resource to be listed on the National Register of Historic Places?**

Resources on the National Register are:

- At least 50 years old
  - Retain important character-defining features from the past
  - Have an association with events, activities, developments, or people who were significant in the past
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#### **What is a lithic site?**

Lithic analysis is the analysis of stone tools and other chipped stone artifacts. A lithic site would contain such artifacts.

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#### **What is a cultural resource?**

A cultural resource refers to the beliefs, customs, and practices of a living community that has been passed on for generations. In the central Puget Sound region, cultural resources are primarily associated with Native American tribes.

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#### **What is a historic property?**

A historic property is a site or structure that provides a valuable physical reminder of our region's past.

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the Washington Historic Register, and local historic registers. The majority of historic properties currently listed are concentrated in the major urban areas of Seattle, Tacoma, Bremerton, and Everett.

Exhibit 16-1 shows the historic and cultural resources listed on the Washington Historic Register as of 2008. The majority of resources listed on the state and national registers are from pre-World War II eras.

There is a growing interest in post-World War II properties and more recent properties dating back to the last 50 years. These properties are increasingly noted as being in need of protection because their qualities and significance may be overlooked and they are often in areas with high rates of redevelopment activities.

### 3 How are historic, cultural, and archaeological resources regulated?

Historic sites are regulated at the federal, state, and local government level. The following laws pertain to the preservation and protection of historic and cultural resources:

- Archaeology and Historic Preservation—Legislative Declaration: RCW 27.34.200 and WAC 25-12
- State Environmental Policy Act (SEPA)
- Shoreline Management Act (SMA)
- National Environmental Policy Act (NEPA)
- Section 106 of the National Historic Preservation Act of 1966
- Section 4(f) regulations of the U.S. Department of Transportation (FHWA, 2005)
- Archaeological Resources Protection Act of 1979



Pioneer Square is Seattle's oldest neighborhood, with buildings dating as far back as the late 1890s.

Source: Flemming, 1919

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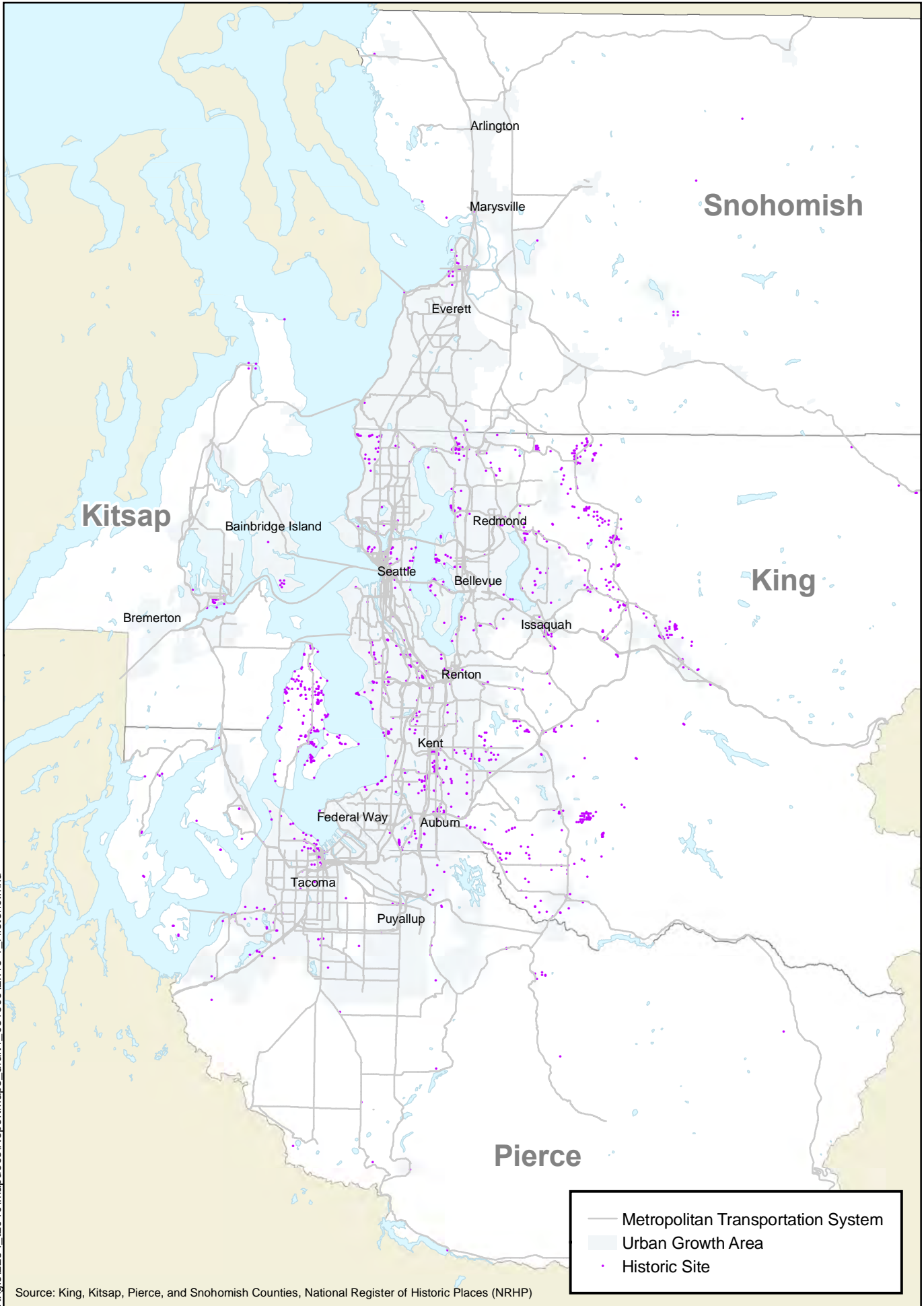
**For Washington state Law, refer to**

<http://apps.leg.wa.gov/RCW/default.aspx?cite=27.34.200>.

Washington state law promotes the designation, preservation, protection, enhancement, and perpetuation of any property, place, or artifact that reflects elements of the state's historic, archaeological, architectural, or cultural heritage.

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**Exhibit 16-1. Historic Properties Listed in the Washington Historic Register (Includes properties listed on the National Register of Historic Places)**



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Source: King, Kitsap, Pierce, and Snohomish Counties, National Register of Historic Places (NRHP)

Historic sites are regulated under federal law by the National Historic Preservation Act. A project that involves federal funding, federal permits, or federal lands is required, under Section 106 of the Act, to consider the effect of the project on historic or cultural resources within the region. The Section 106 review process involves consultation with the President's Advisory Council on Historic Preservation, the State Historic Preservation Officer, Native American tribes, and the public.

At the state level, Revised Code of Washington (RCW) 27.34.200 and Washington Administrative Code (WAC) 25-12 protect historic sites. SEPA requires that any impacts to historic and cultural resources, known or unknown, be considered during the project-level environmental review process. The SMA regulates development permits issued by local governments, including areas with archaeological sites.

At the local level, cities and counties frequently maintain local historic registers for historic and cultural resources in their municipality, and many have ordinances protecting resources.

Section 4(f) is part of the Department of Transportation Act of 1966. It states that it is a national policy to preserve, where possible, "the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites."

The Archaeological Resources Protection Act of 1979 applies to archaeological sites on both tribal and nontribal lands, which are managed under the federal government, such as the National Park Service and the Bureau of Land Management.

Compliance with Section 106, Section 4(f), and local historic preservation ordinances will be performed as applicable as part of project-level NEPA/SEPA documentation and review. Project-level planning should include consultation with the state DAHP, Native American tribes, and any affected local governments to determine the appropriate process for compliance with federal, state, and local historic preservation laws and regulations.

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#### **What is Section 106 Review?**

Section 106 review is a process whereby federal agencies are held accountable for the effects of their actions on cultural and historic resources. Section 106 requires coordination with Native American tribes and state and federal agencies charged with historic and archaeological protection.

Federal agencies are required to keep the public informed of possible effects to historic properties and artifacts and measures to mitigate effects.

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#### **What is the difference between plan-level and project-level environmental review?**

This FEIS is a plan-level (rather than a project-level) EIS. Accordingly, alternatives are defined and environmental effects are evaluated at a relatively broad level. More detailed project-specific environmental review will be developed as appropriate in the future for projects identified in the Transportation 2040 plan that are selected for implementation by their sponsors: Washington State Department of Transportation (WSDOT), transit agencies, and local jurisdictions.

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#### **4 What effects to historic, cultural, and archaeological resources are common to all alternatives?**

##### **Long-term Effects**

Effects to historic, cultural, and archaeological resources are possible with any of the alternatives. Impacts to historic resources are most likely when land is disturbed as part of construction of new or expanded transportation facilities. Impacts are more likely to overlap with historic, cultural, or archaeological resources near areas of water in the case of archaeological sites; and in urban areas in the case of historic properties. Effects to traditional cultural properties could also occur in any context and are difficult to predict at a nonproject level of environmental review. Generally, effects are defined as any action that alters the characteristics of a property that qualify it for inclusion in the national, state, or local register. The Section 106 process further defines adverse effects where alteration of a property significantly diminishes the historic integrity of the property to the point where it is no longer eligible for inclusion in the NRHP. Long-term effects can include the following:

- Destruction of historic properties required for project rights of way
- Isolation from or alteration of historic setting
- Restriction of access
- Economic deterioration of commercial districts or the deterioration of livability in residential districts
- Out-of-character visual, audible, or atmospheric elements
- Deterioration of property or setting through vibration, erosion, or other long-term negative change to its environment

##### **Construction Effects**

Construction activities have the potential to disturb archaeological sites and alter, damage, or remove historic

properties. Clearing and grading activities in advance of construction also have the potential to result in the discovery of archaeological sites or artifacts that were not previously cataloged. Construction effects to historic properties can include the following:

- Physical destruction, damage, or alteration, including removal, relocation, or demolition
- Isolation from historic setting or changing of the character of the setting
- Restriction of access
- Out-of-character visual, audible, or atmospheric elements
- Deterioration of property or setting through vibration, erosion, or other negative change to its environment

These types of effects are most likely to take place in urban areas where there are relatively high densities of historic properties, and on older rail and roadway corridors where the proximity to historic properties is likely to be greater.

## **5 What effects to historic, cultural, and archaeological resources are specific to individual alternatives?**

The types of effects described in the response to Question 4 could occur under any of the proposed Transportation 2040 alternatives, including the Baseline Alternative. This question does not seek to identify specific effects to historic and cultural resources. Instead, it uses the amount of new transportation infrastructure contained in each alternative to compare the possible total effect to historic and cultural resources in the region.

As noted in the sidebar, this plan-level FEIS will not list the specific individual effects that could result from all of the projects contained in each Transportation 2040 alternative. In addition, it is not practicable to conduct a regionwide evaluation of the collective effect on the region's historic and cultural resources from all projects. Therefore, this plan-level

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### **Why does this FEIS not list the specific environmental effects caused by each alternative?**

Each of the Transportation 2040 alternatives contains hundreds of individual projects. If constructed in the future, these projects could affect the region's built and natural environments.

For some environmental disciplines, such as transportation or air quality, these projects could affect the environment in the vicinity of the project and also could collectively affect the regional environment. For these disciplines, this FEIS contains an analysis to evaluate the potential regional effects of these projects. The localized effects for these environmental disciplines will be identified in a future project-level environmental review.

For other environmental disciplines, such as historic and cultural resources, individual projects could affect the historic resources in their vicinity, but would not affect historic resources elsewhere in the region. Therefore, this FEIS does not contain a regionwide analysis for these disciplines. Future project-level environmental review will identify the specific localized effects on these environmental areas.

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FEIS does not contain a regionwide analysis of historic and cultural resources.

However, it is possible to provide an approximation of which alternatives could result in the greatest number of effects on historic and cultural resources. The Transportation 2040 alternatives contain varying levels of new transportation infrastructure (Exhibit 16-2), and it is likely that the alternatives with the most new infrastructure would result in the greatest number of effects on historic and cultural resources.

**Exhibit 16-2<sup>1</sup>**  
**Miles of New Infrastructure Included in Each Alternative**

Facility Type	Base Year 2006	Baseline Alt	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Preferred Alt
Systemwide freeway and arterial lane miles	12,806	13,153	13,352	14,013	13,540	13,489	13,329	13,764
New freeway and arterial lane miles	-	348	546	1,208	735	683	523	958
Portion of new lane miles in new corridors	-	30	40	240	218	159	40	248
Light rail miles	2	55	55	82	55	82	82	86
New light rail miles		53	53	80	53	80	80	84
Commuter rail miles	74	82	82	82	82	82	128	128
New commuter rail miles	-	8	8	8	8	8	54	54
Total new miles of road and rail	-	409	607	1296	796	771	657	1096
Percent increase from 2006	-	3%	4%	9%	6%	5%	4%	7%
Nonmotorized facility miles	570	600	747	745	740	745	1058	1123
New nonmotorized facility miles	-	30	177	175	170	175	488	553

As shown in Exhibit 16-2, all of the alternatives contain similar amounts of new infrastructure, which is measured as a percentage of the total Metropolitan Transportation System (3 to 9 percent). Alternative 2 contains the greatest number of new miles of road and rail, while the Baseline Alternative contains

<sup>1</sup> This exhibit has changed since the DEIS.



the fewest. Of the action alternatives, Alternative 1 contains the fewest number of new miles of roads and rail. Therefore, Alternative 2 would likely result in the highest number of effects on historic and cultural resources and the Baseline Alternative would likely result in the lowest number. Among the action alternatives, Alternative 1 would likely result in the lowest number of effects on historic and cultural resources. The number of effects resulting from Alternatives 3, 4, and 5 would likely fall between the overall number of effects expected for Alternatives 1 and 2.

The Preferred Alternative includes the second-greatest number of new miles of roads and rail. Therefore, the Preferred Alternative would likely result in the second-greatest number of effects on historic and cultural resources.

The comparisons presented here are intended to approximate the number of effects expected from each alternative and do not identify specific effects to historic and cultural resources. Future project-level environmental review will identify these effects.

### **Potential Proximity Effects**

To assess potential impacts to historic and cultural resources, the FEIS used the historic and cultural resources spatial database created by PSRC, and overlaid the location of projects within each alternative.

Exhibit 16-3 shows the number of historic and cultural resources in the central Puget Sound region that may potentially be affected—either positively or negatively—under each alternative, based on future transportation projects that would be located within 100 feet of a historic or cultural resource.

The Geographic Information System (GIS) data shown in Exhibit 16-3 indicate that the Preferred Alternative contains the most roadway and transit projects and therefore would likely result in the greatest number of effects on historic and cultural resources. The Baseline Alternative contains the fewest roadway and transit projects and therefore would likely result

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### **Changes to the Proximity Analysis**

The method used to assess proximity impacts to historic and cultural resources in the FEIS has been modified from that used in the DEIS. The DEIS listed the number of resources within 100 feet of projects whereas the FEIS lists the number of projects within 100 feet of a historic, cultural, or archaeological site. This change was made to be consistent with the method used to assess proximity impacts in Chapter 10: Ecosystems and Endangered Species Act Issues.

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### **What are the limitations of the proximity analysis?**

The purpose of the proximity analysis was to identify relative potential for impacts among alternatives, not to identify absolute numbers of potential impacts. As these projects are implemented, the actual number of impacts would be far less than shown, since the projects would be designed to avoid these impacts.

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in the fewest effects on historic and cultural resources. Among the action alternatives, Alternative 3 would likely result in the fewest effects on historic and cultural resources. Nonmotorized projects are not likely to result in negative effects on historic and cultural resources.

**Exhibit 16-3<sup>2</sup>**  
**Historic, Archaeological, or Cultural Resources within 100 feet of a Project**

Project Type	Baseline						Preferred
	Alt	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt
Transit, roadway, and ferry-related projects	23	32	51	30	45	48	75
Nonmotorized projects	0	13	7	7	7	29	17*

\*Alternative 5 included many small bike concepts in urban centers throughout the region. During review of the Draft EIS (DEIS) alternatives, it was discovered that many of these concepts were already built, others were unable to find a sponsor, and others were deleted for other reasons. Concurrently, a smaller number of long nonmotorized projects were added to the Preferred Alternative that were not in Alternative 5. This explains why the total nonmotorized mileage increased for the Preferred Alternative relative to Alternative 5, but the number of project proximity impacts decreased.

## 6 What cumulative effects to historic, cultural, and archaeological resources could occur if the Transportation 2040 actions coincide with other planned actions?

Transportation improvements through 2040 are expected to coincide with the increased urbanization of the region to accommodate future population and employment growth, identified in VISION 2040. Without oversight and protection by local, state, and federal government and by private entities, these activities could result in the loss of properties and artifacts that provide important information about the region and its peoples’ past. At the same time, development and growth can provide opportunities for redevelopment and reuse of historic or culturally significant structures.

Future cumulative effects on historic and cultural resources could be affected by other regional plans and actions. Local jurisdictions throughout the region may revise their existing land use plans to be consistent with VISION 2040 and complement the Transportation 2040 Preferred Alternative.

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### What are cumulative effects?

Cumulative effects address the impact on the environment, which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

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<sup>2</sup> This exhibit has changed since the DEIS.

New development resulting from these plans could have both positive and negative effects on the environment.

PSRC has performed an analysis of the development pattern changes that could result from the Transportation 2040 alternatives (refer to Chapter 5: Land Use, Population, Employment, and Housing) and has concluded that none of the action alternatives would induce future land use and development pattern changes that are substantively different than the Baseline Alternative. In addition, all of the Transportation 2040 alternatives are consistent with the adopted VISION 2040 Regional Growth Strategy. Therefore, none of the Transportation 2040 alternatives would result in additional cumulative effects on historic and cultural resources.

## **7 How can the effects to historic, cultural, and archaeological resources be mitigated?**

Appropriate mitigation measures for any of the Transportation 2040 alternatives would be determined in consultation with the lead agency, DAHP, Native American tribes, relevant local governments, and the public during project-level review. Potential mitigation measures are described below by resource type. Avoidance of archaeological sites, traditional cultural properties, and historic properties is the preferred strategy for all future regional transportation projects.

### **Archaeological Sites**

Mitigation for archaeological sites could involve the following measures:

- Review records to determine the location of known sites, prior to project site selection.
- Conduct archaeological monitoring during construction (to mitigate potential effects to unrecorded sites).
- Perform subsurface testing.
- Conduct data recovery excavations if sites are known or discovered.

- Monitoring, and in some cases subsurface testing, could be recommended in high probability areas, such as near lakes, rivers, and shorelines.
- Significant archaeological sites could be fully excavated to recover data that have the potential to contribute important information. If sites are discovered and found to be ineligible for inclusion in the national, state, or local registers, no further work is typically required.

### **Traditional Cultural Properties**

If effects to traditional cultural properties eligible for inclusion in the NRHP are identified, all reasonable and feasible measures should be taken to avoid or minimize effects to these properties. Mitigation measures should be developed in consultation with the appropriate Native American tribes, or through consultation with other affected communities.

### **Historic Properties**

If effects to historic properties are identified at the project level, efforts could be made to relocate facilities to avoid the impacts. If facilities cannot be relocated, the following potential measures could be implemented to minimize the impacts:

- Ensure design compatibility of facilities near historic districts or sites.
- Require planning for the use or reuse of the historic property as part of project planning.
- Provide landscaping elements and/or walls to lessen noise and visual effects.
- Modify construction methods to avoid or limit construction-related effects (noise, dust, emissions, and vibrations).
- Monitor construction to ensure no significant effects occur.
- Relocate historic properties only as a last resort.



The Cobb Building in Seattle was built in 1910 and recently remodeled to include luxury apartments.

Source: Wikimedia Commons

If no alternative to relocation or demolition exists, historic properties should be fully documented to standards agreed upon by the lead agency, DAHP, relevant Native American tribes and local governments, any consulting parties, and the public. All rehabilitation or relocation work should be done in a manner consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties, or other agreed-upon standards. Additional mitigation for property removal could include interpretive displays and photographs of the affected properties or of the area's history. These displays would be located in or near the former location of the historic property.

### **8 Are there any significant unavoidable adverse effects to historic, cultural, and archaeological resources?**

Some significant unavoidable adverse effects on historic and cultural resources could occur under the Baseline Alternative and action alternatives. Effects to historic and cultural resources during construction may be unavoidable and could be significant and adverse in some locations. Such effects may include the following:

- The acquisition, demolition, or alteration of historic, cultural, or archaeological properties, or the use of a portion of such properties
- The potential for increased noise, vibration, dust and emissions, and visual changes to historic settings

Unavoidable effects would be evaluated further during project-level environmental review. These effects are anticipated to be few and localized in nature. Reasonable and feasible mitigation measures would be implemented to avoid or minimize these effects in accordance with applicable regulations.