

Affected Section 4(f) Resources



DRAFT SECTION 4(f) EVALUATION

1 What is Section 4(f)?

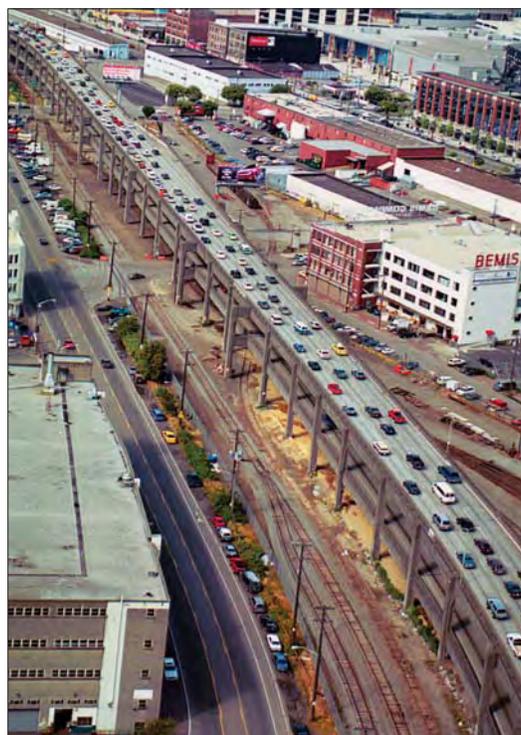
Section 4(f) refers to a section of the Department of Transportation Act of 1966 that established the policy “*that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites.*” (These requirements are codified in federal law at 49 U.S.C. 303.)

Section 4(f) requires that transportation projects with federal involvement avoid use of:

- Park and recreation land (specifically publicly owned land of a significant public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance), or
- Historic resources (specifically a historic site of national, state, or local significance) on or eligible for the National Register of Historic Places.

In discussing Section 4(f), the term “use” may mean either a direct use or constructive use. A direct use occurs when land is permanently incorporated into a transportation facility or when there is a temporary occupancy of land that is adverse to a Section 4(f) resource. Temporary occupancy of a resource is not considered adverse under the Section 4(f) statute if all of the following conditions are satisfied:

1. The duration must be temporary (i.e., shorter than the period of construction).
2. The scope of work must be minor, with only minimal changes to the protected resource.
3. There are no anticipated permanent adverse physical effects, or interference with the activities or purposes of the resource on either a temporary or permanent basis.
4. The resource being used must be fully restored to a condition which is at least as good as that which existed prior to the proposed project.



The Alaskan Way Viaduct near S. Atlantic Street

5. There must be documented agreement of the appropriate officials having jurisdiction over the resource regarding the above conditions.

Constructive use occurs when a project's proximity effects are so severe that the protected activities, features, or attributes that qualify a resource for protection under Section 4(f) are substantially impaired.

To make use of such resources, the Federal Highway Administration (FHWA) must determine that:

- There is no feasible and prudent avoidance alternative to using that resource; and
- The program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.

2 How is it determined that there are no alternatives to using a Section 4(f) resource?

To demonstrate that there is no feasible and prudent avoidance alternative to the use of Section 4(f) resources, an evaluation must address:

- Location alternatives, and
- Design shifts that avoid the Section 4(f) resource.

3 What alternatives were considered?

This evaluation considers the Build Alternative because it more effectively meets the purpose and need for the project than other alternatives considered during project development. Alternatives that would retain or repair the viaduct are not considered because the ability of the viaduct to withstand earthquakes needs to be improved. The viaduct is vulnerable to earthquakes because of its age, design, and location. The viaduct's existing foundations are embedded in liquefiable soil, and the structure is deteriorating. These factors make the structure vulnerable to earthquakes and necessitate its replacement. An effort to seismically retrofit and repair the viaduct would not be reasonable as a long-term solution because it would cost 80 to 90 percent of the cost of a new structure without meeting modern design standards.

Roadways

The Build Alternative would replace the existing viaduct between S. Holgate Street and S. King Street with a safer facility that meets current seismic and roadway design standards.

These improvements would replace approximately 40 percent of the existing viaduct structure located between S. Holgate Street and the Battery Street Tunnel.

Near S. Holgate Street, SR 99 would transition from an at-grade roadway to a side-by-side aerial roadway crossing over S. Atlantic Street and the BNSF tail track. SR 99 would return to grade for a short distance north of S. Royal Brougham Way. SR 99 would then transition to a stacked, aerial structure to match the existing viaduct at about S. King Street. As part of the design, S. Royal Brougham Way would be closed between First Avenue S. and Alaskan Way S. A new northbound off-ramp and southbound on-ramp would be provided just south of S. King Street. The existing northbound on-ramp and southbound off-ramp at First Avenue S. would be maintained.

New roadways and connections would be provided near S. Atlantic Street. These connections include:

- Providing a new grade-separated access for freight and general purpose traffic traveling between the Seattle International Gateway (SIG) Railyard, SR 519, and the Port of Seattle. This access would be provided by a new U-shaped undercrossing below SR 99 on the north side of S. Atlantic Street. This new connection would improve vehicle access by providing a route for east-west traffic when railroad cars on the tail track block the at-grade roadway.
- Improving Colorado Avenue S. to enhance access to the new North SIG Railyard. These improvements would include providing two dedicated truck-only lanes southbound and one dedicated truck-only lane northbound on the west half of Colorado Avenue S., and one general purpose traffic lane in each direction on the east half of Colorado Avenue S.
- Providing northbound and southbound frontage roads that would provide access between Alaskan Way S. and E. Marginal Way S. In addition, the northbound frontage road would provide access from S. Atlantic Street to the new remote holding area for Seattle Ferry Terminal traffic and to Alaskan Way S.
- Reconfiguring the intersections where S. Atlantic Street meets Alaskan Way S., the new U-shaped undercrossing, Colorado Avenue S., the new frontage roads, and Utah Avenue S.

What is the tail track?

The tail track is a single railroad track that connects the BNSF Seattle International Gateway (SIG) Railyard on the east side of SR 99 to the Whatcom Railyard located west of SR 99. The tail track is used to assemble and sort railroad cars for both railyards.

Rail

The tail track would be relocated west of the new SR 99 roadway and would extend north from the railyard to the vicinity of S. King Street. This would help to maintain connections between the Whatcom Railyard on the west side of SR 99 and the SIG Railyard on the east side of SR 99.

Ferry Holding

A new remote holding area for Seattle Ferry Terminal traffic would be added between S. Royal Brougham Way and S. King Street along the east side of SR 99. The remote holding area would be accessed via the northbound frontage road.

Bicycle and Pedestrian Facilities

Existing bicycle and pedestrian access would be maintained or improved as part of this project.

4 What is the project's purpose and need?

The purpose of this project is to replace the SR 99 mainline with a seismically sound structure between approximately S. Holgate Street and S. King Street. In this area, the new SR 99 facility would maintain or improve access to, from, and across SR 99 for general purpose vehicles, transit, and freight. This portion of SR 99 (also known as the Alaskan Way Viaduct) is deteriorating and vulnerable to earthquakes.

The project is not only needed to address seismic vulnerability, but also roadway design deficiencies and to support transportation functions in the area. The viaduct has narrow lanes and lacks or has narrow shoulders that do not meet current roadway design standards. This affects roadway safety, operations, and capacity. The transportation system in this area plays a crucial role in the movement of goods and services. Specific areas where access needs to be improved to support key transportation functions in this area include:

- Transit access into downtown. Transit access to downtown is currently provided at Columbia and Seneca Streets, which are located in the middle of downtown. Transit access could be improved if access to and from SR 99 were provided south of downtown.
- East-west access across SR 99 between the Port and Duwamish industrial facilities, railyards, and the stadiums. This access is currently provided via at-grade connections at S. Atlantic Street and S. Royal Brougham Way and is often blocked by trains.

What is remote ferry holding?

Remote ferry holding is an area where vehicles would wait to enter the Seattle Ferry Terminal when the dock is full. Typically, remote ferry holding is needed during the peak summer season and on holidays.

5 Who did we coordinate with to determine what resources would be affected?

Section 4(f) requires consultation with the Department of the Interior and, as appropriate, the involved offices of the Departments of Agriculture and Housing and Urban Development in developing transportation projects and programs that use resources protected by Section 4(f).

Coordination for this Section 4(f) evaluation included meetings, field visits, and drafting preliminary memoranda outlining Section 4(f) issues with representatives of the City of Seattle and the Department of Archaeology and Historic Preservation (DAHP).

6 What archaeological resources affected by the project are protected by the provisions of Section 4(f)?

Construction activities for the new SR 99 structure could potentially affect archaeological resources through excavation, pile-driving, and soil improvement. Any archaeological site encountered during construction that is historically significant would be subject to Section 4(f) provisions, unless it is important chiefly because of what can be learned by data recovery and has minimal value for preservation in place.

What avoidance measures have been identified?

There are no avoidance or design alternatives that would eliminate the need for excavation and other activities that could potentially affect archaeological resources.

What planning to minimize harm has been incorporated into the project?

Harm to significant archaeological sites discovered during construction would be minimized through scientific data recovery or other suitable measures determined in consultation with the State Historic Preservation Officer (SHPO), affected Indian tribes, and other concerned parties. To minimize potential damage, construction would be conducted under the auspices of a discovery plan that would include a provision for inadvertent discovery of cultural material or human remains. Subsurface coring is underway at excavation and foundation locations to better establish the potential for encountering archaeological resources.

7 What historic resources affected by the project are protected by the provisions of Section 4(f)?

The only historic resource determined to be protected under the provisions of Section 4(f) and subject to use by the proposed project is the existing Alaskan Way Viaduct, which would be demolished within the project area.

The viaduct is protected under Section 4(f) because it was determined eligible for inclusion in the National Register. Authorized under the National Historic Preservation Act of 1966, and administered by the National Park Service, the National Register is part of a program to coordinate and support public and private efforts to identify, evaluate, and protect historic and archaeological resources.

What resources would be used by the proposed action?

The viaduct has been determined eligible for listing in the National Register under Criterion A (see sidebar) for its association with bridge and tunnel building in Washington in the 1950s and under Criterion C for its type, period, materials, and methods of construction. It is the only multi-span concrete double-level bridge in the state. It is also significant for its role in the development of the regional transportation system and of Seattle's waterfront. It would be demolished within the project area to construct the new SR 99 structure.

What avoidance measures have been identified?

There are no avoidance or design alternatives that would avoid replacement or complete reconstruction of the existing viaduct given its inherent structural limitations and high risk of failure during a seismic event.

What planning to minimize harm has been incorporated into the project?

To comply with the National Historic Preservation Act, a Memorandum of Agreement for effects to historic and archaeological resources will be completed in coordination with WSDOT, FHWA, DAHP, Advisory Council on Historic Preservation (ACHP), affected tribes, and the City of Seattle. To mitigate for removal of the viaduct, prior to issuance of the Finding of No Significant Impact (FONSI), documentation will be completed on the viaduct structure in accordance with Level 2 Historic American Engineering Record (HAER) standards. Photographs have already been taken for the HAER documentation.

What determines National Register eligibility?

To be eligible for inclusion in the National Register, a resource must meet one or more of the following criteria:

- **Criterion A** – the resource is associated with events that have made a significant contribution to the broad patterns of our history.
- **Criterion B** – the resource is associated with the lives of persons significant in our past.
- **Criterion C** – the resource embodies distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction.
- **Criterion D** – the resource has yielded, or may be likely to yield, information important in prehistory or history.

8 What park, recreation, and historic resources are not discussed in this evaluation?

Park, recreation, and historic resources not discussed in this evaluation are either:

1. Not protected by Section 4(f), or
2. Are subject to effects that would not substantially impair the activities, features, or attributes that qualified the resource for protection under Section 4(f).

Appendix D Part B addresses in detail the resources that were evaluated but were not subject to use or substantial impairment, such as the Pioneer Square-Skid Road National Historic District and the Bemis Building. *Appendix D Part C* includes historic inventory forms for buildings evaluated as part of the project.

In many cases, although these resources are adjacent to the construction site, the new SR 99 structure would maintain access to the resource and would not result in noise or other effects that would substantially impair the public's ability to access and enjoy the resource.

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ACRONYMS

A

ACHP Advisory Council on Historic Preservation

B

BMP Best Management Practice

C

CO Carbon monoxide

D

DAHP Department of Archaeology and Historic Preservation

dBA A-weighted decibels

E

EA Environmental Assessment

EIS Environmental Impact Statement

EPA U. S. Environmental Protection Agency

F

FHWA Federal Highway Administration

FONSI Finding of No Significant Impact

H

HAER Historic American Engineering Record

HOV high-occupancy vehicle

I

I-5 Interstate 5

ITS Intelligent Transportation Systems

M

mph miles per hour

MSAT mobile source air toxics

N

NAAQS National Ambient Air Quality Standards

NEPA National Environmental Policy Act

P

PM₁₀ particulate matter less than 10 micrometers in size

PM_{2.5} particulate matter less than 2.5 micrometers in size

S

SHPO State Historic Preservation Officer

SIG Seattle International Gateway

SR State Route

T

TSS total suspended solids

W

WOSCA Washington-Oregon Shippers Cooperative Association

WSDOT Washington State Department of Transportation

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Included on CD only

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Appendix H. Draft Memorandum of Agreement