The existing ferry terminal on the Mukilteo waterfront would be removed, with its 300 piles. The fishing pier and day moorage at the current terminal site would be demolished as part of the ferry terminal removal and would be rebuilt.

Land Components

The alternative is largely designed to avoid excavation within the boundaries of a prehistoric archaeological site and to locate more of the facility's footprint to the east of the archaeological site. Sited on the eastern portion of the Mukilteo Tank Farm, it would include parking areas, toll booths, ferry vehicle holding areas, and shoreline promenades. Pedestrians would not be able to cross in front of the trestle to travel between the two promenades and access along the waterfront would not be continuous. The site's vegetated area would include an area east of the First Street/Park Avenue intersection that would be designed to help meet stormwater management requirements, and could also provide an opportunity to develop public open space. Japanese Creek, which currently runs in a pipe culvert below the Mukilteo Tank Farm, would be restored to an open stream north of the extended First Street, and this open space area would include a 50-foot buffer on either side of the stream. A pedestrian bridge would cross the creek near the shoreline. New lighting would illuminate First Street and the terminal facilities, including holding areas.

As with the No-Build and Existing Site Improvements alternatives, the vehicle holding areas would have capacity for approximately 216 vehicles. A terminal supervisor's building would be constructed above four new toll booths east of the holding area. This structure would be oriented north/south and would be 35 feet high to provide vehicle clearance while accommodating all necessary facilities within the site.

First Street would be realigned and extended as a four-lane roadway from SR 525 to the Mount Baker Terminal. A new signalized intersection with SR 525 would be constructed at First Street. The First Street/Park Avenue intersection would be reconstructed to provide access to a reconfigured parking and access area for Mukilteo Station. The First Street extension, which would generally follow the southern portion of the Mukilteo Tank Farm, would also provide sidewalks and bicycle lanes, and two new signalized intersections at either end of the parking area for internal circulation.

Security fences and gates would be constructed to allow WSF to secure the holding area during periods of heightened security, as required by the U.S. Coast Guard.

The upland elements of the existing ferry terminal on the Mukilteo waterfront would be removed, including its buildings; in addition, the holding area and existing ferry employee parking area would be vacated.

Transit Facilities

A transit center with six bus bays serving scheduled routes and paratransit service would be constructed west of the new terminal. Compared to the existing bus stops on SR 525, the new transit center would be approximately the same distance to the Mukilteo Station, but slightly farther from the ferry. An area would be provided near

the transit facility for ferry passenger drop-off and pick-up. The transit facility would also provide an area for ferry employee parking.

Several elements of Mukilteo Station would be modified. Driveway access and parking stall striping would be reconfigured, but the total number of parking stalls would be the same. New driveways would be added to and from the realigned First Street. New sidewalks would connect to the new bus bays and ferry terminal to the east.

2.2 Construction Approach and Activities

The construction of any of the project alternatives would be a major activity that could last several years.

Despite its name, the No-Build Alternative would still involve construction activities for the replacement of the terminal's aging infrastructure, as discussed above in *Section 2.1.1*. All of the Build alternatives would remove the existing terminal, and would construct an improved terminal and supporting facilities with either a different layout (Existing Site Improvements Alternative) or at a new site (Preferred Alternative and Elliot Point 1 Alternative). The Build alternatives would have more construction activities and the longest uninterrupted construction duration (up to 2 years), while the No-Build Alternative would have intermittent construction over a longer period, potentially decades. The length of construction could be either longer or shorter depending on design, permit conditions, phasing, and the contractor's construction approach. Preconstruction activities such as property acquisition, demolition, and utility relocations could occur soon after completion of the environmental process, which is expected by 2013. Construction would also depend on the availability of funding and other approvals, but major activities could begin by 2015, and a terminal could begin operation in 2018.

All of the alternatives were designed to avoid or limit excavation in areas known to contain archaeological resources. In many areas, the approach emphasizes using fill rather than excavating. Excavation is needed for some types of construction, such as foundations or utilities, but features requiring excavation have been located outside of sensitive areas as much as possible.

Typical Durations and Phasing

No-Build Alternative

Construction would remove and alter the features needed for vessel berthing, loading, and unloading. During initial construction, ferry service would be limited, possibly eliminating some late evening/night, weekend, or midday sailings. During the replacement of the tower, bridge seat, transfer span, and related structures, a full closure of 4 to 9 months is expected, and service would be re-routed to Edmonds. It is possible that passenger-only service could be provided to Mukilteo. The No-Build Alternative's overall terminal preservation program could last about a year, if all elements were funded for completion during the same period.

Preferred Alternative (Elliot Point 2) and Elliot Point 1 Alternative

Both of these alternatives would largely be developed on a different site away from the existing terminal, minimizing the need to close the terminal prior to opening the

new terminal. The existing terminal would be removed after the new multimodal facility is in operation. The shift to the new terminal could occur overnight, or with a short closure at night or on a weekend.

Existing Site Improvements Alternative

This alternative would leave the current terminal operational until many of the replacement elements are constructed. Construction would still require schedule changes, including limited evening or weekend sailings, or weekend closures, but compared to the No-Build Alternative more of the site and facilities could be developed without affecting ongoing ferry operations. The terminal would still need to be closed for regular ferry service during final construction of the trestle elements, which would be directly in the path of current operations. It is possible that passenger-only service could be provided to Mukilteo. During final construction, regular ferry service would be re-routed to Edmonds for 1 or 2 months.

Typical Construction Activities and Staging

Except for the No-Build Alternative the major activities, such as demolition of existing buildings and the construction of new buildings, roadways, and other facilities, would occur for up to 2 years. Construction activities that would affect access would be planned, staged, and completed in a manner that would minimize disruption to the natural environment, transportation, businesses, and residents. The duration of heavy civil construction in front of any particular property is not anticipated to exceed 6 to 12 months.

The most complex structures being removed and constructed for the project are the in-water facilities. Structures to be removed (varying by alternative) include the existing pile-supported trestle and bulkhead (all Build alternatives), as well as the Tank Farm Pier (Preferred Alternative and Elliot Point 1), and the Port of Everett fishing pier and day moorage (all Build alternatives). A variety of techniques could be used to remove the existing marine structural components, depending on their condition, permitting requirements, and environmental conditions. The piles could be removed using vibratory methods, direct pulling of the piles, or cut at the mudline. The deteriorating condition of some of the piles may require capping or other partial removal methods.

The alternatives involving the Mukilteo Tank Farm would require dredging or other sediment removal for navigation.

Other major construction activities include:

- Demolition and disposal of Mukilteo Tank Farm facilities (pavement and structures, including buildings and foundations, concrete slabs and paving, light poles, power poles, tank containment walls and footings, utility lines and structures, and steel tank bottoms)—Preferred Alternative and Elliot Point 1 Alternative
- Trenching for relocation or replacement of utilities, including power, gas, sewer, water, stormwater, and communications

- Clearing, grubbing, excavation, fill, grading, and disposal of materials
- Construction of temporary in-water structures
- Construction or reconstruction of structures, including retaining walls, bulkheads, and the terminal buildings (including associated footings)
- Pile driving
- Drilled shaft or stone column installation (could require temporary roads or fill in shoreline and beach areas)
- Concrete casting
- Roadway construction, including intersections, signal systems, sidewalks, bicycle facilities, and trails
- Landscaping
- Transport of workers, equipment, materials, and debris
- Storage of equipment, including heavy trucks, cranes, and bulldozers, as well as storage of construction materials and debris

2.3 Alternatives Development Process

Nearly three decades of planning activities have focused on different approaches and alternatives to address the need for an improved multimodal facility serving travel between Whidbey Island and the Mukilteo area. Alternatives for improving the terminal have been discussed in various efforts since the 1970s. The City of Mukilteo completed a *Mukilteo Multimodal Terminal and Access Study* in 1995 (City of Mukilteo 1995). WSDOT began detailed master plan efforts with multiple concepts in the *Mukilteo Multimodal Terminal Master Plan Design Report* (WSDOT 2004). This was followed by additional planning, design, and environmental studies of a variety of concepts.

Appendix E, Alternatives No Longer Considered, identifies the previously considered alternatives developed throughout the planning process and summarizes the reasons why other alternatives are no longer being considered. The project has also produced an *Alternatives History through 2009* report (WSDOT 2010), which provides additional detail on the alternatives and concepts previously considered.

Alternatives Considered for the Current EIS

The discussion below describes how WSDOT developed the alternatives now being considered. In 2010, WSDOT developed nine concepts, or initial alternatives, to meet the purpose and need of the project. The focus was on improved constructability and environmental performance compared to the alternatives considered in the 2004 EA and 2006 EIS processes, particularly in terms of impacts on cultural resources and marine and shoreline areas. These initial alternatives built on lessons learned through earlier efforts to address current terminal deficiencies, improve operating efficiency and safety, reduce costs, and develop more compact designs to reduce impacts on archaeological sites and natural resources.

Using transportation performance, constructability, policy, and environmental measures, FTA, WSDOT, and their stakeholders evaluated the initial alternatives.

The initial alternatives included modifying the current terminal site; relocating the terminal to Elliot Point north of the existing terminal; or relocating it entirely to Edmonds or Everett:

- Existing Mukilteo Terminal
  - No-Build Alternative
  - Existing Site Improvements Alternative
- Elliot Point (Mukilteo Tank Farm)
  - Elliot Point – Option 1
  - Elliot Point – Option 2
  - Elliot Point – Option 3
  - Mount Baker Terminal
- Edmonds
  - Edmonds – Existing Terminal
  - Edmonds – Existing Site Improvements
  - Point Edwards
- Everett
  - Port of Everett South Terminal

The alternatives were evaluated by WSDOT and FTA using a set of criteria based on the project's purpose and need. These criteria included the ability of each alternative to meet the project's design, operational, environmental, and technical objectives. The results were shared with agencies, tribes, and the public during the scoping period. At the conclusion of the scoping process in 2010, WSDOT and FTA found that the three Build alternatives in Mukilteo have the best potential to meet the project's purpose and need and achieve regulatory and stakeholder approvals. The public comments during the scoping period overwhelmingly supported this direction.

Some public comments also suggested the project should include park-and-ride spaces to serve people who may want to drive to the terminal and then walk on to the ferry. WSDOT does not currently have spaces for this purpose at Mukilteo, although the City of Mukilteo has monthly permit spaces near the current terminal. WSDOT considered the direction of the Long-Range Plan, as well as cost, environmental impacts, safety, transportation benefits, and the limited available waterfront land in evaluating the various concepts. WSDOT found that alternatives focusing on multimodal improvements, reducing vehicle trips, improving safety and security, and minimizing environmental impacts best met the purpose and need.

The alternatives that failed to advance for evaluation in the EIS included relocating the terminal to the Port of Everett South Terminal or Edmonds, and developing a ferry terminal at the Port of Everett Mount Baker Terminal. These alternatives failed to satisfy the project's purpose and need because of worsened transportation performance, including traffic impacts, longer travel times, reduced service, and poor

multimodal connections; environmental impacts stemming from the displacement or conflicts with existing marine-dependent uses; and socioeconomic impacts anticipated from the loss or reduction of service to the city of Mukilteo. During scoping, the project also received written comments from a large number of its participating and cooperating agencies opposing the Everett and Edmonds alternatives.

Appendix E, Alternatives No Longer Considered, details the rejected alternatives, shows the screening evaluation measures and results, and describes the extensive process FTA and WSDOT conducted with the public, the project's cooperating and participating agencies, and interested tribes. All of these stakeholders reviewed the evaluation results and participated in the identification of the alternatives for inclusion in the EIS.

Other Alternatives Previously Considered

During the initial EIS process starting in 2006, another set of alternatives was also studied. These alternatives were removed from further consideration after they were determined to be no longer reasonable for WSDOT to pursue, based on potential impacts on archaeological resources, the amount of over-water construction, geotechnical conditions, and technical issues. The project at that time had a series of alternatives using the Mukilteo Tank Farm and a No-Build Alternative.

Project components under consideration in 2006 (see *Appendix E Alternatives No Longer Considered*) had some similarities to the current Mukilteo Tank Farm alternatives. The biggest differences were:

- A ferry dock with two ferry slips
- Incidental commercial space for retail and other services
- A 275- to 480-stall parking structure

2.4 Other Activities in the Area

The following actions are planned or have been recently completed by others in the project area. While WSDOT is coordinating with the other parties, the activities that are described in the following pages are separate actions that could be taken even if the Mukilteo Multimodal Project is not developed. The EIS sections on cumulative effects discuss the impacts of the Mukilteo Multimodal Project in combination with these and other past, current, or planned activities and projects.

U.S. Air Force Mukilteo Tank Farm

The nearly 20-acre parcel called the Mukilteo Tank Farm, east of the current ferry terminal, was used as a fuel storage and transfer facility, operated through McChord Air Force Base, from 1953 to 1973. The U.S. Air Force continued ownership after that, but operated the facility through the Defense Energy Support Center (DESC) within the Defense Logistics Agency (DLA). In 1972, the NOAA Mukilteo Research Station began operations on a portion of the property. Fuel storage and transfer operations on the site ceased in 1989 and the Air Force removed the ten bulk fuel aboveground storage tanks in 1999.

NOAA and Sound Transit already have facilities on the northwest and southwest corners of the property, respectively. A part of the Port of Everett Mount Baker Terminal is located on the east edge of the Mukilteo Tank Farm, and the Port uses a roadway through the property to access the terminal.

The U.S. Air Force conveyance of 18.85 acres of the Mukilteo Tank Farm to the Port of Everett is permitted by Section 2866 of the Military Construction Authorization Act for Fiscal Year 2001 (division B of the Spence Act; 114 Stat. 1654A-436), as amended by Section 2858 of the National Defense Authorization Act for Fiscal Year 2002 (PL 107-107). The same legislation directed the U.S. Air Force to transfer jurisdiction over the remaining 1.1 acres of the site to the U.S. Department of Commerce for continuing operation of the NOAA Mukilteo Research Station. The property includes lands, structures, pier, roadways, and other features. The transfer does not directly involve demolition or development actions. Any development would be subject to environmental review and permitting requirements under applicable federal, state, and local regulations.

In July 2010, the U.S. Air Force released a Draft EA for the transfer. In 2012, the U.S. Air Force released a second Draft EA and a Final EA with a Finding of No Significant Impact, which concluded the NEPA review of the transfer.

Sounder Mukilteo Station Phase II, Sound Transit

Sound Transit's Sounder commuter rail line between Seattle and Everett serves the Mukilteo Station. The station is located southeast of the existing ferry terminal, where First Street currently terminates. Sound Transit is developing the station in phases. The first phase, completed in 2008, included a platform on the north side of the tracks along with a dedicated surface parking lot located on the Mukilteo Tank Farm west of the station. A second phase, which will be under construction from mid-2013 to fall 2014, will provide a south platform and a pedestrian bridge over the tracks. Additional commuter parking is also planned. Sound Transit is coordinating with the City of Mukilteo to explore options to expand the supply of parking for the rail station in later phases of the station development program.

NOAA Fisheries Service Mukilteo Research Station Expansion

NOAA Fisheries Service operates a laboratory on the Mukilteo Tank Farm and plans to expand this facility following a property transfer from the U.S. Air Force to the U.S. Department of Commerce (NOAA's parent agency). NOAA's planning is still in the early stages, but the expansion could include upgraded laboratories and the addition of a public outreach and education area on the waterfront, as well as a potential replacement of the NOAA pier to support laboratory and field work.

Port of Everett Mount Baker Terminal

In 2006, the Port of Everett opened a new rail/barge transfer facility along the waterfront to allow oversize containers to be delivered to the Everett Boeing plant at Paine Field. This facility is immediately east of the Mukilteo Tank Farm on property owned by WSDOT within the city of Everett. It includes a pier and a rail spur to allow trains to directly offload large parts and materials that are shipped in for assembly at Boeing's plant at Paine Field. It also includes a public shoreline access

area, largely on U.S. Air Force property, with parking, benches, and a paved walkway. This area has not yet been opened to the public because there is no public roadway for accessing the site. For operations and employee access, the Port uses a gated road that runs through the Mukilteo Tank Farm. A public access road is part of this facility, but the Port needs the U.S. Air Force property transfer to occur before it can build this improvement. The Port is now implementing the final improvements needed to open the shoreline access area to the public.

City of Mukilteo Restoration of Japanese Creek

The City of Mukilteo's Shoreline Master Plan calls for removing a culvert that carries Japanese Creek to an outfall in Possession Sound. The creek's culvert crosses under the BNSF tracks and separates into two culverts. A restoration project would allow Japanese Creek to be free-flowing as it meets the shoreline and would build upon other watershed and habitat restoration efforts the City has been undertaking for the creek and the surrounding open space area. The Preferred Alternative, the Existing Site Improvements Alternative, and the No-Build Alternative do not develop the shoreline area in front of the creek and therefore do not include creek restoration. The Elliot Point 1 Alternative would restore Japanese Creek to an open stream, with a 50-foot buffer on each side.

2.5 Next Steps

No sooner than 30 days after the Final EIS is released, the FTA is anticipated to issue a Record of Decision. This would allow WSDOT to move forward with securing funding, completing the final design, and starting construction.