



Washington State Ferries

# Fauntleroy Ferry Terminal Trestle And Transfer Span Replacement Project

Planning and Environmental Linkages

Level 3 Screening Summary

December 2024



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## Introduction

The Fauntleroy ferry terminal in West Seattle serves more than three million riders per year — supporting Washington State Ferries’ (WSF) “Triangle” route between Fauntleroy, Southworth and Vashon Island. The Triangle route is part of State Route 160 and served on the east side by Fauntleroy Way SW, a City of Seattle street classified as a minor arterial. It is the only WSF terminal not served by a state route or major arterial. The terminal faces several challenges, including:

- Aging, seismically vulnerable parts of the terminal are overdue for replacement.
- Rising sea levels risk damage to the terminal structures from debris during future high tides.
- Vehicles backing up along Fauntleroy Way SW, with only one holding lane on the shoulder of southbound Fauntleroy Way SW to serve two destinations.
- Small dock with capacity for about 80 cars serving three Issaquah Class ferries that hold 124 cars each.

The purpose of WSF’s SR 160 – Fauntleroy Ferry Terminal – Trestle and Transfer Span Replacement Project is to improve operations on the Triangle ferry route and preserve and upgrade the terminal facilities.

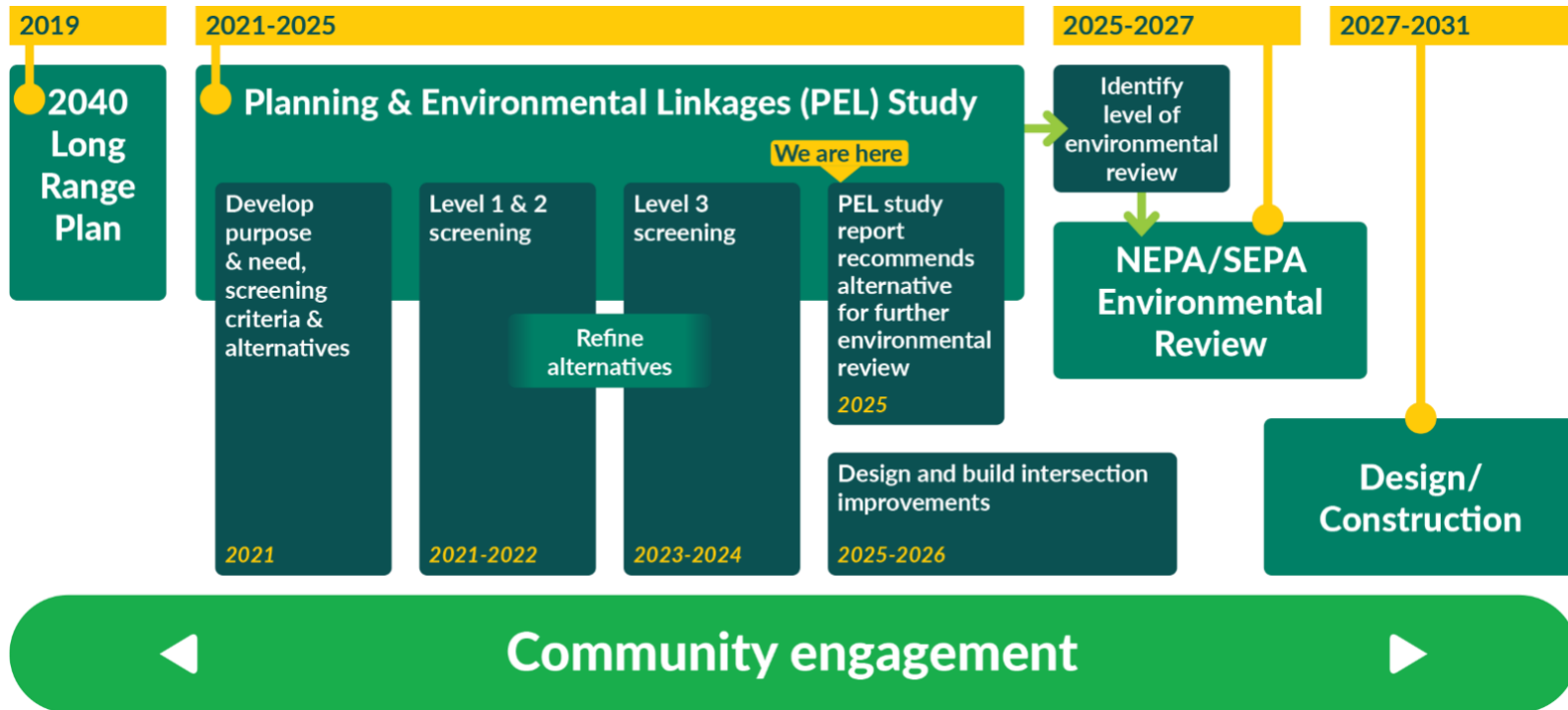
### *PEL process overview*

WSF is conducting a Planning and Environmental Linkages (PEL) study in partnership with the Federal Highway Administration<sup>1</sup>. The PEL study framework encourages early involvement with the public, tribes and agencies to help WSF identify transportation issues, environmental concerns, community values and economic goals early and more effectively in project planning. During the PEL study WSF completed three levels of screening to refine and evaluate the alternatives. The graphic on the following page summarizes key steps in the project development process, including PEL milestones and key activities.

### *Community engagement*

WSF engaged three advisory groups to review and provide input on the alternatives and screening criteria. Since the start of the PEL study in March 2021, WSF has received more than 1,300 comments and hosted seven community meetings, 30 advisory group meetings, and two online open houses. Community feedback has helped WSF evaluate alternatives and identify an alternative to advance into National and State Environmental Policy Act (NEPA/SEPA) review. WSF will keep community members informed of project updates and share input throughout the project.

<sup>1</sup> The PEL process complies with federal requirements ([23 U.S.C. 168](#) and [23 U.S.C. 139](#)).



## Background

This document builds upon WSF’s Level 1 and 2 analyses to determine how well alternatives, or possible solutions, meet the project’s purpose and need compared to No Build conditions. It summarizes the approach and screening of alternatives for the project, technical analyses, the results of the Levels 1 and 2 screenings and results of the Level 3 screening.

## PEL screening process

WSF developed criteria for screening alternatives based on the ability to meet the project’s purpose and need. WSF presented the screening criteria to federal, state and local agencies and tribal representatives, as well as Triangle ferry route communities during outreach meetings and circulated for review and comment.

During Level 1 screening, WSF evaluated 15 alternatives, some at the location of the existing Fauntleroy ferry terminal and some at other locations. WSF found that, of these, six alternatives do not meet several core elements of the project's purpose and need. The remaining nine alternatives, all at the location of the existing Fauntleroy ferry terminal, advanced to Level 2 screening.

Based on the Level 2 screening results, WSF advanced two alternatives: (1) replace the terminal with a similar size and at the same location as the existing facility (Level 1 Alternatives A-1, A-2 and A-3) and (2) expand the terminal at the existing location (Level 1 Alternatives B and C).

During Level 3 evaluation, WSF refined the alternatives based on Level 2 screening results, community and advisory group input and technical analyses. WSF developed alternatives that replace the terminal at the same location with one of a similar size (Level 3 Alternatives A, A-1, A-2 and A-3) and alternatives that expand the terminal for increased on-dock vehicle holding capacity compared to the existing condition (Level 3 Alternatives B, B-1, B-2, B-3 and C). WSF conducted technical analyses of the Level 3 alternatives, including engineering, operational and environmental assessments.

# Level 3 screening

## Overview

WSF applied the Level 1 and 2 screening criteria and developed 29 performance factors for a more detailed assessment of the Level 3 alternatives. WSF considered technical analyses and community and advisory group input to develop these performance factors.

The following subsections detail the technical analyses, application of the performance ratings, the Level 3 screening results and findings.

## Technical analyses

During Level 3 screening, WSF completed the following analyses.

- *Basis of Design* outlines key elements and practical design approach for Level 3 alternatives, including design standards and manuals. This document informs performance factors related to structural reliability, projected sea level rise, staging, sorting, accessibility, vessel maneuverability and customer connections and conflicts.
- *Environmental Analysis* describes how the Level 3 alternatives interact with key environmental resources, including potential benefits and impacts to the surrounding environment. This analysis informs performance factors related to overwater coverage, potential impacts to macroalgae, eelgrass and cultural resources, environmental mitigation and right-of-way and potential encroachment on the surrounding area.
- *Traffic Analysis* evaluates and compares the operational efficiency of the Level 3 alternatives. This analysis informs performance factors related to ferry load and unload times, queuing effects and traffic circulation.
- *Intersection Configuration Memo* compares four intersection scenarios for the configuration and operations of the intersection at the terminal and Fauntleroy Way SW. This document informs performance factors related to operational efficiency, reducing conflicts between traffic modes, minimizing conflicts between people driving and vehicles exiting the ferry terminal at Fauntleroy Way SW, improving connections to transit and changes to access/circulation on local streets.
- *GoodToGo! and Advanced Ticketing Study* considers strategies to improve terminal operations, including *GoodToGo!* and *Wave2Go* advance ticketing, to make it easier to walk, cycle, roll and drive onto the ferry. This document informs performance factor ratings related to ferry schedule reliability, vehicle queuing, construction duration and policy considerations.
- *Construction Approach Memo* is a brief summary of options, assumptions, considerations and temporary effects related to constructing the alternatives. This document informed performance factors related to encroachment onto Cove Park during construction, construction duration and estimated cost of temporary facilities and operational needs during construction.

### Screening criteria

General indicators of whether alternatives meet the project's purpose and need. WSF developed criteria in Level 1 and applied these during Level 1, 2 and 3 screenings.

### Performance factors

Specific indicators of how well alternatives meet each criterion based on characteristics of the alternatives.

- *Estimate of Program Cost* summarizes the Level 3 alternatives' cost estimates, helping to inform performance factors related to the alternatives' estimated program cost compared to available funding.

## *Application of the performance factors*

This section summarizes the Level 3 screening criteria, performance factors, performance ratings and how WSF applied them based on the technical analyses.

### **Ability to meet the requirements for structural reliability.**

#### **Does the alternative meet design codes and requirements for structural reliability?**

The main structural elements of the existing terminal are either approaching the end of their service life or are already structurally deficient and seismically vulnerable.

- **High performance rating:** Meets applicable requirements.

Applied to alternatives with a planning level design that meets the requirements of the 2016 WSF Terminal Design Manual (TDM), Chapter 600. This applied to all alternatives.

- **Low performance rating:** Does not meet applicable criteria.

Applied to alternatives that do not meet the requirements of the 2016 WSF TDM. This did not apply to any of the alternatives.

## Ability to accommodate projected sea level rise (resilience).

### Does the alternative accommodate projected sea level rise?

The bridge seat, which supports the vehicular transfer span, sits at an elevation of 15.65 feet mean lower low water<sup>2</sup> (MLLW), among the lowest elevations in the WSF system and the lowest on the Triangle Route. Rising sea levels and more frequent, intense storms increase the risk of damage and flooding at the terminal, posing a safety risk for passengers and WSF staff.

- **High performance rating:** Meets projected sea level rise (19.5 feet MLLW).

Applied to alternatives with a planning level design bridge seat elevation at or above 19.5 feet MLLW, which is the minimum elevation to meet projected sea level rise as recommended by WSF Terminal Engineering. This applied to all alternatives. WSF may refine the bridge seat elevation in the design delivery phase based on Terminal Engineering's resiliency analysis.

- **Low performance rating:** Does not meet projected sea level rise (19.5 feet MLLW).

Applied to alternatives with a bridge seat elevation lower than 19.5 feet MLLW. This did not apply to any of the alternatives.



*Existing dock during a high tide*

<sup>2</sup> Mean lower low water is the average level of each day's lowest low tide.



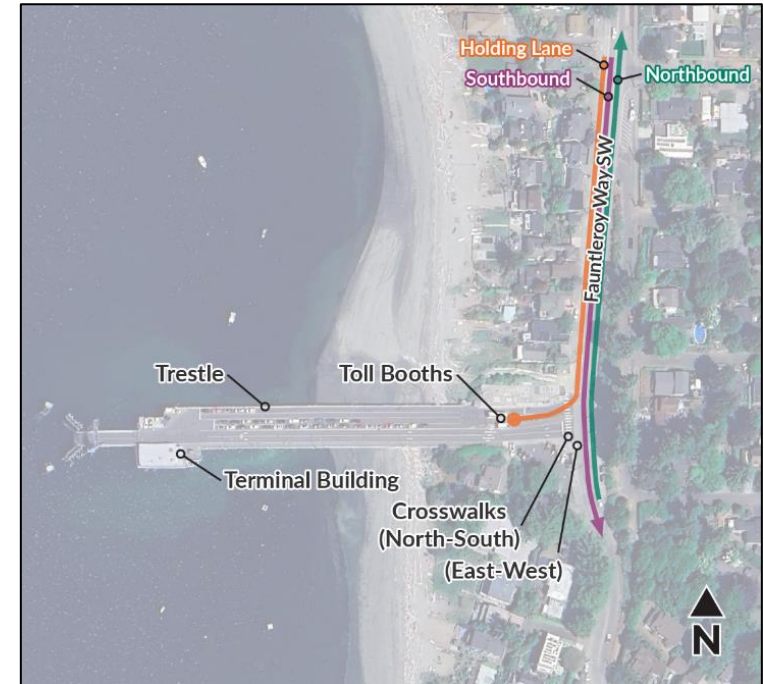
## Ability to improve operational efficiency (i.e., minimize dwell time, process vehicles more efficiently, maintain on-time performance).

How does the alternative maintain or improve ferry schedule reliability (timely and reliable loading and unloading)?

WSF analyzed the modeled load and unload time for pedestrians, bicycles and vehicles for each alternative, including those with *GoodToGo!* and *Wave2Go*. This is a key performance indicator of the ability to meet the scheduled dwell times and maintain or improve ferry schedule reliability and on-time performance. This does not include overhead loading.

- **High performance rating:** Lower modeled loading/unloading time (in minutes) over/under relative to No Build of 19 minutes  
Applied to alternatives with a modeled load/unload time less than or equal to 15 minutes. The lowest modeled load/unload time from the model was 14 minutes. With a modeled load/unload time less than or equal to 15 minutes, the alternative reduces load/unload time by more than 20% compared to No Build and would therefore be able to meet the scheduled dwell times (18 minutes and 20 minutes) for the modelled sailings, significantly improving on-time performance compared to No Build. This applied to Alternatives B, B-1, B-2, B-3 and C.
- **Medium performance rating:** Medium modeled loading/unloading time (in minutes) over/under relative to No Build.  
Applied to alternatives with a modeled load/unload time greater than 15 minutes, but less than or equal to 19 minutes. Alternative maintains or slightly reduces load/unload time, able to meet the scheduled dwell times and anticipated to maintain or improve on-time performance compared to No Build. This applied to Alternatives A-1, A-2 and A-3.
- **Low performance rating:** Higher modeled loading/unloading time (in minutes) compared to No Build.  
Applied to alternatives with a modeled load/unload time greater than 19 minutes. This rating indicates a higher load/unload time compared to No Build, unable to meet the scheduled dwell times or to improve on-time performance compared to No Build. This applied to Alternative A.

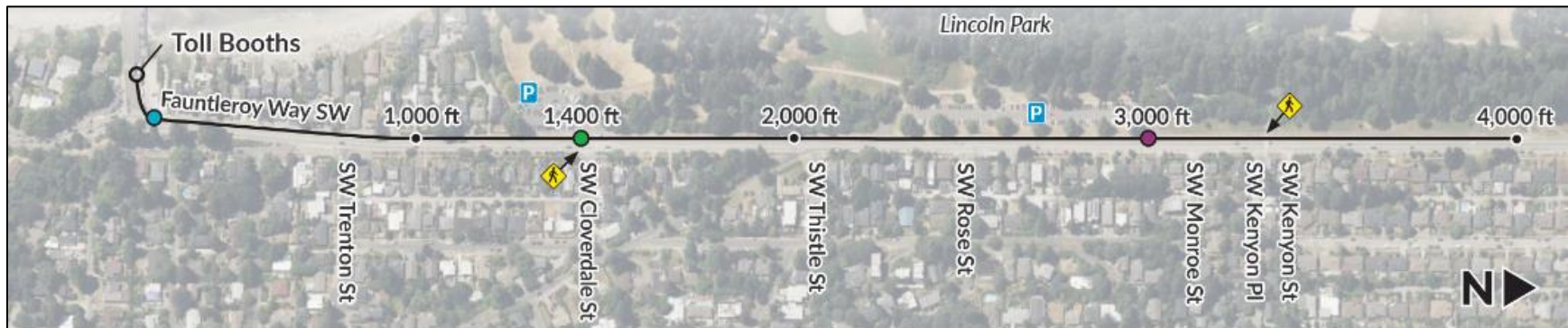
How does the alternative change vehicle queueing on Fauntleroy Way SW? (Including potential upland and community effects, customer experience, etc.)



*Fauntleroy Way SW lanes for traffic and holding*

WSF estimated queuing of vehicles on Fauntleroy Way SW for weekday and weekend conditions. This queuing affects the operational efficiency of the terminal, customer experience and upland and surrounding community.

- **High performance rating:** Lower estimated queuing relative to No Build.  
Applied to alternatives with a lower percentage of sailings with queuing, shorter queue lengths overall, shorter peak queue lengths and/or a faster reduction of queue length over time compared to No Build. This applied to Alternatives B, B-1, B-2, B-3 and C.
- **Medium performance rating:** Similar estimated queuing relative to No Build.  
Applied to alternatives with a similar percentage of sailings with queuing and with shorter queue lengths or a faster reduction of queue length over time. This applied to Alternatives A-1, A-2 and A-3.
- **Low performance rating:** Higher estimated queuing relative to No Build.  
Applied to alternatives with a higher percentage of sailings with queuing, greater queue lengths overall, greater peak queue lengths and/or a slower reduction of queue length over time compared to No Build. This applied to Alternative A.



*Distance of queuing, from the toll booths along the shoulder holding lane on Fauntleroy Way SW.*

Does the alternative improve WSF's ability to stage and handle the mix of arriving volumes based on destination (Southworth or Vashon), truck traffic and transit?

WSF designed all alternatives with wider lanes and improved lane configuration to better manage ferry loading and vehicle sorting for the dual-destination sailings per the TDM recommendations and terminal operations input. WSF found that having more space for holding vehicles than about 155 vehicles does not necessarily improve operational efficiency.

More holding space does improve staging and handling, and a dock that is large enough to hold a full ferry worth of vehicles saves the most time in loading and unloading. Some additional space provides flexibility in staging and sorting, but beyond that, too much space for vehicle holding becomes difficult to manage. The number and length of lanes is especially important for staging and handling the mix of arriving vehicles bound for multiple destinations. Long holding lanes can result in vehicles bound for different destinations sandwiched in the lanes, making it difficult to preserve the first in, first on loading priority and also fill the boat efficiently. Short lanes can provide some flexibility but also complicate staging and may be difficult to access for some vehicle types or in some configurations.

WSF assessed the alternatives based on the number, length and configuration of lanes.

- **High performance rating:** Greatest improvement in the ability to stage and handle the mix of arriving volumes compared to No Build.

Alternatives B, B-1 and B-2 provide four or five full-length lanes of greater length. WSF determined that these provide the greatest improvement in staging and handling and as such rated them as high performance.

- **Medium performance rating:** Medium improvement in the ability to stage and handle the mix of arriving volumes compared to No Build.

Alternative C provides five full-length lanes plus two half-length lanes. WSF found the additional number and length of lanes provides some operational benefit however the significantly increased holding capacity, compared to No Build and compared to the capacity of a vessel, makes it more difficult to manage and more likely to have issues. WSF determined that this provides medium improvement in staging and handling and as such rated it as medium performance.

- **Low performance rating:** Does not improve the ability for staging and handling the mix of arriving volumes compared to No Build.

Alternatives A, A-1, A-2 and A-3 provide four lanes of less or equal length, compared to No Build. Alternative B-3 only provides three full-length lanes plus two half-length lanes. WSF determined that these do not provide any improvement in staging and handling and as such rated them as low performance.

### How does adding a signalized intersection improve operational efficiency of unloading the ferry?

WSF assessed options for improving the intersection at the entrance to the terminal, on Fautleroy Way SW and selected a signalized intersection configuration that provides the most benefits. WSF decided to design and build the improved intersection ahead of construction of the project to benefit terminal operations and neighbors during construction. WSF will build the new signalized intersection for all the Level 3 Alternatives.

- **High performance rating:** Improves operational efficiency relative to No Build.

Applied to alternatives that add a signalized intersection that would improve operational efficiency compared to No Build, by providing signalization during ferry offload and for pedestrian movements; removing the need for a uniformed officer; separating vehicular, bicycle and pedestrian movements; improving multimodal connections and safety. The signal timing may vary between the alternatives, but the intersection improvements benefit operational efficiency for all alternatives.

- **Low performance rating:** Does not improve operational efficiency relative to No Build.

Applied to alternatives that do not incorporate a signalized intersection that improves operational efficiency compared to No Build. This did not apply to any of the alternatives.

### Does the alternative provide space to sort and accommodate Americans with Disabilities Act, emergency vehicles, medical requests and other preferential loading categories?

WSF designed all alternatives to provide one 12-foot (ADA), two 10-foot (one truck lane per destination) and one 9-foot lane minimums to assist with accessibility, managing loading and sorting of vehicle.

- **High performance rating:** Greatest improvement in the space to sort and accommodate ADA, emergency vehicles, medical requests and other preferential loading categories.

Applied to alternatives that provide more lanes and some longer lanes compared to No Build. This applied to Alternatives B-1, B-2, B-3 and C.

- **Medium performance rating:** Medium improvement in the space to sort and accommodate ADA, emergency vehicles, medical requests and other preferential loading categories.

Applied to alternatives that provide the same number of lanes and some longer lanes compared to No Build. This applied to Alternative B.

- **Low performance rating:** Does not improve space to sort and accommodate ADA, emergency vehicles, medical requests and other preferential loading categories.

Applied to alternatives that do not add more lanes or build longer lanes compared to No Build. This applied to Alternatives A, A-1, A-2 and A-3.

### Ability to reduce the number of conflict points between traffic modes (safety of vehicles, bicyclists and pedestrians).

Does the alternative reduce conflicts between people walking, biking, rolling and driving at the intersection of the terminal and Fauntleroy Way SW?

Adding the signalized intersection would reduce conflicts by providing safer movements, signalization and separation between these modes. The signalized intersection would minimize the conflicts of the left turn, separate vehicular and pedestrian movements and eliminate weaving issues. Compared to No Build, the signalized intersection would decrease risk and minimize potential for vehicle-pedestrian conflicts by providing pedestrians an exclusive signal phase. WSF will build the intersection ahead of replacing the terminal so this performance factor considered whether an alternative further reduces conflicts.

- **High performance rating:** Reduces conflicts between people walking, biking, rolling and driving at the intersection of the terminal and Fauntleroy Way SW compared to No Build.  
Applied to alternatives that reduce conflicts at the intersection between people walking, biking, rolling and driving, compared to No Build, by adding a bicycle offload lane. This applied to all alternatives.
- **Low performance rating:** Does not reduce conflicts between people walking, biking, rolling and driving at the intersection of the terminal and Fauntleroy Way SW compared to No Build.  
Applied to alternatives that do not reduce conflicts between people walking, biking, rolling and driving at the intersection, compared to No Build. This did not apply to any of the alternatives.

### Does the alternative reduce or eliminate conflict(s) between people walking, biking, rolling and driving across the trestle during ferry loading and offloading?

WSF operations recommended a 5.5-foot lane for people using motorcycles and bicycles to dedicate space for holding and access during peak periods. This would help WSF manage priority loading and provide enough space to safely separate motorcyclists from other vehicles. The motorcycle and bicycle lane would be located on the north side of the dock, with the bicycle lane furthest north to ensure separation from vehicles. The bicycle exit lane would be 4 feet wide and located on the south side of the dock, between the pedestrian path and vehicle exit lanes.

The WSDOT Design Manual (Chapter 1510.04) indicates the minimum continuous and unobstructed clear width of a pedestrian path shall be 4 feet, exclusive of the curb width, which meets ADA minimum width requirements. It also states that a pedestrian path less than 5 feet in clear width shall provide passing spaces at intervals no farther apart than 200 feet and the passing spaces shall be 5 feet wide minimum for a distance of 5 feet. Discussions with WSF operations resulted in the recommendation to maintain a 7-foot-wide pedestrian walkway.

- **High performance rating:** Reduces or eliminates conflicts by improving pedestrian walkway and bicycle access, holding and exit lanes on the trestle compared to No Build.  
Applied to alternatives that provide dedicated bicycle lanes for loading and unloading, a motorcycle lane and improves the separated pedestrian walkway for people walking or rolling. This applied to all alternatives.
- **Low performance rating:** Does not reduce or eliminate conflict(s) by improving pedestrian walkway and bicycle access, holding and exit lanes on the trestle compared to No Build.

Applied to alternatives that do not provide dedicated bicycle lanes for loading and unloading, a motorcycle lane and does not improve the separated pedestrian walkway for people walking or rolling. This did not apply to any of the alternatives.

### Does the alternative minimize conflicts between people driving on Fauntleroy Way SW and vehicles exiting the ferry terminal onto Fauntleroy Way SW?

Adding a signalized intersection would reduce conflicts between people driving on Fauntleroy Way SW and vehicles exiting the ferry terminal onto Fauntleroy Way SW. However, WSF will install the signalized intersection in advance of the terminal replacement, thus this performance factor considers whether an alternative further reduces such conflicts.

- **High performance rating:** Reduces conflicts between people driving on Fauntleroy Way SW and exiting the ferry terminal onto Fauntleroy Way SW compared to No Build.

Applied to alternatives that reduce conflicts between people driving on Fauntleroy Way SW and exiting the ferry terminal onto Fauntleroy Way SW, compared to No Build. This did not apply to any of the alternatives.

- **Low performance rating:** Does not reduce conflicts between people driving on Fauntleroy Way SW and exiting the ferry terminal onto Fauntleroy Way SW compared to No Build.

Applied to alternatives that do not reduce conflicts between people driving on Fauntleroy Way SW and exiting the ferry terminal onto Fauntleroy Way SW, compared to No Build. This applied to all alternatives.

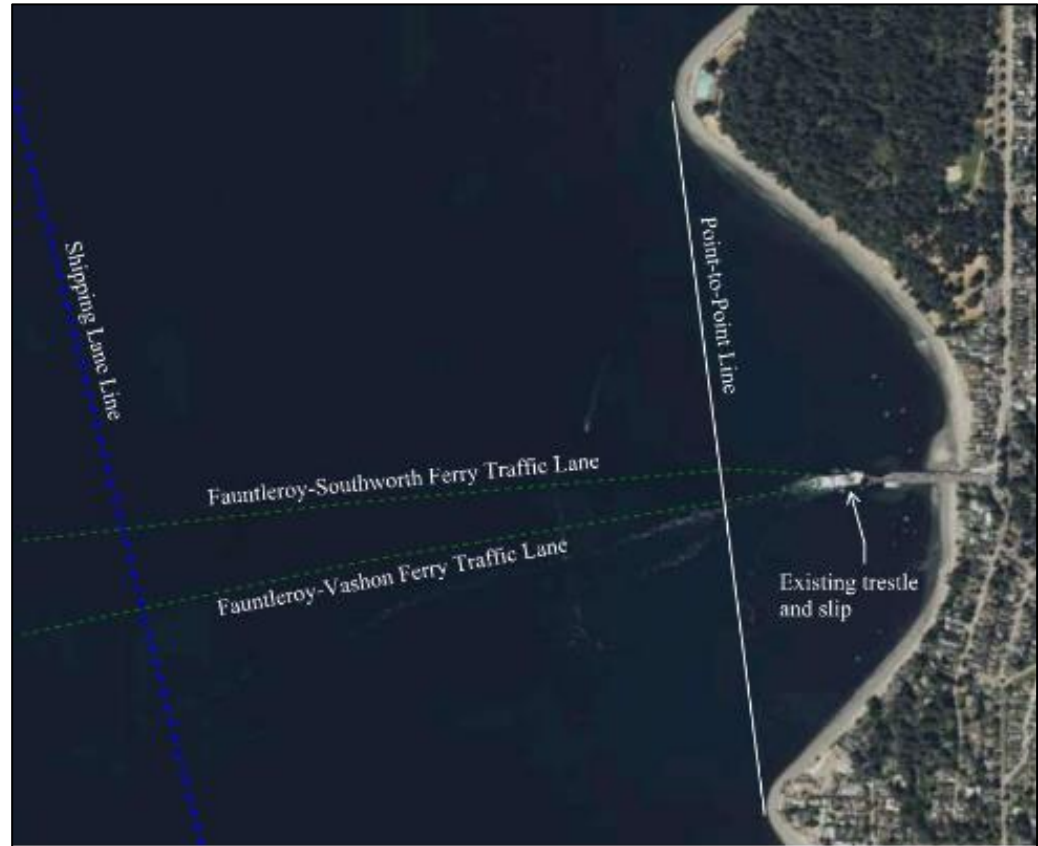
### Ability to meet operational requirements (186 vehicles on the dock and/or in upland holding, access and maneuverability for an Issaquah Class vessel, connection to a minor arterial).

All alternatives accommodate 186 vehicles in a combination of holding on the dock and along Fauntleroy Way SW.

All alternatives connect to Fauntleroy Way SW, which is classified as a minor arterial.

Does the alternative provide sufficient access and maneuverability for Issaquah Class vessels?

- **High performance rating:** Ferry captains and operation staff confirm alternative allows access and maneuverability for Issaquah Class vessel.  
Applied to alternatives that allow access to and maneuverability within the ferry traffic lanes and avoid interference with waiting ferries, shipping lanes or increased weather. This applied to all alternatives.
- **Low performance rating:** Ferry captains and operation staff confirm that alternative does not allow access and maneuverability for an Issaquah Class vessel.  
Applied to alternatives that do not allow access to and maneuverability within the ferry traffic lanes or that do not avoid interference with waiting ferries, shipping lanes or increased weather. This did not apply to any of the alternatives.



*Ferry traffic lanes approaching and departing Fauntleroy Terminal*

### Ability to keep current sailing schedule (number of peak departures and crossing times).

See “Ability to improve operational efficiency” above.

### Ability to enhance multimodal connections, connect to transit and/or allow for growth in walk-ons, people biking and vanpools.

What distance does the alternative provide for people to walk, bike and roll from Fauntleroy Way SW onto the ferry?

- **High performance rating:** Shortest distance (in feet) from the start to end of the terminal compared to No Build. Applied to alternatives with a distance to walk, bike or roll from Fauntleroy Way SW to the end of the Vehicle Transfer Span of no more than the No Build (850 feet). This applied to Alternative A.
- **Medium performance rating:** Medium distance (in feet) from the start to end of the terminal compared to No Build. Applied to alternatives with a distance to walk, bike or roll from Fauntleroy Way SW to the end of the Vehicle Transfer Span between 850 feet and 1,050 feet. This distance is no more than 200 feet further than that of the No Build. This applied to Alternatives A-1, A-2 and A-3.  
WSF's ADA specialist noted a walkway distance within 200 feet is similar from an accessibility standpoint if there are adequate places to rest and an appropriate grade. WSF will incorporate rest spaces during the next project phase.
- **Low performance rating:** Longest distance (in feet) from the start to end of the terminal compared to No Build. Applied to alternatives with a distance to walk, bike or roll from Fauntleroy Way SW to the end of the Vehicle Transfer Span equal to or greater than 1,050 feet. This distance is greater than 200 feet further than that of the No Build. This applied to Alternatives, B, B-1, B-2, B-3 and C.

#### Does the alternative improve connections for people biking, walking or rolling?

- **High performance rating:** Alternative improves conditions for people biking, walking or rolling compared to No Build. Applied to alternatives that provide a less steep trestle grade and separation of people biking from those walking and rolling, which improve connections for people biking, walking or rolling, compared to No Build. This applied to all alternatives.
- **Low performance rating:** Alternative does not improve conditions for people biking, walking or rolling compared to No Build. Applied to alternatives that do not improve conditions for people biking, walking or rolling compared to No Build. This did not apply to any of the alternatives.

#### Does the alternative improve connections to transit (intersection improvements and/or crosswalks to provide safer, easier access to and from transit)?

Adding the signalized intersection would provide safer and easier connections to transit by improving the intersection and crosswalks. Compared to No Build, the signalized intersection would enhance multimodal connectivity by “decreasing risk and minimizing potential for vehicle-pedestrian conflicts by providing pedestrians exclusive signal phase.” The intersection will be permanent so this screening factor considered whether the alternative independently improves connections to transit.

- **High performance rating:** Alternative improves connections to transit compared to No Build.



Applied to alternatives that improve connections to transit compared to No Build, by providing an improved passenger waiting area in the terminal building that meets current TDM standards. This applied to all alternatives.

- **Low performance rating:** Alternative does not improve connections to transit compared to No Build.

Applied to alternatives that do not improve connections to transit compared to No Build. This did not apply to any of the alternatives.

## Ability to avoid changes to parks and recreational areas (Section 4(f)/6(f), Recreation and Conservation Office-funded projects).

### What encroachment will the alternative have on Cove Park during construction?

Construction would require temporary work to the north of the dock into a portion of Cove Park. This factor considers how much construction activity may impact Cove Park, including temporary work trestles, construction equipment and exclusion zone fencing to protect community users of Cove Park.

- **High performance rating:** Lowest construction encroachment (in square feet) on Cove Park compared to No Build. Applied to alternatives that WSF expects would have a significantly lower construction encroachment on Cove Park. This did not apply to any of the alternatives.
- **Medium performance rating:** Medium construction encroachment (in square feet) on Cove Park compared to No Build. Applied to alternatives that WSF expects would have some construction encroachment on Cove Park. This applied to all alternatives as they would all require a clear zone buffer in the near shore area, estimated at 6,000 to 8,000 square feet. This would vary nominally between the alternatives and may vary in size during construction.
- **Low performance rating:** Greatest construction encroachment (in square feet) on Cove Park compared to No Build. Applied to alternatives that WSF expects would have a significantly greater construction encroachment on Cove Park. This did not apply to any of the alternatives.

### What permanent encroachment will the alternative have on Cove Park?

WSF considered each alternative's estimated width north of the dock in the upper shoreline/riparian zone (Zone 1) as an indicator of permanent encroachment on Cove Park. WSF evenly divided the additional width (in feet) north of the dock into low, medium and high-performance ratings by dividing the greatest potential additional width north of the dock by three.

- **High performance rating:** Lowest permanent encroachment on Cove Park compared to No Build. Applied to alternatives with between 0 and 7.3 feet of additional width in the area north of the existing dock in the upper shoreline/riparian zone. This applied to Alternatives B-2 and B-3.

- **Medium performance rating:** Medium construction encroachment on Cove Park compared to No Build. Applied to alternatives with between 7.3 feet and 14.6 feet of additional width in the area north of the existing dock in the upper shoreline/riparian zone. This applied to Alternatives A, A-1, A-2, A-3, B and C.
- **Low performance rating:** Greatest construction on Cove Park compared to No Build. Applied to alternatives with between 14.6 feet and 22 feet of additional width in the area north of the existing dock in the upper shoreline/riparian zone. This applied to Alternative B-1.

### What encroachment will the alternative have on Captain's Park during construction?

This factor considered the estimated construction encroachment into Captain's Park. None of the alternatives propose any work east of Fauntleroy Way SW. The signalized intersection would not encroach on Captain's Park.

- **High performance rating:** Lowest construction encroachment (in square feet) on Captain's Park compared to No Build. Applied to all alternatives as WSF does not expect constructing any of the alternatives to encroach on Captain's Park.
- **Medium performance rating:** Medium construction encroachment (in square feet) on Captain's Park compared to No Build. Applied to alternatives that have a medium construction encroachment on Captain's Park. This did not apply to any of the alternatives.
- **Low performance rating:** Greatest construction encroachment (in square feet) on Captain's Park compared to No Build. Applied to alternatives that significantly encroach on Captain's Park. This did not apply to any of the alternatives.

### What permanent encroachment will the alternative have on Captain's Park?

This factor considered whether and how alternatives would permanently encroach on Captain's Park.

- **High performance rating:** Lowest permanent encroachment (in square feet) on Captain's Park compared to No Build. Applied to all alternatives as WSF does not expect that any of the alternatives would have construction encroachment on Captain's Park. The proposed traffic signal would not physically encroach on Captain's Park.
- **Medium performance rating:** Medium construction encroachment (in square feet) on Cove Park compared to No Build. Applied to alternatives that WSF expects would have a medium construction encroachment on Captain's Park. This did not apply to any of the alternatives.
- **Low performance rating:** Greatest construction encroachment (in square feet) on Cove Park compared to No Build. Applied to alternatives that WSF expects would have a significantly greater construction encroachment on Captain's Park. This did not apply to any of the alternatives.

## Requires changes to traffic circulation on local streets in ferry terminal area.

### Does the alternative require changes to access or circulation patterns on local streets?

WSF introduced this criterion in Level 1 screening when considering moving the terminal and remote holding areas. Level 1 and Level 2 screened out all alternatives that change traffic circulation on local streets.

- **High performance rating:** Alternative does not require permanent change to traffic circulation patterns on local streets. Applied to all alternatives because they do not require permanent change to traffic circulation patterns on local streets. None of these alternatives require permanent changes to access or traffic circulation patterns on local streets. The new intersection configuration would maintain the current access to the terminal.
- **Low performance rating:** Alternative requires permanent change to traffic circulation patterns on local streets. Applied to alternatives that require permanent change to traffic circulation patterns on local streets. This did not apply to any of the alternatives.

## Project cost (design, planning, right of way, risk, construction) alignment with funding.

### What is the alternative's estimated program cost compared to available funding?

Estimates included costs for design, right of way and construction phases, including escalation. WSF excluded the cost of the intersection from screening because it costs the same across all alternatives and is funded separately. Alternatives A-2 and A-3 include the costs to implement, operate, and provide customer service for *GoodToGo!* Option 2 and Wave2Go technology.

- **High performance rating:** Estimated program cost (in dollars) aligns closest with available funding (requires minimal additional funding). Applied to alternatives with a program cost estimate close to the current available legislatively-approved funding. None of the alternative's program cost estimates were close to the current available funding.
- **Medium performance rating:** Estimated program cost (in dollars) requires medium amount of additional funding. Applied to alternatives with the lowest program cost estimate of the alternatives, which was greater than the current available legislatively-approved funding. This applied to Alternative A.
- **Low performance rating:** Estimated program cost (in dollars) requires the greatest amount of additional funding.

Applied to the alternatives with the greatest program cost estimates of the alternatives, which was greater than the current available legislatively-approved funding. This applied to Alternatives A-1, A-2, A-3, B, B-1, B-2, B-3 and C.

### What is the alternative's estimated cost of temporary facilities and operational needs during construction to maintain ferry service?

WSF would need to build a temporary trestle and slip to accommodate essential ferry service during terminal construction. The cost for operational needs would support adding terminal staff to manage fare collection and loading and offloading during construction.

- **High performance rating:** Lowest estimated cost of temporary facilities and operational needs (in dollars).  
Applied to alternatives with the lowest range of cost estimates for temporary facilities and operational needs. This did not apply to any of the alternatives.
- **Medium performance rating:** Medium estimated cost of temporary facilities and operational needs (in dollars).  
Applied to all alternatives as they were within a similar range of cost estimates for temporary facilities and operational needs.
- **Low performance rating:** Highest estimated cost of temporary facilities and operational needs (in dollars).  
Applied to alternatives with the highest range of cost estimates for temporary facilities and operational needs. This did not apply to any of the alternatives.

### Alignment with current project schedule.

#### What is the timeline to construct the alternative?

WSF had a few key assumptions that influence construction duration. Crews would need to build the terminal in phases to maintain essential ferry service during construction. In-water work occurs between August 1st and February 15th and crews follow City of Seattle standard work hours and measures to minimize noise light as much as possible. *GoodToGo!* implementation fits within construction duration.

- **High performance rating:** Shortest estimated duration of construction (in months).  
Applied to alternatives with the shortest estimated duration of construction. This applied to Alternatives A, A-1, A-2 and A-3.
- **Medium performance rating:** Medium estimated duration of construction (in months).  
Applied to alternatives with the shortest and longest estimated duration of construction. This applied to Alternatives B and B-1.
- **Low performance rating:** Longest estimated duration of construction (in months).

Applied to alternatives with the longest estimated duration of construction. This applied to Alternatives B-2, B-3 and C.

## **Project feasibility—amount of additional right of way needed beyond existing terminal footprint (for expanded footprint, utilities or construction).**

### **What additional permanent right-of-way does this alternative require?**

Some alternatives widen to the south, encroaching into private properties extending into Fauntleroy Cove. This requires acquiring right-of-way, which can be a complex and expensive process. WSF considered the amount of space each alternative extends north of the dock in the upper shoreline/riparian zone (Zone 1) as an indicator of permanent right-of-way needed from the City of Seattle. The encroachment varies based on dock width and alternative lane configuration. This factor does not account for other potential property acquisitions such as the triangle parking lot or property at 8923 Fauntleroy Way SW north of the terminal, as these would not vary between alternatives.

- **High performance rating:** Least amount of additional permanent right-of-way required.  
Applied to alternatives that would not require private property acquisition but would widen up to 13 feet north into Cove Park, requiring permanent right-of-way acquisition up to 2,200 square feet north of the dock. This applied to Alternatives A-1, A-2, A-3 and B.
- **Medium performance rating:** Medium amount of additional permanent right-of-way required.  
Applied to alternatives that would not require private property acquisition but would widen greater than 13 feet north into Cove Park, requiring permanent right-of-way acquisition greater than 2,200 square feet north of the dock. This applied to Alternative B-1.
- **Low performance rating:** Greatest amount of additional permanent right-of-way required.  
Applied to alternatives requiring private property acquisition and permanent right-of-way north of the dock. This applied to Alternatives A, B-2, B-3 and C.

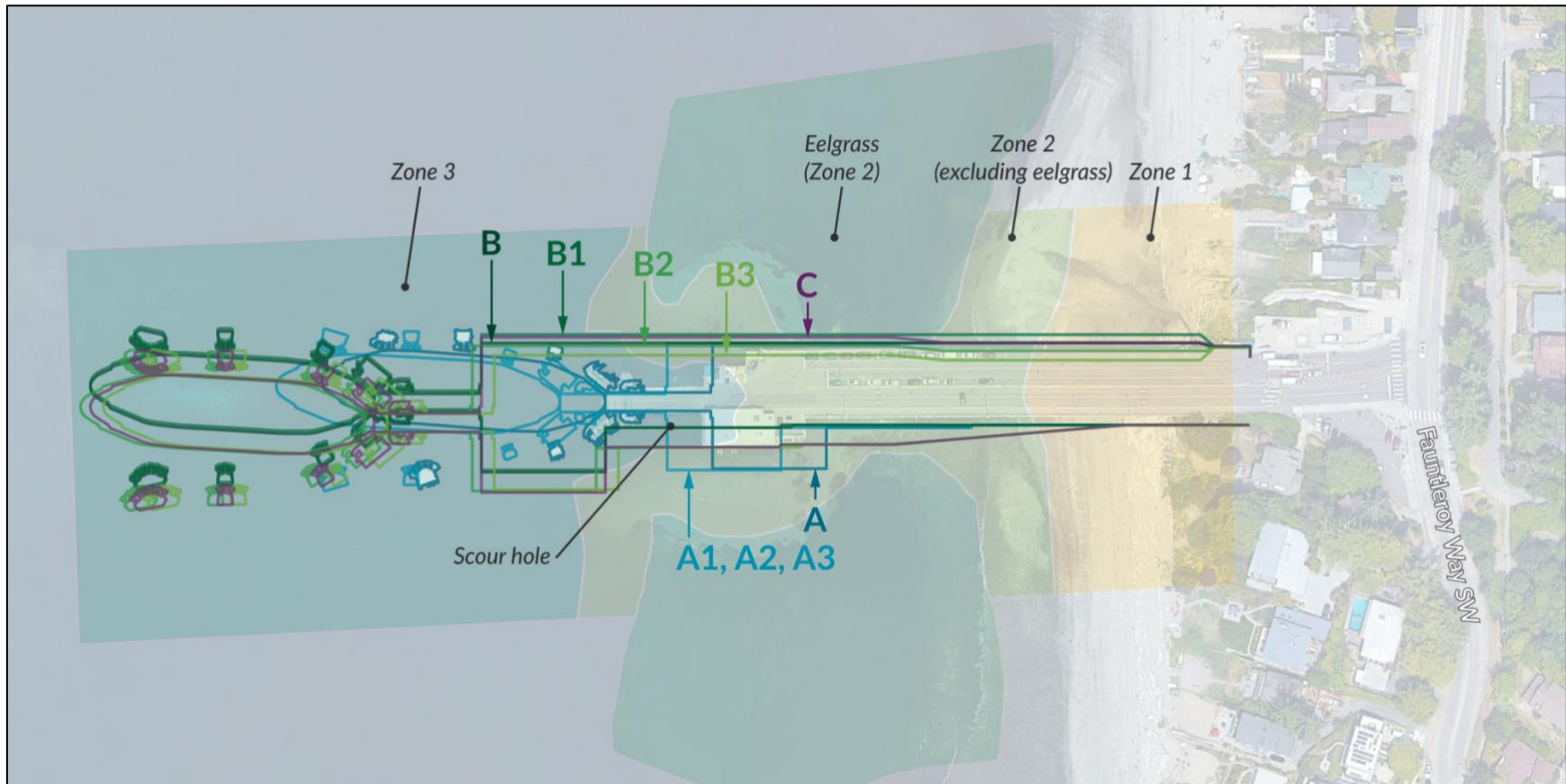
## **Permitting and coordination (level of coordination with external partners, permitting complexity, tribal coordination).**

WSF considered the potential effects on environmental resources, permitting requirements and tribal coordination. WSF's environmental analysis focused on the ecological habitat zones within Fauntleroy Cove, as shown in the graphic below.

- Zone 1 is the upper shoreline and riparian area, which extends approximately 300 feet landward from the highest astronomical tide<sup>3</sup> to the extent of residential-associated vegetation and five feet landward of the mean lower low water<sup>4</sup> (MLLW) line. Zone 1 includes Fauntleroy Creek and upland riparian area and landscape associated with the residential homes around the terminal.
- Zone 2 is the shallow marine area that constitutes the ecologically productive shallow water marine environments (i.e., intertidal and nearshore areas) of Fauntleroy Cove, extending from Zone 1 to 16 feet below the MLLW line. Zone 2 includes two subcomponents, (1) Zone 2 with eelgrass vegetative cover and (2) Zone 2 excluding eelgrass.
- Zone 3 is the deeper marine area that extends seaward from the terminus of Zone 2. Within Zone 3, at the end of the existing dock, ferry propulsion activity has created a distinct scour hole, preventing natural eelgrass recolonization in this area.

<sup>3</sup> Highest astronomical tide is the highest level that can be expected to occur under average meteorological conditions and a combination of astrological conditions that result in very high tides.

<sup>4</sup> Mean lower low water is the average level of each day's lowest low tide.



**Level 3 alternatives and the ecological habitat zones around the dock**

**What potential cultural resource impacts does this alternative pose?**

Additional structure in Zone 1 (upper shoreline and riparian area) is an indicator of ground disturbance that could impact cultural resources. WSF evenly divided the ground disturbance within Zone 1 (in square feet) into low, medium and high-performance ratings by dividing the greatest potential additional ground disturbance in Zone 1 by three.

WSF understands tribes are concerned about potential cultural resource impacts to Captain's Park and the embankment between Captain's Park and Fautleroy Way SW. None of the alternatives encroach on Captain's Park.

- **High performance rating:** Least area of ground disturbance in the intertidal zone and upland areas, as indicator of potential cultural resources impacts compared to No Build.  
Applied to alternatives with the least additional footprint in Zone 1, between 0 and 2,353 square feet. This did not apply to any of the alternatives.
- **Medium performance rating:** Medium area of ground disturbance in the intertidal zone and upland areas, as indicator of potential cultural resources impacts compared to No Build.  
Applied to alternatives with a medium area of additional footprint in Zone 1, between 2,353 square feet and 4,707 square feet. This applied to Alternatives A-1, A-2, A-3, B-2 and B-3.
- **Low performance rating:** Greatest area of ground disturbance in the intertidal zone and upland areas, as indicator of potential cultural resources impacts compared to No Build.  
Applied to alternatives with the greatest area of additional footprint in Zone 1, between 4,707 square feet and 7,060 square feet. This applied to Alternatives A, B, B-1 and C.

### How does the alternative impact treaty fishing rights, based on early engagement with the tribes and their feedback on potential treaty fishing impacts?

WSF understands the Suquamish Tribe and Tulalip Tribes have treaty rights in Fauntleroy Cove. In Technical Advisory Group meetings, Suquamish Tribal representatives noted preference for minimizing the terminal footprint to minimize impacts to treaty fishing rights. In accordance with the Centennial Accord of 1989 and the Millennium Agreement of 1999, WSF initiated government-to-government consultation with tribal governments. This consultation, which is independent of tribal staff participation in the TAG, includes tribal leadership and will determine potential impacts on treaty fishing rights. WSF will not apply this performance factor until government-to-government consultation is complete.

- **No performance rating:** To be determined following government-to-government consultation.

### How much does the alternative increase overwater coverage?

WSF evenly divided the additional overwater coverage (in square feet), as compared to No Build, into low, medium and high-performance ratings by dividing the greatest potential additional overwater coverage value by three.

- **High performance rating:** Least area of additional overwater coverage (in square feet) as compared to No Build.  
Applied to alternatives with the least area of additional overwater coverage compared to No Build, between 0 and 16,667 square feet. This applied to Alternative A.
- **Medium performance rating:** Medium area of additional overwater coverage (in square feet) as compared to No Build.



Applied to alternatives with a medium area of additional overwater coverage compared to No Build, greater than or equal to 16,667 square feet and less than 33,333 square feet. This applied to Alternatives A-1, A-2 and A-3.

- **Low performance rating:** Greatest area of additional overwater coverage (in square feet) as compared to No Build.

Applied to alternatives with the greatest area of additional overwater coverage compared to No Build, greater than or equal to 33,333 square feet and less than 50,000 square feet. This applied to Alternatives B, B-1, B-2, B-3 and C.

### What is the alternative's required environmental mitigation cost?

Indicators of environmental mitigation cost included the increase in overwater coverage in Zone 2 (which provides the nearshore habitat for eelgrass and macroalgae) and the increase in total overwater coverage. Moving the dock and berthing structures further offshore into deeper waters enhances WSF's opportunity to restore eelgrass and macroalgae. This helps reduce or eliminate ferry propeller wash from eroding the scour hole and may allow for eelgrass and macroalgae to regrow in Zone 2 (where substrates are not covered by the dock).

- **High performance rating:** Lowest estimated environmental mitigation cost compared to No Build.

Applied to alternatives with no increase of overwater coverage in Zone 2 and no increase of total overwater coverage. WSF anticipates that these would have the smallest environmental mitigation cost. This did not apply to any of the alternatives.

- **Medium performance rating:** Medium estimated environmental mitigation cost compared to No Build.

Applied to alternatives with the smallest increase of overwater coverage in Zone 2 or the smallest increase of total overwater coverage. WSF anticipates that these would have medium environmental mitigation cost. This applied to Alternatives A, A-1, A-2, A-3, B and B-3.

- **Low performance rating:** Greatest estimated environmental mitigation cost compared to No Build.

Applied to alternatives that have the greatest increase of total overwater coverage and a medium to higher increase of overwater coverage in Zone 2. WSF anticipates that these would have the greatest environmental mitigation costs. This applied to Alternatives B-1, B-2 and C.

### How much does the alternative impact and/or provide opportunities to restore macroalgae and eelgrass?

WSF considered the impacts and opportunities to restore macroalgae and eelgrass based on the extent of the dock and moving berthing structures further offshore into deeper waters, which reduces or eliminates the effect of ferry propeller wash disturbance within Zone 2 and potentially allows for restoring eelgrass and macroalgae in Zone 2 (where water and submerged surfaces are not covered by the dock within "Zone 2 [no eelgrass]").

- **High performance rating:** Lowest impact on eelgrass/macroalgae as indicated by area available for eelgrass to regrow compared to additional overwater coverage in the nearshore zone.

Applied to alternatives that move the western extent of the dock and berthing structures further offshore and have the smallest increase in overwater coverage in Zone 2 (no eelgrass). This applied to Alternative B.
- **Medium performance rating:** Medium impact on eelgrass/macroalgae as indicated by area available for eelgrass to regrow compared to additional overwater coverage in the nearshore zone.

Applied to alternatives that move the western extent of the dock and berthing structures further offshore and have medium increase in overwater coverage in Zone 2 (no eelgrass). This applied to Alternatives B-1, B-2 and B-3.
- Low performance rating:** Greatest impact on eelgrass/macroalgae as indicated by area available for eelgrass to regrow compared to additional overwater coverage in the nearshore zone.

Applied to alternatives that do not move the western extent of the dock and berthing structures further offshore or that have the highest increase in overwater coverage in Zone 2 (no eelgrass). This applied to Alternatives A, A-1, A-2, A-3 and C.

## Policy risk.

### Based on existing policies, does the alternative present risk for substantial project delay?

WSF explored strategies to improve terminal operations, including *GoodToGo!* and *Wave2Go* advance ticketing. WSF assessed four GTG options for each of the alternatives and one W2G-only advance ticketing option. The fare increases associated with *GTG!* Options 3 and 4 do not align with policies including Washington State’s HEAL Act, WSDOT’s Title VI Plan and the Federal Transit Act. Based on the results of this study, WSF recommended advancing Alternative A-2 with *GTG!* Option 2 and Alternative A-3 with W2G to Level 3 screening.

Seattle City of Seattle signed Resolution 29566 in 1997 requesting WSF not to expand the dock and to take steps to reduce ferry traffic within the surrounding neighborhood. The Fauntleroy Community Association supported this position, and some CAG members reiterated this.

The Washington State Legislature established that “interregional state principal arterials including ferry connections that serve statewide travel” are essential public facilities under RCW 47.06.140 and in 2007 stated the following legislative intent,

*“Therefore, it is the intent of the legislature that Washington state ferries be given the tools necessary to maximize the utilization of existing capacity and to make the most efficient use of existing assets and tax dollars. Furthermore, it is the intent of the legislature that the department of transportation adopt adaptive management practices in its operating and capital programs to keep the costs of the Washington state ferries system as low as possible while continuously improving the quality and timeliness of service.”*

WSF considered these policies throughout the PEL process. Both policy positions support improved operational efficiency, however the language in the city resolution regarding no expansion may risk the project schedule.

- **High performance rating:** Alternative does not increase risk for substantial project delay.  
Applied to alternatives with a similar size dock that are not expected to risk project delay due to City of Seattle 1997 Resolution 29566 and community input. Both Alternative A-2 with *GTG!* Option 2 and Alternative A-3 with W2G align with current policies. This applied to Alternatives A, A-1, A-2 and A-3.
- **Low performance rating:** Alternative increases risk of substantial project delay.  
Applied to alternatives with an on-dock vehicle holding capacity greater than the current dock and therefore may risk project delay due to the 1997 Resolution 29566 by the City Council of the City of Seattle Resolution and community input. This applied to Alternatives B, B-1, B-2, B-3 and C.

### *Level 3 screening results*

This section describes Level 3 screening results, key findings and the alternative that WSF recommends to FHWA to advance into NEPA/SEPA review. The table below summarizes the Level 3 screening results.

### Level 3 Screening Results

Level 3 criteria	Performance factors for Level 3 screening	No Build	Alternative A	Alternative A-1	Alternative A-2 (GTG! Option 2)	Alternative A-3 (W2G ATT)	Alternative B	Alternative B-1	Alternative B-2	Alternative B-3	Alternative C
<b>Ability to meet the requirements for structural reliability.</b>	<b>Factor:</b> Does the alternative meet design codes and requirements for structural reliability?	Does not meet applicable requirements	<input checked="" type="checkbox"/> Meets applicable requirements.	<input checked="" type="checkbox"/> Meets applicable requirements.	<input checked="" type="checkbox"/> Meets applicable requirements.	<input checked="" type="checkbox"/> Meets applicable requirements.	<input checked="" type="checkbox"/> Meets applicable requirements.	<input checked="" type="checkbox"/> Meets applicable requirements.	<input checked="" type="checkbox"/> Meets applicable requirements.	<input checked="" type="checkbox"/> Meets applicable requirements.	<input checked="" type="checkbox"/> Meets applicable requirements.
<b>Ability to accommodate projected sea level rise (resilience).</b>	<b>Factor:</b> Does the alternative accommodate projected sea level rise?	Does not meet TDM guidance regarding sea level rise	<input checked="" type="checkbox"/> Accommodates projected sea level rise.	<input checked="" type="checkbox"/> Accommodates projected sea level rise.	<input checked="" type="checkbox"/> Accommodates projected sea level rise.	<input checked="" type="checkbox"/> Accommodates projected sea level rise.	<input checked="" type="checkbox"/> Accommodates projected sea level rise.	<input checked="" type="checkbox"/> Accommodates projected sea level rise.	<input checked="" type="checkbox"/> Accommodates projected sea level rise.	<input checked="" type="checkbox"/> Accommodates projected sea level rise.	<input checked="" type="checkbox"/> Accommodates projected sea level rise.
<b>Ability to improve operational efficiency (i.e., minimize dwell time, process vehicles more efficiently, maintain on-time performance).</b>	<b>Factor:</b> How does the alternative maintain or improve ferry schedule reliability (timely and reliable loading and unloading)?	19 minutes	<input type="checkbox"/> 20 minutes	<input checked="" type="checkbox"/> 19 minutes	<input checked="" type="checkbox"/> 17 minutes	<input checked="" type="checkbox"/> 17 minutes	<input checked="" type="checkbox"/> 14 minutes	<input checked="" type="checkbox"/> 14 minutes	<input checked="" type="checkbox"/> 14 minutes	<input checked="" type="checkbox"/> 14 minutes	<input checked="" type="checkbox"/> 14 minutes
	<b>Factor:</b> How does the alternative change vehicle queueing on Fauntleroy Way? (Including potential upland and community effects, customer experience, etc.)	n/a	<input type="checkbox"/> Longer queue lengths. Higher % of sailings with queuing. Similar dissipation. Higher queuing effects relative to No Build.	<input checked="" type="checkbox"/> Same queue lengths. Same % of sailings with queuing. Similar dissipation. Similar estimated queuing effects relative to No Build.	<input checked="" type="checkbox"/> Similar queue lengths. Slightly less % of sailings with queuing. Fastest dissipation. Similar estimated queuing effects relative to No Build.	<input checked="" type="checkbox"/> Similar queue lengths. Slightly less % of sailings with queuing. Faster dissipation. Similar estimated queuing effects relative to No Build.	<input checked="" type="checkbox"/> Shorter queue lengths. Lower % of sailings with queuing. Similar dissipation. Lower estimated queuing effects relative to No Build.	<input checked="" type="checkbox"/> Shorter queue lengths. Lower % of sailings with queuing. Similar dissipation. Lower estimated queuing effects relative to No Build.	<input checked="" type="checkbox"/> Shorter queue lengths. Lower % of sailings with queuing. Similar dissipation. Lower estimated queuing effects relative to No Build.	<input checked="" type="checkbox"/> Shorter queue lengths. Lower % of sailings with queuing. Similar dissipation. Lower estimated queuing effects relative to No Build.	<input checked="" type="checkbox"/> Shorter queue lengths. Lower % of sailings with queuing. Similar dissipation. Lower estimated queuing effects relative to No Build.
	<b>Factor:</b> Does the alternative improve WSF's ability to stage and handle the mix of arriving volumes based on destination (Southworth or Vashon), truck traffic and transit?	No Build does not meet TDM guidance for staging and handling. 4x 420ft lanes	<input type="checkbox"/> Improved lane config. for staging, for ADA, etc. 4x 380ft lanes	<input type="checkbox"/> Improved lane config. for staging, for ADA, etc. 4x 420ft lanes	<input type="checkbox"/> Improved lane config. for staging, for ADA, etc. 4x 420ft lanes	<input type="checkbox"/> Improved lane config. for staging, for ADA, etc. 4x 420ft lanes	<input checked="" type="checkbox"/> Improved lane config. for staging, for ADA, etc. 4x 620ft lanes	<input checked="" type="checkbox"/> Improved lane config. for staging, for ADA, etc. 5x 620ft lanes	<input checked="" type="checkbox"/> Improved lane config. for staging, for ADA, etc. 4x 620ft + 2x300ft	<input type="checkbox"/> Improved lane config. for staging, for ADA, etc. 3x 620ft + 2x300ft	<input checked="" type="checkbox"/> Improved lane config. for staging, for ADA, etc. 5x 620ft + 2x 300ft
	<b>Factor:</b> How does adding a signalized intersection improve operational efficiency of unloading the ferry?	n/a	<input checked="" type="checkbox"/> Alternative with an added signalized intersection will improve operational efficiency relative to No Build.	<input checked="" type="checkbox"/> Alternative with an added signalized intersection will improve operational efficiency relative to No Build.	<input checked="" type="checkbox"/> Alternative with an added signalized intersection will improve operational efficiency relative to No Build.	<input checked="" type="checkbox"/> Alternative with an added signalized intersection will improve operational efficiency relative to No Build.	<input checked="" type="checkbox"/> Alternative with an added signalized intersection will improve operational efficiency relative to No Build.	<input checked="" type="checkbox"/> Alternative with an added signalized intersection will improve operational efficiency relative to No Build.	<input checked="" type="checkbox"/> Alternative with an added signalized intersection will improve operational efficiency relative to No Build.	<input checked="" type="checkbox"/> Alternative with an added signalized intersection will improve operational efficiency relative to No Build.	<input checked="" type="checkbox"/> Alternative with an added signalized intersection will improve operational efficiency relative to No Build.
	<b>Factor:</b> Does the alternative provide space to sort and accommodate Americans with Disabilities Act, emergency vehicles, medical requests and other preferential loading categories?	No Build does not meet TDM guidance for provision of ADA and preferential vehicles. 4x 420ft lanes	<input type="checkbox"/> Improved lane config. and widths for ADA, etc. 4x 380ft lanes	<input type="checkbox"/> Improved lane config. and widths for ADA, etc. 4x 420ft lanes	<input type="checkbox"/> Improved lane config. and widths for ADA, etc. 4x 420ft lanes	<input type="checkbox"/> Improved lane config. and widths for ADA, etc. 4x 420ft lanes	<input checked="" type="checkbox"/> Improved lane config. and widths for ADA, etc. 4x 620ft lanes	<input checked="" type="checkbox"/> Improved lane config. and widths for ADA, etc. 5x 620ft lanes	<input checked="" type="checkbox"/> Improved lane config. and widths for ADA, etc. 4x 620ft + 2x300ft	<input checked="" type="checkbox"/> Improved lane config. and widths for ADA, etc. 3x 620ft + 2x300ft	<input checked="" type="checkbox"/> Improved lane config. and widths for ADA, etc. 5x 620ft + 2x 300ft

See the preceding section for details of each performance rating.

- High-performance
- Medium-performance
- Low-performance



Level 3 Screening Results (continued)

Level 3 criteria	Performance factors for Level 3 screening	No Build	Alternative A	Alternative A-1	Alternative A-2 (GTG! Option 2)	Alternative A-3 (W2G ATT)	Alternative B	Alternative B-1	Alternative B-2	Alternative B-3	Alternative C	
Ability to avoid changes to parks and recreational areas (Section 4(f)/6(f), Recreation and Conservation Office-funded projects).	Factor: What encroachment will the alternative have on Cove Park during construction?	n/a	<input checked="" type="checkbox"/> Requires clear zone in the near shore area, estimated 6,000-8,000 square feet. This will nominally vary between alternatives.	<input checked="" type="checkbox"/> Requires clear zone in the near shore area, estimated 6,000-8,000 square feet. This will nominally vary between alternatives.	<input checked="" type="checkbox"/> Requires clear zone in the near shore area, estimated 6,000-8,000 square feet. This will nominally vary between alternatives.	<input checked="" type="checkbox"/> Requires clear zone in the near shore area, estimated 6,000-8,000 square feet. This will nominally vary between alternatives.	<input checked="" type="checkbox"/> Requires clear zone in the near shore area, estimated 6,000-8,000 square feet. This will nominally vary between alternatives.	<input checked="" type="checkbox"/> Requires clear zone in the near shore area, estimated 6,000-8,000 square feet. This will nominally vary between alternatives.	<input checked="" type="checkbox"/> Requires clear zone in the near shore area, estimated 6,000-8,000 square feet. This will nominally vary between alternatives.	<input checked="" type="checkbox"/> Requires clear zone in the near shore area, estimated 6,000-8,000 square feet. This will nominally vary between alternatives.	<input checked="" type="checkbox"/> Requires clear zone in the near shore area, estimated 6,000-8,000 square feet. This will nominally vary between alternatives.	<input checked="" type="checkbox"/> Requires clear zone in the near shore area, estimated 6,000-8,000 square feet. This will nominally vary between alternatives.
	Factor: What permanent encroachment will the alternative have on Cove Park?	n/a	<input checked="" type="checkbox"/> 13 ft wider to north (2,080 square feet)	<input checked="" type="checkbox"/> 13 ft wider to north (2,080 square feet)	<input checked="" type="checkbox"/> 13 ft wider to north (2,080 square feet)	<input checked="" type="checkbox"/> 13 ft wider to north (2,080 square feet)	<input checked="" type="checkbox"/> 13 ft wider to north (2,080 square feet)	<input type="checkbox"/> 22 ft wider to north (3,625 square feet)	<input checked="" type="checkbox"/> 5 ft wider to north (593 square feet)	<input checked="" type="checkbox"/> No widening to north. Narrower than No Build but requires a small 73 square foot encroachment due to the configuration.	<input checked="" type="checkbox"/> 13 ft wider to north (2,193 square feet)	
	Factor: What encroachment will the alternative have on Captain's Park during construction?	n/a	<input checked="" type="checkbox"/> "WSF does not expect that any of the alternatives will have construction that encroaches on Captain's Park."	<input checked="" type="checkbox"/> "WSF does not expect that any of the alternatives will have construction that encroaches on Captain's Park."	<input checked="" type="checkbox"/> "WSF does not expect that any of the alternatives will have construction that encroaches on Captain's Park."	<input checked="" type="checkbox"/> "WSF does not expect that any of the alternatives will have construction that encroaches on Captain's Park."	<input checked="" type="checkbox"/> "WSF does not expect that any of the alternatives will have construction that encroaches on Captain's Park."	<input checked="" type="checkbox"/> "WSF does not expect that any of the alternatives will have construction that encroaches on Captain's Park."	<input checked="" type="checkbox"/> "WSF does not expect that any of the alternatives will have construction that encroaches on Captain's Park."	<input checked="" type="checkbox"/> "WSF does not expect that any of the alternatives will have construction that encroaches on Captain's Park."	<input checked="" type="checkbox"/> "WSF does not expect that any of the alternatives will have construction that encroaches on Captain's Park."	<input checked="" type="checkbox"/> "WSF does not expect that any of the alternatives will have construction that encroaches on Captain's Park."
	Factor: What permanent encroachment will the alternative have on Captain's Park?	n/a	<input checked="" type="checkbox"/> "The proposed traffic signal will not physically affect Captain's Park..."	<input checked="" type="checkbox"/> "The proposed traffic signal will not physically affect Captain's Park..."	<input checked="" type="checkbox"/> "The proposed traffic signal will not physically affect Captain's Park..."	<input checked="" type="checkbox"/> "The proposed traffic signal will not physically affect Captain's Park..."	<input checked="" type="checkbox"/> "The proposed traffic signal will not physically affect Captain's Park..."	<input checked="" type="checkbox"/> "The proposed traffic signal will not physically affect Captain's Park..."	<input checked="" type="checkbox"/> "The proposed traffic signal will not physically affect Captain's Park..."	<input checked="" type="checkbox"/> "The proposed traffic signal will not physically affect Captain's Park..."	<input checked="" type="checkbox"/> "The proposed traffic signal will not physically affect Captain's Park..."	<input checked="" type="checkbox"/> "The proposed traffic signal will not physically affect Captain's Park..."
Requires changes to traffic circulation on local streets in ferry terminal area.	Factor: Does the alternative require changes to access or circulation patterns on local streets?	n/a	<input checked="" type="checkbox"/> Alternative does not require permanent change to traffic circulation patterns on local streets.	<input checked="" type="checkbox"/> Alternative does not require permanent change to traffic circulation patterns on local streets.	<input checked="" type="checkbox"/> Alternative does not require permanent change to traffic circulation patterns on local streets.	<input checked="" type="checkbox"/> Alternative does not require permanent change to traffic circulation patterns on local streets.	<input checked="" type="checkbox"/> Alternative does not require permanent change to traffic circulation patterns on local streets.	<input checked="" type="checkbox"/> Alternative does not require permanent change to traffic circulation patterns on local streets.	<input checked="" type="checkbox"/> Alternative does not require permanent change to traffic circulation patterns on local streets.	<input checked="" type="checkbox"/> Alternative does not require permanent change to traffic circulation patterns on local streets.	<input checked="" type="checkbox"/> Alternative does not require permanent change to traffic circulation patterns on local streets.	
Project cost (design, planning, right of way, risk, construction) alignment with funding.	Factor: What is the alternative's estimated program cost compared to available funding?	Scoping estimate = \$94M	<input checked="" type="checkbox"/> Lowest program cost estimate, greater than available funding.	<input type="checkbox"/> Higher program cost estimate, greater than available funding.	<input type="checkbox"/> Higher program cost estimate, greater than available funding.	<input type="checkbox"/> Higher program cost estimate, greater than available funding.	<input type="checkbox"/> Higher program cost estimate, greater than available funding.	<input type="checkbox"/> Higher program cost estimate, greater than available funding.	<input type="checkbox"/> Higher program cost estimate, greater than available funding.	<input type="checkbox"/> One of the highest program cost estimates, greater than available funding.	<input type="checkbox"/> One of the highest program cost estimates, greater than available funding.	<input type="checkbox"/> One of the highest program cost estimates, greater than available funding.
	Factor: What is the alternative's estimated cost of temporary facilities and operational needs during construction to maintain ferry service?	n/a	<input checked="" type="checkbox"/> Similar range of cost estimates for temporary facilities and operational needs.	<input checked="" type="checkbox"/> Similar range of cost estimates for temporary facilities and operational needs.	<input checked="" type="checkbox"/> Similar range of cost estimates for temporary facilities and operational needs.	<input checked="" type="checkbox"/> Similar range of cost estimates for temporary facilities and operational needs.	<input checked="" type="checkbox"/> Similar range of cost estimates for temporary facilities and operational needs.	<input checked="" type="checkbox"/> Similar range of cost estimates for temporary facilities and operational needs.	<input checked="" type="checkbox"/> Similar range of cost estimates for temporary facilities and operational needs.	<input checked="" type="checkbox"/> Similar range of cost estimates for temporary facilities and operational needs.	<input checked="" type="checkbox"/> Similar range of cost estimates for temporary facilities and operational needs.	<input checked="" type="checkbox"/> Similar range of cost estimates for temporary facilities and operational needs.
Alignment with current project schedule.	Factor: What is the timeline to construct the alternative?	0 months	<input checked="" type="checkbox"/> Approx. 36 months	<input checked="" type="checkbox"/> Approx. 36 months	<input checked="" type="checkbox"/> Approx. 36 months Can accommodate the estimated 32 month timeline to implement GTG! Option 2.	<input checked="" type="checkbox"/> Approx. 36 months Can accommodate the estimated 30 month timeline to implement W2G ATT.	<input checked="" type="checkbox"/> Approx. 43 months	<input checked="" type="checkbox"/> Approx. 43 months	<input type="checkbox"/> Approx. 45 months	<input type="checkbox"/> Approx. 45 months	<input type="checkbox"/> Approx. 45 months	

Level 3 Screening Results (continued)

Level 3 criteria	Performance factors for Level 3 screening	No Build	Alternative A	Alternative A-1	Alternative A-2 (GTG! Option 2)	Alternative A-3 (W2G ATT)	Alternative B	Alternative B-1	Alternative B-2	Alternative B-3	Alternative C	
<b>Project feasibility—amount of additional right of way needed beyond existing terminal footprint (for expanded footprint, utilities or construction).</b>	<b>Factor:</b> What additional permanent right-of-way does this alternative require?	0 SF	<input type="checkbox"/> 300 SF private ROW. 13 feet widening (2,080 SF) into Cove Park needs City ROW.	<input checked="" type="checkbox"/> 0 SF private ROW. 13 feet widening (2,080 SF) into Cove Park needs City ROW.	<input checked="" type="checkbox"/> 0 SF private ROW. 13 feet widening (2,080 SF) into Cove Park needs City ROW.	<input checked="" type="checkbox"/> 0 SF private ROW. 13 feet widening (2,080 SF) into Cove Park needs City ROW.	<input checked="" type="checkbox"/> 0 SF private ROW. 13 feet widening (2,080 SF) into Cove Park needs City ROW.	<input checked="" type="checkbox"/> 0 SF private ROW. 22 feet widening (3,625 SF) into Cove Park needs City ROW.	<input type="checkbox"/> 300 SF private ROW. 5 feet widening (593 SF) into Cove Park needs City ROW.	<input type="checkbox"/> 300 SF private ROW. No widening (narrower than No Build) but encroaches 73 SF into Cove Park due to the configuration, needs City ROW.	<input type="checkbox"/> 300 SF private ROW. 13 feet widening (2,193 SF) into Cove Park needs City ROW.	
<b>Permitting and coordination (level of coordination with external partners, permitting complexity, tribal coordination).</b>	<b>Factor:</b> What potential cultural resource impacts does this alternative pose?	n/a	<input type="checkbox"/> Permanent disturbance in Zone 1 compared to No Build = +5,500 SF	<input checked="" type="checkbox"/> Permanent disturbance in Zone 1 compared to No Build = +3,360 SF	<input checked="" type="checkbox"/> Permanent disturbance in Zone 1 compared to No Build = +3,360 SF	<input checked="" type="checkbox"/> Permanent disturbance in Zone 1 compared to No Build = +3,360 SF	<input type="checkbox"/> Permanent disturbance in Zone 1 compared to No Build = +5,520 SF	<input type="checkbox"/> Permanent disturbance in Zone 1 compared to No Build = +7,060 SF	<input checked="" type="checkbox"/> Permanent disturbance in Zone 1 compared to No Build = +4,420 SF	<input checked="" type="checkbox"/> Permanent disturbance in Zone 1 compared to No Build = +2,600 SF	<input type="checkbox"/> Permanent disturbance in Zone 1 compared to No Build = +6,050 SF	
	<b>Factor:</b> How does the alternative impact treaty fishing rights, based on early engagement with the tribes and their feedback on potential treaty fishing impacts?	To be determined at conclusion of government-to-government consultation.										
	<b>Factor:</b> How much does the alternative increase overwater coverage?	n/a	<input checked="" type="checkbox"/> +12,500 SF OWC	<input checked="" type="checkbox"/> +17,000 SF OWC	<input checked="" type="checkbox"/> +17,000 SF OWC	<input checked="" type="checkbox"/> +17,000 SF OWC	<input type="checkbox"/> +35,100 SF OWC	<input type="checkbox"/> +42,200 SF OWC	<input type="checkbox"/> +44,100 SF OWC	<input type="checkbox"/> +33,900 SF OWC	<input type="checkbox"/> +50,000 SF OWC	
	<b>Factor:</b> What is the alternative's required environmental mitigation cost?	+0 SF Zone 2 OWC +0 SF Total OWC Does not move berthing structure further offshore.	<input checked="" type="checkbox"/> +9,970 SF Z2 +12,500 SF OWC Does not move berthing structure further offshore.	<input checked="" type="checkbox"/> +10,300 SF Z2 +17,000 SF OWC Does not move berthing structure further offshore.	<input checked="" type="checkbox"/> +10,300 SF Z2 +17,000 SF OWC Does not move berthing structure further offshore.	<input checked="" type="checkbox"/> +10,300 SF Z2 +17,000 SF OWC Does not move berthing structure further offshore.	<input checked="" type="checkbox"/> +5,400 SF Z2 +35,100 SF OWC Does move berthing structure further offshore.	<input type="checkbox"/> +9,510 SF Z2 +42,200 SF OWC Does move berthing structure further offshore.	<input type="checkbox"/> +10,150 SF Z2 +44,100 SF OWC Does move berthing structure further offshore.	<input checked="" type="checkbox"/> +6,750 SF Z2 +33,900 SF OWC Does move berthing structure further offshore.	<input type="checkbox"/> +14,380 SF Z2 +50,000 SF OWC Does move berthing structure further offshore.	
<b>Factor:</b> How much does the alternative impact and/or provide opportunities to restore macroalgae and eelgrass?	+0 SF Zone 2 (no eelgrass) Does not move berthing structure further offshore.	<input type="checkbox"/> +9,060 SF Does not move berthing structure further offshore.	<input type="checkbox"/> +9,420 SF Does not move berthing structure further offshore.	<input type="checkbox"/> +9,420 SF Does not move berthing structure further offshore.	<input type="checkbox"/> +9,420 SF Does not move berthing structure further offshore.	<input checked="" type="checkbox"/> +4,520 SF Does move berthing structure further offshore.	<input checked="" type="checkbox"/> +7,280 SF Does move berthing structure further offshore.	<input checked="" type="checkbox"/> +9,610 SF Does move berthing structure further offshore.	<input checked="" type="checkbox"/> +6,570 SF Does move berthing structure further offshore.	<input type="checkbox"/> +12,700 SF Does move berthing structure further offshore.		
<b>Policy risk.</b>	<b>Factor:</b> Based on existing policies, does the alternative present risk for substantial project delay?	n/a	<input checked="" type="checkbox"/> Alternative does not present risk for substantial project delay.	<input checked="" type="checkbox"/> Alternative does not present risk for substantial project delay.	<input checked="" type="checkbox"/> Alternative does not present risk for substantial project delay.	<input checked="" type="checkbox"/> Alternative does not present risk for substantial project delay.	<input type="checkbox"/> Alternative does present risk for project delay due to the 1997 City Council resolution 29566.	<input type="checkbox"/> Alternative does present risk for project delay due to the 1997 City Council resolution 29566.	<input type="checkbox"/> Alternative does present risk for project delay due to the 1997 City Council resolution 29566.	<input type="checkbox"/> Alternative does present risk for project delay due to the 1997 City Council resolution 29566.	<input type="checkbox"/> Alternative does present risk for project delay due to the 1997 City Council resolution 29566.	

The screening results highlight alternatives with high, medium and low performance ratings. WSF reviewed these results to identify an alternative or alternatives to recommend to FHWA to advance into NEPA and SEPA review.

WSF considered all of the screening criteria and performance factor ratings during the Level 3 screening. The screening results show some factors perform the same across all alternatives, so WSF focused on the remaining performance factors that differ between alternatives. WSF also heard from the advisory groups and Suquamish Tribe about the importance of minimizing impacts to the surrounding environment and building a terminal that operates more efficiently.

For these reasons WSF focused on the two screening criteria most critical to meeting the purpose and need – developing a new terminal that meets the **operational needs** while minimizing impacts to the surrounding **environment** and community as much as possible.

The section below describes the Level 3 screening findings.

## Findings

Based on the Level 3 screening results, WSF recommends advancing a footprint based on Alternatives B and B3, holding between 124 and 155 vehicles. WSF will refine the final footprint during NEPA and SEPA environmental review.

- Alternatives A, A-1, A-2 and A-3, the similar sized dock options, provide no or minimal benefit to operational efficiency, even with *GoodToGo!* and *Wave2Go*. These alternatives do not perform better than the other alternatives for the environmental performance factors because they do not improve the scour hole caused by propeller wash at the end of the dock.
- **Alternatives B and B-3, two of the longer dock options, improve operational efficiency and minimize environmental impacts. These alternatives move the ferry slip to deeper water, allowing greater potential for restoring eelgrass and macroalgae around the dock.**
- Alternatives B-1 and B-2, the other two longer dock options, provide the greatest improvement in operational efficiency, performing slightly better than Alternatives B, B-3 and C. Similar to Alternatives B-1 and B-2, these alternatives move the ferry slip to deeper water, however, overall they score lower in environmental related performance ratings because they require a bigger increase in overwater structure.
- Alternative C, the largest dock option, brings the greatest increase in overwater coverage and impacts to eelgrass and macroalgae, requiring the most complex permitting and environmental mitigation. The additional holding space may not provide more operational efficiency than Alternatives B, B-1, B-2 and B-3.



## Next steps

WSF will finalize the PEL report and coordinate with FHWA to advance a footprint based on Alternatives B and B3 to NEPA/SEPA environmental review. During the next phase, WSF will begin preliminary design, complete environmental review and permitting, and secure the remaining funding needed to build the project. WSF then plans to hire a contractor to complete design and build the project. Construction is currently scheduled to begin in 2027 with the new terminal opening around 2031 . WSF will continue to engage the advisory groups, tribes and Triangle route communities throughout the project.