

Appendix I

Project Summary Descriptions

Complete Seismic Upgrades to Area Bridges

Goal 1: Promote Regional Solutions	Goal 2: Promote Economic Vitality and Growth	Goal 3: Provide Multi- modal Solutions	Overall Average
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1 What is the project?

This project would provide seismic upgrades to two bridges in the tri-city area, the Chehalis River Bridge (built in 1951) and the Heron Street Bridge over the Wishkah River (built in 1949). The bridge locations are highlighted in Exhibit 3-2. Both bridges require stronger pier foundations to withstand a major earthquake.

The upgrades to the Chehalis River Bridge include strengthening the two-bascule pier foundations with drilled shafts. The upgrades to the Heron Street Bridge include strengthening the center pier foundation with drilled shafts.

2 What are the potential benefits and impacts of this project?

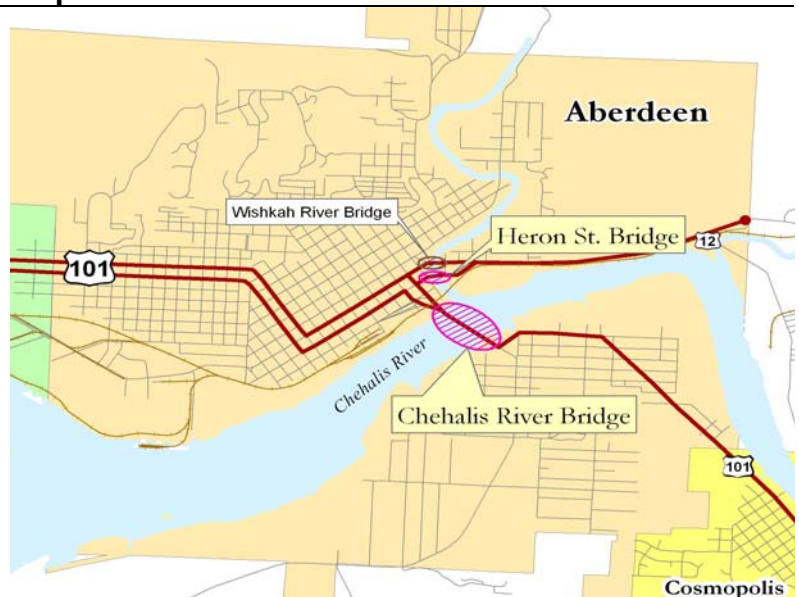
Seismic upgrades to these two bridges are vital to maintain access to regional health care facilities and provide fire and police protection in the event of a natural disaster. If these bridges were to fail during an earthquake, residents of South Aberdeen and Cosmopolis would be isolated from the rest of the community. The alternate route to the Chehalis River Bridge via SR 107 and US 12 is approximately 20 miles. This would add time and cost for moving people and goods through the region.

3 What is the estimated project cost?

Seismic upgrades to each bridge would cost approximately \$10,000,000, resulting in a total project cost of \$20,000,000.

Exhibit 3-2

Seismic Upgrades to Area Bridges Project Vicinity Map



The Heron Street Bridge is an important link in the region's transportation network.



The Chehalis River Bridge provides access between South Aberdeen/Cosmopolis and US 12/downtown Aberdeen.



Truck Route Alternative

Goal 1: Promote Regional Solutions	Goal 2: Promote Economic Vitality and Growth	Goal 3: Provide Multi- modal Solutions	Overall Average
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1 What is the project?

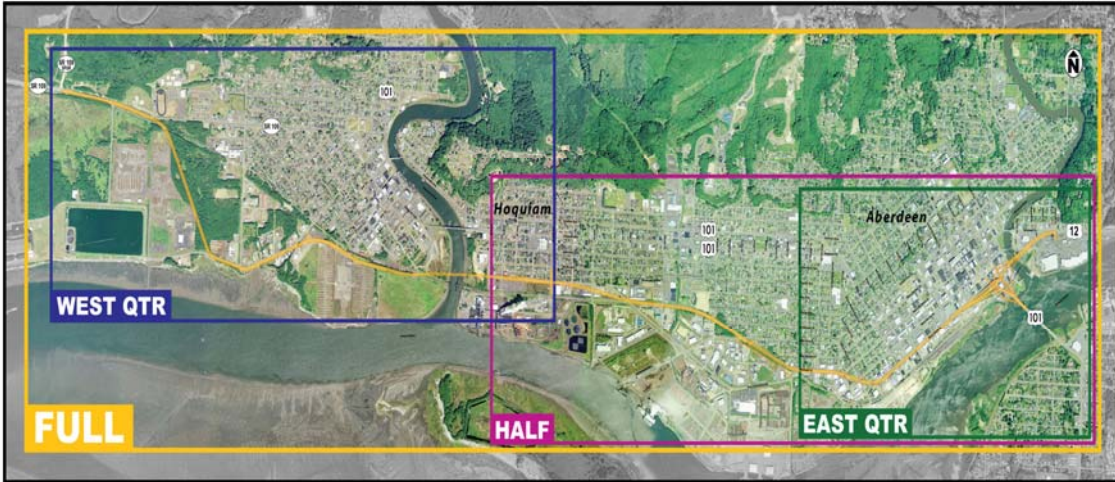
The Truck Route Alternative project was initially identified in the early 1970s. This project would provide an alternate truck route corridor from the State Route (SR) 109/SR 109 Spur intersection in Hoquiam to the US 101/Chehalis Street intersection in Aberdeen, as shown in Exhibit 3-3. A new four- to five-lane (two lanes in each direction and left turn lanes) limited access truck route would parallel US 101 through South Hoquiam, the Port of Grays Harbor, and Aberdeen. Two new high-level, fixed span bridges over the Hoquiam River and Wishkah River would be provided. Other design features include a new alignment from Wishkah Street to State Street and completing grade-separated ramps at the US 12/US 101 interchange. The new corridor would be a designated truck route but would also provide an alternate route to US 101 for through and local traffic.

The truck route project could be constructed in phases, and four options were analyzed, including:

- Full Truck Corridor
- Half Truck Corridor
- East Quarter Truck Corridor
- West Quarter Truck Corridor

The full truck corridor option would consist of several smaller elements and could be constructed over several years as project funds become available. Before this project can move forward into design and construction, WSDOT would need to update the Final Environmental Impact Statement (EIS) (FHWA and WSDOT et al. 2000) completed in the late 1990's.

**Exhibit 3-3
Truck Route Alignment Options**

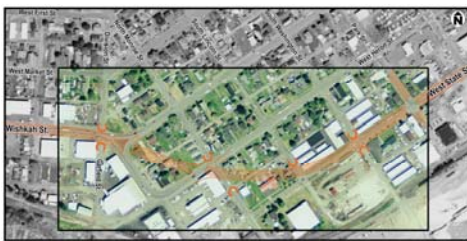
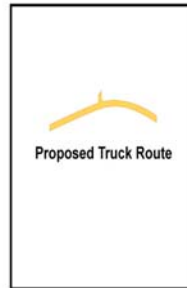




FULL
High-level Wishkah River Bridge; US 101 / SR 12 connection; State St.; new route to north of railroad (in Aberdeen); high level Hoquiam River Bridge; new route north and parallel to railroad (in Hoquiam) to SR 109.
Requires update of the EIS.

WEST QUARTER
High-level Hoquiam River crossing; continues along a new alignment along the railroad; connects to SR 109 east of Paulson Road, follows SR 109 and terminated at the SR 109/SR 109 Spur junction.
Requires update of the EIS.

HALF
High-level Wishkah Bridge; US 101 / SR 12 connection; new route North of railroad in Aberdeen to 22/23 St. (No new Hoquiam River Bridge).
Requires update of the EIS.




EAST QUARTER
High-level Wishkah Bridge; US 101 / SR 12 connection; connect State Street to Port Industrial Road; Port Industrial Road improvements.
Requires update of the EIS.



Legend
 New Cul-de-sac
 New State St. Alignment

New truck corridor alignment between State Street and Wishkah Street In Aberdeen.



Legend
 New US12/US101 Connection
 Proposed Wishkah River Bridge
 Proposed US101 Alignment

The new US 12/US 101 interchange would provide ramps from northbound US 101 to eastbound US 12 and from westbound US 12 to southbound US 101.

2 What are the potential benefits and impacts of this project?

This project would greatly improve motorist travel times and circulation patterns on US 12, US 101, and SR 109 by removing some truck and through traffic. Areas with high congestion, particularly in downtown Aberdeen and downtown Hoquiam, would see improved traffic flow and intersections would operate more efficiently, as shown in Exhibit 3-4. Truck mobility and circulation into the Port of Grays Harbor would improve, and the majority of trucks would no longer compete with vehicular traffic on US 101 through Aberdeen and Hoquiam. Most importantly, the full truck route would provide additional crossings over the Hoquiam River and Wishkah River. The new bridges would provide additional access to emergency responders, would reduce vehicle traffic on the existing bridges, and would not open to vessel traffic.

Exhibit 3-4
Intersection Level of Service

	Number of Intersections (2006)	Number of Intersections (2030 without the Full Truck Corridor)	Number of Intersections (2030 with the Full Truck Corridor)¹
Level of Service A or B	26	13	23
Level of Service C or D	7	5	6
Level of Service E or F	1	16	4

1. The full truck corridor would eliminate one study intersection

3 What is the estimated project cost?

The project costs have been calculated separately for different project elements and segments and are shown in Exhibit 3-5. The full truck corridor, including a reevaluation of the National Environmental Policy Act (NEPA) EIS and construction of all the truck corridor elements, would cost approximately \$386,000,000.

Where can I find descriptions for each segment of the full truck corridor?

A detailed description of each truck corridor segment is presented in Appendix H – Cost Estimate Report, Chapter 1 – Truck Route.

**Exhibit 3-5
Truck Route Cost Summary**

	West Quarter Truck Corridor	Half Truck Corridor	East Quarter Truck Corridor	Full Truck Corridor
Reevaluation of the NEPA EIS; early engineering including phasing analysis	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000
Environmental Documentation	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000
SR 109 Spur Junction to SR 109 at Paulson Road	\$3,600,000			\$3,600,000
New Alignment from Paulson Road to 5th Street	\$18,900,000			\$18,900,000
New Alignment from 5th Street along the Railroad to 10th Street	\$5,700,000			\$5,700,000
New Hoquiam River Bridge	\$136,000,000			\$136,000,000
22nd/23rd Streets to 30th Street		\$16,100,000		\$16,100,000
New Alignment from 30th Street to Port Industrial Road		\$10,500,000	\$8,000,000	\$10,500,000
Port Industrial Road Improvements*	\$3,600,000			
Port Industrial Road to Wishkah Street		\$900,000	\$900,000	\$900,000
New Alignment from Wishkah Street to State Street		\$9,700,000	\$9,700,000	\$9,700,000
State Street from Park Street to South K Street		\$2,600,000	\$2,600,000	\$2,600,000
US 101/US 12 Connection		\$40,000,000	\$40,000,000	\$40,000,000
New Wishkah River Bridge		\$134,000,000	\$134,000,000	\$134,000,000
TOTAL COST	\$175,800,000	\$221,800,000	\$198,800,000	\$386,000,000

Tri-City Operational Improvements

Goal 1: Promote Regional Solutions	Goal 2: Promote Economic Vitality and Growth	Goal 3: Provide Multi- modal Solutions	Overall Average
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1 What is the project?

The Tri-City Operational Improvements project provides 17 needed and visible improvements that can be implemented in the short term. Most of these projects are small in nature and are limited to a single intersection or a few city blocks. Exhibit 3-6 illustrates the location of each tri-city operational improvement, and Exhibit 3-7 provides a brief description of each project.

**Exhibit 3-6
Tri-City Operational Improvements Vicinity Map**



2 What are the potential benefits and impacts of this project?

The Tri-City Operational Improvements would provide each city with several small but beneficial projects that would enhance the quality of the regional transportation system. Each project in the Tri-City Operational Improvements is relatively low cost and would provide a quick and immediate benefit to the region. Several projects, including constructing curb extensions, Americans with Disabilities Act (ADA) compliant ramps, and sidewalks, would provide non-motorized safety and accessibility improvements in the tri-city area.

Where can I get more detailed description and cost information for each tri-city operational improvement?

The Cost Estimate Report (Appendix H) provides a more comprehensive description and detailed cost breakdown of each tri-city operational improvement.

3 What is the estimated project cost?

The full funding cost for all of the Tri-City Operational improvements would be approximately \$10,000,000. The stakeholder committee has recommended full funding be allocated for this project.

Exhibit 3-7

Tri-City Operational Improvement Projects

Map Location	Project Description
A	Pedestrian and access improvements
B	Redesign or improve the intersection of Lincoln Street/6th Street to provide easier access to downtown Hoquiam
C	Improve signage, lighting, and sidewalk in the vicinity of the Riverside Bridge
D	Provide pedestrian safety, beautification, and economic development improvements
E	Approach improvements to the Simpson Avenue Bridge
F	Improve intersection operations to increase capacity and safety
G	Provide a right-turn pocket on westbound First Street
H	Replace the old span wire signal system
I	Increase right-turn radius from westbound Wishkah Street
J	Increase left-turn radius from southbound Park Street
K	Extend sidewalk bulb-out project (shown in green in Exhibit 3-6)
L	Intersection improvements and restriping at the South Aberdeen Fire Station
M	Install a left-turn pocket at the Mill Creek Pedestrian Link
N	Sidewalk Improvements in downtown Cosmopolis
O	Construct center left-turn lane
Downtown Hoquiam ADA Ramp Improvements in the Central Business District (Not shown on map)	Install 96 new Americans with Disabilities Act (ADA) accessible ramps, upgrade 144 existing ramps, and complete sidewalks along all state routes in Hoquiam.
Activate the Aberdeen Traffic Actuation System (Not shown on map)	Activate traffic loops along US 101 through downtown Aberdeen

Wishkah Mall Access Improvements

Goal 1: Promote Regional Solutions	Goal 2: Promote Economic Vitality and Growth	Goal 3: Provide Multi- modal Solutions	Overall Average
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1 What is the project?

The Wishkah Mall Access Improvements project shown in Exhibit 3-8 would provide channelization improvements and access revisions to the Wishkah Mall in two phases. The first phase would fund a new emergency vehicle access, turning movement and access revisions, signal coordination between the two signals located along US 12, and re-striping of the internal Wal-Mart and Top Foods parking area. The second phase would include analysis and construction of an alternate access road, located on the north side of US 12, and removal of several driveways along the highway.

**Exhibit 3-8
Phased Wishkah Mall Access Improvements**



2 What are the potential benefits and impacts of this project?

This project would improve access from US 12 to the Wishkah Mall. This includes reducing vehicle delays at site access driveways, improving safety by changing access control at some mall driveways, and providing a dedicated emergency vehicle access route that is not blocked by a train. This project would provide some public funds for improvements to private property; however, since Wal-Mart and adjacent businesses are critical to the economic vitality of the region, the stakeholder committee agreed full funding should be allocated for this project.



The primary access to the Wishkah Mall from Heron Street.

3 What is the estimated project cost?

The total project cost for both phases is approximately \$4,000,000.

Improve Port Industrial Road

Goal 1: Promote Regional Solutions	Goal 2: Promote Economic Vitality and Growth	Goal 3: Provide Multi-modal Solutions	Overall Average
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1 What is the project?

This project would include several improvements to Port Industrial Road, such as intersection turn lanes, two traffic signals, sidewalks, storm drain facilities, proposed pavement overlay, and a center two-way left-turn lane. Exhibit 3-10 illustrates the improvements along the corridor.

Exhibit 3-10
Port Industrial Road Improvements



2 What are the potential benefits and impacts of this project?

This project would improve traffic flow, roadway capacity, and pedestrian and vehicle safety along the entire corridor. The project would benefit local traffic destined for Port of Grays Harbor businesses and through traffic using Port Industrial Road to avoid traffic congestion on US 101. Construction of the two-way left-turn lane and other intersection turn lanes would remove turning vehicles from through lanes, improving traffic flow along the corridor. The new traffic signals would shorten wait times at two of the higher-volume intersections in the corridor. The new traffic signals would also create additional traffic flow gaps at stop-sign controlled intersections on Port Industrial Road. As a result, vehicle wait times at both of the new signalized intersections and at unsignalized intersections would improve.



At the Port Industrial Road/Myrtle Street intersection, a traffic signal and traffic channelization improvements are recommended.

3 What is the estimated project cost?

The total construction cost for all of the proposed improvements is approximately \$3,600,000.

Cosmopolis Downtown Revitalization

Goal 1: Promote Regional Solutions	Goal 2: Promote Economic Vitality and Growth	Goal 3: Provide Multi- modal Solutions	Overall Average
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1 What is the Project?

The Cosmopolis Downtown Revitalization project would improve the downtown area of Cosmopolis by constructing the following improvements between “C” Street and “F” Street on the west side of US 101, as shown in Exhibit 3-11:

- Replacing the aging sidewalks
- Improving street lighting and storm drainage facilities
- Reconstructing utilities underground
- Installing ADA compliant wheelchair ramps
- Retrofitting existing wheelchair ramps with truncated domes
- Adding landscaping
- Completing the Cosmopolis sidewalk project, along the west side of US 101 between “F” Street and “H” Street and a portion extending 300 feet to the south from “C” Street

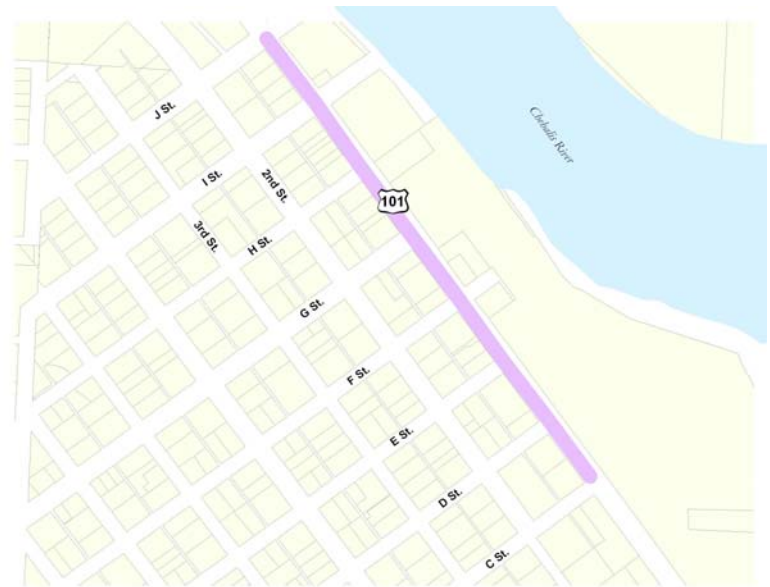
2 What are the potential benefits and impacts of this project?

This project would revitalize Cosmopolis with improved pedestrian-friendly and aesthetically pleasing facilities. After Cosmopolis partially reconstructed the west side of US 101, many downtown businesses reinvested in their store frontage and eight new businesses opened creating 40 new fulltime jobs with a private investment of over \$1 million. This resulted in a more attractive and economically viable business district.

3 What is the estimated project cost?

This project is expected to cost approximately \$1,300,000.

Exhibit 3-11
Cosmopolis Downtown Revitalization Project Vicinity



The downtown Cosmopolis sidewalk project, as shown above, improved aesthetics on the west side of US 101. The Cosmopolis downtown revitalization would finish improving the west side of US 101 and provide similar improvements to the east side of the street.

Rail Car Storage East of Aberdeen

Goal 1: Promote Regional Solutions	Goal 2: Promote Economic Vitality and Growth	Goal 3: Provide Multi-modal Solutions	Overall Average
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1 What is the project?

This project includes the design and construction of a rail car storage yard east of Aberdeen to relieve rail conflicts in downtown Aberdeen from train switching movements across at-grade street crossings. Two new railroad sidings would be constructed to allow one train to pass another; the new sidings could also potentially be used for temporary rail car storage. Potential storage locations include Oakville, Aberdeen Junction, and other locations east of Aberdeen. These potential rail car storage locations are shown in Exhibit 3-12.

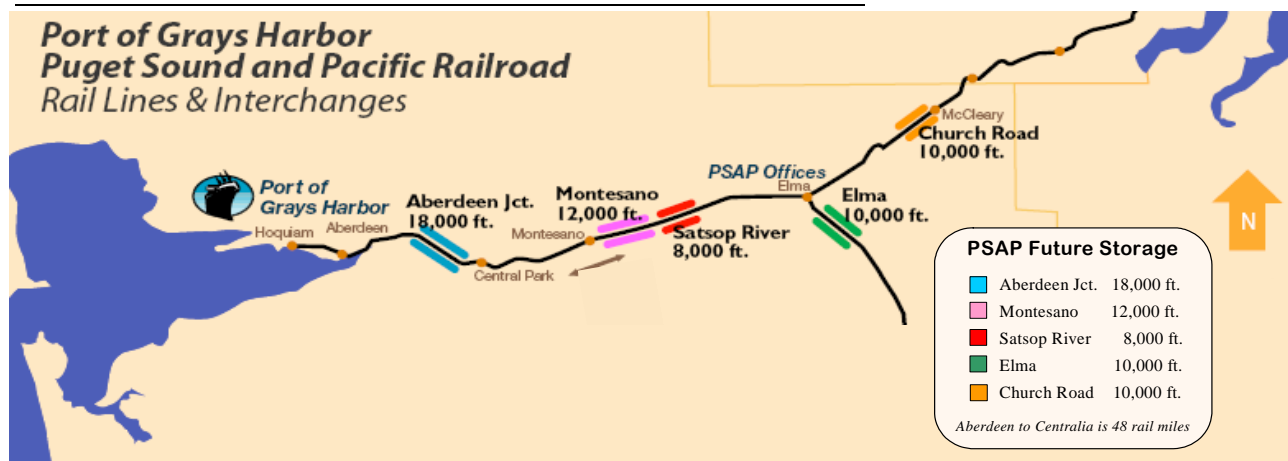
2 What are the potential benefits and impacts of this project?

This project would relieve rail congestion and minimize conflicts at rail/roadway crossings in the downtown Aberdeen area. Train cars are currently stored on the rail sidings south of State Street to allow larger trains to pass. Relocating the rail car storage area east of Aberdeen would greatly reduce trains blocking the Wishkah Mall access driveways. This would reduce traffic congestion caused by trains in the mall vicinity and along State Street.

3 What is the estimated project cost?

This project would cost approximately \$4,300,000.

Exhibit 3-12
Future Rail Car Storage Locations East of Aberdeen



www.PortofGraysHarbor.org

This map is for illustrative purposes only. Storage yard locations have not been identified. Further study is needed.

Replace Existing Hoquiam Bridges

Goal 1: Promote Regional Solutions	Goal 2: Promote Economic Vitality and Growth	Goal 3: Provide Multi- modal Solutions	Overall Average
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1 What is the project?

This project would replace the two existing Hoquiam River Bridges, as shown in Exhibit 3-13. Two alternative alignment options for replacing these structures include two high-level, fixed-span bridges or replacing each bridge with low-level, moveable facilities at the same location. This project would likely require preparation of an environmental impact statement prior to constructing the two new bridges.

2 What are the potential benefits and impacts of this project?

The high-level fixed-span crossing footprint would be over half a mile long to obtain an adequate clearance over the Hoquiam River.

As a result, existing businesses near the Hoquiam River could be displaced or affected. The new high-level bridges would benefit local and through traffic mobility by eliminating periodic congestion caused by bridge openings.

The two new low-level bridges would have lower impacts to existing businesses compared to a new high-level facility, but would continue to have long-term maintenance costs associated with the mechanical bridge opening system. The low-level bridges may also have greater environmental impacts to fish habitat areas and to vessel navigation requirements from the U.S. Coast Guard.

3 What is the estimated project cost?

This project is expected to cost approximately \$141,000,000 for two low-level movable bridges and approximately \$154,000,000 for two new high-level structures.

Exhibit 3-13
Replace Existing Hoquiam River Bridges



- Existing US 101/SR 109
- Optional Low Level Replacement Bridges
- Optional High Level Replacement Bridges



Riverside Avenue Bridge



Simpson Avenue Bridge

Relocate Rail Line South of Port Industrial Road

Goal 1: Promote Regional Solutions	Goal 2: Promote Economic Vitality and Growth	Goal 3: Provide Multi- modal Solutions	Overall Average
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1 What is the project?

This project would relocate the existing Puget Sound and Pacific Railroad (PS&P) line between the vicinity of the Port Industrial Road/E. Terminal Way and 30th Street. The new rail alignment would traverse through the Port of Grays Harbor, as shown in Exhibit 3-14, and would eliminate the two existing at-grade railroad crossings along the corridor. The new railroad alignment would continue to operate within the existing and future industrial land uses.

Exhibit 3-14
Proposed Rail Realignment



2 What are the potential benefits and impacts of this project?

This project would eliminate all vehicle delays associated with trains crossing Port Industrial Road and greatly improve roadway operations through the Port. The project would also benefit residential property adjacent to the existing railroad alignment by reducing noise and other impacts from the rail line.



The two at-grade railroad crossings along Port Industrial Road would be removed in conjunction with this project.

3 What is the estimated project cost?

The project is expected to cost approximately \$6,200,000.