

# HOOD RIVER/WHITE SALMON INTERSTATE BRIDGE REPLACEMENT

Pre-Construction Phase 2

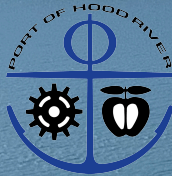
## 2020 BUILD TRANSPORTATION PLANNING GRANT APPLICATION

Submitted jointly by

Klickitat County (Wash.)



Port of Hood River (Ore.)



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*Submitted to USDOT on May 15, 2020*

#### LEAD APPLICANT AND IDENTIFIED AWARD RECIPIENT:

Port of Hood River, 1000 E. Port Marina Drive, Hood River, OR 97031

Michael McElwee, Executive Director / Kevin Greenwood, Project Director, (541) 961-9517



# Letter from Applicants

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May 13, 2020

The Honorable Elaine L. Chao  
Secretary, U.S. Department of Transportation  
1200 New Jersey Avenue, S.E.  
Washington, D.C. 20590

RE: JOINT BUILD TRANSPORTATION PLANNING GRANT APPLICATION FOR THE  
PHASE 2 REPLACEMENT OF THE HOOD RIVER/WHITE SALMON BRIDGE

Dear Secretary Chao,

The Port of Hood River and Klickitat County have jointly applied for a U.S. Department of Transportation's Better Utilizing Investments to Leverage Development (BUILD) Transportation Planning Grant program to fund design for the proposed Hood River – White Salmon Highway Bridge Replacement Project on SR-35, between the States of Oregon and Washington, across the Columbia River.

As part of the application, the applicants are required to express the specific contributions to the project aside from simply being a project partner.

Klickitat County has agreed to head the design selection committee (DSC) and the technical advisory committee (TAC) for the duration of the BUILD project. The Port of Hood River has agreed to contribute a \$1.25-million local match to the project and serve as the lead applicant, project manager and award recipient.

We look forward to working with your staff to begin the design of the replacement of this critical, but aging, interstate bridge.

Thank you for your consideration.

Sincerely,

A blue ink signature of David Sauter, Commissioner of Klickitat County.

David Sauter, Commissioner  
Klickitat (Wash.) County

A blue ink signature of Michael McElwee, Executive Director of the Port of Hood River.

Michael McElwee, Executive Director  
Port of Hood River (Ore.)

# Project Description

The Mid-Columbia River Region seeks to replace the nearly century old Hood River (Ore.) - White Salmon (Wash.) Interstate Bridge. The original bridge – built in 1924 – has a number of restrictions limiting its full use for the residents, businesses and visitors to this 100-mile stretch of the Columbia River.

The purpose of this project is to fund 15% design and accompanying financing studies to improve multi-modal transportation of people and goods across the River between the White Salmon/Bingen (Wash.) and Hood River (Ore.) communities. The need for this project is significant: to rectify current and future transportation inadequacies and deficiencies associated with the existing Bridge.

Those needs and solutions can best be summarized as follows:

CHALLENGES	Description	Solution
<b>Roadway Capacity</b>	Address traffic congestion on the bridge and at both approaches	Increase lane size and convert system to All Electronic Tolling (AET).
<b>System Linkages</b>	Maintain a cross-river and through-river connection	Removal of weight limitations for commercial truck traffic; addition of bike/pedestrian facility including ability to convert temporarily for emergency operations.
<b>Transportation Demand</b>	Meet future travel demand for vehicles, pedestrians and bicycles	Addition of shoulders could allow for future FHWA application for conversion of third lane; bike/ped facility allows for non-motorized bridge crossing; AET allows for more efficient flow of traffic.
<b>Legislation</b>	Comply with state and federal laws for the corridor	Minimize the profile of the bridge in a National Scenic Area; improve currently non-existent storm water collection system; provide Washington residents access to policy decisions.
<b>Social Demands/Economic Development</b>	Provide for current and projected flow of goods, labor and consumers across the river; develop long-term funding strategies for operations and maintenance	Removes weight restrictions for commercial lumber/fruit trucks; ensures more efficient flow of traffic between Oregon and Washington; maintenance and repairs requiring lane closures eliminated; opportunity for upgraded fiber-optic cable across Columbia River; bridge lifts eliminated making travel more efficient for both maritime traffic and highway traffic; provides alternate travel opportunities for localized traffic
<b>Modal Interrelationships</b>	Accommodate river navigation, passenger and commercial vehicles, transit, bicycles and pedestrians	Increases horizontal and standing vertical clearances for barges; adds bike/ped path; increases opportunities for heavy commercial truck traffic; ensures localized traffic can continue travel between Washington and Oregon communities.
<b>Safe Travel for All Modes</b>	Reduce the deficiencies to allow for faster, wider and more efficient movement of people and goods	Increases travel lane width; adds shoulders; adds bike/ped facility which currently does not exist; bike/ped facility can be converted into temporary emergency management lane if travel lanes are blocked.

## Project History

This bi-state effort began in 1999 when Rep. Linda Smith (Wash. 3<sup>rd</sup> District) worked to secure the funds for the SR-35 Feasibility Study. The SW Washington Regional Transportation Council (RTC) received \$942,000 in the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) which was passed June 9, 1998. An additional \$235,000 in local match was used, bringing the total to \$1,277,500 for the study effort. Matching funds were provided by Klickitat (Wash.) County and the Port of Hood River, Ore. These funds were used to complete the SR-35 Feasibility Study and Draft Environmental Impact Statement (DEIS) in 2003.

On August 10, 2005, President Bush signed into law the “Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users” (SAFETEA-LU), which included \$640,000 for the SR-35 Study. Representative Doc Hastings (Wash. 3<sup>rd</sup> District) secured these funds via earmark. WSDOT provided “Toll Credits” from the State Ferry system as a match (\$99,885). These funds were used to complete the Type, Size, and Location (TS&L) Study in 2011.

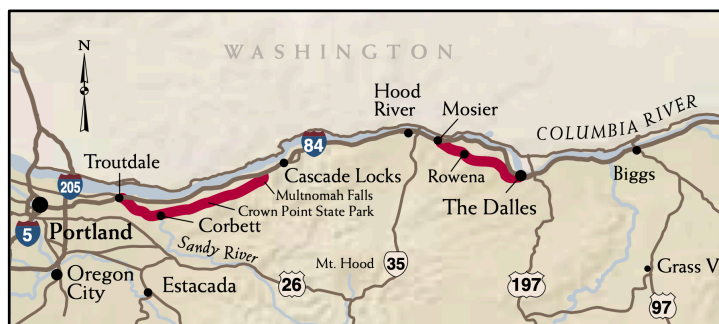
In 2017, the Oregon side of the river picked up the baton when the Oregon State Legislature passed House Bill 2017 (HB2017), the “Local Transportation Projects Program”, using State Highway Funds. \$5 million was appropriated for “an environmental impact statement (EIS) and necessary related activities for the replacement of the Hood River / White Salmon Interstate Bridge”. As of April 30, 2020, the Port of Hood River, ODOT and Federal Highway Administration (FHWA) have completed most of the Supplemental Draft EIS and the Port has also developed Administrative Rules for the consideration of Public Private Partnerships (P3s).

As the SDEIS nears completion, a Bi-State Bridge Replacement Working Group (BSBRWG or WG), made up of six local government elected officials, has been meeting frequently since the beginning of 2020 to discuss post-NEPA activities.<sup>1</sup>

## Other Transportation Investments in the Gorge

Since the project is a significant rural connector, the project applicants are stressing that rural transportation networks are critically important for domestic uses and export of agriculture and energy commodities. As such, the Port, County and its partners will be applying for a wide-range of local, state and federal funding. It will take a number of diverse funding pots to complete the financing for this Bridge.

The Port has also applied for a \$5-million INFRA grant and anticipates that it will also pursue Transportation



**Figure 1**

Hood River is the middle point between Troutdale and The Dalles, providing a necessary connecting point for citizens in the mid-Columbia River gorge.

<sup>1</sup> [https://www.hoodrivernews.com/news/new-bi-state-group-forms-to-support-bridge-replacement/article\\_e0a6ef06-8efd-11ea-97da-4fce6463a2a.html](https://www.hoodrivernews.com/news/new-bi-state-group-forms-to-support-bridge-replacement/article_e0a6ef06-8efd-11ea-97da-4fce6463a2a.html) (Hood River News, 2020)



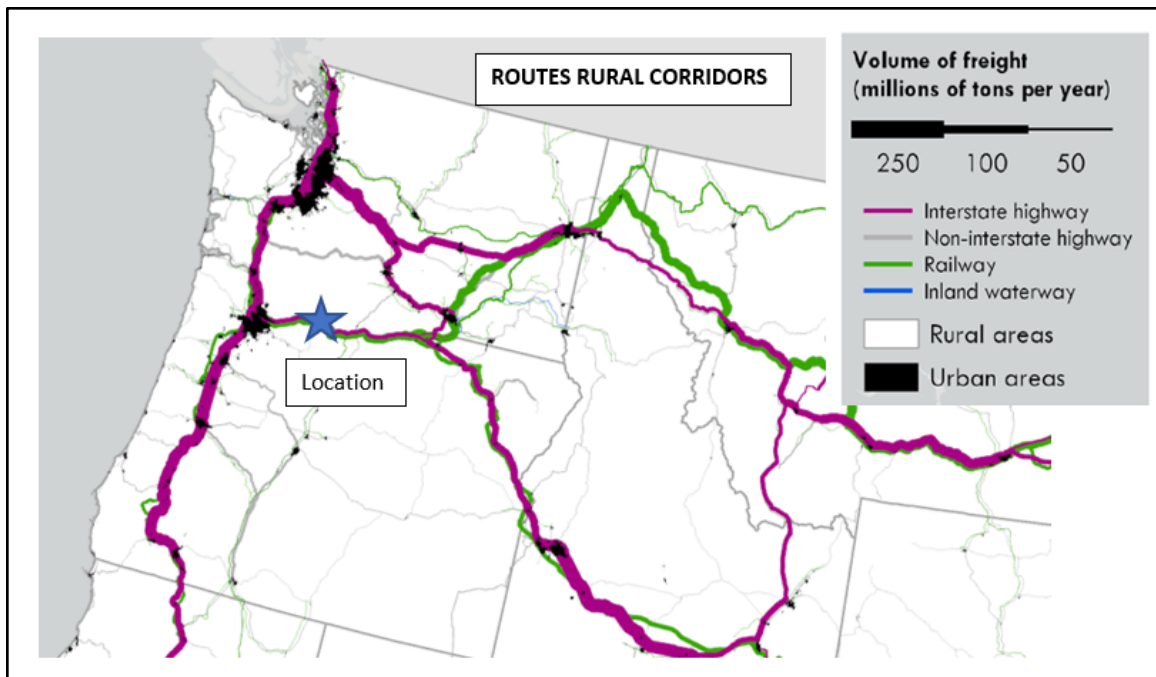
Infrastructure Finance and Innovation Act (TIFIA) funding to complete the financing necessary to being final design and construction. It's possible that the US Dept. of Agriculture (USDA) and US Economic Development Administration (EDA) may have significant financing programs that could aid in completing subsequent phases of this project.

In addition to ongoing Interstate Hwy. improvements along I-84 and SR-14, a significant multi-modal transportation improvement has been made along the south shore of the Columbia River. Oregon Dept. of Transportation (ODOT) will soon complete a 75-mile bike/pedestrian trail between Troutdale, Ore. and The Dalles, Ore.

## Benefits to the Mid-Columbia River Gorge Region

The proposed project directly addresses the federal Rural Opportunities to Use Transportation for Economic Success (ROUTES) initiative by addressing disparities in rural transportation infrastructure. Replacement of the 96-year old bridge will result in bi-state regional economic benefits that meet our Nation's priority transportation goals of safety and economic competitiveness. As shown in the ROUTES map below, this project directly serves all designated Rural freight modes (Interstate Highway, Railways, Inland Waterway).

**Figure 2.** Project meets four ROUTES rural corridors criteria



This project is located within a rural U.S. Congressionally-designated National Scenic Area (NSA), located approximately 45 miles from the Portland (Ore.)-Vancouver (Wash.) metro area, at river mile 169 between Oregon and Washington. As such, the route provides a vital linkage between the agricultural heartland and ocean ports located in the Pacific Northwest.

The new bridge will strengthen U.S. freight mobility for all modes of travel, support and enhance high technology companies, farm operations and visitation/service industries within the NSA and beyond. This will be done by removing the current load restrictions on the current bridge.

Currently, the load ratings for the bridge are limited at 40 tons which require timber and fruit processors to drive an additional 75 miles to move product coming across state borders. The Oregon Dept. of Transportation (ODOT) contracted with David Evans & Associates (DEA) in October 2019 to load rate a total of 26 bridges owned by ODOT and the Port of Hood River. Though the current load is rated for 40 tons, DEA is proposing that the Port lower the rating for 5- and 6-axle tractor/trailers to 32 tons.

There are well over 10,000 separate farm operations that depend on shipments along the routes enhanced by this project. The Hood River and Yakima Valleys are a world leader in the production of pears and apples, with over 225,000 tons of fruit produced for domestic and foreign consumption each year.

In addition, the region has evolved its Advanced Technology and Avionics clusters. The bridge is a critical shipping route and workforce link between Oregon and Washington, which is home to Insitu, an independent subsidiary of Boeing, and one of the largest manufacturers of unmanned aerial vehicles (UAVs) in the world.

The project is located within Opportunity Zone No. 41027950300.

## **Description of the Technical and Engineering Work**

This grant proposal will focus on 15% bridge design including geotechnical borings and analysis, intersection design at SR-14 in Washington and I-84 in Oregon, pier placement, segmental concrete box schematics, wind and load ratings. In addition, grant proceeds would complete the funding required for a Level 2 Traffic & Revenue Study, Level 3 Governance Evaluation, Financial Analysis, Project Management and Public Involvement.

This 15% level design and financial analysis will move this project closer to financing and construction of the Hood River-White Salmon Interstate Bridge. ◆



# Project Location

## Description

The Hood River - White Salmon Interstate Bridge (HRB) is a critical freight and commuter link in the heart of the Columbia River Gorge National Scenic Area (CRGNSA or NSA), spanning the federal waterway at river mile 169 between Oregon and Washington. The Oregon landing is located at GPS coordinates 45.713223, -121.500499. The project is located in Oregon Congressional District 2 and Washington Congressional District 3.

Both Klickitat County in Washington and Hood River County in Oregon are rural areas with 2017 populations of 21,811 and 23,377 respectively. The cities of Bingen and White Salmon together comprise a local population of 3,281 and the City of Hood River has 7,686 residents. Together, these communities constitute a single bi-state community and the economic well-being of this region is dependent on the Bridge. The entire Columbia River Gorge region is home to more than 83,000 residents commuting across state and county lines for employment, creating a truly bi-state regional economy. The Columbia River Gorge National Scenic Area is a national treasure, and host to over 2 million visitors each year.

The 4,418-foot long bridge connects the rural communities of White Salmon and Bingen, Washington with Hood River, Oregon serving as an essential link to the local communities, the region, and interstate movement of freight, commuters, and visitors. The Preliminary Preferred

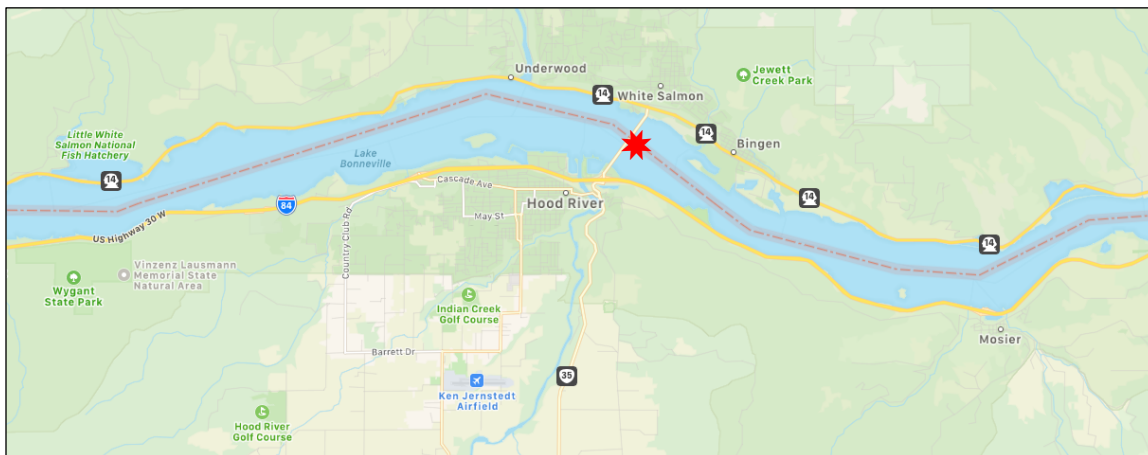
**Figure 3**

Location of Hood River, Oregon



**Figure 4**

Shows the Bridge connections to existing transportation systems including SR-14 in Washington and I-84 in Oregon



Alternative (PPA) selected during the Draft EIS sited the new bridge directly west of the current bridge, with approaches at or just west of their current location.

The HRB provides the only connection for passenger vehicles between Interstate 84 and Washington SR 14 for over forty-five miles between Stevenson (Wash.)-Cascade Locks (Ore.) (Bridge of the Gods) and Dallesport (Wash.)-The Dalles (Ore.) (US-197) Bridge. For truck traffic over 80,000 lbs., there is 84 miles of isolation between I-205 and US-197. Other important highways connected by the bridge are Oregon Hwys. 35 and 30, and Washington SR-141, US Marine Hwy M-84, the Pacific Coast Trail, as well as the soon to be completed Historic Columbia River Highway State Trail. ◆

**Figure 5.** The Current Hood River Bridge from Waubish Rd. in White Salmon



**Figure 6.** NEPA Visualization of new bridge design concept from same location





# Grant Funds, Sources & Uses

## Costs for the BUILD 2020 Project

The eligible project costs for the transportation planning grant are primarily centered on geotechnical borings, analysis and 15% design of the replacement bridge. Additional project costs include project management staff, contracted project advisors, evaluation of the governance structure of the bi-state facility, traffic and revenue study, and legal costs. An 8% contingency is also included. Unused contingency would be re-invested in a greater level of engineering.

**Figure 7.** Eligible Project Costs by SF-424C Cost Classification

COST CLASSIFICATION/TASK	TOTAL COST	% OF TOTAL	NOTES
<b>A. ADMINISTRATIVE &amp; LEGAL EXPENSES</b>			
- Port Project Management Staff & Expenses	\$ 120,000		
- Contracted Project Management Expenses	\$ 90,000		
- Governance Evaluation	\$ 50,000		
- Project Legal	\$ 10,000		
- Traffic/Toll Revenue Estimates	\$ 280,000		
<b>SUBTOTAL</b>	<b>\$ 550,000</b>	<b>9%</b>	<b>SF-424C Row 1</b>
<b>D. ARCHITECTURAL &amp; ENGINEERING DOCUMENTS</b>			
- 15% Engineering Design	\$ 4,500,000		
- Geotechnical Borings	\$ 700,000		
<b>SUBTOTAL</b>	<b>\$ 5,200,000</b>	<b>83%</b>	<b>SF-424C Row 4</b>
<b>TOTAL</b>	<b>\$ 5,750,000</b>	<b>92%</b>	<b>SF-424C Row 12</b>
<b>CONTINGENCY</b>	<b>\$ 500,000</b>	<b>8%</b>	<b>SF-424C Row 13</b>
<b>GRAND TOTAL</b>	<b>\$ 6,250,000</b>	<b>100%</b>	<b>SF-424C Row 16</b>

The source and amount of funds to be used on the eligible project costs will come entirely from the Port of Hood River and the BUILD 2020 program. The Port of Hood River has committed \$1.25-million in the Port's 2020-21 Fiscal Year Budget per vote of its Commission on May 5, 2020.<sup>2</sup> The source of the commitment is from operational revenue and cash reserves. A successful BUILD 2020 grant application for \$5-million will complete the financing for this phase of the project. There are no other federal, state or local funds being used to fund this component of the project.<sup>3</sup>

<sup>2</sup> Board of Commissioners, *Approved Regular Meeting Minutes*, Hood River, OR: Port of Hood River, May 5, 2020.

<sup>3</sup> Toll credits under 23 U.S.C. 120(i) are considered a Federal source under the BUILD program and, therefore, cannot be used to satisfy the statutory cost sharing requirement of a BUILD award. Though the current Hood River-White Salmon is a toll bridge, the

For all of the costs identified in Figure 8, the Port expects to pay for twenty percent (20%) of all project costs. The successful BUILD award will pay for eighty percent (80%) of all project expenses.

## Cost Estimates for Other Project Components

**Figure 8.** Other Phase Costs by SF-424C Classifications

	Feasibility Pre-BUILD Phase 1 (1998-2020)	BUILD ELIGIBLE COSTS (2020-24)	Construction Post-BUILD Phase 3 (2024-29)	TOTAL
DEIS	\$ 1,277,000	\$ -	\$ -	\$ 1,277,000
TS&L	\$ 739,885	\$ -	\$ -	\$ 739,885
SDEIS	\$ 2,046,000	\$ -	\$ -	\$ 2,046,000
Admin/Legal	\$ 1,733,000	\$ 550,000	\$ 1,500,000	\$ 3,783,000
ROW	\$ -	\$ -	\$ 985,000	\$ 985,000
Other A/E	\$ 1,221,000	\$ -	\$ -	\$ 1,221,000
Engineering		\$ 5,200,000	\$ 25,000,000	\$ 30,200,000
Construction		\$ -	\$ 238,500,000	\$ 238,500,000
Contingency	\$ -	\$ 500,000	\$ 20,748,115	\$ 21,248,115
<b>TOTAL</b>	<b>\$ 7,016,885</b>	<b>\$ 6,250,000</b>	<b>\$ 286,733,115</b>	<b>\$ 300,000,000</b>

**Figure 9.** Other Phase Resources by Origination.

	Feasibility Pre-BUILD Phase 1 (1998-2020)	BUILD ELIGIBLE RESOURCES (2020-24)	Construction Post-BUILD Phase 3 (2024-29)	TOTAL
Wash. St. Leg.	\$ 99,885	\$ -	\$ 94,900,115	\$ 95,000,000
Ore. St. Leg.	\$ 5,000,000		\$ 90,000,000	\$ 95,000,000
Federal	\$ 1,582,000	\$ 5,000,000	\$ -	\$ 6,582,000
Local	\$ 335,000	\$ 1,250,000	\$ 101,833,000	\$ 103,418,000
<b>TOTAL</b>	<b>\$ 7,016,885</b>	<b>\$ 6,250,000</b>	<b>\$ 286,733,115</b>	<b>\$ 300,000,000</b>

The 20-year old project has started and stopped depending on funding. The Post-BUILD Phase 3 columns are shown to propose the likely expense categories and resources originations, but those details are speculative and are shared with the best understanding from our engineers and government affairs officials.

*Port of Hood River has not received past federal funding and, hence, the tolls are eligible as a local match to the BUILD 2020 Grant Program. The entirety of the BUILD 2020 proceeds will be used for the replacement bridge which will be subject to Title 23 rules.*



## Schedule of Funds

The following schedule shows the order of budgeted costs. The Design Contract is contingent upon a SDEIS release and a lack of significant comments during the 45-day comment period. The Governance Evaluation and Traffic & Revenue Study are timely, but not contingent upon NEPA or the Design process. If the U.S. Dept of Transportation chose to award a lesser amount, the Project Team would pull the T&R and Governance contracts. Clearly, completing 15% design for the replacement bridge will be a significant milestone for the project. Costs related to staff, advisors and legal would be paid during the course of the project. The Project Team is confident that the contract can be closed within 18-months of the funds being obligated.

The Supplemental DEIS is scheduled to be released in December 2020 and the BUILD grant would begin engineering activities upon completion of the public comment period. Work on future eligible costs such as geotechnical borings would begin during the in-water work period starting in January 2021.

A project schedule based upon quarterly cost estimates for eligible tasks is submitted as an attachment. Upon receipt of BUILD funds, all activities included in this application will begin. The attached schedule assumes that the grant agreement can be negotiated and approved by the end of December 2020 allowing work to begin January 2021<sup>4</sup>. The BUILD project is estimated to take less than 18 months and scheduled to finish by May 2022.

**Figure 10.** Project Milestone Completion Summary

KEY MILESTONE	COMPLETION
<b>BUILD Award Announced</b>	Sept. 30, 2020
<b>Supp. Draft EIS (SDEIS) Released</b>	Dec. 1, 2020
<b>BUILD Contract Signed</b>	Dec. 31, 2020
<b>Governance Evaluation Notice to Proceed*</b>	Dec. 31, 2020
<b>SDEIS Public Comment Period Ends</b>	Jan. 15, 2021
<b>In-Water Geotechnical Borings</b>	Feb. 15, 2021
<b>Start PE/Design RFP</b>	March 1, 2021
<b>Start Traffic &amp; Revenue (T&amp;R) RFP*</b>	March 1, 2021
<b>Award PE/Design Contract</b>	May 15, 2021
<b>PE/Design Notice to Proceed (NTP)</b>	June 1, 2021
<b>T&amp;R NTP*</b>	June 1, 2021
<b>Governance Evaluation Complete*</b>	June 30, 2021
<b>Final EIS/ROD Published</b>	July 15, 2021
<b>15% Design Complete</b>	March 1, 2022
<b>T&amp;R Complete*</b>	March 1, 2022
<b>BUILD Work Complete</b>	May 1, 2022

<sup>4</sup> Greenwood, K., *BUILD 2020 Future Eligible Estimated Costs by Quarter*, Hood River, OR: Port of Hood River, May 15, 2020.

# Selection Criteria

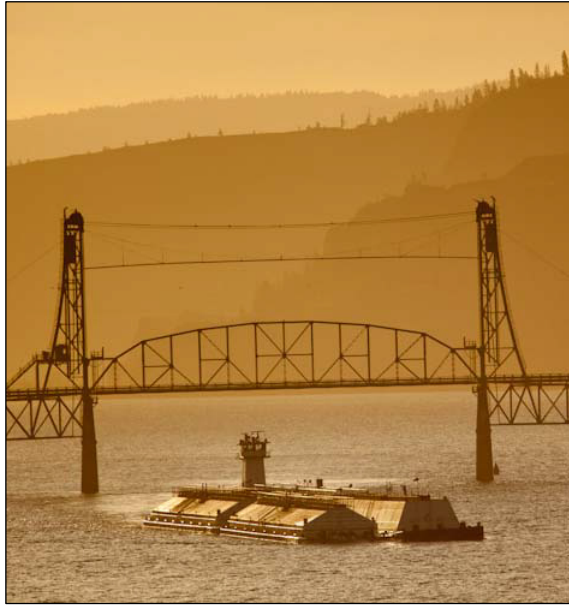
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## Safety

### MARITIME MOBILITY

According to Rob Rich, VP of Marine Services for Shaver Transportation – one of the leading barge companies on the Columbia River – “the Hood River Bridge is universally recognized as one of the two most hazardous transit points for danger to vessels or the structure itself due to its navigational obstruction.” Two events have made this a treacherous part of the river.

In November 2006, the Hood River blew a rock-and-debris cork off the slope of Mount Hood and sent millions of tons of water, mud and debris down the valley creating the sandbar that nearly extends to the federal channel.



The White Salmon River was freed in October 2011 when PacifiCorp contractors detonated charges that began the removal of the 125-foot high Condit Dam. An estimated 2.3-million cubic yard of sediment settled into the north side of the Columbia River<sup>5</sup>

These two events have made barge pilots navigate a serpentine route around the deposits and through the 246-foot opening of the current 1924 bridge. Compounded by winds that average in the upper 20s<sup>6</sup>, it's no wonder that barge pilots find this stretch of the Columbia so daunting.

The preliminary preferred alternative calls for a minimum navigational channel of 450 feet, and also recommends a re-alignment of the channel, stating that “the channel alignment should also allow tugs and barges to be aligned with the westerly winds that now hit on the diagonal and cause control problems, especially for tows with empty barges.”

In his testimony to the Oregon state legislature on January 25, 2016, Eric Burnette, Executive Director of the Oregon Board of Maritime Pilots described the unique and significant challenges barge pilots face when approaching and navigating under the bridge [excerpt]:

“.... When configured as a unit, these 4 barges and one towboat form a large vessel that by itself is slightly over 1/10 of a mile long. It requires precise and skillful navigation. The practical impacts of these combined factors on navigational safety are significant. A tug/barge headed upriver will typically

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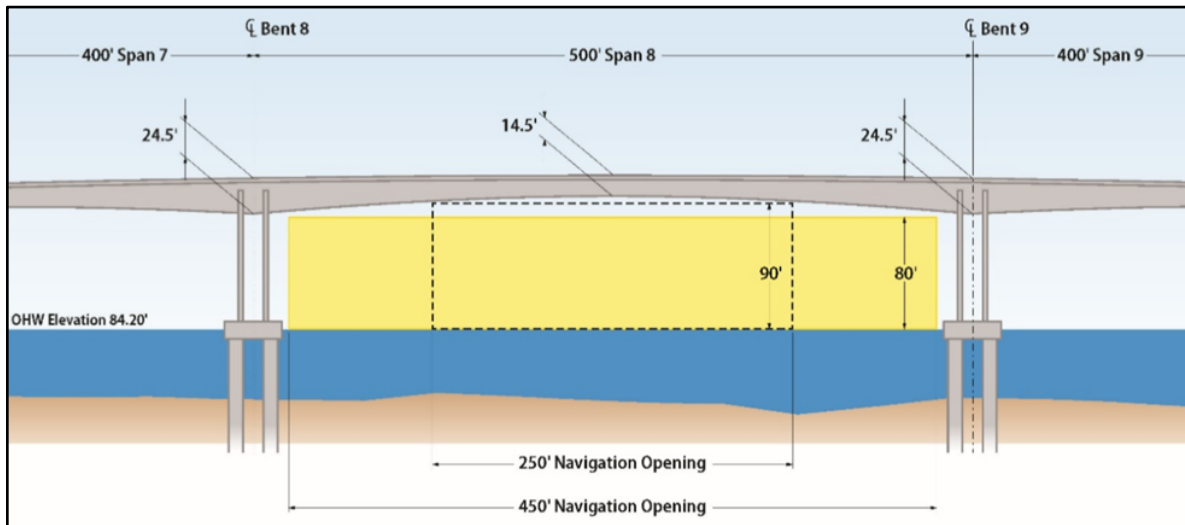
<sup>5</sup> Pesanti, Dameon, *Condit Dam: Life after the breach*, Vancouver, WA: The Columbian, Oct. 23, 2016.

<sup>6</sup> *Weather and Conditions*, Hood River, OR: newwindkiteboarding.com, Feb. 21, 2020.

favor the south side of the channel as it passes the While Salmon River Delta, and then quickly shift to the north side of the channel to avoid the Hood River Delta. Once clear of the Hood River Delta it must then immediately get into position to pass under the lift span of the Hood River Bridge.<sup>7</sup>

Case in point, the U.S. Coast Guard (USCG) noted that a tugboat pushing three empty grain barges ran one into the south pier in 2009.<sup>8</sup> Though the bridge wasn't damaged, the barge was. Increasing the size between piers from 246-feet to 450-feet will make navigating the mid-Columbia region easier for the thousands of barges that make the trip under the bridge every year.

**Figure 11.** USCG Preliminary Navigation Determination – Proposed Clearances



## TRAVEL LANE MOBILITY

The current bridge is unsafe in many ways. Though there have not been any fatalities and incident reports have not been fully tabulated, the qualitative examples often are enough to make the point. Currently the travel lanes are only 9-ft, 4-3/4 inches wide. A typical semi-truck in the United States is 8-1/2 ft. wide not counting side view



Travel lanes of the Bridge are only 9-ft., 4.75-inches wide.

<sup>7</sup> Senate Bill 1510 (LC0257), Hearing before the Committee on Transportation, *Testimony of Eric Burnette, Exec. Dir. of Oregon Board of Marine Pilots*, Salem, OR: Oregon State Senate, January 25, 2016.

<sup>8</sup> Associated Press, *Barge pushed by tug hits pylon of Hood River Bridge over Columbia*, Hood River, OR: The Oregonian, March 28, 2009.

mirrors. Many stories have been told of mirrors being mangled or torn off passing semi-trucks. Large Recreational Vehicles are advised to cross at Cascade Locks, Ore. or The Dalles, Ore. over twenty miles away. Special arrangements for wide load crossings can be made but only by calling port staff in advance and requiring flaggers and pilot cards.

The bridge does not currently have a dedicated bike/pedestrian path. It is not unusual for pedestrians to illegally walk across the bridge at night only to encounter dangerous car passings on the 4,418-ft. long bridge.



The proposed bridge will have 12-ft. wide travel lanes, 8-ft. wide shoulders, and 12-ft. dedicated bike/pedestrian facility.

## State of Good Repair

### VEHICLE FREIGHT MOBILITY

The last load rating analysis of the Hood River Bridge was conducted in 2003. At that time, the maximum vehicle weight was limited to 80,000 lbs. gross vehicle weight (GVW) or 40 tons. For comparison, the typical maximum weight limit for trucks on interstate highways in the state of Oregon is 105,000 lbs. GVW or 52 tons.

Several years ago, ODOT gave the Port notice that they would need to conduct a new Load Rating Analysis (LRA) for the Bridge. This effort was necessitated by a federal mandate that all bridges nation-wide be inspected with particular attention to the type and configuration of gusset plates in wake of the 2007 collapse of the I-35W bridge in Minneapolis. Separately, in 2013, the Federal Highway Administration directed states to give additional attention to the impacts of Specialized Hauling Vehicles (SHV), which are defined as single unit trucks with closely spaced multiple axles that concentrate heavy loads, for example, a concrete mixer.

ODOT contracted with David Evans Associates (DEA) last October to load rate a total of 26 bridges owned by ODOT and other entities including the Port of Hood River. DEA's analysis utilized new load rating procedures to evaluate the impacts of SHVs. On March 17, the Port received DEA's preliminary Load Rating Analysis. Based on these draft findings, DEA



recommends that reduced weight limits be applied to the Bridge for all heavy vehicle types under ODOT's vehicle classification system (Figure 12):

**Figure 12.** ODOT Preliminary Load Rating Analysis

TYPE	CURRENT WEIGHT LIMIT	PROPOSED WEIGHT LIMIT
Type 3: 3-axle Single-unit truck	25 Tons	24 tons
Type 3S2: 5-axle tractor/trailer	40 Tons	32 tons
Type 3-3: 6-axle combo truck/trailer	40 Tons	32 tons
SU4: 4 axle SHV	27 Tons	22 tons
SU5: 5 axle SHV	31 Tons	24 tons
SU6: 6 axle SHV	34.75 Tons	25 tons
SU7: 7 axle SHV	38.75 Tons	25 tons

Once ODOT performs their review and accepts the load rating results, they will then provide the Port with official notice of the new load rating. The Port will be required to post new weight limits signs at multiple locations. This will likely need to occur by the middle of May. This will have some effect on the commercial businesses that rely on the bridge for transportation product and materials. The economic impacts are discussed in the Economic Competitive section of this Chapter.

## FHWA/ODOT RATINGS

The Federal Highway Administration (FHWA) has kept records on bridges for many generations. Sufficiency rating is an old rating that established eligibility for funding. A score below 50 was eligible for replacement and below 80 was eligible for rehabilitation. The most recent rating was 48.7 with the bridge described as “functionally obsolete.”

PROJECT INCLUDED IN RELEVANT TRANSPORTATION PLANS
Oregon STIP 2018-2021 (No. 21280)
Oregon State Freight Plan 2017. App J
Klickitat County (Wash.) Long Range Transportation Plan, 2019
City of Hood River Transportation System Plan, 2018
Pacific NW Waterways (PNWA) Maritime Projects, 2020

The Administration also rated the condition of the bridge deck, superstructure and substructure using a scale of 0 (worst) to 9 (best). The Hood River Bridge has ratings of five, five and six respectively.

## LIFE CYCLE COST ANALYSIS

Replacing the Hood River Bridge will enable the Port to avoid major near-term O&M costs needed to maintain current lift span elements and keep operations moving effectively. Estimates made in the 2011 HNTB Corporation Report "Deterioration Modeling & Future Expenditures for

the Hood River - White Salmon Bridge<sup>9</sup> regarding the extensive O&M expenditures needed to maintain the Hood River Bridge, determined that the bridge would need \$36.5 million in repairs over the next 30 years if no action were taken to improve the bridge. In comparison, the bridge would only require routine, less expensive maintenance if this project to move forward (an estimated \$19.6 million over that same 30-year time frame).

The Hood River Bridge has had tolls since 1924. As the Port of Hood River is not eligible for state gas tax, the toll is the primary resource for funding operations and maintenance on the bridge. In 2016, a Maintenance and Repair plan identified over \$50-million in needed capital repairs over the next 15 years. Based upon a 2018 preliminary cost estimate produced by Mott McDonald, the cost of a new bridge (with 50% construction contingency) is estimated to be \$271.8-million in 2021 dollars<sup>10</sup>. The \$5-million federal investment will help in applying as much of the budgeted amount for O&M into bridge replacement.

Though not popular, tolls have been a cultural norm on the Hood River Bridge since 1924. By using tolls generated by local residents on this project, the Port is showing a significant local leverage of federal funds while showing citizens in Hood River and Klickitat Counties that their tolls are being used for bridge replacement. This is one way that the Port can show performance and accountability to the residents of the mid-Columbia region.

## OTHER CONCERNS

This project will assist in improving freight rail infrastructure on the Burlington Northern Santa Fe (BNSF) Railway on the Washington side of the Columbia River by removing the 85-year old crossing and replacing with a higher crossing with more vertical clearance

As part of the financing of the new bridge, the Port will be working with the US Dept. of Transportation TIFIA program to identify a favorable financing plan. The current bridge has a mechanical lift that has a long history of operational concerns. The new bridge concept utilizes a fixed height bridge that will significantly reduce the maintenance costs of the lift. In addition, the steel grate will be removed and replaced with concrete. The Port spends tens of thousands of dollars every year welding the bridge deck requiring lane closures. Wider shoulders will also prevent damage to the side rail. In 2020 the Port spent almost \$200,000 replacing damaged guard rail on the bridge.

All Electronic Tolling (AET) will also save on costs related to toll collection and will be a feature of the new bridge as well.

Though the bridge is safe, it has not had a thorough seismic evaluation. A replacement bridge would be built to modern standards reducing the chances of a catastrophic event in the case of a significant earthquake.

A new bridge would allow for the bike/ped path to temporarily be converted to emergency vehicle use. This would also address access issues in the case of accidental lane closures.

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<sup>9</sup> *Deterioration, Moeling & Future Expenditures for the Hood River -White Salmon Bridge Replacement*: HNTB, 2011. Print. Rep. Hood River: ODOT, WSDOT, SW Washington RTC, 2014.

<sup>10</sup> Heydenrych, Paul, *SR-35 Columbia River Crossing – Estimate Report*, Portland, OR: Mott McDonald, May 8, 2018.

## Economic Competitiveness

### REMOVAL OF WEIGHT RESTRICTIONS

As noted earlier in the application, ODOT recently commissioned a report to reduce the load limits crossing the bridge. The following describes the effects on the local industries dependent on the bridge

**FRUIT** - Some orchardists, especially in the lower valley, haul bins across the bridge to Underwood Fruit. Based on a few interviews, the reduced weight limit would result in a few less bins on some larger hauls using Type 3 vehicles. This might require one or two additional trips per fruit calls during harvest.

**LOGS** - Log trucks often transit the bridge in both directions. They typically haul at or just above 40 tons. It would be difficult for log trucks to haul at much less than full capacity so a weight limit of 32 tons could have a very significant impact. These trucks could use an alternative bridge to cross the Columbia River, but this is significant out-of-direction travel and not likely.

**SHV** - Concrete mixers and dump trucks use the Bridge on occasion. From one initial interview, it appears that the impacts of a weight restrictions to 22 and 24 tons (SHV classes associated with concrete mixers and large dump trucks) would be significant if these vehicles are hauling full loads.

**GENERAL** - At various times, typical semi-trucks use the bridge. We believe it is not uncommon for the GVW of these vehicles to exceed 40 tons and some undoubtedly haul at or near the Oregon legal limit of 52.5 tons. This is a vehicle type where we have very limited hard data on weight and almost no way to obtain it.

ODOT will not require significant weight limit enforcement to be carried out by the Port as truckers are expected to follow the posted weight limits. Although weigh-in-motion technology is an expenditure item in our 10-year Bridge Model it will be costly and administratively challenging to implement. Barring weigh-in-motion, the Port has very few enforcement options other than to contact the Weigh Master in Cascade Locks for occasional on-site enforcement operations. The new replacement bridge would remove all weight restrictions and allow for the more efficient flow of goods and services along the Columbia River corridor

### KEY INDUSTRY CLUSTERS

Key industry clusters in the region include agricultural production worth over \$300 million annually; high tech/advanced manufacturing focused on unmanned aerial vehicles (UAV) generating over \$450 million in annual revenue with 1,200 employees in both states; value added agricultural/food production clustered around wineries, breweries, and distilleries; and tourism recognizing the region as an international destination for outdoor recreation in all seasons. Beyond workforce commuting, the value of freight crossing the Hood River Interstate Bridge is estimated to be \$75 million, not including high-value UAV components.

Studies conducted by Parsons Brinckerhoff and HNTB on the HRB conclude that cumulative spending to maintain the bridge in its current deficient, constrained/limited access condition could

grow to \$30 million over the next 25 years. The Summary of the Draft EIS describes the impact of bridge closure if the current bridge reaches the end of its serviceable life and has to be closed to all vehicular traffic:

“This closure would have severe social and economic impacts on the interdependent, bi-state communities. In particular, Bingen, White Salmon and nearby rural areas would lose their direct connect to I-84. Residents and business-related traffic would need to travel 20 miles east or west before being able to cross the Columbia River at The Dalles or Cascade Locks. This severed direct connection could be detrimental to the long-term economic development of the Washington communities as well as an adverse effect to Hood River businesses and service providers that depend on the workforce and client base that Washington residents supply.”<sup>11</sup>

## ECONOMIC IMPACTS OF BRIDGE USE

The combined rail, marine and highway freight volume served by the bridge exceeded 25 million tons in 2019 (74% rail, 14% barge, 12% truck), based on estimates by Port staff.<sup>12</sup>

Over 4.3 million vehicles crossed the Hood River Bridge in 2019. Traffic levels have reached record levels in 2019 despite a current 80,000 lbs. vehicle weight limit. The proposed bridge is expected to raise this weight limit to 105,500 lbs. and increase truck usage by 15% during the first year of opening.

## MANUFACTURING, AGRICULTURE, FORESTRY, TOURISM

Bingen, Washington is the home of Insitu, an independent subsidiary of Boeing and one of the largest manufacturers of unmanned aerial vehicles (UAVs) in the United States. The Bridge is a critical shipping route for Insitu UAVs, components, and parts, but even more important as a commuter link for the company’s more than 1,200 employees who live and work on both sides of the river.

The Hood River Valley is a world leader in the production of Anjou pears and other winter pear varieties. Together, Oregon and Washington produce 84% of the nation’s fresh pear crop. According to the Columbia Gorge Fruit Growers Association, over 225,000 tons of apples, pears, and cherries are annually produced in the Mid-Columbia area. The current bridge is structurally deficient for vehicle freight crossings, with only two very narrow (9’ 4.75” wide), shoulder-less lanes. The preliminary preferred alternative calls for a roadway consisting of two 12-foot travel lanes, two 8-foot shoulders, and one 12-foot pedestrian/bike facility on one side.

The Bridge has no bicycle/pedestrian facilities and cannot support the addition of such facilities. This is particularly problematic since it prohibits cycle commuting between Washington and Oregon and also fails to serve the recreational interests of cyclists and pedestrians drawn to the NSA.

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<sup>11</sup> Moore, Terry, *EcoNorthwest, SR-35 Hood River Bridge: Economic Effects*, Portland, OR: SW Washington RTC, October 2010.

<sup>12</sup> Assumes 5 unit trains per day on the BNSF mainline = 18.5 M tons, 3.5 million tons of barge cargo shipments (per USACE shipment data), and 3.1 M tons of truck freight (Port of Hood River data) in shipments in 2019.



Since 1986, ODOT has invested over \$73 million in federal and state funding to redevelop the Historic Columbia River Gorge Highway (HCRH) - \$56 million of that on the HCRH Bicycle and Pedestrian facility. 68 of the original 73 miles of the Historic Columbia River Highway are now open to travel either by motor vehicle (Historic Highway or connecting county roads) or by foot and bicycle (State Trail). This facility is drawing tens of thousands of cyclists and pedestrians to the NSA, yet the lack of cycling and pedestrian access on the HRB presents a significant and unfortunate gap in non-motorized connectivity in the NSA.

An October 2012 study by HNTB concluded that while there is significant interest and broad support from area stakeholders in adding safe pedestrian and bicycle crossings to the current bridge, there are significant structural and mechanical barriers that make such a project unfeasible and cost-prohibitive. The study concluded that:

- The steel trusses have a limited reserve structural capacity to support added loads.
- The lift span would require significant mechanical and electrical equipment upgrades and structural retrofit or full replacement to support the added loads and configuration.
- The steel trusses would require full engineering evaluation and structural strengthening to support added loads.
- If a ped/bike facility is added to the bridge the bridge may need to be load limited for vehicles.
- The substructure (piers) and subaqueous (underwater) foundations have an unknown ability to support additional vertical and lateral loading and require further investigation.

The Summary of the Draft EIS notes that a result of the construction of the preliminary preferred alternative design would be that, “Recreational opportunities would be expected to increase with a bridge crossing that has multi-modal facilities and would enable bi-state connections to trails and sidewalks.”

## MARITIME IMPACTS

Over 9 million tons of commercial cargo traveled under the bridge’s lift span in 2012, at least 30% of the total cargo barged for import/export on the inland navigation route from Portland/Vancouver to Lewiston, Idaho. Barge traffic on the lower Columbia River continues to grow with barge operators annually hauling more than 3 million tons of wheat and barley, and millions of barrels of petroleum products, logs and wood chips.

## Environmental Sustainability

### ENVIRONMENTAL IMPACTS & BENEFITS

At the project location, the Columbia River is host to Endangered Species Act (ESA) salmon and steelhead, lamprey, and migratory birds and other sensitive species. The Summary to the DEIS details the immediate environmental benefit to the Columbia River with the removal of the steel deck bridge:

“The new bridge would benefit water quality, as compared to the existing bridge, because road runoff from the bridge deck would be collected and treated prior to discharge to the Columbia River. Currently, all oil, grease, metals, and sediments from vehicles may enter the river directly through the grated bridge decking.”

The DEIS also notes the expected improvements related to an increased speed limit on the new bridge, stating: “Each of the build alternatives would improve energy consumption of traffic [...] range[ing] between 8 and 15 percent less than No Action as a result of the higher operating speed....”

The current bridge has 28 piers, 20 of which are in the water. The new bridge will only have 17 piers with 14 being water-borne. As part of the mitigation, the current bridge will be removed providing a net improvement to the river.

Another environmental credit to the project will be the recycling of the old bridge steel and the removal of the lead-based paint over the river.



The current bridge decking is steel grate.

## Quality of Life

### INCREASES CHOICE

The project will allow transportation choices not currently available for large commercial trucks, pedestrians and bicyclists. Currently for trucks over 40 tons, the only crossings on the Columbia River are I-205 in Portland and US-197 in The Dalles. That is a 84 mile stretch where many timber and fruit processors must add significant miles to adequately cross the Columbia River.

The Hood River Bridge also does not have a legal bike/pedestrian access. The closest river crossings for bike/ped are located in Cascade Locks (Ore.) at the Bridge of the Gods, 21 miles away; and in The Dalles (Ore.) at US-197, 23 miles away. The addition of a crossing in Hood River would allow workers in White Salmon and Bingen to bike or walk to Hood River. It is anticipated that bike/pedestrians will be toll exempt.

Dan Bubb, President of Gorge Net and Chair of the Columbia Gorge Broadband Consortium, has long desired for fibre-optic cable to be drawn across the River. This project will help provide conduit for all utility providers including broadband.

### COMMUTERS: NO VIABLE ALTERNATE ROUTE TO WORK

The Hood River/White Salmon area is truly a single, bi-state community with the bridge providing a critical route to work and services for residents on both sides of the river. In 2014 there were 12,444 jobs in Hood River County. Of those jobs, workers who lived outside of the County held 5,435. Nearly six percent (736 jobs) of Hood River County's jobs were held by residents of Klickitat County (White Salmon, Bingen primarily) and 2.5% (315 jobs) were held

by Skamania County residents (Stevenson, North Bonneville primarily)<sup>13</sup>. Alternate routes across the river would require an additional 45-60 minute drive time, as the nearest alternate crossings of the Columbia are more than 20 miles away in each direction. Thus, the bridges of the Gorge, especially the HRB, provide essential routes to work, school, health care, and other services for working families throughout the region.

## Innovation

### BROADBAND OPPORTUNITIES

Gorge Networks and the Columbia Gorge Broadband Consortium have approached the Port requesting that the new bridge will have adequate conduit for high-speed Internet cable that can reach both sides of the River. The Gorge Broadband Consortium (GBC) seeks to ensure that residents and businesses have the broadband access and skills to take advantage of the resources, services, and markets available on the Internet today. To accomplish these goals, the GBC is working with communities, internet service providers, and local and regional governments to address access challenges in Klickitat and Skamania Counties (Wash.). Ensuring that a new bridge will provide conduit and access for high speed internet cable will help the GBC meet their goals.

### ALL ELECTRONIC TOLLING (AET) / LICENSE PLATE RECOGNITION (LPR)

With the recent COVID restrictions on human-to-human interaction, All Electronic Tolling (AET) will provide operational efficiencies as well as limiting the spread of disease. AET provides several benefits including reduced operating costs, uninterrupted traffic flow and a cleaner environment. AET uses small radio frequency identification tags (RFID) on vehicles (also known as transponders) in conjunction with video tolling technology, which uses License Plate Recognition (LPR) software to read license plates as vehicles pass by. These images can be matched to state vehicle registration databases for billing, giving new residents, tourists and late-adopters the opportunity to use the toll bridge as needed – even without a transponder. In a way, AET brings the same type of efficiency to toll collection as the bar code scanner did to the checkout line – but with no human intervention required.

### COMPUTERIZED MAINTENANCE MANAGEMENT SYSTEM (CMMS)

Computerized maintenance management system (CMMS) is a software package that maintains a computer database of information about a facility's maintenance operations. This information is intended to help maintenance workers do their jobs more effectively (for example, determining which machines require maintenance and which storerooms contain the spare parts they need) and to help management make informed decisions (for example, calculating the cost of replacement of stormwater collection membranes versus preventive maintenance for each collection vault, possibly leading to better allocation of resources).

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<sup>13</sup> Data provided by Oregon Employment Department Regional Economist, Dallas Fridley. Phone: (541) 645-0005 Email: Dallas.W.FRIDLEY@oregon.gov

## PUBLIC PRIVATE PARTNERSHIPS EVALUATED

One of the tasks that this BUILD grant will help fund is an analysis on alternative project delivery methods. With less and less public funds available for infrastructure projects, the Port expects to evaluate and analyze Public Private Partnerships (P3s). It will be critical for the steps after the BUILD tasks have been completed to have a better understanding of whether municipal financing will be available or if the private market can provide a better product for the region. Having 15% design complete allows enough flexibility moving forward for both alternative project delivery methods as well as financing.

## EVALUATION OF GOVERNANCE STRUCTURES

Though the Port of Hood River has owned and operated the current bridge since 1949, as the project proceeds through various funding hurdles and legal requirements from Salem and Olympia, it may make sense for the governance to change to ensure bi-state representation, an increase in creditworthiness and provide a satisfactory financial support that meets the need of bi-state funding. Bi-state compacts, a series of Intergovernmental and Interlocal Agreements (IGA/ILAs), or continued Port of Hood River operation with ancillary advisory committees will all be studied to ensure that financing for the replacement bridge receives the best rates and highest credit rating necessary to keep tolls as low as possible.

## RECYCLED USE OF STEEL AS POSSIBLE FUNDING SOURCE

A recent evaluation by the Port's bridge engineers, HDR, analyzed the volume of steel in the current bridge. By analyzing the reactions to self-weight (SW) of the truss lines and dead load (DL) of the other bridge components (floor beams, stringers, deck, guard rail), HDR was able to estimate 3,050 tons of recyclable steel in the existing bridge. Rockaway Recycling, in Rockaway, New Jersey, recently published a volume rate of \$195/ton for reusable steel. This would result in a potential revenue source of close to \$500,000 for the project.

## USE OF COMBINED FINAL EIS/ROD AND ERRATA SHEETS

The Oregon Division of the Federal Highway Administration (FHWA) has agreed to allow the project sponsors to use an abbreviated process for distributing the Final Environmental Impact Statement (FEIS) and Record of Decision (ROD). The U.S. Dept. of Transportation Office of Transportation Policy issued guidance on facilitating accelerated decision making in environmental reviews. The Oregon Division has indicated that certain conditions have been met allowing for the preparation of a FEIS by attaching errata sheets to the Draft EIS. This option allows for a speedier and more efficient process for producing the required NEPA documents.



## Partnership

The following is a list of project partners helping with the replacement of the HRB.

PARTNER	ROLE
<b>Klickitat County</b>	Co-Applicant. Constitutional local government to the north. Bi-state Bridge Replacement Committee Member. Lead on engineering selection process and technical advisory committee.
<b>Port of Hood River</b>	Lead Co-Applicant and Identified Award Recipient. Current bridge owner and operator since 1950. Bi-state Bridge Replacement Committee Member
<b>City of Hood River</b>	Municipal boundary of southern approach. Bi-state Bridge Replacement Committee Member
<b>Hood River County</b>	Constitutional local government to the south. Bi-state Bridge Replacement Committee Member
<b>City of White Salmon</b>	Municipal boundary of northern approach. Bi-state Bridge Replacement Committee Member
<b>City of Bingen</b>	Bi-state Bridge Replacement Committee Member
<b>SW Washington State Regional Transportation Council (RTC)</b>	Public agency board providing a conduit for state funding and policy direction
<b>Oregon Dept. of Transportation (ODOT)</b>	Facilitated the funding of FEIS/Public Private Partnership (P3) rule development
<b>Columbia River Gorge Commission</b>	Bi-state National Scenic Area (NSA). Management Plan includes Bridge Replacement provisions
<b>Washington Dept. of Transportation (WSDOT)</b>	Project partner on engagement to the Washington State highway system
<b>Mid-Columbia Economic Development District (MCEDD)</b>	Providing economic development data for the Mid-Columbia River Region
<b>Shaver Transportation</b>	Founded in 1880, Shaver's 15 tugs and 20 barges are one of the largest marine transportation companies on the Columbia Snake River System
<b>Columbia River Inter-Tribal Fishing Council (CRITFC)</b>	Tribal agency partner communicating impacts to tribal rights regarding cultural resources, fisheries and economic development. Represents interests for the Yakama Nation (YN), Confederated Tribes of the Umatilla Indian Reservation (CTUIR), Confederated Tribes of Warm Springs (CTWS), and the Nez Perce Tribe (NPT)

Renewed outreach to tribal representatives including direct in-person meetings with each of the four treaty tribes (Yakama Nation, Confederated Tribes of Warm Springs, Confederated Tribes of the Umatilla Indian Reservation, and the Nez Perce Tribes) has been a major element in the public outreach process to date. The Port anticipates maintaining those tribal relationships through construction and beyond.

## REGIONAL ECONOMIC SUPPORT

The replacement of the HRB has been identified as the #1 priority in the 2019 Comprehensive Economic Development Strategy (CEDS) of the Mid-Columbia Economic Development District, which states:

“Matching funding to support completion of an Environmental Impact Statement for a new Hood River White Salmon Interstate Bridge [...] is a vital step in the process of securing a replacement bridge, a critical transportation facility in the mid-Columbia Region.”<sup>14</sup>

The 2019 Regional Transportation Plan for Klickitat County, Washington also ranks bridge replacement project as a #1 priority.

Hood River County’s Zoning Ordinance Article 75 (National Scenic Area Ordinance) anticipates the bridge replacement project, with recommendations on the Visual Quality, Historic Design Elements, and recommendations for Recreation and Pedestrian/Bicycle Access for the new bridge. The bridge replacement project is included in the County’s next update to the Transportation Safety Plan (TSP), as well as that of the City of Hood River. The need for bridge replacement is also expected to be included in the next comprehensive plan update for Klickitat County and City of White Salmon.

## PUBLIC OUTREACH

The public engagement has been thorough since the DEIS re-evaluation and the current Supplemental Draft work. In early 2018, an online survey to generate public feedback about bridge replacement and the design criteria generated over 1,000 responses from Oregon and Washington residents. A public open house was held in December 2018 to share the results of the survey and to generate any feedback on the work that had been in development since the late 1990s. Information boards are produced monthly and displayed at the White Salmon (Wash.) library and in the entry foyer to the Port administrative offices.

A number of community outreach events were also held including a tabling event at the Hood River Walmart (1/11/2019), White Salmon Harvest Market (1/11/2019), Hood River Farmers Market (9/6/2019) and the White Salmon Huckleberry Festival (9/6/2019). As environmental justice is an important part of the NEPA process, the project team also conducted events focused on soliciting responses from underserved populations. Events were held at Latinos en Action (1/10/2019) and the Bingen (Wash.) Food Bank (9/11/2019).

As part of the BUILD grant, the Port anticipates reaching out to tribal members in a variety of ways to generate feedback on fisheries, cultural resources and economic development impacts created by bridge replacement. There are also a number of standing tribal committees that are working directly with the Project Team. ♦

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<sup>14</sup> Board of Directors, *Columbia Gorge Economic Development Strategy 2017-2022*, The Dalles, OR: Mid-Columbia Economic Development District, April 2019.

# Environmental Risk Review

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## Project Readiness

The region completed a feasibility study almost 20 years ago and a preliminary preferred alternative was selected through the Draft EIS process. Design criteria were negotiated as part of the Type, Size and Location Study (TS&L) in 2011.

The Supplemental Draft EIS is currently underway with the public comment period taking place at the end of 2020. Any mitigation or other project requirements based upon environmental impacts will be incorporated into the mitigation plan. This plan will include any additional construction elements required for NEPA clearance. The timing lines up well for the BUILD grant as the grant agreement can be signed before the Final EIS and ROD is being developed. The US Dept. of Transportation (USDOT) Federal Highway Administration (FHWA) along with the Oregon Dept. of Transportation (ODOT) and the Port of Hood River (POHR) will sign the ROD sometime in mid-2021.

Geotechnical borings will be required at the location of the 17 piers before engineering begins. The US Army Corps of Engineers (USACE) will be issuing a permit for the geotechnical work, which will be good for two in-water work seasons (November 1 – February 15). The borings should take three weeks to complete. (Figure 13)

The Port has already prepared a Request for Proposals document for soliciting engineering services for this project.

## Required Approvals to Begin BUILD Project

The SDEIS 45-day comment period and the permit for geotechnical work are the two milestones that will be completed before BUILD work can begin.

**Figure 13.** Geotechnical Borings In-Water Work Permit Status

Jurisdiction	Permit	Submitted	Status	Approval Date
Federal				
U.S. Army Corps of Engineers – Portland District	Clean Water Act (CWA) Section 404/Rivers and Harbors Act Section 10	15-Jul-19	8/19 assigned to PM Winston Zack	TBD
			NWP-2019-392	
State				
Oregon Department of Environmental Quality	CWA Section 401 Water Quality Certification	15-Jul-19	Pre-certified	N/A
Oregon Division of State Lands	Removal/Fill Permit	15-Jul-19	No Permit Needed	N/A
Oregon Division of State Lands	Short Term Access Agreement	15-Jul-19	Approved	31-Jul-19
				No. 62177-AA
Washington Department of Natural Resources	Aquatic Land Lease	15-Jul-19	In review	TBD
Washington Department of Fish and Wildlife	Hydraulic Project Approval	Before 1 September 2019	Approved	19-Sep-19
Local				
City of White Salmon	State Environmental Policy Act (SEPA) Exemption	15-Jul-19	Exempt	23-Jul-19
	Shoreline Substantial Development Permit (SSDP) Exemption	15-Jul-19	Exempt	23-Jul-19

As part of NEPA, the USCG issued a Preliminary Navigation Determination for the bridge clearances and sent the linked letter to the Port on January 21, 2020<sup>15</sup>.

A number of prior documents have been conducted on this project including the 2003 Draft Environmental Impact Statement, 2004 SR 35 Crossing Feasibility Study, and the 2010 Bridge Type, Size and Location Study. These have been referenced frequently throughout the BUILD application.

The Port has been working closely with Emily Cline, Environmental Program Manager, USDOT-FHWA Oregon, 530 Center St., Suite 42, Salem, OR 97301, (503) 316-2547. Ms. Cline is a key member of the Project Team along with Kevin Greenwood, Bridge Replacement Project Director, Port of Hood River (POHR); and Jeff Buckland, Environmental Project Manager, Oregon Dept. of Transportation (ODOT). The Project Team has had bi-monthly project meetings since POHR, FHWA and ODOT were named co-lead agencies for the NEPA process. Frequent phone conferences for additional queries also take place as is typical for any NEPA process.

An EIS Working Group (EISWG) is made up of elected officials, a member of the Columbia River Gorge Commission, the Exec. Dir. Of the SW Washington Regional Transportation Council (RTC), the Oregon Area Commission on Transportation (ACT) and the Port of Klickitat (Wash.). The EISWG has been a sounding board for consultants as they conducted a re-

<sup>15</sup> Fischer, Steven M, *Preliminary Navigation Determination for the Hood River-White Salmon Bridge*, Seattle, WA: USCG 13<sup>th</sup> District, January 21, 2020.



evaluation of the DEIS and provided updates on the various technical reports necessary for publishing the Supplemental Draft EIS. The WG's minutes and meeting materials can be found online at (<https://portofhoodriver.com/bridge/bridge-replacement-project/environmental-impact-statement-working-group/>).

An Executive Committee is made up of the Executive Director of the Port of Hood River, the SW Washington WSDOT Regional Director, the Region 1 ODOT Director, and the FHWA – Oregon Division Administrator. This committee is scheduled to meet quarterly.

A new Bi-State Bridge Replacement Working Group (BSBRWG) has been meeting monthly to discuss policy needs, governance/ownership issues, toll setting and other issues related to bridge replacement outside the NEPA process. This six-member group is made up of the Mayors of Hood River, White Salmon, and Bingen; Commissioners from Hood River and Klickitat Counties; and the Commission President from the Port of Hood River. The Executive Committee members are invited to sit in and participate in the BSBRWG meetings.

Overall, the Port has made public information a high priority during this process.

## Support Letters

Support letters have been received from:

- Port of Hood River Commission\*
- City of Hood River Council\*
- Hood River County Commission\*
- City of Bingen (Wash.) Council\*
- City of White Salmon (Wash.) Council\*
- Klickitat County (Wash.) Commission\*
- State Sen. Thomsen (Ore. 26<sup>th</sup> District – R)
- State Rep. Williams (Ore. 52<sup>nd</sup> District – D)
- State Sen. King (Wash. 14<sup>th</sup> District - R)\*
- State Rep. Mosbrucker (Wa. 14<sup>th</sup> Dist. - R)\*
- State Rep. Corry (Wash. 14<sup>th</sup> District - R)\*
- U.S. Sen. Wyden (Oregon – D)\*
- U.S. Sen. Merkley (Oregon – D)\*
- U.S. Sen. Cantwell (Washington – D)\*
- U.S. Sen. Murray (Washington – D)\*
- U.S. Rep. Greg Walden (Oregon 2<sup>nd</sup> District - R)\*
- U.S. Rep. Jamie Herrera-Beutler (Washington 3<sup>rd</sup> District - R)\*
- SW Washington Regional Transportation Council (SWRTC)
- Oregon Transportation Commission
- Washington Dept. of Transportation
- Mid-Columbia Economic Development District
- Port of Cascade Locks~
- Shaver Transportation~
- Columbia River Gorge Commission~

\*Joint letter

~Submitted w/INFRA application

## Potential Risk

Procurement for Personal Services Contracts for engineering, cultural resources, traffic and revenue studies and toll analysis are relatively straightforward procurements. The Port has worked with a number of consultants in these fields and is ready to begin public contracting procedures for these engineering services upon signing the contract agreement. The probability of delays in procurement are low.

There is a chance that during the public comment period for the Supplemental Draft EIS that enough comments are generated that could change elements of the conceptual design criteria. For example, during the TS&L Study, the bike/ped path was located on the west side of the bridge. Since the preferred alternative will be about 50 yards closer to a tribal treaty fishing site, comments could be received by tribal fishers objecting to the closeness of the bridge. The project could avoid that concern by moving the bike/ped path to the east side of the bridge. Another example would be two pier locations were placed within the underwater Bureau of Indian Affairs (BIA) legal parcel. If that becomes an issue, the concept plan could move the piers to the north and south outside the respective boundaries. As part of the SDEIS process, a risk register is being kept to account for these possibilities. The risk is high that something could come out of the comment period, but since the project is conceptual at this point, adjustments could be made to the design criteria before engineering begins.

Right of Way (ROW) acquisition is always a concern and the Project has identified an acquisition plan for required property for the project. Most of the property is in public ownership, but there are three private owners that the acquisition will focus upon. Since the Port of Hood River is an Oregon local government with no jurisdiction in Washington state, the Port will be reliant on our Washington state partners to help in negotiating any ROW acquisition. This is a high-risk item, but the project does not require full acquisition to allow the project to continue at this time. There are governance issues in play as well and there is consensus among the bi-state local governments to find a governance structure that allows Washington governments to participate in future bridge decisions. These relationships will be critical as the project moves past the BUILD phase and into larger capital needs.

At this time, there are no financial needs as all matching funds have been obligated and legislative approval is not required for future eligible expenditures. ◆

# Appendices

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## OTHER RESOURCES

Pacific Northwest Waterways Association Fact Sheet: <http://www.pnwa.net/factsheets/CSRS.pdf>

YouTube Video “Oil Train Derailment I Was There” (Bridge crossing segment begins at minute 4:00): <https://www.youtube.com/watch?v=iYLugyWEI4w>

Draft Environmental Impact Study 2003: <http://www.rtc.wa.gov/studies/sr35/docs/deis-es.pdf>

Type, Size and Location Study 2011: <http://www.rtc.wa.gov/studies/sr35/docs/sr35Report20111007.pdf>

List and Links to All Studies Completed Prior to BUILD: <http://www.rtc.wa.gov/studies/sr35/>

HNTB Study of Structural Considerations for Pedestrian Crossing on the Existing Bridge: <http://portofhoodriver.com/wp-content/uploads/2016/04/Bridge-Pedestrian-Crossing-Study.pdf>

Columbia River Port Engineers Study on Heavy Truck Use of Hood River Interstate Bridge: <http://portofhoodriver.com/wp-content/uploads/2016/12/c.Attachment.PoHR-Report-20150902.pdf>

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