

PUBLIC COMMENTS FOR IBR PROGRAM EXECUTIVE STEERING GROUP

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Bob Ortblad

12/12/2022

ESG Public Comment - Dec. 16, 2022 Meeting

Respectfully
Bob Ortblad MSCE, MBA

** ADA compliant versions of the attachments can be made available upon request*

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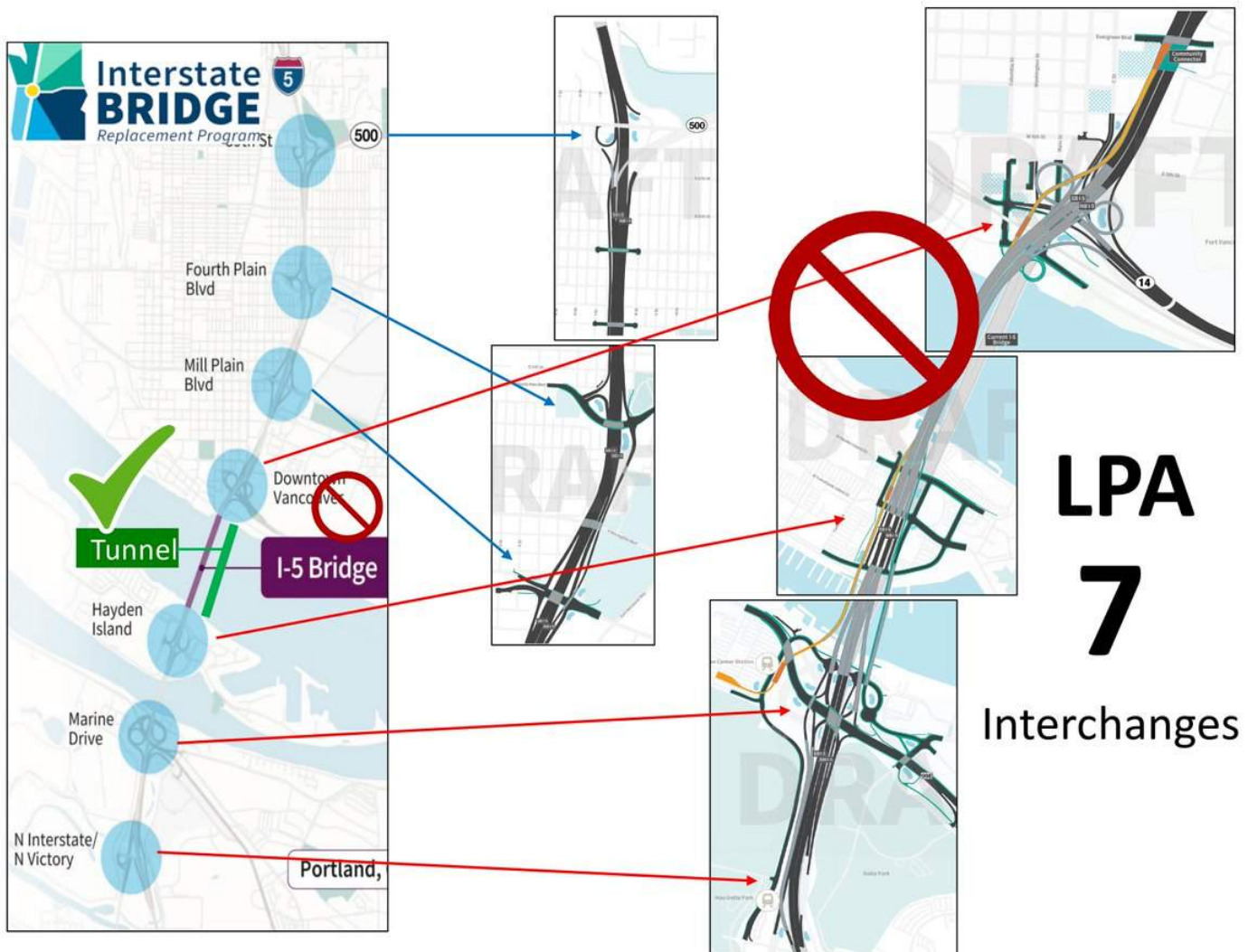
IBR's Tunnel Concept Assessment is misleading

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The IBR's (LPA) requires 2 new interchanges on Hayden Island & Vancouver.

An immersed tunnel connects to current interchanges on both riverbanks, saving \$1 billion.

Other 5 interchanges should be evaluated separately from the river crossing.



Bob Ortblad MSCE, MBA

The Interstate Bridge Replacement's "Locally Preferred Alternative" (LPA) will be extremely dangerous in a freezing fog, with a -4% grade, double curve, and sight distance many times shorter than stopping distance.

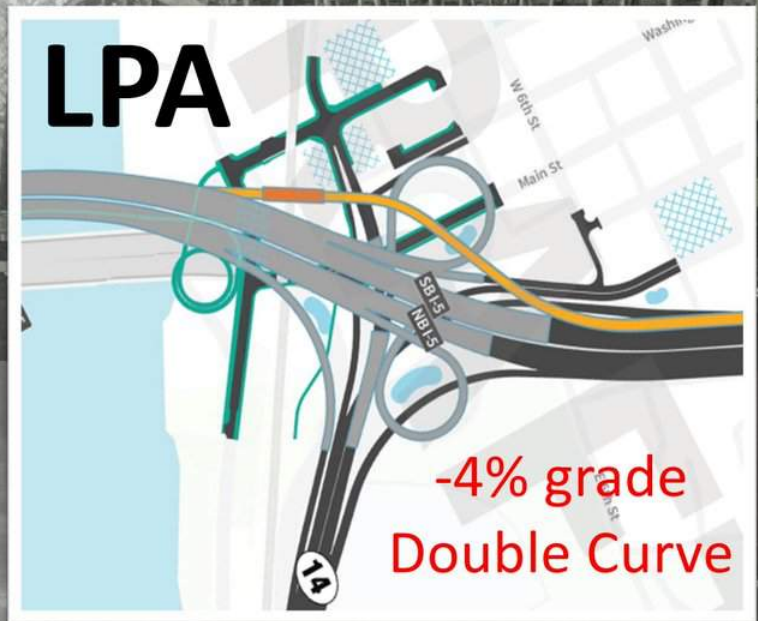
Fatal crashes involving 60 vehicles
chaos on foggy I-5 near Eugene

Oct. 20, 2022

*Freezing
Fog*

I-90 crashes 38 vehicles
near Kittitas amid
freezing fog

Dec. 7, 2022



Maryland canceled an 8-lane double-deck bridge and built an immersed tunnel to protect historic Fort McHenry.

Fort Vancouver deserves similar protection. IBR's bridge will cast visual blight, noise, & pollution.



Bob Ortblad MSCE, MBA

The IBR's bridge will be built with steel trusses. Last two West Coast bridges were fabricated in Asia.

The concrete pontoons for Seattle's SR-520 Bridge created 800 local jobs. An I-5 immersed tunnel's concrete segments will create local jobs.



Bob Ortblad MSCE, MBA

I-205 has a 2.5 % grade and is the nation's 8th most dangerous accident hotspot, with an accident almost every other day. The IBR's I-5 Locally Preferred Alternative (LPA) with 4% grade will be number one, with fog, rain & black ice.



 **Interstate
BRIDGE**
Replacement Program
LPA

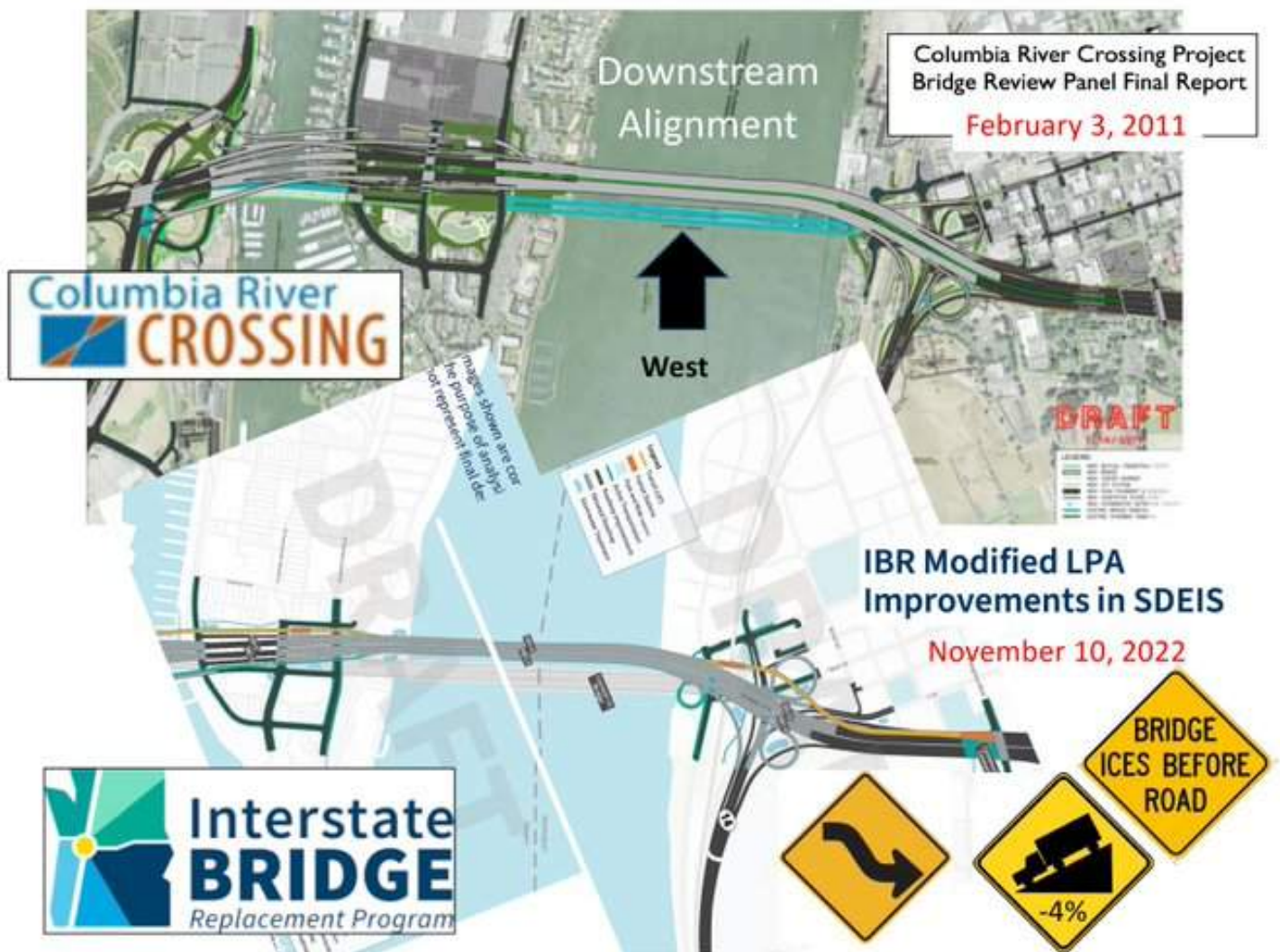
4.0 % grade



Bob Ortblad MSCE, MBA

The IBR has spent \$60 million to recycle exact copy of the 12-year-old design from "Columbia River Crossing Bridge Review Panel Final Report".

At Vancouver a double curve will be extremely dangerous on icy -4% grade.



Bob Ortblad MSCE, MBA

The Columbian

Dec. 6, 2022

I-5 Bridge Replacement Program leaders, critics make their case



Above, Bob Ortblad, a retired civil engineer and proponent of an immersed tube tunnel, is one of the program's most vocal critics. (Taylor Balkom/The Columbian)

HAYDEN ISLAND, Ore. — Interstate Bridge Replacement leaders, vocal critics and curious residents alike were packed into a conference room Monday night at the Hayden Island Holiday Inn to hear presentations and ask questions about the project.

The event, held by the Hayden Island Neighborhood Network, also known as Hi-NooN, was not without its heated moments.

There were six speakers: Greg Johnson, the program's administrator; Ray Mabey, the assistant program administrator; Bob Ortblad, a retired civil engineer and an advocate for an immersed tube tunnel; Chris Smith, a member of the Just Crossing Alliance (which Hi-NooN is a part of) who want a smaller footprint for the bridge; Zachary Lauritzen from Oregon Walks, and Be Friend, a Hi-NooN board member.

Presentations

Friend opened the evening by introducing the guests and raising questions about how the island will be affected by a new bridge, ranging from the impact of tolls on the economy to the decrease in congestion time for island residents.

Johnson and Mabey followed and explained some of the constraints of building a replacement bridge, like the Coast Guard's preliminary ruling asking for at least 178 feet of clearance.

The program is trying to thread a needle and hit a window of federal funding, Johnson said. With geographical and political constraints, the program will not be able to build a perfect, iconic bridge.

Misinformation was another area of focus for Johnson, who pushed back against the argument that the replacement bridge is going to be deadly because of its 4 percent grade.

"Do you think the Federal Highway Administration is going to bring billions of dollars to a project that's going to kill people? No. They're not," Johnson said. "We are licensed engineers. ... We have credibility, we've done projects before, we have a license to protect that we're not going to build anything that's going to be dangerous and killing people as we have been accused."

Ortblad followed Johnson and [made his case for an immersed tube tunnel](#), an underwater tunnel made up of segments floated to the site, sunk and then linked together. The tunnel is also buoyant, making it seismically resilient.

A tunnel would also be better for the waterfront as it will be quieter than a bridge and out of sight, he argued.

"World-class cities don't trash the waterfronts with elevated approaches," he said. "You can imagine how ugly these approaches will be if they build them."

Mabey said the bridge project spent over \$100,000 looking into an immersed tube tunnel and found [it does not fit the program's purpose and needs](#). The document was developed by 17 professional engineers and other professionals, most of whom are involved in the bridge replacement.

"Seventeen engineers and scientists have signed that thing," Ortblad said. "I don't care how many people signed it. It's just not right. Think for yourself. Look at the numbers."

Smith and Lauritzen were the final presenters. Smith argued that Hayden Island's traffic problem is a result of Washingtonians flocking to Hayden Island to avoid Washington's sales tax — he did not mention commuters going to Portland — and asked how it will change once a toll is in place.

Smith additionally argued that the partial interchange on Hayden Island will hurt residents as it will take longer for them to travel into Portland.

Lauritzen asked those in the room to think back to a similar hypothetical meeting decades ago.

“My concern here is, if we expand capacity on the bridge, that just means there’s a different pinch point somewhere else, and it’s someone else’s problem,” Lauritzen explained. “And they’ll come together in a group like this and say, ‘We need one more lane. Just one more lane.’”

Questions and answers

Tempers flared during a Q&A section.

An audience member asked if there was a 3D model of the modified locally preferred alternative. Johnson said there is a 3D model and a tactile model in the program’s office, but before he could finish his response the audience member who asked it interrupted, raising his voice to the point where he was nearly shouting and demanded a direct answer to the question.

The audience member was asked to calm down and Johnson proceeded to refocus on Ortblad.

“Bob has accused folks who are licensed engineers of malpractice,” Johnson said. “Bob, where’s your license? Or are you just a citizen who is interested? You’re talking about folks who are licensed —” “I had a license for 40 years,” Ortblad cut in. Ortblad said later that he gave up his license once he retired.

“Yeah, well, where is it now?” Johnson asked. “He’s made accusations of folks who he has no idea about their expertise.”

The audience member who was asked to calm down stood up and demanded that Johnson answer the original question and once again raised his voice at Johnson before Friend took control of the microphone.

One attendee asked why most federal bridges are free and why tolls are necessary for a replacement Interstate 5 Bridge.

Bridges built in the past were mostly paid for by the Federal Highway Administration, Johnson said. They can’t afford to do that now.

Another asked Johnson how a replacement bridge plans to relieve congestion. The answer, Johnson said, is through auxiliary lanes — lanes that connect only between interchanges — so vehicles can sort themselves out.

“Auxiliary lanes are a way of sorting people out, it is not through capacity,” he said. “So when folks say it’s a freeway expansion that’s once again part of that misinformation.”

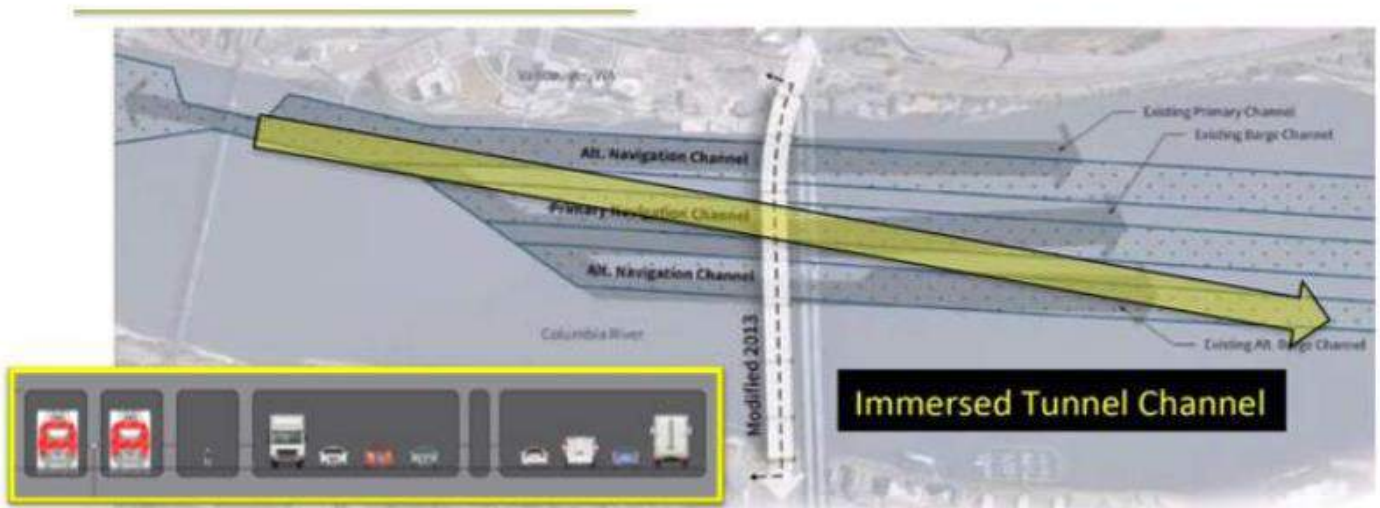
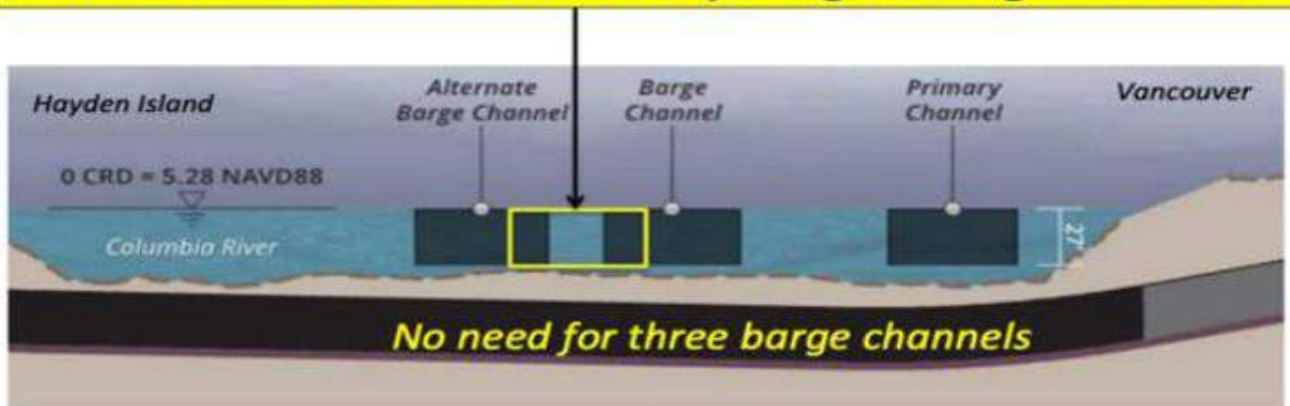
The bridge program is scheduled to release an updated cost estimate in late 2022 or early 2023. The program’s cost is currently estimated at \$3.2 billion to \$4.8 billion. The program will also appear before the Oregon Legislature in 2023 to ask for \$1 billion to match what Washington has allocated.

IBR's "Tunnel Concept Assessment" is misleading

Columbia River barge captains, depending on the river level and the height of their barge, can select one of three barge channels to pass under the current I-5 Bridge. If an immersed tunnel replaced the current bridge there would be no height restrictions or piers to navigate between, only a single channel near the center of the river.

The Interstate Bridge Replacement Program's "Tunnel Concept Assessment" is incorrect and misleading because it evaluated a tunnel that goes under three current barge channels that would not exist with an immersed tunnel.

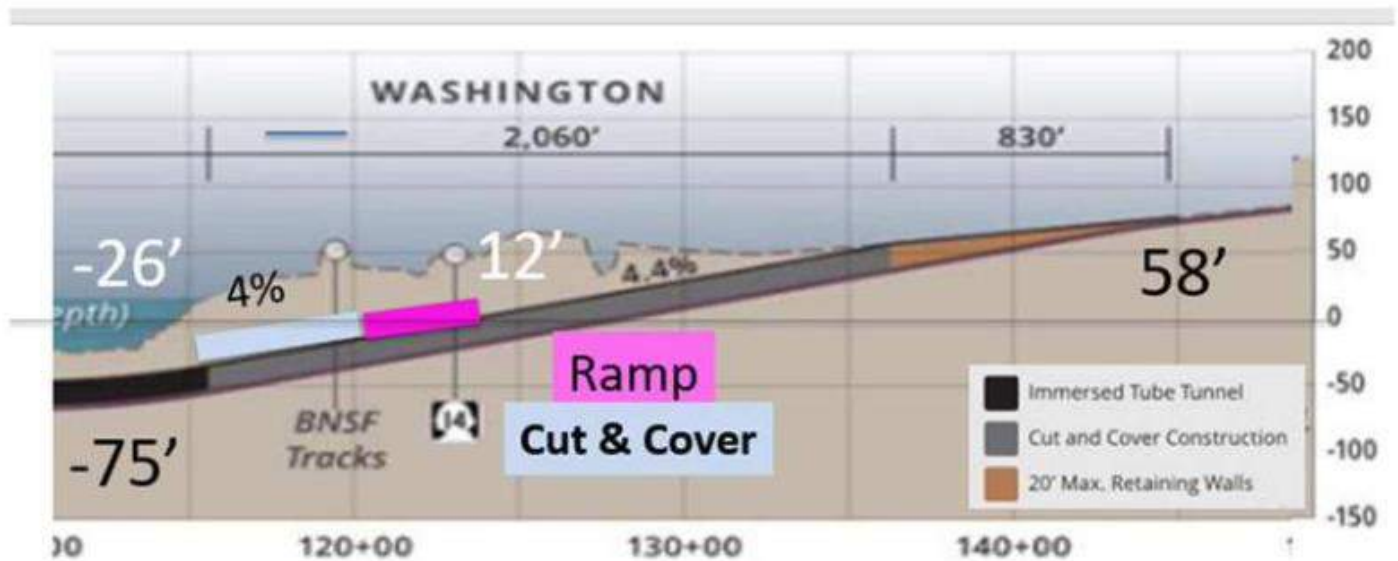
Immersed Tunnel needs only single Barge Channel



The IBR's "Tunnel Concept Assessment" requires a long steep ramp and cut & cover section to get under the primary channel at the current bridge lift. This channel will not be needed with an immersed tunnel. An immersed tunnel can have a ramp and cut & cover section one third as long and with 90% less excavation and cost.

The IBR graphic has a very poor scale and does not have an accurate elevation profile.

Distances and elevations can be checked with Google Earth.



The IBR's misleading evaluation has extremely inaccurate estimates of excavation, 7.9 million cubic yards.

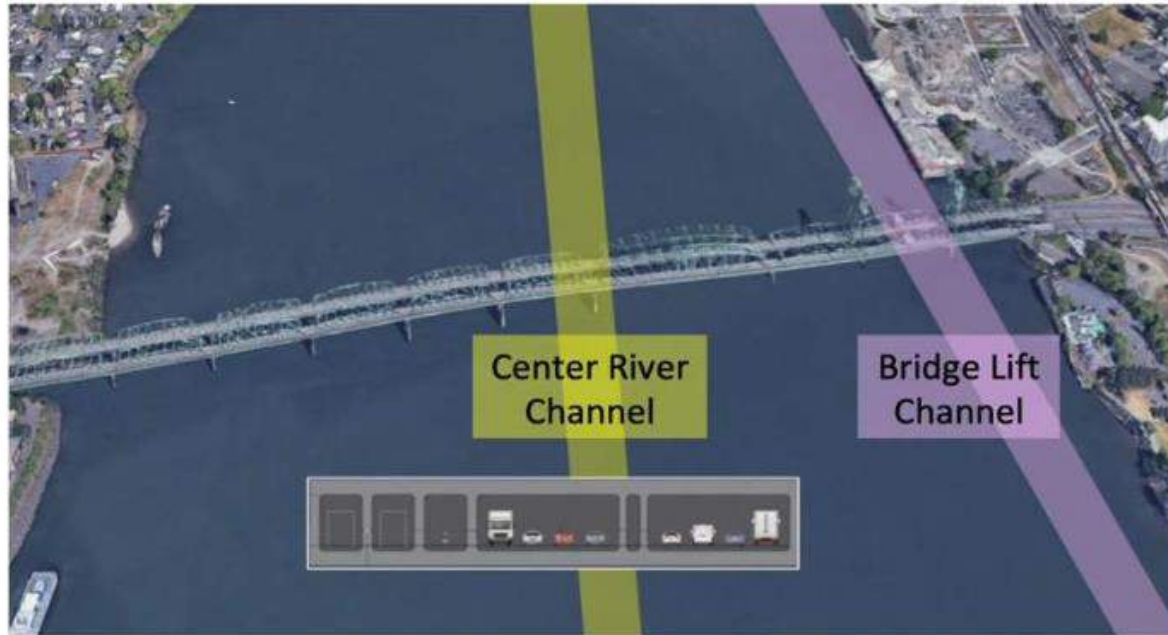
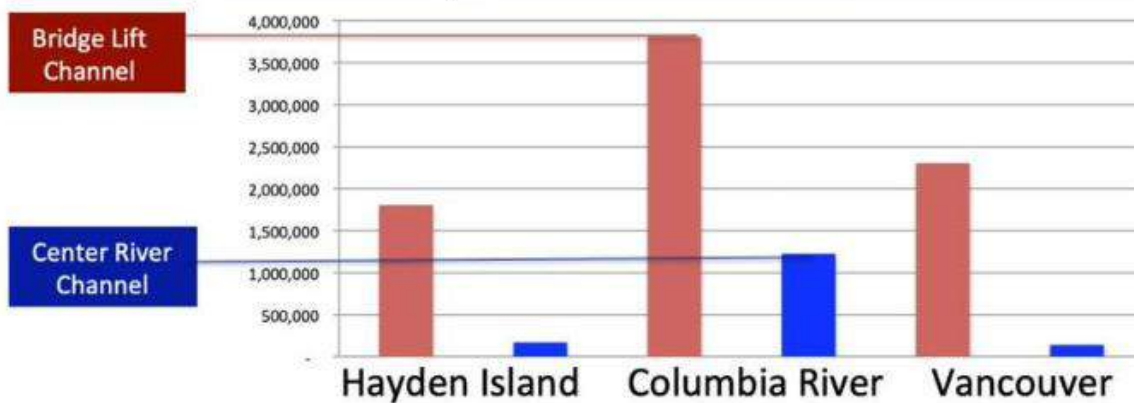


Table 1. Preliminary Tunnel Excavation Quantities

Location	Upstream Alignment	
	Bridge Lift Channel	Center River Channel
Hayden Island (on land)	1,800,000 yd ³	169,000 yd ³
Columbia River (in water)	3,800,000 yd ³	1,223,000 yd ³
Vancouver (on land)	2,300,000 yd ³	138,000 yd ³
Total	100% 7,900,000 yd³	19% 1,530,000 yd³



I-5 Bridge Replacement Program leaders, critics make their case

Ray Mabey, Assistant Program Administrator, said the bridge project spent over \$100,000 looking into an immersed tube tunnel and found it does not fit the program's purpose and needs. The document was developed by 17 professional engineers and other professionals, most of whom are involved in the bridge replacement.

“Seventeen engineers and scientists have signed that thing,” Ortblad said. “I don’t care how many people signed it. It’s just not right. Think for yourself. Look at the numbers.”

“It is difficult to get a man to understand something, when his salary depends on his not understanding it.”

—Upton Sinclair



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