

November 16th, 2023

Inside Olympia — New I-5 Columbia River Bridge

<https://tvw.org/2023/11/inside-olympia-new-i-5-columbia-river-bridge/>



IBRprogram

@IbrProgram



Program Administrator Greg Johnson was the guest on last night's "Inside Olympia" on [@TVWnews](#), where he discussed the latest program updates with host [@AustinJ_Reports](#).

Watch the full interview here:



Bob Ortblad @BOrtblad · 17h

Poor defense of IBR bridge

COMMON SENSE tells you that IBR's bridge with a -4% grade S-curve covered with rain, snow, or black ice will be deadly.

I don't believe IBR's claim that there are steeper Interstate bridges subject to ice.

Guidelines don't cancel laws of physics.

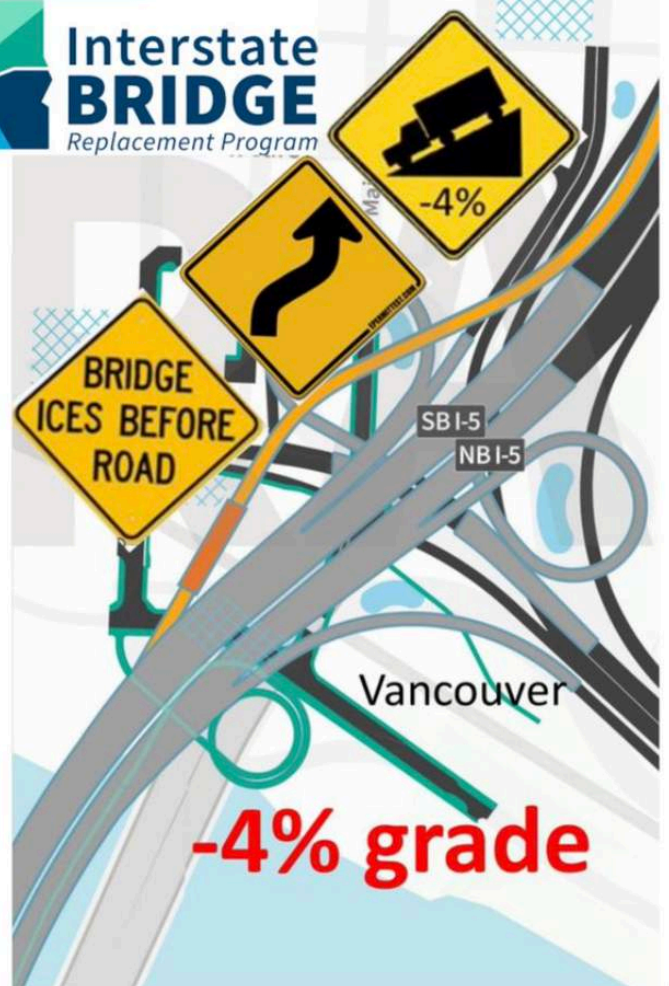
Inside Olympia Nov. 16, 2023

Greg Johnson, IBR Administrator

"One of the great things about DOT's is there is a vast amount of experience across the country with ice and snow conditions. This will not be as some critics have said one of the steepest bridges in the country. There are many other bridges that are steeper than this. We will be building within Federal Administration design guidelines, so this will not be an exceptionally dangerous bridge because of the height."



**Interstate
BRIDGE**
Replacement Program



Bob Ortblad @BOrtblad · 1h



IBR's false promise of a safe bridge

6 miles upriver the I-205 Bridge is the nation's most dangerous bridge. IBR's bridge will be more dangerous, steeper, with a tighter S-curve, and black ice that will frequent its north face.

Immersed Tunnel safer with environmental benefits

Greg Johnson, IBR Administrator

“We will be building within Federal Administration design guidelines, so this will not be an exceptionally dangerous bridge because of the height”

Inside Olympia Nov. 16, 2023



Bob Ortblad @BOrtblad · Nov 7

Letter Clark County Today: "This unnecessary deadly design is criminal negligence"

<https://www.clarkcountytoday.com/opinion/letter-this-unnecessary-deadly-design-is-criminal-negligence/>

Trucks need up to 2 football fields to safely stop.

Federal Motor Carrier Safety Administration

**Freezing Fog
BLACK
ICE**

BRIDGE ICES BEFORE ROAD

-4%

Interstate **BRIDGE** Replacement Program

-4% grade

Vancouver



Myth vs. Fact

Myth: The new bridge will be dangerously steep and unsafe for users.

Fact.

While the previous planning effort identified a grade of just under 4% for a 116-foot clearance bridge design, the IBR program has not reached that level of design and final road grades have not been confirmed. It is not unusual to have highway grades at 4% or steeper. In both Oregon and Washington there are stretches of interstate highway that feature grades steeper than 5%.

As designs progress, the program will ensure that any design accounts for the safety of all modes of travel and will meet or exceed all local, federal, and state safety and design standards.

IBR "Facts" are false and misleading

There are no Interstate Bridges with a 4% grade that experience snow and ice.

Highway grades steeper than 5% cannot be compared to a bridge grade. Bridges freeze before roads.

Design standards do not make a bridge safe.

Bob Ortblad @BOrtblad · Nov 4

Great question at yesterday's Bi-state Legislative Committee meeting. IBR did not have a good answer.

Does the IBR plan to build a station over the Hurley Tower?

Dozen elevators to serve 344 passage MAX car?

Elevators serve both sides of BNSF tracks, downtown & waterfront?



Bi-state Legislative Committee Meeting

Nov. 3, 2023.

Senator Lynda Wilson

“We have plans to build a transit station 80 feet in the air?”



3

10

19

16K



The Urbanist @UrbanistOrg · Nov 4

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Some unique Puget Sound transit planning ideas are being exported down to Vancouver via state transportation bodies.

Martin  @mixio17 · Nov 4

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Good point! I have not seen any 8 story high light rail station. A tunnel station would be so much easier/faster to access. Same applies to cycling lane.

Ryan Packer @typewriteralley · Nov 4

It's becoming even more clear how out-of-the loop Washington and Oregon legislators are about their own bistate megaproject.

Bob Ortblad @BOrtblad · Nov 9

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History Repeats

Much of cost increase on the Abernethy Bridge is due to 6 in-water drilled shafts that require an expensive oscillator that can only work in a brief 6-month fish window.

IBR plans to drill 124 in-water shafts with only a 4-month fish window, will cost DOUBLE?

The image is a side-by-side aerial comparison of two bridge projects. The left side shows the I-205 Abernethy Bridge Widening, featuring the Oregon Department of Transportation logo and text indicating 6 in-water drilled shafts, an original estimate of \$248 million, and a current estimate of \$515 million. The right side shows the Interstate Bridge Replacement Program, featuring its logo and text indicating 124 in-water drilled shafts, an estimate of \$5 to 7.5 billion, and a future estimate of \$10 to 15 billion. A central black box with white text reads 'HISTORY REPEATS ITSELF'.

Project	In-water drilled shafts	Original Estimate	Current Estimate	Future Estimate
I-205 Abernethy Bridge Widening	6	\$248 million	\$515 million	-
Interstate BRIDGE Replacement Program	124	-	-	\$5 to 7.5 billion (Estimate) \$10 to 15? billion (Future)

Bob Ortblad @BOrtblad · Nov 11

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In 1958 a Fraser River immersed tunnel was opened.

B.C. is building a new tunnel that has less environmental impact & costs no more than a bridge.

A Columbia River immersed tunnel will protect the environment for both people & fish.

Demand this alternative in Supplemental EIS.



Bob Ortblad @BOrtblad · Nov 14

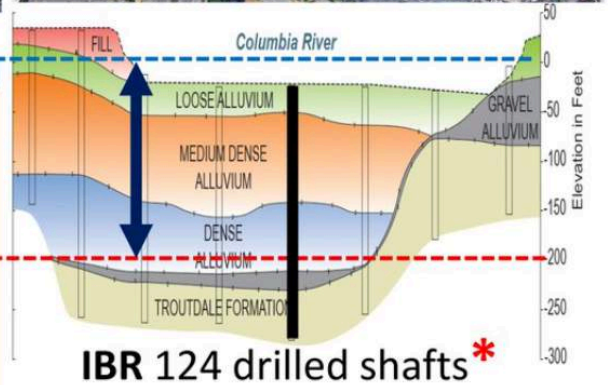
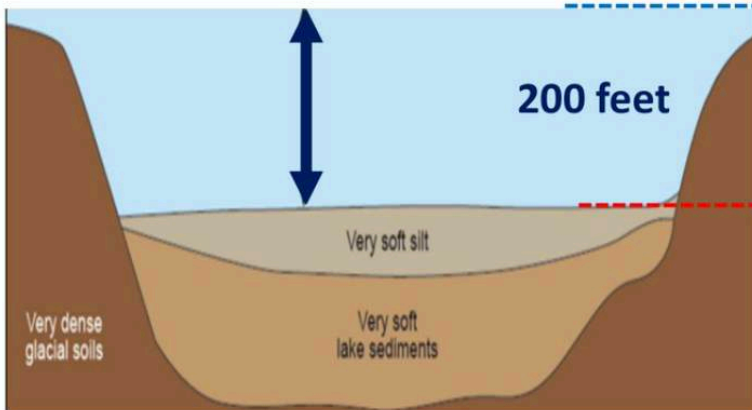
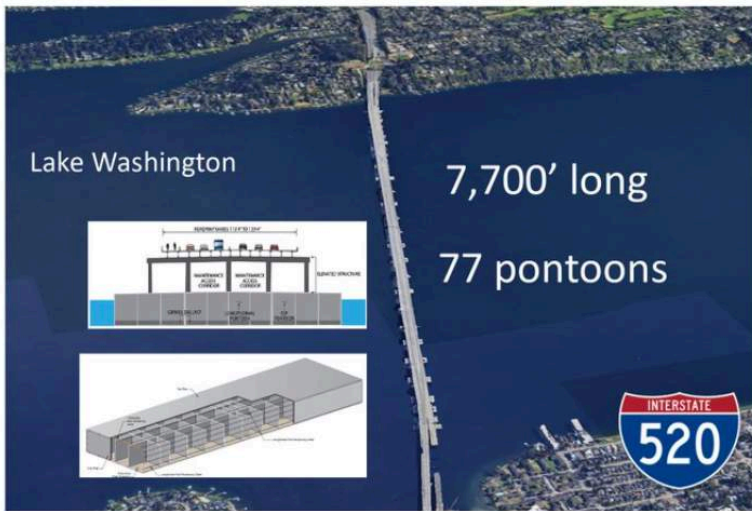
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WSDOT's manual, not cost effective to design structures for deep liquefaction.

IBR plans shafts to overcome deep liquefaction.

77 pontoons float I-520 across Lake Washington.

7 sunken segments (similar to pontoons) can float (below river bottom) I-5 across the Columbia River.



IBR 124 drilled shafts*
* WSDOT - Designing a structure for deep liquefaction is not cost effective.

Bob Ortblad @BOrtblad · Nov 14

IBR's bridge needs 124 drilled shafts, risky, costly, extends construction from 10 to 16 years.

Buoyancy supports an immersed tunnel, no needs for shafts, dredging takes days.

About 7 tunnel segments can be built at multiple shipyards.

Completion in half the time of a bridge.

IBR Bridge
124 drilled shafts

35,000 CY/day

PORT OF PORTLAND DREDGE OREGON

37 days of Dredging

2,800'
1,300,000 Cubic Yards

410'

45'

140'

The image is a composite of three parts. The top left is an inset photo of blue dredging machinery on a barge. The top right is a photo of a large blue and white dredger ship on the water, with the text '35,000 CY/day' overlaid. The bottom part is an aerial view of a river with a bridge, showing a yellow trapezoidal area representing the dredging site. Dimensions are provided: 2,800' length, 410' width at the top, 140' width at the bottom, and a 45' depth. A volume of 1,300,000 Cubic Yards is indicated. A small inset shows icons for different dredging methods.

Bob Ortblad @BOrtblad · Oct 24

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Portland and Vancouver have a proud history of ship and barge building. An Immersed Tunnel will create hundreds of local shipyard jobs. The new S.F. Bay Bridge was fabricated in China and the new Tacoma Narrows Bridge was fabricated in Korea.



Myth: A tunnel can solve the Interstate Bridge transportation problems just as easily as a bridge.

Fact.

A tunnel cannot be feasibly built within the footprint of I-5 without eliminating important connections to Hayden Island, downtown Vancouver and SR-14. It also comes with significantly more operational, environmental and historical resource impacts, and would cost more than a replacement bridge.

For more information about the suitability of an immersed tube tunnel, view the Tunnel Concept Assessment [↗](#).

IBR “Facts” are false and misleading

Immersed tunnel fits better than a than a bridge in I-5 footprint and makes better connection to SR-14, Hayden Island, and downtown Vancouver.

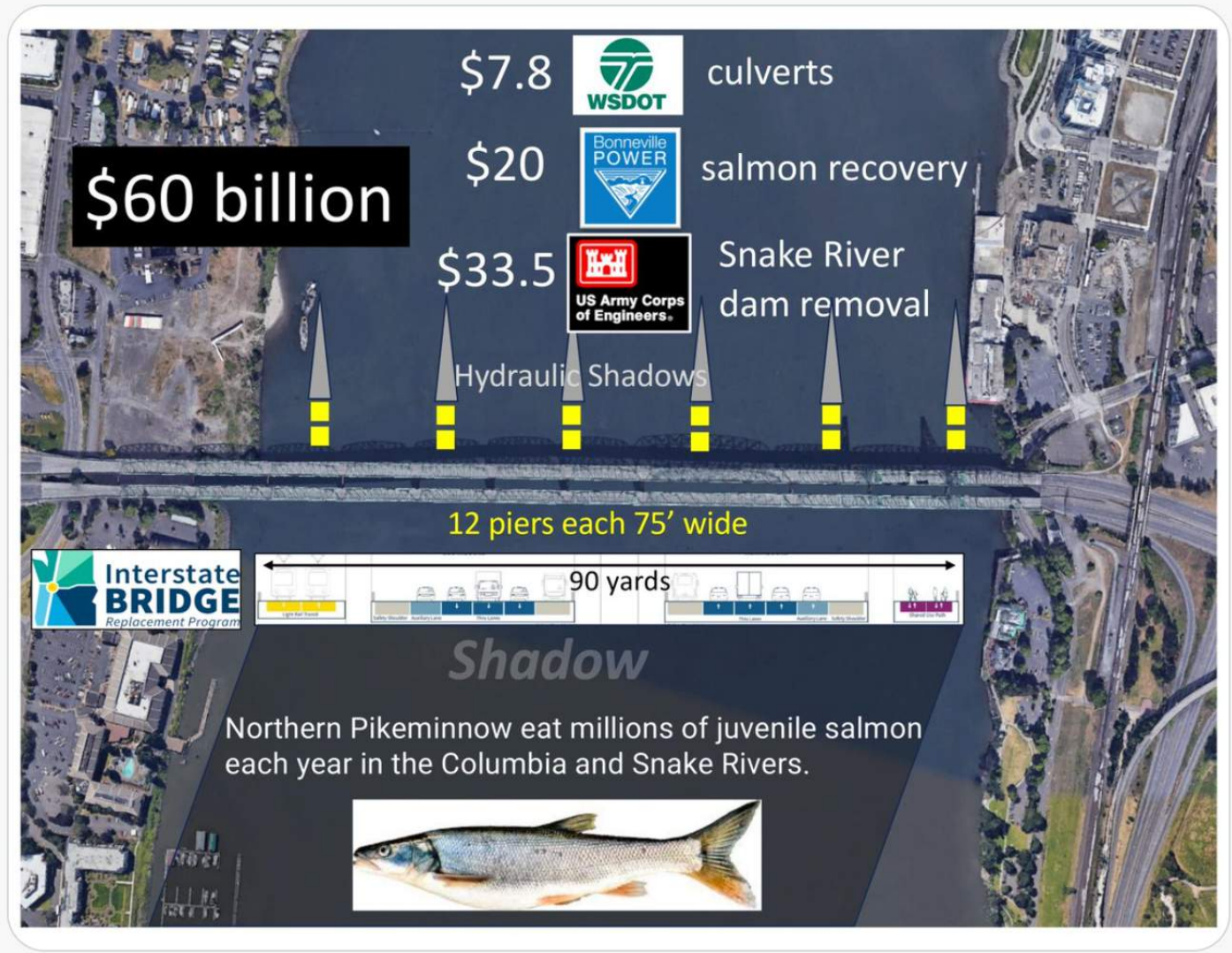
It also has less historic and environmental impacts than a bridge.

IBR’s “Tunnel Concept Assessment” is worthless, misleading by 4 million cubic yards.

Bob Ortblad @BOrtblad · 16h



\$60 billion maybe required to prevent salmon extinction.
IBR's large piers will provide hydraulic shadows plus a 90-yard-wide-bridge light shadow that is ideal for predatory fish that eat millions of juvenile salmon yearly.
No hydraulic or light shadows with an Immersed Tunnel.



<https://www.seattletimes.com/seattle-news/times-watchdog/huge-spike-in-costs-to-help-salmon-could-derail-wa-transportation-budget/>

Huge spike in costs to help salmon could derail WA transportation budget.

Bob Ortblad @BOrtblad · Oct 12

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IBR's bridge shadow & pier eddies create an ideal environment for salmon predators.

Tribes & sport fishermen should support a free-flowing river & Immersed Tunnel.

**NORTHERN PIKEMINNOW
SPORT-REWARD PROGRAM**

Eat millions of Columbia River salmon juveniles each year
Bonneville has spent \$20 billion on recovery

17 acre shadow
6 pier eddies

OREGON Fish & Wildlife
PACIFIC STATES MARINE FISHERIES COMMISSION
Bonneville POWER ADMINISTRATION
Interstate BRIDGE Replacement Program



Bob Ortblad

@BOrtblad



IBR claims an Immersed Tunnel will be twice the cost of a High Bridge, \$1.64 - \$2.45 billion bridge & approaches.

Columbia River crossing is 2,700 feet.

Antwerp at 4,200 feet, 50% longer, is building a 6-lane & bike path Immersed Tunnel for \$680 million.

Right-size


[@i5bridgenow](#)

Antwerp

\$680 million

Scheldt

8 segments x 525 ft = 4,200 ft

 Immersed Tunnel

5 segments x 540 ft = 2,700 ft



Bob Ortblad
@BOrtblad



Suggest Sen. Marko Liias also visit Gothenburg, Sweden the worlds' most sustainable city and drive through the city's two immersed tunnels. An I-5 Columbia River immersed tunnel is the best IBR solution. Can be built rapidly, see video.

<https://www.youtube.com/watch?v=JC4mRlgwXU0>



Bob Ortblad @BOrtblad · Nov 11

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IBR's Tunnel Concept Assessment correction

A Public Disclosure forced a correction of wildly inflated excavation estimate from 7.9 to 3.9 million CY. This 4 million CY correction is larger than the volume of Hoover Dam.

IBR denies deception, claims incompetence.
See email.

Interstate BRIDGE Replacement Program

-4.0 million CY
Tunnel Concept Assessment correction

Hoover Dam
1,244' top wide
726' high
660' base feet
45' top feet

3.25 million CY



Bob Ortblad

@BOrtblad

IBR admits its immersed tunnel estimate of excavation & dredging 7.9 million CY is incorrect.

No small error, correct estimate could be much smaller, 2 million CY.

Paid \$100,000, 17 engineers signed this report.

Incompetence disqualified an immersed tunnel.

Email Sept. 8, 2023

Interstate Bridge Replacement Program Team

To: Robert Ortblad

Good afternoon,

Thank you for reaching out to the Interstate Bridge Replacement (IBR) program and for sharing your questions about the Cross Section areas. We are responding back to address your specific questions but want to be clear that this does not change that the tunnel still does not best address the needs of the I-5 bridge and the corridor.

Our team of engineers uses a variety of software tools, such as InRoads that you referenced. We have investigated your inquiry and were able to confirm an issue with the model. Duplication occurred in the model where some excavation quantities were counted more than once. We are working on making the correction in the report and uploading an updated version.

However, upon reviewing what you provided, it appears your representative diagram and excavation calculations at 87+00 do not account the construction need for laying back slopes during excavation (and the resulting surface property impacts), or the alternative to have temporary structural walls which come with an extremely high cost. As you know, one of these options must be accounted for to prevent the sides of the trench from caving in during construction of an ITT.

We conduct continuous quality checks and assurances to catch any errors that may arise with third party software and appreciate you flagging this. Quantity errors like this are not uncommon during the development of conceptual work. In a situation where plans are being constructed, the increasing level of detail completed as work advances would address potential calculation errors before moving to future steps.

As we have extensively detailed and documented, a tunnel still results in out-of-direction travel, cannot tie into existing connections, potentially causes safety concerns for active transportation, has significant environmental impacts, and has a higher estimated cost. While this error does result in a change in the quantity of excavation of material, it does not change the decision, reached with agency partners, not to pursue a tunnel as a solution for the I-5 corridor as the multiple factors considered remain true.

We appreciate your understanding.

Sincerely,

Interstate Bridge Replacement program

Communications Team

**IBR thinks the Public is stupid
Unbelievable insulting email**

Tunnel Concept Assessment

Revision 2

Prepared by WSP USA and Parametrix Cost \$100,000

IBR's email explains their incompetence:

Translation:

“Our team of engineers uses a variety of software tools ... errors that may arise with third party software ..”

We don't know how our software works.

“Duplication occurred in the model where some excavation quantities were counted more than once.”

We only doubled 4 million cubic yards to 8 million cubic yards.

“Quantity errors like this are not uncommon during the development of conceptual work.”

We make errors all the time, no big deal.

“In a situation where plans are being constructed, the increasing level of detail completed as work advances would address potential calculation errors before moving to future steps.”

We would have found the error in the distance future.

“While this error does result in a change in the quantity of excavation of material, it does not change the decision, reached..”

We are just going to ignore our massive error.

Bob Ortblad @BOrtblad · Sep 24

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Transparency?

With "No Public Notice" the IBR just issued Revision 2 of "Tunnel Concept Assessment". Told for two years that excavation quantities were incorrect & misleading, the IBR admits a 100% & 4 million CY error. Error is closer to 300% & 6 million CY

IBR retract report

Table 1. Preliminary Tunnel Excavation Quantities

Location	Upstream Alignment	Downstream Alignment
Hayden Island (on land)	1,800,000 yd ³	2,200,000 yd ³
Columbia River (in water)	3,800,000 yd ³	4,000,000 yd ³
Vancouver (on land)	2,300,000 yd ³	2,700,000 yd ³
Total	7,900,000 yd³	8,900,000 yd³
	200%	200%

Tunnel Concept Assessment

July 14, 2021

Table 1. Preliminary Tunnel Excavation Quantities

Location	Upstream Alignment	Downstream Alignment
Hayden Island (on land)	<u>800,000 yd³</u>	<u>1,000,000 yd³</u>
Columbia River (in water)	<u>2,100,000 yd³</u>	<u>2,300,000 yd³</u>
Vancouver (on land)	<u>1,000,000 yd³</u>	<u>1,100,000 yd³</u>
Total	3,900,000 yd³	4,400,000 yd³
	100%	100%

Revision 2

No Public Notice

September 18, 2023

Bob Ortblad @BOrtblad · Nov 13

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Normally an engineering firm takes credit for its work.

Public Disclosure Request discovered that WSP & Parametrix prepared an incorrect and misleading “Tunnel Concept Report”.

Report was issued three times without either firm ever claiming authorship.

Retract report & refund fee.

Public Disclosure Request

“The Tunnel Concept Assessment was prepared by our consultant team from **WSP USA** and **Parametrix**.”



Tunnel Concept Assessment

Revision 2

Prepared for:



Prepared by:
?

Revision	Item	Date
0	Tunnel Concept Assessment	March 1, 2021
1	Sealed and added states of professional registration (Cover, Page iii, Page 1, and Page 32)	April 19, 2023
2	To address duplication that occurred in the model where some excavation quantities were counted more than once, excavation quantities and costs were revised (Table 1 and Table 2) and there is revised/additional text (Pages 14, 15, 17, 19 and 32). Revisions are underlined.	September 18, 2023

Bob Ortblad @BOrtblad · Jul 17

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IBR's "Tunnel Concept Assessment" draft was unstamped and not legal for 21 months during which time it was used to disqualify an immersed tunnel alternative to eight cities and agencies.

Washington Administrative Code (WAC) 196-23-020
Preliminary documents must be stamped.



**Not Legal
for 21 months**

Tunnel Concept Assessment
Draft — For Internal Review Only

Issued July 15, 2021

Tunnel Concept Assessment
Revision 1
April 19, 2023

Stamped April 19, 2023



CONCEPTUAL - NOT FOR CONSTRUCTION

WAC 196-23-020

Preliminary documents must be stamped

Bob Ortblad @BORtblad · Oct 31

IBR/WSDOT Accounting worse than Engineering?

After 45 days, WSDOT's cannot or will not give "Tunnel Concept Assessment" actual cost, or the number of hours billed by the P.E. that stamped the report.

Misleading report must be retracted and cost refunded.

WSDOT Public Disclosure Request

Sept 15, 2023

Cost of report?

Hours billed by Professional Engineer
that stamped report?



"Billing to the state is provided as hours worked, and not per deliverable provided, so the **cost for this specific report cannot be provided** but was estimated at \$100K."

"There is **no responsive record for specific hours charged to the Tunnel Concept Assessment**, Rob Turton's billing rate was \$411.59 at the time the assessment was released."

Bob Ortblad @BOrtblad · Oct 16

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FTA want to fund affordable housing near transit stations.
IBR plans to build 1,270 parking spaces costing \$116,000,000.
These 6 acres better used for 900 apartments.
IBR's 1960's freeway & parking not attractive to Federal funding.

The image is a composite of four parts. The top-left part is an aerial photograph of a parking lot with many cars parked. Overlaid on the image is the text "1,270 spaces" in white and a red banner at the bottom with the text "\$116,000,000". The top-right part is a photograph of a modern multi-story apartment building with orange and grey facades. Overlaid on the image is the text "900 units" in white and a red banner at the bottom with the text "\$150,000,000". The bottom-left part is a map of Vancouver showing the Interstate Bridge Replacement Program area. The word "Vancouver" is written in white. The logo for "Interstate BRIDGE Replacement Program" is in the bottom left corner. The bottom-right part is a detailed map of a 6-acre area, with a red box containing the text "6 Acres" and a label "Possible Parking Locations" pointing to a specific area. A "COMMUNITY CONNECTOR" is also labeled on the map.

Bob Ortblad @BOrtblad · Nov 16

Outrage over destruction of the Seattle Hotel to build a parking garage saved historic Pioneer Square.

IBR's Parking Rides will add traffic & blight to downtown Vancouver. Land near transit is more valuable for commercial & residential development.

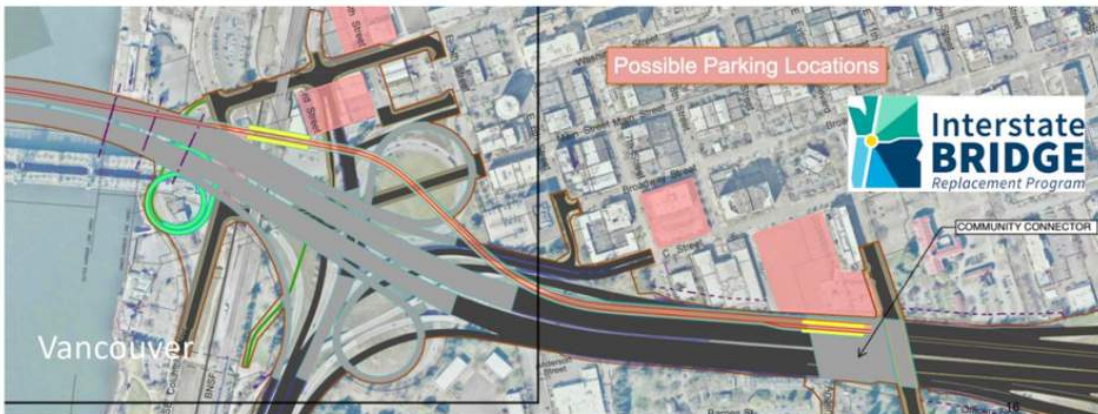
[@FTA_DOT](#) [@USDOTFHWA](#) [@trimet](#)



Saved Pioneer Square

'Sinking Ship' parking garage

1,270 Parking Spaces: \$116 million plus land



Bob Ortblad @BOrtblad · Oct 23

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Vancouver should build a downtown for people, not cars.

IBR plans to build 1,270 parking spaces costing \$116,000,000.

These 6 acres better used for 900 apartments.

IBR's 1960's freeway & parking not attractive to Federal funding.



Bob Ortblad @BOrtblad · Sep 11

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IBR's just submitted a USDOT Mega grant application. Planned Vancouver parking lots are almost dumber than a high bridge with a -4% grade on an often-icy S-curve.

Immersed Tunnel, innovative, safe, with environmental benefits and more attractive for Federal funding.



*“Yes, the planet got destroyed.
But the IBR built
lots of car parking”*

1,270 Parking Spaces: \$116 million plus land

