

May 20, 2022

Bi-state Legislative Committee

The Interstate Bridge Replacement Program (IBR) is promoting a slightly modified Columbia River Crossing bridge design. This design is from the 1960's. It has massive half-mile-long elevated interchanges with dangerously steep looping on and off-ramps to elevate traffic 150 feet over the Columbia River.

An immersed tunnel is simpler, safer, and has less cost and environmental impact. The IBR continues to lie to the public and political leaders about the feasibility of an immersed tunnel.

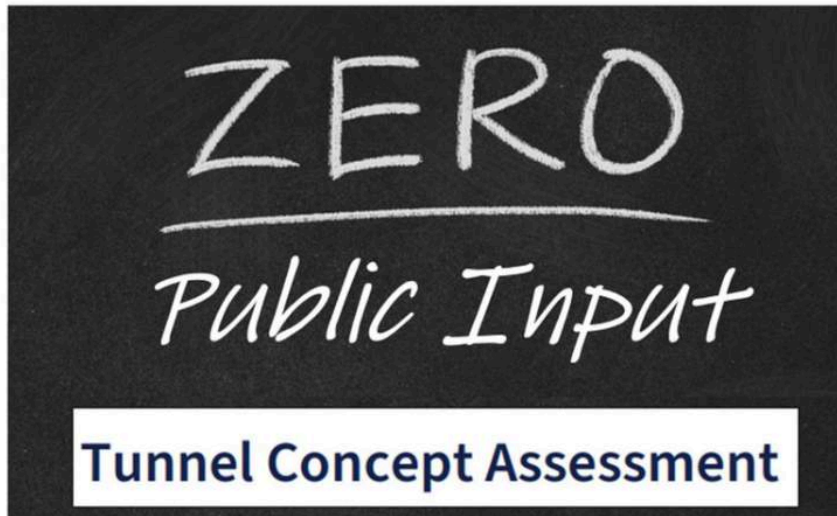
Please study the attached material.
More comments at Twitter @BOrtblad

Respectfully
Bob Ortblad MSCE, MBA

Bob Ortblad @BOrtblad · May 13

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With ZERO public input, directed by the IBR, a cabal of bridge consultants issued a misleading “Tunnel Concept Assessment” that disqualified an immersed tunnel option. interstatebridge.org/media/4ivnpz3n...



Prepared for:



July 2021

Bob Ortblad @BOrtblad · 27m

The IBR must retract its misleading “Tunnel Concept Assessment”

Clark County [TODAY.com](https://www.clarkcountytoday.com)

Letter to Editor Oct. 6, 2021

[clarkcountytoday.com/opinion/letter...](https://www.clarkcountytoday.com/opinion/letter...)

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@EPAnorthwest @VancouverUS @trimet @oregonmetro @IbrProgram

Tunnel Concept Assessment

Draft — For Internal Review Only



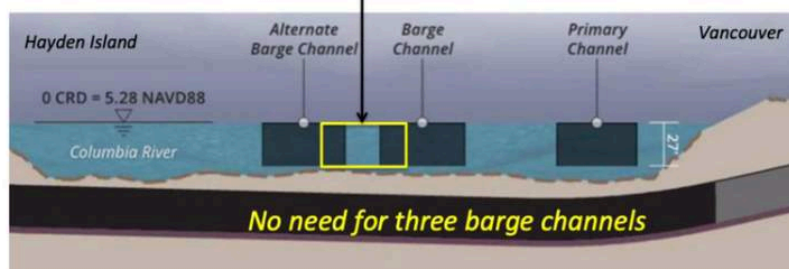
RETRACTED

Prepared for: July 14, 2021



Letter writer Bob Ortblad believes an immersed tube tunnel under a channel near the center of the Columbia River should have been evaluated

Immersed Tunnel needs only single Barge Channel



Bob Ortblad @BOrtblad · May 2

Tampa Bay has steepest interstate bridge 4%, but never black ice

New High I-5 Bridge at 3.99% has potential black ice 6 months/year & will be a killer

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@PortlandCorps @trimet @ctranvancouver @VancouverUS @lbrProgram
@oregonmetro



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IBR repeatedly tweets bridge sidewalks are too narrow

IBR fails to mention the extreme climb a high bridge will require

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@VancouverUS @trimet @oregonmetro @ctranvancouver @lbrProgram
@BikePortland @justcrossingall



Bob Ortblad @BOrtblad · May 8

SR14 access to + 120' High Bridge will be terrible

+ 6% spiral on-ramp

[twitter.com/BOrtblad/statu...](https://twitter.com/BOrtblad/status/1524444444)

-7% off-ramp

[twitter.com/BOrtblad/statu...](https://twitter.com/BOrtblad/status/1524444444)

Immersed Tunnel ground level access

[twitter.com/BOrtblad/statu...](https://twitter.com/BOrtblad/status/1524444444)

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@lbrProgram @portvanusa

Slow +6% loop on-ramp



Steep -7% off-ramp



Bob Ortblad @BOrtblad · May 5

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The IBR is repeating past mistakes. Its bridge and approaches are from the 1950's.

An Immersed Tunnel would have no elevated approaches, with portals a 1,000' from the riverfront

@EPAnorthwest @USDOTFHWA @FTA_DOT @USCGPacificNW
@PortlandCorps @VancouverUS @IbrProgram @orgonmtro



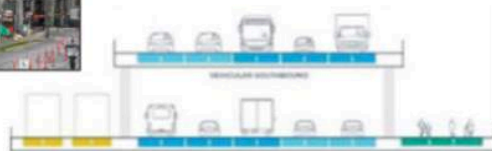
Embarcadero Freeway
San Francisco 1959-1989



Alaskan Way Viaduct
Seattle 1953-2019



Cypress Street Viaduct
Oakland 1957-1989



Bob Ortblad @BOrtblad · May 6

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The IBR has selected light rail & 8 lanes

An Immersed Tunnel better than a High Bridge for rail & traffic, 75' dip under vs. 150' climb, 1/2 distance, plus riverfront stations

@trimet @ctranvancouver @EPANorthwest @USDOTFHWA @FTA_DOT
@USCGPacificNW @PortlandCorps @IbrProgram



Bob Ortblad @BOrtblad · May 9

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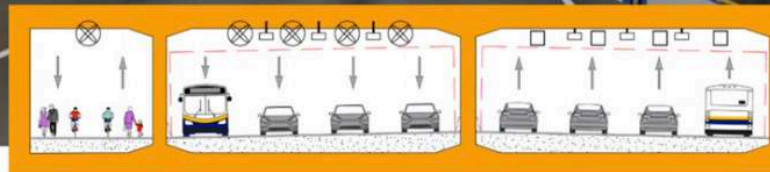
British Columbia has an engineering firm designing an 8-lane immersed tunnel for the Fraser River

COWI

cowi.com/about/news-and...

OR-WA Joint I-5 Committee should invite this firm to review the Columbia River site

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@lbrProgram



Columbia River 27 feet deep



Bob Ortblad @BOrtblad · May 10

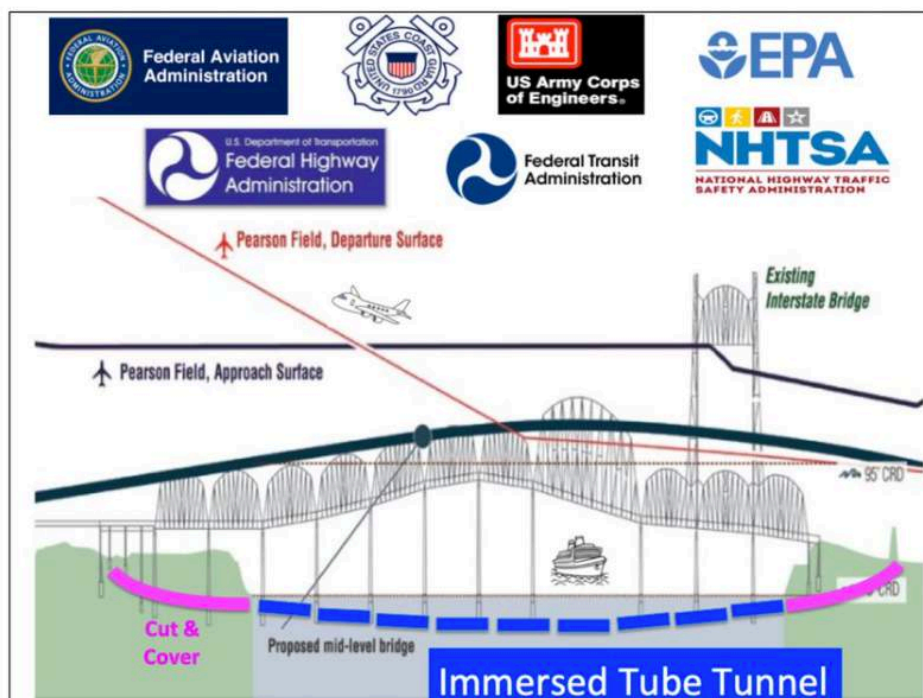
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Federal agencies will see the advantages of Columbia River I-5 immersed tunnel.

@FAANews @USCGPacificNW @PortlandCorps @EPAnorthwest
@USDOTFHWA @FTA_DOT @NHTSAgov @IbrProgram @VancouverUS
@oregonmetro @trimet @ctranvancouver @PortOfPortland @portvanusa

Federal agencies will see the advantages of immersed tunnel.

FAA	clear air path
USCG	navigation clearance, no piers
USACE	center channel, less dredging
EPA	restored river & riverbank
FHWA	\$1 billion saved on riverbank interchanges
FTA	riverbanks rail stations, less grade
NHTSA	protection from weather, safer grades



Bob Ortblad @BOrtblad · May 10

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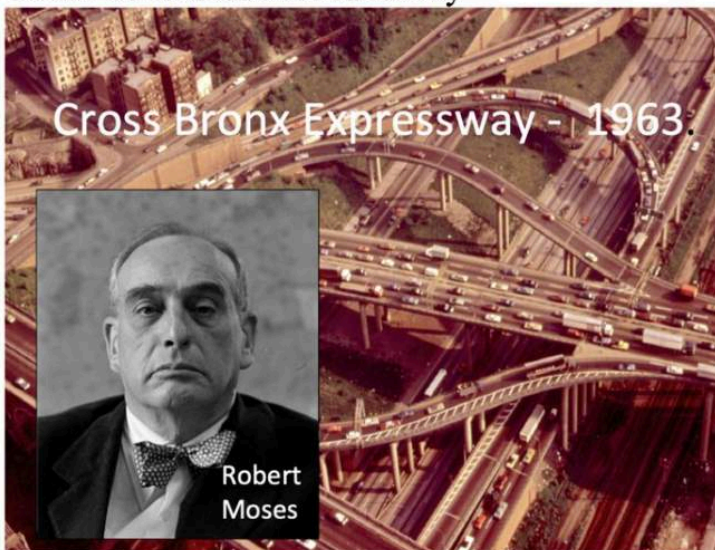
Interstate Bridge Replacement elevated interchanges will devastate Hayden Island & Vancouver

An immersed tunnel needs no elevated interchanges and will allow riverfront parks

[twitter.com/BOrtblad/statu...](https://twitter.com/BOrtblad/status...)

@tedwheeler @AnneOgle @IbrProgram @oregonmetro @EPAnorthwest @USDOTFHWA

Cause of extreme urban decay



Please protect your city from the IBR's interchanges



Bob Ortblad @BOrtblad · May 14

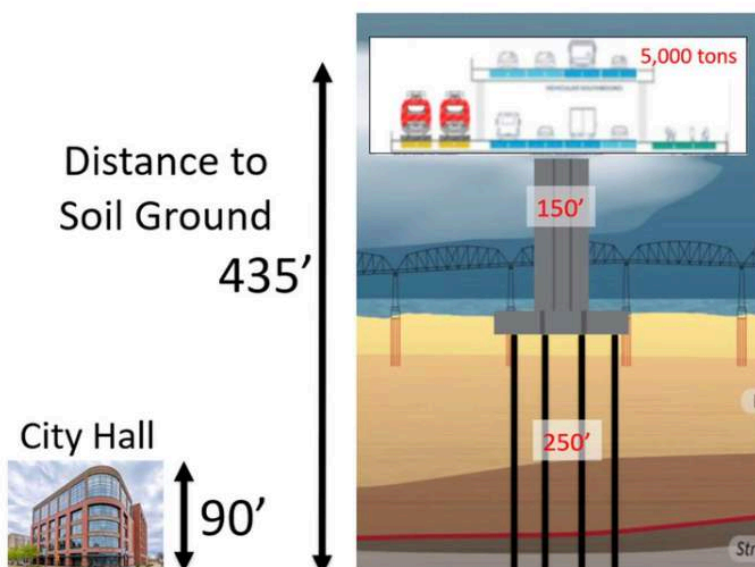
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The Columbia River bottom is 250' of soft sediment, a risky & costly site for an earthquake resistant bridge, like SF Bay Bridge

Traffic 400' from soil ground during liquefaction

Immersed Tunnel less risky, costly

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@IbrProgram



Bob Ortblad @BOrtblad · May 15

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Immersed Tunnel is a better Modified LPA

interstatebridge.org/nextsteps?v=_K...

Less impact on Hayden Island, less distance & grade for transit & traffic,
weather protected, ground level Columbia Way LRT station

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1-5 BRIDGE OVER THE COLUMBIA




Better Solution

TUNNEL UNDER

IBR Recommendation: Modified LPA

Hayden Island/ Marine Drive:	River Crossing Auxiliary Lanes:
Partial Interchange	1
Transit:	Variable Rate Tolling:
Light Rail to Evergreen near I-5	Yes




175 SE Columbia Way Vancouver, Washington
Columbia Way LRT Station

Shorter
Less Grade

Auxiliary

Auxiliary



Bob Ortblad @BOrtblad · 2h

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British Columbia & Denmark both selected an immersed tunnel, less cost than a bridge

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@justcrossingall

IBR says an immersed tunnel is twice the cost of an I-5 bridge.

