

There is lots of interest in an Immersed Tunnel as better solution than a 1960's style Freeway Bridge with massive half-mile-long elevated interchanges.

See following Tweets, lots of likes and impressions.

The IBR has spent millions soliciting public comment, but gets few Tweet likes, mostly disparaging comments.

▶ Stacked One-Bridge Option (Different Levels for Northbound & Southbound Traffic)



Immersed Tunnel



Bob Ortblad MSCE, MBA



as seen in the new york times @nomorefreeways · Apr 30

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Considering the outrageously high height that a bridge will have to top so the coast guard is satisfied that boats can pass underneath, building a tunnel for the @lbrProgram increasingly seems like a cost-effective option, as @BOrtblad has been saying. But IBR won't study it.

Bob Ortblad @BOrtblad · Apr 30

An immersed tunnel trench can be dredged in 35 days; prefabricated tunnel segments can be placed in a few days; low river impact

Bridge requires years of in river construction of drilled shafts, piers, & trusses

@PortOfPortland @EPANorthwest @USCGPacificNW @PortlandCorps @lbrProgram



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21



Impressions ⓘ

2,124

Engagements ⓘ

160

Detail expands ⓘ

132

Bob Ortblad @BOrtblad · Apr 25

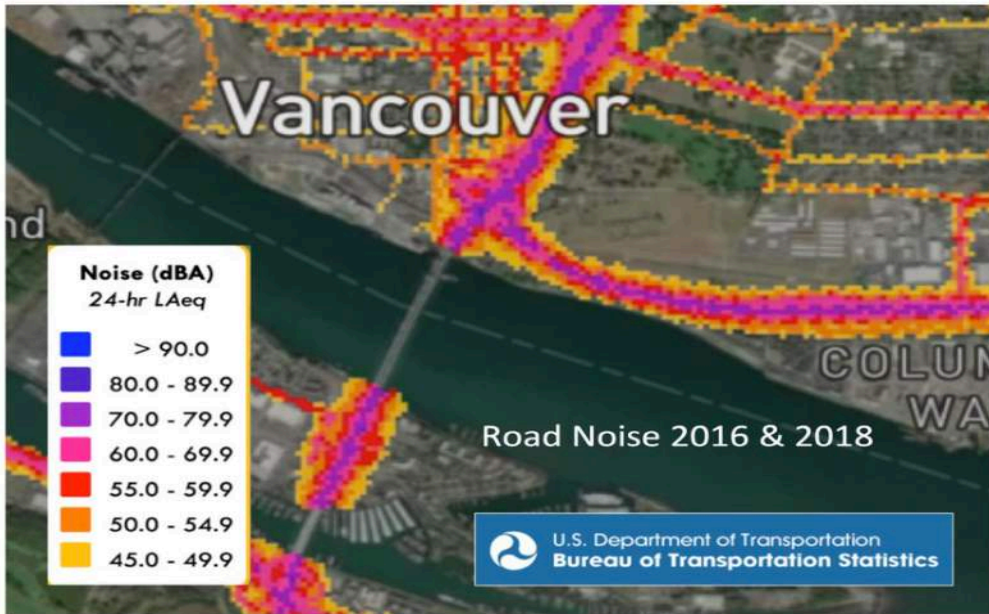
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The IBR's elevated bridge interchanges will increase the volume & distance of highway noise shown by the USDOT's map.

An immersed tunnel will silence the river and reduce riverfront noise.

@EPANorthwest @USDOTFHWA @FTA_DOT @USCGPacificNW

@PortlandCorps @VancouverUS @IbrProgram

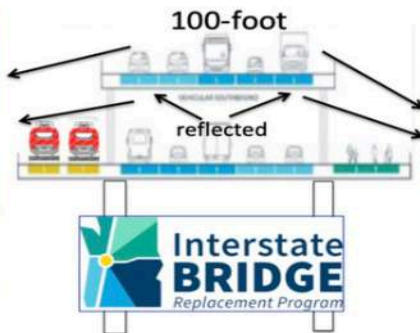


NOISE 90 decibels

Downtown



Fort Vancouver



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6

26

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Impressions ⓘ

1,949

Engagements ⓘ

463

Detail expands ⓘ

383

Bob Ortblad @BOrtblad · Apr 23

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The IBR's selection of LRT makes an immersed tunnel better solution than a bridge.

A towering +110' Columbia Way Station can be avoided along with massive elevated interchanges.

[@ctranvancouver](#) [@trimet](#) [@USDOTFHWA](#) [@FTA_DOT](#) [@USCGPacificNW](#)
[@PortlandCorps](#) [@VancouverUS](#) [@IbrProgram](#)

High Bridge - A Columbia Way LRT Station requires a massive structure twice the height of Sound Transit's Tukwila Station.



Immersed Tunnel - An Columbia Way LRT Station can be built just below ground with an attractive ground level entrance.



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Impressions ⓘ

1,434

Engagements ⓘ

139

Detail expands ⓘ

89



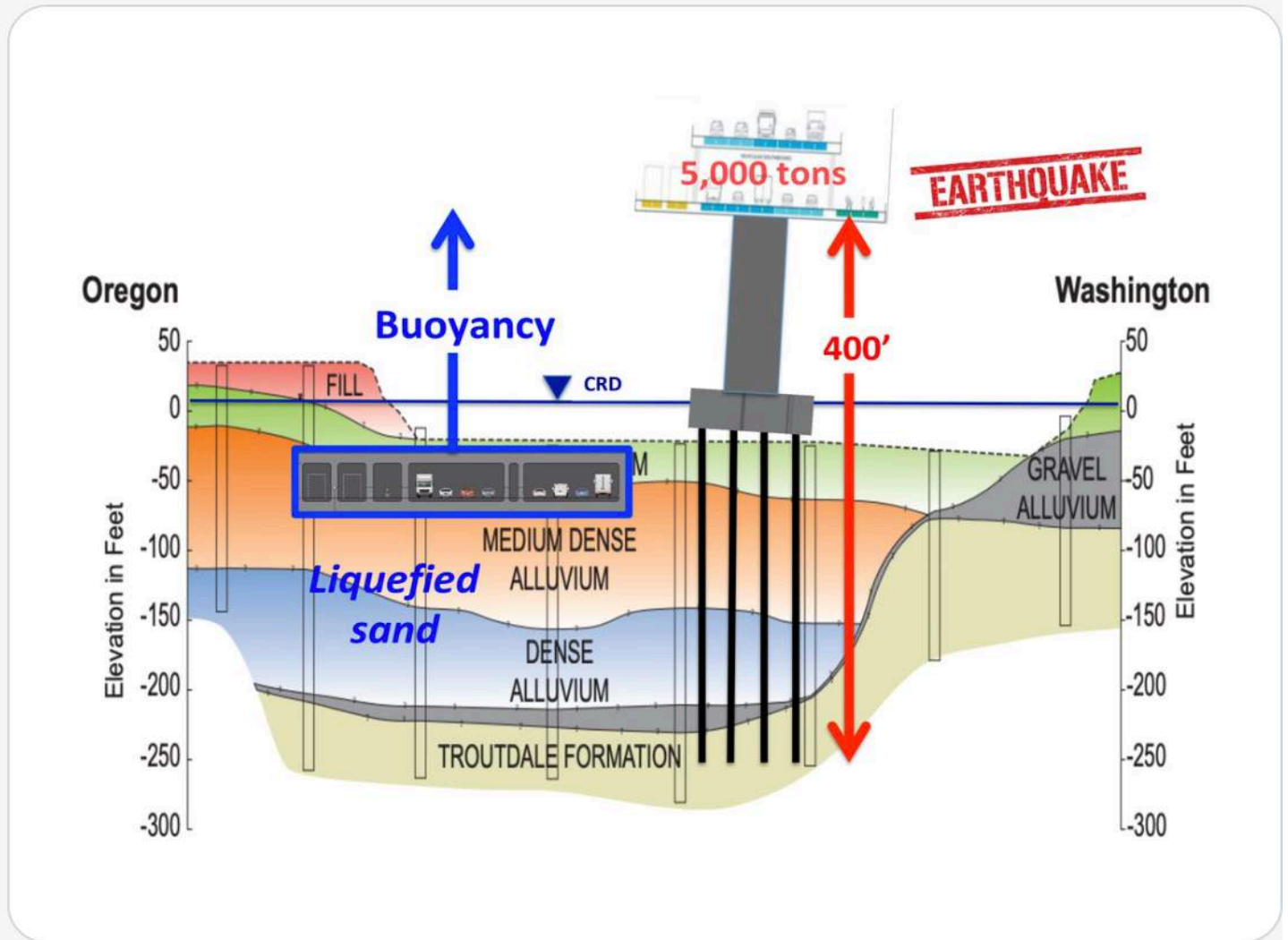
Bob Ortblad @BOrtblad · Apr 26

Buoyancy makes an immersed tunnel almost immune to earthquake liquefaction

Costly to earthquake proof a bridge supporting 5,000-ton trusses 400' from solid ground

Buoyancy is free

@EPANorthwest @USDOTFHWA @FTA_DOT @USCGPacificNW @PortlandCorps @VancouverUS @IbrProgram



Comment icon Refresh icon Heart icon 2 Share icon Menu icon

Impressions ⓘ
375

Engagements ⓘ
171

Detail expands ⓘ
167

Bob Ortblad @BOrtblad · Apr 24

The IBR's "Tunnel Concept Assessment" is worthless because it evaluated a tunnel under the bridge lift channel that would become redundant.

A tunnel allows a center river channel & excavation quantities 80% less than IBR's estimates.

@USCGPacificNW @PortlandCorps @IbrProgram

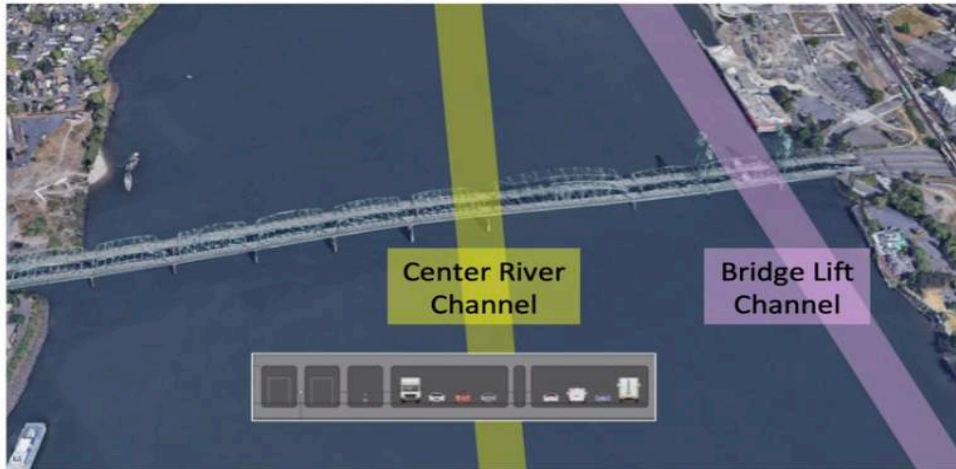
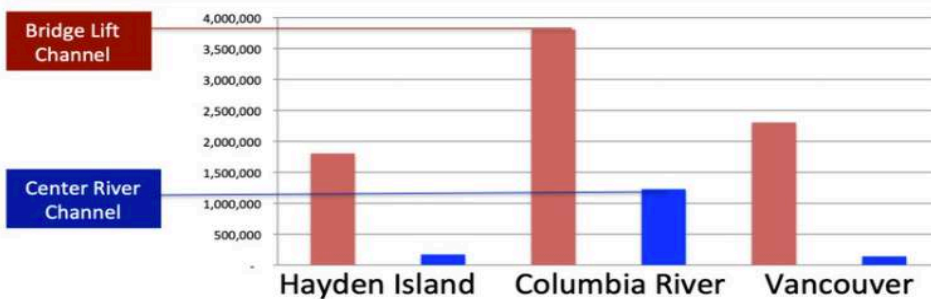


Table 1. Preliminary Tunnel Excavation Quantities **Upstream Alignment**

Location	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



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Impressions ⓘ

233

Engagements ⓘ

55

Detail expands ⓘ

43