



INSTEAD OF BUILDING THE IBR MEGA BRIDGE WITH COSTLY TOLLS, LET'S SAVE OUR HISTORIC INTERSTATE BRIDGE WITH AN IMMERSED TUBE TUNNEL, AND REPURPOSE THE EXISTING BRIDGE AS A REVENUE GENERATING HISTORIC GATEWAY ATTRACTION!

The following is an overview of a White Paper by Neighbors For A Better Crossing that analyzed the direction the Interstate Bridge Replacement (IBR) Program is taking with regard to reducing traffic congestion on the Interstate Bridge between Hayden Island OR and Vancouver WA. For the full White Paper: contact.us@neighbors4a-bettercrossing.org.

The IBR is about to tear down & replace our <u>Historic Interstate Bridge</u> that was opened to foot traffic on Dec 30, 1916 and subsequently added to the <u>National Register of Historic Places</u> in April of 1980, to make way for a mega toll bridge that will be over 180ft tall. This mega-bridge will claim 12-acres of valuable Vancouver waterfront property and 10-acres of prime retail property on Hayden Island. **With only one additional lane planned for each direction, the proposed mega bridge will do little to solve traffic congestion.** The mega-bridge will include a light rail transit station positioned 100ft high over Vancouver and one that's 30ft high over <u>historic Hayden Island</u>. The IBR also intends to pave an ugly swath of 16-traffic lanes across the very heart of Hayden Island's retail district. The IBR project will take 15 years to complete, placing a huge financial & logistics burden on all those living & working close to the project. Why would any Oregon or Washington resident or public official want to destroy our iconic NW historic bridge (plus a large part of Hayden Island's retail district), only to replace it with a Los Angeles style mega bridge with burdensome tolls, <u>when a lower cost alternative exists that would avoid the need for costly tolls and be more resistant to earthquakes than a mega bridge?</u> "We believe that failing to protect our historic Interstate Bridge is simply not an option!

Starting next year (in 2026), expensive toll charges will begin at a cost of an estimated \$2350/yr per commuter, driving across the bridge two times a day. Toll's are currently limited in WA State to \$18 each way, but expect that limit to increase. Tolls will place a financial burden on everyone, so we firmly oppose tolls on the I-5 crossing! There's a lot of opposition to placing tolls on the I-5 bridge from organizations such as Hayden Island Neighborhood Network (HINOON), Hayden Island Community Safety Initiative, Just Crossing Alliance & Endorsing Partners, and our own Neighbors For A Better Crossing. Petitions are being circulated to block/control tolls in both states: Vote Before Tolls Initiative is being circulated in Oregon, and Rep. John Ley in Washington has introduced HB 1559: NO TOLLS ON THE INTERSTATE BRIDGE.

An Immersed Tube Tunnel (ITT) is a viable solution that <u>could save \$\$ Billions</u> in construction costs, eliminate the need for costly "tolls," and be considerably more resilient to earthquakes than the IBR's mega bridge! The historic Interstate Bridge could then be saved and repurposed as a revenue generating historic attraction for local businesses.

TO SAVE & REPURPOSE OUR HISTORIC I-5 BRIDGE, THE SOLUTION IS AN IMMERSED TUBE TUNNEL (ITT)!

Notwithstanding the Interstate Bridge Replacement (IBR) Project's negative statements that an Immersed Tube Tunnel option is a "myth," it's a very credible alternative to a mega bridge! Still, the IBR insists on tearing down our historic Interstate Bridge, replacing it with a Los Angeles style mega bridge that will forever change the landscape and charm of our I-5 crossing. Our historic Interstate Bridge is still very strong structurally with a lot of life left in it.

In briefings, IBR has made statements that an Immersed Tube Tunnel is a "myth" because of "The inability [of a tunnel]to tie into existing connections such as SR 14..." However, those statements are refuted by the IBR's own professional engineering study "Tunnel Concept Assessment" Rev 2 on page 18, Para 3.4 (see below) that confirms that an Immersed Tube Tunnel (ITT) "would connect to above-ground roadway network via cut-an-cover...." An ITT is in fact a valid option!

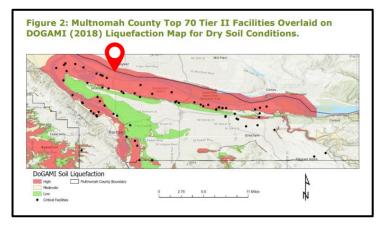
On Page 6, we show how an Immersed Tube Tunnel could connect with I-5 & SR-14.

3.4 Cut-and-Cover and Retained Cut Construction

The ITT would be connected to the above-ground roadway network via cut-and-cover and retained cut connections at either end. Excavation support for these end connections could differ between Vancouver and Hayden Island, as excavations in Vancouver are anticipated to be primarily in gravel alluvium, whereas excavations on Hayden Island are anticipated to be primarily in silt/sand alluvium. The deepest excavations could require ground support systems consisting of braced or restrained secant pile or slurry walls, while shallower excavations may require less robust ground support systems. Ground improvement measures could be incorporated to decrease the potential for seepage through the base of the excavation and to provide long-term support for the constructed cut-and-cover and retained cut sections.

Immersed Tube Tunnels (ITT) are widely used throughout the world. Examples include the Bay Area Rapid Transit (BART) tunnel in San Francisco, Fort McHenry Tunnel in Baltimore, Second Midtown Tunnel in Portsmouth, and the Fraser River "No Toll" Immersed Tunnel underway in British Columbia. ITTs are prefabricated in sections on land, then lowered into a trench in the riverbed. An ITT can accommodate the same types of vehicles, light rail, and bike/pedestrian paths as any mega bridge, so why has the IBR been resistant to the ITT option? It appears that among the main decision makers within the IBR, most if not all have experience with bridge building or have ties to bridge building companies, which may have compromised & tainted IBR decisions toward a mega bridge.

An <u>engineering study</u> confirms that our historic Interstate Bridge with its tightly spaced group of ninety (90) 120ft long wood pilings in each of its 9-piers, provides more "fail safe" protection against destruction from soil liquefaction, than a mega bridge. Why is that important? According to reports about the <u>Critical Energy Infrastructure (CEI) Hub</u>, all communities along the Willamette & Columbia Rivers from St. Johns to the Columbia River Gorge are at risk. In the event of a major earthquake those areas will experience a high degree of soil liquefaction, that will force mass evacuations. The I-5 crossing is in the middle of an earthquake generated soil liquefaction zone shown in red below per 67 of the October 2023 PCC report: <u>Risk of Earthquake-Induced Hazardous Materials Releases in Multnomah County</u>.



Consider the similarity of the crossing at the Fraser River "TOLL FREE" Immersed Tube Tunnel in Vancouver BC with our own crossing between Hayden Island & Vancouver. The Columbia River is similar to the Fraser River. <u>An ITT can save our historic Interstate Bridge and the beauty & history of our I-5 crossing, at cost savings that could prevent "costly tolls."</u>

FRASER RIVER "TOLL FREE" IMMERSED TUBE TUNNEL IN VANCOUVER BC



COLUMBIA RIVER "TOLL FREE ?"IMMERSED TUBE TUNNEL AT THE WA/OR I-5 CROSSING



So what's an Immersed Tube Tunnel?

It's a concrete structure prefabricated on land, floated into position, and lowered into a trench on the river bed. There are two local firms, <u>Gunderson Marine & Iron</u> & <u>Vigor</u> that could manufacture these.

IMMERSED TUBE TUNNEL UNDER CONSTRUCTION



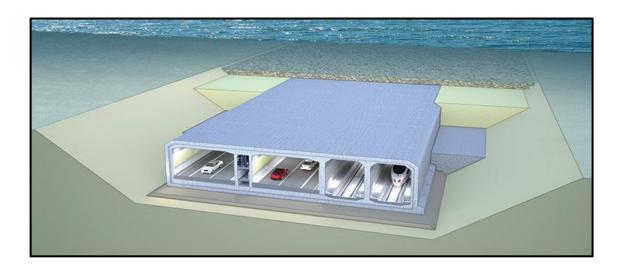
CLICK HERE FOR A SHORT YOUTUBE VIDEO:

Installing an Immersed Tube Tunnel



An Immersed Tube Tunnel is far more resilient to earthquakes than a mega bridge. With an ITT, there will be less disruption to fish and fish habitat during construction as a trench is far less intrusive than hammering a huge number of bridge pilings into the riverbed, which will be required for a mega bridge. Rather than having the 100ft high elevated transit station in Vancouver or the 30ft high transit station on Hayden Island subject to elevator outages, both light rail transit stations will be at ground level. The ugly swath of 26-lanes of pavement across historic Hayden Island will also be avoided. By channeling vehicle traffic through a tunnel, we save our historic bridge and avoid an imposing Los Angeles style mega bridge that would seriously impact the beauty of the crossing.

AN IMMERSED TUNNEL CAN BE DESIGNED FOR ANY VEHICLE REQUIREMENT,



THE IMMERSED TUNNEL SOLUTION FOR OREGON & WASHINGTON

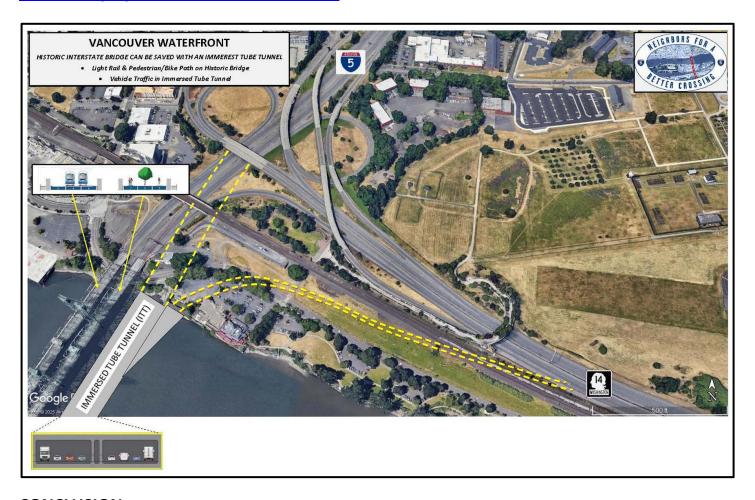
Let's keep the Charm of the Historic Interstate Bridge and add the Riverfront Parks. It will be a place for Fun Runs, Bridge Walks, and Mini-Events that will attract thousands!



The Immersed Tube Tunnel would be for vehicle traffic only, the historic I-5 Bridge would be saved and repurposed for light rail and pedestrian & bike paths, with attractive riverfront parks added to Vancouver & Hayden Island.



An Immersed Tube Tunnel is best positioned just east of the historic Interstate Bridge, where the depth of the channel is about 26ft. From the ITT, the SR-14 eastbound traffic lane would come up west of Who Song & Larry's Restaurant in Vancouver, then follow on vacant land to the NE on grade just east of Who Song & Larry's, then under the Railroad Track to connect to SR-14. Information about this potential design can be found at https://neighbors4a-bettercrossing.org/immersed-tube-tunnel-solution/.



CONCLUSION

At Neighbors For A Better Crossing, we are residents and businesses that will be seriously affected by a mega bridge, and the destruction of our historic Interstate Bridge. We consider any attempt to dismantle an icon of our Oregon-Washington history to be a travesty as that can be completely avoided with an Immersed Tube Tunnel. Our group is against tolls, and the way to avoid tolls is a lower cost Immersed Tube Tunnel that could save \$\$ Billions. Repurposing the historic Interstate Bridge into a major "Gateway" attraction, complete with waterfront parks in both Vancouver and on Hayden Island for special events, will attract thousands that will boost local business & tourist revenue for both Oregon and Washington.

Protecting our historic Interstate Bridge is of prime importance! We strongly urge elected officials in both Oregon & Washington reject the LA style mega bridge in favor of an Immersed Tube Tunnel by establishing an independent task force of ITT experts and local residents, to fully investigate, evaluate, and generate an Immersed Tube Tunnel design, that will meet the needs of both states.

FAILING TO PROTECT OUR HISTORIC INTERSTATE BRIDGE IS SIMPLY NOT AN OPTION!