

## THE IBR SALES TEAM MISLED US, A TUNNEL OPTION IS NOT A MYTH!

## WHY AN IMMERSED TUBE TUNNEL (ITT) IS FAR BETTER THAT THE IBR MONSTER BRIDGE DESIGN

An IMMERSED TUBE TUNNEL is less costly to build & maintain, less time to complete, and more resilient to earthquakes!

Fabricated on land, then lowered in a trench dredged in the riverbed, it'll do everything a bridge does with far less environmental damage!

Compare this scene to the ugly Interstate Bridge Replacement (IBR) fixed "toll bridge" design on the next page.

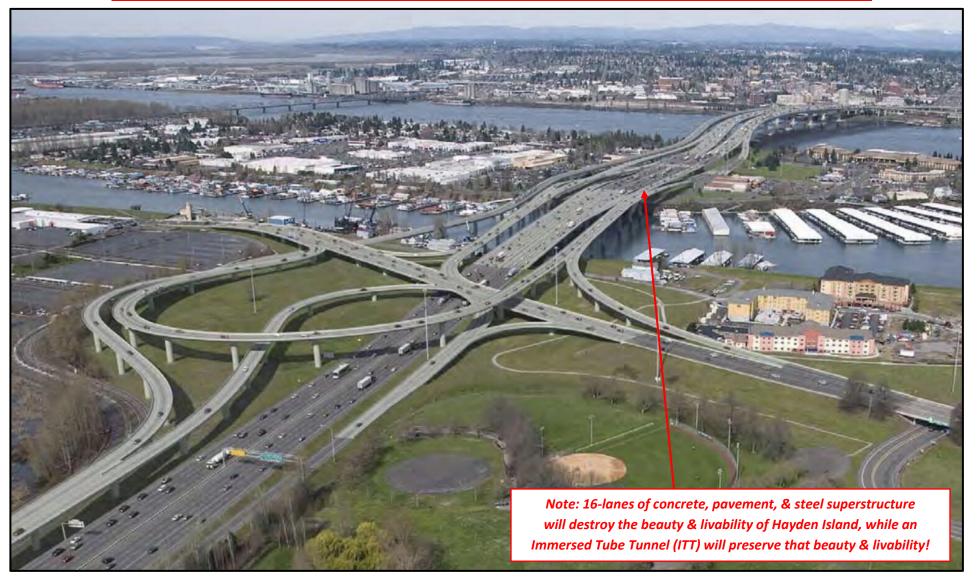


#### THE IBR'S TOLL BRIDGE DESIGN BELOW WILL LEAVE AN UGLY ENVIRONMENTAL SCAR, LET'S STOP IT!

At a staggering cost of \$7-\$12 billion and 15-years to build, this monster "Toll Bridge" is 175ft + high over the Columbia, complete with steep bike & pedestrian ramps and Light Rail Transit Centers 100ft above ground in Vancouver and 30ft above Hayden Island. It'll have massive interchanges that will cut an ugly swath of concrete, pavement, & steel from Marine Drive to North Vancouver!

At 62ft less vessel clearance than the existing drawbridge, this IBR design will restrict Commercial Shipping to Central Oregon & Washington.

#### THERE WOULD BE NO VESSEL CLEARANCE RESTRICTIONS WITH AN IMMERSED TUBE TUNNEL!



#### HOW AN IMMERSED TUBE TUNNEL (ITT) IS CONSTRUCTED

Immersed tunnels are widely used throughout the world. A trench is first dug in the riverbed, then prefabricated tunnel segments are lowered into position and connected to adjacent segments. The tunnel is then backfilled & covered with riverbed to a specified depth. An ITT can accommodate multiple lanes of traffic, light rail, bus lanes, and bike & pedestrian paths.

Our I-5 Bridge is subject to a major <u>Cascadia Seduction Zone</u> earthquake, and is located in a "Soil Liquefaction Area." Scientists predict there is a 37% chance that a mega-thrust earthquake in this fault zone will occur in the next 50 years.

An Immersed Tunnel is far more resilient to earthquakes than a bridge, and will accommodate everything a bridge can, including light rail!



Here's a short YouTube Video about the installation: <a href="https://www.youtube.com/shorts/jeYa2RDfJi8">https://www.youtube.com/shorts/jeYa2RDfJi8</a>

**Note:** Whether by intent or not, the Interstate Bridge Replacement (IBR) Sales Team misled us.

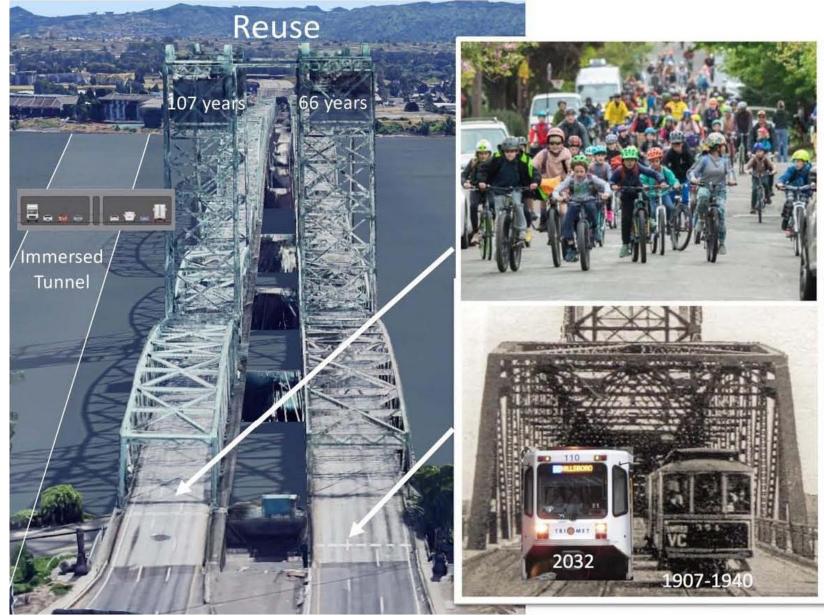
In briefings with elected officials, the IBR team called the tunnel option a "Myth," stating a network of access roads were needed to connect the tunnel with I-5 & SR-14 in Vancouver, but that conflicts with the IBR's Tunnel Concept Assessment Rev 2, Pg 18, Para 3.4 by WA Professional Engineer Robert Turton, that states a tunnel will connect to above ground network (I-5 & SR-14) with cut-and-cover connections at either end.

### 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.

\*Cut-and-cover is an engineered tunneling method that involves digging a trench, constructing a tunnel, and then restoring the surface. It's the oldest tunneling method and is often the most economical way to build tunnels.





# WITH I-5 TRAFFIC CHANNELD THROUGH AN IMMERSED TUBE TUNNEL, THE CURRENT HISTORIC BRIDGE CAN BE PRESERVED AS AN ATTRACTIVE GATEWAY BETWEEN WASHINGTON & OREGON!



## THE IBR MUST CONSIDER BOTH AN IMMERSED TUBE TUNNEL & REPURPOSING THE CURRENT BRIDGE!

