

PUBLIC COMMENTS FOR IBR PROGRAM EXECUTIVE STEERING GROUP

Received between June 10 – July 13, 2021

Bob Ortblad

6/28/21

Executive Steering Group Public Comment

The I-205 Bridge is the 8th most dangerous bridge in the country.
A new I-5 Bridge could be more dangerous.

Please study the attached ESG Public Comment.

Attachments included

* ADA compliant versions of the attachments can be made available upon request

David Rowe

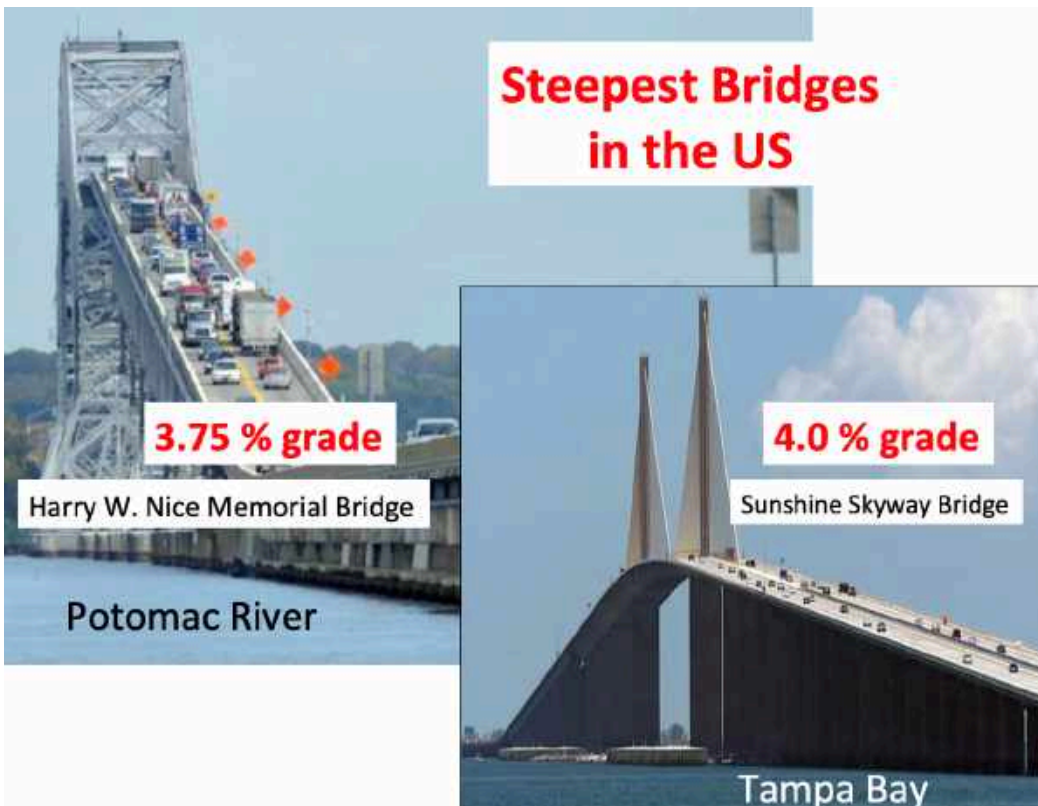
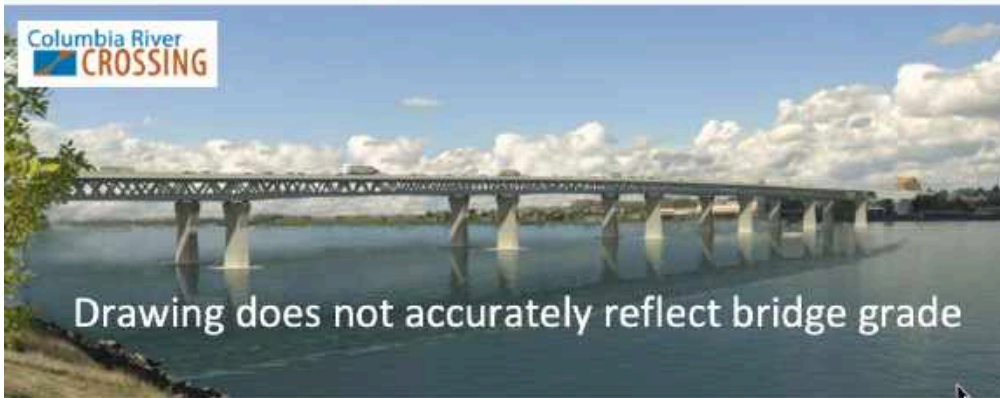
7/13/21

I wish to make a public comment during the IBR meeting on July 15. I am attaching a written comment also.

Attachments included

* ADA compliant versions of the attachments can be made available upon request

A new I-5 Columbia River High Bridge will be one of the steepest in the US. Its severe grade and local weather will also make it one of the most dangerous.



The 205 Bridge is the 8th most dangerous bridge in the country. Wind, fog, rain, and black ice combined with bridge grade and curves generated 124 accidents in 2019.

<https://katu.com/news/local/numbers-show-glenn-jackson-bridge-a-hot-spot-for-accidents>

A new I-5 High Bridge will have the same weather, similar curves, and a steeper grade making it **potentially more dangerous** than the 205 bridge.

8th most dangerous bridge*

North
2.5% grade

INTERSTATE
205

SUV hit a patch of ice
plunges into the
Columbia River
Feb. 2021

One accident every three days
124 accidents in 2019

North & South
3.8% grade

INTERSTATE
5

more dangerous bridge

*Go Safe Labs
Review of 2019 Accident Data

BLACK ICE

- VERY HARD TO SEE
- SLICK CONDITIONS
- ESPECIALLY ON BRIDGES/OVERPASSES

Fog

Wind

Rain

Hydroplaning

In February 2021 an ice storm shut down I-84. An SUV hit black ice and skidded off the 205 Bridge into the Columba River.



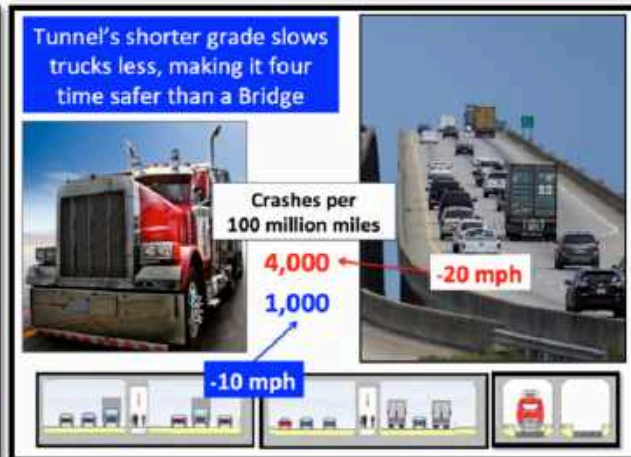
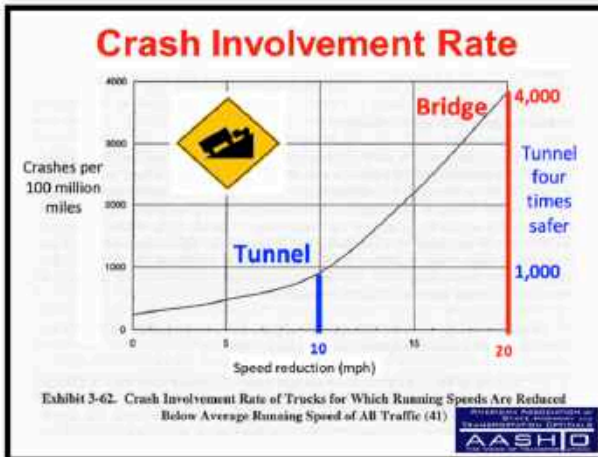
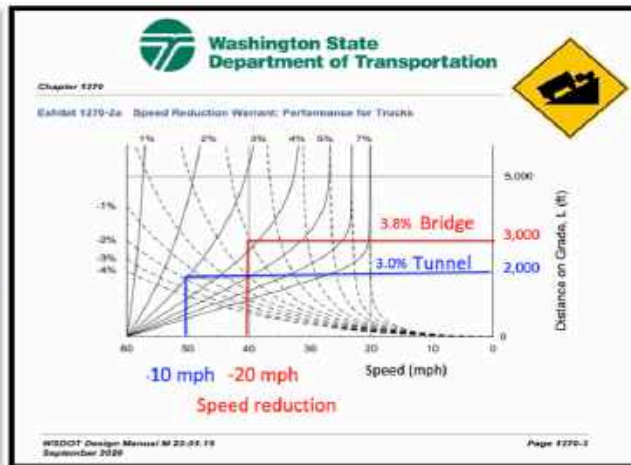
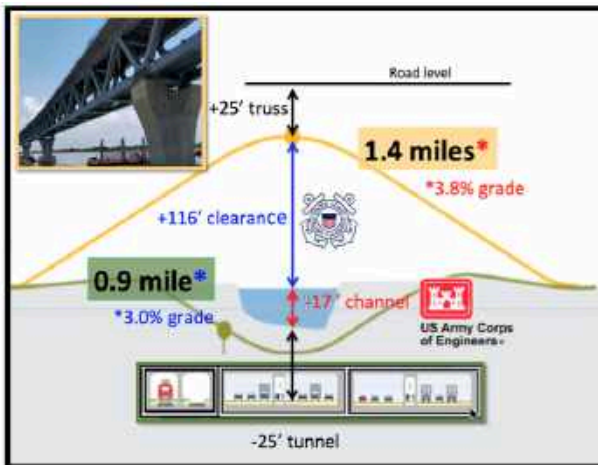
An Immersed Tube Tunnel (ITT) will be protected from the weather, have no curves, and have half as long a grade.



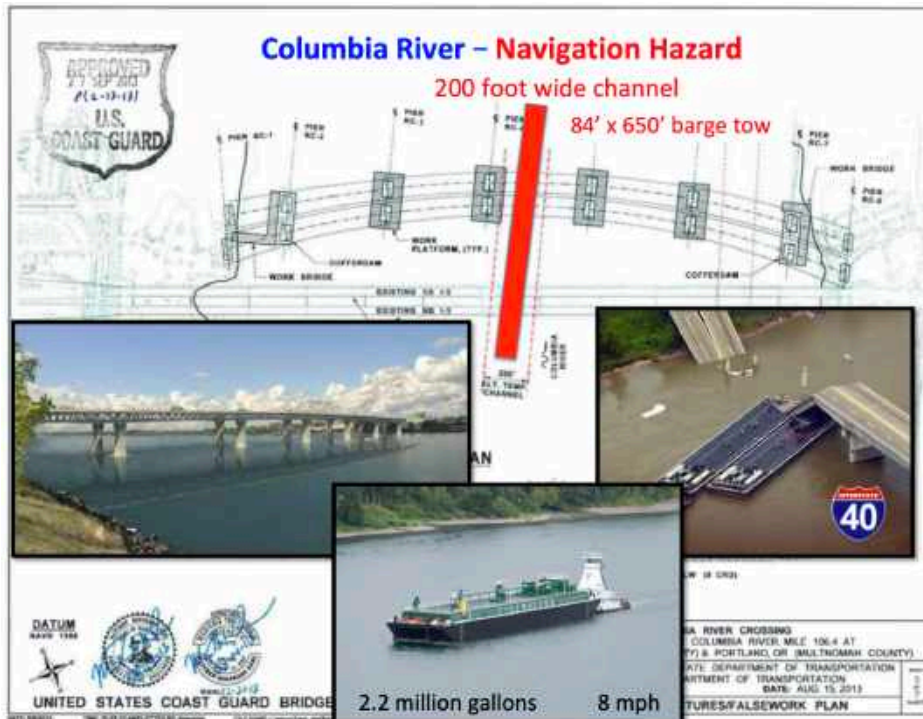
An Immersed Tube Tunnel (ITT) will have **half the effective grade** of a High Bridge.

A WSDOT graph shows trucks will slow by 20 mph on a High Bridge but only 10 mph in an ITT.

An American Assoc. of State Highways (AASHTO) graph shows an ITT slowing of only 10 mph would be **four times safer** than a bridge.



A during construction a bridge will require massive cofferdams that will narrow the navigation channel to only two hundred feet. Six piers will support a High Bridge and be **permanent navigation hazards**.



Bridge construction is almost twice as dangerous for workers. The workers compensation insurance rate reflects the **risk of injury or death** during construction.



An ITT is safer during construction. It is also many times safer than a bridge for vehicle and river traffic. **How many injuries and lives could be saved in the next hundred years?**



Trelleborg - How to build an immersed tunnel
<https://www.youtube.com/watch?v=2Xkyyc9PIQA>

Trip through Tingstad Tunnel, Gothenburg
<https://www.youtube.com/watch?v=KoEBbmeccd88>

Trip through Marieholm Tunnel before its Dec. 16 opening, Gothenburg
<https://www.youtube.com/watch?v=BT9s2Pf9Wms&feature=youtu.be>

Construction of the Marieholm Tunnel, Gothenburg
<https://www.youtube.com/watch?v=2kcAIBFCz8w&feature=youtu.be>

Launch of the Marieholm Tunnel elements, Gothenburg
<https://www.youtube.com/watch?v=JC4mRlgwXU0>

Elizabeth River Tunnel, Norfolk, VA.
<https://www.youtube.com/watch?v=NsNBdPFMuQY>

George Massey Crossing Tunnel Concept, Vancouver, Canada
<https://www.youtube.com/watch?v=8At88ti-yFA>

Immersion Tunnel Coatzacoalcos by Volker Construction International, Mexico
<https://www.youtube.com/watch?v=VFWkoZMja0k>

DERSA - Santos Guarujá Immersed Tunnel Project, Brazil
<https://www.youtube.com/watch?v=du8KZob7Pkw>

Busan-Geoje Fixed Link in South Korea
<https://www.youtube.com/watch?v=-aykpUulHJo>



**Immersed Tube Tunnel
better than a
New High Bridge**

The Interstate Bridge Community Advisory Group meeting on July 1, 2021, presented design options and solutions similar to the failed 2012 CRC design. The IBR traffic reduction solution seems to be mainly tolls or Congestion Pricing, which are really highway taxes with no equity. Reasonable alternate solutions to the transportation problems with the I-5 Bridge must be studied beyond the current IBR design options. IBR solutions must address transportation choices of the future Clark County and the Portland region for the next 50 to 100 years. Ridgefield and LaCenter as well as Camas and Washougal are the fastest growing areas in Clark County. These areas will have to rely on congested I-5 and I-205 highway bridges to travel to Portland if the I-5 bridge replacement is the only solution. These areas as well as Battle Ground have one transportation solution in common. These growth areas all have an active rail corridor that connects them to Portland. *The Cascades* train demonstrates rail passengers can be moved from Vancouver to Portland in less than 15 minutes. Adding additional tracks to these existing corridors would be cheaper than highway expansion, with less environmental and ancestral ground disruption. A public/private partnership to build this transit solution could save taxpayer dollars. Battery powered regional rail cars are used in Germany and could be an alternative to the expansion of I-5. Regional passenger rail service would reduce I-5 congestion across the I-5 bridge and through Portland Rose Quarter. High Speed Rail could soon help I-5 congestion, but High Speed Rail will not solve local travel and equity issues. The IBR program should study all reasonable solutions using services such as Hatch LTK Engineering.

Additionally, the 2012 CRC design to remove the lift span was going to give tax payer money to Thompson Metal Fab to mitigate their reduced production capability. The current moveable I-5 span on the Columbia River allowed large structures to be built at Thompson Metal Fab. If a moveable span were part of a new I-5 bridge Thompson Metal Fab would still be able to construct large structures. Also, future tall ships could navigate upstream to bring tourists to the Columbia Gorge and Stevenson if a new I-5 bridge had an opening. The current I-5 lift bridge could be repurposed into local traffic, mass transit, bicycle and pedestrian crossing from Vancouver and Hayden Island. A new lower profile I-5 draw bridge could be built alongside the current I-5 bridge and would be much cheaper than a fixed 95 foot high concrete bridge.