

PUBLIC COMMENTS FOR IBR PROGRAM COMMUNITY ADVISORY GROUP – JANUARY 6, 2022 MEETING

Received between November 30, 2021 – January 4, 2022

Sam Churchill

12/2/21

Hello CAG members:

Thank you for this helpful discussion. I have two questions:

1. What impact will autonomous shuttles have on I-5 bridge design?
2. What will be the impact of tolling have on bridge traffic?

(Previous studies by the DOTs? WSDOT'S traffic forecasts from 2002, on Seattle's SR-520 floating bridge after the start of tolling, predicted the floating bridge would carry between 90,000 and 98,000 cars per day in the first year of tolling, down from a projected baseline of 118,000 cars per day with no tolling.

But the reality for January through June, the first six months of tolling in 2012, recorded an average of 63,500 cars on weekdays, down from a baseline of 101,100 weekday cars the prior fall.)

3. Would an Open Tunnel Alliance aid competition from different autonomous shuttles?

The Open Tunnel Alliance (pdf).

<http://www.hayden-island.com/wp-content/uploads/2021/11/Open-Tunnel-Alliance.pdf>

The Open Tunnel Alliance, (Powerpoint).

<https://docs.google.com/presentation/d/e/2PACX-1vQWi15YX9V2wm3YtaZZ3JOL83cLiN1jwsCmT9fLjsSgkH2KFzp8if8vy2K9HEuaPhbjYvd-0FjZQpLc/pub?start=false&loop=false&delayms=10000>

- Sam Churchill
Hayden Island

Bob Ortblad

1/4/22

Community Advisory Group

Public Comment - CAG Jan. 6, 2022

Going under the river is a better solution than going over.

Interstate Bridge Replacement Program (IBRP) - Immersed Tunnel Best Option

For over two years I have submitted public comments supporting an I-5 Immersed Tunnel to the IBRP and the "Joint Interim Committee On The Interstate 5 Bridge".

The IBRP has spent \$26 million manufacturing consent for two recycled "Columbia River Crossing" bridge designs and one new bizarre "Stacked alignment" design. All three designs will have a dangerous 4% grade, the steepest interstate bridge grade in the country.

On July 14, 2021, at the IBR Program's request, I attended a Zoom meeting with Greg Johnson, his assistant, and six WSP consultants. I was never consulted before the meeting. However, for 30 minutes they presented their "Tunnel Concept Assessment". Not convinced I questioned their findings for the next 30 minutes. Finally, Greg Johnson claimed the IBRP has spent hundred-of-thousands of dollars on this report and this evaluation was final.

On August 3, 2021, after studying the "Tunnel Concept Assessment", I informed IBRP their report was worthless because it evaluated a tunnel going under the wrong channel, the primary channel near the Vancouver shoreline. The IBRP and their consultant WSP should have checked the Columbia River Crossing drawings and the United States Coast Guard's approval of a new primary channel near the center of the river.

On Oct. 6, 2021, my letter to the editor was published in "Clark County Today" which demanded the "Tunnel Concept Assessment" be retracted. The IBRP has not yet retracted this misleading report. I also suggested that two independent competing designs teams, one bridge, and one tunnel, should be hired.

An immersed tunnel consultant independent from the IBRP should be hired. One million dollars for this would be money well spent.

Please study my press articles and email to the "Joint Interim Committee On The Interstate 5 Bridge".

I plan to share my advocacy and research with the United States Coast Guard, U.S. Corps of Engineers, Federal Highway Administration, Federal Transit Administration, U.S. Environmental Protection Agency, my elected representatives, community & business associations, and the Press.

Respectfully
Bob Ortblad MSCE, MBA

Email - Sent Nov. 22, 2021

Joint Interim Committee On The Interstate 5 Bridge

For the committee's convenience, I have provided the links to my written testimony for 2021, 2020, 2019.

Nov. 23, 2021

Stacked alignment option

<https://olis.oregonlegislature.gov/liz/2021I1/Downloads/CommitteeMeetingDocument/250597>

High Risk Bridge

<https://olis.oregonlegislature.gov/liz/2021I1/Downloads/CommitteeMeetingDocument/250595>

Letter to United States Coast Guard

<https://olis.oregonlegislature.gov/liz/2021I1/Downloads/CommitteeMeetingDocument/250596>

Oct. 27, 2021

Retraction Required

<https://olis.oregonlegislature.gov/liz/2021I1/Downloads/CommitteeMeetingDocument/250082>

Lewis and Clark Trail

<https://olis.oregonlegislature.gov/liz/2021I1/Downloads/CommitteeMeetingDocument/250081>

Plague of problems puts Bay Bridge seismic safety in question

<https://olis.oregonlegislature.gov/liz/2021I1/Downloads/CommitteeMeetingDocument/250096>

Sept. 17, 2021

Steep and Dangerous Bridge

<https://olis.oregonlegislature.gov/liz/2021I1/Downloads/CommitteeMeetingDocument/249622>

Vancouver River Park

<https://olis.oregonlegislature.gov/liz/2021I1/Downloads/CommitteeMeetingDocument/249626>

Tunnel Concept Assessment

<https://olis.oregonlegislature.gov/liz/2021I1/Downloads/CommitteeMeetingDocument/249624>

Tunnel would be safer than bridge

<https://olis.oregonlegislature.gov/liz/2021I1/Downloads/CommitteeMeetingDocument/249625>

Dec. 15, 2020

Gothenburg, Sweden

<https://olis.oregonlegislature.gov/liz/2019I1/Downloads/CommitteeMeetingDocument/227329>

Nov. 24, 2020

Immersed Tunnel less impact

<https://olis.oregonlegislature.gov/liz/2019I1/Downloads/CommitteeMeetingDocument/226910>

Oct. 1, 2020

Examples of light rail in immersed tunnels

<https://olis.oregonlegislature.gov/liz/2019I1/Downloads/CommitteeMeetingDocument/226736>

July 16, 2020

Beaverton Valley Times

<https://olis.oregonlegislature.gov/liz/2019I1/Downloads/CommitteeMeetingDocument/224755>

Dec. 20, 2019

Seismic Risk

<https://olis.oregonlegislature.gov/liz/2019I1/Downloads/CommitteeMeetingDocument/208560>

Nov. 13, 2019

Advantages Immersed Tunnel

<https://olis.oregonlegislature.gov/liz/2019I1/Downloads/CommitteeMeetingDocument/207468>

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

Tuesday, February 25, 2020

BeavertonValleyTimes

Pamplin
MediaGroup

Instead of building new bridge, consider a tunnel

In 2013, Washington and Oregon canceled the construction of a new Columbia River Bridge after eight years of planning and spending nearly \$200 million. Now \$44 million is committed to exploring a new Columbia River Crossing.

The Joint Oregon-Washington Legislative Action Committee should travel to Vancouver BC through the George Massey Immersed Tube Tunnel (ITT) built under the Fraser River in 1956. British Columbia spent 10 years and \$40 million trying to decide on a new Fraser River Crossing. British Columbia canceled a bridge plan and is moving ahead with a new eight-lane ITT (six vehicle and two transit).

After British Columbia, fly to Japan and travel through Japan's 25 earthquake-resistant ITTs.

Stop in Hong Kong and travel by car or train through the five ITTs that connect to the mainland, then drive through the 4.2-mile ITT to Macau.

Fly to the Netherlands and tour their 30 ITTs. Talk with the Dutch engineers, the most prolific builders of ITT's and world leaders in their design. Rotterdam's Maastunnel, completed in 1942, was Europe's first ITT and the model for 150 worldwide.

The canceled 2013 massive bridge design would have blighted the Columbia River for a century. Our transportation agencies need to look beyond our borders for the best Columbia River Crossing solution.

Bob Ortblad, Seattle



Letter: Build a tunnel, not a bridge

By Bob Ortblad, Seattle

Published: January 2, 2022, 6:00am

As our roads are covered with ice, the Interstate Bridge Replacement program has presented three dangerous I-5 Bridge options. All three options will have a steep 4 percent bridge grade, plus a 7 percent off-ramp grade to state Highway 14. These will be extremely dangerous when coated with ice. The Interstate Bridge Replacement program has repeatedly promised “data-driven” analysis. The Interstate Bridge Replacement must employ highway safety experts and insurance actuaries to calculate the number of deaths and injuries over the 100-year-life of their bridge options.

We can't change the weather, but we can choose a safer crossing option. An immersed tunnel is protected from the weather and would also be many times safer when the Cascadia earthquakes hits. Gothenburg, Sweden, is the world's most sustainable city and has long, snowy winters. Gothenburg completed its second immersed tunnel in 2020 and its two tunnels have 180,000 weather-protected daily crossings.



Letter: Tunnel would be safer than bridge

By Bob Ortblad, Seattle

Published: August 24, 2021

On Sunday, Feb. 14, 2021, Antonio Amaro Lopez on his way home from work plunged off the Interstate 205 Bridge into the Columbia River. Antonio was driving less than 50 mph, hit an ice patch, skidded and jumped a Jersey barrier.

Ice and the bridge's 2.7 percent downgrade extended his stopping distance more than 10 times. The I-205 Bridge is curved, so Antonio slid across four lanes before hitting a snow ramp that launched his SUV over a Jersey barrier into the river.

Go Safe Labs ranked the I-205 Bridge as the eighth most accident-prone site in the country, with an accident every three days.

A new I-5 Columbia River bridge will be even more dangerous. The 10-year-old \$200 million Columbia River Crossing bridge design has a 4 percent downgrade, curvature similar to the I-205 Bridge, a shaded northern exposure that will retain black ice, and sight distances much shorter than stopping distances in foggy, wet or icy conditions.

The Interstate Bridge Replacement Program administration is eager to recycle the Columbia River Crossing bridge design. The IBR has spent hundreds of thousands of dollars on bridge engineering consultants to discount the possibility of a much safer river crossing design: an immersed tube tunnel.



Letter: Retraction Required Oct. 6, 2021

As professional engineers, the Interstate Bridge Replacement Program (IBRP) administrators and WSP USA consultants are obligated to acknowledge an obvious error in their assessment of a Columbia River I-5 immersed tube tunnel (ITT).

The WSP's "Tunnel Concept Assessment" evaluated an ITT under the current primary barge channel at the bridge lift near the Vancouver riverbank. This resulted in an ITT design that is too steep, long, and costly. An ITT under a channel near the center of the river should have been evaluated.

WSP USA has a conflict of interest in evaluating an ITT. WSP USA is anticipating hundreds of millions in bridge design and construction management fees. An alternative ITT design from a competing ITT engineering firm is a threat to these fees. To restore public trust, WSP USA must retract its misleading report and refund its fee.

The IBRP administration should contract for two parallel competing design teams, a bridge vs. ITT team. Only then will an ITT get a fair evaluation.

Vancouver, British Columbia, had competing bridge and ITT designs for a new Fraser River crossing. Last month, Vancouver officials chose an eight-lane ITT with dedicated bus rapid transit lanes.

Bob Ortblad MSCE, MBA

WSP USA's "Tunnel Concept Assessment" link

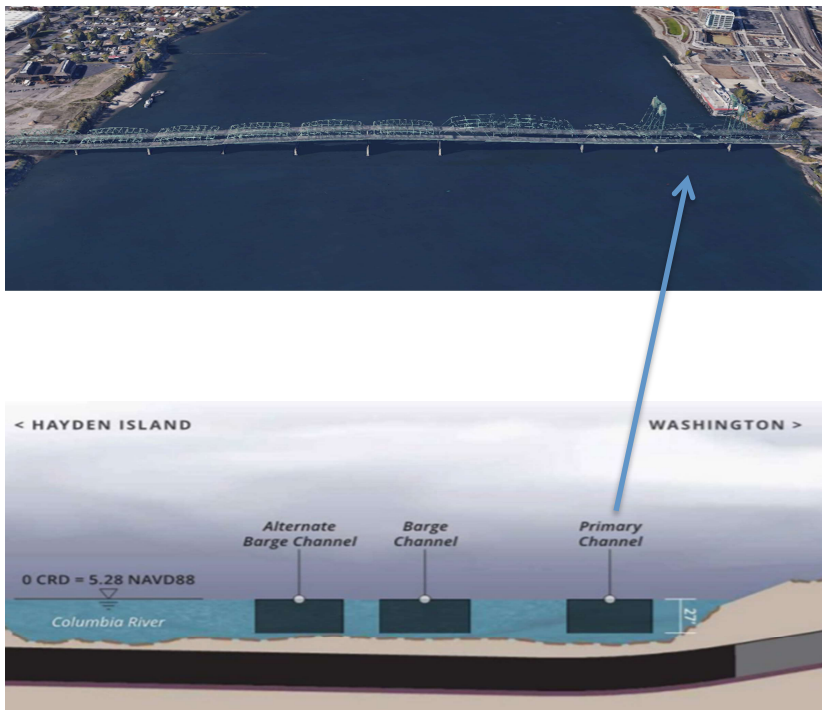
<https://www.interstatebridge.org/media/4ivnpz3n/2021-03-03-final-itt-v2-48-remediated.pdf>

"Vancouver, British Columbia" ITT link

<https://www.cbc.ca/news/canada/british-columbia/massey-tunnel-replacement-bridge-1.6145139#:~:text=280-An%20eight%20lane%20tunnel%20under%20the%20Fraser%20River%20will%20replace,%20be%20complete%20until%202030.>

"Clark County Today letter" link

<https://www.clarkcountytoday.com/opinion/letter-retraction-required-due-to-conflict-of-interest/>





Bob Ortblad encourages the choice of a safer crossing option

As our roads are covered with ice, the Interstate Bridge Replacement (IBR) program has presented three dangerous I-5 Bridge options. All three options will have a steep (4 percent) bridge grade, plus a 7 percent off-ramp grade to SR-14. These will be extremely dangerous when coated with ice.

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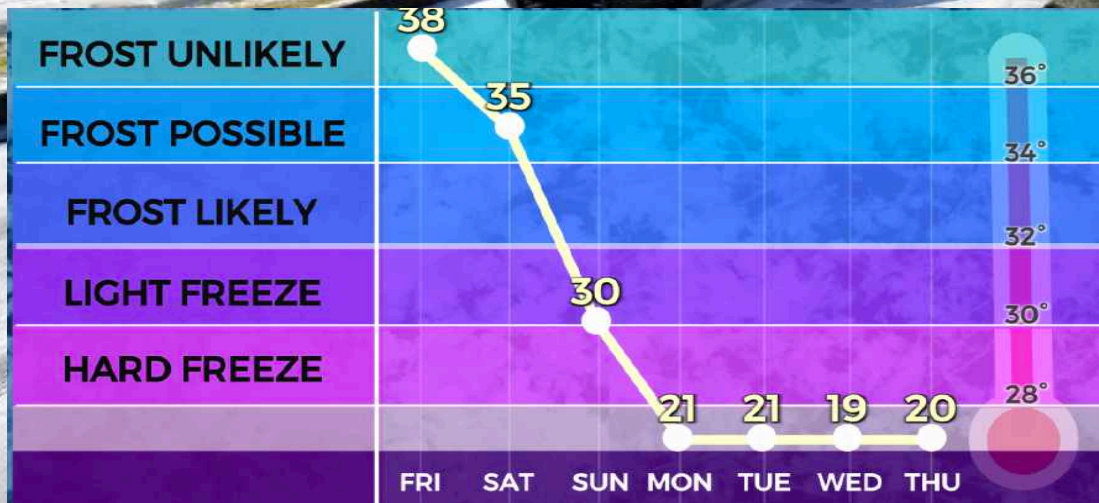
Bob Ortblad MSCE, MBA

ICY ROADS POSSIBLE TONIGHT

KOIN 6 WEATHER

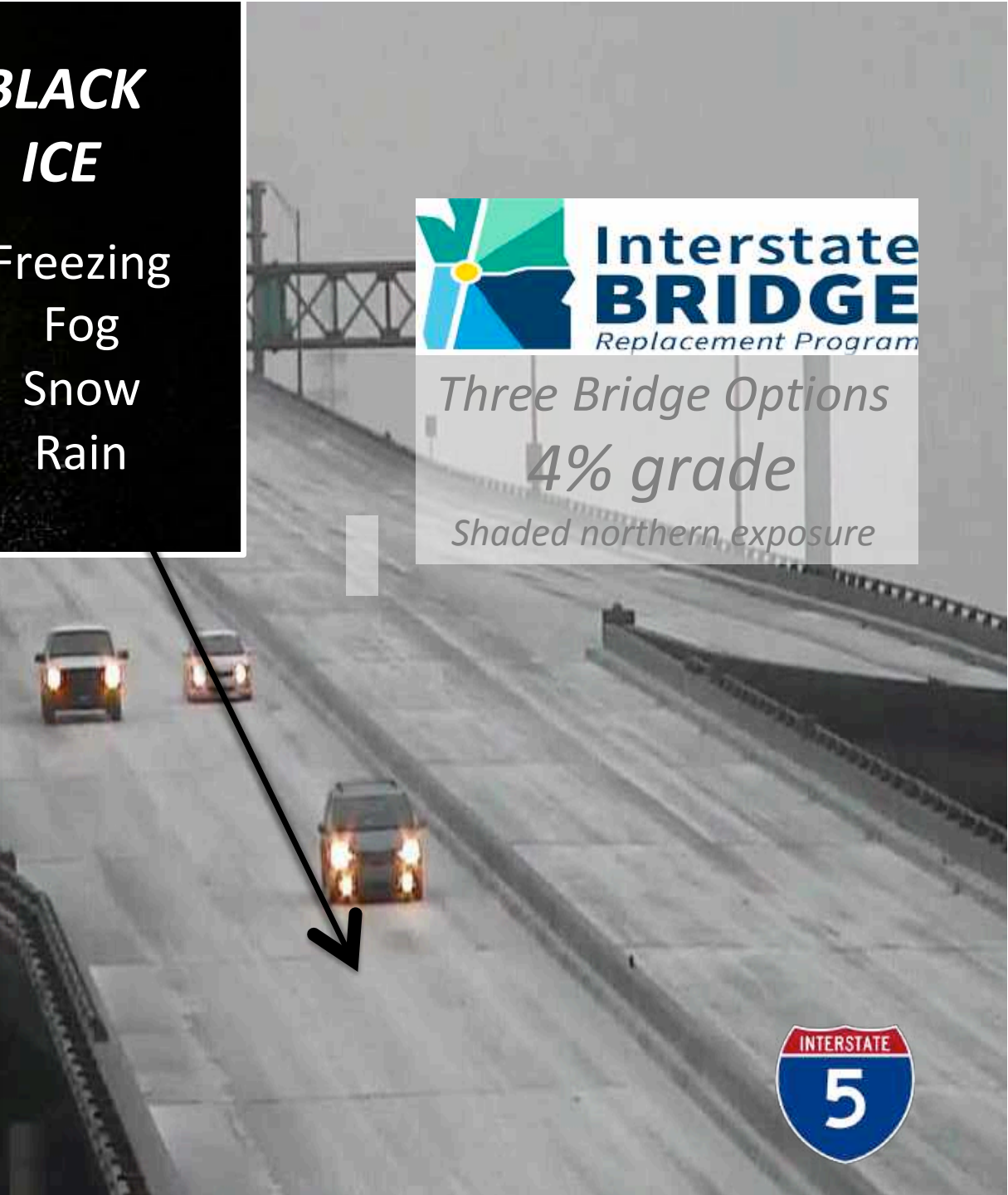
PORTLAND'S COLD FORECAST

Dec. 27, 2021



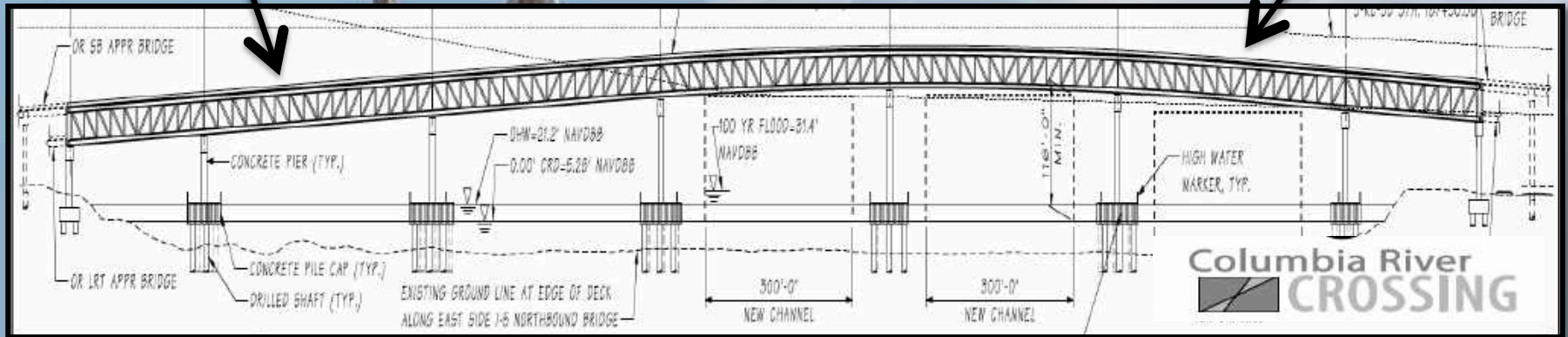


Three Bridge Options
4% grade
Shaded northern exposure



3.73%

3.99%



4% grade

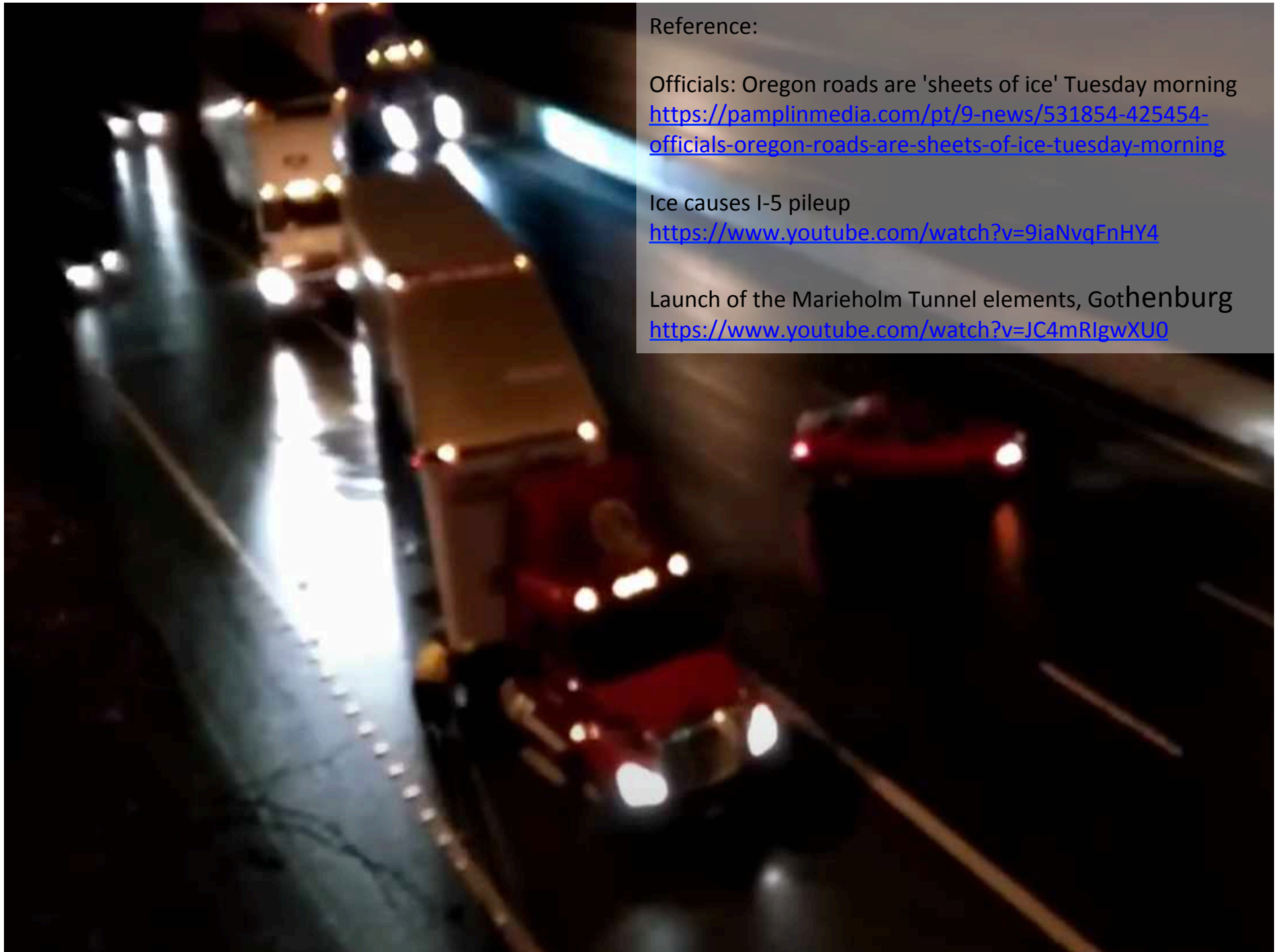
<https://www.pinterest.com/pin/839076974300479711/>



Immersed Tunnel



Less Grade
Weather Protected



Reference:

Officials: Oregon roads are 'sheets of ice' Tuesday morning
<https://pamplinmedia.com/pt/9-news/531854-425454-officials-oregon-roads-are-sheets-of-ice-tuesday-morning>

Ice causes I-5 pileup
<https://www.youtube.com/watch?v=9iaNvqFnHY4>

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