

City of Vancouver • P.O. Box 1995 • Vancouver, WA 98668-1995

www.cityofvancouver.us

Dear Members of the Washington State Legislature:

You are all no doubt aware the Columbia River I-5 crossings at Vancouver have been rated "fracture critical". As a professional engineer I would like to share more detail that may clarify the severity of this rating.

Specifically, the truss elements <u>are</u> fracture critical. That means if the trusses (for example, the vertical trusses) were to become compromised due to a major direct hit, they could fail. There is no built-in redundancy. Over the years, the Columbia River bridge trusses have been hit. The vertical trusses sit just inches off the travel way, protected only by a single row of antiquated Jersey barrier, as seen in the attached photo. One cannot pinpoint ultimately what type of impact it would take for the trusses to fail, but they all work together. One failed truss would stress all the other pieces, which could trigger a domino-style collapse. The point is, the Skagit River bridge collapse is an ominous reminder that <u>failures do occur</u>, often with catastrophic results.

It is important to note our current crossing actually comprises two separate structures. The portion of the bridge carrying northbound traffic opened in 1917, making it almost 100 years old. It is built on wood support pilings, not anchored in bedrock. The southbound span opened for traffic in 1958 and was built using the same methods, wood support pilings driven into sand and gravel soils. In the engineering profession, we now understand that these foundation designs and construction methods are simply not structurally sound. Knowing these inherent design vulnerabilities, risks and age of the Columbia River structures, it is clear that action now is paramount.

This project has been controversial, but please keep in mind this is not a Vancouver project. It is not a Portland project. It is a bi-state project of national significance. And as such, this project and the "Locally Preferred Alternative" emerged from a bi-state planning process that built a preferred concept through years of public process, outreach and engineering study, and the EIS process complied fully with state and federal law. While it is virtually impossible for a Mega Project like this to appeal to everyone, the current bridge replacement strategy is a sound project endorsed by local, regional and federal agencies at every political process step, and it will serve our region for decades to come.

The Skagit River I-5 bridge collapse was a terrible accident that could have resulted in deadly consequences, but this incident can have a broader, positive impact if we recognize it as a wake-up call about just how vulnerable some of our bridges in Washington State are. In the case of the Columbia River Crossing, every day we delay moving forward with a replacement bridge we are putting our people at risk. To avoid funding the Columbia River Crossing this year is a huge gamble. It is unwise because, in addition to endangering commuters, it puts in peril the tens of millions of dollars already spent on planning, engineering and in securing a final approval of the project EIS by the federal government, and it undermines Oregon's approved \$450 million in equity funds.

Every year of delay means the bridges will only get older, become more obsolete and cost more to replace, which ultimately means we are using our people and our economy as the currency for this gamble. That is a bet I am unwilling to make. I implore every one of you to pay attention to this critical need and to move forward now with funding for the CRC project, the result of an almost-15-year effort.

Few people are remembered for what they did not do. Please seize this moment and act positively to fund our project, and in the years ahead, people will look back favorably upon what you did do.

Sincerely,

Timothy D. Leavitt

Mayor

City of Vancouver