Testimony to the Legislature's CRC Committee by Gerald Fox PE (retired) Feb 12 2014

My name is Gerald Fox. I am a retired Transportation Engineer. I live in Portland.

I have been following the CRC Project for almost a decade with a growing sense of dismay and foreboding. Driven by staff and consultants obsessed with building a big new bridge, and awash with public money, the CRC Project has gone disastrously astray. Tens of millions of dollars have been wasted designing the wrong type of bridge, ignoring the Coastguard's requirements, and on massive engineering cost over-runs. Millions more of public money have been squandered on unprecedented lobbying efforts that are still keeping this doomed project alive, regardless of the consequences for the transportation system and the interests of Oregon taxpayers.

The CRC Project is bad transportation. It is environmentally inappropriate. It conflicts with regional land use goals, and the financing plan is a looming disaster. It flies in the face of efforts to combat climate change, and is certain to incur devastating cost over-runs that are destined to become its legacy, and a burden on Oregon taxpayers for decades to come.

Everyone agrees that something needs to be done about the CRC. During today's hearing you will hear that **all** of the expectations contained in the CRC Project "Purpose and Need" can be accomplished, or at least mitigated by alternatives that would cost less, could be built faster, with less risk, fewer impacts, eventually delivering greater transportation capacity and a wider range of travel options.

For instance, the Common Sense Alternative is a menu transportation components each of which would mitigate some aspect of the Columbia River bottleneck. Under a genuine multi-

modal approach the region's real transportation needs could be achieved incrementally, through a series of smaller, more manageable, more affordable projects, with less risk to the taxpayers. Taken together, such an approach would actually deliver far more transportation capacity then the CRC. Under a coordinated regional planning umbrella, each component could be organized and managed in the manner best suited to the project in hand. This approach can be seen in Portland, where, under the Metro umbrella, TriMet is building a \$140 million bridge across the Willamette for transit, bikes and pedestrians, while Multnomah County is replacing the Sellwood Bridge further upstream.

At the CRC, such an approach might include some permutation of:

- 1)Making the long-deferred seismic and safety improvements to the existing I-5 bridge, generally as envisaged in the DEIS.
- 2) Constructing a new bridge for local traffic, transit and bikes to relieve I-5 of conflicts with local traffic. This would improve freeway traffic flow, enhance the transit system, and encourage active transportation (bikes and pedestrians).
- 3) Work at the railroad bridge, including a new lift span, which will reduce the frequency of I-5 bridge lifts, and add rail freight and passenger capacity.

I find it striking that so many citizens continue to take time from their busy schedules to testify against this disastrous project. We look to this committee to finally call a halt to the present hemorrhaging of public funds, and to establish a new direction leading to a more appropriate and successful conclusion.

I have set out these issues in more detail in a paper I will leave with this committee.

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What's Next with the CRC?

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Background.

Everyone agrees that something needs to be done about the I-5 Columbia River Crossing. After years of studies, the Washington and Oregon DOTs came up with a scheme to build a monster freeway bridge, widen 5 miles of freeway, and include LRT and a bikeway embedded in the freeway bridge understructure.

But in the years since these studies began, the world has changed. Highway funds have become scarcer, and there is widespread concern that the DOTs' proposal is no longer an appropriate or affordable response to the transportation needs of the 21st century. In June 2013, the Washington State Legislature declined to fund the CRC, putting the project in limbo. But despite growing opposition, the Oregon DOT is still persisting to promote their plan, and continues to squander taxpayer funds on studies and lobbying.

As the region considers what to do next, it is important to understand the flaws with the CRC Proposal and thus develop some insight as to how the Columbia Crossing bottleneck might be resolved.

The CRC Project was fundamentally flawed.

For instance:

- * The CRC claimed it would reduce **traffic congestion**. Which is odd, since it would feed into the existing congested freeway system in North Portland and the Rose Quarter. And while it would undoubtedly ease congestion in the immediate vicinity of the bridge, any extra traffic enabled by a wider CRC would aggravate congestion throughout the rest of the Portland freeway system. Anyone who listens to the daily traffic reports knows how bad this could become. The CRC won't expand traffic capacity significantly, regardless of the number of lanes on the bridge. Worse, a widened bridge has been used as justification to widen some 5 miles of the bridge approaches, including interchanges, accounting for over half of the total CRC cost.
- * The LRT component of the CRC is the only piece that adds significant transportation capacity. To prevent the obvious conclusion that the LRT component should therefore be built first, the CRC Project embedded LRT under the main freeway structure. And in doing so had to lower the bridge clearance to such an extent that the Coastguard objected, and upstream industries became permanently obstructed.

- * The CRC Project has portrayed the **lift spans** as a major traffic constraint. ("the only stop light between Canada and Mexico") In fact bridge lifts account for less than 5% of traffic delays a driver might encounter driving through Portland. So \$3.5 billion and years of construction delays later, 95% of the delays will still be there. And because the bridge does not open during peak traffic hours, eliminating the lift spans will have no effect on peak hour traffic congestion whatsoever! Hardly a \$3.5 billion problem! The CRC's plan to replace the lift spans requires a massive elevated freeway overshadowing the Vancouver waterfront, and the reconfiguration of almost 5 miles of approach freeways, accounting for over half of the proposed CRC cost!
- * The CRC proposal **concentrates** all travel by the freeway and transit onto one facility. To converge transit and traffic, numerous interchanges, some of them still almost new would need to be rebuilt, adding to project cost and disruption. It increases the vulnerability of the transportation system to accidents or even terrorist activity; it provides no alternative route for emergency vehicles, and it is unsuited to incremental construction.
- * People are driving less. There are many reasons for this phenomenon, which can be observed in most developed countries. Consequently the devastating traffic congestion the CRC project was predicting (15 hours a day ??) will not be happening. And the toll revenue needed to help fund the project will not be there. Relief from decades of traffic growth would seem to be a desirable trend, to be encouraged by developing transportation alternatives instead of embarking on another round of freeway expansion.
- *The CRC funding plan is a taxpayer trap. The federal government would contribute about one third of the CRC cost. Another third would come from bonds backed by toll revenue, while the remainder (and any cost over runs) is to be contributed by Oregon taxpayers (or bonds backed by taxpayers.) However the federal share would be fixed. And it now appears that the toll revenue is unlikely to meet projections. So Oregon taxpayers will be stuck with any cost over runs or revenue shortfall. And the history of large complex projects, such as the new Bay Bridge, the Boston Big Dig, or ODOT's Highway 20 project warn that cost over runs of 100% or more are the norm, rather than the exception. Curiously the CRC Project has yet to update its current cost estimate. Recently identified new costs seem to have been ignored. Such as the compensation deal for upstream shippers, or the cost escalation resulting from continued delays, or the escalating finance costs incurred by new borrowing plans. The CRC Project may wish to avoid disclosing a new (higher) cost estimate until the project has been irrevocably committed. Some projections suggest the CRC will eventually cost some \$10 billion, with most of it falling on the Oregon taxpayer. Once work starts, there's no going back!

- * The CRC would divert funds from numerous capacity and safety projects statewide. The CRC Project response has been to suggest voters could be given the opportunity to raise new taxes to fund these projects defunded by the CRC.
- * Climate change is a growing national and international concern, and efforts to roll back greenhouse gas emissions will become a priority. The highway expansion component and growth assumptions associated with the CRC will aggravate this problem, and become an environmental embarrassment to the region. Encouraging alternative transportation options is essential before any more highway expansion can be justified.
- * The CRC has repeatedly suggested that the **existing bridges** are in urgent need of replacement. Yet an ODOT evaluation made before the CRC Project claimed that these bridges could serve for decades more, provided they were maintained. This report vanished once the CRC Project began. Even the much maligned wooden piles supporting the existing bridge are largely hype. Wood piles don't rot underwater. Most of the medieval bridges in Europe have stood on wood piles for hundreds of years. There are hundreds of bridges in Oregon and Washington in worse shape than the CRC. If the seismic and safety improvements deferred by the CRC were completed the existing bridges could serve for decades to come., and resources released for more urgent projects.
- * \$190 million has now been spent on the CRC Project. While some of this work remains relevant for whatever replaces the CRC Project, tens of millions have been wasted designing the wrong type of bridge. Many millions more have been squandered hiring duplicate consultants in an effort to prevent dissent, and on a massive lobbying effort to try and sell this ill-conceived project. The longer this fiasco is allowed to continue, the longer it will be before work can start on a more appropriate solution to the Columbia River bottleneck. The cost of CRC studies now exceeds the construction cost of the Trimet's new Willamette transit and bike bridge!!
- * During the recent recession, the **need for jobs** was presented as a justification for proceeding with this ill-conceived project. Missing from this discussion was any recognition of the jobs lost at businesses displaced by the CRC, and jobs upstream lost by navigation restrictions. Besides, it is not a case of the CRC or nothing. Alternatives to the CRC (discussed below) would also produce jobs, maybe more jobs, and would have done so sooner were it not for the persistence of CRC supporters.

Designing a Better Bridge

The defects riddling the CRC Project are also pointers towards a "Better Bridge" For instance, people are driving less, a trend that should surely be encouraged by prioritizing investment in alternatives to traffic growth before determining the need to build a new or bigger I-5 bridge. Several alternatives are outlined in the "Common Sense Alternative" (CSA). The CSA is actually a menu of alternative projects, rather

than a specific plan, such that each element would mitigate or reduce the problems at the I-5 bridge in ways less costly, and more environmentally responsible. Elements of the CSA include:

"Fixing" the railroad bridge, by replacing the swing span with a lift span. This would straighten the navigation channel, reducing the need for the I-5 bridge to lift, and also increase railroad capacity, because the bridge would operate faster. Some of this increased rail capacity might be used to add peak hour commuter rail trains from the Clark County Railroad to Portland's Union Station, similar to the Sounder trains operating between Tacoma and Everett. Two commuter trains an hour could add 15% to the I-5 corridor capacity.

A robust transit component, insulated from traffic delays, is a fundamental requirement in this corridor. Since 3/4 of the LRT line to Vancouver already exists, and 3/4 of the LRT service is already being provided, it would be highly cost effective to extend LRT at least to downtown Vancouver, instead of having a transfer point on Hayden Island or Expo Center. LRT service could be supplemented by express bus service.

Construct a local street bridge connecting the Vancouver street system to the Portland street system via Hayden Island. This bridge would have a lift span for large vessels, and a profile somewhat higher than the present I-5 bridge. It would provide lanes for local traffic, transit, bikes, and pedestrians. It would relieve I-5 of the local traffic, which currently uses the freeway to access Hayden Island, thus reducing friction and disruption to through traffic on the freeway. It would provide a superior environment for bikes, pedestrians, and transit facilities, and could be built faster and for a fraction of the CRC Project cost. A local street bridge with LRT would add up to 40% to the existing transportation capacity, much of it through the transit component. It would also allow the new generation of small vehicles to cross the Columbia.

Encourage bike use by constructing a world class bike route between Vancouver and Portland. Safe and attractive bike route(s) might attract over 5% of cross river trips for less than 1% of the CRC cost.

The existing I-5 bridges would be retained until the alternative transportation elements had been completed and had time to demonstrate their impact. Various deferred seismic and safety retrofits would be made to ensure continued safe operation.

Eventually the I-5 bridges may need to be replaced. This should not occur until the effectiveness of the alternatives have been demonstrated, providing a more convincing basis for deciding the design. A new four lane freeway bridge on the east side of the existing bridges could connect the existing four lane segments on each side of the Columbia, and would also improve the freeway alignment geometry.