

MEMORANDUM

April 11, 2011

TO: State Legislators

FROM: Joe Cortright, Impresa

RE: Response to Comments on HJM 22

This memorandum responds to the comments made by ODOT Director Matt Garrett and CRC consultant Patricia McCaig in their testimony to the House Transportation and Economic Development Committee on March 28 and 30, 2011, and further responds to statements made in a letter from chief co-sponsors of HJM 22 in response to concerns raised in a letter signed by 20 legislators.

I have carefully reviewed each of the major points made in this testimony and these documents. Impresa stands by the accuracy of all of the data and conclusions in our reports and in our testimony, and based on our analysis, we disagree with the CRC/ODOT and co-sponsor comments. Our full analysis is provided below. In summary we continue to conclude:

- Traffic levels in the I-5 corridor have been declining since 2005, raising serious doubts about the reliability of the project's future traffic projections. Despite a very modest rebound in the past 12 months, traffic flows remain below year 2000 levels, are 17,000 vehicles per day below the CRC forecast and show no signs of reaching the levels contained in CRC forecasts. Flawed traffic projections undercut the need for the project itself, the rationale for its size, the accuracy of its environmental assessment, and the viability of its financing plan.
- The total cost of building and operating the Columbia River Crossing over the next thirty years will be \$10 billion. CRC officials dispute whether the cost of fixing Rose Quarter bottleneck, which the Independent Review Panel said "threatens the viability of the project" should be included, but they have not disputed the \$2.7 billion in interest costs and \$1.7 billion in toll collection costs that will be required. The region's road users and taxpayers will have to pay all of these costs, not just the widely publicized initial capital cost.

- The proposed financing plan for the project poses major risks for the state and the region, and there is a high probability of cost overruns and revenue shortfalls. The accuracy of the Cost Estimation Validation Process (CEVP) was seriously questioned by the Independent Review Panel. An updated CEVP has not been conducted for any of the three current bridge designs, nor has the CEVP process been validated for completed multi-billion dollar projects.

We recommend that the state contract for an independent, investment grade financial review of the CRC. It has frequently been asserted that the Independent Review Panel appointed by Governors Kulongoski and Gregoire has reviewed and endorsed the cost and risk estimates prepared as part of the CEVP for the CRC. Ms. McCaig claimed in her March 30 testimony that “the independent review panel as well as the project sponsor council and the local governments have all accepted the premises and the work from this process.” This is not an accurate representation of the IRP report.

The IRP report actually presents a detailed critique and specific set of warnings about problems in CRC cost estimates, particularly the application of the CEVP process. The IRP report uses the words “significant risk,” “not accurate enough,” “seriously suspect” and “problematic” to describe various aspects of the CEVP, and the schedule and cost estimates produced to date. They warn that unless these problems are fixed, the CRC “potentially faces significant project delay and cost overruns.” They specifically recommend that the CEVP be redone to provide a “realistic schedule and cost information needed for state appropriations.” (All quotes from pages 166 to 169 of the Independent Review Panel Report.) At the current time, no new CEVP has been performed to resolve these issues. Furthermore, a final bridge design has not been selected, so further analysis, in addition to addressing the errors cited in the IRP report, is needed.

The gravity of the consequences of the IRP findings and recommendations, most of which have not been addressed by the CRC, gives the Legislature ample reason to insist on the immediate preparation of an independent, investment grade financial review of the CRC. Such a review would take only a few months and would not be expensive considering the proposed project costs. Such an analysis would likely cost less than \$250,000, according to an authoritative estimate.

An independent, investment grade financial analysis is not a trivial technicality to be completed to satisfy financiers at the end of the project. It is a vital decision-making tool to determine whether, and under what conditions a project may be feasible. To be useful, it is essential that decision makers have access to this information before—not after—they make costly and potentially irreversible decisions about project scope and design.

An investment grade forecast could end up saving the state hundreds of millions of dollars. Its worth remembering that just two months ago, the independent bridge review panel pronounced “unbuildable” the open-web design that the CRC had been pursuing for years; its action has doubtless saved the state wasting further time and resources on a design that would ultimately have failed. An independent financial review can similarly

help the state from wasting resources on a project that may simply not be financially feasible, or which may need major changes in the financing plan or the project design, in order to be affordable and actually get built.

The reasons for our conclusions and specific responses to each of the points raised in response to Impresa's earlier analyses are presented in the attached table. In the left hand column, we present claims made in the referenced testimony and documents; in the right hand column, we present our rejoinder.

Response to Comments on the Columbia River Crossing and HJM 22

Prepared by Joe Cortright, Impresa, April 11, 2011

This report responds to comments made about the Columbia River Crossing and HJM 22 in a letter from the Co-sponsors of the measure, dated April 1, 2011 (Co-sponsors), Matthew Garrett’s powerpoint presentation to the House Transportation and Infrastructure Committee on March 28, 2011 (Garrett) and Patricia McCaig’s testimony to the House Transportation and Economic Development Committee on March 30, 2011 (McCaig). Key claims from each of these sources are shown in the left hand column; Impresa’s response is shown in the right hand column.

CLAIM	RESPONSE
<p>Project Cost “the cost is between \$3.2 billion and \$3.6 billion.” (McCaig) Capital cost estimates are \$3.2 billion - \$3.6 billion in year of expenditure dollars with 60% and 90% confidence respectively.” (Co-sponsors, p.1.)</p>	<p>IRP cites construction cost of up to \$3.875 billion According to the Independent Review Panel, the 90% confidence estimate of CRC construction cost was \$3.875 billion. These estimates are based on the so-called 90 percent probability that costs will not exceed this amount and are for the “full” project. See Independent Review Panel, 2010, page 173. In addition, ODOT testimony does not dispute the accuracy of these 30-year cost estimates, taken from CRC documents:</p> <ul style="list-style-type: none"> • Interest: \$2.7 billion • Toll Collection Cost: \$1.7 billion
<p>CEVP Cost Estimates “There is a cost estimating validation process called CEVP from Washington, that is a nationally known model that is applied to the Columbia River Crossing.” (McCaig) “WSDOT has reviewed the project using their risk analysis process, the Cost Estimation Validation Process (CEVP®), where the project team and outside experts identify potential threats and opportunities, quantify them, and then develop mitigation strategies to avoid or minimize risks.” (Co-sponsors, p. 1)</p>	<p>CEVP is untested in large projects and is no guarantee against cost overruns</p> <ul style="list-style-type: none"> • Washington has not actually completed any multi-billion dollar projects using the CEVP • The CEVP process failed to detect the problem with the unbuildable open web design. • The Independent Review Panel found that the CEVP had “significant weaknesses.” “... the IRP sees a significant weakness in the Final CEVP Report as presented to the IRP and thus potentially in the cost and schedule dates used in the financial model.” (IRP, p. 166) • CEVP has not been carried out for any of the three new proposed bridge designs—cable stayed, tied arch or composite truss. • Like ODOT, WashDOT has experienced significant cost overruns, i.e.: “State auditor says goofs nearly doubled cost of Highway 18 project,” <i>Seattle Times</i>, January 18, 2011

CLAIM	RESPONSE
<p>The IRP “accepted the premises and the work” from the CEVP “There is a cost estimating validation process called CVEP from Washington, that is a nationally known model that is applied to the Columbia River Crossing and we will spend as much time as you as like to go through that with you.</p> <p>We will summarize it by saying the independent review panel as well as the project sponsor council and the local governments have all accepted the premises and the work from this process, which is updated yearly. And it concludes that the cost of the project is estimated today based on the information that we have-and remember there are still a lot of decisions to be made-that the cost is between \$3.2 and \$3.6 billion dollars.” (McCaig, emphasis added)</p>	<p>The IRP seriously questioned the validity of the CEVP cost, risk and schedule estimates. “As the CEVP performed in February 2009 used information and assumptions available at the time which are fundamentality different than the design concept and assumptions being put forth in the Final EIS, there is a significant risk that the range of numbers and dates used for the financing model, which in turn will be used for funding and financing of the Project is not accurate enough for such purposes.” (IRP, pp. 167-68, emphasis added) “Another example of an inaccuracy in the CEVP risk model that may or may not have any affect when the CEVP is rerun is the decision on the number of lanes. The risk is that ‘the final 10 versus 12 lane decision is delayed’. In the ‘SMART’ column of the risk table attached to the CEVP report it is noted that ‘If the decision is not made by January 2010 it will cause a delay’ to the schedule. Unless this assumption, which if according to the CEVP has already come true, is evaluated in the midst of these other known changes, the reliability of the final outputs for cost and schedule are seriously suspect. Until these changed conditions are considered in conjunction with the other risks included in the CEVP, the credibility of the cost basis for the project as a means for communicating the needed funding and financing is problematic.”(IRP, p. 166, emphasis added).</p>
<p>Rose Quarter Bottleneck “We believe that addressing the problems in the project impact area further north will not necessarily make matters worse in the Rose Quarter.” (Co-sponsors, p.1) “. . . our travel forecasting has indicated that we are not going to make it worse and we are not going to make it better.” (McCaig)</p>	<p>Rose Quarter will affect CRC effectiveness According to the CRC, the length of time it will take to get from SR 500 to Columbia Boulevard in the AM peak in 2030 would be 19 minutes under the no-build alternative and 22 minutes under the locally preferred alternative (Exhibit 7-13). The Independent Review Panel said: “Questions about the reasonableness of investment in the CRC bridge because unresolved issues remain to the south threaten the viability of the project.” (IRP, p. 112, emphasis added) The IRP recommended that ODOT prepare a cost estimate and impact analysis for the Rose Quarter, and incorporate this project in the CRC phasing plan (IRP, p. 113)</p>

CLAIM	RESPONSE
<p>Safety “400 collisions a year” “Highest crash location on I-5 in Oregon.” (Garrett, slide 7).</p>	<p>The I-5 bridges are safer than the Fremont and Marquam, and do not have 400 accidents annually. In 2009 there were 102 accidents on I-5 between Lombard Street and the Washington State Line. (ODOT, 2009 Crash Rate Tables, p. 30, 116) The Marquam and Fremont bridges have higher accident rates than the Interstate Bridges: --Fremont 1.53 crashes per million vehicle miles --Marquam 0.90 crashes per million vehicle miles --Interstate 0.88 crashes per million vehicle miles Similar stretches of urban freeway have higher accident totals --US 26 (Sylvan to I-405) , 3.05 miles 230 crashes --I-405, (Entire length) 4.25 miles, 131 crashes --I-5 (Lombard to state line) 2.94 miles, 102 crashes</p>
<p>Structural and Seismic Issues “Existing bridges do not meet current seismic standards.” (Garrett, slide 6)</p>	<p>I-5 Bridges are in better condition than the Marquam and 24 other Interstate Bridges in Oregon according to ODOT According to ODOT’s <i>2010 Bridge Condition Report</i>, 25 bridges on the Interstate system in Oregon are rated “structurally deficient”—the I-5 bridges are not on this list. The Marquam Bridge is rated “structurally deficient” Almost none of the state’s bridges meet current seismic standards.</p>

CLAIM	RESPONSE
<p>Borrowing “Mr. Cortright is accurate in stating that this price does not include debt service costs, but that is consistent we make about funding for transportation projects all the time. With the Connect Oregon projects, for example, we made a choice about \$100 million in bonded projects.” (Co-sponsors, p. 2)</p>	<p>Toll borrowing is highly risky and nothing like lottery bonds. Compared to a borrowing structure like that used for the lottery bonds, the toll bonds proposed for CRC will cost an additional \$1.2 billion in interest over the next 30 years. The proposed borrowing against toll revenues is nothing like borrowing against lottery revenues.</p> <ul style="list-style-type: none"> • The proposed toll borrowing assumes a state guarantee of repayment euphemistically described as “credit enhancement.” While lottery borrowing is a revenue bond that explicitly carries no state guarantee. • The proposed toll borrowing is against an unproven stream of revenue, while lottery funds have a 15 year track record. • The proposed toll borrowing would use virtually all net toll revenue to pay debt service, lottery bond debt service represents less than 20% of net lottery revenues annually. • The proposed toll bonds would have a non-amortizing, balloon payment and assume steadily increasing toll revenues, lottery bonds have level payments. • Toll bonds would have a 30 year term, lottery bonds have 10 to 20 year terms. <p>A toll-backed revenue bond that had the same features as lottery bonds would probably provide less than one-third as much capital for CRC construction.</p>
<p>Traffic Projections “we won’t be able to fully judge the accuracy of our projections until much time has passed.” (Co-Sponsors, p. 2.) “Mr. Cortright is correct in noting that average weekday traffic volumes did fall between 2005 and 2008. However the most recent data from ODOT’s automatic counters on I-5 indicate that the AWDT for 2010 was 1.12 percent higher than 2009 volumes.” (Co-sponsors p 2)</p>	<p>Traffic projections are demonstrably wrong We have five full years of data since the base year of the CRC projections (2005); this is 20 percent of the planning period. Rather than increasing by 7,000 vehicles per day as the model predicted, traffic has decreased by 7,000 vehicles per day. This clearly shows that the traffic projections are already inaccurate. Calendar Year 2010 daily traffic on the I-5 bridges is about 17,000 vehicles per day below the level estimated by the CRC models. The traffic modeling is base on incorrect assumptions about low gasoline prices and a very high value of user time.</p>

CLAIM	RESPONSE
<p>Peer Review CRC Transportation modeling is base on state-of-the-art methodologies and has been peer reviewed. (Co-sponsors p.2-3)</p>	<p>The peer review was cursory and uninformed The so-called “peer review” panel was chosen by the CRC, was not provided with analyses that criticized the CRC projections, and did not examine actual post 2005 data on traffic counts. According to both the Government Accountability Office (GAO, 2005) and National Academy of Sciences (2007), the entire class of “four-step” transportation models, of which the Metro model is one, are flawed and tend to overestimate traffic levels. The CRC adjusted the outputs of the Metro model substituting their judgment for the model results and shifting traffic from the I-205 bridge to the I-5 bridge.</p>
<p>Investment Grade Analysis “. . . conducting an investment grade analysis before the necessary decisions have been made would be irresponsibly premature and a waste of taxpayer money.” (Co-Sponsors, p. 3) “An investment grade analysis is absolutely essential . . . it is usually done 6 to 12 months before the bonds are actually issued. It is way premature to be able to begin to do that kind of process, and if you choose to do it, we can pay folks to do it. (McCaig, p. 2)</p>	<p>An Investment Grade Analysis would provide essential information for verifying the feasibility of the CRC finance plan, and making adjustments to avoid delays and cost overruns.</p> <ul style="list-style-type: none"> • An investment grade analysis would cost less than \$250,000 and would take fewer than 120 days, according to the former director of one of the three major bond rating agencies. • This is ½ of 1% of the amount scheduled to be spent on the CRC EIS in the coming biennium, according to the Washington Legislature’s transportation budget bill (HB 1175). • For reference, the Washington Legislature has earmarked \$200,000 of its appropriation for additional CRC cultural and archeological studies in the coming biennium.
<p>Possible Consequences of Slower Traffic Growth than Forecasted Can Be Addressed. (Co-sponsors, p. 3)</p>	<p>Slow traffic growth jeopardizes project finances. Charging even higher tolls, as suggested, would have the effect of diverting more traffic to I-205, and could produce lower overall net revenue.</p>

CLAIM	RESPONSE
<p>Project Schedule The project will issue a final Environmental Impact Statement and Record of Decision in 2011 and could break ground in 2013 (Garrett, slide 20)</p>	<p>The CRC has no valid current schedule “The schedules that have been provided to the IRP do not reflect major, important issues that have been identified in this report, which should be considered before the schedule is finalized.” (IRP, p.159)</p> <p>“The IRP believes the Schedules provided are very optimistic and aggressive as to essential milestones. In many cases recent events have made the schedules obsolete.” (IRP, p.160)</p> <p>“Response to IRP requests with dated and in many cases no longer valid project schedules suggest that CRC is not using project schedules as a core management tool. This can detract from the credibility of and confidence in the project management staff and can lead to public uncertainty in the delivery of the Final EIS as currently promised to the Governors.” (IRP, p.160)</p> <p>The CRC has not produced a new project schedule since December 30, 2010, and has made no provision for changes in bridge type, no construction funding from the 2013 Washington Legislature, and a likely delay in Clark County voting on light rail.</p>
<p>CRC has vetted and dismissed all criticisms “I would say as it relates to these specific questions and the report that is attached to those questions that they have been reviewed. And they have been analyzed. And they have been vetted. And they have been dismissed.” (McCaig)</p>	<p>CRC has ignored or never responded to most of the points raised in Impresa’s CRC Financial Analysis.</p> <ul style="list-style-type: none"> • 100% plus cost overruns on major ODOT projects including Pioneer Mountain/Eddyville, Newberg Dundee and Grand Avenue Viaduct • No adjustment for gas price increases in travel projections • Inaccurate value of time estimates in travel projections • Schedule and legal risks from In-Water Work Window limits <p>CRC has not addressed key IRP concerns, including project phasing, with public input on phasing options, new traffic studies, and additional environmental analysis.</p>

CLAIM	RESPONSE
<p>Traffic is rising despite high gas prices. Quoting an article in the Oregonian “daily traffic volumes have climbed despite rising gas prices.” Citing higher traffic on I-5 in the Terwilliger curves. (Co-sponsors, p. 2)</p>	<p>Long Term Traffic Trends are Down Due to Higher Gas prices. According to ODOT traffic counts, despite a small rebound in the past 12 months traffic levels remain well below their historic peaks.</p> <ul style="list-style-type: none"> • Crossings over the I-5 bridge are lower now than in 2001. • Traffic in the Terwilliger curves is lower now than in 1997. • CRC financial projections assume a levels of traffic and a growth in traffic that show no signs of being realized.

References

Columbia River Crossing, *Draft Environmental Impact Statement*, (2008). Traffic Technical Report, Exhibit 7-13. Southbound I-5 Travel Times (2030).

Committee for Determination of the State of the Practice in Metropolitan Area Travel Forecasting. (2007) *Metropolitan Travel Forecasting: Current Practice and Future Direction* Washington: Transportation Research Board of the National Academies. Peer Review

Gilmore, S. (2011, January 18). State auditor says goofs nearly doubled cost of Highway 18 project. *Seattle Times*.

Government Accountability Office. (2005). *Highway and Transit Investments: Options for Improving Information on Projects' Benefits and Costs and Increasing Accountability for Results* (GAO-05-172). Washington, DC. GAO

Independent Review Panel. (2010). *Columbia River Crossing Independent Review Panel Final Report*. Olympia: Author.

Oregon Department of Transportation, Bridge Engineering Section. *2010 Bridge Condition Report*.

Oregon Department of Transportation. *State Highway Crash Rate Tables, 2009*. (August 2010).

Oregon State Treasurer, *Official Statement, Lottery Revenue Bonds, 2011*, <http://www.ost.state.or.us/officialstatements/DAS%20Lottery%20Revenue%20Bonds,%20Series%202011ABC%20FOS%20ideal.pdf>