Columbia River Crossing: Recently Asked Questions

Updated September 16, 2011

1. What are the projects' next steps after completing the Final Environmental Impact Statement (EIS)?
A 30-day review period for the Final EIS officially begins on Sept. 23, 2011, with the notice of availability in the Federal Register. It concludes Oct. 24, 2011. It is anticipated that the federal oversight agencies, Federal Highway Administration and Federal Transit Administration, will select an alternative and sign a record of decision in late 2011.

The record of decision signals conclusion of the National Environmental Policy Act (NEPA) process. CRC will then continue to develop the design for the project, which will include additional detail on project phasing, construction staging and construction techniques. Federal approval also allows property acquisitions to begin. The soonest construction could begin is 2013.

2. What funding assumptions have changed with publication of the Final Environmental Impact Statement (EIS)?
Funding assumptions have not changed since publication of the Draft Environmental Impact Statement (EIS) in 2008. Chapter 4 of the CRC Draft EIS describes potential finance plan scenarios for the five alternatives studied. Funding is expected to come from three, nearly equal sources: the federal government, the states of Oregon and Washington and tolling. The Final EIS includes a funding proposal with more specific values for each of the three primary funding sources within the broader ranges that were included in the Draft EIS. Project analyses were updated to reflect the increases in "existing state revenue," which represents funding already appropriated, and "additional state revenue," or funding that is still needed. Over time, the "existing state revenue" total increases, and the "additional state revenue" total decreases.

Since the release of the Draft EIS, CRC has regularly updated the project cost estimates using a process that helps manage risks and reduce cost overruns. Refinements have been made to project designs leading to the most recent estimate of $3.1 to $3.5 billion. This range includes the cost to complete the environmental planning phase, pre-construction phase and construction phase.

3. What are the differences in the Final Environmental Impact Statement (EIS) compared to the Draft Environmental Impact Statement (EIS)?
Following the 60-day review period for the Draft EIS in 2008, project sponsors selected the Locally Preferred Alternative – a replacement bridge with light rail.

Since the preferred alternative was adopted, the project has worked with the community to:

- Select the number of structures for the replacement bridge
- Select a location for light rail and the bicycle and pedestrian pathway on the replacement bridge
- Select an alignment for the Marine Drive interchange
- Select a light rail alignment and station and park and ride locations in Vancouver
- Update the traffic analysis using the 2009 regional travel demand model
- Update the design for the SR-14 interchange to minimize impacts to the Vancouver Historic Reserve
- Refine the design for the Hayden Island interchange, which now includes a local traffic bridge between Hayden Island and Marine Drive
- Select a deck truss bridge type for the main river crossing

The Final Environmental Impact Statement (EIS) includes a description of these refinements and the results of the analyses of the community and environmental effects.

4. How will CRC respond to the Oregon Treasurer's recommendations on the project finance plan?
In July 2011, the Oregon treasurer's office provided a report to Oregon Governor John Kitzhaber that validated much of the Columbia River Crossing project's work and made tangible recommendations that reduce and manage financial risk. The report was developed at Governor Kitzhaber's request, who asked the Oregon State Treasurer to conduct an independent review of the CRC's financing plan.

The review found that the CRC's tolling financial projections should be adjusted to account for the depth and length of the current economic recession. New funding sources were also suggested. Governor Kitzhaber accepted the more conservative financing plan that helps clarify the path to move the project forward.

CRC incorporated the treasurer's recommendation in the project's Final Environmental Impact Statement (EIS), released in September 2011.

Based on the recommendations Gov. Kitzhaber also requested that CRC describe how project construction can be adapted to available resources. CRC is developing a project sequencing plan that describes how project elements will be funded and built according to anticipated cash flow and engineering realities. The project will be prepared to discuss the sequencing plan with both governors and their interim legislative committees later this year.

5. Where did the project's recent $100 million cost estimate reduction come from?
In August 2011, the estimated construction cost for the Columbia River Crossing project decreased by $100 million due to recent decisions and increased certainty on the construction schedule.

The estimate is part of an annual process that helps the project manage risks and reduce cost overruns. The previous cost range from May 2010 was $3.2 to $3.6 billion. The updated cost range is now $3.1 to $3.5 billion. The range is determined through a risk-based analysis that includes many variables, including inflation, demand for materials or labor and the availability of funding.

Direction given by the Oregon and Washington governors in spring 2011 related to bridge type allowed the project to move forward on a planned schedule. In addition, cost savings were realized with increased certainty on construction approach and design details.

Lower cost estimates resulted from:

- Selection of a deck truss bridge type
- Increased knowledge of soil conditions from geotechnical borings
- Receipt of the biological opinion from the National Marine Fisheries Service
- Refinement of interchange designs
- Planned use of design-build construction contracts for the replacement of the Interstate Bridge; and potentially other project elements.

The costs, presented in year-of-expenditure dollars, include construction of a replacement bridge over the Columbia River at Interstate 5, extension of light rail to Vancouver, improvements to the highway and five interchanges, and enhancements to bicycle and pedestrian facilities.

6. How much have we spent on the project, what do we get from it, and where did the money come from?
Since 2005 the project has spent a total of $134.3 million. It has been funded about equally by Washington and Oregon, with additional contributions from the federal government.

The current phase of the project is wrapping up this year. Since 2005, the funds have been spent on engineering, project management, transit planning, public involvement and communications (required by the federal NEPA process), and environmental studies, including preparation of a Draft and Final Environmental Impact Statement (EIS). The majority of the money spent to date in all project areas supports the current project design, including the bridge type. In a letter dated June 2, 2011, the U.S. Department of Transportation's Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) concluded:

> "In our review of this re-evaluation, we considered whether the changes and design refinements present significant environmental impacts which were not reviewed in the DEIS (23CFR77I.J29). Based upon the information you provided, FHWA and FTA agree that the design changes and refinements incorporated in the project since our approval of the DEIS do not create new environmental impacts that require a Supplemental DEIS."

This decision allows the project to apply the work done to date and maintain its current schedule.

7. How do we provide oversight and accountability for a project of this size and complexity?
The CRC uses the Washington State Department of Transportation's nationally-recognized Cost Estimate Validation Process (CEVP) to develop cost estimates. CRC managers update these estimates regularly as project plans become more developed and refined. CEVP provides a range of costs, determined through a risk-based analysis that estimates the probability that actual construction costs will fall somewhere within the range. CEVP has been successfully used multiple times in Washington to manage large transportation projects. The project's cost estimate of $3.1-3.5 billion is the 60 to 90 percent confidence range, so there is a high probability that the cost will come in at or below the high-end estimate of $3.5 billion.

Additionally, Governors Kitzhaber and Gregoire, and Oregon and Washington legislators have made it clear that they will review every element of this project and provide oversight and accountability. The governors and legislative leaders are discussing the scope of interim legislative oversight committees.

At Governor Kitzhaber's request, the Oregon State Treasurer conducted an independent review of the CRC's financing plan and released a report in July 2011. CRC incorporated the treasurer's recommendation in the project's Final Environmental Impact Statement (EIS), released in September 2011.

8. Have you looked at alternatives?
The process to develop, review alternatives and design the Columbia River Crossing project began in 2005, not counting the years of planning work. The public, stakeholders and partner agencies identified six project area problems. Seventy different ideas for potential solutions were suggested and discussed by partner agencies, the CRC Task Force and the public.

Out of the 70 ideas, 12 preliminary alternatives were identified. Each alternative included several transportation components: bridge, highway, transit, freight, bicycle and pedestrian improvements, and strategies to reduce travel demand. The project team and others evaluated these preliminary alternatives to identify the strengths and weaknesses of each. Following stakeholder and public input, the project team recommended five alternatives for further analysis in the Draft EIS.

In 2008, after three months of public hearings, community comments and meetings, and local partner and agency reviews, the project team identified the project elements that best meet the needs of improving safety and mobility with the least impact on natural resources and local communities. Those elements included replacing the I-5 bridge, extending light rail to Vancouver, improving safety by addressing closely spaced interchanges, and enhancements to the bicycle and pedestrian path. The Task Force, Vancouver and Portland City Councils, C-Tran and Tri-Met, and RTC and Metro all supported this alternative.

9. Would a separate local traffic bridge for Hayden Island reduce congestion on I-5 near the Interstate Bridge?
No. The project team evaluated a local bridge to replace the Hayden Island interchange. The result was even longer delays and longer queues at the ramps associated with the Marine Drive interchange. That interchange currently operates very poorly. In addition, a local bridge would not accommodate the traffic generated by development on Hayden Island specified in the City of Portland's Hayden Island Plan. A local bridge does not provide enough relief to I-5 to eliminate the need to replace the interchange.

10. Would renovating the rail bridge one mile downstream eliminate most bridge lifts?
No. Half of the bridge lifts have nothing to do with barge traffic. Instead, the lifts are required for maintenance and non-commercial marine traffic. Modifying the location of the movable span on the Burlington Northern Santa Fe (BNSF) railroad bridge would not eliminate the majority of bridge lifts and would not address unsafe conditions for motorists on the Interstate Bridge and I-5.

11. Why not retrofit the Interstate Bridge to reduce seismic vulnerability?
Retrofitting the Interstate Bridge would increase the footprint of the existing piers, narrow the navigation channel, and still leave the potential for bridge lifts during high-water periods for larger vessels. Seismic risk is only one of six problems the CRC project will solve. A retrofit would not address the high crash rate, hours of congestion, freight immobility, poor bicycle and pedestrian facilities or limited transit options.

12. Who uses this bridge and the adjacent interchanges?
The project corridor benefits local, regional, and state businesses; the Ports of Portland and Vancouver; West Coast freight; and travelers and commuters.

About $40 billion in freight crosses the I-5 bridge annually, expected to grow to $70 billion by 2030. In 2010, average weekday counts showed 127,000 vehicles crossing the I-5 bridge. Much of the traffic crossing the bridge does not travel long distances on I-5. Traffic counts show that during peak periods 68 to 75 percent of the traffic using the bridge also uses one or more of the interchanges in the 5-mile project area. The safety and mobility improvements on the bridge and the adjacent interchanges will serve the regional economic engine as well as serving commuters in both Oregon and Washington.

13. Do the improvements result in any real time savings for commuters?

Yes. The project will provide considerable benefits for travel time, reliability and duration of congestion for most bridge users, but not for everyone at all times. Bridge lifts will be eliminated, collisions significantly reduced and traffic will flow more smoothly to and from interchanges. Travel time benefits vary based on time of day, location and travel direction.

There are significant travel time savings in the afternoon. During the p.m. peak period, drivers heading north on I-5 from I-84 in Portland to 179th Street in Vancouver are predicted to save 20 minutes compared with the no-build scenario. Drivers using the short segment of I-5 from Columbia Boulevard to SR 500 are predicted to save eight minutes compared with the no-build scenario. For drivers traveling southbound during the morning peak, the time savings will not be as significant, but the trip will be more reliable and safer. For drivers traveling outside of the peak commute hours, there are significant travel time savings both northbound and southbound because vehicles will experience much less congestion than with the no-build scenario.

Additionally, the duration of congestion on the bridge is substantially reduced, from a predicted 15 hours a day in 2030 under the no-build scenario, to 5.5 hours with the project.

14. Is this a corridor that really needs to be fixed now?
Multiple studies starting in 1999 have concluded the corridor needs improvement for economic health and regional livability. Local and regional transportation plans in both states have prioritized the Columbia River Crossing project. INRIX, an independent firm that collects and studies traffic data, ranked the corridor leading to the Interstate Bridge as the 21st most congested corridor in America. This section of I-5 is one of the most congested corridors in a smaller metro region. The Marine Drive, Victory Boulevard and Hayden Island interchanges in the CRC project area all rank among the top six bottlenecks in INRIX's summary for the Portland Metropolitan Area.

15. Can we rely on traffic forecasts with all the volatility in gas prices and other factors?
The region is expected to grow by about one million people in the next 20 years. Growth in population and employment, the primary drivers of traffic growth, occurs in spurts with intermediate plateaus or even declines.

Traffic counts for the I-5 bridge have shown a recent decline with the current recession. It is typical for traffic volumes to decline during a recession and to rise during boom periods. These fluctuations are expected. Based on the most recent counts, evidence suggests that traffic volumes are resuming their long-term upward trend on both I-5 and I-205.

There is evidence that increases in gasoline prices have recently had an effect on automobile driving. Over the longer-term, as motorists become aware of the costs of driving, there is a shift to more fuel efficient vehicles and other long-term strategies for coping with the higher prices.

Traffic count data marginally declined between 2006 and 2009 at some locations when compared to historical daily volumes. This was the result of the stagnant economy and slowing regional population growth, as well as increased price of fuel over that time period. However, traffic counts during peak commute periods have remained steady or increased.

16. Can Oregon and Washington toll the existing I-5 bridge?
Potentially. According to federal law, if a state wants to reconstruct and convert a non-tolled highway, bridge or tunnel previously constructed with federal-aid funds to a toll facility, a toll agreement under

Title 23 United States Code Section 129(a)(3) must be executed. Tolling is assumed as part of the project. Policy decisions including rates and timing will be made in the future by the state transportation commissions.

17. Are there other bridges that need our attention first?
The Interstate Bridge is functionally obsolete due to the bridge lift span, the hump that reduces sight distance, lack of safety shoulders and many other features that render it obsolete for current safety standards. I-5 and the Interstate Bridge serve as an important lifeline route during emergencies or natural disasters. The existing bridges (built in 1917 and 1958) are not seismically sound and could collapse or be rendered unusable by a major earthquake, regardless of how many other bridges are rated worse. A 1994 report for ODOT said the piers of both existing bridges are built on top of wooden pilings that do not extend into the underlying bedrock of the river. It also said shaking associated with an earthquake could stress or damage the bridge structures. In an earthquake, the loose, sandy layer of soil that supports the bridge piers could lose strength and may begin to act like a liquid (liquefaction), causing soil to suddenly stop providing support for the bridge. The ability for emergency services to move back and forth across the river would be at severe risk.

18. Why are there so many crashes in this stretch of I-5?
Between 2002 and 2006, an average of more than 400 collisions per year was reported on the I-5 mainline and ramps in the five-mile CRC project area. The highest crash location on I-5 in Oregon is within this area at the northbound on ramp from Hayden Island. The standard method of reporting collision rates is measured in collisions-per-million-vehicle-miles-traveled (MVMT). The collision rate experienced on I-5 within the Oregon segment of the project area was 1.08 collisions per MVMT. This rate is nearly twice that of Oregon's comparable statewide average of 0.55 collisions per MVMT. The following reasons contributed to the high crash rate:

- Collisions increase during congestion
- Bridge lifts increase possibility of collision three to four times for drivers traveling toward the bridge
- Merge areas between closely-spaced interchanges are inadequate
- The Interstate Bridge has no safety shoulders and has other substandard features
- Trucks are two times as likely to be involved in crashes compared to autos, based on a review of crash data

Collisions lead to societal costs that significantly exceed the costs of congestion. Safety costs include property damage, lost earnings, lost household production, medical costs, emergency services, travel delay, vocational rehabilitation, workplace costs, administrative and legal fees, and pain and lost quality of life. In the Portland-Vancouver region the annual cost of traffic crashes is nearly three times the cost of congestion — $1.762 billion for traffic crashes, and $625 million for congestion.