


From: [Carter Kennedy](#)
To: [Draft EIS Feedback;](#) 
CC:
Subject: Anticipate higher energy costs
Date: Friday, May 30, 2008 12:01:41 PM
Attachments:

- P-0444-001** I am concerned about the forecasts of future transportation needs and the cost of a new Columbia River crossing. This is a particularly difficult time to make such forecasts because the future of energy is so uncertain. Any forecast of traffic 15 years from now, or even of the cost of steel, concrete and energy in the next ten years is likely to be wrong.
- P-0444-002** Using the old bridges as envisioned in options four and five would not solve the problem of lifting the bridges for river traffic. It would present northbound drivers with the confusing choice of two roads that both go to the same place. Also, as near as I can figure from the cost estimates, the cost of reinforcing them for earthquake resistance approaches the cost of a new span.
- P-0444-003** So that means new bridges for the highway, options two and three. The proposed design is a monstrosity, with the bridges needing to be high for river traffic and low for air traffic. One way to ameliorate its ugliness is to reduce the number of lanes. That would reduce their cost too.
- P-0444-004** It is very likely that well within the bridges' lifetime, and probably even before they are finished, petroleum-based fuels and energy-intensive materials such as concrete and steel will become much, much more expensive. This does not seem to be a scenario that the planners allowed for. Besides making the cost of the bridges go through the roof, it would reduce the amount of driving, therefore reducing the capacity the new crossing would need.
- P-0444-005** I recommend that you adopt option two or three with fewer traffic lanes than are currently envisioned. The construction should be in phases so that after each step the costs and requirements can be re-figured with up-to-date information. The one thing we know is that mass transit will have to play a bigger part in our future transportation. Therefore, the mass transit/bike/pedestrian bridge should be built first. Incidentally, the bridge could accommodate both high-capacity bus and light

P-0444-001

Significant increases in oil prices can have both short term and long term effects on travel behavior. In the short term, the options for responding to rising gas prices are more limited, and include driving less and/or changing from driving to walking, biking or transit for at least some trips. During recent increases in gasoline prices transit use increased and off-peak highway travel decreased. Peak period highway travel changed little.

Over the long term, there are more options for adjusting to changes in gasoline prices, besides changing driving behavior. Technological advances and legislative mandates can increase fuel efficiency standards in the long term. In turn, as older vehicles wear out, more consumers can replace them with more fuel efficient vehicles. Automobile manufacturers are developing and will continue to develop new vehicle and engine technologies that require much less, or even no, petroleum-based fuels. This trend is already happening as evidenced by the growing popularity of gasoline-electric hybrid and small electric vehicles.

Regarding project costs, in 2002, WSDOT introduced a rigorous process of determining cost and schedule estimates, the Cost Estimate Validation Process (CEVP), to help deliver major projects. A key difference between conventional estimating and CEVP is the expression of project cost and schedule as a range rather than as a single number. Providing cost information as a range accounts for risk factors that might otherwise cause costs to balloon over time. The cost information is given for the year of expenditure and includes everything, even "unknown" issues that may arise. CEVP is a construction cost estimate tool and does not estimate long-term operations and maintenance costs. CEVP has been successful enough in determining accurate costs that states across the country are using it as a model. WSDOT now mandates all projects over \$25 million use the process. Chapter 4 of the DEIS, and

P-0444-005 rail by paving the trackways. That way we have the flexibility to adapt to future needs.

P-0444-006 I propose to put the bulk of the effort into building the transit bridge rapidly while preliminary work goes on for one of the highway bridges at a slower pace. In a two or three years the need for, and cost of, future highway capacity will be clearer and the third span can be begun if it is still feasible.

Carter Kennedy

the Cost Risk Assessment included as an appendix to the DEIS, include information about how costs were estimated for the DEIS. See Chapter 4 of the FEIS for more discussion on how project costs were estimated in the CEVP that was conducted following publication of the DEIS.

P-0444-002

Preferences for specific alternatives or options, as expressed in comments received before and after the issuance of the DEIS, were shared with local sponsor agencies to inform decision making. Following the close of the 60-day DEIS public comment period in July 2008, the CRC project's six local sponsor agencies selected a replacement I-5 bridge with light rail to Clark College as the project's Locally Preferred Alternative (LPA). These sponsor agencies, which include the Portland City Council, Vancouver City Council, TriMet Board, C-TRAN Board, Metro Council, RTC Board, considered the DEIS analysis, public comment, and a recommendation from the CRC Task Force when voting on the LPA.

With the LPA, new bridges will replace the existing Interstate Bridges to carry I-5 traffic, light rail, pedestrians and bicyclists across the Columbia River. Light rail will extend from the Expo Center MAX Station in Portland to a station and park and ride at Clark College in Vancouver. Pedestrians and bicyclists would travel along a wider and safer path than exists today.

For a more detailed description of highway, transit, and bicycle and pedestrian improvements associated with the LPA, see Chapter 2 of the FEIS.

P-0444-003

Following the selection of the LPA in July of 2008, the CRC Project Sponsors Council (PSC) was developed to provide recommendations to the project on a variety of issues, including the number of add/drop lanes

over the river crossing. Over the course of several months, PSC was provided with operational characteristics and potential environmental impacts of 8-, 10-, and 12-lane options. These technical evaluation criteria included, but were not limited to, traffic safety, congestion, traffic diversion onto local streets and I-205, regional vehicle miles travelled, transit ridership, regional economic impact, effects to neighborhoods, and protected species and habitats. In addition to the technical information, PSC received input from CRC advisory groups and reviewed public comment submitted to the project and obtained during two public Q&A sessions in January 2009 regarding the number of lanes decision, as well as hearings conducted by Portland City Council and by Metro Council. In August 2010, the PSC voted unanimously to recommend that the replacement bridges be constructed with 10 lanes and full shoulders. For more information regarding the number of lanes decision making process, see Chapter 2 (Section 2.7) of the FEIS.

The proposed new lanes are add/drop lanes (i.e., lanes that connect two or more interchanges), which are used to alleviate safety issues associated with the closely spaced interchanges in the project area, and accommodate the 68 to 75% of traffic that enters and/or exits I-5 within two miles of the Columbia River.

P-0444-004

Please see response above to comment P-0444-001.

P-0444-005

Your preference has been noted. The current proposal for the CRC project, the Locally Preferred Alternative (LPA), is very similar to Alternative 3 presented in the DEIS. A possible phased option for the LPA includes one less lane in each direction across the I-5 bridge over the Columbia, as well as the deferment of several project interchange components. Please see Chapter 2 of the FEIS for more information regarding this LPA Phase I option.

The current proposal for the LPA includes the light rail alignment beneath the highway deck of the new southbound I-5 bridge, which would prevent light rail service from starting to operate until the bridge construction is complete.

Shared use of the light rail guideway across the Columbia River could be explored in future projects, but is currently not proposed as part of the LPA.

P-0444-006

The LPA is a multi-modal alternative including light rail transit and highway improvements, as well as a new toll and bicycle and pedestrian improvements. See response above to comment P-0444-001 regarding future travel demand relative to petroleum pricing.