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June 21, 2008

Heather Gunderson, CRC Environmental Mgr.
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RECEIVED
via Fax
JUN 23 2008

RE: Comments on Columbia River Crossing DEIS

Dear Ms. Gunderson:

Columbia River Crossing

- P-0231-001** | A very important issue is the connection between bridge building and land development; this seems to be ignored in the DEIS. There is a feedback between the two which could overwhelm the bridge development in short order. Freeway builders have found this out the hard way. Furthermore there may be other unanticipated consequences that considerations of land development might highlight. Planning models are available which can factor in these effects. Why aren't they being used?
- P-0231-002** | Multnomah County Commissioners have proposed a more gradual approach starting with imposing tolls on the existing two Columbia River bridges. Besides generating income for future construction this approach would allow experimentation with variable congestion tolling to measure its effect. Using an incremental approach to bridge development which seriously affects a whole urban region and is estimated to cost almost four billion dollars seems wise, even if it results in some delays.
- P-0231-003** | Furthermore currently we seem to be in an extremely dynamic period of highway fuel prices. Finally fuel prices have reached a point where they are becoming noticeably elastic, unlike in the past. Planning efforts should factor this variable into consideration.
- P-0231-004** | I found that the air quality comparisons in Exhibit 27 of the May 28 Executive Summary to be simplistic at best. This is an important issue. The fact that all five alternatives have an identical reduction in four pollutants due solely to projected automotive technology improvements takes no account of variation in vehicle trips, rush hour congestion, breakdown between trucks and automobiles, number of spans, etc. I suspect that my same objections apply to the CO2 Emissions stated in Exhibit 27. I don't believe that the overall less than 10% variations shown reflect all of the above variations among the alternatives.
- P-0231-005** |

Yours truly,

C. William Savery, Ph.D.
Prof. Emeritus of Mechanical Engineering, Portland State University

P-0231-001

As described in Chapter 3 (Section 3.4) of the DEIS and FEIS, and in the Indirect Effects Technical Report, highway capacity improvements and access improvements can induce development in suburban and rural areas that were not previously served, or were greatly underserved, by highway access. The DEIS outlines a comprehensive analysis of the potential induced growth effects that could be expected from the CRC project. A review of national research on induced growth indicates that there are six factors that tend to be associated with highway projects that induce sprawl. These are discussed in the Indirect Effects Technical Report. Based on the CRC project team's comparison of those national research findings to CRC's travel demand modeling, Metro's 2001 land use / transportation modeling, and a review of Clark County, City of Vancouver, City of Portland and Metro land use planning and growth management regulations, the DEIS and the FEIS conclude that the likelihood of substantial induced sprawl from the CRC project is very low. In fact, the CRC project, because of its location in an already urbanized area, the inclusion of new tolls that manage demand, the inclusion of new light rail, and the active regulation of growth management in the region, the CRC project will likely reinforce the region's goals of concentrating development in regional centers, reinforcing existing corridors, and promoting transit and pedestrian friendly development and development patterns.

In October, 2008, the project convened a panel of national experts to review the travel demand model methodology and conclusions, including a land use evaluation. The panel unanimously concluded that CRC's methods and the conclusions were valid and reasonable. Specifically, the panel noted that CRC would "have a low impact to induce growth...because the project is located in a mature urban area," and that it would "contribute to a better jobs housing balance in Clark County...a positive outcome of the project". These results are summarized in the "Columbia River Crossing Travel Demand Model Review

Report” (November 25, 2008).

In 2010, Metro ran the MetroScope model (an integrated land use and transportation model) to forecast growth associated with transportation improvements of a 12-lane river crossing and light rail to Clark College. Even with a 12-lane river crossing, the model showed only minimal changes in employment location and housing demand compared to the No-Build Alternative.

For a more detailed discussion regarding potential indirect land use changes as a result of the CRC project, including the likely land use changes associated with the introduction of light rail, please see Chapter 3 (Section 3.4) of the FEIS.

P-0231-002

Modeling has indicated that tolling I-5 without making the improvements that are part of the CRC project would not meet the project’s Purpose and Need. This does not mean that some form of tolling prior to constructing CRC couldn’t be implemented. The ultimate decision on any tolling options will be made by both the Washington and Oregon Transportation Commissions.

P-0231-003

Traffic forecasts reported in the DEIS and used to inform decisions on a locally preferred alternative were derived from adopted regional employment and population forecasts and state-of-the-art modeling and evaluation conducted by Metro, RTC and the project team, and reviewed by all project sponsor agencies as well as FTA and FHWA. In addition, an independent panel of traffic modeling experts was convened in October 2008 to review the modeling methods and findings. These experts concluded that the project’s approach to estimating future travel demand was reasonable and that it relied on accepted practices employed in metropolitan regions throughout the country. These findings

are summarized in the “Columbia River Crossing Travel Demand Model Review Report” (November 25, 2008). This independent review confirmed the approach CRC modeling used to address multiple variables that can affect travel demand, including gasoline prices, tolling, travel demand measures and induced development.

P-0231-004

For more detail on air quality, see the Air Quality Technical Report. Emissions of some pollutants are less sensitive than others to changes in congestion. For some pollutants, the projected changes in vehicle technology and fuels over the next 20 years will have a much larger impact on total emissions than differences in traffic speeds and other metrics between alternatives.

P-0231-005

Gasoline combustion produces very large quantities of carbon dioxide compared to relatively very small quantities of some of the mobile source air toxins. With such low quantities of emissions, it is less likely to see differences in emissions among different alternatives. In addition carbon dioxide emissions are more subject to changes in traffic speed than some of the MSATs. As such, there is more variation in GHG emissions from the different alternatives, than there is in some of the MSAT emissions among alternatives. Further, various aspects of a given alternative can have opposing effects on emission levels. For example, tolling I-5 reduces total auto crossings which tends to reduce emissions. However, tolling I-5 also diverts some traffic to I-205 which results in longer trips and higher emissions.