From: Ron Buel
To: Draft EIS Feedback;
CC:
Subject: DRAFT EIS Feedback on 7/1/08
Date: Tuesday, July 01, 2008 9:43:49 PM
Attachments: Memo to Sam Adams from Ron & Joe - Clark Co..doc

Ms. Heather Gunderson
c/o Columbia River Crossing Project
700 Washington Street, Suite 300
Vancouver, Washington 98660

Re: Columbia River Crossing DEIS

Dear Ms. Gunderson:

P-0789-001 I submit the attached memo in Word for Windows, prepared for City Commissioner Sam Adams, at his request, by Joseph Cortright and myself, as my comments on the Columbia River Crossing draft environmental impact statement (DEIS). I request that this letter and the attached memorandum be made part of the record and responded to by the Federal Highway Administration in its final environmental impact statement for the CRC.

P-0789-002 The attached memo details ways in which the DEIS fails to address important environmental impacts of the CRC as proposed, particularly the DEIS failure to project induced travel caused by the additional highway capacity to be created by the proposed project. I would like to recommend that the Administration correct this deficiency by issuing a supplemental DEIS addressing impacts of induced travel, and containing one or more alternatives that would avoid the induced travel impacts and thereby comply with applicable federal law.

Cordially,
Ronald A. Buel
2817 NE 19th Ave.
Portland, OR 97212

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Thank you for taking the time to submit your comments on the I-5 CRC DEIS.

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There are two issues regarding additional highway capacity, induced trips on the facility and induced growth or development. Both issues have been studied with the most advanced models available in the United States of America, and consistent with established methodologies. The travel demand modeling does allow for an increase in the number of trips using a facility. In fact, the model uses an equilibrium based algorithm that "sorts" each individual's mode and route choice, allowing each roadway to take a balanced share of the trips. If the model is used to test the addition of new lanes on an existing facility, many new trips will "choose" in the model to use the new capacity. So, the modeling done for this project, like all projects in the region, is capable of understanding the new highway capacity and simulating the demand for such among commuters.

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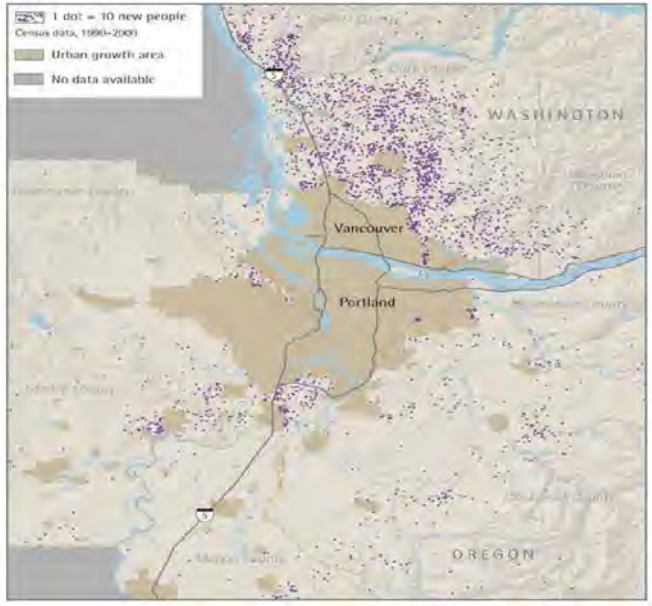
5/4/07
Memo to Sam Adams
From Ron Buel & Joe Cortright
Clark County Land-Use Analysis in reference to the Columbia River Crossing

There is no question that Clark County population has been growing steadily and rapidly through the year 2005, and has now reached 400,000 people. There is no question that Clark County has been sprawling out across the landscape – a look at this map with each pink dot representing 10 new people, from the Sightline Institute, for the period 1990-2000, shows the sprawl quite clearly:



What is at issue, in terms of the planning for the Columbia River Crossing, is what will happen if there is a 12-lane bridge built, compared to what will happen if there is no change. To this end, the staff for the Columbia River Crossing Task Force has made some projections, and has presented them to the press and to the City Planning Commission and the City Sustainable Development Commission. We believe these projections are seriously flawed, and most particularly they are flawed as to what will

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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 summarizes in the "Columbia River Crossing Travel Demand Model Review

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happen if we do not build six lanes of additional highway capacity throughout the bridge area to serve the 65,000 Clark County commuters and those who may join them between now and 2030.

As Dean Lookingbill of the Clark County Regional Transportation Council told us, the land-use projections for the 12 lane bridge and for the No Build Option in 2030 and 2035 are **the same**, as are the projections for population growth. This forecast, frozen for both cases by federal DEIS protocol, gives everyone seriously mistaken assumptions with which to work. Clearly, population in Clark County, which is projected to grow from 400,000 to 665,000 by 2030, and the continued sprawling pattern of that development, will be significantly altered with additional capacity for 40,000 trips a day at higher speeds across the new bridge, especially when compared to what will happen without that capacity and, therefore, *with* the resulting worsening congestion on the bridge.

What this faulty comparison of projected population and travel demand does is to ignore decisions that consumers make about where to live and where to work -- what is called "induced travel." There are, in effect, **no** projections in the CRC Task Force work for such travel that will come about because of the new bridge auto capacity. A direct historical analogy is useful, using the last time that freeway capacity was added across the Columbia. The Glenn Jackson Bridge, completed in 1982, had projections for 2000 and 2005 trips that were based on the same kind of analysis, no change in trip travel from the No Build Option to the new bridge. These trip projections, according to Lookingbill, were nearly **50% below** what actually happened in terms of bridge travel in 2000 and 2005. The lesson is simple – added highway capacity generates choices about where to live and where to work in a fashion that is *independent of* other trends.

Indeed, it is very likely that the businesses who wish to benefit from growing Clark County population recognize quite well what will be the impact of a new bridge – to spur housing development and population growth in sprawling Clark County. And, the governments there desire that the population does grow so that it can pay sales taxes, the source of most government funding in Washington. As you are well aware, the State of Washington does not have strong land-use laws protecting farm and forest land. So nearly all of the cities in Clark County have hundreds of acres of land that can be developed for housing, as shown in the chart below:

City	Housing Acres Now	Available for Housing in City	In UGA outside City
Battle Ground	447.9	427.7	767.2
Camas	384.1	539.8	469.0
La Center	167.2	67.1	369.7
Ridgefield	451.2	568.9	609.0
Three Creeks	805.4	0	2,116.9
Vancouver	858.7	747.8	1,513.0
Washougal	207.7	295.9	248.9
Yacolt	14.8	33.5	5.1
Total	3,337.0	2,680.7	6,098.8

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.

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The CRC's own analysis shows that 93% of the additional travel over the replacement bridge will come from low density development in what they call "suburban fringe" areas of Clark County Source: (CRC: 2030 Transit Travel Markets Technical Memo, 2007). This low density fringe development will generate additional single occupancy vehicle travel and be particularly difficult to serve with transit.

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Perhaps even more important to the decision about the Columbia River Crossing is what we believe to be a **purposeful miscalculation** about travel demand on the existing bridge if the additional highway-auto capacity is *not* built. Keeping with what is widely recognized as a bias of such highway department projections (Government Accountability Office (2005). Highway and Transit Investments: Options for Improving Information on Projects' Benefits and Cost and Increasing Accountability for Results, Washington, DC GAO-05-172)
the traffic across the new bridge is projected to grow dramatically by 2030 with the No Build Option, by even more trips than would occur with the additional capacity on a new bridge after tolls and transit are added or imposed. There are a number of factors which are counter to this typical straight-line travel prediction, not the least of which is that the rush-hour congestion *itself* causes alternative decision-making by potential commuters – choices to take other routes, to car-pool, to live closer to the job, and to take existing transit or bicycle options. But, in this particular case, there are other important considerations which have not been properly built into the CRC Task Force Staff's No-Build Option projections.

- Traffic has been already been **declining** across the bridge over the last two years. Average daily traffic declined by 0.5% in 2006 and by an additional 1.2% in 2007.
- Gasoline prices are the part of car ownership that is most visible to most commuters. The CRC Task Force Staff projections for all alternatives are calibrated to a travel demand model based on the experience of the 1990s, when real gasoline prices were much lower, and were actually declining in inflation-adjusted terms. In effect, these models are based on behavior back when oil was less than $30 per barrel. It is *currently* at $113 a barrel, and the City's Peak Oil Task Force expects it to rise sharply from that figure as oil supplies begin to dwindle. Rising gasoline prices are likely to have a very large impact on demand for peak hour commuting from Clark County, and this fact is **not** part and parcel of the No Build projections. In part, the impact from gasoline prices will be higher than projected because Clark County trips to work are, on average, longer than those in the rest of the region, because of the sprawled-out land-use pattern in Clark County. Already, higher gasoline prices are reducing gasoline sales and vehicle miles traveled in the region, and the long term effect is expected to be several times larger. Attached to this memo are a map showing 2030 travel demand from each geographic segment of the county, and the numbers of persons projected to be living in those

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geographic areas. These have been provided from the Clark County RTC as the land-use data for 2030 projections for the No Build Option and the Big Bridge. CRC Task Force Staff said repeatedly before the City Sustainable Development Commission that the Bridge project "promotes compact development." A quick look at the 2030 projections for increased sprawl in Clark County, with the new bridge or without, demonstrates conclusively that such statements are **not true**.

- CRC Task Force staff has said in hearings that there is **no** calculation in the travel demand numbers for the impact of a carbon tax, or for a cap and trade policy and regime on oil. Yet, if the CRC Task Force assumption of 40% growth in regional VMT by 2030 actually begins to look like it will occur, surely Oregon and Washington will head in that policy direction in this region. After all, VMT is the largest source of greenhouse gas emissions in the region. Such policy change could have a major impact on travel demand across the Columbia.
- Economist Cortright has recently released a paper published by CEOs for Cities (Driven to the Brink, attached to this memo) that demonstrates that, nationwide, demand for suburban housing is down. "The collapse of America's housing bubble -- and its reverberations in financial markets -- has obscured a tectonic shift in housing demand. Although housing prices are in decline almost everywhere, price declines are generally far more severe in far-flung suburbs and in metropolitan areas with weak close-in neighborhoods. The reason for this shift is rooted in the dramatic increase in gas prices over the past five years. Housing in cities and neighborhoods that require lengthy commutes and provide few transportation alternatives to the private vehicle are falling in value more precipitously than in more central, compact and accessible places," he writes. This is particularly true, he says, when suburban housing is compared to housing prices in healthy inner core cities, such as that in Portland, where housing prices have remained stable despite the current credit crunch. Again, this data, if it is in response, at least in part, to rising gasoline prices, throws yet another cloud over projections of growing travel demand in the No Build that require us to spend $4.2 million for a big new bridge.
- As Clark County Commissioner Steve Stuart pointed out at the Oregon Bus Project debate on March 25, Clark County has about 50% fewer jobs per capita than the rest of the region south of the Columbia. The CRC Task Force staff has projected dramatically increased employment in Clark County between now and 2030, a result, it has said, of the vast population increase expected. But Scott Bailey, Regional Economist for the Washington State Employment Security Department found something a little different when he spoke on April 17. The slides for his remarks are attached to this memo. Bailey projects 2030 population figures **below** 600,000, which is quite a bit different than the 665,000 figure used in the CRC presentations. Bailey also noted that Clark County housing permits are now the lowest they have been since 1987. There is another bit of information in Bailey's presentation that can have a major impact on

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travel demand for commuting across the Columbia. The 185,061 persons in 2005 holding non-farm jobs and who are not self-employed, are largely aging baby-boomers and will be retiring at increasing rates. Retirement will leave thousands of jobs open in Clark County, and a fair number of those jobs are likely to be taken by the 65,000 persons who the CRC Task Force staff says are now commuting to jobs across the Columbia daily, thereby reducing further the travel demand projected in the No Build Option. Relatively minor adjustments in the projected growth rates of employment and housing in Clark County over the next 20 years would eliminate the enormous projected demand in commuting to Oregon, and the supposed need for additional transportation capacity.

We are not surprised that the CRC Task Force staff has significantly over-estimated demand for travel across the current bridge in a No-Build Option. Nor are we surprised that the Task Force staff has significantly under-estimated the induced travel to be caused by a combination of Clark County land-use and the additional freeway capacity built in the bridge area. We are, however, concerned that City Commissioners will buy their analysis.

We also feel compelled to point out additional gaps in the CRC presentations that we can document for you at length, if you so desire:

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1) The No Build Option has not been publicly fitted with tolls and high capacity transit, to see what would happen to demand and congestion without the big new bridge. At first, CRC members and staff said it was illegal to toll the existing structure. After being repeatedly corrected on this point, they now acknowledge it is legal to do so. Obviously the $750,000,000 for the light rail transit, bicycle and pedestrian crossing could also be applied for to FTA without a big new bridge. It is just that the Washington and Clark County members of the Task Force are better poker players than those of us on the Oregon side of the River, and they have seen that such alternatives are not presented. Nor is there an alternative presented for an arterial bridge connecting the two Ports for freight. Under the CRC analysis, the only reason that the Replacement Bridge alternative has less traffic (and therefore lower greenhouse gas emissions) than the No-Build is that it has tolls, and the No-Build does not: imposing tolls on the No-Build would result in less congestion and less greenhouse gas emissions at far lower cost.

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2) The CRC Task Force staff has claimed before the City Planning Commission and the City Sustainable Development Commission that the congestion now found in the bridge area will not simply move to another area, such as the intersection of I-5 and the Banfield in the Rose Garden area, or to the areas where the traffic narrows from five lanes in the bridge area to three lanes on leaving the bridge area, going both North or South. Claims to eliminate or greatly reduce congestion on the I-5 corridor by virtue of the Big New Bridge are **not credible**, because over-all traffic and VMT in the region is increased, a fact one can ascertain by looking at the CRC's own projections. As a result, the congestion just moves to another part of the system – this is a law of cueing theory, and is not disputed by reputable analysts and scientists.

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The evaluation of the five alternatives in the DEIS was preceded by an extensive evaluation and screening of a wide array of possible solutions to the CRC project's Purpose and Need statement. Chapter 2 of the DEIS (Section 2.5) explains how the project's Sponsoring Agencies generated ideas and solicited the public, stakeholders, other agencies, and tribes for ideas on how to meet the Purpose and Need. This effort produced a long list of potential solutions, many of which were non-auto oriented options such as various transit modes and techniques for operating the existing highway system more efficiently without any capital investment. These options were evaluated for whether and how they met the project's Purpose and Need, and the findings were reviewed by project sponsors, the public, agencies, and other stakeholders. Alternatives that included only TDM/TSM strategies, or provided only transit improvements, would provide benefits, but could only address a very limited portion of the project's purpose and need. This extensive analysis found that in order for an alternative to meet the six "needs" included in the Purpose and Need (described in Chapter 1 of the DEIS), it had to provide at least some measure of capital improvements to I-5 in the project area. Alternatives that did not include such improvements did not adequately address the seismic vulnerability of the existing I-5 bridges, traffic congestion on I-5, or the existing safety problems caused by sub-standard design of the highway in this corridor. The DEIS evaluated alternatives with more demand management (higher toll) and increased transit service with less investment in highway infrastructure improvements (Alternatives 4 and 5) compared to the toll and transit service levels included in Alternatives 2 and 3. The additional service and higher toll provided only marginal reductions in I-5 vehicle volumes, and they came primarily at the cost of greater traffic diversion to I-205. This analysis found that a more balanced investment in highway and transit, as represented by Alternatives 2 and 3, performed considerably better on a broad set of criteria.

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3) Similarly, the claim of the CRC Task Force staff to reduce air pollution and greenhouse gas emissions by adding capacity to speed up traffic through the bridge chokepoint area has **fatal flaws**. It, too, ignores cueing theory and second-level effects of added capacity, which again are scientifically proven to occur within a regional highway system when major capacity is added. Induced land use changes will produce longer commutes, more vehicle miles of travel and higher greenhouse gas emissions—all effects ignored in the CRC modeling.

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4) We are also greatly concerned at the tendency of the CRC Task Force staff to over-exaggerate the impact of a single light rail line to downtown Vancouver, if it is to be built with approval of Clark County and Vancouver. In cities throughout the world, it has become quite clear that transit works best when it provides a truly competitive alternative to the automobile, and when a line within a single corridor such as I-5 becomes part of a much larger transit system that competes with the automobile. Yes, we agree that transit generally "promotes compact development." But, how well it works to achieve compact development depends on how well, for example, C-Tran co-ordinates buses with the light rail stop, with how much time is saved on transit going to desirable job locations in Oregon compared to using an automobile, with how well the transit network gets you to varying locations outside the central city in Portland. And transit promotes compact development most effectively when the region doesn't make a massive additional investment in building additional capacity for moving single occupancy vehicles. It is possible to show you numerous light rail stops in East Multnomah County, and in Washington County, that have little or no "transit-oriented development" as the Task Force staff gladly projects for downtown Vancouver and for the Hayden Island stops for light rail. Park and Ride lots in Downtown Vancouver that connect via freeway to sprawled out living locations throughout Clark County may not promote compact development at all.

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5) The claims of freight growth via trucking in the region are also highly questionable. So, too, are the claims of the importance of freight to our economy. Freight movement is not a major factor in the Portland area's economic competitiveness, and marginal improvements (or declines) in travel times within the metropolitan area will have no measureable effect on long term regional economic growth. Freight intensive industries are in decline, and growing industries move trivial amounts of freight. Freight companies already route around congestion—truck movements over the I-5 bridge are lowest in the peak hours, and 85 to 90% of all freight in the corridor moves at non-peak hours or in the non-peak direction. Higher fuel costs are affecting freight growth: truck freight per unit of GDP is declining sharply, and intermodal rail freight movements are up sharply. Most truck freight in the region is low value (fuel, gravel, logs), and moves short distances (less than 50 miles).

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The Oregon Department of Transportation (ODOT) completed Phase I construction of the I-5 Delta Park widening project in fall 2010. Phase I of the project involved widening I-5 and lengthening the entrance and exit ramps at Victory Boulevard and Columbia Boulevard. Phase II involves improving local streets and will begin when funding is secured. Phase I of the Delta Park project widened the current 2-lane segment of southbound I-5 to 3 lanes. There are currently no immediate plans to widen I-5 south of Delta Park. Neither the CRC project nor the Delta Park projects are intended to address the southbound traffic congestion that currently exists near the I-5/I-405 split. However, traffic analyses show the congestion at the split will not be worsened because of the Columbia River Crossing project. The main reason is that fewer cars are expected to cross the river with a project in 2030 than without a project. This is due to the provision of improved transit service and tolling.

Beyond the CRC and Delta Park projects, the I-5 Transportation and Trade Partnership Final Strategic Plan recommended a comprehensive list of modal actions relating to: additional transit capacity and service; additional rail capacity; land use and land use accord; transportation demand/system management; environmental justice; additional elements and strategies (such as new river crossings); and financing. RTC and Metro are tasked with initiating recommendations as part of their regional transportation planning role. Examples of current efforts include RTC's evaluation of future high-capacity transit in Clark County, and evaluation of needs for future river crossings. Regional planners have investigated solutions to existing bottlenecks at the I-5 connections with I-405 and I-84. ODOT is responsible for conducting ongoing studies to identify other congestion problems on I-5 in Oregon that may need to be addressed in the future.

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Please see response to comment P-0789-003.

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As discussed in the Chapter 3 (Section 3.4) of the DEIS, the introduction of light rail into Vancouver will support development and redevelopment around transit stations. This could result in greater advancement of local and regional land use goals to concentrate growth along transit corridors, and potentially greater economic investment around station areas. The project will also result in improvements to economic development conditions for businesses in Portland and Vancouver by reducing congestion and improving access, safety, and travel time reliability. This is especially important for the movement of goods and services. These improvements would support economic growth by increasing the efficiency of truck-hauled freight in the region and improving access for commuters and other travelers traveling between Portland and Vancouver. We agree that the degree to which the introduction of high capacity transit stations may affect development is dependent on other factors. The City of Vancouver manages a progressive planning program which includes policies and code incentives for transit oriented development.

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The ability to move freight efficiently in the Vancouver/Portland region is critical to the overall health of our economy. As such, the CRC project is designed to improve freight mobility on I-5, as well as make it safer and easier for trucks to get on and off I-5 to reach businesses and Port facilities. The Freight Working Group (FWG), comprised of representatives of the Vancouver-Portland metropolitan area's freight industry, met 22 times throughout the DEIS and FEIS development process to advise and inform the Columbia River Crossing project team about freight issues. The group provided insight, observation, and recommendation about the needs for truck access and mobility within the corridor; characterized the horizontal and vertical clearances, acceleration/deceleration, and stopping performance needs of trucks that must be accommodated; and provided meaningful comments on the

effect of geometric, regulatory, and capacity changes on truck movements in the corridor. See Chapter 3 (Section 3.1) of the FEIS for detailed discussion of how the project increases freight mobility and access along I-5 and in the region.