


**From:** [ArchitectureWeek Editors](#) 

**To:** [Draft EIS Feedback](#);

**CC:** [Artifice Staff](#);

**Subject:** Comment on Columbia River Crossing Draft EIS

**Date:** Tuesday, July 01, 2008 6:21:50 PM

**Attachments:**

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Re: CRC DEIS COMMENTS

To: Columbia River Crossing  
c/o Heather Gundersen  
700 Washington Street, Suite 300  
Vancouver, WA 98660

Dear CRC Team et al.,

- B-047-001** Thank you for the opportunity to comment on the draft environmental impact statement for the Columbia River Crossing project (CRC DEIS). We are participating as the Editorial Board of ArchitectureWeek magazine, the premiere professional architecture and planning periodical based in Oregon.
- B-047-002** We have reviewed this document, fully recognizing that our cities, state, region, nation, and indeed our planet are at a critical crossroads of change with regard to transportation planning. In one direction, the road continues the general tenor of analysis and hence the kind of conclusions seen in business as usual over the last half-century. In the other direction, the road to-date less traveled, lies the substantive response to the threat and reality of anthropogenic climate change.
- B-047-003** We fear that the CRC DEIS lies in the main direction. In terms of analysis, because of the fatally-incomplete review of impacts due to induced traffic related to land use changes, the current work is inadequate to properly authorize such a significant project at this time (<http://www.oregonlive.com/news/oregonian/index.ssf?/base/news/1214029515244280.xml&coll=7>). In terms of conclusions, the expansive alternatives represent unacceptable misallocations of essential resources in a time of unfolding crisis in U.S. transportation.
- B-047-004** The State of Oregon has adopted goals by legislation for reducing greenhouse gas emissions to 10% below 1990 levels by 2020, and to 75% below 1990 levels by 2050.

### B-047-001

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

### B-047-002

Please see responses to comments B-047-005 and B-047-008.

### B-047-003

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

- B-047-004** While the latest climate science suggests those goals are not stringent enough to prevent triggering disastrous climate switches, the adopted goals are sufficient for immediate planning purposes.
- B-047-005** Transportation planning that projects to meet those adopted goals, as it is morally imperative that the CRC DEIS must, will need to show assurance of high levels of vehicle miles traveled (VMT) reduction over time.
- In fact, simple calculations using stabilization wedges as well as other approaches show that to project transportation sector compliance with greenhouse gas emission reduction goals, using currently-demonstrable or reasonably-expected technologies, VMT reductions on the order of 50% are required over the next 20 years or so.
- B-047-006** This reality has two profound implications, which are difficult to avoid:
- 1) The only new large transportation projects that can be considered acceptable at present are those that are aimed directly at reducing VMT. This implies, for instance, that 90% or more of transportation funding needs to be allocated to low-emissions public transit for people and rail for freight, rather than conventional over-the-road vehicle capacity building.
  - 2) Projects that are proposed primarily for congestion-reduction and capacity building are literally pointless. When we make the correct alternative investments to reduce VMT, we will see continuing and increasing drops in highway traffic levels - as we have in fact started to see already in 2008 over 2007 under the influence of higher gas prices.
- B-047-008** Conservatively, each extra lane-mile added to a congested highway will increase emissions of carbon-dioxide, the main greenhouse gas, by more than 100,000 tons over 50 years, even assuming major improvements in vehicle fuel efficiency, as shown by the Sightline Institute and others ([http://www.sightline.org/research/energy/res\\_pubs/climate-analysis-ggc-new-lanes-10-07](http://www.sightline.org/research/energy/res_pubs/climate-analysis-ggc-new-lanes-10-07), <http://www.smartgrowthamerica.org/gcindex.html>).
- B-047-009** A sprawl-inducing bridge expansion would increase regional VMT, at a time when all significant transportation investments must be concentrated on safely and economically reducing VMT.
- B-047-010** As part of an ongoing program of climate change research and communication, we have studied and published on these issues in ArchitectureWeek magazine. Some of our recent coverage includes:
- New Urbanism in Charlotte  
<http://www.ArchitectureWeek.com/2008/0409/index.html>

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.

#### **B-047-004**

Please see responses to comments B-047-005 and B-047-008

#### **B-047-005**

Based on modeling and analysis, the CRC LPA is expected to significantly increase transit ridership and reduce the number of vehicles crossing the river. This shift toward transit, reduction in auto crossings, reduced congestion, removal of bridge lifts, and lower accident rates are all factors that contribute to lower CO2 emissions with the project than without it. These factors will also make it easier for the region to meet goals for reducing greenhouse gas (GHG) emissions.

**B-047-010** Tackling Climate Change  
<http://www.architectureweek.com/2008/0423/index.html>

Climate Action Now  
<http://www.architectureweek.com/2008/0430/index.html>

Reviewing the words we have written and conclusions we have reached ourselves in the national arena highlights some hard questions on this more local issue.

**B-047-011** How much more public resource must Oregon devote to going down the wrong path, before we turn to the new path - as we know we must? Will Portland go down in history as spending billions on one of the last horrible dinosaurs of the backward, unsustainable 20th Century approach to highway planning? Or will we go down in history as one of the first regions to act in accord with our own knowledge and rhetoric, leading forward in this new millennium?

This is one dimension of the future for which the crystal ball is as easy to read as a mirror on the wall. We must stop now in building large new highway projects to support traffic increases that will not even be there - traffic increases that cannot be allowed to be there - traffic increases that we must indeed plan and build so as to eliminate.

Now is the time to rise to the call of an epochal emergency.

Do the math; don't do the project.

Sincerely,

ArchitectureWeek Editorial Board

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While there was no standard threshold or standardized methodology for estimating GHG emissions when the DEIS was being developed, the project team worked with federal and state agencies to develop an appropriate analysis methodology that would allow disclosure of impacts and a comparison of alternatives. Chapter 3 (Section 3.19) of the DEIS summarized the results of GHG emissions and climate change analysis conducted for the DEIS alternatives. Further detail was included in the Energy Technical Report that was released along with the DEIS. Following the public comment period on the DEIS, the Metro Council and Portland City Council requested the CRC project team secure independent review of the GHG evaluation conducted for the DEIS. The "Columbia River Crossing Greenhouse Gas Emission Analysis Expert Review Panel Report" (January 8, 2009) describes the activities and findings of the independent review panel. The panel concluded that the GHG evaluation methods and the findings in the DEIS were valid and reasonable. They also found that the findings were likely conservative, and that the LPA would likely reduce GHG emissions even more than estimated in the DEIS. The GHG and climate change analysis in Chapter 3 (Section 3.19) of the FEIS updates the analysis that was in DEIS, but the basic conclusion that the LPA would have lower emissions than No-Build Alternative remains unchanged.

The CRC project embodies nearly all of the Governor's Climate Change Integration Group's recommendations for planning transportation projects to reduce GHG emissions. These recommendations include highway tolling, relieving chronic highway bottlenecks, increasing transit, and increasing pedestrian and bicycle facilities. Meeting the legislative goal to reduce future statewide emissions below 1990 levels will require numerous actions in all sectors. There is no requirement or expectation in law or policy that any single action by itself should or can have the effect of reducing future emissions below existing emissions. Such broad reductions can only result from a wide variety of actions. As stated in the DEIS, the preferred alternative by itself would reduce GHG emissions

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compared to No-Build Alternative. This helps move GHG emissions in the right direction, and when combined with other actions, can play an integral role in helping the state meet its overall greenhouse gas reduction goals.

#### **B-047-006**

See earlier discussion regarding the CRC project's increases in transit ridership and reductions in the number of vehicles crossing the river in the I-5 corridor. Regarding freight, according to the Feasibility of Diverting Truck Freight to Rail in the Columbia River Corridor Technical Memorandum produced by CRC project staff in April 2006, trains cannot move smaller loads as cost-effectively as trucks and may even be more costly for shipping distances under 500 miles. This is a key point, as the average trip distance by truck in the Portland/Vancouver region is 199 miles. While there are certainly some commodities that could shift from truck to rail in the region, it is probably a very minimal amount, probably not part of a consistent and regular shipment schedule, and would not significantly ease congestion along I-5 in the project area.

Additionally, the Vancouver-Portland region is the "last mile" for 85 percent of the freight traveling in the region. That is, goods are produced, assembled, and/or delivered within the region, and the overwhelming majority of the local shippers and customers are not located on a rail spur or within a rail/intermodal terminal. Even if there was a targeted effort to use railroads more frequently, the goods would need to travel by truck on regional roads and freeways to arrive at rail terminals. In fact, most of the goods produced or received from the rail system must drive those goods by truck to or from the rail lines; and, increased rail service would likely lead to greater use of trucks for this very reason.

#### **B-047-007**

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.

#### **B-047-008**

The Sightline report refers to a hypothetical highway improvement (adding one general purpose lane, no toll, no high capacity transit, unspecified land use, unspecified real estate markets, and unspecified land use controls). The CRC project-specific analysis of GHG emissions is a much better representation of likely GHG emissions from the CRC project. In addition, the Sightline report ([http://www.sightline.org/research/energy/res\\_pubs/analysis-ghg-roads](http://www.sightline.org/research/energy/res_pubs/analysis-ghg-roads)) inserted a fixed assumption into its spreadsheet model regarding induced growth. They made an underlying assumption that about 85 percent of the traffic using a new highway lane over the estimation period would be trips that would not have occurred if not for that additional capacity. Sophisticated modeling conducted by Metro for the CRC project, as well as the Method Notes for the Sightline report itself, suggest that this may be an extreme over-estimate. The Sightline report

appears to have assumed that diverted trips were induced trips in their assumption regarding induced growth. For example, traffic modeling for the CRC project indicates that with improved capacity and reliability on the I-5 crossing (and assuming no toll), the number of auto trips using the I-5 crossing would increase compared to No-build (with a toll the number of trips would decrease). However, most of these "induced" trips are actually "diverted" trips that, under No-build, would have used I-205 instead to avoid the severe congestion and unreliability of the existing I-5 route. These are not new trips, they are diverted trips. Furthermore, this diversion would actually slightly reduce GHG emissions because many of those trips would have a shorter route (resulting in lower VMT) and experience less congestion (resulting in higher fuel efficiency) than if they used the I-205 crossing under a No-build scenario.

**B-047-009**

Please see response to comment B-047-003

**B-047-010**

Comment noted. The proposed CRC project is consistent with many of the concepts of New Urbanism (promoting walkable communities with a diversity of housing types, mixed with commercial and public spaces, connected by public transit, and designed to conserve resources and protect greenbelts). The CRC project reinforces the region's historic transportation corridors rather than opening new corridors to undeveloped lands, improves multi-modal connections to revitalizing regional centers, invests significantly in high capacity transit, promotes transit oriented development in future high capacity transit station areas, and invests significantly in improved biking and walking facilities and connectivity.

**B-047-011**

The proposed new add/drop lanes (i.e., lanes that connect two or more

interchanges) are used to alleviate safety issues associated with the closely spaced interchanges in the project area and are not designed to increase capacity generally on I-5. 68 to 75% of I-5 traffic enters and/or exits I-5 within the CRC project area, and these add/drop lanes provide space for this traffic to do so without disrupting cars and trucks traveling to destinations further north and south of the project area. The project does not propose to add lanes north or south of the project limits.

The DEIS evaluation found that the project, with a toll and light rail, would actually reduce the total daily volume of traffic using the I-5 and I-205 river crossings by approximately 3%. The FEIS analysis of the project has been updated to include an evaluation of how the CRC project would affect Vehicle Miles Traveled (VMT) (see Chapter 3, Section 3.1). Rather than inducing sprawl, 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 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. The model showed only minimal changes in employment location and housing demand compared to the No-Build. For more information see FEIS Chapter 3, Section 3.4.