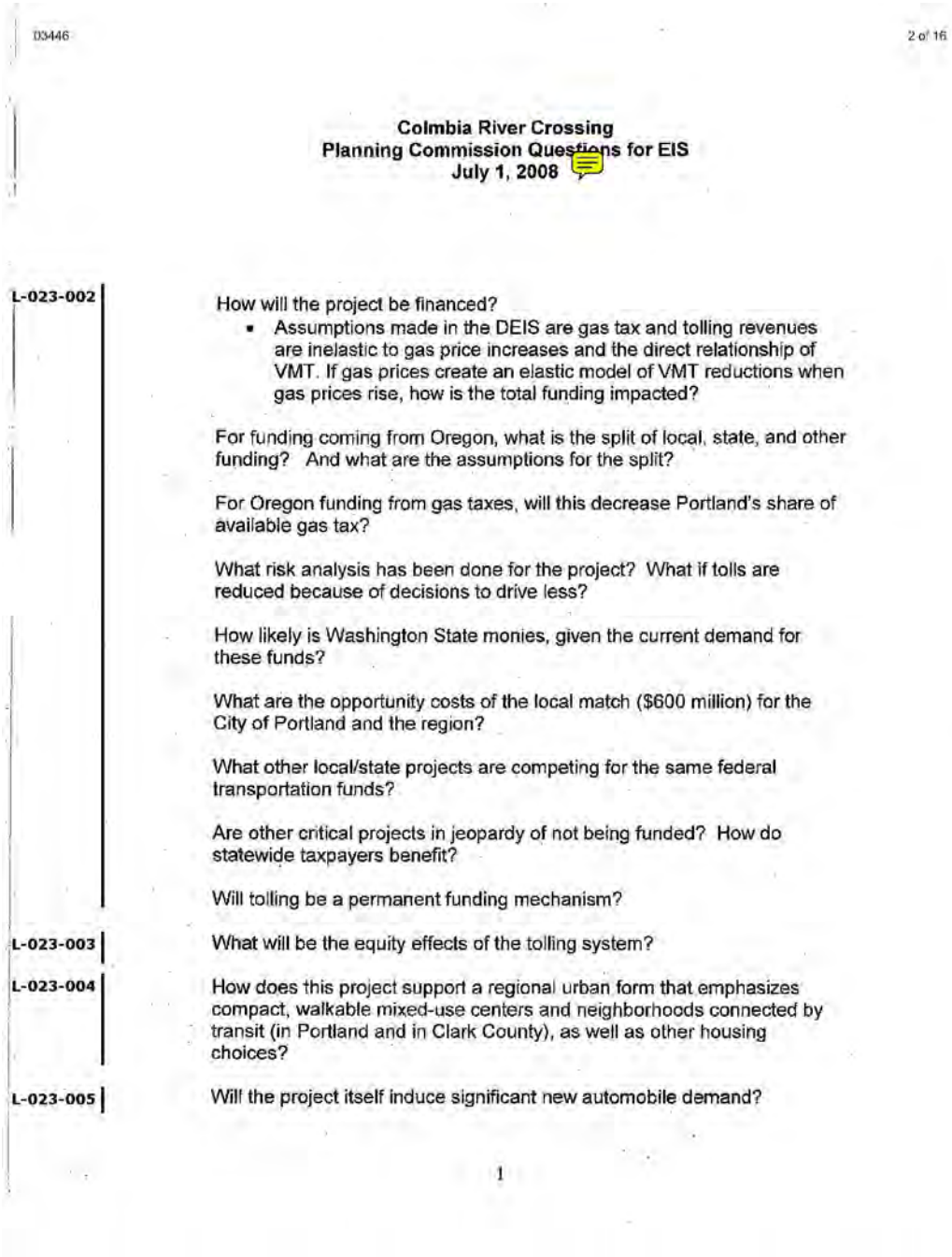
From: Olson, Carolyn
To: Draft EIS Feedback;
CC: Wetzel, Alice Ann; Gillam, John;
Subject: CRC Draft EIS Comments attached
Date: Tuesday, July 01, 2008 4:42:43 PM
Attachments: 1883_001.pdf
1884_001.pdf
1885_001.pdf
1886_001.pdf

L-023-001 Attached are the transmittal letter and three comment documents from the City of Portland Bureau of Planning and the City of Portland Planning Commission.

L-023-001

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



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Colmbia River Crossing
Planning Commission Questions for EIS
July 1, 2008

L-023-002

How will the project be financed?

- Assumptions made in the DEIS are gas tax and tolling revenues are inelastic to gas price increases and the direct relationship of VMT. If gas prices create an elastic model of VMT reductions when gas prices rise, how is the total funding impacted?

For funding coming from Oregon, what is the split of local, state, and other funding? And what are the assumptions for the split?

For Oregon funding from gas taxes, will this decrease Portland's share of available gas tax?

What risk analysis has been done for the project? What if tolls are reduced because of decisions to drive less?

How likely is Washington State monies, given the current demand for these funds?

What are the opportunity costs of the local match ($600 million) for the City of Portland and the region?

What other local/state projects are competing for the same federal transportation funds?

Are other critical projects in jeopardy of not being funded? How do statewide taxpayers benefit?

Will tolling be a permanent funding mechanism?

L-023-003 What will be the equity effects of the tolling system?

L-023-004 How does this project support a regional urban form that emphasizes compact, walkable mixed-use centers and neighborhoods connected by transit (in Portland and in Clark County), as well as other housing choices?

L-023-005 Will the project itself induce significant new automobile demand?

1

L-023-002

CRC assumes funds allocated to other projects would remain dedicated to those projects, and anticipates needing to find new funds to finance the project. Funding for the project will come from a variety of sources including federal grants that would not be available to other transportation projects in the region, State of Oregon, State of Washington, regional and local sources. In addition, it is assumed that the replacement bridge will be tolled. The authority to toll the I-5 crossing is set by federal and state laws. Federal statutes permit a toll-free bridge on an interstate highway to be converted to a tolled facility following the reconstruction or replacement of the bridge, and the CRC project would meet these conditions. Prior to tolling I-5, Washington and Oregon departments of transportation (WSDOT and ODOT) would have to enter into a toll agreement with the U.S. Department of Transportation (USDOT). State legislation from 2008 in Washington permits WSDOT to toll I-5 provided that the tolling of the facility is first authorized by the Washington legislature. Once authorized by the legislature, the Washington Transportation Commission has the authority to set the toll rates. In Oregon, the Oregon Transportation Commission has the authority to toll a facility and to set the toll rates. It is anticipated that prior to tolling I-5, ODOT and WSDOT would enter into a bi-state tolling agreement to establish a cooperative process for imposing tolls, set toll rates, and guide the use of toll revenues. Please refer to Chapter 4 of the FEIS for a description of the current plans for funding construction and operation of the LPA.

Since 2002, WSDOT has been developing a process of determining cost and schedule estimates, the Cost Estimate Validation Process® (CEVP®), to help deliver major projects. Compared to conventional cost estimating, CEVP®is a risk-based estimating process, iterative in nature, and represents a “snapshot in time” for that project under the conditions known at that time. CEVP® is the expression of project cost and schedule as a range rather than as a single number. Providing cost

L-023-006 Will the project induce significant new housing demand in Clark County? How has this been taken into account in the forecasting?

Could increased housing demand in Clark County eliminate congestion enhancements brought by increased bridge capacity?

L-023-007 How does this project help reduce our carbon footprint (e.g., reduce greenhouse gas emissions)? How has carbon footprint analysis been factored into the analysis and design of the project?

L-023-008 Does this project promote economic vitality in Portland?

L-023-009 Does it help solve freight mobility issues over the long-term?

L-023-010 How does the project solve freight mobility issues between Wilsonville and Clark County? What is the impact of the project on I-5 traffic at the Rose Quarter?

L-023-011 How does this project affect public safety and livability?

L-023-012 How sustainable is the project? What is the most efficient (in terms of the multiple objectives being considered) long-term solution to the identified problem?

What "green" elements have been incorporated into the project's design and construction?

L-023-013 How does this project shift modes of travel from auto dependency to other modes? Does it make the I-5 corridor plan work? How effective will it be at changing behaviors?

L-023-014 Does the project promote equity, particularly with respect to transportation, commuting, and housing patterns? How?

L-023-015 What is the project's impact on Hayden Island, Interstate Avenue, and other Portland corridors – both in terms of congestion and development potential?

How does this project improve our northern gateway to the City and State? Is the structure "iconic", reflecting its symbolic importance for both states?

L-023-016 How have the design constraints of Pearson airfield and the navigation channel been examined?

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 addresses even "unknown" issues that may arise. CEVP® is a construction cost estimate tool and does not estimate long-term operations and maintenance costs. WSDOT now mandates all projects over $25 million use the process. Chapter 4 of the DEIS, and 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.

L-023-003

As discussed in Chapter 3 (Section 3.5) of the DEIS and FEIS, tolling could impact low-income populations by introducing a new expense that could be proportionally a greater share of total income for low-income individuals, requiring that all users obtain transponders for electronic toll collection, and instituting a new tolling system that could be confusing or difficult to communicate to individuals with limited English proficiency. However, without a toll, the project likely could not be funded, or if funded, the new capacity on the bridge would be filled faster. Including a toll would reduce congestion, improve travel times, and could result in a slight improvement in air quality by reducing emissions, which would benefit all users. See Chapter 3 (Section 3.5) of the DEIS and Chapter 3 (Section 3.5) of the FEIS for a description of impacts and benefits of the project to EJ populations.

L-023-004

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.

L-023-017 How could the design be different if Pearson's airfield was not a constraint? Could this design cost less than the current structure proposed? How does this affect aesthetics?

L-023-018 Stewardship: How will the issues raised at this stage of the process be managed throughout the next phases of the project?

L-023-019 The CRC staff should provide:

- ndependent analysis of greenhouse gas emissions/assumptions

L-023-020
- Detailed financial plan
- Risk analysis

L-023-021 Why is a regional TDM strategy not included as part of this huge investment?

Why was a local option bridge not included as a potential LPA?

L-023-022 Large transportation infrastructure projects often spur increased development nearby. How has the CRC analysis incorporated increased housing in Clark County into the analysis?

L-023-023 What strategies and efforts has the planning process developed for ensuring, demonstrating, and substantiating compliance with Title VI? What measures have been used to verify that the multi-modal system access and mobility performance improvements included in the CRC project, and the underlying planning process, comply with Title VI?

Has the planning process developed a demographic profile of the metropolitan planning area that identifies the locations of socio-economic groups, including low-income and minority populations as covered by the Executive Order on Environmental Justice and Title VI provisions?

Does the planning process seek to identify the transportation needs of low-income and minority populations? Does the planning process seek to

L-023-005

See response to L-023-006, below.

L-023-006

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

L-023-023

utilize demographic travel information collected from current bridge crossings to examine the distributions across these groups of the benefits and burdens of the transportation investments included in the CRCDEIS plan? What methods are used to identify imbalances?

Does the planning process have an analytical process in place for assessing the regional benefits and burdens of transportation system investments for different socio-economic groups? Does it have a data collection process to support the analysis effort? Does this analytical process seek to assess the benefit and impact distributions of the investments included in the CRC plan?

How does the planning process respond to the analyses produced? What imbalances were identified? How are their concerns documented, and how do they reflect on the performance of the planning process in relation to Title VI requirements?

What mechanisms are in place to ensure that issues and concerns raised by low-income and minority populations are appropriately considered in the decision making process?

How will CRC proposed construction alter minority business districts within Portland, and visibility to traffic-based businesses? How will visibility and access changes alter business activity? What measures is CRC taking to mitigate impact to minority business districts?

L-023-024

The DEIS process has been crafted to meet federal standards outlined in the National Environmental Policy Act (NEPA) of 1969, which requires a DEIS to "promote efforts that will prevent or eliminate damage to the environment and biosphere, and stimulate the health and welfare of man." To satisfy NEPA requirements, the CRC project has focused on meeting minimum standards set by federal and state governments for air quality and noise. How will CRC exceed future air quality standard set forth by the State of Oregon?

L-023-025

The DEIS analysis of safety considers only the frequency of collisions. It shows that during the study period (2002–2006), the crash rates in the project area were twice the rate of average collisions on other urban interstate highways. While the frequency of crashes is expected to decline with the proposed bridge alternatives, the severity of the crashes may increase given the higher speeds of travel projected. What measure is CRC taking to decrease or mitigate the severity of future crashes on the new structure?

L-023-026

The Bridge Influence Area in Portland includes industrial and airport emissions in addition to pollution from mobile sources. Bridge alternatives

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 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.

L-023-007

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.

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

L-023-026

that raise cumulative ambient levels of air toxics will increase the risks posed to human health. Considering the impacts of the CRC project in isolation does not take into account the contribution the project makes to the overall levels of air toxics already present. How are the impacts taking into account the cumulative ambient level of air toxics?

L-023-027

The FHWA noise abatement criteria require mitigation for highway project noise impacts that exceed 67 dBA in sensitive areas outdoors (residences, parks, and schools) and 72 dBA for developed areas, such as commercial centers. According to the DEIS there are 234 locations in the CRC study area that exceed acceptable noise thresholds. With the "no build" alternative, this increases to 268. With the "build" alternatives, this increases to 329-334 without mitigation. With the inclusion of sound walls and residential improvements, the "build" alternatives potentially reduce the unacceptable noise impacts to 52 locations. What are the mitigation measures to bring the CRC project in compliance with Federal standards?

L-023-028

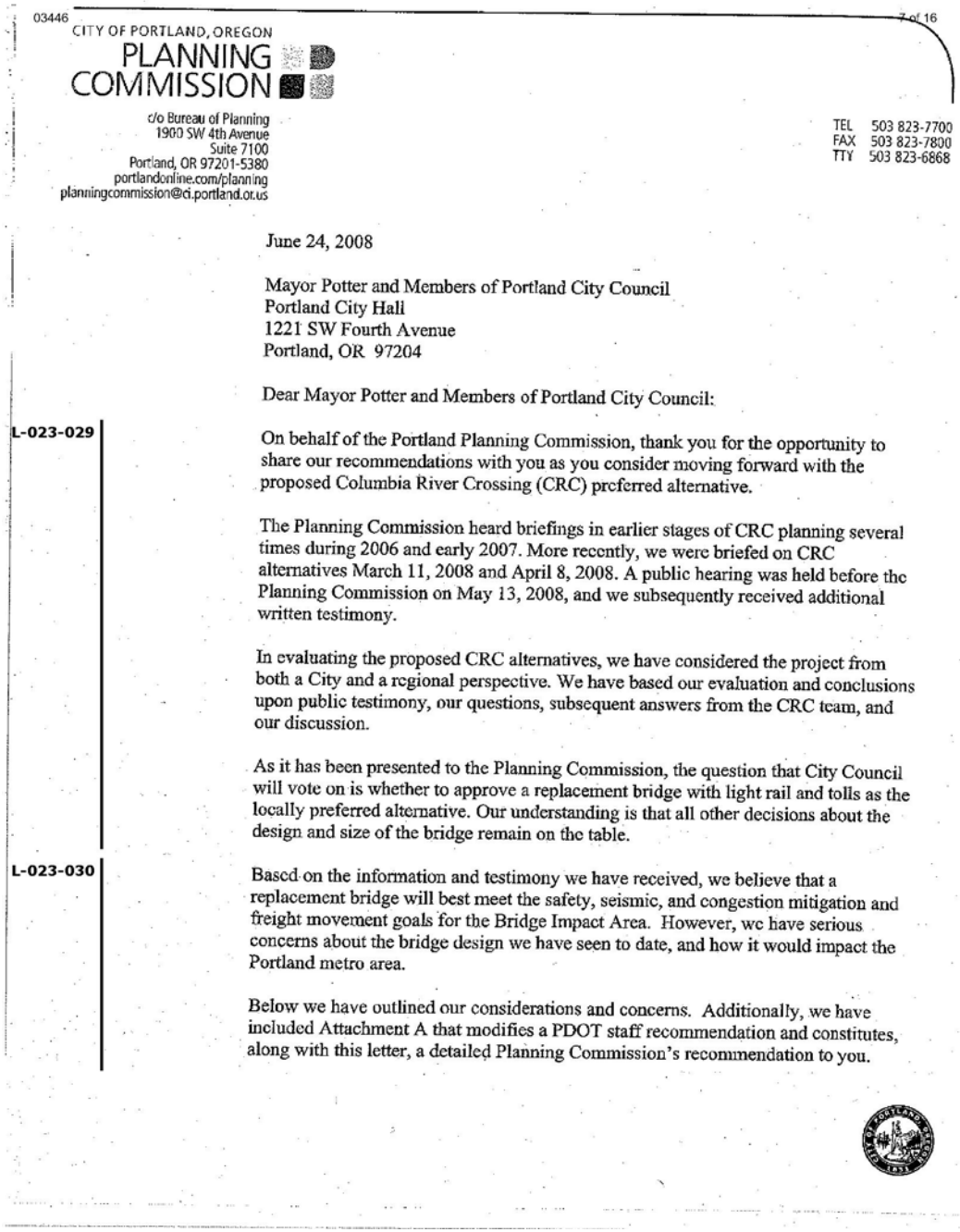
The assumed cost of auto transit is substantially lower than reality suggests. What costs are included in the "auto operating cost" per mile and how much are each of these costs assumed to be? While it may be speculative to assume that VMT will decrease as gas prices increase, it is clear that fuel prices are rising faster than inflation. What risk analysis which factors in rising fuel prices, lower VMT, carbon taxes, has been done to justify a $4.2 billion investment?

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 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.

L-023-008

The ability to move freight efficiently in the Vancouver/Portland region is



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CITY OF PORTLAND, OREGON
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June 24, 2008

Mayor Potter and Members of Portland City Council
Portland City Hall
1221 SW Fourth Avenue
Portland, OR 97204

Dear Mayor Potter and Members of Portland City Council:

L-023-029

On behalf of the Portland Planning Commission, thank you for the opportunity to share our recommendations with you as you consider moving forward with the proposed Columbia River Crossing (CRC) preferred alternative.

The Planning Commission heard briefings in earlier stages of CRC planning several times during 2006 and early 2007. More recently, we were briefed on CRC alternatives March 11, 2008 and April 8, 2008. A public hearing was held before the Planning Commission on May 13, 2008, and we subsequently received additional written testimony.

In evaluating the proposed CRC alternatives, we have considered the project from both a City and a regional perspective. We have based our evaluation and conclusions upon public testimony, our questions, subsequent answers from the CRC team, and our discussion.

As it has been presented to the Planning Commission, the question that City Council will vote on is whether to approve a replacement bridge with light rail and tolls as the locally preferred alternative. Our understanding is that all other decisions about the design and size of the bridge remain on the table.

L-023-030

Based on the information and testimony we have received, we believe that a replacement bridge will best meet the safety, seismic, and congestion mitigation and freight movement goals for the Bridge Impact Area. However, we have serious concerns about the bridge design we have seen to date, and how it would impact the Portland metro area.

Below we have outlined our considerations and concerns. Additionally, we have included Attachment A that modifies a PDOT staff recommendation and constitutes, along with this letter, a detailed Planning Commission's recommendation to you.

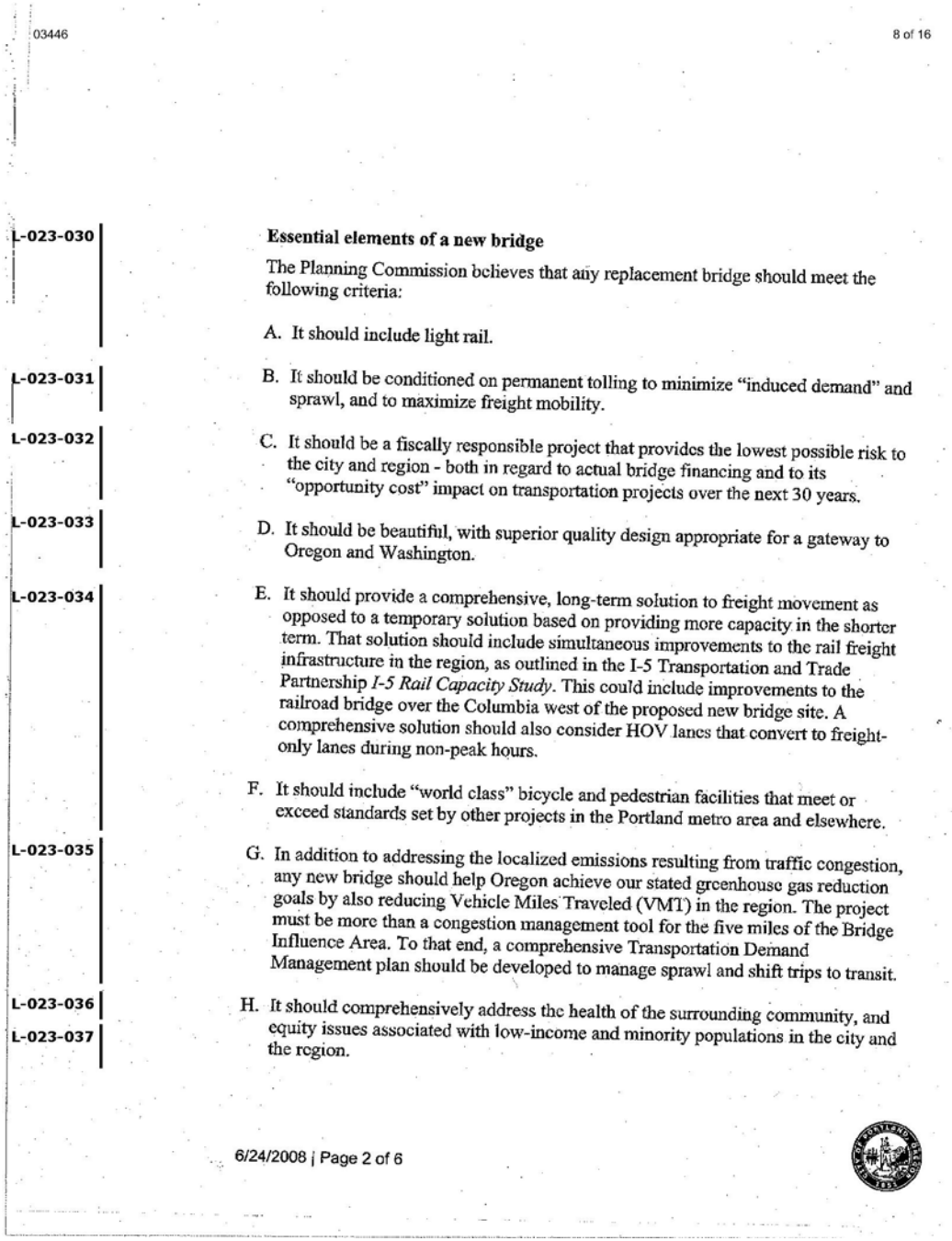
critical to the overall health of our economy. As such, the CRC project is designed to improve freight mobility on I-5, as well as make it safer and easier for trucks to get on and off I-5 to reach businesses and Port facilities. The Freight Working Group (FWG), comprised of representatives of the Vancouver-Portland 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.

L-023-009

Please see response to L-023-008, above.

L-023-010

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



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L-023-030 **Essential elements of a new bridge**

The Planning Commission believes that any replacement bridge should meet the following criteria:

A. It should include light rail.

L-023-031 B. It should be conditioned on permanent tolling to minimize "induced demand" and sprawl, and to maximize freight mobility.

L-023-032 C. It should be a fiscally responsible project that provides the lowest possible risk to the city and region - both in regard to actual bridge financing and to its "opportunity cost" impact on transportation projects over the next 30 years.

L-023-033 D. It should be beautiful, with superior quality design appropriate for a gateway to Oregon and Washington.

L-023-034 E. It should provide a comprehensive, long-term solution to freight movement as opposed to a temporary solution based on providing more capacity in the shorter term. That solution should include simultaneous improvements to the rail freight infrastructure in the region, as outlined in the I-5 Transportation and Trade Partnership *I-5 Rail Capacity Study*. This could include improvements to the railroad bridge over the Columbia west of the proposed new bridge site. A comprehensive solution should also consider HOV lanes that convert to freight-only lanes during non-peak hours.

F. It should include "world class" bicycle and pedestrian facilities that meet or exceed standards set by other projects in the Portland metro area and elsewhere.

L-023-035 G. In addition to addressing the localized emissions resulting from traffic congestion, any new bridge should help Oregon achieve our stated greenhouse gas reduction goals by also reducing Vehicle Miles Traveled (VMT) in the region. The project must be more than a congestion management tool for the five miles of the Bridge Influence Area. To that end, a comprehensive Transportation Demand Management plan should be developed to manage sprawl and shift trips to transit.

L-023-036 H. It should comprehensively address the health of the surrounding community, and
L-023-037 equity issues associated with low-income and minority populations in the city and the region.

6/24/2008 | Page 2 of 6

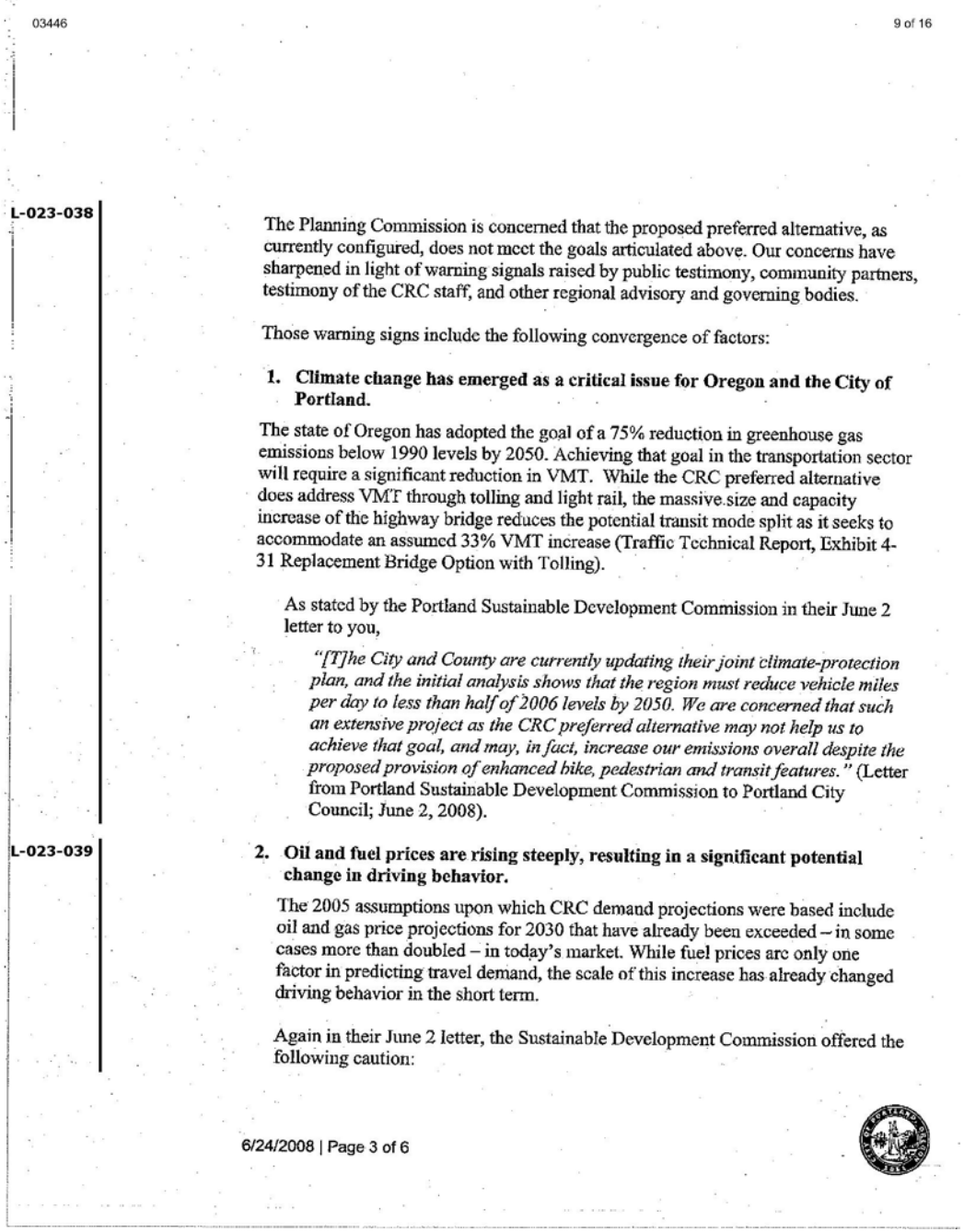
expected to cross the river with a project in 2030 than without a project. This is due to the provision of improved transit service and tolling.

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.

L-023-011

The FEIS has many sections which address specific contributors to livability (for example, see sections on Neighborhoods, Visual and Aesthetics, and Air Quality), and the CRC project will likely result in specific livability benefits relative to the No-Build Alternative, including less cut-through traffic on local streets, lower traffic noise levels, and improved access to transit and bicycle and pedestrian infrastructure.

Public safety is addressed in the neighborhoods (Section 3.5) and public services (Section 3.6) sections of Chapter 3. The project has no adverse effects related to public safety, and will actually contribute numerous improvements through the use of a Crime Prevention Through Environmental Design (CPTED) approach to design of transit stations on Hayden Island and in Vancouver.



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L-023-038

The Planning Commission is concerned that the proposed preferred alternative, as currently configured, does not meet the goals articulated above. Our concerns have sharpened in light of warning signals raised by public testimony, community partners, testimony of the CRC staff, and other regional advisory and governing bodies.

Those warning signs include the following convergence of factors:

1. **Climate change has emerged as a critical issue for Oregon and the City of Portland.**

The state of Oregon has adopted the goal of a 75% reduction in greenhouse gas emissions below 1990 levels by 2050. Achieving that goal in the transportation sector will require a significant reduction in VMT. While the CRC preferred alternative does address VMT through tolling and light rail, the massive size and capacity increase of the highway bridge reduces the potential transit mode split as it seeks to accommodate an assumed 33% VMT increase (Traffic Technical Report, Exhibit 4-31 Replacement Bridge Option with Tolling).

As stated by the Portland Sustainable Development Commission in their June 2 letter to you,

"[T]he City and County are currently updating their joint climate-protection plan, and the initial analysis shows that the region must reduce vehicle miles per day to less than half of 2006 levels by 2050. We are concerned that such an extensive project as the CRC preferred alternative may not help us to achieve that goal, and may, in fact, increase our emissions overall despite the proposed provision of enhanced bike, pedestrian and transit features." (Letter from Portland Sustainable Development Commission to Portland City Council; June 2, 2008).

L-023-039

2. **Oil and fuel prices are rising steeply, resulting in a significant potential change in driving behavior.**

The 2005 assumptions upon which CRC demand projections were based include oil and gas price projections for 2030 that have already been exceeded – in some cases more than doubled – in today's market. While fuel prices are only one factor in predicting travel demand, the scale of this increase has already changed driving behavior in the short term.

Again in their June 2 letter, the Sustainable Development Commission offered the following caution:

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L-023-012

The CRC project is a being designed to meet the commitments from its sponsoring agencies to sustainability. The FEIS comprehensively evaluates how this project will affect the many elements of our environment. This evaluation found many benefits from this project, including a shift in future travel patterns toward reduced motor vehicle usage and greater transit ridership. Regarding construction specifically, many decisions regarding construction materials and practices will depend on decisions regarding design, contracting, material availability and pricing, and other factors that cannot be finalized at this phase of project planning. These and other options will be considered as the project moves forward into final design and construction, in order to reduce GHG emissions during construction.

L-023-013

The proposed design will serve to encourage walking, cycling, and transit. Not only will the project extend the MAX system 2.9 miles into Vancouver, but the bike and pedestrian pathway will also be substantially improved. The use of tolls will also contribute to behavioral changes. Several pedestrian and bicycle forecasting scenarios predict that pedestrian and bicycle travel demands would increase substantially if a new I-5 bridge was constructed with sufficient multi-modal facilities.

Transit mode share is expected to increase substantially by 2030 for both the No-Build Alternative and the LPA. With the LPA, trips between the key markets have a mode split that exceeds that in the 2030 No-Build Alternative for all three transit service markets that were studied. Additionally, with the LPA, the percent increase of transit trips would grow substantially for the markets connecting Oregon and Washington commuters.

Please refer to Section 3.1 of the FEIS for details regarding the bike and

L-023-039

"[W]e are concerned that the data underpinning the CRC preferred alternative may be outdated or flawed...We believe fundamental changes in behavior are occurring over a relatively short period of time because citizens are reacting to both high gas prices as well as a general increase in awareness of climate change. For example, bridge traffic over the Columbia River has decreased by at least 3 percent since February 2008. In addition, gas consumption on a per capita basis has decreased to 1966 levels and vehicle miles traveled (VMT) in Oregon are down, while transit use has increased." (Letter from Portland Sustainable Development Commission to Portland City Council; June 2, 2008).

In the face of these factors, the Planning Commission believes it would be imprudent not to consider possible long-term changes in driver behavior as decisions about the size, cost, and design of the bridge are considered.

L-023-040

3. **Steadily declining gas tax revenues have resulted in a serious and pervasive transportation funding shortfall at the state and city levels.**

If the new bridge is to be funded in any part by statewide gas taxes, that funding presents several levels of risk – both to the project funding itself and to other as-yet-unfunded transportation priorities in the Portland region.

A gas tax-based project has particular financial risk and volatility. Any reduction in state gas tax revenues (based on improved technology or on driver response to rising fuel costs, or both) means the project could consume a greater percentage of a potential gas tax increase than anticipated. In turn, this could further reduce the already insufficient gas tax revenues available to the City of Portland to meet the growing backlog of transportation investment needs. Given the importance of the CRC to the state as a whole, we believe any Oregon gas tax funding for the project should come from the state's share of gas tax revenue.

As you know, the City of Portland and PDOT are already making changes to address these realities. In a recent statement, Mayor-elect Sam Adams pledged that the City, in order to deal with reduced transportation revenues and increasing fuel costs, will 1) *evaluate all capital projects to ensure recent price increases are included;* and 2) *examine opportunities to reduce fuel consumption.* We urge you to do the same for this project.

pedestrian system, mode split, and other improvements to the transportation system.

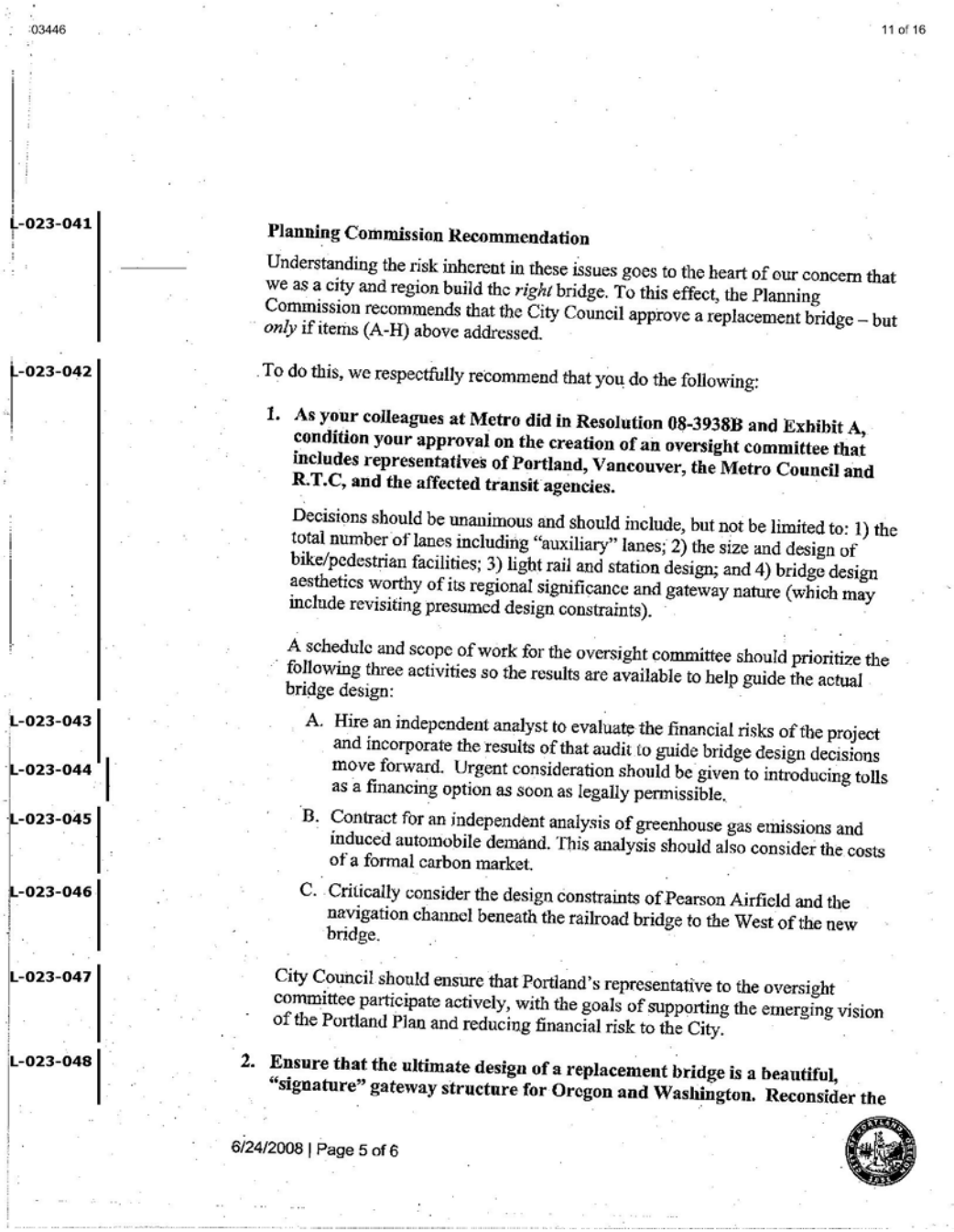
L-023-014

No analysis was conducted to substantiate the project's ability to *promote* equity. However, the project is providing transportation benefits, some of which (transit and pedestrian facilities in particular) have been found to disproportionately benefit lower income users. The project team did complete an analysis to determine whether the project would disproportionately impact lower income residents. The conclusion was that there is a potential for such related to the tolling aspect of the project. However, these impacts could be mitigated. Please refer to Section 3.5 of the FEIS and the Environmental Justice Technical Report.

L-023-015

Impacts on local streets and development patterns as a result of the CRC project have been identified, discussed, and documented as part of the DEIS and FEIS. Please see Section 3.1 of the FEIS for an updated discussion of local street impacts and Section 3.4 of the FEIS for a discussion of land use impacts. In short, Hayden Island's roadways would experience less congestion under the LPA than with the No-Build Alternative and the CRC project would increase the potential for transit-oriented development to occur. Interstate Avenue would experience less change relative to Hayden Island, but would have impacts such as gaining more frequent light rail service and experiencing degraded traffic operations at Interstate and Going Street (mitigation would be provided for the impacts at Interstate and Going). The indirect land use impacts include the potential for a slight increase in development activity near the I-5 corridor.

The CRC project design for interchanges, roadway elements, transit stations, and other facilities will be context-sensitive and reflect the



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L-023-041

Planning Commission Recommendation

Understanding the risk inherent in these issues goes to the heart of our concern that we as a city and region build the *right* bridge. To this effect, the Planning Commission recommends that the City Council approve a replacement bridge – but *only* if items (A-H) above addressed.

L-023-042

To do this, we respectfully recommend that you do the following:

1. **As your colleagues at Metro did in Resolution 08-3938B and Exhibit A, condition your approval on the creation of an oversight committee that includes representatives of Portland, Vancouver, the Metro Council and R.T.C, and the affected transit agencies.**

   Decisions should be unanimous and should include, but not be limited to: 1) the total number of lanes including "auxiliary" lanes; 2) the size and design of bike/pedestrian facilities; 3) light rail and station design; and 4) bridge design aesthetics worthy of its regional significance and gateway nature (which may include revisiting presumed design constraints).

   A schedule and scope of work for the oversight committee should prioritize the following three activities so the results are available to help guide the actual bridge design:

   L-023-043

   A. Hire an independent analyst to evaluate the financial risks of the project and incorporate the results of that audit to guide bridge design decisions

   L-023-044

   move forward. Urgent consideration should be given to introducing tolls as a financing option as soon as legally permissible.

   L-023-045

   B. Contract for an independent analysis of greenhouse gas emissions and induced automobile demand. This analysis should also consider the costs of a formal carbon market.

   L-023-046

   C. Critically consider the design constraints of Pearson Airfield and the navigation channel beneath the railroad bridge to the West of the new bridge.

   L-023-047

   City Council should ensure that Portland's representative to the oversight committee participate actively, with the goals of supporting the emerging vision of the Portland Plan and reducing financial risk to the City.

L-023-048

2. **Ensure that the ultimate design of a replacement bridge is a beautiful, "signature" gateway structure for Oregon and Washington. Reconsider the**

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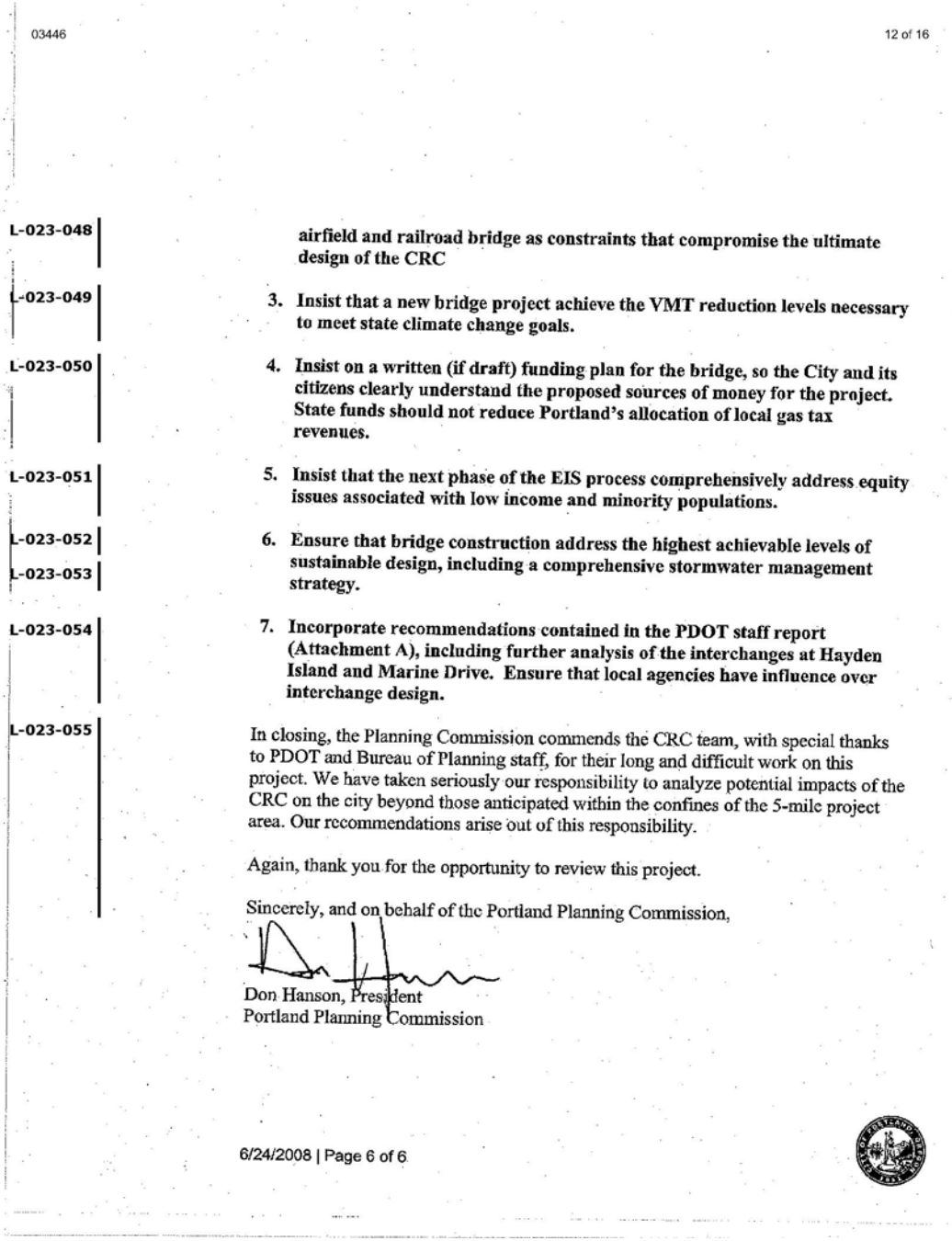
unique character of the surrounding area. CRC formed a 14-member, bi-state Urban Design Advisory Group (UDAG), made up of design professionals and neighborhood representatives. All UDAG meetings were open to the public to attend and observe, and were facilitated by the mayors of both the City of Vancouver and City of Portland. Goals of the UDAG included achieving "design excellence that can be embraced by affected communities and users" and providing "a landmark bridge that is both inspired and inspiring and fully integrates the design and function of the structure with the urban design elements." Working closely with project designers, UDAG provided input and guidance on integrating the new facilities with the surrounding community. This work included identifying significant iconography (for example, symbols and patterns) that reflects the history of the area, the Native American communities, early pioneers, and other significant themes. These images will be incorporated into art master plans. A more detailed discussion of bridge designs can be found in the Visual and Aesthetics Technical Report supporting the FEIS.

L-023-016

Please see the response to L-023-017, below.

L-023-017

The protection of Pearson Field, although important from the perspective of historic resource protection, the local economy, the provision of public services, and preferences stated by the City of Vancouver, is not the only factor influencing bridge heights over the Columbia River. Possible intrusions into Portland International Airport airspace, maintenance of marine navigation, construction staging, maintaining I-5 traffic, and constraints imposed by the location and alignment of the river crossing all constrain the ultimate design of the bridge. The upstream river crossing alignment was dropped for further consideration in October 2007. The downstream option has a curved alignment primarily for construction staging purposes, and connecting into existing I-5. The



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L-023-048 airfield and railroad bridge as constraints that compromise the ultimate design of the CRC

L-023-049 3. Insist that a new bridge project achieve the VMT reduction levels necessary to meet state climate change goals.

L-023-050 4. Insist on a written (if draft) funding plan for the bridge, so the City and its citizens clearly understand the proposed sources of money for the project. State funds should not reduce Portland's allocation of local gas tax revenues.

L-023-051 5. Insist that the next phase of the EIS process comprehensively address equity issues associated with low income and minority populations.

L-023-052 6. Ensure that bridge construction address the highest achievable levels of
L-023-053 sustainable design, including a comprehensive stormwater management strategy.

L-023-054 7. Incorporate recommendations contained in the PDOT staff report (Attachment A), including further analysis of the interchanges at Hayden Island and Marine Drive. Ensure that local agencies have influence over interchange design.

L-023-055 In closing, the Planning Commission commends the CRC team, with special thanks to PDOT and Bureau of Planning staff, for their long and difficult work on this project. We have taken seriously our responsibility to analyze potential impacts of the CRC on the city beyond those anticipated within the confines of the 5-mile project area. Our recommendations arise out of this responsibility.

Again, thank you for the opportunity to review this project.

Sincerely, and on behalf of the Portland Planning Commission,

Don Hanson, President
Portland Planning Commission

6/24/2008 | Page 6 of 6

curved alignment limits the feasibility of several different structure types.

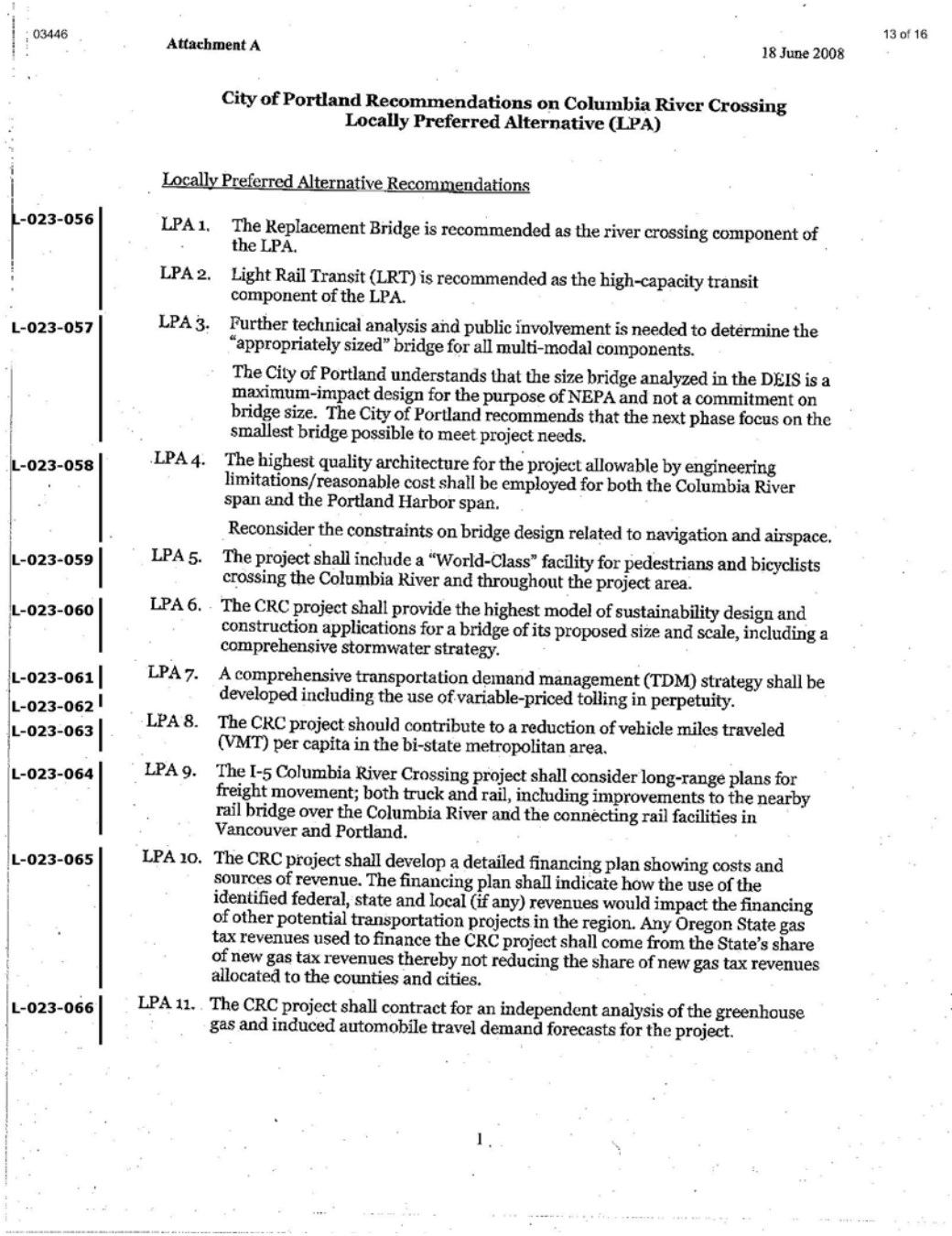
Since the publication of the DEIS, the Urban Design Advisory Group (UDAG) met multiple times to discuss the design of the bridges and ultimately endorsed the two-bridge concept in January 2009 and also endorsed the open-web concept in September of 2009. The Project Sponsors Council endorsed a two-bridge option in June of 2009, and also endorsed the Pedestrian and Bicycle Advisory Committee recommendations for a covered pathway with the conditions of the maintenance and security plan in September of 2009. Then in February 2011, the CRC Bridge Review Panel recommended that the project discontinue work on the open-web concept and instead select either a composite deck truss, tied arch or cable-stayed bridge type. Following additional analysis and outreach, the governors, in April 2011, announced selection of the composite deck truss as the preferred bridge type. For a more detailed description of the limitations and opportunities that influenced the bridge type selection process, please see Technical Screening Study Final Report December 2008, Aesthetic Screening Study Final Report March 2009, Final Type Study Report October 2009, CRC Project Bridge Review Panel Report, February 2011, CRC: Key Findings and Recommendation Related to Bridge Type, February 2011 and the memo from the governors offices – Moving Forward; CRC Background, Bridge-type Major Factors, Next Steps, April 2011. Much of this information is also summarized in Chapter 2 of the FEIS.

L-023-018

The continued coordination with sponsoring agencies, regulatory agencies, and project advisory bodies will ensure such consistency. Project documents and processes also provide binding commitments.

L-023-019

Please see response to L-023-007.



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18 June 2008

City of Portland Recommendations on Columbia River Crossing
Locally Preferred Alternative (LPA)

Locally Preferred Alternative Recommendations

L-023-056
LPA 1. The Replacement Bridge is recommended as the river crossing component of the LPA.

LPA 2. Light Rail Transit (LRT) is recommended as the high-capacity transit component of the LPA.

L-023-057
LPA 3. Further technical analysis and public involvement is needed to determine the "appropriately sized" bridge for all multi-modal components.

The City of Portland understands that the size bridge analyzed in the DEIS is a maximum-impact design for the purpose of NEPA and not a commitment on bridge size. The City of Portland recommends that the next phase focus on the smallest bridge possible to meet project needs.

L-023-058
LPA 4. The highest quality architecture for the project allowable by engineering limitations/reasonable cost shall be employed for both the Columbia River span and the Portland Harbor span.

Reconsider the constraints on bridge design related to navigation and airspace.

L-023-059
LPA 5. The project shall include a "World-Class" facility for pedestrians and bicyclists crossing the Columbia River and throughout the project area.

L-023-060
LPA 6. The CRC project shall provide the highest model of sustainability design and construction applications for a bridge of its proposed size and scale, including a comprehensive stormwater strategy.

L-023-061
L-023-062
LPA 7. A comprehensive transportation demand management (TDM) strategy shall be developed including the use of variable-priced tolling in perpetuity.

L-023-063
LPA 8. The CRC project should contribute to a reduction of vehicle miles traveled (VMT) per capita in the bi-state metropolitan area.

L-023-064
LPA 9. The I-5 Columbia River Crossing project shall consider long-range plans for freight movement; both truck and rail, including improvements to the nearby rail bridge over the Columbia River and the connecting rail facilities in Vancouver and Portland.

L-023-065
LPA 10. The CRC project shall develop a detailed financing plan showing costs and sources of revenue. The financing plan shall indicate how the use of the identified federal, state and local (if any) revenues would impact the financing of other potential transportation projects in the region. Any Oregon State gas tax revenues used to finance the CRC project shall come from the State's share of new gas tax revenues thereby not reducing the share of new gas tax revenues allocated to the counties and cities.

L-023-066
LPA 11. The CRC project shall contract for an independent analysis of the greenhouse gas and induced automobile travel demand forecasts for the project.

1

L-023-020

Please see response to L-023-002, above.

L-023-021

Many well coordinated TDM/TSM programs are already in place in the Portland-Vancouver Metropolitan region and supported by agencies and adopted plans. In most cases, the impetus for the programs is from state-mandated programs: Oregon's Employee Commute Options rule and Washington's Commute Trip Reduction law.

The physical and operational elements of the CRC project provide the greatest TDM opportunities by promoting other modes to fulfill more of the travel needs in the project corridor. These include: major new light rail line in exclusive right-of-way, as well as express bus and feeder routes; modern bicycle and pedestrian facilities that accommodate more bicyclists and pedestrians, and improve connectivity, safety, and travel time; park and ride lots and garages; and a variable toll on the highway crossing.

In addition to these fundamental elements of the project, facilities and equipment would be implemented that could help existing or expanded TSM programs maximize capacity and efficiency of the system. These include: replacement or expanded variable message signs or other traveler information systems in the CRC project area; expanded incident response capabilities; queue jumps or bypass lanes for transit vehicles and other designated vehicles where multi-lane approaches are provided at ramp signals for entrance ramps; and expanded traveler information systems with additional traffic monitoring equipment and cameras.

The CRC project has crafted a multi-pronged TDM program to address capacity demands during construction of the project. The program promotes alternate modes of transportation for those crossing the bridge

L-023-067

L-023-068

Hayden Island Interchange Recommendations

HI 1. The CRC project must provide an ultra high-quality LRT station on Hayden Island that provides a community focal point. Safe, attractive and accessible pedestrian and bicycle facilities shall be incorporated into the station area design.

HI 2. CRC project arterial streets providing access to the interchange shall also serve community needs, and provide bicycle and pedestrian facilities and street trees. Smaller scale arterial streets than currently indicated in the DEIS should be considered.

HI 3. The western termini of the CRC project arterial street improvements on Hayden Island Drive and Jantzen Beach Drive should be extended to the planned primary north-south future public street (approximately 600 feet west of the freeway ramp intersections).

HI 4. The extension of Tomahawk Drive under the freeway shall be designed as a community main street highlighting the needs of pedestrians and bicyclists and local traffic access. Design issues to be resolved include the provision of acceptable vertical and horizontal clearances, property access, stormwater management and creating an attractive and safe environment under the freeway.

HI 5. The CRC project should participate and allow for the re-use of areas north of Hayden Island Drive that are disrupted by construction or used for construction activities, for open space, stormwater management and habitat restoration.

HI 6. The CRC project, ODOT and the City shall work cooperatively in the development and adoption of the required Interchange Area Management Plan (IAMP). The IAMP shall consider the principles of IAMP standards balanced with current and future property access and in coordination with a master street plan for Hayden Island.

Marine Drive Interchange Recommendations

MD 1. The next phase of the CRC project development process should continue to evaluate the interchange design alternatives presented in the DEIS.

The evaluation should recognize that this is a freight priority interchange and also consider potential future land use opportunities, the current and future needs of Expo and the protection of the Vanport wetlands.

MD 2. Implement a network of pedestrian and bicycle facilities to improve connectivity in the interchange area, and connecting to Bridgeton and to Hayden Island under all interchange design options.

MD 3. The CRC project should include an extension of the pedestrian and bicycle facilities to Bridgeton including a first phase construction of the Bridgeton Trail.

MD 4. Under all interchange design options the potential for a local street connection (non-freeway) to Kenton should be evaluated.

and includes increased carpool, vanpool and transit options and promotion of pedestrian and bicycle trips.

L-023-022

Please see response to L-023-005, above.

L-023-023

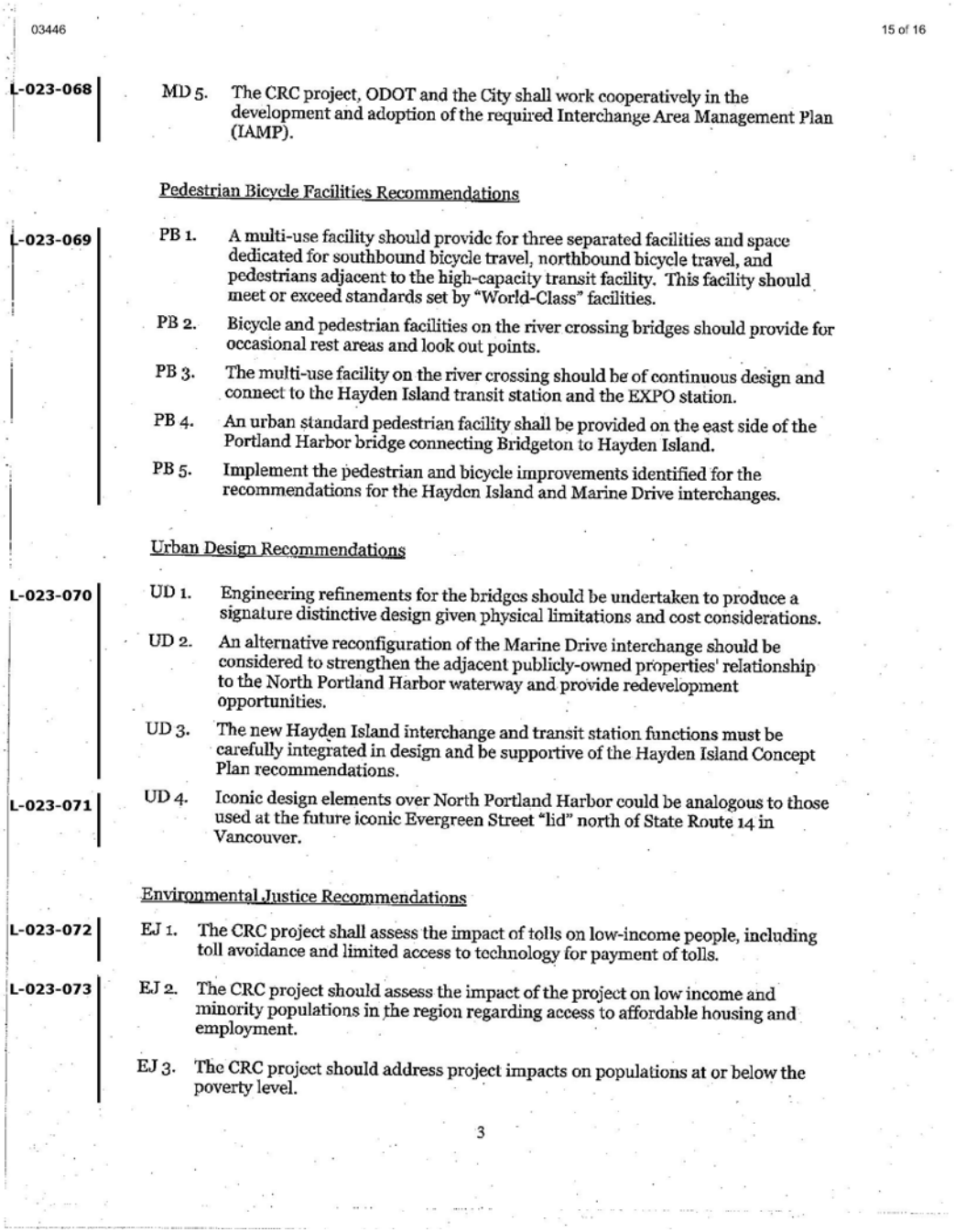
Thank you for your detailed inquiry into the Environmental Justice analysis, which includes the analysis of potential effects to Title VI populations. We have assessed the various issues that you have requested. Discussion of these can be found in great detail in the Environmental Justice Technical Report, which is an appendix to the DEIS and the FEIS.

L-023-024

It would be overly speculative to estimate whether or not emissions would exceed future standards that have not yet been established or proposed. However, as noted in the FEIS air quality section (3.10), 2030 emissions from I-5 would be well within current standards.

L-023-025

Crash severity is related to “impact speed,” which is not necessarily directly related to the operating speed on a modern freeway. There are several aspects of the CRC project that can be expected to reduce impact speed even if operating speed were to increase slightly. For example, the project proposes removal of barriers adjacent to the roadway and creation of clear zones. These are expected to not only reduce the frequency of crashes, but also reduce the severity because of additional deceleration that will occur before a vehicle that leaves the travelled way impacts a fixed object. In multi-vehicle crashes, the difference in speed between the vehicles is an important factor and improving areas with high weaving and merging volumes will help to



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L-023-068 MD 5. The CRC project, ODOT and the City shall work cooperatively in the development and adoption of the required Interchange Area Management Plan (IAMP).

Pedestrian Bicycle Facilities Recommendations

L-023-069
PB 1. A multi-use facility should provide for three separated facilities and space dedicated for southbound bicycle travel, northbound bicycle travel, and pedestrians adjacent to the high-capacity transit facility. This facility should meet or exceed standards set by "World-Class" facilities.

PB 2. Bicycle and pedestrian facilities on the river crossing bridges should provide for occasional rest areas and look out points.

PB 3. The multi-use facility on the river crossing should be of continuous design and connect to the Hayden Island transit station and the EXPO station.

PB 4. An urban standard pedestrian facility shall be provided on the east side of the Portland Harbor bridge connecting Bridgeton to Hayden Island.

PB 5. Implement the pedestrian and bicycle improvements identified for the recommendations for the Hayden Island and Marine Drive interchanges.

Urban Design Recommendations

L-023-070
UD 1. Engineering refinements for the bridges should be undertaken to produce a signature distinctive design given physical limitations and cost considerations.

UD 2. An alternative reconfiguration of the Marine Drive interchange should be considered to strengthen the adjacent publicly-owned properties' relationship to the North Portland Harbor waterway and provide redevelopment opportunities.

UD 3. The new Hayden Island interchange and transit station functions must be carefully integrated in design and be supportive of the Hayden Island Concept Plan recommendations.

L-023-071
UD 4. Iconic design elements over North Portland Harbor could be analogous to those used at the future iconic Evergreen Street "lid" north of State Route 14 in Vancouver.

Environmental Justice Recommendations

L-023-072
EJ 1. The CRC project shall assess the impact of tolls on low-income people, including toll avoidance and limited access to technology for payment of tolls.

L-023-073
EJ 2. The CRC project should assess the impact of the project on low income and minority populations in the region regarding access to affordable housing and employment.

EJ 3. The CRC project should address project impacts on populations at or below the poverty level.

3

reduce speed differentials. In conclusion, the safety benefits cited above can be expected to more than offset a possible increase in severity that could be attributed to a modest increase in operating speed on the proposed facility.

L-023-026

Industrial and airport facilities are generally regulated by federal and state air quality standards, and thus subject to similar requirements as projects that affect highway operations such as CRC. The air quality modeling done to evaluate the effects of the CRC indicates that overall the project should lower vehicle emissions in most areas around the project relative to the No-Build Alternative, and thus contribute positively toward improving air quality. Please see Chapter 3 (Section 3.10) for more information regarding the project's direct effects on air quality and Chapter 3 (Section 3.19.9) for information regarding cumulative air quality effects.

L-023-027

As discussed in Chapter 3 (Section 3.11) of the FEIS, and in greater detail in the Noise and Vibration Technical Report, the state departments of transportation implement the FHWA traffic noise impact regulations. While these regulations establish criteria for when mitigation must be considered, they do not require mitigation be implemented in all cases. The LPA includes mitigation in the form of noise walls that substantially reduces the number of noise impacted properties relative to existing conditions and the No-Build Alternative. However, in some cases, noise walls are either not feasible or not reasonable, and therefore were not recommended for the project. Chapter 3 (Section 3.11) identifies each property impacted by traffic noise and explains whether noise wall mitigation is feasible and reasonable for each of these properties.

Process Recommendations post LPA

L-023-074

PR 1. The City of Portland supports the formation of a Local Oversight Committee (LOC) consisting of the six local and regional project sponsors (City of Portland, City of Vancouver, Metro, RTC, TriMet and C-Tran) who shall participate with ODOT and WSDOT in major post-LPA decisions including:

- The size, location, design and aesthetics of the bridges and highway facility in the project area
- The size, design and location of the bicycle and pedestrian facilities in the project area
- The location and design of the light rail transit facility including stations

The decisions of the LOC shall be reached by consensus. The Portland City Council shall conduct public hearings on major post-LPA decisions.

ODOT and the City of Portland shall agree on the design of the Hayden Island and Marine Drive interchanges.

The LOC shall review and comment on post-LPA studies and plans, including:

- Reconsideration of bridge design constraints related to navigation and airspace (see LPA 4)
- CRC project finance plan (see LPA 10)
- An independent analysis of greenhouse gas and induced automobile travel demand forecasts (see LPA 11)

The City of Portland believes it essential that the financial, greenhouse gas and review of design constraints be immediate priorities of the Local Oversight Committee. The LOC will need the results of this analysis to adequately consider revisions to the project and insure that these revisions can be completed in a timely manner. The City of Portland recommends that this be considered in the decision, scope and schedule of work to be determined by the Governors and the LOC.

L-023-075

PR 2. The existing advisory groups for freight, pedestrians/bicycles, urban design and environmental justice should continue their roles for post-LPA activities. The CRC project process should also consider assembling a combined design advisory group.

L-023-076

PR 3. A process agreement should be established between the City and CRC project management to outline an on-going review, approval, and public hearing role for City Council for post-LPA activities.

L-023-077

PR 4. The Bi-State Coordinating Committee should continue to review post-LPA project recommendations and comment at important milestones. This group should also consider updating their land use accord to assure a stronger role in land use/transportation coordination matters particularly for high-capacity transit planning between the states.

L-023-028

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), and include a detailed breakdown of estimated costs of vehicle ownership. This report is available by contacting the CRC project office. 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.

L-023-029

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

L-023-030

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.

L-023-031

Tolling was evaluated in the DEIS and included in the LPA for two important reasons. First, a toll may be necessary to pay for the construction of this project, as discussed in Chapter 4 of the FEIS. Second, a toll provides a valuable travel demand management tool that encourages travelers to take alternative modes (including light rail provided by this project), travel at off-peak periods, or reduce their auto trips. This demand management reduces congestion and extends the effective service of the facility.

It is not yet clear how the Washington and Oregon Transportation Commissions will structure the tolling system, or how long the tolls will be in place. For more information about such, please refer to Chapter 4 of the FEIS.

L-023-032

CRC assumes funds allocated to other projects would remain dedicated to those projects, and anticipates needing to find new funds to finance the project. Funding for the project will come from a variety of sources

including federal grants that would not be available to other transportation projects in the region, State of Oregon, State of Washington, regional and local sources. In addition, it is assumed that the replacement bridge will be tolled. Please refer to Chapter 4 of the FEIS for a description of the current plans for funding construction and operation of the LPA.

L-023-033

The CRC project design for interchanges, roadway elements, transit stations, and other facilities will be context-sensitive and reflect the unique character of the surrounding area. CRC formed a 14-member, bi-state Urban Design Advisory Group (UDAG), made up of design professionals and neighborhood representatives. All UDAG meetings are open to the public to attend and observe. Goals of the UDAG include achieving “design excellence that can be embraced by affected communities and users” and providing “a landmark bridge that is both inspired and inspiring and fully integrates the design and function of the structure with the urban design elements." Working closely with project designers, UDAG will provide input and guidance on integrating the new facilities with the surrounding community. This work includes identifying significant iconography (for example, symbols and patterns) that will reflect the history of the area, the Native American communities, early pioneers, or other significant themes. These images will be incorporated into an art master plan. Additional discussion of bridge designs can be found in Chapter 2 of the FEIS and in the Visual and Aesthetics Technical Report supporting the FEIS.

L-023-034

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 form 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 be driven by truck to or from the rail lines; and, increased rail service would likely lead to greater use of trucks for this very reason.

Regarding freight only lanes, the Freight Working Group and project team analyzed a number of ideas, including truck-only lanes in the project area. It was determined that truck-only lanes tend to primarily benefit trucks traveling long distances. For truck-only lanes covering relatively short distances, the maneuvers required to enter and exit the truck-only lane limits their usefulness. Several of the regions major truck freight generators are accessed to and from I-5 in the project area, such as the Port of Vancouver, the Port of Portland, and the Columbia Corridor. Truck-only lanes would not effectively benefit trucks traveling to and from these destinations. Rather than creating truck-only lanes, the CRC project will benefit truck freight through such actions as reducing congestion and redesigning interchanges so they are easier and safer for trucks to use.

As discussed in the DEIS, a replacement bridge over the Columbia River will include dramatically improved bicycle and pedestrian facilities by

providing:

- A new 16 to 20 foot multi-use pathway over the Columbia River completely separated from vehicle traffic due to the design of the Stacked Transit Highway Bridge
- Protections from traffic noise, exhaust and debris for pedestrians and bicyclists on the river crossing
- More direct connections on each side of the river, consisting of stairs, ramps, and elevators, as well as pathway extensions that connect in with existing or planned facilities and public transit.
- Many new or enhanced sidewalks, bike lanes, and crosswalks near the bridge and throughout the project area

Since the publication of the DEIS in May 2008, and the selection of the LPA in July 2008, the CRC project team has continued to work with the Pedestrian and Bicycle Advisory Committee and project partners to refine route and facility design. The final design, as described in Chapter 2 (Section 2.2) of the FEIS, is the outcome of a long collaboration process.

L-023-035

Please see response to L-023-021, above.

L-023-036

The DEIS and FEIS analyses of impacts to air quality, noise, electromagnetic fields, and other factors that can affect human health, are based on comparing the project's impacts to specific standards that have been established to protect public health. Ensuring the project will meet or better these standards is used as a method to determine whether the project will have an adverse effect on human health. The criteria used in the DEIS and the FEIS are based on government regulatory standards where they have been established (such as for

criteria air pollutants). Where regulatory standards do not exist, then the criteria are based on government agency guidelines or thresholds established by public health and safety professionals.

Modeling conducted for the DEIS and FEIS indicate that air emissions from I-5 traffic will be significantly lower by 2030 than they are today, and will be well below established regulatory standards designed to protect human health (see Section 3.10 of the DEIS and Section 3.10 of the FEIS). Noise impacts from I-5 traffic, with the mitigation proposed for the CRC project, will also be substantially lower than today. Noise from the light rail can be mitigated below FTA's noise impact criteria as well (see Section 3.11 of the DEIS and Section 3.11 of the FEIS).

The DEIS did not explicitly evaluate potential effects on physical activity or obesity. However, the DEIS and FEIS both discuss how the project could affect the surrounding urban form that would increase opportunities for physical activity, including: improved bicycle and pedestrian facilities crossing the river; improved connections between existing and new bike and pedestrian paths and across I-5; the LRT extension and transit stations that support increased pedestrian-oriented development; improved sidewalks in Vancouver; and new pedestrian and bicycle connections crossing I-5. The project would also reduce daily hours of congestion on I-5 compared to the No-Build and provide greatly improved transit service, both of which decrease the amount of time travelers spend in cars, thus further promoting physical activity.

L-023-037

Chapter 3 (Section 3.5) of the FEIS and the Environmental Justice Technical Report address potential impacts to low-income populations and equity issues.

L-023-038

As noted in Chapter 3 (Sections 3.1 and 3.19) of the FEIS, the LPA

would reduce VMT and greenhouse gas emissions below the 2030 No-Build Alternative projections. Please see response to L-023-007 for more information.

L-023-039

The price of crude oil was nearly $140/barrel around the time that the DEIS was published. The travel demand modeling in the DEIS, however, used a vehicle operating cost assumption based on a much lower price of crude oil. A number of commenters were concerned that this could exaggerate future travel demand and result in the construction of a larger facility than would be necessary, if fuel prices rise significantly.

One of the key reasons that we do not use the current price of crude oil as an assumption in models that forecast long term travel demand is that the daily, weekly or even average annual price of crude oil can vary significantly, while the longer term average is much less volatile. While crude oil prices peaked briefly at about $140/barrel in mid-2008, shortly after that they dropped to less than $30/barrel. It is important to note too that fuel price changes do not, as a rule, have significant effects on long-term travel demand. 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 limited - some travelers can drive less and/or change from driving to walking, biking or transit for at least some trips; other travelers can not make such changes. During the 2008 increase in gasoline prices transit use increased and off-peak highway travel decreased, but peak period highway travel changed little.

Over the long term, travelers have more options for adjusting to changes in gasoline prices, besides changing driving behavior. Longer term responses to increasing fuel prices can include increases in vehicle fleet fuel efficiency and advances in alternative fuel vehicles. As older vehicles wear out, 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, especially if the price of gasoline rises again. Substantial changes in the vehicle fleet don't occur in the short-term, but when looking ahead to the planning horizon for the CRC project (2030), it's important to remember that most of the vehicles that will be on American roads in 2030 have not been designed yet, let alone purchased. Over the longer term life of the river crossing infrastructure (100 years or more) the fleet will change many times over, and will adjust to changes in the price and availability of different types of fuels and vehicles.

L-023-040

Please refer to Chapter 4 of the FEIS for a description of the current plans for funding construction and operation of the LPA. This discussion provides an updated assessment of likely funding sources for this project, though it is not common practice to receive funding commitments prior to completion of the alternative selection process. As described in the FEIS, project funding is expected to come from a variety of local, state, and federal sources, with federal funding and tolls providing substantial revenue for the construction. As Oregon and Washington businesses and residents will benefit from the project's multi-modal improvements, both states have been identified as contributors to the project. As jurisdictions on both sides of the river seek to encourage non-auto travel, tolls are not anticipated for bikes, pedestrians, and transit users. Lastly, CRC assumes funds allocated to other projects and purposes would remain dedicated to those projects and purposes.

L-023-041

The items (A through H) have all been incorporated with the LPA, except for the following:

1. No commitment has been made to a permanent toll as this will be set by the two state legislatures

2. No improvements to the railroad bridge are included with the LPA. Please see response to comment L-023-034.

L-023-042

The governors of Washington and Oregon formed the Project Sponsors Council (PSC) in late 2008 to provide ongoing advice related to project development. The members include representatives from Portland and Vancouver, the Metro Council, Regional Transportation Commission, and the transit agencies. PSC has deliberated and considered recommendations on auxiliary lanes, size and design of the bicycle and pedestrian facilities, bridge design aesthetics and constraints, financial risks and tolling, and analyses of induced travel demand and greenhouse gas emissions. Information related to formation, membership, and deliberations of PSC can be found in Appendix B of this FEIS and on the CRC Web site at: http://columbiarivercrossing.org/ProjectPartners/ProjectSponsorsCouncil.aspx

L-023-043

There have been numerous independent reviews of different aspects of the project, including the financial plan and bridge design issues and options. Oregon Governor Ted Kulongoski and Washington Governor Chris Gregoire convened an Independent Review Panel (IRP) for the Columbia River Crossing Project in April 2010 to ensure that key project study assumptions and methods are reasonable for the CRC project, including the financial plan. The panel reported its findings to the governors on July 30, 2010, and the CRC project implemented them.

A Columbia River Crossing Bridge Review Panel convened in November 2010 by the Oregon and Washington departments of transportation

submitted its final report in February 2011. The panel was asked to evaluate the open web box girder bridge type previously under consideration for the Columbia River Crossing project, as well as the environmental, regulatory and physical constraints pertinent to the crossing. The panel offered three bridge types for consideration that panel members believe would have less construction risk and be potentially less expensive to construct than the previous bridge type. The three types were deck truss, tied arch and cable-stayed. As a result of the bridge panel's recommendation and public feedback, on April 25, 2011, the governors announced the deck truss bridge as the recommended replacement structure for the aging Interstate 5 bridge.

Governor Kitzhaber asked the Oregon State Treasurer to conduct an independent review of the Columbia River Crossing Project's financing plan. The treasurer's office provided its report to Governor Kitzhaber on July 20, 2011. The treasurer's office and its independent consultants validated much of the CRC's work, and also made tangible recommendations that reduce and manage financial risk. 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. The CRC project incorporated the treasurer's recommendation to level the debt service and adjusted the tolling financial projections found in Chapter 4 of the FEIS to reflect the stalled economic growth. An investment grade analysis will also be conducted prior to bonding.

More information on these, and other, independent reviews is available on the CRC project Web site at http://www.columbiarivercrossing.org/

L-023-044

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.

L-023-045
Please see response to L-023-007.

L-023-046
Please see response to L-023-017.

L-023-047
Mayor Adams has been the City of Portland's representative on the Project Sponsors Council.

L-023-048
The CRC project design for interchanges, roadway elements, transit stations, and other facilities will be context-sensitive and reflect the unique character of the surrounding area. CRC formed a 14-member, bi-state Urban Design Advisory Group (UDAG), made up of design professionals and neighborhood representatives. All UDAG meetings are open to the public to attend and observe, and are facilitated by the mayors of both the City of Vancouver and City of Portland. Goals of the UDAG include achieving “design excellence that can be embraced by affected communities and users” and providing “a landmark bridge that is both inspired and inspiring and fully integrates the design and function of the structure with the urban design elements." Working closely with project designers, UDAG will provide input and guidance on integrating the new facilities with the surrounding community. This work includes identifying significant iconography (for example, symbols and patterns) that will reflect the history of the area, the Native American communities, early pioneers, and other significant themes. These images will be incorporated into an art master plan. A more detailed discussion of bridge designs can be found in the Visual and Aesthetics Technical

Report supporting the FEIS.

Please also see the response to L-023-017.

L-023-049

Please see the response to L-023-007. Travel demand modeling for the FEIS indicates that the CRC project would not reduce VMT enough to meet the entire state's GHG reduction goal, but it will reduce regional VMT below the No-build projections. Meeting the state-wide goals could only occur through the combined reductions of many different actions.

L-023-050

Please see the response to L-023-040.

L-023-051

The Environmental Justice (EJ) analysis for the DEIS was significantly more robust than is required by law or is typical for transportation projects. We have more thoroughly documented the following information in Section 3.5 of the FEIS and in the Environmental Justice Technical Report: project efforts made to outreach, assess, and involve potential EJ populations; what we heard from the outreach; and how the project has responded or adapted to such input.

The FEIS also includes more advanced technical analysis of potential EJ impacts than what was included in the DEIS. For example, the FEIS reports on the demographic analysis of the tolling studies and survey data from displaced businesses and residents.

L-023-052

See response to L-023-012.

L-023-053

Please see Chapter 3 (Section 3.14) of the FEIS and the Water Quality and Hydrology Technical Report for more information on potential stormwater management techniques likely to be included with the project.

L-023-054

CRC project staff has worked closely with City of Portland staff on the design of the Hayden Island and Marine Drive interchanges. Please see the response to L-023-068.

L-023-055

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

L-023-056

Thank you for your comment. 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.

L-023-057

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 additional 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.

L-023-058
Please see response to L-023-017 and L-023-033.

L-023-059
Please see response to L-023-034.

L-023-060
Please see the response to L-023-012 and L-023-053.

L-023-061
Please see the response to L-023-021.

L-023-062
The authority to toll the I-5 crossing is set by federal and state laws. Federal statutes permit a toll-free bridge on an interstate highway to be converted to a tolled facility following the reconstruction or replacement of the bridge, and the CRC project would meet these conditions. Prior to

tolling I-5, Washington and Oregon Departments of Transportation (WSDOT and ODOT) would have to enter into a toll agreement with the U.S. Department of Transportation (USDOT). State legislation from 2008 in Washington permits WSDOT to toll I-5 provided that the tolling of the facility is first authorized by the Washington legislature. Once authorized by the legislature, the Washington Transportation Commission has the authority to set the toll rates. In Oregon, the Oregon Transportation Commission has the authority to toll a facility and to set the toll rates. It is anticipated that prior to tolling I-5, ODOT and WSDOT would enter into a bi-state tolling agreement to establish a cooperative process for imposing tolls, set toll rates, and guide the use of toll revenues.

L-023-063

The gross VMTs in the study area will be slightly reduced with the LPA, relative to the No-Build Alternative, as discussed in Chapter 3 (Section 3.1) of the FEIS. We similarly expect that per capita VMT will also be reduced as a result of the project's tolls, extension of the light rail system, and improvements to bike facilities.

L-023-064

Please see the response to L-023-034.

L-023-065

As the only continuous north-south Interstate on the West Coast connecting the Canadian and Mexican borders, I-5 is vital to the local, regional, and national economy. The I-5 crossing also provides the primary transportation link between Vancouver and Portland, and the only direct connection between the downtown areas of these cities. As described in the DEIS, serious problems face this important crossing, including growing congestion, impaired freight movement, limited public transit options, high auto accident rates, substandard bicycle and pedestrian facilities, and vulnerability to failure in an earthquake. The fact

that other important issues face our communities does not diminish the importance of addressing the problems plaguing the I-5 crossing.

CRC assumes funds allocated to other projects would remain dedicated to those projects, and anticipates needing to find new funds to finance the project. Funding for the project will come from a variety of sources including federal grants that would not be available to other transportation projects in the region, State of Oregon, State of Washington, regional and local sources. In addition, it is assumed that the replacement bridge will be tolled. Please refer to Chapter 4 of the FEIS for a description of the current plans for funding construction and operation of the LPA.

L-023-066

Please see responses to L-023-006 and L-023-007.

L-023-067

Following the selection of the LPA in July of 2008, the CRC enlisted the help of community members from North Portland and Hayden Island – residents, business owners, transit dependent populations, and commuters – who have interest in light rail planning to form the Portland Working Group (PWG). The PWG meets regularly to develop recommendations and provided feedback to the CRC project, the City of Portland and TriMet on a variety of topics, including station area planning. Recommendations provided by the PWG, with consideration of community input and the Hayden Island Plan, were used to develop a set of design principles that would meet the needs of users by maximizing accessibility, while providing a safe and aesthetically-pleasing station environment. For a description of how the PWG has been involved, please see Appendix B, Public Involvement, of the FEIS.

L-023-068

The CRC project includes several improvements to local roads and circulation on Hayden Island. See Chapter 2 of the FEIS for a description of these local road improvements and Appendix B for information on the design process. Further development of local streets will be completed during the design process in coordination with the IAMP process, as needed.

Regarding the Marine Drive Interchange, following the publication of the DEIS in May 2008, and the selection of the LPA in July 2008, the CRC project team established a Stakeholder Group to provide feedback on the function and design of the Marine Drive interchange. This advisory group was comprised of a wide range of stakeholders with strong interests in the final design of this interchange including Metro, TriMet, the Oregon Department of Transportation, the City of Portland, the Port of Portland, trucking and distributions companies, the Audubon Society, nearby property owners or operators (such as Diversified Marine and the Metropolitan Exposition Recreation Commission), as well as community members from the surrounding Bridgeton, Kenton, and East Columbia Neighborhoods.

Working with this advisory group, the CRC project team conducted studies that analyzed the traffic operations, property impacts, and potential environmental effects for a range of potential interchange designs. The Marine Drive interchange design included in the LPA that is analyzed in the FEIS was developed with this stakeholder advisory group to balance many competing interests, including freight mobility, property impacts to nearby properties, and environmental impacts. For more information regarding this interchange, please see Chapter 2 of the FEIS. For more information on the design process, please see Appendix B.

As discussed in the DEIS, a replacement bridge over the Columbia River

will include dramatically improved bicycle and pedestrian facilities. Please see response to L-023-034.

L-023-069
Please see response to L-023-034.

L-023-070
Please see Chapter 2 of the FEIS for more information about the design of the North Portland Harbor and Columbia River bridges as well as the Marine Drive and Hayden Island interchanges.

L-023-071
Please see response to L-023-070.

L-023-072
Please see the response to L-023-003.

L-023-073
Please see Chapter 3 (Section 3.5) of the FEIS and the Environmental Justice Technical Report for the evaluation of project impacts on potential Environmental Justice populations.

L-023-074
Following the close of the 60-day DEIS comment period and the selection of an LPA, a 10-member governor-appointed panel was formed to advise the Oregon and Washington DOT on project development for the CRC project. The Project Sponsors Council (PSC) was charged with advising the project on completion of the FEIS, project design, project timeline, sustainable construction methods, consistency with greenhouse gas emission reduction goals and the financial plan.

L-023-075

The Freight Working Group, Citizen and Environmental Justice Group, Pedestrian and Bicycle Advisory Committee, and Urban Design Advisory Group continued to meet and advise the CRC project after issuance of the LPA. In addition, a Portland Working Group, Vancouver Working Group, and Vancouver Transit Advisory Committee were also formed to ensure the community perspective was incorporated into design and planning for extension of the MAX Yellow light rail linefrom the Expo Center to Vancouver. See Appendix B of the FEIS for details on how these committees were involved in the CRC project after issuance of the DEIS.

L-023-076

Though the Portland City Council is independent of the CRC project, City representation includes participation on the PSC and several other CRC committees, and in this capacity, continued to be actively engaged in advising the project after selection of the LPA.

L-023-077

Though the Bi-State Coordinating Committee is independent of the CRC project, the Bi-State Coordinating Committee and PSC have members in common, and the Bi-State Coordinating Committee has discussed the CRC project at their meetings.