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Columbia River Crossing Comments

To: Columbia River Crossing Project
C/O Heather Gunderson, Environmental Manager
700 Washington Street, Suite 300
Vancouver, Washington 98660

June 28, 2008

Columbia River Crossing

Dear: Ms. Heather Gunderson and Columbia River Crossing Project Staff

P-1052-001

I want to thank you and your staff for providing a public question and answer session at the Beaverton Public Library on June 14, 2008. Your knowledgeable staff answered many of my questions and provided additional information about the project.

Since 1978, I have commuted to work using public transportation. My employer moved from Portland to an office building in Vancouver on Minnehaha Street and near St. Johns Avenue. Furthermore, my employer pays for my yearly bus pass. Typically, I drive to work once a week a 36-mile round trip. I use public transportation for the remainder of workweek. My work commute using public transportation starts at 5:10-AM in S.W. Portland when I board a Tri-Met bus. This bus drops me off in downtown Portland where I wait for a 5:41-AM C-Tran #134 Salmon Creek bus. I ride this bus to the Salmon Creek Park and Ride where I transfer to the C-Tran #105 bus. I ride this bus to the 99th Street Park and Ride to transfer to a C-Tran #37 bus. C-Tran use to have the #134 bus stop at the 99th Street station but changed the schedule in May. I was able to get an earlier transfer. I ride the #37 bus to NE 63rd and Highway 99. Then I walk about a mile to office. In the afternoon, I ride the C-Tran #25 bus to downtown Vancouver where I transfer to the #105 bus to downtown Portland. Then I transfer to a Tri-Met bus that drops me off near my home. I am lucky to use public transportation for commuting to work because it reduces my car fuel and maintenance cost from \$2,000 to over \$3,000 a year. In 2007, I spent \$1.17 for gasoline every 7-miles driving a car. This year this figure will double or more because of rising fuel costs.

For several years, I have observed the daily chronic traffic congestion on I-5 near the Interstate Bridge during the rush hour. Traffic congestion deteriorates every year. Frequent vehicle breakdowns and accidents that further complicate the congestion problem of stalled vehicles. I seen two instances of near misses where a careless driver almost caused a major collision that could easily resulted in serious injuries or death near the Interstate Bridge. I try to avoid driving because of the rush hour congestion.



P-1052-002

P-1052-001

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

P-1052-002

As described in Chapter 3 (Section 3.1) of the DEIS, ODOT's Safety Priority Index System (SPIS) ranked two locations within the CRC project area, the Hayden Island Interchange and the North Portland Harbor Bridge, within the top 5% of the highest scored sites or, high crash locations, in the state for 2004 to 2006. Within Washington, five locations along I-5 in the project area have been categorized by WSDOT as high accident locations, as reported in the DEIS.

Improving safety and mobility of cars and freight using the bridge and highway is a part of the CRC project's purpose and need. As described in Chapter 3 (Section 3.1) of the DEIS and FEIS, the replacement bridge and highway alignment, which was chosen as part of the LPA, includes a range of safety and design improvements. Some of those improvements include:

- A new bridge structure high enough for marine traffic, which eliminates the need for a lift span
- The addition of safety shoulders for stalled vehicles and incident responders
- Improved sight lines so drivers can see over the crest of the bridge, reducing the potential for rear-end collisions during congested periods
- Longer on-ramps and off-ramps to make it easier for drivers to merge onto traffic, and improve connections between interchanges
- Reducing congestion over the bridge compared to No-Build, by improving traffic operations, providing light rail and charging a toll to cross the river.

P-1052-003

After reviewing information presented about this project, I have the following comments and additional questions.

I. Bridge Design:

A. Bridge Appearance: The current Pearson Airfield flight path now limits height and design of proposed bridge to a concrete structure similar in design to Glen Jackson Bridge. Although structurally functional, this bridge design has a poor appearance. Your project staff mentioned that Federal Aviation Administration FAA could change airfield flight paths to allow higher bridge height. Project staff should approve structural engineering studies to determine if more attractive bridge designs such as cable stayed, suspension, and arched bridges. Furthermore, alternative and innovative bridge designs may address the traffic congestion, environmental issues, commuting needs, safety, noise, and maintenance more efficiently at lower cost than proposed design. This bridge designed to last hundred years or more. Engineering staff has one chance to design a functional but beautiful bridge. What do I mean with the vague term beautiful? Do you want another Glenn Jackson or Marquam Bridge design or something that citizens can admire such as the St. Johns Bridge and Fremont Bridge. In past years, I have read newspaper Oregonian articles in past about Portland residences complaining about the Marquam Bridge design. This word means that bridge planners can balance environmental and aesthetics issues along with enhancing economic lives and safety of individuals using the bridge. Tri-Met seriously studying an attractive cable stayed bridge design for a Willamette River light rail crossing. The San Francisco Golden Gate Bridge provides an example of an attractive design. I hope Columbia Crossing staff avoids the design mistake of the Marquam Bridge. I have one other suggestion perhaps the project staff can conduct a design competition for engineering firms and perhaps the public can contribute or comment on the overall conceptual design alternatives.

P-1052-004

B. I feel historical and archaeological sites at or near Pearson Air field need protection. The City of Vancouver owns the airfield. I have some questions about this airfield.

Will future air traffic from Portland International Airport curtail flights or stop flights coming from Pearson Airfield because of air traffic safety in the future?

Moving the Pearson Airfield can allow it to expand as a regional civil airport. At the present location, this airport growth remains static. Has the City of Vancouver looked at this issue?

Can the City of Vancouver use the land for Pearson Airfield that enhances the lives of Vancouver residents such as a park, recreation center, small retail businesses, museum, and so fourth? I am not advocating that the City of Vancouver sells or rents this land for strip malls, large box stores, or heavy industry.

Additional potential safety measures, such as eliminating interchanges or reducing posted speeds, were considered during earlier phases of the CRC project but were dropped from further consideration because they did not meet the accessibility goals of the project, did not meet highway design standards, and/or were not supported by the local jurisdictions.

P-1052-003

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.

P-1052-004

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

2. Bridge Features and Construction Comments:

- P-1052-005** A. The proposed design of the bridge has a curve to go around the existing Interstate Bridge. Does the road surface design help prevent hydroplaning during rainy weather. For example, on I-5 the sharp Terwilliger curves have been a problem with numerous accidents. Oregon Department of Transportation had to cut grooves in pavement to reduce this problem along with lower speed limits. Interstate Bridges have experienced problems in past with truck skidding and sometimes jack knifing during wet weather.
- P-1052-006** Will the transportation departments specify a durable and high strength concrete mix to reduce number of repaving projects over the lifetime of the bridge? Repaving costs will increase in cost in the future. Furthermore, repaving can cause congestion.
- P-1052-007** B. I think bridge planners had a good idea utilizing unused space under the bridge deck between structural supports for a pedestrian and bicycles. The bridge deck overhead protects the users from weather but high winds can become a potential problem from the side. However, I suggest this space has a metal grating or fencing to prevent passer bys from throwing objects off the bridge or falling off the bridge.
- How do bridge planners address security issues of crime for this design? Will this area have good lighting? Will this bridge pedestrian and bicycle lane attract transients and crime? Do police have adequate access to this lane to aid a crime victim or prevent a crime? What happens if someone has a medical emergency on the bridge, can emergency medical staff reach this area. Do planners plan to install emergency telephones along this path and in highway shoulders? Do maintenance crews have access for cleaning up garbage and cleaning the path. Furthermore, I think bridge planners should consider a design that provides enough space on this pedestrian and bicycle lane for emergency and maintenance vehicles.
- P-1052-008** C. The bridge has two tracks for light rail, do bridge planners have provisions in the track design or layout to allow trains to bypass a stalled or train blocking the tracks on the bridge. Another alternative, rail designers can put in track siding for stalled trains to avoid impeding other light rail traffic. In case, passengers need to leave a stalled train or during an emergency, the light rail line needs an emergency pedestrian walkway. I think idea of combining bus lanes and light rail tracks in one corridor a good idea but need way to prevent passenger vehicles from accidentally entering the bus lanes. Do you want taxicabs and other commercial transportation vehicles use this bus lane?
- P-1052-009** D. Do bridge planners have a fire protection plan for the bridge? For example, how would fire fighters handle a burning overturned tanker truck? Will the bridge have freeze-proof fire hydrants along the bridge deck?
- P-1052-010** E. Do you plan to put up well-lighted signs to warn motorists of accidents, stalled vehicles and dangerous weather conditions such as fog and ice? Have planning staff consider option of installing heating cables embedded in pavement to prevent road-icing problems or will it just add another costly maintenance problem?

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 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.

P-1052-005

The proposed bridge cross-slope, grade, pavement material, and drainage facilities will be designed and constructed to provide adequate

- P-1052-011** F. A stacked bridge such as the Fremont Bridge could reduce the overall footprint of the bridge if bridge height no longer a problem. The stacked bridge could reduce the number of bridge piers with possible reduction in cost. A covered bridge could reduce problems such as accidents from weather such as heavy rain, snow, and ice. See part A. This feature may add cost to the project unless structural design of bridge could allow addition of this feature with minimal cost.
- P-1052-012** G. I think the proposal to have up to 12 lanes constructed to accommodate traffic growth a good idea because tolls or mass transit has only slowing affect on traffic growth. Despite fuel price increases, economic and population growth will continue in metropolitan Portland and Vancouver and outside the region that results in an increase in vehicle and commercial vehicles usage of bridge. Bridge planners should design a bridge that allows for future traffic growth because in long run it becomes cheaper to put them in during bridge construction than trying to add lanes in the future.
- P-1052-013** H. Bridge design and materials selected to minimizing maintenance such as periodic painting of structural steel. Design of bridge should allow easy access for bridge maintenance and safety inspections.
- P-1052-014** I. The proposed bridge design and other design alternatives need strong barriers to prevent vehicles or trucks from skidding off the bridge during an accident. The Marquam Bridge has this problem. I think the barriers on this bridge inadequate to prevent vehicles from jumping the barrier and falling into river during an accident. Perhaps Oregon Highway Department officials have records of this problem. High fencing needed to prevent objects tossed from vehicles from falling to river or structures below.
- 3. Bridge Options with Routes Crossing the Oregon Slough**
- P-1052-015** A. Comment: I noticed in your bridge proposals and maps that you plan to cross the Oregon Slough in vicinity of the Expo Center after passing through Hayden Island. While driving or riding a bus in this vicinity, I noticed a small boat repair and dry dock business next to Marine Drive in this area. Will your bridge construction force this business to close? Can this business relocate? Apparently, the boats in the dry dock are repaired or have hull paint stripped and repainted. In the past, these paint-stripping practices generated allot of paint waste that contained heavy metals such as lead, copper, zinc, and so fourth, that may have dropped into slough bottom. I am not saying present owner doing this. Has your planning staff conducted or plan to conduct an environmental study to determine if heavy metals are a potential environmental hazard in this area if disturbed during construction?
- P-1052-016**

drainage for safe travel. However, drivers are still expected to use good judgment in selecting their speed in consideration of the specific driving conditions.

P-1052-006

Yes, WSDOT and ODOT will specify high strength concrete be used for bridge construction.

P-1052-007

Thank you for your concern about safety on the multi-use path. The multi-use path will be equipped with standard height railing to deter bicyclists and pedestrians from falling off the bridge.

Access to and from the multi-use path has been designed to accomodate an ambulance for emergency response. Likewise the multi-use path has been designed to accomodate access by police or maintenance crews. The bridge design also allows for the potential addition of security cameras and phones.

Regarding your concern about overall safety and security, the PBAC has drafted and approved a Recommendation for a Maintenance and Security Program to be further refined as the bridge is constructed.

P-1052-008

Light rail will travel on an exclusive guideway from where it joins the bridge near 6th Street in Vancouver to the existing Expo Center station in Portland.

A stalled light rail vehicle would be towed to the terminus where there is track to accommodate an out of service vehicle. At the end of the service day that LRT would be towed to the Ruby Junction maintenance facility.

4. Remove Existing Interstate Bridge

P-1052-017

A. I support proposal to remove the existing Interstate Bridge after completion of a new bridge. The project staff mentioned that the existing bridge piers are structurally weak. Furthermore, a major earthquake can cause the massive concrete counter weights to swing and toppling the support structure. The span would then collapse. It would take construction crews months to clear the wreckage. Interstate Bridge costs money to maintain and repair. A crew needed to lift the bridge for barge traffic.

5. Bridge Tolls

P-1052-018

A. Comments: Although, I have no problem of using tolls to pay for new bridge or specifically used to fund mass transit projects, equipment, and maintenance. I am against bridge tolls that go to the general fund of Oregon or Washington State or local governments. I am against permanent high tolls except for specific reasons above. Furthermore, I am against a toll for the Glenn Jackson I-205 Bridge because bridge already paid off.

I heard argument that tolls will reduce pollution. The recent fuel prices increases will do more to reduce vehicle use and encourage commuters to drive high efficient vehicles such as hybrids than tolls.

The US Congress considering a bill to ban the states from charging tolls on Federal funded highways.

You may want to research the experiences Los Angeles toll highway system.

P-1052-019

B. Your staff and web site mentions that no tollbooths used to collect tolls but instead uses radio frequency identification technology and video cameras to collect tolls. I have the following comments about this system of toll collecting.

How do you collect tolls from an out of state driver or trucker that lives some distance away from Oregon and Washington? You send a bill such as \$2.00 to these individuals. They then throw the bill away in the trash and do not pay it. How are you going to make them pay for this bill? The administrative staff cost to collect the bill more than the toll fee. Highway staff spending thousands of dollars a year to collect out of state toll bills. You could threaten to pull their vehicle registration or driver licenses but you need agreements from all 50 states to do this. This effort would require considerable staff expense. You would need a hearing process to make someone pay.

How would you penalize Oregon and Washington drivers for nonpayment?

The bridge will include an evacuation route for light rail passengers in the event of an emergency.

P-1052-009

The new I-5 Bridge and entire project area will be able to better accommodate emergency response vehicles with standard shoulders and modern emergency utilities. Incident response plans have been developed for the existing highway system and will be modified to match the new system.

P-1052-010

Variable message signs which could be used to alert motorist are one of the measures being considered for the project. At this point, an analysis of the effectiveness of a heated pavement system has not been evaluated. It is something that can be considered as we move into more detailed design.

P-1052-011

The Stacked/Transit Highway Bridge (STHB) option, which would allow transit, bicyclists, and pedestrians to travel beneath the highway bridge deck, was included as part of the LPA. The DEIS indicated that the two bridges required for this bridge option would put less bridge sub-structure in the Columbia River, likely resulting in less environmental impact. After publication of the DEIS, additional engineering studies were conducted that confirmed the feasibility of the STHB design.

The STHB is described in greater detail in Chapter 2 (Section 2.2) of the FEIS. Impacts associated with a STHB are discussed throughout Chapter 3 of the FEIS.

P-1052-012

Following the selection of the LPA in July of 2008, the CRC Project

P-1052-020

I have traveled to Chicago metropolitan on business trips. Chicago has an extensive system of tollbooths to collect tolls from drivers. The tollbooths located on freeway exits and entrance ramps. Drivers can get change to pay the toll. You have less toll evasion but higher staff costs to operate the booths. Vehicles stop before entering freeways because of ramp signal lights. You use the ramp system to collect tolls while drivers wait to get on the freeway. From my perspective, I see no evidence that Chicago's toll system reduces traffic congestion.

P-1052-021

C. The use of electronic tolls raises privacy issues or questions.

Who will have access to tollbooth records such as marketers, law enforcement, auto insurance companies, Internal Revenue Service, and other commercial organizations? Does the commuter have access to their toll records including video record if a dispute on payment occurs and have any say how these records are distributed?

Will State of Oregon and Washington governments use this tollbooth information other than gathering statistical information and toll enforcement for other purposes such as tax collections, tracking criminal suspects, enforce child support payments, complying with court subpoenas, and so fourth?

The Privacy Clearing House web site has posted article titled Privacy Today: A Review of Current Issues updated April 2008 about transfer of electronic data to various government databases. In article 6 Data Profiling, the authors talk about electronic transponders used for tollbooths where the data records a specific time and place of your transaction. This data shared with comprehensive databases that employers, law enforcement, and information broker industry. The article provides two examples where data profiling can cause harm.

My comment on this issue, if tolls are necessary, I prefer the old fashion tollbooth or buy a monthly or yearly pass rather than installing an electronic transponder system.

P-1052-022

D. Lower income commuters who must drive a vehicle to work and unable to use public transportation are more affected than higher income commuters.

P-1052-023

E. Some alternatives to bridge tolls are regional income taxes or sales taxes. A small charge tacked on to vehicle registrations and driver license fees. Small portion of traffic ticket fines allocated to the bridge payments. Utility bills have a small charge for the bridge construction.

6. Vancouver Light Rail

P-1052-024

A. I prefer a light rail with minimum impact on downtown Vancouver businesses. In long term, I think rail planners should consider routes that allow eventual expansion to the C-Tran 99th Street Transit Center, Fishers Landing Transit Center, and Salmon Creek Transit Center. Furthermore, a light rail line should service areas were light rail benefits

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

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

P-1052-013

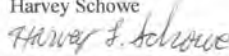
The project undertook an extensive type study and took into consideration all implications of maintenance and selected a bridge type that best meets all maintenance and inspection criteria.

For more information, please see the Columbia River Bridge Type Study Report.

- P-1052-024** | the most businesses, commuters, schools, and other organizations. Traffic congestion has no effect on light rail service and good supplement to express bus system.
- P-1052-025** | B. Any light rail system into Vancouver needs to address the crime, security, and fare evasion issues.
- P-1052-026** | C. Occasionally, I ride a C-Tran to the Delta Park light rail station to ride a Max to downtown Portland. I never experienced any problems with the light rail.
- P-1052-027** | 7. Miscellaneous Comments:
- A. On Vancouver side of project, I noticed in planning map a large bridge pier in vicinity of the Burlington Northern railroad. What steps bridge designers plan to use to prevent soil disturbances from damaging the rail bed and tracks?

I hope these comments are useful to you and your staff.

Sincerely Yours,

Harvey Schowe

 4200 SW Kanan Drive.
 Portland, Oregon 97221

P-1052-014

The bridge barrier will be designed to meet the current highway standards for crash loading. The bridge barrier will be the ODOT tall "F" shape type barrier which is 42" high. Design cannot prevent all extraordinary accidents from occurring but the barrier will be designed to meet current highway standards for crashes.

P-1052-015

Please see Section 3.3, Property Acquisitions and Displacements, of the FEIS for a description and maps showing the properties that would be impacted by the construction of the LPA. Property owners will receive just compensation for the estimated value of land and improvements acquired and for other impacts that result in a measurable loss of value to the remaining property. Businesses displaced may be eligible to receive relocation assistance, as described in Section 3.3. of the FEIS.

P-1052-016

Throughout the planning process and through construction, the CRC project is committed to minimizing construction related environmental effects. Potential temporary effects, and potential measures to avoid/reduce those effects, were described in each section of Chapter 3 of the DEIS. Measures the CRC project proposes to mitigate these effects are described in each section of Chapter 3 of the FEIS. These mitigation measures have been developed through consultation with federal, state, and local agencies, and community stakeholders. These measures are intended to ensure that construction activities will comply with regulatory requirements and will minimize impacts to people living and working in the project area during construction.

The FEIS also includes, as appendices, technical reports on hazardous materials and water quality. These reports will provide more detailed information about how hazardous materials will be managed.

P-1052-017

The existing bridges will be removed following the opening of the new bridges.

P-1052-018

Under Washington law, each individual toll project must be specifically authorized by the legislature. The maximum duration and use of tolls will be established in the act providing the authority to toll the I-5 Bridge. ODOT and WSDOT will establish the specific duration and use of toll revenues within the parameters set by the Washington legislature through a bi-state agreement.

P-1052-019

Details and policies for the tolling system will be decided by the transportation commissions and legislatures of both states. However, the project has proposed and assumed that an electronic tolling system will be used. Electronic tolling collection (ETC) is a cashless toll collection system using the latest electronic technology. ETC promotes free-flowing traffic by eliminating the need for toll booths and allowing all vehicles to pay a toll without stopping.

ETC systems in use today allow drivers to purchase an inexpensive, credit card sized transponder that is placed on the inside windshield of their car. When driving through the toll collection point, radio equipment above the road scans the transponder and deducts the toll from the user's account. User accounts could be linked to a credit or debit card, or they could be prepaid.

Infrequent travelers without a transponder would be charged via a video

camera that can quickly scan and photograph license plates. A bill for the cost of the toll and a processing fee can be sent to the registered vehicle owner.

All personal information necessary to use the ETC system would be maintained by the State DOT, as is now being done with WSDOT's Good To Go! Program that is collecting tolls for facilities such as the Tacoma Narrows bridge. The use of this information, like all personal information provided to the state, will follow state privacy guidelines.

P-1052-020

One of the reasons why the project will employ electronic tolling is to reduce traffic congestion. With our proposed system, no motorists will be forced to stop and pay. Also, if the project were to include toll booths, the right of way required for such would cause additional displacements in Portland and Vancouver.

P-1052-021

Details and policies for the tolling system will be decided by the transportation commissions and legislatures of both states. However, the project has proposed and assumed that an electronic tolling system will be used. Electronic tolling collection (ETC) is a cashless toll collection system using the latest electronic technology. ETC promotes free-flowing traffic by eliminating the need for toll booths and allowing all vehicles to pay a toll without stopping.

Infrequent travelers without a transponder would be charged via a video camera that can quickly scan and photograph license plates. A bill for the cost of the toll and a processing fee can be sent to the registered vehicle owner. The cameras, much like those for red lights throughout the metro area, will not capture the vehicle occupants.

All personal information necessary to use the ETC system would be

maintained by the State DOT, as is now being done with WSDOT's Good To Go! Program that is collecting tolls for facilities such as the Tacoma Narrows bridge. The use of this information, like all personal information provided to the state, will follow state privacy guidelines.

P-1052-022

The CRC project team is aware that tolls require a higher share of income for low-income populations and could impact these populations without mitigation. Therefore, the project team is evaluating mitigation options such as financial assistance programs, outreach and education, and increasing accessibility to transponders for low-income persons.

P-1052-023

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.

P-1052-024

The Clark College transit terminus was chosen by project sponsors as part of the LPA in July 2008, as it was deemed to most effectively

balance the cost of the project and the projected community benefits.

RTC's Clark County High Capacity Transit System Study, published in December of 2008, analyzed specific high-capacity transit improvements that could connect with existing and future transit facilities and be extended throughout Clark County To view their Final HCT System Study, visit RTC's website at www.rtc.wa.gov.

Both current and future land use is one of the criteria used to determine the locations of proposed transit facilities. Other considerations include traffic impacts, property impacts, and overall transit operations. The five proposed stations will support current and planned residential and commercial development. As an example, the Clark College terminus station will serve a community and senior center, a community college, and the Veterans Administration campus.

P-1052-025

The CRC project is using design strategies that have been proven to reduce the potential for crime at stations and on trains. In addition, CRC has received input from advisory groups, jurisdictions, and the public to design a system that will enhance safety and security.

Recommendations include, but are not limited to, locating stations near residential and commercial buildings; controlling pedestrian access to stations through the strategic placement of entrances and exits, fencing, lighting, and landscaping; lighting stations so that all activity is easily visible; and designing a clear line of sight into and out of the station. A Safety and Security Management Plan (SSMP) was created, in part, to address public concerns about safety, and is a requirement for funding from the Federal Transit Administration. Safety will be designed into every phase of the project.

The CRC project is also working with the City of Vancouver and Portland police and C-TRAN and TriMet security to promote passenger safety at

stations and park and ride facilities, as well as on light rail trains. Measures to increase public safety on and near light rail could include enforcing fare payment; installing closed-circuit TV at light rail stations, park and rides, and on trains; and patrolling stations and trains by transit security and local police officers. For more information about how safety and security associated with light rail is being addressed by the CRC project, see Chapter 3 (Section 3.1) of the FEIS.

P-1052-026

Thank you for your comment.

P-1052-027

The project team has been and will continue to coordinate with BNSF. In addition, geotechnical information has been reviewed and more will be collected and evaluated prior to the start of construction.