

Here's an idea of mine, my family
and friends.

MAY 16 2008
Columbia River Crossing

The Interstate I-5 Bridge over the Columbia River. If you plan on spending 2-3 Billion dollars for a New Bridge.

It should be something of a landmark, a Big Deal, An Awesome Bridge to call its own for Portland / Vancouver.

We should spend Many more Millions and make the New Bridge a Modern, Unique and Beautiful Bridge. Not a concrete Bridge like I-205.

Are only the Bridges of late, Be the only Gorgeous feats of thier time.

Oregon and Washington should share the costs equally. They could even subsidize costs with Electronic Tolls that tally \$ for cars/trucks.

We can all say we would pay extra for a Real nice Beautiful Bridge.

Sincerely,
D. WILDE
MILWAUKIE, OR.

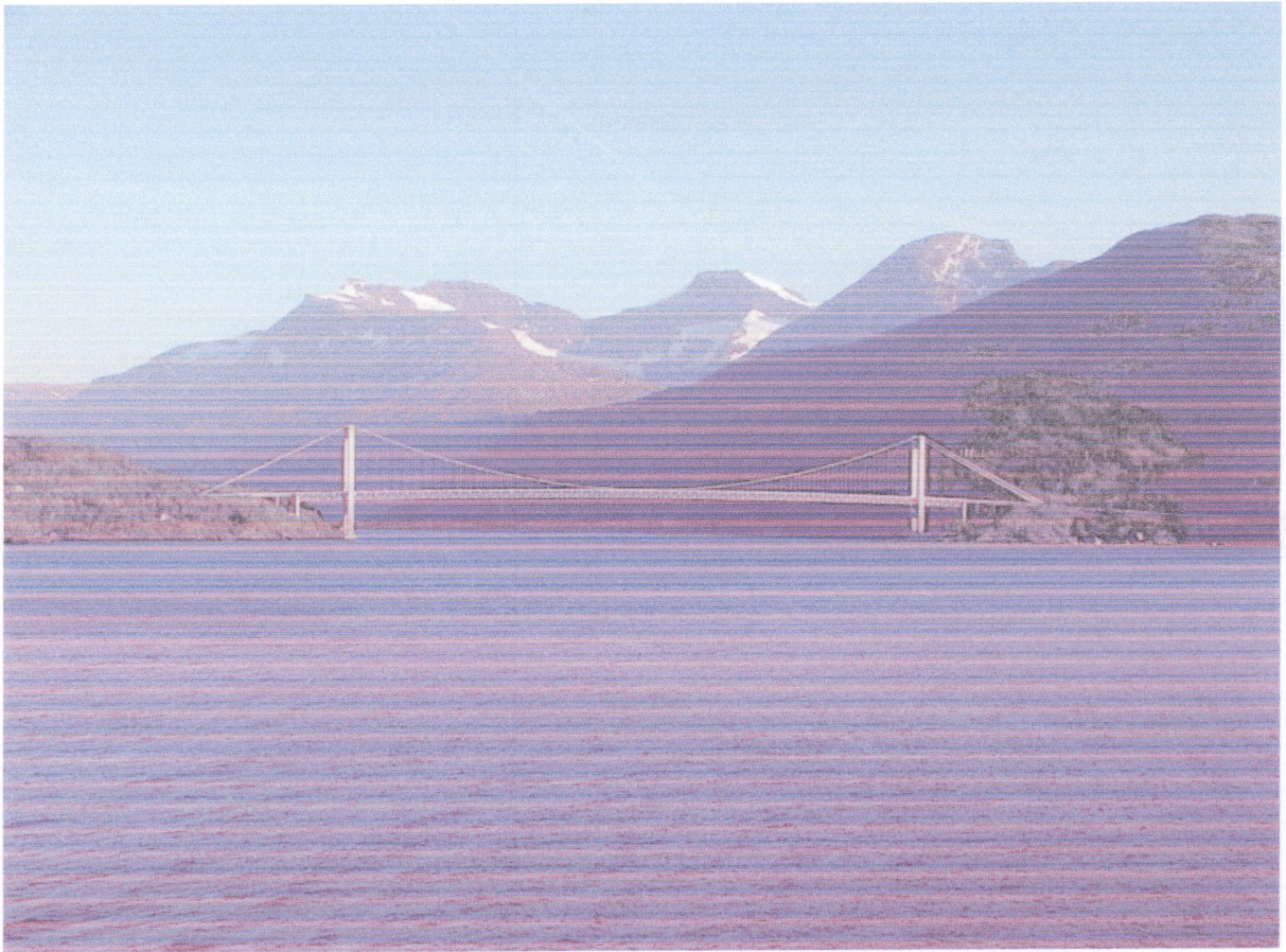


(MY FAVORITE CHOICE)

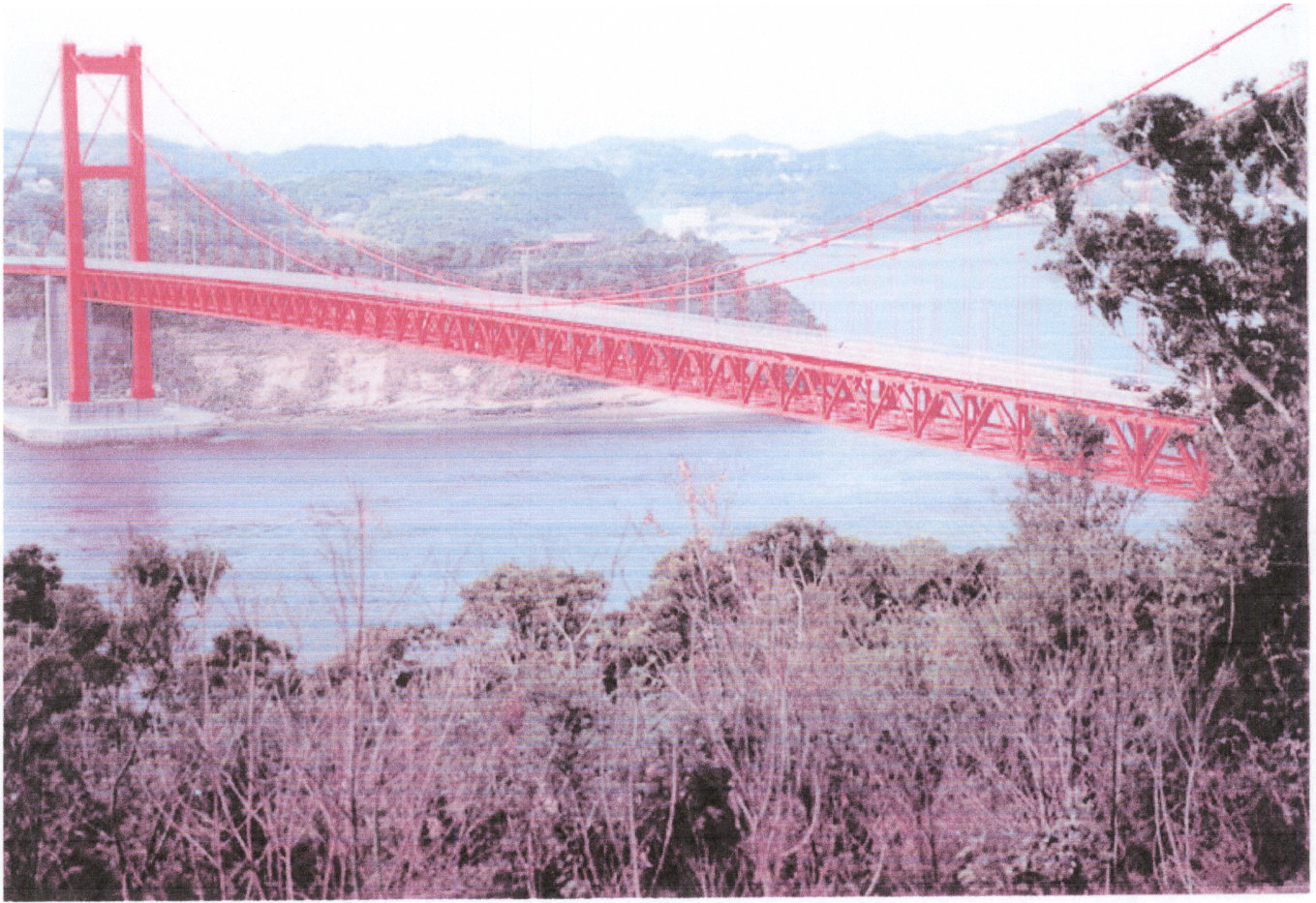
ANY COLOR

USE ONE OLD BRIDGES FOOTINGS & LEGS
FOR MODERN ARCHED CONCRETE TRAIN
BRIDGE ~~AD~~ NEXT TO NEW BRIDGE
RESEMBLING OR SIMILAR TO NEW BRIDGE
TYING IT IN. -

OR DESIGN RAIL & PED as part of the
structure.



WHITE



RED



WHITE



GREEN

From: NoEmailProvided@columbiarivercrossing.org
To: [Columbia River Crossing;](#)
CC:
Subject: Comment from CRC DraftEIS Comments Page
Date: Tuesday, May 27, 2008 2:29:13 PM
Attachments:

Home Zip Code: 97202

Work Zip Code: 97202



Person:

Commutes through the project area

Person commutes in the travel area via:

Bicycle

Bus

Car or Truck

1. In Support of the following bridge options:

Do Nothing

2. In Support of the following High Capacity Transit options:

Bus Rapid Transit between Vancouver and Portland

Light Rail between Vancouver and Portland

3. Support of Bus Rapid Transit or Light Rail by location:

Lincoln Terminus: No Opinion

Kiggins Bowl Terminus: No Opinion

Mill Plain (MOS) Terminus: No Opinion

Clark College (MOS) Terminus: No Opinion

Contact Information:

First Name:

Last Name:

Title:

E-Mail:

Address:

,


Comments:

Strongly against additional freeway capacity. Sounds like a lot of money for a slight increase in capacity that will just encourage more sprawl in SW Washington.

Additional bus, rail, and bike transit is fine by me.

If we're going to replace the bridge, I'd be glad to spend a little extra for something more attractive than a viaduct.

From: [Nelson Brady](#)
To: [Draft EIS Feedback;](#)
CC:
Subject: One comment about the new bridge proposal
Date: Tuesday, May 27, 2008 10:21:43 AM
Attachments:

One idea has been the bridge should rise (arch upward) for more aesthetic appeal. While I am all for affordable aesthetics, what has not been considered that I have heard is the traffic impact of the rise. 

For every degree of elevation on the bridge you slow traffic more, have more stalls, and have more accidents. This is especially true in hot weather and for badly maintained vehicles and heavily loaded trucks.

The rise slows people as they do not like not being able to see over the horizon. A very real psychological effect. A rise causes stalls when problem vehicles can not make it up the incline, and can drastically slow heavy trucks. When this happens you get more lane changes on the bridge which leads to more accidents. This is not my opinion. It is something I have observed repeatedly in 10 years of daily bridge use.

Nelson Brady, VP of Operations
SnapNames.com, Inc.
1600 SW 4th Ave
Suite 400
Portland, OR 97201
tel: 503-219-9990 x223
direct: 503-459-5723
cell: 360-903-8844

fax: 503-274-9749

nelsonb@SnapNames.com

www.SnapNames.com

From: NoEmailProvided@columbiarivercrossing.org
To: [Columbia River Crossing](#);
CC:
Subject: Comment from CRC DraftEIS Comments Page
Date: Wednesday, May 28, 2008 12:06:36 PM
Attachments:

Home Zip Code: 97330

Work Zip Code: 97209



Person:

Works in the project area

Person commutes in the travel area via:

Bicycle

Walk

1. In Support of the following bridge options:

Do Nothing

2. In Support of the following High Capacity Transit options:

Light Rail between Vancouver and Portland

3. Support of Bus Rapid Transit or Light Rail by location:

Lincoln Terminus: Yes

Kiggins Bowl Terminus: Yes

Mill Plain (MOS) Terminus: Yes

Clark College (MOS) Terminus: Yes

Contact Information:

First Name:

Last Name:

Title:

E-Mail:

Address:

,

Comments:

I heard that mass transit (BRT or light rail) may be placed inside the support structure of

the new bridge to minimize bridge width and cost. As I understand that would cut off all views from those riding mass transit across the bridge. The Draft EIS should consider the aesthetic and safety issues of such a design. If such a design is planned, I suggest that vehicles be placed below deck, so to speak, and mass transit be afforded the views of the upper deck. Drivers would be less distracted in their box (safer) and mass transit riders would receive the benefits of great views (aesthetic). Drivers should be the second class citizens for once. Please afford those on foot, bike, and mass transit a pleasant route across the river, not a tunnel in the bowels of a bridge.



Columbia River **CROSSING** Draft Environmental Impact Statement **Comment Form**

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TELL US ABOUT YOURSELF

What is your home zip code? 97217 Work zip code? 97217

Do you: (check all that apply)

- Live in the project area?
- Work in the project area?
- Own a business in the project area?
- Commute through the project area?
- Other _____

How do you regularly travel in the project area: (check all that apply)

- Bicycle?
- Car or Truck ?
- Other _____
- Bus?
- Walk?

Comments:

We live in JBMI in a floating home. The preferred alternative we are looking at would be a replacement bridge with the light rail/pedestrian access bridge adjacent to the I-5 bridge. The closer all the bridges and traffic stays together, the better and less impact to our migratory (noise, visuals, replacements-displacements of homes, wildlife, fish issues.)

The proposed "toll" concerns us as residents of Hayden Island. It is extremely high, and where does that leave the residents of Hayden Island if their Dr./Dentist is in Vancouver as ours is w/ Kaiser.

1. WHICH BRIDGE OPTION DO YOU SUPPORT? (please check any that you would support)

- Replace the existing bridges
- Supplement the existing bridges with a new structure
- Do nothing—make no changes to the existing bridges
- No opinion

2. WHAT HIGH CAPACITY TRANSIT MODE DO YOU SUPPORT? (please check any that you would support)

- Bus rapid transit between Vancouver and Portland
- Light rail between Vancouver and Portland
- Do not add high capacity transit between Vancouver and Portland
- No opinion

3. WOULD YOU SUPPORT BRINGING BUS RAPID TRANSIT OR LIGHT RAIL TO THE FOLLOWING LOCATIONS? (please check any that you would support)

	Yes	No	Unsure	No Opinion
Lincoln Terminus (39th and Main)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kiggins Bowl Terminus (I-5 and 45th)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clark College MOS Terminus	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mill Plain MOS Terminus (15th and Main)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

DO YOU WANT TO STAY INVOLVED IN THE PROJECT? | Optional

YES NO Would you like to be added to the project mailing list?

Name (First & Last Name, Organization)

Charley & Karla Davis

Address (Street, City, State, Zip)

1973 N. Jantzen Ave.
Portland Or. 97217

E-mail (enter address to receive monthly electronic updates)



Thank you!

Give this form to project staff or return to the project office:

Postal Mail

Columbia River Crossing Project
C/O Heather Gundersen, Environmental Manager
700 Washington Street, Suite 300
Vancouver, WA 98660

Fax

360-737-0294

E-mail

DraftEISfeedback@columbiarivercrossing.org

Draft EIS information

www.columbiarivercrossing.org/CurrentTopics/DraftEIS.aspx

Submit Online Comments

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Comments must be postmarked by July 1, 2008



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TELL US ABOUT YOURSELF

What is your home zip code? 98663 Work zip code? _____

Do you: (check all that apply)

- Live in the project area?
- Work in the project area?
- Own a business in the project area?
- Commute through the project area?
- Other _____

How do you regularly travel in the project area:

- (check all that apply)
- Bicycle?
 - Car or Truck ?
 - Other _____
 - Bus?
 - Walk?

Comments:

I am not in favor of Light Rail becoming part of downtown Vancouver and moving North up Main Street, Washington or Broadway.

Light Rail is a very permanent eyesore that will significantly change the "flavor" of the current historic downtown Vancouver. The constant desire for 'economic redevelopment' is unnecessary.

There are many hard-working and dedicated business owners and residents who should not be uprooted because of this incessant need for redevelopment.

The best transit option is Bus Rapid Transit changes can be made as necessary. That's not

1. WHICH BRIDGE OPTION DO YOU SUPPORT? (please check any that you would support)

- Replace the existing bridges
- Supplement the existing bridges with a new structure
- Do nothing—make no changes to the existing bridges
- No opinion

possible with Light Rail!

2. WHAT HIGH CAPACITY TRANSIT MODE DO YOU SUPPORT? (please check any that you would support)

- Bus rapid transit between Vancouver and Portland *Absolutely!*
- Light rail between Vancouver and Portland
- Do not add high capacity transit between Vancouver and Portland
- No opinion

3. WOULD YOU SUPPORT BRINGING BUS RAPID TRANSIT OR LIGHT RAIL TO THE FOLLOWING LOCATIONS? (please check any that you would support)

	Yes	No	Unsure	No Opinion
Lincoln Terminus (39th and Main)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kiggins Bowl Terminus (I-5 and 45th)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clark College MOS Terminus	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mill Plain MOS Terminus (15th and Main)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

DO YOU WANT TO STAY INVOLVED IN THE PROJECT? | Optional

YES NO Would you like to be added to the project mailing list? *Yes!!*

Name (First & Last Name, Organization)

SUZAN HOFFMANN

Address (Street, City, State, Zip)

3407 I STREET

E-mail (enter address to receive monthly electronic updates)



Thank you!

Give this form to project staff or return to the project office:

Postal Mail

Columbia River Crossing Project
C/O Heather Gundersen, Environmental Manager
700 Washington Street, Suite 300
Vancouver, WA 98660

Fax

360-737-0294

E-mail

DraftEISfeedback@columbiarivercrossing.org

Draft EIS information

www.columbiarivercrossing.org/CurrentTopics/DraftEIS.aspx

Submit Online Comments

www.ColumbiaRiverCrossing.org

Comments must be postmarked by July 1, 2008



From: davidmlomas@gmail.com
To: [Columbia River Crossing](#);
CC:
Subject: Comment from CRC DraftEIS Comments Page
Date: Wednesday, May 28, 2008 8:25:24 PM
Attachments:

Home Zip Code: 98663

Work Zip Code: 98683



Person:

Lives in the project area

Commutes through the project area

Person commutes in the travel area via:

Car or Truck

Walk

1. In Support of the following bridge options:

Replacement Bridge

2. In Support of the following High Capacity Transit options:

Light Rail between Vancouver and Portland

3. Support of Bus Rapid Transit or Light Rail by location:

Lincoln Terminus: Yes

Kiggins Bowl Terminus: Yes

Mill Plain (MOS) Terminus: Yes

Clark College (MOS) Terminus: Yes

Contact Information:

First Name: David

Last Name: Lomas

Title: Resident of Arnada Neighborhood

E-Mail: davidmlomas@gmail.com

Address: 1900 C St

Vancouver, WA 98663

Comments:

Having recently purchased a home in the Arnada neighborhood, I am very excited about this project. My preferred option is to build a replacement bridge with light-rail stacked within the body of the bridge structure. Light-rail is the only realistic solution because it is more quiet, efficient and cheaper to operate than BRT and does not require a vehicle change to commute to Portland. Previous experience with light-rail has proven that it encourages significant high-quality high-density growth and BRT may not have these same positive benefits. Stacked light-rail within the bridge structure is preferred only if it reduces the costs vs. a third bridge. I do not have a preference about the light-rail alignment through downtown below Mill Plain. My preferred alignment north of downtown is to have a rail stop at Mill Plain / 15th St. and have the guide-way travel east along 16th St, over or under I-5 and have a terminus at Clark College. I prefer the 16th Ave route vs. the McLoughlin route because it does not make sense to reconfigure McLoughlin since it is already highly functional and built up. 16th St. has a lot of vacant land that is ideal for high-density development. At the Mill Plain station location I there should be an underground parking garage with a large public park above with a water feature like Jamison Park in the Pearl district in Portland to encourage more families into the area. I also like the idea of adding light-rail from the Mill Plain station north to the Lincoln neighborhood so long as strict design principals are adopted so that the light rail guide way does not in any way create a East-West dividing line and actually encourages more pedestrian crossing. The light rail guide way should be completely surrounded by solid surfaces (no gravel in-fill) to make it look as attractive as possible and less like a railroad. Also, strict attention must be given to environmental aspects such as lots of lighting to discourage crime. My preferred alignment North of Mill Plain is one way on Broadway and one way on Washington Streets.

In summary, I strongly feel that this project should extent light-rail to downtown Vancouver, even if we can only get it as far as Clark College. And the replacement bridge option is the only viable option to meet the region's future growth potential.



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TELL US ABOUT YOURSELF

What is your home zip code? 98663 Work zip code? 98661

Do you: (check all that apply)

- Live in the project area?
- Work in the project area?
- Own a business in the project area?
- Commute through the project area?
- Other _____

How do you regularly travel in the project area: (check all that apply)

- Bicycle?
- Car or Truck?
- Other _____
- Bus?
- Walk?

Comments:

No light rail - too inflexible. Bus Rapid Transit is less expensive and flexible. Light Rail will negatively impact our city & community. We ARE NOT Washington DC, LA, New York - we are not a large city. We do not need an eyesore train going right through our city center. If your goal is to destroy the development of the downtown core, putting in light rail will accomplish this goal!

It appears the CRC does not really know the "rules" of an DEIS and are opening themselves up wide for a "day in court"!

1. WHICH BRIDGE OPTION DO YOU SUPPORT? (please check any that you would support)

- Replace the existing bridges
- Supplement the existing bridges with a new structure
- Do nothing—make no changes to the existing bridges
- No opinion

2. WHAT HIGH CAPACITY TRANSIT MODE DO YOU SUPPORT? (please check any that you would support)

- Bus rapid transit between Vancouver and Portland
- Light rail between Vancouver and Portland
- Do not add high capacity transit between Vancouver and Portland
- No opinion

3. WOULD YOU SUPPORT BRINGING BUS RAPID TRANSIT OR LIGHT RAIL TO THE FOLLOWING LOCATIONS? (please check any that you would support)

	Yes	No	Unsure	No Opinion
Lincoln Terminus (39th and Main)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kiggins Bowl Terminus (I-5 and 45th)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clark College MOS Terminus	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mill Plain MOS Terminus (15th and Main)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

DO YOU WANT TO STAY INVOLVED IN THE PROJECT? | Optional

- YES NO **Would you like to be added to the project mailing list?**

Name (First & Last Name, Organization)

Address (Street, City, State, Zip)

E-mail (enter address to receive monthly electronic updates)

Thank you!

Give this form to project staff or return to the project office:

Postal Mail

Columbia River Crossing Project
C/O Heather Gundersen, Environmental Manager
700 Washington Street, Suite 300
Vancouver, WA 98660

Fax

360-737-0294

E-mail

DraftEISfeedback@columbiarivercrossing.org

Draft EIS information

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Submit Online Comments

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- Own a business in the project area?
- Commute through the project area?
- Other _____

How do you regularly travel in the project area: *(check all that apply)*

- Bicycle?
- Car or Truck?
- Other _____
- Bus?
- Walk?

Comments:

- Consider selecting a prominent designer like Calatrava to design the structure that is both functional and a piece of art.

- I am concerned about the quality of life impacts to me and other residents of the West Coast Bank Building.

- I want light rail downtown.

1. WHICH BRIDGE OPTION DO YOU SUPPORT? (please check any that you would support)

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- Do nothing—make no changes to the existing bridges
- No opinion

2. WHAT HIGH CAPACITY TRANSIT MODE DO YOU SUPPORT? (please check any that you would support)

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- Do not add high capacity transit between Vancouver and Portland
- No opinion

3. WOULD YOU SUPPORT BRINGING BUS RAPID TRANSIT OR LIGHT RAIL TO THE FOLLOWING LOCATIONS? (please check any that you would support)

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Clark College MOS Terminus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Address *(Street, City, State, Zip)*

E-mail *(enter address to receive monthly electronic updates)*



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- Commute through the project area?
- Other _____

How do you regularly travel in the project area: *(check all that apply)*

- Bicycle?
- Car or Truck?
- Other _____
- Bus?
- Walk?

Comments:

Consider also the opportunity to make a statement in design - i.e. Calatrava as architect.

1. WHICH BRIDGE OPTION DO YOU SUPPORT? (please check any that you would support)

- Replace the existing bridges
- Supplement the existing bridges with a new structure
- Do nothing—make no changes to the existing bridges
- No opinion

2. WHAT HIGH CAPACITY TRANSIT MODE DO YOU SUPPORT? (please check any that you would support)

- Bus rapid transit between Vancouver and Portland
- Light rail between Vancouver and Portland
- Do not add high capacity transit between Vancouver and Portland
- No opinion

3. WOULD YOU SUPPORT BRINGING BUS RAPID TRANSIT OR LIGHT RAIL TO THE FOLLOWING LOCATIONS? (please check any that you would support)

	Yes	No	Unsure	No Opinion
Lincoln Terminus (39th and Main)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Clark College MOS Terminus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mill Plain MOS Terminus (15th and Main)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Thank you!

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- Commute through the project area?
- Other _____

How do you regularly travel in the project area: (check all that apply)

- Bicycle?
- Car or Truck?
- Other _____
- Bus?
- Walk?

Comments:

I've talked w/ the owner of a house on McLaughlin Blvd threatened w/ removal of large trees out front, along w/ a freshly paved sidewalk; he seemed to perk up at the idea of landowners being compensated by an equivalent amount of parking strip (grass, etc) created on side-streets tangential to Max coming in. This might prevent potential collisions by reducing car-flow & car-access.

I had advocated at neighborhood meetings in the past to create more green space by narrowing the streets.

1. WHICH BRIDGE OPTION DO YOU SUPPORT? (please check any that you would support)

- Replace the existing bridges
- Supplement the existing bridges with a new structure
- Do nothing—make no changes to the existing bridges
- No opinion

*With Series ... though that is not fuel-affordable
How soon is post-peak oil?*

2. WHAT HIGH CAPACITY TRANSIT MODE DO YOU SUPPORT? (please check any that you would support)

- Bus rapid transit between Vancouver and Portland
- Light rail between Vancouver and Portland, *East Vancouver. Parallel the Columbia. Skip downtown.*
- Do not add high capacity transit between Vancouver and Portland
- No opinion

3. WOULD YOU SUPPORT BRINGING BUS RAPID TRANSIT OR LIGHT RAIL TO THE FOLLOWING LOCATIONS? (please check any that you would support)

	Yes	No	Unsure	No Opinion
Lincoln Terminus (39th and Main)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kiggins Bowl Terminus (I-5 and 45th)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clark College MOS Terminus	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mill Plain MOS Terminus (15th and Main)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

possibly bring max middle of I-5 directly to Clark College if they're willing

DO YOU WANT TO STAY INVOLVED IN THE PROJECT? | Optional

YES NO Would you like to be added to the project mailing list?

Name (First & Last Name, Organization)

Address (Street, City, State, Zip)

E-mail (enter address to receive monthly electronic updates)

thereby skipping downtown & letting us have our trolley w/ leftover funds.

Thank you!

Give this form to project staff or return to the project office:

I don't want a mammoth new bridge towering over the nice new fastbridge by Maya Liu

Postal Mail
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C/O Heather Gundersen, Environmental Manager
700 Washington Street, Suite 300
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What is your home zip code? 98660 Work zip code? n/a

Do you: (check all that apply)

- Live in the project area?
 Work in the project area?
 Own a business in the project area?
 Commute through the project area?
 Other

How do you regularly travel in the project area:
(check all that apply)

- Bicycle?
 Car or Truck?
 Other
 Bus?
 Walk?

Comments:

- ① As downtown Vancouver residents who regularly walk in the area, it is very important to us that park spaces and trails be maintained at existing levels or improved. The waterfront area by the Ship of Discovery park should be as "green" - i.e. filled with growing/green plants - as possible rather than concrete. It's also important to maintain pedestrian access to the waterfront, Apple Tree Park + Land Bridge, as historic Reserve.
- ② Flights from Pearson Airport should not be deemed more important than bridge design. If the airport becomes a park in order to do an optimal bridge design, it should be considered, especially as it has few but very noisy flights.
- ③ Safe and accessible pedestrian access to whichever bridge option is important to us. It would be nice to be protected from car splashing as we walk over the bridge.

1. WHICH BRIDGE OPTION DO YOU SUPPORT? (please check any that you would support)

- Replace the existing bridges
 Supplement the existing bridges with a new structure
 Do nothing—make no changes to the existing bridges
 No opinion

2. WHAT HIGH CAPACITY TRANSIT MODE DO YOU SUPPORT? (please check any that you would support)

- Bus rapid transit between Vancouver and Portland
- Light rail between Vancouver and Portland
- Do not add high capacity transit between Vancouver and Portland
- No opinion

3. WOULD YOU SUPPORT BRINGING BUS RAPID TRANSIT OR LIGHT RAIL TO THE FOLLOWING LOCATIONS? (please check any that you would support)

	Yes	No	Unsure	No Opinion
Lincoln Terminus (39th and Main)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kiggins Bowl Terminus (I-5 and 45th)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clark College MOS Terminus	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mill Plain MOS Terminus (15th and Main)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

DO YOU WANT TO STAY INVOLVED IN THE PROJECT? | Optional

YES NO Would you like to be added to the project mailing list?

already on - thanks

Name (First & Last Name, Organization)

Address (Street, City, State, Zip)

E-mail (enter address to receive monthly electronic updates)

Thank you!

Give this form to project staff or return to the project office:

Postal Mail

Columbia River Crossing Project
C/O Heather Gundersen, Environmental Manager
700 Washington Street, Suite 300
Vancouver, WA 98660

Fax

360-737-0294

E-mail

DraftEISfeedback@columbiarivercrossing.org

Draft EIS information

www.columbiarivercrossing.org/CurrentTopics/DraftEIS.aspx

Submit Online Comments

www.ColumbiaRiverCrossing.org

Comments must be postmarked by July 1, 2008



From: [Bobbie Sproul](#)
To: [Columbia River Crossing;](#)
CC:
Subject: NEW BRIDGE
Date: Wednesday, May 28, 2008 10:18:51 AM
Attachments:

As East County residents, we seldom use the I-5 crossing, opting for the I-205 access which is closer.

However, we certainly see the need for a new bridge to carry I-5 traffic to points North and South. And we believe a brand-new bridge is the way to go, and paying for it by charging a toll. This is the only way possible for all vehicles using the bridge to pay a fair share. We would like to see the toll idea taken one step further, and add toll-booths to the I-205 crossing. Tolls collected would be used to fund bridges to cross our rivers - wherever those bridges might be located.

All traffic passing through our state must cross rivers, streams, and creeks. All those folks expect and demand that our State provide safe access to the "other side". So why not begin right here, right now, with a BRIDGE FUND that will help pay for these safe crossings? And let's let the new I-5 bridge be the catalyst that gets the fund started.

The design concept shown on this web site is beautiful, and we owe ourselves nothing less.

Roberta J. Sproul
Moni J. McKenna
16037 NE Everett Ct
Portland OR 97230

From: [SHIRLEY Lillian M](#)
To: [Ficco, Doug; john.e.osborn@columbiarivercrossing.org;](#)
CC: [Markgraf, Tom; Columbia River Crossing; Cogen, Jeff; Crim, Michele; kochr@pdx.edu; cervin@christineervin.com; jyuen@fmyi.com; WEST Kathleen S; ksnyder@ksnyder.com; leslie@carlson-communications.com; CHIDSEY Molly L; Trieu, Amy; Anderson, Susan; Armstrong, Michael; Bethell, Cynthia; Cathy Knight; Derek Smith; Diesner, Kyle; Finn, Brendan; COLLYMORE Karol; LENNON Karolin M; Lori DeYoung; Marcelo Bonta; Mark Edlen; Mark Fitz; Mike Houck; Neal, Pam; Osdoba, Tom; Sears, Colin; MADRIGAL Marissa D; John.Wiesman@clark.wa.gov; Healthier.Gramp@clark.wa.gov;](#)
Subject: Columbia River Crossing DEIS Response
Date: Tuesday, June 10, 2008 10:46:11 AM
Attachments: [0122_001.pdf](#)
[image001.jpg](#)

Attached is Multnomah County Health Department's response to the Draft Environmental Impact Statement for the Columbia River Crossing project. We are submitting a number of recommendations for further analysis and look forward to your response. We appreciate the challenge of balancing environmental, economic and safety considerations in designing an alternative to the current I-5 bridge and commend the inclusion of those characteristics that support the health of our communities.

Lillian Shirley, Director

Multnomah County Health Department

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Portland, OR 97204

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**Health Department
Office of the Director
MULTNOMAH COUNTY OREGON**

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Portland, Oregon 97204
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June 9, 2008

Mr. Doug Ficco, Co-Director
Mr. John Osborn, Co-Director
Columbia River Crossing
700 Washington Street, Suite 300
Vancouver, WA 98660

Dear Mr. Ficco and Mr. Osborn:

This letter provides Multnomah County Health Department's response to the Columbia River Crossing (CRC) Draft Environmental Impact Statement (DEIS) issued on May 2, 2008. We are submitting a number of recommendations for further analysis and look forward to your response.

As an agency committed to improving the health and well-being of our residents, Multnomah County Health Department (MCHD) has an interest in promoting those bridge and highway improvement features that enhance the health of our communities and avoid or mitigate negative health impacts. We believe that all of the proposed options for the I-5 bridge expansion (both "build" and "no-build" options) have significant potential to affect the health of residents of both Multnomah and Clark Counties. Consequently, we have examined the draft Environmental Impact Statement (DEIS) for this project through a public health lens to understand the scope and magnitude of these potential health effects.

It appears that the DEIS 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."¹ To satisfy NEPA requirements, the CRC project has focused on meeting minimum standards set by federal and state governments for air quality and noise. We believe CRC staff has an opportunity to not simply meet minimum standards, but to plan a project to maximize positive impacts on regional health. This will require project staff to go beyond the health scope of DEIS precedents, examine current scientific literature, and, in some instances, to set standards that are stricter than current federal and state requirements when they do not adequately safeguard the public's health.



It is our hope that after considering our remarks the Columbia River Crossing (CRC) staff, members of the public, and all decision-making entities will give public health effects significant weight in evaluating the relative merits of the bridge alternatives. We also hope that health impact will be used as an evaluation criterion in other transportation projects in our county. The primary goal of this work is to ensure that public health is a priority concern in the DEIS process.

This memo is divided into two major sections. The first addresses potential health impacts of the proposed I-5 bridge alternatives. The second outlines our recommendations for improving the health impacts associated with the CRC project. Within each section, transportation, safety, air quality, noise and environmental justice issues are addressed.

1) Potential health impacts of proposed I-5 bridge alternatives

a) Transportation

- i) Traffic volumes in 2030 and beyond are likely to affect human health through air quality, noise pollution, obesity, and unsafe conditions.*

The population growth in the region and the demand for use of the I-5 bridge are likely to continue beyond 2030. It will only be a matter of time before an expanded highway bridge again reaches capacity and congested conditions occur. According to the DEIS the traffic volumes that the replacement bridge will accommodate are 26% higher during AM peak hours and 39% higher during the PM peak hours than present day conditions. If population growth in the region continues at a similar rate beyond 2030, we can expect 30,240 vehicles attempting to cross the bridge southbound during the AM peak, and almost 40,000 northbound during the PM peak by the year 2055. The motor vehicle congestion that the CRC project is designed to address will be alleviated only temporarily during the lifespan of the new bridge. With an increase in the volume of vehicles in the bridge area, congested conditions are likely to yield more severe health impacts from air pollution, noise, and motor vehicle collisions than the present day conditions.

Increasing incentives and capacity for single occupancy vehicle (SOV) use may contribute to the problem of obesity in the region. Public health research shows that the amount of time spent in cars has an inverse relationship with physical activity and a direct relationship with obesity. In one study, every extra 30 minutes of commuting time per day was associated with a 3% greater likelihood of obesity.² In another study, each additional hour spent in a car per day was associated with a 6% increase in the likelihood of obesity.³

- ii) Bridge alternatives that encourage the use of mass transit or bicycles instead of cars will have a positive effect on health by increasing physical activity and reducing obesity.*

Obesity and related conditions are a serious problem in the United States and have reached epidemic proportions. In the Portland-Vancouver Metropolitan Area, 24% of residents are obese, and an additional 37% are overweight. Physical activity can contribute to a decreased risk of obesity, heart disease, high blood pressure, diabetes, and some types of cancer.⁴

A growing body of research shows that certain features in the built environment can help people attain the daily minimum requirements for physical activity by encouraging participation in active modes of transportation including cycling, walking, and using mass transit.⁵⁻⁸ The Centers for Disease Control's (CDC) Guide to Community Preventive Services states that improving access to non-motor vehicle transportation can increase the number of people who are physically active 3 times a week by 25%.⁴ Walking to public transit also helps people meet physical activity recommendations.⁸ In the US walking and bicycling levels fell 67% between 1960 and 2000, while obesity levels increased 241%.⁹ States with the highest levels of cycling and walking have a greater percentage of the population meeting the recommended 30-plus minutes a day of physical activity.

MCHD commends CRC staff for including options that expand the transportation alternatives available to commuters traveling between Washington and Oregon to include light rail or bus rapid transit. We are also pleased to note the inclusion of options for safer bike and pedestrian facilities that will also encourage physical activity and provide health benefits.

iii) The inclusion of increased options for public transportation will improve the mobility of vulnerable populations.

Public transportation is a preferable alternative to SOV trips. In addition to alleviating traffic congestion and counteracting the problem of overweight and obesity, public transportation plays a significant role in the lives of many vulnerable groups including the elderly, people with disabilities, and members of our community who cannot afford or do not have access to a car. The provision of accessible, safe public transportation options is necessary to provide equitable access to regional resources for all segments of the population. From the perspective of providing greater access to an array of public transportation options for vulnerable populations all of the "build" alternatives of the CRC project are laudable as they all expand mass transit options.

iv) The introduction of a toll on the I-5 bridge together with quality public transportation will have a beneficial impact on health to the extent that a toll would encourage travelers to shift from using SOVs to public transportation.

The health benefits of using public transportation including increasing physical activity and reducing obesity have been discussed above. The institution of a toll or any commuter trip reduction policy that creates an incentive for travelers to use

public transportation options rather than motor vehicles will result in better health for our communities.

- v) *Light Rail Transit (LRT) is substantially more beneficial to health than Bus Rapid Transit (BRT).*

We strongly support the addition of LRT over BRT. LRT has the potential to be more convenient and accessible, and have greater overall health benefits. LRT produces less air pollution and noise than BRT, and is less subject to congestion problems. In addition, the benefits that use of public transportation may have on overall physical activity rates could be maximized due to the speed and higher capacity of LRT (7,250 daily users in the Replacement option as compared with 6,100 on BRT), which would likely increase attractiveness and encourage higher rates of use. The DEIS also indicates that safety concerns with LRT have been successfully mitigated in Portland with simple improvements (traffic control, signage, etc.).

b) Safety

- i) *Bridge alternatives that provide opportunities for more cars to travel faster may increase the number and severity of collisions.*

Research has established that the severity of collisions increases with speed and volume, both of which will increase with the “build” alternatives. The probability of an injury versus a serious injury versus a fatality can be calculated based on the speed of travel. Reduction in speeds of 2 to 9 mph has reduced the number of fatalities between 6 and 34%, and in a crash with an impact speed of 50 mph, the likelihood of death is 20 times greater than with an impact speed of 20 mph.¹⁰

Increases in speed also increase the likelihood of collisions. A meta-analysis found a 2% decrease in the number of crashes for every 1km/h (0.6 mph) reduction in average speed at levels above 50km/h (31 mph), and that the risk of crash at least doubles for each 5km/h (3 mph) increase over 60 km/h (37 mph).¹⁰ Interstate highways, with faster speeds, comprise 1% of all road nationally but contribute a disproportionate 14% of all road fatalities.¹¹

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.

Motor vehicle accidents are a serious public health concern as they comprise the leading cause of death in people ages 1-44 in the United States.¹² In 2003, there were 42,643 fatalities and almost 3 million injuries on roads in the United States,¹³ and the number has increased in recent years. There are 500,000 hospitalizations and four million emergency department visits each year due to motor vehicle crashes. The economic burden of motor vehicle-related injuries and fatalities costs the United

States over \$150 billion each year.¹² The National Traffic Safety Administration (NHTSA) calculates the economic impact of motor vehicle crashes in 2000 at \$230.6 billion. This includes \$61 billion for loss of productivity, \$59 billion for property damage, \$32.6 billion for medical expenses, and \$25.6 billion travel delay.¹⁴

- ii) Wider bicycle and pedestrian paths separated from the freeway, adequate signage and lighting, and increased connectivity of routes in the project area will decrease the number of crashes involving cyclists and pedestrians.*

Bikes and pedestrians suffer a disproportionate amount of injury and fatality due to crashes with motor vehicles. This is evidenced in the project area, where 100% of the fatalities in the study period were to cyclists and pedestrians. Nationally, 12.6% of traffic fatalities were pedestrians.¹⁵ Above 35 mph, most crashes resulting in pedestrian injury are fatal.¹⁶ Pedestrians involved in a motor vehicle crash have an 80% risk of being killed at 31 mph, and a 10% risk at 19 mph.¹⁰

Roadway width and design affect the risk of injury to pedestrians.¹⁵ Given the potentially disastrous consequences of crashes with motorists, the Health Department supports the widening of bicycle and pedestrian routes across all of the bridge alternatives to a minimum of 20' per route as recommended by the Bicycle Transportation Alliance. We also support physical separation from motorists on the road and specific plans for better signage, lighting and access to the bridge from local streets.

c) Air quality

- i) Air pollution has the potential to affect a large proportion of the population in the project area and should be a major criterion in the final selection of the bridge.*

Approximately 77% of air pollution in Multnomah County comes from mobile sources.¹⁷ In terms of illness and premature death, the toll of increased exposure to traffic-related air toxics is of concern for residents of the Portland-Vancouver area, for the families of those who are affected, and for the economy of the area.

Based on the Federal Highway Administration (FHWA) guidance the DEIS states that there will be a reduction of 30 to 90% in emissions associated with gas or diesel engines in the study area due to cleaner fuels and new combustion and emission control technology by 2030. However, a recent report by the Health Effects Institute (HEI) cautions that the alternative fuels and emissions control technology being adopted may themselves contribute to increases in other mobile source air toxics (MSATs) and particulate matter.¹⁸ For example, the report states that it is likely that acetaldehyde concentrations will rise as a result of increased use of ethanol. Another example is provided by the increase in ambient levels of formaldehyde associated with an increase in the number of vehicles fuelled by compressed natural gas.

While new fuels and emission control technologies will greatly reduce particulate matter in newer engines, older diesel vehicles will continue to pose a health risk until they are phased out. The HEI report urges readers to evaluate the exhaust from the newer engines “in particular to ensure that possible new emission species will not cause new adverse effects on human health”.¹⁸

Given that any new bridge alternative will be designed to last several decades, we urge the CRC staff to consider the potential environmental and health effects of alternative fuels beyond 2030. This particularly supports alternatives that maximize the use of LRT.

- ii) Significant improvements in health are possible if air pollution levels are reduced well below the National Ambient Air Quality Standards. Project alternatives that lower air toxics below the federal standards should be given greater consideration.*

The DEIS projects that none of the bridge alternatives will result in a violation of National Ambient Air Quality Standards and that air toxics that meet the maximum levels allowed by state and federal law (NAAQS) need not be examined further. However, peer reviewed scientific articles indicate that even a small reduction in certain air toxic levels *below* the federally set maximum allowable levels results in a significant decrease in premature mortality and illness associated with air pollution. Even at levels below federal standards, higher levels of air pollution lead to increasingly adverse health risks. Specifically, a reduction in the NAAQS for particulate matter (PM 2.5) from 15 to 14 $\mu\text{g}/\text{m}^3$ is estimated to result in 1,900 fewer premature deaths, 3,700 fewer non-fatal heart attacks, and 2,000 fewer emergency room visits for asthma per year.¹⁹ We ask CRC staff to examine such evidence and use standards for emissions that are more stringent than federal or state requirements in determining which of the proposed alternatives has the least harmful impact on human health. In addition, The DEIS states that federal maximum acceptable levels have not been set for MSATs. However, the state of Oregon Department of Environmental Quality has Ambient Benchmark Concentrations for MSATs. These can be used as a guideline in the absence of federal standards.

- iii) The cumulative effect of criteria pollutant and mobile source air toxics has the potential to cause health problems for community members.*

Clearly, residents of urban areas are exposed to multiple air pollutants simultaneously rather than a single air pollutant. Thus, health risks are a result of exposure to the total air toxics level in any given area. Further, the bridge influence area in Portland includes industrial and airport emissions in addition to pollution from mobile sources. Bridge alternatives 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. Conversely, options which minimize air toxics will have positive impacts on human health.

d) Noise

- i) Harmful noise levels from traffic are associated with increases in chronic diseases and cognitive functioning. Bridge options and mitigation strategies that decrease the number of residents exposed to transportation noise as well as the level of noise will avoid these adverse health outcomes.*

Thirty million people in the United States are exposed to harmful noise levels daily.²⁰ Of particular concern is the finding that increases in transportation noise are associated with increases in hypertension and cardiovascular disease.²¹⁻²⁴ Noise is of particular concern where children are present, as it interferes with children's concentration, cognitive development, learning, and reading comprehension.²⁵⁻²⁸ Other common complaints from noise include sleep disturbances and annoyance.²⁹⁻³²

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.

The health risks of noise occur at lower levels than the FHWA thresholds. While the FHWA recommends mitigation for residences, schools and parks above 67 dBA, the thresholds at which health effects occur are actually much lower. In a review of the state of the existing evidence of noise impacts on health around the world, the World Health Organization (WHO)^{22,26} estimated that sleep disturbances occur over 30dB, annoyance is associated with 50dB, heart disease and hypertension are associated with noise in the 65-70 dB range, and hearing impairment over 75 dB. The WHO recommended outdoor acceptable noise level for health is 55 dB. This is substantially lower than the FHWA guidelines used in this project (67 dBA). Using the lower noise threshold would result in identification of a greater number of areas at unacceptable noise levels that increase the risk of adverse health impacts on area residents.

Providing alternatives to motor vehicle use, such as public transportation or safe and accessible bike and pedestrian facilities have been examined in depth in the DEIS and provide an alternative to driving for a significant number of people. Tolling would also reduce the incentives to drive and thus reduce motor vehicle volumes. All alternatives that decrease motor vehicles on the highway and local streets could reduce noise and avoid negative health impacts.

e) Environmental justice

The CRC project poses the potential for disproportionate adverse health impacts on susceptible populations as a result of all of the concerns stated above. The CRC

project area includes neighborhoods with high proportions of populations of color, low income residents, and populations with disabilities. Therefore, it is possible that the health impacts due to air pollution and excessive noise will be felt most acutely by these susceptible populations.

Previous regional studies have shown that the air and noise pollution in these neighborhoods are directly attributable to traffic on I-5.³³⁻³⁴ Although the CRC project has conducted extensive public outreach with stakeholders, and has engaged a Community and Environmental Justice advisory group and tribal liaisons to assist with the analysis, some concerns remain.

i) Air pollution

In the Portland Neighborhood Survey, 32% of North and Northeast Portland residents reported that the air quality in their neighborhoods was sometimes or always bad.³⁵ The Portland Air Toxics Assessment (PATA) report issued in 2006 suggests that the health effects of certain criteria air pollutants and MSATs disproportionately affect communities in the I-5 corridor in North and Northeast Portland.³³ These areas include higher percentages of low-income residents and populations of color. The pattern of distribution clearly showed that the higher concentrations of these toxics were attributable to pollution from I-5. Although levels of certain air toxics from motor vehicles may decline by 30 to 90% in the coming years, concerns about the negative health impact of other air pollutants are warranted as outlined in the air quality section above (part c). These air pollutants are likely to have the same disproportionate impact on communities in North and Northeast Portland that is described in PATA. The subarea analysis in the DEIS was not sensitive enough to uncover the neighborhood variations in air toxics in the project area found in the PATA report. We, therefore, request that you consider the PATA report in your analyses.

ii) Noise

The larger 23-mile geographic area examined in the Transportation section of the DEIS includes several Environmental Justice populations that currently bear the unequal impact of noise from the I-5 corridor, but are not included in the noise analysis. In the North Portland Noise Study, the City of Portland examined noise impacts in 21 neighborhoods in North and Northeast Portland.³⁶ These neighborhoods currently experience excess noise from I-5, as well as from the Portland International Raceway and railways. Thus, the cumulative effects of environmental noise in these neighborhoods are large. Although the CRC project is not responsible for mitigating noise impacts from other sources, CRC staff should consider the portion of the overall noise levels that is attributable to the new bridge and how this contributes to human health.

In addition to noise measurements, a survey was conducted in North and Northeast Portland neighborhoods in 2006. The four Portland neighborhoods in the CRC project area that were included in the survey (Kenton, Bridgeton, Hayden Island, and East

Columbia) reported that they were more affected by noise than residents of other study neighborhoods. Overall, 45% of residents said they were affected by noise, and 37% said they were most aware of it when they were outdoors. Further, 75% of residents said that they spend at least a couple of days a week outdoors in their yard.³⁴

The locations that do not meet criteria for mitigation of noise impacts in the “build” alternatives include 36 residences, apartment buildings and a hotel in downtown Vancouver, and a hotel in Portland that all house low income and minority residents.

2) Recommendations for improving the health impacts of the Columbia River Crossing project

In making our recommendations to the CRC project staff and the decision-making agencies, the goal of this Health Department is to encourage the development of bridge characteristics that improve the health of our residents while simultaneously minimizing the potential for harmful health consequences. Based on our assessment of the health impacts of the proposed bridge alternatives Multnomah County Health Department makes the following recommendations to the CRC project staff and decision-making agencies:

Support the following project components:

- Maximize use of Light Rail Transit
- Transit alignments that serve low income and minority populations without severing community cohesion
- Roadway and interchange improvements that increase safety
- Safe and accessible bike and pedestrian facilities
- Tolling to discourage motor vehicle use, particularly single occupancy motor vehicle use
- Alternatives that do not increase SOV capacity on the roadway, especially during peak periods

Conduct additional analysis in the following areas:

a) Transportation

- i) Use population and freight traffic projections well beyond 2030 in forecasting the number of trips across the I-5 bridge, duration of travel, length of peak congestion periods, etc.*

Conducting such analysis is likely to reveal significant information on how long it will be before the new bridge no longer meets the CRC goals of alleviating traffic congestion and safety problems and facilitating the efficient movement of freight along I-5. It will also allow the selection of a locally preferred alternative with a clearer understanding of the long term needs of our community.

b) Safety

- i) *Include analysis of predicted collision rates and the impact of increased speed and volume on collision severity and associated injuries.*
- ii) *Ensure that routes through North Portland and downtown Vancouver on local streets are well connected, accessible and safe.*

Adequate accessibility to the bridge by bike or foot involves safe connections to the bridge from local neighborhoods in Portland and Vancouver. The Bike and Pedestrian Advisory Committee has identified problem areas for the connectivity of routes.

- iii) *Widen bridge bicycle and pedestrian paths beyond the dimensions presented in the proposed alternatives and incorporate better separation of these from motorized vehicles and High Capacity Transit.*

c) Air Quality

- i) *Include analysis of possible unanticipated increase of air toxics that have not been considered in the air quality analysis of the DEIS.*

We urge the CRC staff to follow the recommendations of the Health Effects Institute by considering the effects on air quality and on human health of alternative fuels and emission control technologies that are likely to be implemented in the coming decades. We encourage CRC staff to take a proactive approach in analyzing the impacts on air quality instead of focusing solely on air toxics that are of current concern.

- ii) *Include analysis of the health impacts of cumulative exposure to air toxics emitted by vehicles.*

We strongly recommend a more complete analysis of the project's impact on human health which requires a higher standard than merely an examination of whether individual federal and state air quality standards will be met. This is particularly important in the areas identified to currently experience unsafe levels of air pollution.

d) Noise

- i) *Analyze the impacts of traffic noise of the proposed bridge alternatives using a lower threshold for noise levels than the current federal standard.*

Health consequences of noise including heart disease and hypertension occur at noise levels that are lower than the federal threshold. We recommend an analysis of the effects of noise using the WHO recommended outdoor noise threshold of 55 dBA.

- ii) *Re-examine mitigation measures for 35 locations that will not meet noise standards with the build alternatives as a way of protecting the health of residents in these areas.*

e) *Environmental Justice*

- i) *Analyze the effects of noise, air quality, and safety in the area of impact used for the transportation analysis.*

The populations in the 23-mile project area used in the transportation analysis will experience air quality and noise impacts from both the I-5 and the increased vehicles on local streets accessing the bridge. The health and safety of bikes and pedestrians on local streets will also be impacted by this traffic. The air quality, noise, and safety analyses should use this expanded area of analysis. Otherwise, environmental justice populations are not consistently considered throughout the DEIS.

f) *Establishing health-based standards for the CRC project*

- g) *In evaluating the merits of proposed bridge alternatives set standards (e.g. for acceptable air toxic and noise levels) that are more stringent than federal or state standards where there is scientific evidence that this is necessary to protect the health of the public.*

As we have pointed out in the air quality and noise sections some federal standards do not protect human health adequately. We urge the CRC staff to examine available peer-reviewed literature to determine whether stricter standards are necessary to prevent harmful health impacts in our community rather than simply following NEPA requirements.

In closing, Multnomah County Health Department recognizes that the CRC project staff is facing a considerable challenge in balancing environmental, economic, and health and safety considerations in designing an alternative to the current I-5 bridge. Once again, we commend the inclusion in the proposed bridge alternatives of those characteristics that support the health of our communities. The protection of public health is at the heart of the law that requires this environmental assessment and we encourage you to incorporate our suggestions as the project moves forward.

Sincerely,



Lillian Shirley, BSN, MPH, MPA
Director



Gary Oxman, MD, MPH
Health Officer

cc: Columbia River Crossing Task Force
Sustainable Development Commission

***Analysis conducted by: Nancy Goff, Maya Bhat, and Sandy Johnson
Health Assessment and Evaluation
Multnomah County Health Department***

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Memorandum

June 17, 2008

TO: Columbia River Crossing Task Force
FROM: CRC Pedestrian and Bicycle Advisory Committee (PBAC)
SUBJECT: PBAC Recommendations for World Class Pedestrian and Bicycle Facilities

Purpose of this Memorandum

The Locally Preferred Alternative (LPA) for the Columbia River Crossing project, to be selected by the project's sponsoring agencies this summer, will focus on three key decisions: 1) replace or supplement the existing Interstate Bridges, 2) provide bus rapid transit or light rail transit across the Columbia River, and 3) the location of the high capacity transit line's terminus in Vancouver.

This memorandum serves to provide recommendations from the Pedestrian and Bicycle Advisory Committee (PBAC) regarding pedestrian and bicycle facilities associated with the decision of replacing or supplementing the existing bridges and the PBAC's definition of and requirement for "world class" facilities. This memorandum also describes tasks the PBAC plans to undertake after the LPA, which sets the general framework for actual project design, has been chosen. Presented within this memorandum are points of consensus reached within the PBAC. Neither support nor opposition by the PBAC to issues outside the scope of this memorandum should be assumed.

Composition of the Pedestrian and Bicycle Advisory Committee

The PBAC is composed of representatives from municipal, county and state public agencies; citizen advisory committees; neighborhood associations; and pedestrian and bicycle advocacy groups (see attachment for a list of the PBAC members). Staff members of the Columbia River Crossing support the PBAC. All PBAC meetings are open to the public. The PBAC, which has met 13 times so far, will continue to provide input on pedestrian and bicycle related project elements after the LPA is selected and to be explored during preparation of the project's Final Environmental Impact Statement (FEIS).

Pedestrian and Bicycle Considerations in the DEIS, LPA, and FEIS

Pedestrian and bicycle facilities are part of the Columbia River Crossing project's Purpose and Need statement. This means that any build alternative must address the problems for pedestrian and bicycle conditions described in the Purpose and Need statement.

The Draft Environmental Impact Statement (DEIS), released on May 2, 2008, presents analysis of pedestrian and bicycle conditions associated with build alternatives that assumed single pathways at least 16 feet in width over the Columbia River (emphasis added). The multi-modal elements (transit, highway, pedestrian, bicycle, etc.) for each of the build alternatives analyzed in the DEIS were based on standard design practices. This assisted in packaging the multi-modal elements into complete alternatives that could be evaluated and compared in the DEIS and to enable the project's sponsors to focus on the three key decisions needed as a part of the LPA.

While the DEIS evaluated the environmental impacts associated with pedestrian and bicycle pathways at least 16 feet wide across the Columbia River, the DEIS included flexibility for design refinements. For example, many of the PBAC's recommendations through the spring of 2008 were referenced in the DEIS, and while not all were included in the full environmental analysis, they will be further explored after the adoption of the LPA and during the preparation of the FEIS. This is consistent with how several other multi-modal elements, that while not key for making an LPA decision, were considered in the DEIS, e.g., number of auxiliary lanes across the Columbia River, specific designs for each of the six interchanges, transit alignment choices on Hayden Island and in Vancouver, and tolling rates.

The Replacement Bridge Would Offer Best Pedestrian and Bicycle Opportunities

The PBAC has come to a consensus that the replacement bridge alternative would offer the best opportunities for walking and bicycling in the project area. Compared to the supplemental bridge alternative, the replacement bridge option would provide the most direct and safe routes for pedestrians and bicyclists between Vancouver, Hayden Island, and North Portland. It would also enable provision of a “world-class” facility (see discussion below).

According to the DEIS, the replacement bridge alternative would include a multi-use pathway west of and adjacent to the transit guideway. The pathway would be continuous and above-grade from approximately Sixth Street in Vancouver to just north of Marine Drive, then pass under Marine Drive and connect to the Expo Center. The pathway could separate pedestrian and bicycle traffic.

The replacement bridge alternative would provide access to Vancouver via a ramp to a roadway in the downtown area. A second connection in Vancouver, closer to the Columbia River, would provide access (with an elevator) to waterfront attractions and the multi-use path along the shore. On Hayden Island, the pathway would be accessible via an elevator and stairs located at the high-capacity transit station. In addition, stairs at the north and south ends of the island could be provided to link the interstate facility to waterfront trails.

At the Marine Drive interchange, the multi-use path would have access to the Expo Center transit station and to the 40 Mile Loop trail pathway running along North Portland Harbor. Additional connections to Delta Park and bicycle routes along Union Court and Martin Luther King Jr. Boulevard would be maintained and improved with off-street facilities, ramps and stairs. Pedestrians and bicyclists would be able to cross North Portland Harbor on a new pathway along the high-capacity transit guideway on the west side of I-5.

The I-5 Bridge Must Include a “World-Class” Pedestrian and Bicycle Facility

The PBAC, after extensive study of current multi-modal issues, existing and planned pedestrian and bicycle routes, physical and geographic conditions, projected land use changes, and forecast pedestrian and bicycle demands, has determined that the Columbia River Crossing must provide “world-class” pedestrian and bicycle facilities. To meet this standard, the I-5 bridge must:

- Think forward by designing pedestrian and bicycle facilities that accommodate demands for the next 50 plus years and that offer flexibility for reconfiguration as needs change over time
- Provide a safe and comfortable experience for a variety of users, including pedestrians, persons with disabilities, seniors, families with children, recreational trail users, tourists, roller-skaters, and well as bicyclists of varying skill levels traveling at a range of speeds. This is best achieved by maximizing accessibility and limiting opportunities for conflict through:
 - Universal design
 - Ample width for all users to travel in both directions and pass one another
 - Separation between more vulnerable users traveling at slow speeds and users traveling at significantly higher speeds (this is especially important given the grades required to span the Columbia River)
 - Good visibility and sight lines
 - Minimal changes in elevation and steepness of grade
 - Provide wide negotiation room, signage and pavement markings to alert users to potential conflict points
- Link communities and regionally significant trail networks on both sides of the Columbia River and the North Portland Harbor, including in Vancouver, on Hayden Island, and near Marine Drive. This should be achieved by providing connections at bridgeheads to existing and planned trails and street networks that are convenient, logical, easy to find and navigate, and that limit out of direction travel and changes in grade.

- Promote healthy and active living by providing inviting opportunities to incorporate physical activity into daily lives, including how people transport themselves
- Celebrate and elevate the importance of multi-modal transportation in the region by increasing the visibility of people walking and bicycling in the project area
- Offer a high quality experience by providing attractive and functional features such as lighting, seating, wayfinding signs, and art
- Provide a facility dedicated to regional trail users, complete with rest and scenic viewing areas, that serves as the regional trail connection between Washington and Oregon identified in trail plans
- Commit to sustainability and quality urban design and landscaping

The following describes the PBAC’s recommendation for the replacement bridge’s “world-class” pedestrian and bicycle facility:

- The overall pathway on the western bridge (adjacent to the transit guideway) must provide separation between recreational users and higher speed bicycle users. To provide this separation, a 12-foot wide regional trail should be provided adjacent to, and to the west of, a pair of six-foot wide bicycle lanes (see attached rendering). These recommended widths are exclusive of potentially needed shy distances, i.e., free and clear of poles and other obstructions to enable safe pedestrian and bicycle movement (a summary of agency standards for multiuse paths, sidewalks and bike lanes is attached).

The regional trail would accommodate pedestrians, persons with disabilities, seniors, families with children, tourists, roller-skaters, and recreational bicycle riders. The adjacent bicycle lanes would be used by bicycle commuters and other faster-moving bicyclists. The regional trail would be at a slightly higher level than the bicycle lanes, but bicyclists in the bicycle lanes would be able to access the trail. Different paving treatments and/or patterns should differentiate the regional trail and the bicycle lanes.

- In addition to the combined regional trail and bicycle lanes on the western bridge, an eight-foot wide sidewalk should be provided on the eastern bridge (the bridge that would serve the northbound traffic lanes) across both the Columbia River and the North Portland Harbor. The sidewalk across the North Portland Harbor would touch down on Hayden Island and use surface street sidewalks to connect to the sidewalk across the Columbia River.

While this facility would primarily serve pedestrians, accommodations should be provided for the occasional recreational bicyclist, e.g., wheel gutters (narrow ramps alongside stairs for rolling a bicycle while climbing stairs). It is understood that for physical and environmental reasons connecting this eastern sidewalk directly with the Vancouver shore would be challenging and most likely would require routing it westerly under the replacement bridge to tie in with the western multi-use pathway above the shore.

- Additional access points, discussed as possibilities in the Draft EIS, should be provided to make the river crossing paths connect more directly to parks and recreational trails. Some examples of these facilities are the Columbia River Waterfront Trail in Vancouver, the river adjacent areas on Hayden Island, and the 40 Mile Loop in Oregon.
- Viewpoints or “belvederes” should be provided at locations along both the regional trail on the western bridge and the sidewalk on the eastern bridge. These features would also function as rest areas for pathway users.

The PBAC recognizes that the Portland-Vancouver metropolitan area has experienced exponential growth in walking and bicycling trips over the years and that any bridge improvement project must not only meet existing and latent pedestrian and bicycle demands, but also must accommodate pedestrian and bicycle traffic anticipated over the next 50 plus years. Based on pedestrian and bicycle forecasts developed for the Columbia River Crossing, the PBAC is confident that the facilities described above would offer a sustainable, long-term solution to accommodate expected users for years to come .

PBAC's Next Steps

The PBAC plans to spend the summer and fall of 2008 conducting several tasks, including:

- Providing recommendations for project area pathway and sidewalk designs, including walkway and bikeway separation treatments and barriers
- Studying and suggesting pathway and sidewalk connections near Marine Drive/Bridgeton/Expo Center, Hayden Island, and Vancouver, including ramps, elevators and stairs
- Recommending pedestrian and bicycle treatments within each of the project's six interchange areas (Marine Drive, Hayden Island, SR 14/City Center, Mill Plain, Fourth Plain, and 39th Street/SR 500/Main Street)
- Providing input on pedestrian and bicycle design for the affected local streets (e.g., Vancouver's high-capacity transit streets determined after the LPA) and transit stations, including provisions for bicycle parking

In addition, the PBAC will continue to refine its list of pedestrian and bicycle considerations regarding design, safety, connections, and quality of experience (see attachment).

Attachments

- CRC Pedestrian and Bicycle Advisory Committee Membership
- PBAC Proposed Pedestrian and Bicycle System for Replacement Bridge
- PBAC Recommended Pathway Artist Rendering
- Potential Pedestrian and Bicycle Design Guidelines
- Pedestrian and Bicycle Facilities in Portland and Vancouver
- Pedestrian and Bicycle Bridge Pathways around the World
- Summary of Agency Standards for Multiuse Paths, Sidewalks and Bike Lanes

/DJP



Pedestrian and Bicycle Advisory Committee Membership

Membership current as of June 5, 2008

April Bertelsen, City of Portland

Todd Boulanger, City of Vancouver

Kyle Brown, Steps to a Healthier Clark County

Coalition for a Livable Future - *inactive*

Basil Christopher, Oregon Department of Transportation

Seanette Corkill, Arnada Neighborhood Association

Bob Cromwell, National Park Service

Debbie Elven-Snyder, C-TRAN

Emily Gardner, Bicycle Transportation Alliance

Roger Geller, City of Portland

Lisa Goorjian, City of Vancouver

Joe Greulich, Clark County Bicycle Advisory Committee

Rod Merrick, Portland Pedestrian Advisory Committee

Paula Reeves, Washington State Department of Transportation

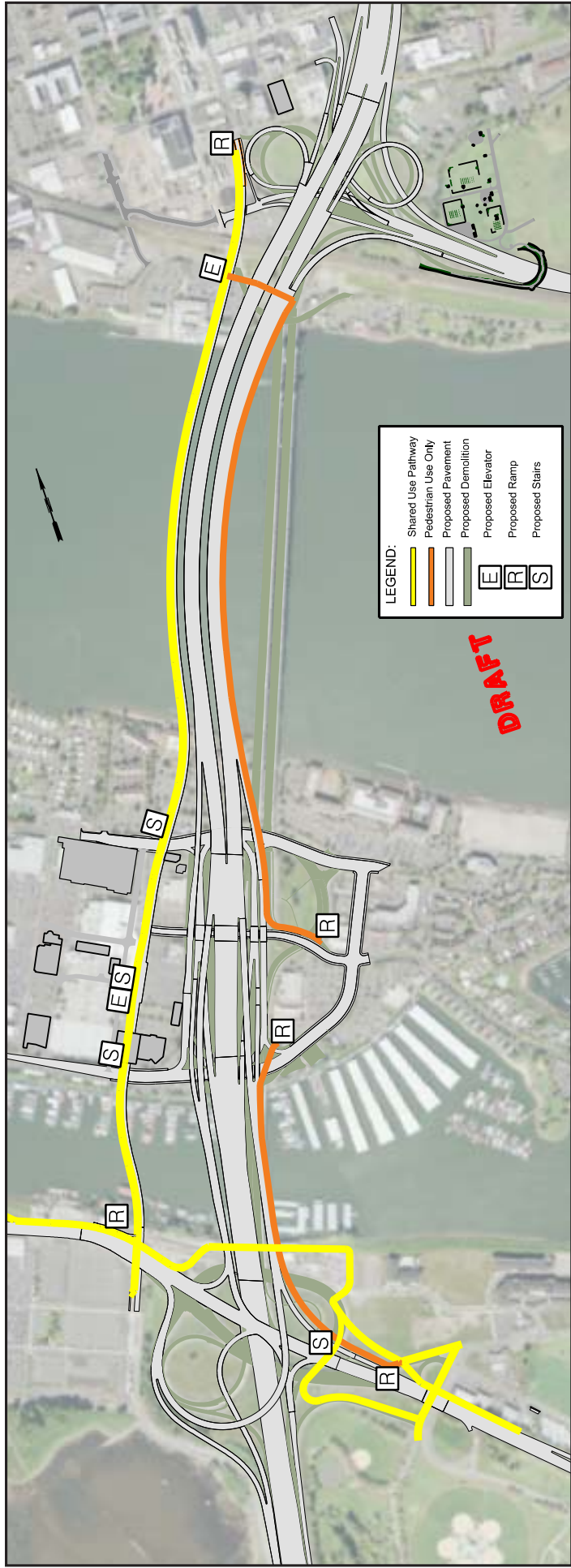
Shayna Rehberg, Portland Bicycle Advisory Committee

Karl Rohde, Bicycle Transportation Alliance

Walter Valenta, Bridgeton Neighborhood Association

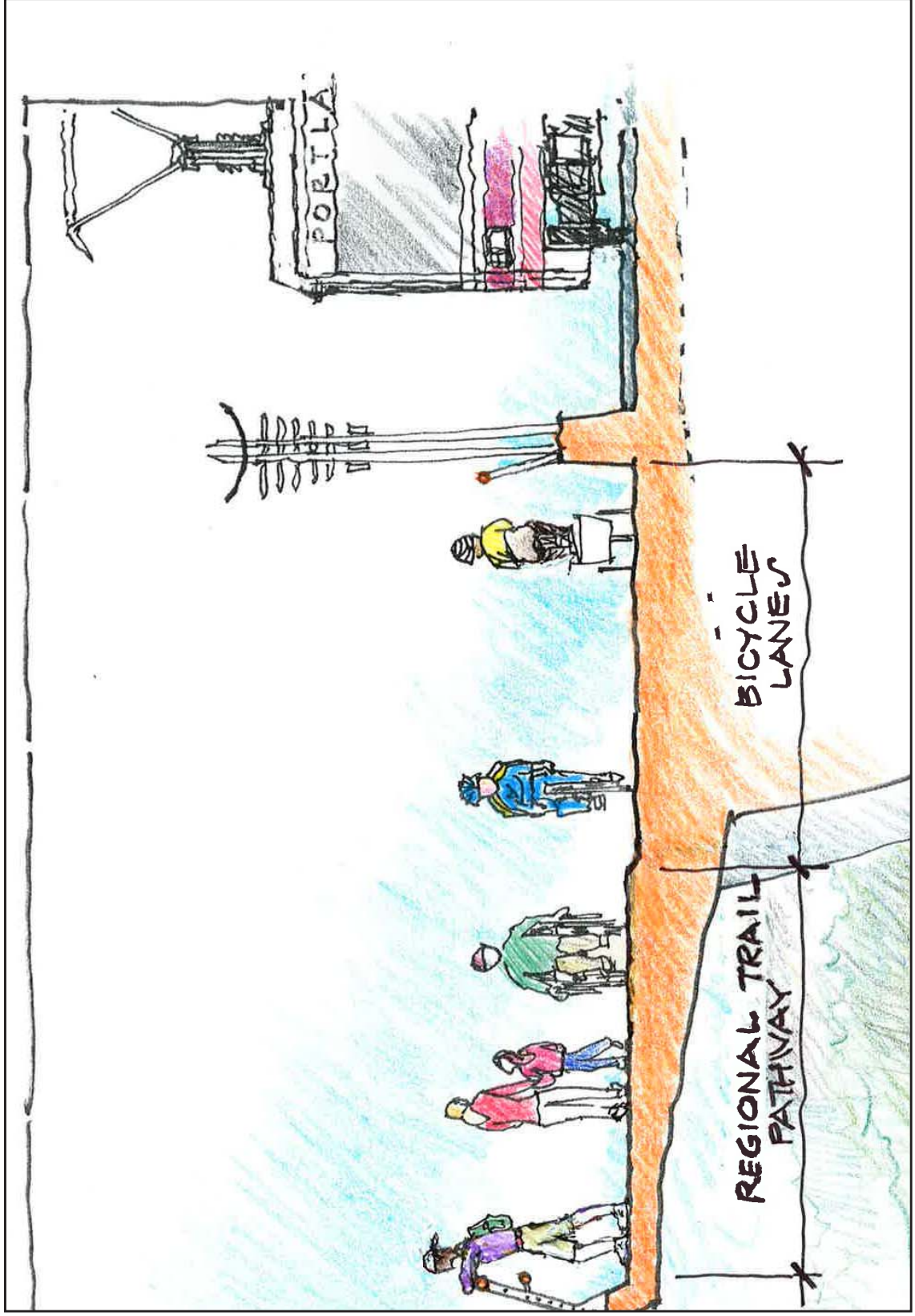


PBAC Proposed Pedestrian and Bicycle System for Replacement Bridge





Pedestrian and Bicycle Advisory Committee Recommended Pathway
on West Side of West Replacement Bridge (Looking North)



Artist Rendering



Potential Pedestrian and Bicycle Design Guidelines for the I-5 Columbia River Crossing

Introduction

The Columbia River Crossing's Problem Definition states, "Bicycle and pedestrian facilities for crossing the Columbia River in the I-5 Bridge Influence Area are not designed to promote non-motorized access and connectivity across the river." This document serves to provide parameters for consideration of a future bridge facility in terms of pathway design, bicycle and pedestrian safety, improved connections to the local and regional network and to create a high quality riding and walking experience between Portland and Vancouver.

Design

- Pathways
 - Located on either side of the bridge or on both sides
 - Shared use or separated
 - Width; increase path width on steeper grades
 - Gentle grades ($\leq 5\%$) and cross-slopes ($\leq 2\%$)
 - Sight distances on curves
 - Large turning radii on downgrades and curves
 - Overhead clearance
 - Constructed using non-skid surfaces
 - Utility, drainage grates and expansion joint placement
- Scenic views – (Mt. Hood, Columbia River, Hayden Island, Vancouver)
- Planned for future capacity

Safety

- Modal separation
 - Minimize exposure of pedestrians and bicyclists to vehicles and transit
 - Separation of pedestrians and bicyclists
 - Separation of "commuter" bicyclists and "recreational" bicyclists
- Physical separation features
 - Grade separated paths
 - Barriers – vehicular, transit and water
 - Noise mitigation
 - Minimize exposure to vehicle exhaust
 - Protection from debris/"kick-up"/splatter/bird droppings
 - Wind, rain and headlight glare protection

- Personal safety
 - Lighting
 - Security cameras and phones
 - “Eyes on the street”
- Emergency response/maintenance vehicle access

Connections

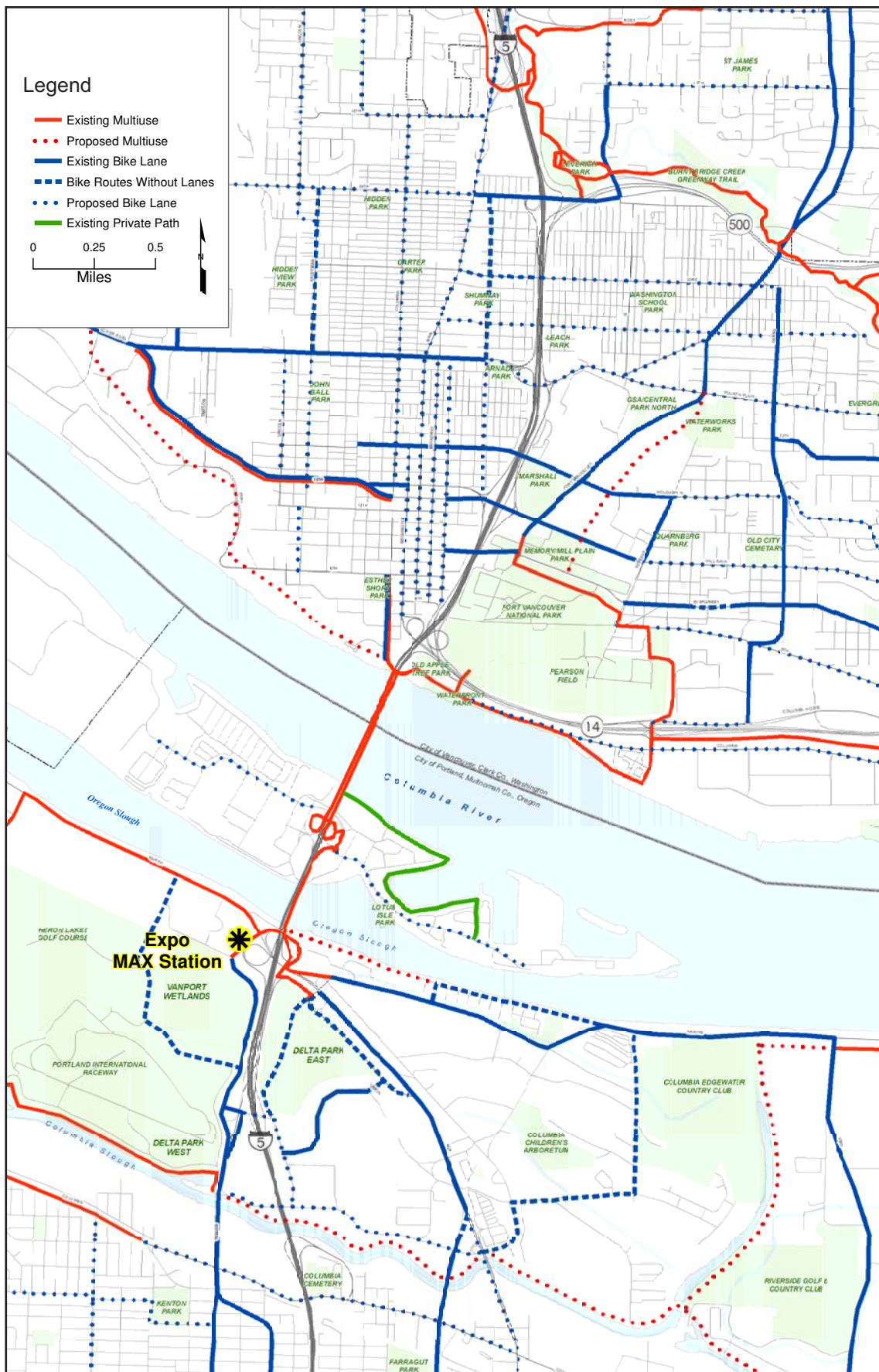
- Connection to existing pedestrian/bicycle facilities – (Portland, Vancouver, transit stops, activity centers)
- Provide straight and direct connections – minimize time to cross river and make connections
- Way-finding and directional signage
- Improvement of existing trails/paths in the BIA
- Travel time across the future facility should not exceed the time to cross today

Quality of Experience

- Amenities – (restrooms, benches, trash cans, info kiosks, public art, end of trip and park & ride facilities, etc.)
- Bridge aesthetics
 - Architectural detailing and quality of build materials
 - Lighting and landscaping

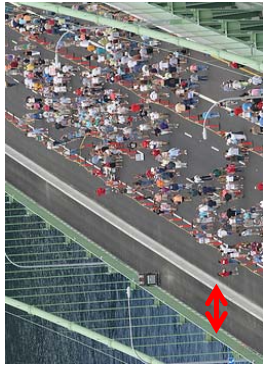


Pedestrian and Bicycle Facilities in Portland and Vancouver



Pedestrian and Bicycle Bridge Pathways Around the World

Shared Pedestrian and Bicycle Paths



Tacoma Narrows Bridge
Tacoma, WA
10' shared-use path (1)
Total 10'



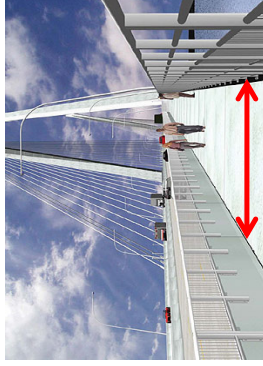
Golden Gate Bridge
San Francisco, CA
10' shared-use path (1 full-time)
10' (5' clear) bike path (weekend)
1' raised above roadway
Total 10' (15' weekend)



Carquinez Bridge
Vallejo, CA
12' shared-use path (1)
Total 12'



New Bay Bridge
SF/Oakland, CA
15.5' shared-used path (1)
7.5' belvederes (2)
Total 15.5'



Cooper River Bridge
Charleston, SC
12' shared-use path (1)
Total 12'

Separated Pedestrian and Bicycle Paths



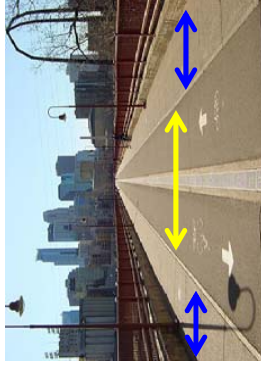
Pfluger Bridge
Austin, TX
10' bi-directional bike path (1)
5' sidewalks (2)
15' observation deck
Total: 20'



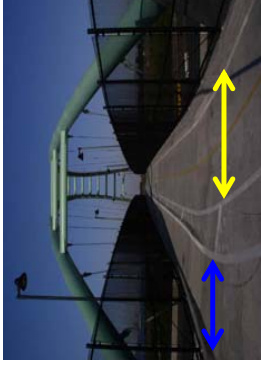
Willemsbrug
Rotterdam, Netherlands
6' sidewalks (2)
6' bike lanes (2)
Total: 24'



Eramusbrug
Rotterdam, Netherlands
6' sidewalks (2)
6' bike lanes (2)
Total: 24'



Stone Arch Bridge
Minneapolis, MN
Bi-directional bike path (1)
Sidewalks (2)
Total: 24'



I-80 Ped/Bike Bridge
Berkeley, CA
8' bi-directional bike path (1)
5' sidewalk (1)
Total: 13'

Columbia River CROSSING

Summary of Agency Standards for Multiuse Paths, Sidewalks and Bike Lanes

Multiuse path

Agency	Minimum width	Desirable width	Separation	Reference
WSDOT	14 feet: (2)-10-(2)	16 feet: (2)-12-(2) or (1)-14-(1) Use a 12-14 foot pathway when maintenance vehicles use the path as an access road for utilities or when there will be substantial use by bicyclists, joggers, skaters and pedestrians	Min. 2 feet to traffic barrier	1
ODOT	14 feet, (2)-10-(2)	16 feet: (3)-10-(3) or (2)-12-(2) 12-foot wide path in areas with high mixed-use	5 feet shy distance when adjacent to roadway or barrier	2
City of Vancouver	12 feet	18-20 feet which includes a 6- to 8-foot border		3
City of Portland	14 feet clear of obstructions for a two-way path: (2)-10-(2)	16 feet clear of obstructions for two-way path: (2)-12-(2)		4

Sidewalk

Agency	Minimum width	Desirable width	Separation	Reference
WSDOT	5 feet	6 feet		1
ODOT	5 feet 6 feet adjacent to motor vehicle lane 6 feet on bridges	6 feet plus 3-5 feet of planting strip 7 feet on bridges	2 foot shy from shoulder high barriers or walls (in addition) 1 foot shy when adjacent to fills (in addition)	2
City of Vancouver	pedestrian zone width: 4-6 feet, depending on street classification	Frontage plus furnishing zone width: 3.5-8, depending on street classification		3
City of Portland	8 feet clear of obstructions (6 feet through pedestrian zone plus 2 feet furnishings zone/curb zone)	12 feet clear of obstructions (6 feet through pedestrian zone plus 2.5 feet furnishings zone/curb zone plus 1.5 feet frontage zone adjacent to bridge rail)		5

Bike lane

Agency	Minimum width	Desirable width	Separation	Reference
WSDOT	4 feet (no curb) 5 feet (against curb, guardrail or barrier)	5 feet		1
ODOT	4 feet (when physically limited) 5 feet against curb, guardrail or parking	6 feet		2
City of Vancouver	5 feet	6 feet		6
City of Portland	5 feet	6.5 feet		4

Definition of terms

Minimum width: The smallest pathway width allowable under the standard without a design exception.

Desirable width: The default width for new construction as suggested by the standard. This width is to be used in all cases except when circumstances call for the adoption of the minimum width or a design exception.

Separation: The default width for new construction as suggested by the standard. This width is to be used in all cases except when circumstances call for the adoption of the minimum width or a design exception.

References

1. Chapters 1020 & 1025 - WSDOT Design Manual (2006)
2. Oregon Bicycle and Pedestrian Plan (1995)
3. Southeast Vancouver Neighborhood Traffic Management Plan (2002)
4. City of Portland Bicycle Master Plan (1998)
5. Portland Pedestrian Design Guide (1998)
6. City of Vancouver Standard Plan Number T29-43 (2007)

Columbia River CROSSING

Summary of Agency Standards for Multiuse Path Grade, Curve Radius and Clearance Standards

Grade		
Agency	Maximum grade	Reference
WSDOT	5%, minimize length of segments with grades over 5% 2% grade for sustained climbing sections longer than 800'	1
ODOT	5% - steeper grades allowed for up to 500'	2
AASHTO	5% - steeper grades allowed according to: 5-6% for up to 800 ft 7% for up to 400 ft 8% for up to 300 ft 9% for up to 200 ft 10% for up to 100 ft 11+% for up to 50 ft	3

Curve Radius		
Agency	Minimum radius	Reference
WSDOT	Open country, urban setting: 90 feet Downgrades > 4% & 500 feet: 260 feet	1
ODOT	As short as needed to accommodate design vehicles	2
AASHTO	Design speed of 12 mph: 36 feet Design speed of 20 mph: 100 feet Design speed of 25 mph: 156 feet Design speed of 30 mph: 225 feet	3

Clearance			
Agency	Minimum height	Standard height	Reference
WSDOT	10 feet. 8 feet, with justification	10 feet	1
ODOT	8 feet	10 feet	2
AASHTO	8 feet	10 feet	3

Cross slope			
Agency	Standard	Maximum	Reference
WSDOT	2%	2%	1
ODOT	2%		2
AASHTO	2%	3%	3

Definition of terms

Minimum height: The smallest clearance allowable under the standard without a design exception.

Desirable height: The clearance suggested by the standard that meets almost all general requirements

Maximum grade: The sustained rise or drop in slope of the path

Minimum radius: The sharpest curve allowed under the standard for the given design speed

References

1. Chapters 1020 & 1025 - WSDOT Design Manual (2006)
2. Oregon Bicycle and Pedestrian Plan (1995)
3. AASHTO Guide for the Development of Bicycle Facilities (1999)

From: [Russ & Becky](#)
To: [Columbia River Crossing](#);
CC:
Subject: ARNADA Neighborhood Association's CRC
Recommendations
Date: Thursday, June 19, 2008 4:11:39 PM
Attachments:

The Arnada Neighborhood Association (ANA) has been actively involved in the Columbia River Crossing (CRC) project from its inception. We have worked to stay informed about the project and have appreciated the open dialog the CRC staff has had with us all along. Now that the Draft Environmental Impact Statement (DEIS) has been released we appreciate the opportunity to provide formal comment.



The following comments were presented by the ANA board to the general membership via email and our newsletter prior to our June 12th general meeting. At the meeting we amended and then voted for approval by 46 ANA residents, property owners and business owners who attended. Due to the complexity of the project and diverse opinions in ANA we voted separately for each issue; results are listed after each issue. (Due to late arrivals and early departures there is variance in total votes from issue to issue.)

The ARNADA NA is pleased that the CRC project is looking at more than just a highway project. We believe that a multi-modal solution is the best choice because it provides more options for traveling in the I-5 corridor. Besides highway improvements and the addition of High Capacity Transit (HCT) ANA would like to see this project deliver world class bicycle and pedestrian facilities and not just on the bridge, but the entire HCT alignment, all transit stops and all interchanges in the bridge influence area. Recent studies show that pedestrians and cyclists have a limited acceptable access distances. We live within them for the proposed alternatives and we need the project designed to enhance that access.

ARNADA is one of the few neighborhoods in Vancouver that will be affected by any of the five alternatives and we will be frequent users of the bridge and public transit. We are the first residential neighborhood north of and adjacent to downtown Vancouver. We think our input should be weighted accordingly.

Goals that our Neighborhood Association wants accomplished are:

- Minimizing peak hours SOV use through the corridor.
- Preservation of the historical qualities and livability of ARNADA.
- Reduction in the fumes we experience from idling vehicles on I-5.
- Reduction in the noise we experience from I-5.

1. Bridge Options

The ANA prefers the Replacement over Supplemental Bridge. To take on a project of this magnitude and not eliminate bridge lifts is inappropriate.

In favor of a replacement bridge vote count was 39 in support, 0 opposed and 0 abstained.

2. I-5 Lane Additions

We would like to see the footprint of the bridge and its associated freeway lanes and interchanges minimized. We would like to see the bridge no wider than 5-lanes each way (including auxiliary lanes). The DEIS shows that reduced capacity (the Supplemental bridge) can still meet the purpose and need. In addition, ANA believes that the project team has underestimated how quickly the highway improvements will be fully congested again with pollution generating vehicles. One less lane each way amounts to about 15% fewer vehicles idling next to our neighborhood; a substantial improvement in our thinking.

In favor of 5 lanes versus 6 vote count was 24 in support, 4 opposed and 6 abstained.

3. Neighborhood Road Impacts

Although the nature of the interchange improvements were not specifically called out in the DEIS, ANA would like to comment on the two of them adjacent to us, Mill Plain and Fourth Plain. Several years back state Route 501, running in and out of the Port of Vancouver, was shifted from Fourth Plain to Mill Plain after the completion of the Mill Plain extension. While that change has shifted an appreciable amount of truck traffic to Mill Plain, we are still burdened by heavy truck traffic on Fourth Plain. To help encourage trucks to use the designated truck route (Mill Plain) ANA would request that the Fourth Plain and Mill Plain interchanges be designed in such a way that Fourth Plain will be more conducive to automobile traffic while Mill Plain be designed to encourage truck traffic. In addition, large truck traffic could be prohibited on Fourth Plain, or disincentives implemented to discourage truck traffic on Fourth Plain. Although 39th Street is north of ARNADA we do not want to see the other west side neighborhoods carved up by a major truck arterial. We want the same treatments for 39th as for Fourth Plain.

Regarding road impacts vote count was 26 in support, 1 opposed and 5 abstained.

4. HCT Transit Mode

ANA prefers Light Rail over Bus Rapid Transit for several reasons.

- It reduces the number of transit vehicles passing through our neighborhood hourly
- Generates less noise in the neighborhood
- Provides better air quality
- Eliminates a transfer at the Expo center which will increase ridership
- It is a less expensive way to provide mass transit once in place

Regardless of which transit mode is chosen, ANA expects the CRC project to design and deliver state of the art transit stops which enhance access, ensure security for the riders and our neighborhood, and creates a sense of community that reflects the people of ANA and Vancouver. Amenities must include quality lighting, CCTV monitoring, clear and open sight lines, plenty of secure bike

parking, landscaping and artwork. Transit and its structures need to match the historical qualities of our neighborhood. ANA is very supportive of Crime Prevention Through Environmental Design (CPTED) and expects CRC, C-Tran and the Vancouver Police department to work together actively with the community to implement state of the art designs at all transit stop. ANA is ready to actively participate in the design effort.

The vote count was 35 in support of Light Rail and 8 in favor of Bus Rapid Transit.

5. HCT Transit Terminus

ANA has no preference with regard to alignments south of Mill Plain.

We believe that to see the greatest benefits and attract the most riders, beyond just moving commuters through Vancouver, HCT needs to be located along primary mixed use corridors and readily accessible to everyone along those corridors. The Lincoln terminus would enhance ridership by reducing the number of people who would need to transfer from C-Tran buses to light rail. It will greatly expand the number of light rail riders who can access their ride by foot and bikes.

Preferred terminus vote count was 22 in support of Lincoln, 17 in favor of Clark College MOS, one in favor of Mill Plain MOS and one in favor of Kiggins Bowl.

We also believe that our neighborhood will experience an unacceptable flow of bus traffic to the light rail terminus if the Mill Plain MOS is chosen. We believe that the Mill Plain MOS will negatively impact usage of public transportation. We do not believe the massive parking structures needed for the Mill Plain MOS are a good use of the valuable land in downtown Vancouver. **We actively oppose the Mill Plain MOS. The vote count was 39 in support, 2 opposed and 0 abstained.**

ANA does not support placing HCT along I-5 and therefore cannot support the Kiggins Bowl terminus. The I-5 alignment bypasses virtually all commercial/

mixed use zones and places it adjacent to predominately R-9 (single family) property. This would give little opportunity for transit oriented development without major rezoning that is currently not in Vancouver's comprehensive plans. In addition, ANA believes that placing an isolated transit stop at freeway level, away from the watchful eyes of the community will surely increase the possibility of criminal activity and reduce ridership.

We voted to oppose the Kiggins terminus: The vote was 30 in support, 4 opposed and 0 abstained in our motion to oppose Kiggins.

6. HCT Transit Alignments

If the Clark College MOS or Kiggins Bowl terminus are selected, ANA prefers 16th Street over McLoughlin Blvd because that alignment places HCT more centrally between McLoughlin and Mill Plain, an area which were recently rezoned to City Center Commercial and has been identified for mixed-use development in the newly adopted Vancouver City Center Vision.

Preferred alignment to Clark College (or to Kiggins if it is selected against our preference) 27 in favor of 16th street, 6 in favor of McLoughlin and 8 abstained.

If the Lincoln Terminus is selected ANA does not have a strong preference on alignments with many abstaining on this issue.

Voting for alignments to Lincoln was 18 in favor of a Main/Broadway couplet, 4 in favor of 2-way on Broadway and 20 abstained.

We have a concern that HCT lanes and stations will remove parking on Main and/or Broadway and negatively impact businesses there. It will force customers and those living in multi-family buildings on Broadway to park in ARNADA and Hough neighborhoods. We request that the HCT project acquires property to convert to parking. This must maintain the existing number of spaces on the two streets.

The vote count was 22 in support of maintaining parking, 8 opposed and 8 abstained.

7. Mitigation/Enhancements/Construction/Tolling

Required all trucks and off-highway diesel construction equipment be fitted with the same pollution controls which will be required on over the road vehicles. Require low emission construction equipment also included the use of clean/ low sulfur fuels during construction and transport of materials and equipment for the project.

Enhanced east-west pedestrian and bike connections crossing I-5 with safe, well lit routes.

Full sound and vibration mitigation from both the freeway and HCT

Full support for our commercial and retail members along Broadway and Main Streets to mitigate any construction related business interruption. ARNADA residents value our proximity to the business district on Main and Broadway Streets. We support the businesses and want them made stronger by the CRC project and not burdened by its construction.

Bridge tolls should be phased out for off peak hours and maintained for peak hours to encourage car pools and public transportation.

Voting for Mitigation/Enhancements/Construction/Tolling was 26 in support, 1 opposed and 5 abstained.

Sincerely,


Russ Pascoe

Chair, ANA

russ.bec@gmail.com

(360) 993-5259

400 E 22nd Street Vancouver, WA 98663-3205

From: [Noah Blanton](#)
To: [Draft EIS Feedback;](#) 
CC:
Subject: Columbia River Crossing
Date: Monday, June 23, 2008 8:15:33 AM
Attachments:

- Transportation is critical to our future to improve the business climate, create jobs and generate tax revenues.
- The existing I-5 bridges are not safe.
- The Columbia River Crossing Project is a smart transportation and quality of life decision that will benefit both sides of the river as our region grows.
- A replacement bridge will provide safer travel, more commuter choice, better freight mobility and an opportunity to create a sustainable, visual signature that models the environmental ethics of our region.
- Interstate 5 is a critical trade corridor and has been designated by the US Department of Transportation as one of six "Corridors of the Future" recognizing its critical importance in the transportation network and to the US economy.
- The forecast for freight volumes moving in and out of the Portland/Vancouver region are expected to double in 30 years.
- The interstate system provides overnight access for many products moving to national markets up and down the West Coast and the deep draft ports on the Columbia river provide the connection to the international markets.
- This project proposes a solution for one of the most congested segments of our nation's highway system.
- A replacement bridge will improve navigation for marine traffic on the Columbia River as well as eliminate the need for bridge lifts.
- Our economy will suffer without a strong transportation system that has the capacity to move people and goods quickly and efficiently.
- Congestion in the Portland/Vancouver area is pushing distribution centers out of the region and leading to the loss of family-wage jobs.
- Failure to invest adequately in transportation improvements will result in a potential business loss of 6,500 jobs and \$844 million annually by 2025.
- Today, congestion, a lack of highway capacity and other problems in the I-5 Bridge influence area causes an estimated 64,000 hours of delay for trucks each year, imposing significant additional costs on businesses, and ranking the Interstate Bridge as one of the worst impediments to freight mobility in the US.
- The existing bridges were not designed to carry today's traffic let alone tomorrow's. Nor

could they withstand a major seismic event. The current bridges have no safety lanes and more accidents occur within this five mile stretch than another section of I-5. Crash rates are two to four times higher than on similar facilities.

- Trade and freight movement is an important part of this region's economy and should be considered positive assets for our region because they facilitate job development and retention.
- Done right, major transportation investments like light rail lines and bridges don't just move people and goods, they help build community.

Noah Blanton | President

Stewart Title of Western Washington, Inc.

Telephone: (360) 696-0621

Cell: (360) 241-8951

P Please consider the environment before printing this e-mail

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AIA Portland

A Chapter of the American Institute of Architects



June 19, 2008



RECEIVED

JUN 23 2008

Kris Stickler
Columbia River Crossing
700 Washington Street, Suite 300
Vancouver, WA 98660

Columbia River Crossing

Signatories

David Partridge, AIA
President, American Institute of
Architects Portland Chapter

John Blumthal, AIA
President, American Institute of
Architects Oregon

Timothy Buckley, AIA
President, American Institute of
Architects Washington Council

Kalina Kunert, Assoc. AIA
President, American Institute of
Architects Vancouver Chapter

Jenny Richmond, ASLA
President, Oregon Chapter of the
American Society of Landscape
Architects

Dear Mr. Stickler,

We, the undersigned, represent the leaders of the professional associations of Portland and Vancouver's design community. Our purpose in writing is to encourage you to use this opportunity to consider the enormous impacts the Columbia River Crossing will have on our region. We further ask that you elevate the conversation and scrutiny beyond the core considerations of engineering to include the human, artistic and symbolic impacts this structure will have. We are asking that the spiritual and aesthetic dimensions of this crucial connector be raised to be of equal concern to those of the functional solutions. Now, as the comment period for the Draft EIS draws to a close, is the time.

Your comments and those of the other public agencies in the region will define the key questions that the balance of the design process must answer in order to move forward. You have the opportunity to profoundly impact the quality of this crossing and the way in which future generations look back on what was done here. We stand ready to help you to define the important design, aesthetic, and cultural questions that must be asked. We understand that this project has had many contributors and extensive public process. But we are asking that as decision makers you condition your approvals with additional criteria and review processes recommended by the Urban Design Advisory Group.

If a bridge is built, it should be regionally significant and context sensitive. This bridge crosses the greatest river of the western United States. It can be seen from the moon. The Columbia is the lifeblood of our region and has demanded the greatest respect from all civilizations that have grown around it. It is a key piece of both the region's commerce and its tourism. We now have the opportunity to design a symbol of the connection of our two states, the region and our respect for the role it plays in our lives. We have arrived at the moment to transcend the engineering necessities and to create a powerful and unique linkage that inspires future generations. We are at the point in the process where the practicalities are understood. Now is the time to elevate the design to address the spirit of this connection by deepening the discussion and asking more of the project.

The CRC Urban Design Advisory Group already in place has our support. But only if it has your powerful endorsement and enthusiastic commitment can it assume the role it should play. As a collection of experienced design professionals whose long involvement here has helped to establish our reputation as one of the most livable communities in the world, we the undersigned, understand that without champions of good design no project realizes its full

potential. We ask that you let us help you raise the humane criteria of this project to the forefront. That is the role of the Design Community in this and every region of the country. The history and success of design in the metropolitan region as a generator of public support, development activity and responsible, carefully planned growth is well acknowledged. Help us to bring this level of professional insight to this visible and important project.

In the region all major projects benefit from inclusive and considerate design review. Now that preliminary engineering has identified several alternatives we ask that the process be focused to allow the design, aesthetic, and cultural dimensions of the project to take on an equal role to those of the engineering criteria. Deepen the review process. Require the agencies and consultants who are leading this design effort to make design as important as efficiency, cost and engineering. This can be accomplished within the current process only if local government makes it clear that design has their support and will be a key part of the ongoing review process. We want to help the Columbia River Crossing to be a new model of cooperation and sensitivity that resonates with our culture and long established values. This is not only a simple structure to carry vehicles. This could be an expression of our highest aspirations, central to the urban center that combines two great cities.

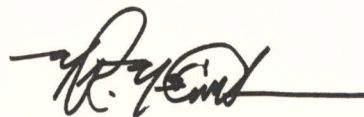
As experienced and deeply committed citizens with design in our blood we urge you to look again at this bridge and imagine how much more it could be. We all stand together to help you reach the highest goals for the CRC.

For further information, contact Sandra Stevens, Hon. AIA, Executive Vice President of AIA Portland, (503) 223-8757, sandra@aiaportland.org.

Sincerely,



Douglas A. Benson, AIA
Co-Chair, Portland-Vancouver
Design Professionals Task Force,
American Institute of Architects



Michael McCulloch, AIA
Co-Chair, Portland-Vancouver
Design Professionals Task Force,
Architecture Foundation of Oregon

cc: Mayor Tom Potter
Mayor Elect Sam Adams
Members of the Portland City Council
Mayor Royce Pollard
Members of the Vancouver City Council
Council President David Bragdon and Fellow Metro Councilors
Fred Hansen, General Manager, Tri-Met
Tim Leavitt, C-TRAN

From: [Bertelsen, April \(PDOT\)](#)
To: [Draft EIS Feedback; Adams, Sam;](#)
CC: [Potter, Mayor; Leonard, Randy; Fish, Nick; Saltzman, Dan; Hamilton, Joan; Merrick, Rod; Gillam, John; Drake, Sara; McCollum, Caitlin; Moore-Love, Karla; "rex.burkholder@oregonmetro.gov"; David Aulwes \(david.aulwes@ibigroup.com\);](#)
Subject: Portland Pedestrian Advisory Committee comments on Columbia River Crossing DEIS
Date: Friday, June 27, 2008 3:04:50 PM
Attachments: [CRC DEIS Comments 06-24-08_adressed to Council and CRC.pdf](#)

Heather Gundersen and Commissioner Sam Adams,

I am writing to you on behalf of the Portland Pedestrian Advisory Committee (PAC). Please find the attached letter from the PAC regarding the Columbia River Crossing Project DEIS.

The PAC has requested that the letter be submitted as testimony on the DEIS made during the public comment period (ending July 1, 2008). Please make it a part of the public record for the CRC project DEIS.

The PAC also hopes that the Portland City Council will take their comments under advisement as the CRC project is deliberated and voted on at the upcoming hearing on July 9, 2008.

I have copied several others with whom the PAC wished to share their comments.

Karla Moore-Love - Please include the letter in the public record for the Portland City Council hearing.

Joan Hamilton - Please distribute this letter to Portland Planning Commission members.

Sara Drake - Please distribute this letter to Portland Design Commission members.

If you have any questions or problems with opening the letter, please contact myself and Caitlin McCollum. She is reachable by phone at 503-823-5831, or email Caitlin.McCollum@pdxtrans.org.

<<CRC DEIS Comments 06-24-08_adressed to Council and CRC.pdf>>

Thank you.

April Bertelsen



Portland Pedestrian Advisory Committee

1120 SW5th Avenue Suite 800
Portland OR 97204

Members

David Aulwes

Ali Corbin

Kim Cottrell

Erin Kelley

Doug Klotz

Jess Laventall

Rod Merrick

Elizabeth Mros-O'Hara

Bob Robison

Matt Whitney

Rod Yoder

June 24, 2008

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



Commissioner Sam Adams
1221 SW Fourth Avenue, Room 220
Portland, OR 97204

Re: Interstate 5 Columbia River Crossing Project, DEIS

Dear Ms. Gundersen and Commissioner Adams:

This letter is the Pedestrian Advisory Committee of the City of Portland testimony to the Columbia River Crossing (CRC) Draft Environmental Impact Statement (DEIS) issued on May 2, 2008. We are submitting a number of suggestions that we believe will improve the project and look forward to your response.

Introduction and Executive Summary of Recommendations

The Pedestrian Advisory Committee of the City of Portland (PAC) respects the considerable effort and accomplishment embodied in the CRC DEIS. The PAC *provisionally endorses the replacement bridge alternative* because it appears to provide the best framework for improving the pedestrian and cycling environment within the project study area. The endorsement is conditioned on the project team making extensive revisions as outlined in this letter.

The purpose of this testimony is to encourage the project steering committee – the CRC Task Force - to look beyond the economic and transportation engineering framework articulated in the “Project Purpose” section of Chapter 1. The bridge alternatives proposed fail to respond to a *larger vision and agenda for a more environmentally and economically sustainable future* - policies adopted by the states of Oregon and Washington, Metro, and the City of Portland, and policies that support walking scale communities.

In support of this project the PAC has identified a set of principles, suggested changes to the design, and anticipated outcomes that would fulfill the promise of the new bridge concept. The principles are as follows:

- 1. Check regional sprawl, commuter trip length, vehicle miles traveled (VMT), and global warming while enhancing freight movement and economic activity.**
- 2. Minimize traffic congestion and highway impacts on Portland's Central City and neighborhoods along the I-5 Corridor within the city.**

Ms. Gundersen and Commissioner Adams

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June 24, 2008

- 3. Enhance urban neighborhood and recreational land uses in the study area especially along riverfront areas and at interchanges.**
- 4. Create a landmark gateway bridge.**
- 5. Provide “world class” pedestrian and bike routes and environment to facilitate both commuter and recreational use.**

Changes to the Replacement Alternative flowing from these principals include:

- A world class 24-foot wide multi-use bike commuter and regional trail on the west side of the crossing and a 10-foot wide walking and cycling sidewalk on the east side that will serve commuting and recreational needs for the life of the structure.
- A lower level, urban, multimodal bridge connecting Hayden Island, neighborhoods to the south and to the freeway at a relocated Marine Drive interchange. This will replace freeway auxiliary lanes serving the island and eliminate the complex high capacity interchange that dominates the island. The bridge would include bike lanes and a 12-foot walkway on the east side.
- A maximum of 3 vehicle lanes plus one full width shoulder lane *total* in either direction over the river. This provides build out consistent with long term highway capacity to the south. Congestion pricing and lane designations to facilitate freight movement will be included.
- *Combined* light rail and busway crossing including three or four lanes/tracks to accommodate both modes and allow for passing.
- Interchanges that are carefully designed to enhance the adjacent land uses and maximize the network of pedestrian and bike access to nearby destinations.
- Commitment to sustainability and quality urban design and landscaping for all aspects of the project.

PAC DEIS Overview and Critique

The stated *primary goal* of the project articulated in the “Project Purpose” section of Chapter 1 is to reduce congestion and enhance freight movement through the crossing. The project area is a 5 mile stretch of highway, highway interchanges, and “high capacity” transit improvements. Among the alternatives being considered, only one alternative is likely to be given serious study during the *Locally Preferred Alternative* assessment. That alternative includes a new span with 12 vehicle lanes plus full width shoulders (potentially 16 lanes total for later expansion) to replace the 6 lanes without shoulders now in service.

Sustainability elements include transit and improved bike and pedestrian access. Toll pricing enhances the economic viability and prolongs reduced congestion. While the lane count provides generous capacity for adding car and truck traffic, the project fails to offer a serious alternative to building a conventional high capacity freeway designed to temporarily reduce congestion and decrease travel time - a short term fix with legendary negative secondary effects.

Ms. Gundersen and Commissioner Adams

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Addressing the land use, transportation, and environment nexus, the DEIS speaks to “urban design” in several technical reports.

1. The “Land Use” technical report summarizes policies in and around the project area and provides a literature review of the impact of highways on development. The authors cite a number of studies that downplay the sprawl inducing influences of highway widening in other cities that *are sprawling*. Included is a summary of a Parsons Brinkerhoff 2001 study that concludes that land use policies may have more impact on what is constructed than highway widening and suggests that *increased capacity simply accentuates what is already occurring* (that would be *sprawl*). The technical report concludes that increasing vehicle capacity on the bridge is “*unlikely to induce sprawling land use patterns*”.

Remarkable in its absence is a discussion of the Vancouver, BC experience that strongly supports enhanced urban development, reduced sprawl, reduced congestion, and cleaner air by limiting highway and specifically bridge lane capacity. The “Land Use” technical report cites Metro goals to reduce VMT from 1991 levels (no discussion as to how this project meets those goals) and a 2005 report that identifies congestion as a threat to the economy of Portland (citing complaints by shippers). Congestion at the crossing is a serious problem but seems less so when considering congestion on I-5 through Seattle or Los Angeles.

2. The “Visual and Aesthetics” technical report is perfunctory description of the visibility of structures from a quantitative perspective - not the quality of or aspirations for the visual or tactile experience. This accurately reflects the lack of concern for aesthetic issues within the project team.
3. Environmental Technical Reports. Oregon and Washington have set aggressive goals to roll back greenhouse gas emissions to a percentage of 1990s levels. Environmental pollution is evaluated in the context of the study area only. The writers assume that noise will be reduced by new sound walls. They assume that tailpipe emissions will be reduced by cleaner burning engines. We recommend that this report incorporate the June 9, 2008 health assessment report from the Multnomah County Health Department.

Conclusion

Quality of life issues for neighborhoods adjacent to the project or for the region as a whole are generally outside the boundary of evaluation. It should not be so. The DEIS fails to consider important environmental and urban design impacts within and adjacent to the project boundaries, and in the region as a whole. The PAC finds the urban design and environmental impact analysis and its conclusions insufficient to support the high speed 12 lane expansion favored by the project leadership. Our concern extends to the lack of emphasis on the quality of design evident in concepts developed for the bridge and interchanges. As a gateway to Oregon and a gateway to Portland, the 12 lane option with its sprawling Hayden Island interchange will represent a profound lack of imagination and vision – a monument to the age of the freeway as a pipeline for suburban sprawl.

Ms. Gundersen and Commissioner Adams

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The PAC recommends that the CRC design team develop a replacement bridge alternative that supports state and regional transportation, environmental, and urban design policies in addition to facilitating freight movement. The argument for a fifth option outlined in the pages following contains our detailed recommendations for changes to the project and the beneficial outcomes we anticipate will result from those changes.

We greatly appreciate the opportunity to comment on this important project.

Sincerely,

A handwritten signature in black ink, appearing to read 'DAULWES', written in a cursive style.

Pedestrian Advisory Committee
David Aulwes, Chair

Enclosure: Five Principles for the Fifth Alternative

Cc: John Gillam, PDOT Transportation Planning
Rex Burkholder, Metro Council
Portland City Council
Portland Planning Commission
Portland Design Commission

Five Principles for the Fifth Alternative

1. Check regional sprawl, commuter trip length, vehicle miles traveled (VMT), and global warming while enhancing freight movement and economic activity.

- Every evidence indicates that enhanced bridge capacity will encourage dispersed land use development especially on the north side of the river, encourage longer distance commuting, and will increase auto dependency.
- The availability of LRT/BRT, enhanced bicycle and pedestrian facilities, and tolls will likely encourage higher density growth on Hayden Island and in downtown Vancouver along with park and ride viability. But without lane capacity restraint it will have little to no effect on sprawling development patterns beyond.

Suggested Changes:

Provide HOV+ truck lane to access port facilities.

Encourage long distance freight to use I-205.

Reduce the number of lanes to a maximum of 4 lanes including shoulder lane.

Reduce Design Speed and enforce to 50 MPH.

Expand the capacity of light rail and bus to 3 or 4 lanes.

Use congestion as the primary means of regulating traffic flow with tolling providing additional support.

Expected Outcomes:

Enhance viability of downtown Vancouver as a pedestrian scale employment and residential center.

Stabilize traffic flow at near current levels and enhance viability of options to SOV travel.

Discourage sprawling auto dependent land use patterns and long distance commuting.

Conserve energy and reduce negative environmental and health effects.

Make more efficient use of land for housing and employment.

Reduced speed allows greater capacity, increases safety, reduces lane width, merge lane lengths, shoulder width, and reduce costs.

HOV + Freight lane will provide priority lane access to and from Port facilities.

2. Minimize traffic congestion and highway impacts on Portland's Central City and neighborhoods along the I-5 Corridor.

- The regional Task Force narrowed the options for the location of the bridge replacement but there does not appear to have been an assessment of the long term management of the I-5 and I-205 corridors within the city to minimize the need to expand roadway capacity in the future and to mitigate the negative impacts of noise, pollution, health impacts, and damage to neighborhood connectivity.
- Designing a bridge to carry up to 6 to 8 lanes in each direction compared to 3 lanes today will greatly increase the speed and flow of traffic through Vancouver and into Portland - where it will stop or move to neighborhood streets. No long-term vision for the I-5 corridor in the city has been adopted. Will it remain the primary through route and will it be periodically widened to accommodate additional traffic? I-5 congestion at the juncture with I-405, I-84, in the area of the Rose Quarter, and

crossing of the Marquam Bridge will place additional pressure on the viability of these routes

- The additional traffic flowing south of the bridge will create additional traffic, noise, and air pollution in the Portland neighborhoods along the freeway and of course in the city of Vancouver. No mitigation has been discussed.
- The Bridge Replacement Alternative offers a choice between light rail and an exclusive busway. This should not be either-or. Light rail serves urban neighborhoods and high demand routes. Buses are efficient in serving outlying towns and residential areas and provide convenience and flexibility. The project should provide exclusive right of way to accommodate both modes.

Suggested Changes:

Expand the capacity of light rail and bus from 2 lanes/tracks to 3 or 4 lanes/tracks. Encourage long distance trucking and auto traffic onto I-205 to reduce traffic on I-5 traveling through the densest areas of the city. This can be achieved with the following combination of measures: congestion pricing, signage, speed limits, transit enhancements, education.

Reduce Design Speed and enforce to 50 MPH on the bridge.

Include traffic calming elements in the design.

Reduce the number of lanes to a maximum of 4 lanes including shoulder lanes.

Reduce lane widths to 11 feet and reduce shoulder width to 12.

Expected Outcomes:

I-5 will serve freight destined for Portland west of 82nd Avenue and Washington County.

Stabilize congestion at I-84 and I-405 intersections and Marquam Bridge.

Avoid increased highway noise and other highway environmental pollution.

Reduced construction and maintenance costs.

Reduce driver frustration and pressure to reconstruct highways at choke points south.

Minimize demand for capacity improvements.

3. Enhance urban neighborhood and recreational land uses in the study area especially along riverfront areas and at interchanges.

- The Columbia River south shore and Hayden Island are dominated by highway interchanges.
- Truck and car access to Hayden Island is via the shared high speed “auxiliary lanes”. Access to and from the Island and the connection to Bridgeton and other neighborhoods in the city including the houseboat communities along the slough is not improved.
- Bike, pedestrian and transit access between Vancouver and the neighborhoods northeast of the downtown and destinations to the east are not being adequately addressed by the project or the City of Vancouver. With one exception, the connections are all associated with I-5 interchanges, are widely spaced, and will become increasingly congested as more vehicles attempt to access the highway.

- Proposed interchanges discourage urban land use patterns and bike and pedestrian travel. This is particularly acute for travel parallel to I-5.

Suggested Changes:

Provide a lower level, urban, multimodal bridge connecting Hayden Island and neighborhoods to the south with a relocated Marine Drive interchange. This will replace freeway auxiliary lanes serving the island and eliminate the complex high capacity interchange that dominates the island. The bridge would include bike lanes and a 12 foot walkway.

Move Marine Drive interchange south and away from river and connect to the road serving Hayden Island.

Add Local Street along river to support mixed-use neighborhood relating to Hayden Island.

Add bike and pedestrian network connectivity in the area of all interchanges to minimize out of direction travel.

Expected Outcomes:

Improves east west connectivity and reduces noise and congestion on Hayden Island.

Eliminates need for auxiliary lanes.

Improves safety by limiting merge activity.

Enhances bike and pedestrian access to Island by minimizing height from ground to trail over Hayden Island (currently about 40 feet).

Eliminates long stairs and elevators on Hayden Island.

Improves safety and connectivity to local streets and arterials for Island residents.

Encourages walking and cycling through areas now considered too dangerous or too lengthy in the area of the freeways.

Encourages development of land uses that are pedestrian friendly, which saves development and maintenance costs.

Reduces dependency on the auto.

4. Create landmark gateway bridge

- The scenic values of the setting, and the *design aspirations* expressed in the *adopted goals* for the project and the urgency of environmental priorities are not described in the DEIS and do not appear in any design studies.
- Although the design is conceptual, every indication is that the view from the top of the bridge southbound will reveal a sea of concrete from Hayden Island to the south shore and through Delta Park - at rush hour a sea of stalled vehicles. This degrading Welcome to Oregon ill serves the states image as a leader in environmental quality.
- The 80 mph design speeds, lane widths, wide shoulders and interchange configurations represent an approach to designing highways in urban areas that is a dinosaur from the 1960s in the context of a densely urbanized land and the dramatic setting of the river and Columbia Slough crossings.

Suggested Changes:

Integrate aesthetics of structural and ornamental elements into the DEIS budget.

Prohibit value engineering of the design elements once adopted.

Employ "A" level landscape /urban design/bridge designer to lead the urban design and final design of the bridge.

Construct two separate and generally parallel spans from the Oregon Marine Drive interchange to the Washington SR-14 interchange.

Landscape around the roadway and bridgehead interchanges to the level of quality of the PDX airport approach road.

Expected Outcomes:

A bridge that is worthy of its setting, expressive of the passion that Oregon and Washington residents have for the environment and regarded as a great engineering and aesthetic achievement.

The quality of the experience of crossing the river in either direction will be timeless, distinctive, and highly memorable both in the design of the bridge and the interchanges. This applies to autos and trucks but equally for transit riders, cyclists, and pedestrians.

The visual quality of the bridge from the river and the river banks will be timeless, distinctive, and highly memorable and a regional attraction as an engineering and urban design achievement.

5. Create “world class” pedestrian and bike routes and environment to facilitate both commuter and recreational use.

- The programming effort for bike and pedestrian access has been productive. However the response from the design team began by asking us to seriously consider the cost of adding such facilities. Whereas highway lane and interchange design are well developed, other modes including transit, bikes and pedestrians have yet to gel as more than rough diagrams indicating intent and general criteria.

Suggested Changes:

Provide separate zones for pedestrians, casual cyclists, and commuter and touring lanes. This will require more space than the 16 foot right of way included in the DEIS options.

Provide quality pedestrian paths on both sides of the bridge structures.

Coordinate multiuse trail with transit right of way over the river.

The PAC endorses the CRC Bike Pedestrian Advisory recommendations for a 24 foot trail on the west side of the bridge and recommends a 10 foot - primarily pedestrian walkway - on the east side.

Expected Outcomes:

Higher than projected use by pedestrians for commuting to work in the Hayden Island to Vancouver downtown corridor.

Higher than projected use by commuter and recreational cyclists.

Regional recreation destination.

Reduced environmental impacts from motorized travel.

Health benefits associated with use of the facility.

In addition to the 5 principles we suggest changes that would reduce costs without compromising safety

- Wide shoulders and auxiliary lanes are described as safety features. One of the reasons that shoulders are required on both sides is the number of lanes and the speeds. One of the common uses of shoulders is for future lane expansion – especially

the center shoulder. Reducing the number of lanes and shoulders will result in significant cost to build and maintain savings.

- Lane widths are related to vehicle size and speed. By reducing speeds it is possible to reduce lane width and cost to build and resurface.
- Vehicle speed in an urban freeway setting has numerous indirect and direct costs. To merge safely the merge and exit lanes must be longer. These long merge lanes cost money to construct and maintain and remove land for other uses.
- Higher speeds are also the source of costly serious injuries and ongoing health impacts. When entering an urban area with frequent and complex interchanges reduced speed is appropriate. Reduced speed reduces engine and tire noise and airborne particulates. Finally, reduced speeds increase capacity as safe stopping distances are reduced and more vehicles can be safely accommodated.

Suggested changes:

Reduce Design Speed and enforce to 50 MPH.

Include traffic calming elements.

Reduce the number of lanes to a maximum of 3 lanes including freight and HOV lanes.

Reduce lane widths to 11 feet.

Provide one shoulder lane.

Expected Outcomes

Increase safety at merging without extended merge lanes.

Reduce construction cost with narrower lanes.

Reduce Noise impacts on bikes, pedestrians, park areas, and Vancouver neighborhoods.

Reduce tailpipe emissions.

Reduce serious injuries.

Increase the useful life of the crossing.

Pedestrian Coordinator

Portland Office of Transportation


Phone: 503.823.6177

Fax: 503.823.7609

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From: kalina.kunert@mulvannyg2.com
To: [Draft EIS Feedback;](#)
CC:
Subject: DEIS Document Viewer Feedback
Date: Monday, June 30, 2008 5:42:54 PM
Attachments:

From: Kalina Kunert 
Zip Code: 98663
Address: 2201 F Street
City: Vancouver
State: WA
E-Mail: kalina.kunert@mulvannyg2.com
Section: Draft Environmental Impact Statement
Page: i

Comment or Question:

AIA
AMERICAN INSTITUTE OF ARCHITECTS
VANCOUVER
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June 30, 2008

Mayor Royce Pollard
Vancouver City Council
City of Vancouver Representatives
Columbia River Crossing Staff

AIA Vancouver, the local component of the American Institute of Architects, represents the views of our member Architects and designers living and working in the community. We recognize the importance of the Columbia River Crossing Project (CRC) to the future economic vitality and transportation needs of the region. As designers of the built environment, we clearly understand the necessity to balance functionality, form, and budget, but we are also concerned with issues of livability, sustainability, and quality of design in our community. This project is far too significant to have a purely

“engineering” solution. The design guidelines which have been developed as part of the CRC process can help craft the appropriate solution, if they are used as intended.

AIA Vancouver supports the Draft EIS with the preferred Alternative No. 3, replacement bridge(s) with light rail, and we ask for your support as decision makers in the process to include the following additional considerations in the Final Report to ensure that the Crossing provides the greatest benefit to the communities it will serve and to future generations.

1. Community Economic Impact Study: we recommend that the Final Environmental Impact Statement include an economic analysis of the impact of the bridge on the City of Vancouver. That is, a study that answers key economic questions: Does the capacity of the bridge ensure the flow of commerce? Or does it encourage jobs and businesses to move to Portland? Does it ease congestion, or does it facilitate longer commuter trips and sprawl? The cost for the bridge will be split between Vancouver and Portland, but the split will be unequal. Vancouver has more miles of freeway improvements. Vancouver has four interchanges that require improvement; Portland has two. All four alternatives require three to five new transit stations in Vancouver. The crossing will directly and immediately affect Vancouver’s redeveloping downtown. And the majority of the tolling will come from Vancouver commuters. The City of Vancouver may have much to lose from more people commuting into Portland, to shop, work, and pay income tax. A study needs to be included to determine if the capacity of the Crossing is appropriate to ensure real economic benefit.

2. Sustainability: The Portland metropolitan area is known for being one of the “greenest” places in the country. The materials from the existing bridge must be recycled and re-used in a manner that serves to honor and educate. The opportunity to generate power should be included. What a shame it would be to have a Crossing that wastes the wind from the Gorge and the power of the Columbia River waters. What better way to symbolize the region than to have the vital link across the region be a showpiece of sustainability, perhaps a bridge that powers itself? The increased carbon emissions from additional trips should be offset by trees and landscaping planted along the Crossing and its interchanges. The water that runs off the bridge should be treated and returned to the river. We urge that these concepts of sustainability be included in the chosen alternative and be given a high priority that is not “value engineered” out of the final construction. We owe it to future generations.

3. Community Connection: the replacement bridge will be higher and significantly wider than the existing bridge. We need to ensure that the East and West sides of downtown Vancouver and Jantzen Beach/Hayden Island are not further divided by the Interstate. We need a

final design that pays special attention to the urban design of the areas under the bridge and ensures that connections over and under it are safe, pedestrian and bike friendly, and help to bind communities together rather than separate them. We request that the guidelines set forth by the Urban Design Advisory Groups and the CRCA be adopted.

4. Trip Reduction: we ask that the final design of the chosen alternative give at least equal importance to the goal of trip reduction as to the goal of increased capacity. The draft study includes bus or light rail and tolling to pay for the bridge. This may discourage single-occupancy vehicle use, but the Final Statement needs to study the effects of other options such as reduced tolls for car pools, express lanes, etc. We need to explore options that will not just provide, but actually encourage mass transit and set a goal for trip reduction.

5. Preferred Transit Terminus: AIA Vancouver supports the connection of mass transit into downtown Vancouver, but we are concerned about the scale of both options as they make their way through historic and very tiny neighborhoods. We are also concerned about the economic disruption to the fragile, still redeveloping downtown. We support the Kiggins Bowl terminus option that makes use of the existing I-5 right-of-way and generally routes through larger streets. We also ask that as the final design will likely be built in phases for budget considerations, that flexibility be left in the design for connection to a possible future streetcar system which is more appropriate in scale to the downtown neighborhoods. And very important to downtown Vancouver, we ask that the final design allow for Main Street to one day reconnect all the way to the river.

6. Design: The final design needs to make a statement about crossing such an important body of water and connecting communities in two different states. It needs to be designed as a whole system that recognizes that there are several different crossings, each with its own design criteria and identity. And each transportation experience, be it vehicular crossing, transit crossing, pedestrian overpass, bicycle underpass, needs to be carefully designed. The Urban Design Advisory Groups and the CRCA have been working on design guidelines to ensure that the new Crossing is more than just a freeway over the river. These guidelines need to be adopted into the Final EIS.

We thank the project committees for all their work on the draft EIS and again voice our support. We now ask that the above considerations be added to the Final Statement to ensure that the Columbia River Crossing reaches its full potential and achieves our highest goals for the future.

Sincerely,
Kalina J Kunert, President

AIA Vancouver

Alta Vista Design Architecture & Planning LLC

4128 NW Peppertree Place, Corvallis, OR 97330
Phone / Fax: (541) 754-7540

June 24, 2008



Columbia River Crossing
700 Washington St., Suite 300
Vancouver, WA
98660

RE: Preferred Alternative – The Missing One

To Whom it May Concern:

The attached document is a copy of an e-mail that I sent to the Oregonian today regarding what I believe is a preferred option for the proposed Columbia River Crossing.

ODOT, WDOT, Vancouver and Portland have an opportunity to make a resounding and forward looking statement with the crossing alternative you recommend for a new Columbia River connection between our two states.

All of the leaders of the four key organizations who are sponsoring the new connection project are self-proclaimed advocates of sustainable transportation and communities. As such, you should all be willing to look at alternatives that will work to actually enhance your communities and your sustainability goals. You have a once in a hundred year chance to get this right.

To achieve the right solution, it is critical to look at the problem from more perspectives than might be suggested by the standard textbook solutions that the old transportation models typically bring to the table. Those models were based on easy solutions that depend on cheap fuel costs and limited serious consideration of environmental and community impacts.

One need only look at the Mercer Island I-90 project to see how old ways of thinking resulted in extensive delays and terrible costs increases to a project that could have been completed a decade sooner and probably at half the cost of the final product. If only the engineers and planners had been willing to think outside the box at the beginning of that project rather than many years later when forced to change course by judicial mandate.

It is not too late to take a step back and look at how our world and economy are on track for major changes. Keep in mind that you have only invested in paper and ego. With a little courage and an open mind, you can set aside your current paper concepts and explore alternatives that are based upon a new and expanded intermodal transportation model for this connection.

Borrowing from a Hollywood movie line, I would like to suggest that you consider this thought – Life without a Tunnel is chaos!

Respectfully,

Richard Bryant, AIA

Attachment: E-mail correspondence to Dylan Rivera, The Oregonian

RECEIVED

JUN 26 2008

Columbia River Crossing

Richard Bryant

From: Richard Bryant [altavistadesign@comcast.net]
Sent: Tuesday, June 24, 2008 9:44 AM
To: Richard Bryant
Subject: Proposed I-5 Columbia River Bridge

Dylan:

I have been following the replacement bridge proposal proposed by ODOT for the I-5 / Columbia River Crossing.

Unfortunately ODOT is mentally stuck in "Old Think" when it comes to future transportation planning for this vital river crossing and interstate link. All they can think about is a replacement BRIDGE.

Why not think outside the box and seriously consider a TUNNEL under the river? We obviously have the technology!

The crossing distance is far less than the distance between England and France. The Chunnel successfully carries many different vehicle modes. I suspect the technical issues of a tunnel under the Columbia would also be far less difficult than those encountered by the Chunnel, BART, the tunnel-crossing in Norfolk, VA., etc., etc., etc.

The bridge-only discussion also seems to have glossed-over the impact on existing communities that now exist along the current path of I-5. The route through downtown Portland and Vancouver is not currently 12-lanes wide. Since the present freeway width is not 12-lanes, there only seems to be two options.

1. Leave the freeway width the same as now exists and suffer continued traffic bottlenecks - or
2. Widen the freeway to 12 lanes all the way from North Vancouver to Wilsonville and suffer the negative environmental impacts.

Leaving the width as it now exists will eventually create a bottleneck of merging lanes and simply move the problem into some other community.

Likewise – increasing the width of the freeway will add significantly to attacks on the livability of adjacent neighborhoods and heat-sinks of pavement that will impact the micro-climate of the two cities that are most immediately impacted by the proposed bridge solution.

Suggestion:

Both communities and DOTs need to take a step back and look at the proposed bridge solutions under the light of our changing environment and oil-based economy.

A tunnel solution needs to be seriously evaluated and include the following out-of-the-box possibilities:

1. Light-rail
2. Space for future high-speed rail
3. Dedicated freight-rail
4. Dedicated truck lanes
5. Dedicated car lanes

Tunnel Advantages:

- Tunnel construction is well understood and technically feasible for this project.
- Allows the existing bridges and freeway lanes to remain fully active and uncompromised during tunnel construction and beyond
- Existing bridges can be replaced in the future if tunnel capacity is reached
- Avoids conflict with river-shipping needs
- Presents less visual blight on the community
- Avoids conflicts with air-traffic flight paths

- Reduces negative environmental impacts from light pollution, noise, heat-sink effect, air-quality, and neighborhood disruption

Dylan, the next time you attend one of the I-5 river crossing hearings, pose the tunnel option to the representatives of ODOT, WDOT, Vancouver and Portland to see how they react. It is time to challenge the status quo way of thinking only about a bridge solution.

RECEIVED

JUN 27 2008

Hand Delivered 12:20pm

Columbia River Crossing

Vancouver's Downtown Association's Locally Preferred Alternative for CRC

After much consideration, VDA stands strongly in favor of a replacement bridge with a light rail minimum operating segment that ends at Clark College with configured couplets on Broadway and Washington. We strongly urge the extension of Main Street to the waterfront as well.

Vancouver's Downtown Association has a significant interest in issues that affect the development, livability, vitality, accessibility, potential for diversification, and connectivity of Vancouver's greater downtown area. We realize that wise choices in transportation investment, both within the city and outside the city, impact the movement of goods and services, downtown residents, visitors and consumers. We believe wise decisions made today provide great benefit for generations to come.

VDA has been an active participant in the discussions surrounding the choices before our region regarding the optimum mode to service traffic crossing the Columbia River. We have done our due diligence by gathering data, evaluating and debating the options. Without question, the decisions made on this issue have the potential to streamline commerce and leave a much improved transportation system for our residents. This decision, while bold in some ways, is appropriate for the transportation system we will need in the future.

Briefly, the benefits of adopting our position include:

Safety

- significant safety improvement by thoughtfully designing ingress and egress lane changes with maximum safety in mind
- safety lanes for emergency needs
- safe accommodation of alternative modes of transportation such as bicycle and pedestrian
- improved sight distance
- elimination of bridge lifts which not only cost valuable time but create an unsafe condition and increase accidents.

Access

- improved access to the waterfront
- improved access from Portland to our downtown
- more commuter choices for visitors and residents to travel in and around our region
- more commuter choices for employees who work within the city
- easier movement from place to place within the city

The new bridge would protect against significant risks

- inadequate assurance of viability in the event of earthquake
A new bridge would eliminate significant economic risk and gives a more reliable platform for the movement of freight and commuters.
- existing antiquated structure not sufficient for current needs

An improved, modern image for our city

- a symbol of a modern, forward-thinking community.
As its design is developed, we are excited to see what message it can send to our visitors.
- a new bridge will be the gateway to significant development and both public and private investment on the waterfront and within the city. It will demonstrate clearly that our city has planned from a total perspective and not in small, unrelated chunks.

VDA strongly believes that these concerns need to be addressed

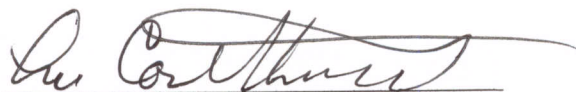
- public safety on light rail and around stations
- construction impact on existing businesses kept to a minimum
- more information on unknown impact of operating and maintenance costs
- bridge design will create significant landmark
- plans include the additional connectors to rejoin Vancouver .

We encourage the voting entities to make this decision in a timely manner allowing the Columbia River Crossing funding to be considered as a part of the next federal funding cycle.

Dated this 12th day of June, 2008.

On behalf of the Board of Directors
VANCOUVER'S DOWNTOWN ASSOCIATION

Signed:



Lee Coulthard, Board Chair


Lee E. Coulthard

500 E. Broadway
Suite 603
Vancouver, WA 98660
Phone: 360.750.8907
Cell: 360.607.4224
Email: l.coulthard@comcast.net

From: jon.meusch@nwsignal.com
To: [Columbia River Crossing](#);
CC:
Subject: Comment from CRC Submit Comments Page
Date: Friday, May 02, 2008 8:12:44 AM
Attachments:

From: Jon Meusch

E-Mail: jon.meusch@nwsignal.com

Comment or Question:

Let's do this one right. We need a new, massive connector between our two beautiful cities that will last for 100 years. It should service personal vehicles, freight and a flexible bus fleet. The existing 205 bridge should be the model for the new I-5 structure. Wide. Tall. Beautiful.

LRT has too many limitations, including cost. Kill the train idea and lets move folks on buses.



From: glennwhitewa@gmail.com
To: [Draft EIS Feedback;](#)
CC:
Subject: DEIS Document Viewer Feedback
Date: Saturday, May 03, 2008 3:47:10 PM
Attachments:

From: Glenn White
Zip Code: 98663
Address: 4105 Main Apt. 16
City: Vancouver
State: WA
E-Mail: glennwhitewa@gmail.com
Section: Draft Environmental Impact Statement
Page: i

Comment or Question:

We need plenty of pedestrian and bicycle access with decent views. We need plenty of room for mass transit. We need this regardless of where the crossing is. We need it regardless of what is on each side of the crossing at this time. We need vision.



From: kaleidofun@aol.com
To: [Columbia River Crossing](#);
CC:
Subject: Comment from CRC DraftEIS Comments Page
Date: Tuesday, May 06, 2008 2:07:05 PM
Attachments:



Home Zip Code: 98661

Work Zip Code: 98661

Person:

Lives in the project area

Owns a business in the project area

Person commutes in the travel area via:

Car or Truck

1. In Support of the following bridge options:

Supplemental Bridge

2. In Support of the following High Capacity Transit options:

Light Rail between Vancouver and Portland

3. Support of Bus Rapid Transit or Light Rail by location:

Lincoln Terminus: Yes

Kiggins Bowl Terminus: No

Mill Plain (MOS) Terminus: No

Clark College (MOS) Terminus: No

Contact Information:

First Name: Reardon

Last Name: Adcock

Title:

E-Mail: kaleidofun@aol.com

Address:

,

Comments:

I would like to suggest another possible approach the new bridge. First phase would be a

new four-lane span West of the existing bridge. This new bridge would be the same style and architecture at the current. Elevate the center to allow river traffic to pass. This new span would act as the new Southbound lanes. The next phase would be to rebuild the East, Northbound span to match the new West, Southbound span. The third phase would be to rebuild the center section to handle light rail and foot traffic.

This would give a dedicated lane to Hwy 14 as it merges with I-5. Don't allow traffic from downtown to enter the freeway at this location. Light rail is an ineffective and inefficient necessary evil that government wants to force on the people. I'm fine with that as long as the total picture is improved.

Because the I-5 bottleneck in Portland will always be present unless they have a major change in political philosophy. For that reason there is no need to get people to that bottleneck faster. The traffic will still back up to the Interstate Bridge during rush hours even with a new bridge of any design.

In the plans, serious thought should be given to having a main highway off ramp going directly to the port area and not going through the downtown streets. Whatever the final plan it should be cost effective to solve the most logical problems not create more. The downtown area is struggling to rebuild itself. A mammoth bridge structure would discourage all future development of this area and destroy any hope of giving Vancouver a true identity. Please give this some serious thought before a final design is adopted.