Columbia River CROSSING

Meeting Agenda

MEETING TITLE: Task Force Meeting

DATE: Wednesday, April 26, 4-7 p.m.

LOCATION: OAME, Main Conference Room
4134 N. Vancouver Avenue (at N. Skidmore), Portland, Oregon

Note: Please turn off all cell phones during the meeting as they can disrupt the audio and recording equipment. Thank you.

TIME	AGENDA ITEM	ACTION
4:00 – 4:10	March 22 Meeting Summary	Approval
4:10 – 4:30	Overview of Open House Results	Briefing
4:30 – 4:45	Public Comment	
4:45 – 5:45	Component Packaging/Background Information	Briefing and Discussion
5:45 – 6:45	Component Selection for Further Study	Discussion/Action
6:45 – 7:00	Wrap-up/Next Steps	Next Meeting – May 17. Focus on initial alternatives.

TriMet Route to the Task Force meeting from Portland:

From Downtown Portland (SW Salmon Street and 6th Avenue) take **TriMet Bus #40** (Mocks Crest to St. Johns) northbound to N Williams and Skidmore. OAME is 1 block west of this bus stop. For route information contact TriMet at 503-238-RIDE or www.trimet.org.

C-TRAN Route to the Task Force meeting from Vancouver:

From Downtown Vancouver (7th Street Transit Center) take **C-Tran Bus #105** (I-5 Express) southbound to Downtown Portland (SW Salmon Street and 6th Avenue). Transfer from Downtown Portland (SW Salmon Street and 6th Avenue) to **TriMet Bus #40** (Mocks Crest to St. Johns) northbound to N Williams and Skidmore. OAME is 1 block west of this bus stop. For route information contact C-TRAN at 360-695-0123 or www.c-tran.com and TriMet at 503-238-RIDE or www.trimet.org.

Columbia River CROSSING

Meeting Summary

Meeting: Columbia River Crossing Task Force

Meeting Date: March 22, 2006

Location: WSDOT SW Region Headquarters,
11018 NE 51st Circle, Vancouver, WA

Members Present:

Sam Adams, City of Portland
Rex Burkholder, Metro
Bob Byrd, Identity Clark County
Lora Caine, Friends of Clark County
Serena Cruz, Multnomah County
Hal Dengerink, Washington State University Vancouver (Task Force Co-chair)
Dave Frei, Arnada Neighborhood Association
Jill Fuglister, Coalition for a Livable Future
Lynne Griffith, C-TRAN
Jerry Grossnickle, Columbia River Tugboat Association
Brad Halverson, Overlook Neighborhood Association
Alan Lehto for Fred Hansen, TriMet
Henry Hewitt, Stoel Rives (Task Force Co-chair)
Monica Isbell, Portland Business Alliance
Dean Lookingbill, Regional Transportation Council
Ed Lynch, Vancouver National Historic Reserve Trust
Dick Malin, Central Park Neighborhood Association
Steve Petersen, Portland Business Alliance
Bob Russel, Oregon Trucking Association
Steve Stuart, Clark County
Jeri Sundvall-Williams, Environmental Justice Action Group
Walter Valenta, Bridgeton Neighborhood Association
Scot Walstra, Greater Vancouver Chamber of Commerce
Tom Zelenka, Oregon Freight Advisory Committee
Susie Lahsene for Bill Wyatt, Port of Portland

Task Force Members Absent:

Dr. Wayne Branch, Clark College
Charles Becker, City of Gresham
Rich Brown, Bank of America
Elliott Eki, Oregon/Idaho AAA
Eric Holmes, City of Battle Ground
Janet Ray, Washington AAA
Art Schaff, Oak Harbor Freight
Karen Schmidt, WFMSIB
Jonathon Schlueter

Team Members Present:

Doug Ficco	Gregg Snyder
Rob DeGraff	David Parisi
Kris Strickler	Mike Baker
Jay Lyman	Linda Mullen
Barbara Hart	Anne Pressentin

I. Meeting Minutes

The Task Force approved the February 1 meeting minutes. Language was added to read "Based on previous studies the costing of moving the rail bridge is about $42 million. If moving the rail bridge is determined to be necessary to provide for marine safety for an alternative, it will be included in the description of that alternative."

Action: Changes proposed were approved.

II. Opening Remarks

Chairman Hal Dengerink introduced Barbara Hart as the new facilitator for the Task Force and noted that Katy Brooks would still be involved, but as a representative of the Port of Vancouver.

Chairman Dengerink updated the Task Force about changes made to the Evaluation Framework by the Project Sponsors Council and InterCEP. He explained that the points were minor, that these groups have some institutional or regulatory interests in the project. He and Co-Chair Hewitt had discussed the items and felt they were acceptable changes.

Action: Consensus to accept the changes

III. Arch Miller, Regional Transportation Council

Chairman Dengerink then introduced Arch Miller, of the Regional Transportation Council. Mr. Miller commented that the I-5 bridge needs to be fixed, and that the decision to do so was made by the I-5 Partnership in 2002. He then updated the Task Force with information relating to a new north-south corridor study process that RTC will be taking on. It may provide an opportunity or avenue to discuss a third crossing between Vancouver and Portland, in a longer-term process.

Rex Burkholder commented that he supports that effort and would like coordination with Metro at the appropriate time.

Action: No action necessary

Jill Fuglister asked why the public comment section was moved to the end of the agenda. It was noted that the group had agreed to have public comment at the beginning of the agenda when it was a decision-making meeting. This meeting was informational so the comment period was moved.

Action: No action necessary

IV. Step A Component Screening

Jay Lyman introduced the task force to the component screening background information that had been mailed to members the week prior. The Step A screening process was meant to identify components that have fatal flaws, and was applied only to Transit and River Crossing components – the other components will be considered later in the process.

The primary criteria were the six pass/fail questions based upon the problem definition, whereby any component that didn't meet the criteria would be recommended to fail and not advance in the process. The six questions are below and apply specifically to the Bridge Influence Area.

Does the component:
Increase vehicular capacity or decrease vehicular demand?
Improve transit performance?
Improve freight mobility?
Improve safety and decrease vulnerability to incidents?
Improve bicycle and pedestrian mobility?
Reduce seismic risk of the I-5 Columbia River Crossing?

Each of the six criteria applied to the River Crossing component and the first two applied to the transit component.

Mr. Lyman noted that the context for answering the pass/fail questions related to travel demand and market analysis; vehicular, aviation and navigation safety; design constraints and seismic considerations. He requested that Task Force members hold their questions until the end because of the quantity of material to get through in the meeting.

David Parisi gave an overview of traffic and travel information in the Bridge Influence Area that included volume information, where people are entering and exiting the area, current and 2020 projected hours of congestion.

Gregg Snyder reviewed transit information including existing service, existing and 2020 projected transit travel times and future travel markets. Most trips will originate in Downtown Portland, North Portland, Rivergate, Delta Park and Hayden Island.

David Parisi reviewed freight movement, including current and projected tonnage by mode, and how mid-day congestion will impact freight travel in the future.

Kris Strickler introduced the marine navigation and aviation issues affecting the project. These include reducing or eliminating the "s curve" maneuvers that marine vessels must navigate between the I-5 bridges and the railroad bridge to the west. The project team has been in discussion with the US Coast Guard regarding acceptable height clearances for marine navigation. USCG prefers a higher, wider, upstream bridge and will issue public notice for 30 day review on height/width after DEIS is published for comment.

The Federal Aviation Administration also has interest in preserving/protecting flight space for Pearson Airpark and, to a lesser extent, Portland International. The existing I-5 bridge intrudes into Pearson Airpark airspace because it was there before the airport. However, FAA would not grandfather the existing height into a new bridge.

Together, the marine and air space issues provide a tight area within which any new structure could be constructed.

David Parisi gave an overview of vehicular safety issues in the Bridge Influence Area, which included an analysis of five-year crash data on both sides of the river. He noted that there is an average of more than once crash per day in the Bridge Influence Area and that the accident rates are higher than average for similar urban Interstates. Parisi showed maps of where the accidents occur, the type and severity. Through this work, he demonstrated a strong correlation between collisions and out-dated, or non-standard highway design features, including narrow shoulders, short on and off-ramps, merging and diverging spaces and sight distances. He noted that bridge lifts result in a three to four times more likelihood of collisions, and that over twice as many collisions occur during periods of congestion.

Parisi walked the Task Force through the current routing of the bicycle and pedestrian pathways, noting the narrow path, the steep climbs and descents, lack of connectivity and other impediments to safe bike or foot travel.

Kris Strickler reviewed the seismic issues, noting that I-5 is a lifeline yet the current bridges don't meet seismic standards, and we don't currently know if it's feasible to upgrade/retrofit them.

The Task Force took a break for dinner and reconvened for the Screening Report Results.

V. Component Screening Results

Transit was discussed first. There were 14 ideas that had been considered. Each was presented with a recommendation to advance or not in the process. A summary follows:

TR-1 – Express Bus in General Purpose Lanes	Advance
TR-2 – Express Bus in Managed Lanes	Advance
TR-3 – Bus Rapid Transit Lite	Advance
TR-4 – Bus Rapid Transit Full	Advance

TR-5 – Light Rail Transit — Advance
TR-6 – Streetcar — Advance

TR-7 - High Speed Rail — Do not advance
This alternative fails on the following questions:

- Does not satisfy Questions 1 and 2

- Q1 – Could not serve many of the identified travel markets, generate significant ridership and thus reduce vehicular demand (hard to do with trains that go 175+ MPH)
- Q2 – Does not improve transit performance and can't be feasibly integrated into existing service structures

TR-8 – Ferry Service — Do not advance
This alternative fails on the following questions:

- Does not satisfy Questions 1 and 2
- Q1 – Long, out of direction travel times would not generate significant ridership and thus reduce vehicular demand.
- Q2 – Does not improve transit performance and can't be feasibly integrated into existing service structures
  Note: Ferry service wouldn't serve multiple transit markets such as Hayden Island, Delta Park, and North Portland.

TR-9 – Monorail — Do not advance
This alternative fails on the following questions:

- Does not satisfy Question 2
- Q2 –Does not improve transit performance and can't be feasibly integrated into existing service structures
  Note: Monorails have special purpose applications and have not been successfully used for general public transit service in the U.S.

TR-10 – Magnetic Levitation Railway — Do not advance
This alternative fails on the following questions:

- Does not satisfy Questions 1 and 2
- Q1 – An experimental high-technology rail system that serves long distance trips (i.e., Salem to Seattle). Would not generate significant ridership and reduce vehicular demand.
- Q2 – Does not improve transit performance and can't be feasibly integrated into existing service structures

TR-11 – Commuter Rail Transit — Do not advance
This alternative fails on the following questions:

- Does not satisfy Question 2
- Q2 –Does not improve transit performance and can't be feasibly integrated into existing service structures. Existing railroad right-of-way misses key transit markets.

Note: Prior studies show that commuter rail can't be operated on the existing, congested freight rail trackage.

TR 12 – Heavy Rail Transit Do not advance
This alternative fails on the following questions:

- Does not satisfy Question 2
- Q2 –Does not improve transit performance and can't be feasibly integrated into existing service structures.
  Note: Heavy rail transit service is appropriate for the world's largest and most congested cities where population density and ridership demand exceeds light rail and bus capacity.

TR-13 – Personal Rapid Transit Do not advance
This alternative fails on the following questions:

- Does not satisfy Questions 1 and 2
- Q1 – As a theoretical concept, a PRT system has never been built for general public transit service and therefore can't reduce vehicular demand
- Q2 – Does not improve transit performance and can't be feasibly integrated into existing service structures

TR-14 – People Mover/Automated Guideway Transit Do not advance
This alternative fails on the following questions:

- Does not satisfy Question 2
- Q2 –Does not improve transit performance and can't be feasibly integrated into existing service structures.
  Note: People movers are rare because they consist of driver-less trains operating in either underground tunnels or elevated railways.

River Crossing Components

There were 23 considered.

RC-1 – Replacement Bridge/Downstream/Low-level/Movable Advance
RC-2 – Replacement Bridge/Upstream/Low-level/Moveable Advance
RC-3 - Replacement Bridge/Downstream/Mid-level Advance
RC-4 – Replacement Bridge/Upstream/Mid-level Advance

RC-5 – Replacement Bridge/Downstream/High-level Do not advance
This alternative fails on the following questions:

- Does not satisfy Question 4
- Q4 – Would result in unacceptable encroachment into Pearson Airpark airspace

RC-6 – Replacement Bridge/Upstream/High-level Do not advance
This alternative fails on the following questions:

- Does not satisfy Question 4

- Q4 – Would result in unacceptable encroachment into Pearson Airpark airspace

RC-7 – Supplemental Bridge/Downstream/Low-level/Movable Advance
RC-8 – Supplemental Bridge/Upstream/Low-level/Movable Advance
RC-9 – Supplemental/Downstream/Mid-level Advance

RC-10 – Supplemental/Upstream/Mid-level Do not advance
This alternative fails on the following questions:

- Does not satisfy Question 4
- Q4 – Would result in unacceptable encroachment into Pearson Airpark airspace Note: Bridge high point located far enough north to align with north channel of Columbia River. Creates the airspace encroachment.

RC-11 – Supplemental/Downstream/High-level Do not advance
This alternative fails on the following questions:

- Does not satisfy Question 4
- Q4 – Would result in unacceptable encroachment into Pearson Airpark airspace

RC-12 – Supplemental/Upstream/High-level Do not advance
This alternative fails on the following questions:

- Does not satisfy Question 4
- Q4 – Would result in unacceptable encroachment into Pearson Airpark airspace

RC-13 – Tunnel to Supplement Existing Bridges Advance

RC-14 – New Corridor Crossing Near BNSF Do not advance
This alternative fails on the following questions:

- Does not satisfy Questions 2, 4, 5 and 6
- Q2 – Does not provide service to population centers on Hayden Island. Out of direction travel times for trips between Salmon Creek and downtown Portland. Does not improve transit performance within the Bridge Influence Area.
- Q4 – Maintains known I-5 non-standard design features that contribute to vehicular collisions. Future I-5 safety would be expected to worsen as demand increases.
- Q5 – Does not improve or provide new multi-use pathway across Columbia River in the I-5 corridor or improve I-5 related bicycle/pedestrian connections.
- Q6 – Investment in an alternative corridor does not reduce the seismic risk of the I-5 Columbia River crossing.

RC-15 – New Corridor Crossing, plus widen existing I-5 bridges Do not advance
This alternative fails on the following questions:

- Does not satisfy Questions 2, 4, 5 and 6
- Note: Not feasible to add new travel lanes between existing I-5 bridges. Without the I-5 improvement, it performs similar to RC -14.
- Q2 – Does not improve transit performance within the Bridge Influence Area.

- Q4 – Maintains, and may exacerbate, known I-5 non-standard design features that contribute to vehicular collisions. Future I-5 safety would be expected to worsen as demand increases.
- Q5 – Does not improve or provide new multi-use pathway across Columbia River in the I-5 corridor or improve I-5 related bicycle/pedestrian connections.
- Q6 – Investment in an alternative corridor does not reduce the seismic risk of the I-5 Columbia River crossing.

RC-16 – New Western Highway (I-605) Do not advance

This alternative fails on the following questions:

Does not satisfy Questions 1 through 6

- Q1 and 3 – Does not significantly increase vehicular capacity or reduce demand for commuter and truck freight travel along I-5.
- Q2 – Does not improve transit performance within the Bridge Influence Area due to:
  - Not directly serving transit markets in North Portland,
  - Long, out of direction travel times for trips between Salmon Creek and downtown Portland,
  - Little future transit demand for travel between Clark County and Washington County.
- Q4 – Maintains known I-5 non-standard design features that contribute to vehicular collisions. Future I-5 safety would be expected to worsen as demand increases.
- Q5 – Does not improve or provide new multi-use pathway across Columbia River in the I-5 corridor or improve I-5 related bicycle/pedestrian connections.
- Q6 – Investment in an alternative corridor does not reduce the seismic risk of the I-5 Columbia River crossing.

RC-17 New Eastern Columbia River Crossing Do not advance

This alternative fails on the following questions:

- Does not satisfy Questions 1 through 6
- Q1 and 3 – Does not significantly increase vehicular capacity or reduce demand for commuter and truck freight travel along I-5.
- Q2 – Does not provide service to Hayden Island or Delta Park. Long, out of direction travel times for trips between Salmon Creek and downtown Portland. Does not improve transit performance within the Bridge Influence Area.
- Q4 – Maintains known I-5 non-standard design features that contribute to vehicular collisions. Future I-5 safety would be expected to worsen as demand increases.
- Q5 – Does not improve or provide new multi-use pathway across Columbia River in the I-5 corridor or improve I-5 related bicycle/pedestrian connections.
- Q6 – Investment in an alternative corridor does not reduce the seismic risk of the I-5 Columbia River crossing.

RC-18 – I-205 Improvements Do not advance

This alternative fails on the following questions:

- Does not satisfy Questions 1 through 6
- Q1 and 3 – Does not significantly increase vehicular capacity or reduce travel demand for commuter and truck freight along I-5.
- Q2 – Does not improve transit service to identified I-5 transit markets.
- Q4 – Maintains known I-5 non-standard design features that contribute to vehicular collisions. Future I-5 safety would be expected to worsen as demand increases.
- Q5 – Does not improve or provide new multi-use pathway across Columbia River in the I-5 corridor or improve I-5 related bicycle/pedestrian connections.
- Q6 – Investment in an alternative corridor does not reduce the seismic risk of the I-5 Columbia River crossing.

RC-19 – Arterial Crossing to Supplement I-5 Do not advance

This alternative fails on the following questions:

- Does not satisfy Questions 1, 3, 4, and 6
- Q1 and 3 – Does not significantly increase vehicular capacity or reduce demand for commuter and truck freight travel along I-5.
- Q4 – Does not address known I-5 non-standard design features that contribute to vehicular collisions. Future I-5 safety would be expected to worsen as demand increases.
- Q6 – Investment in an alternative corridor does not reduce the seismic risk of the I-5 Columbia River crossing.

RC-20 – Replacement Tunnel Do not advance

This alternative fails on the following questions:

- Does not satisfy Questions 1, 2, 3, and 5
- Q1 and 3 – Does not serve I-5 commuter and truck freight trips within the Bridge Influence Area.
- Q2 – Does not improve transit performance within the BIA because it does not provide service to key transit markets in downtown Vancouver, Hayden Island, and North Portland.
- Q5 – Does not improve or provide new multi-use pathway across Columbia River in the I-5 corridor or improve I-5 related bicycle/pedestrian connections.

RC-21 – 33rd Avenue Crossing Do not advance

This alternative fails on the following questions:

- Does not satisfy Questions 1 through 6
- Q1 and 3 – Does not significantly increase vehicular capacity or reduce demand for commuter and truck freight travel along I-5.
- Q2 – Does not provide service to Hayden Island or Delta Park. Out of direction travel times for trips between Salmon Creek and downtown Portland. Does not improve transit performance within the Bridge Influence Area.

- Q4 – Does not address known I-5 non-standard design features that contribute to vehicular collisions. Future I-5 safety would be expected to worsen as demand increases.
- Q5 – Does not improve or provide new multi-use pathway across Columbia River in the I-5 corridor or improve I-5 related bicycle/pedestrian connections.
- Q6 – Investment in an alternative corridor does not reduce the seismic risk of the I-5 Columbia River crossing

RC-22 – Non-Freeway Multi-Modal Columbia River Crossing Do not advance
This alternative fails on the following questions:

- Does not satisfy Questions 1, 3, 4, and 6
- Q1 and 3 – Not feasible to elevate existing I-5 structures to eliminate bridge lifts. Does not significantly increase vehicular capacity or reduce travel demand along I-5. Results in out-of-direction travel for commuters within the Bridge Influence Area.
- Q4 – Many known I-5 non-standard design features that contribute to vehicular collisions would remain.
- Q6 – Investment in an alternative corridor does not reduce the seismic risk of the I-5 Columbia River crossing.

RC-23 – Arterial Crossing with I-5 Improvements Advance

Mr. Lyman discussed next steps, including applying Step B screening to the Transit and River Crossing Components and reporting Step B results at the April 26 Task Force Meeting.

VI. Question and Answer and Comments Session

Many Task Force Members had questions or comments to offer. They are summarized below.

Tom Zalenka – Regarding the Pass-fail criteria, shouldn't question 1 be two separate questions – one for increasing capacity and one for decreasing demand?
Mr. Lyman – The criteria reflect the problem definition as approved by the Task Force.
Mr. Zalenka – I don't think that the question was a straightforward question now that I've had more detail to look at. I want to make sure the process is transparent.

Steve Stuart – Commented that he didn't believe the term "Origin and Destinations" was an accurate way to portray Parisi's trip study and that the issue is entries and exits to the system.
Mr. Lyman – I agree

Mr. Stuart – How does the project define capacity?
Mr. Parisi – Roughly 1700 vehicles per hour
Mr. Stuart – How do you define congestion?
Mr. Parisi – It's based upon service levels and how many cars get through, how many are in the queue and when speeds go down

Serena Cruz: How can you measure excess demand?
Mr. Parisi: Count the cars stuck in traffic
Ms Cruz - How do you count the people who are taking the later trip?
Mr. Parisi – By watching the length of time that the delays occur

Henry Hewitt – What do you mean by pre/post HOV when measuring transit travel times?
Response – The travel times are meant to measure apples to apples, with the first count taken before the HOV lane was put in, and the second one after the HOV lane in Washington was taken out.

Jeri Sundvall – Regarding page 4 (Origin/Destination Slide) – What is the time period?
Mr. Parisi – Four hours northbound, between 2 and 6 p.m.

Ms. Sundvall – Regarding page 7 – How does fuel price affect volumes across bridge? Do you assume hybrids or other vehicles will increase?
Gregg Snyder – We haven't done that
Ms. Sundvall – Would sufficient transit be a solution for congestion?
Mr. Snyder **–** Yes

Scot Walstra – Does westbound Pearson traffic influence PDX airplanes?
Response – PDX airspace is considered.

Mr. Walstra – Does the safety data include pedestrians and bikes accidents? Bike and pedestrian people say they don't use the I-5 bridge because it's unsafe
Mr. Parisi – It includes them if they are on the mainline.

Rex Burkholder – Regarding page 3.7 in the report – Shouldn't the phrasing be regarding the BIA, not I-5 corridor?
Mr. Parisi – Yes.

Bob Byrd – Where did top line of green box (about marine navigation) come from?
Kris Strickler: It includes a survey of all potential users.
Mr. Byrd – Would USCG consider that?
Mr. Strickler – We could likely get an exception from the USCG.

Laura Caine – Regarding page 3.29, booklet 3.7 – other considerations, does that consider toll issues?
Mr. Lyman – We looked at feasibility and some technologies, but toll booths are not yet in the discussion. We are looking at electronic tolling and will have more information for you regarding that at a later time.

Ms. Cruz – Regarding safety and your comment that more vehicles cause more collisions, did you develop a rate that would show that the traffic does in fact group?
Mr. Parisi – We only looked at how DOT reports it. The relationship is about congestion, not volume.
Ms. Cruz – In relation to reducing traffic compared to today's levels: is that real or relative numbers?
Mr. Parisi – They're relative.
Ms. Cruz – Can't you do it with training, signage, other things instead of changing designs.
Mr. Parisi – There are 8 interchanges with in within 5 miles and standard call for no more than one per mile. Because of the non-standard designs, they lead to accidents.
Ms. Cruz – What if you created a traffic safety corridor, would that do it?
Mr. Parisi – Yes, to a limited extent. You could reduce speeds and reduce collisions, but you'd create more delay.

Jerry Grossnickle - Regarding Figure 3.5 – 9 hours of congestion - I saw a similar study for the towboat industry, but it had different results. Were restrictions on bridge lifts included? Because if so, it extends the congestion curve more.

Jill Fuglister – Regarding page 4 – Next Step, part b: As part of the O/D Survey, did you collect demographic info? That might be helpful for EJ issues. We'll need that.
Mr. Parisi – This was done through license plate monitoring, but the charts with the red and green dots can give that information.
Ms. Fuglister – Does that match with census tracts?
Mr. Parisi – We can try, but I won't guarantee it right now.
Ms. Fuglister – What other urban freeways compare to I-5?
Mr. Parisi – I-5 in the Portland central city, the I-405 loop, parts of I-205 and I-84

Bart Phillips – regarding the 2020 Transit Market, page12, 1st slide - Aren't those park and ride lots? What are we really measuring?
Mr. Snyder – Yes, some are park and rides, some are final destination
Mr. Phillips – Isn't this really saying that the locations of park and ride facilities is driving this?
Mr. Snyder – 2020 mode show final destination
Mr. Phillips – If you move the facilities, don't you control the demand?
Mr. Snyder – Potentially
Mr. Philips – Northbound direction only?
Mr. Snyder – Yes, evening peak is higher than morning, but we have morning peak data also.

Ms. Sundval – Can we get some large print?

Tom Zalenka – I have 4 or 5 questions or comments, but don't need answers now
1) North/South congestion slides – Northbound and Southbound have different peak times. Northbound has more people, a longer time, which makes it more complex.

2) Can we compare to other communities with a high percentage of commuter traffic to learn their through-put numbers and get ideas for better overall solutions? Include Seattle, Olympia, and the Canadian border.
3) Freight and the forecast mode split – there's nothing related to safety and design issues. Are we looking at rail safety? Are we backing up trains?
4) Transit markets, adjacent to I-5 – why isn't Washington County included? What about East county?
5) I want to understand the relationships between the Task Force, the Project Sponsors Council and InterCEP.

Steve Stuart – Regarding the Capacity/Demand graph, can we get average traffic speeds through BIA to help to begin to understand "acceptable congestion", i.e. how slow is slow. Also, regarding safety – page 3-25 – was there prioritization of the accident locations or most important factor?
Mr. Parisi – We didn't look at it like that because of the presence of non-standard features and high traffic levels.
Mr. Stuart – Regarding page 3.29 how many Willamette River Bridges meet seismic standards?
Is that a must?
Mr. Lyman – There are some important distinctions: the Willamette bridges serve local traffic; the Interstate is a lifeline structure.

Rex Burkholder – Page 4.1.1 seems written to interpret to add lanes. RC-19 and RC 22 – If combined with TDM, they might work. We might want these things when looking at what we can afford.
Response – RC-19 and 22 are safety issues, but RC 23 includes TDM.
Mr. Burkholder – Can we be careful about language? "Improvements" may be too value laden. Can we be more specific?

Steve Stuart – RC numbers 5, 6, 10, 11 and 12 all have one flaw – Pearson Air Park. Will we regret this 20 years from now if we take these off the table?
Royce Pollard – Pearson will be here longer than you and I.

Hal Dengerink – Regarding page 5, through trips versus others – If you gave them a different way to get on, would that change?
Mr. Parisi – The 2020 scattergram about origins and destinations in 2020 shows where people are traveling to and from. We could model traffic in other corridors to see if it would.
Mr. Dengerink – What is the threshold? Is there one for congestion and one for safety?
Mr. Parisi – We know we need to improve safety and can predict from the models that collisions will go up 50% to 60% by 2020.

Alan Lehto – Regarding TR-6, the streetcar. TriMet doesn't believe it is compatible with existing Max Station designs. Also, a streetcar wouldn't be able to meet capacity demands for crossing the bridge.

Walter Zalenka – Is the bias for new lanes? Does this information get to the less cars philosophy? We need to keep a valid slower growth idea on the table.
Mike Baker – The model for all of these included a high level of TDM/TSM.
Mr. Lyman – This will show up in greater detail when we begin the packaging efforts.

Dick Malin – It's vital to understand the impacts this will have on Vancouver. We need to consider better east-west transit
Mr. Lyman – Our goal is not to preclude new east-west transit options.

Question – Does recommending against the ferry preclude the water taxi idea being considered in Portland?
Answer – No

Ms. Cruz – Regarding TDM and TSM – RC 14, 19, and 22 with TDM might be doable.
Mr. Parisi – We don't know of a super TDM program that could save us 15 minutes.
Mr. Lyman – Our intent for now is to isolate these "stand-alone" components and address TDM in more detail in packaging. All will have an aggressive TDM program.

Ms. Fuglister – Can you clarify where we are in the process?
Bob Byrd – Is there something that staff sees that we don't? I would like to see the data that Dave is referring to so we can be convinced too.

Brad Halverson – RC 13 – and RC 20. Why does the short tunnel pass and the long tunnel fail?
Response – the Bridge Influence area is not served by the long tunnel. It misses SR 14, Mill Plain and Fourth Plain in Vancouver and Hayden Island in Portland.

Jeri Sundvall – Regarding the Task Force – are we advisory? How much weight to do have?

Mr. Dengerink – If we don't support something it is likely it won't happen.

Rex Burkholder – I have questions regarding the fact that Step A is not complete, yet you are moving forward with Step B and propose to bring us those results next month.

Doug Ficco – We are concerned about the schedule. We need to keep the Step B process moving so that work can continue. We need that information.

VII. Communications Report

Linda Mullen gave a run down of project communications activities, including the Open Houses on April 12 and 13; outreach to neighborhood associations; intention to be visible in the community. The EJ effort will include a committee made up of EJ and adjacent neighborhood members who will look at outreach plans, project milestones and design issues.

VIII. Public Comment

Paul Edgar – Sees errors in the analysis, thinks mixed use transportation is essential for Clark County and he doesn't want I-205 cut out of this project.

Mikki Blizzard – Washington County resident would like to see a combo of small, well thought out solutions because they will likely be more useful.

Sharon Nasset – would like to see a Bi-state industrial corridor. She would like the team to restudy the proposal she submitted.

Ben Wilson – advocated for a sky train that could go high speeds and is above the roadway system.

Appendices
to Task Force Meeting Summary

Handouts from Public Commenters

Paul Edgar

From: Paul Edgar [pauloedgar@qwest.net]

Sent: Tuesday, March 21, 2006 9:53 AM

To: Henry Hewitt; Harold A. Dengerink, Ph.D.; Rob DeGraff

Cc: Rep. Deb Wallace; Rex Burkholder; Sam Adams; Marc Boldt

Subject: I am going to speak to this at tomorrows CRC Task Force Meeting (Please print this and have it in the packets for the members)

Paul,

Thank you for your efforts to bring a regional perspective and a sense of accountability to the congestion problems in the Portland area. I agree with nearly everything you are trying to accomplish and I appreciate your efforts to "keep the pressure" on the leaders of the Region. In my opinion, we are on the same side...and we want the same things for Portland / Vancouver. If we differ at all, it's in the matters of scope and timing. Let me explain:

Scope: I think our goal should be, not to fix one corridor between Portland and Vancouver, but to fix them all. I don't want to just widen I-205, or build a new Columbia River Crossing at I-5 or to build a new third bridge connecting the Ports and better serving the western communities...I want all three, and, looking to the twenty year future, the metropolitan area will need all three. So what we are trying to do is to pursue a strategy that will give us the best chance of getting all three.

Timing: The question is...How to do this, and in what order??? Should we try for the easier (and less expensive) widening of I-205 first? Maybe, but if so, that might reduce the perceived need for an improved I-5 corridor? Should we try for the third bridge first to improve the connection between the Ports with a new "freight" corridor? Maybe, but that might be seen as a substitute for widening I-205 and for improving the I-5 corridor.

So, what we seem to be settling on is trying to get the most difficult project (the I-5 corridor) underway first. If we can get that project started (and funded) and prove to the public and the legislature our ability to make a positive difference at the I-5 crossing...then, it is not such a great leap to build public support for the other two, and ...there is no question that both other projects can still stand on their own as necessary and cost effective. The fear is, if we do I-205 or the third bridge between the Ports first, than these projects will be used by some as an excuse to not support the I-5 improvements and we will further delay the replacement of these critical bridges.

I hope that you can accept (or at least not object to) this strategy. In fact, my real hope is that you will use your considerable influence to support and help us find a way to build all three of these needed projects.

Thank you again for your active support of improved transportation in the Portland / Vancouver area.

David O. Cox
Division Administrator
FHWA - Oregon Division
503-399-5749

From: Paul Edgar, **Subject:** Economic Development Research Group Study

After printing out and reading the full text of the "The Cost of Congestion to the Economy of the Portland Region" by the Economic Development Research Group at first I thought to myself "that it was about time that this information was made available" but then the real light came on. Why not let this group independently setup the criteria to evaluate; the solutions on the table now and in the future like the Columbia River Crossing (CRC) Project proposal so that a comparison could be made to it; like the widening of I-205 to 4-lanes in conjunction with the building of a freight specific Port-to-Port, Westside arterial like outlined in the Bi-State Industrial Corridor (BIC) proposal as a public/private partnership. The BIC proposal also includes replacing the Heavy Rail Bridge crossing the Columbia River with the ability to include on it a MAX/Light Rail Loop that would provide the infrastructure to connect into Vancouver.

David Evans and Associates is doing the pre-EIS efforts for this I-5 CRC project and they have had the blinders put on them to virtually only design, engineer and sell this one project. The current process, instructions and players pre-ordain an action without identifying if this is the best use of all recourses and dollars that can be invested into transportation in our region. It precludes any region/system wide solutions from evaluation. How can we have and achieve an effective public process and ROI with the current plan and instructions? Many people believe that we will not even be able to achieve an effective EIS with the current charter/RFP that exists for the CRC Task Force and project teams.

The comparative cost of these alternate projects to the public should be approximately about that same or a little less when it comes to widening of I-205 because so much of the bridges and overpass infrastructure already exists. All of the Right-of-Way necessary to accomplish this widening of I-205 to 4-lanes is currently owned. The (BIC) Port-to-Port Westside arterial could be accomplished/built in an earlier time frame with-in a public private partnership. The funding for BIC would come from the combinations of contributions from the Ports (Portland and Vancouver), Heavy Rail Entities (UP and BNSF), Tri-Met, PDC, ODOT, WSDOT, FED's, Metro, Multnomah County, Clark County, City of Portland, City of Vancouver, River Commerce Groups, Tolls and other public and private investors. The big issue is the comparative benefits to the economy of the Portland/Vancouver region.

The benefit and cost analysis should depict what the net results are of any recommendation in the Portland/Vancouver Region as transportation entities try to implement recommendations to satisfy "The Cost of Congestion to the Economy of the Portland (Vancouver) Region". Right now in front of us is a major train going down the track call the Columbia River Crossing Task Force that can obligate much of the next 20-years of transportation, transit, highway and road investments dollars in this region. This task force is tightly looking at only the replacement of the Interstate Bridges and very little more. It does not at this time even take steps to look at real economic and congestion relieving alternatives that may have the possibility of costing less and bringing in more benefits as suggested as needed by the "Economic Development Research Group". If the CRC Task Force is not given instruction to open their charter and tasks to include and identify all options to the east and west of the I-5 corridor it is wrong. A result would that we will be doing a significant disservice to all stakeholders. We must identify and evaluate all transportation options and investments to ensure that the cost of congestion to our region is eliminated or substantially reduced.

Immediate steps must be taken by all parties to thrust the lack of "Freight Mobility" caused by congestion to the front of our area's priority list. We cannot continue to invest into feel good projects that suck up the majority of the transportation investment dollars that have little Return on Investment. We must change the mind-set of the public as to what is considered as politically correct. If the economic engine doses not spin, we will not have the needed family wage jobs and investments that create them. A major issue for all of the public servants is that we will not have the taxes/revenue come in that are needed to pay for the public services and public investments. This is a chicken or egg priority decision as to what comes first. I do not want to be Chicken Little but if we do not stop and/or change the direction of the CRC Task Force Train and transportation planning NO-ONE will have the dollars available to make reasonable decisions and investments to help solve this serious congestion problem and its subsequent cost that was identified in this report.

I want what this report suggests and that is that we can get a 2-dollar return for every 1-dollar invested. The current regional transportation plans do not currently provide this type of returns on our transportation investments. Something has to change.

Thanks, Paul O. Edgar

Description of the BI-State Industrial Corridor

for Placement in the Official Records of

Columbia River Crossing

includes

Description of the Northwest Passage

and

Description of the West Arterial

March 22, 2006

Sharon Nasset
Director, Economic Transportation Alliance

Phone: (503)283-9585
Email: sharonnasset@aol.com

BI-State Industrial Corridor (BIC)

1. From highway 30, 124th to Oil Time Road in Oregon connects with existing arterials Marine Dr., N. Lombard St., Columbia Blvd. and North Portland Rd. to Vancouver Washington along the east side of the BNSF north alignment to perhaps Ridgefield Washington.
2. BIC is a freeway corridor and would have nine or more complete ramps as entrance and exit access with NO stop lights.
3. A complete ramp is north and south access (18 or more). This would be in addition to and with no change of Fruit Valley Rd. There are several existing arterials in Vancouver that currently connect with the BNSF rail line.
   *Due to grade issues the trenching of Mill Plain has been removed.

Columbia River Bridge (BIC)

1. A high span bridge with 2 levels and no lift span.
   The Lower Level Consistingonsisting of 8 lanes with 4 in each direction. Truck friendly lanes thirteen feet wide with emergency lanes in the center and on the sides. This level is to be built to accommodate high wide and needs to remain at about a 2 percent grade.
   The Top lLevel Four lanes with 2 general purpose lanes in each direction general and an emergency lane on the side.
   Three lanes transit only, 1 as a future reversible lane and 2 lanes for transit. Two lane width for sidewalk, bike and viewing.

2. New rail tracks lift span bridge with 4 tracks(1or 2 extra heavy for high speed and large loads.) Commuter rail to be established with the new additional capacity.

3. Remodel of the existing BNSF from a swing to a lift span, adding a second lift to line up with the current I-5 bridge.
   North Portland Road
   North Portland Road to be upgraded to 4 lanes each in North/South direction. The upgrade from Marine Dr. to Columbia Blvd. As North Portland Rd. borders both Smith and Bybee lakes, this would provide both access and create a pedestrian friendly promenade.

Willamette River Bridge (BIC)

1. A one level bridge with no lift span consisting of 5 lanes, 4 general purpose truck friendly lanes, thirteen feet wide with emergency lanes in the center and on the side.

2. To be built to accommodate high wide, it needs to remain at about a low percent (2%-3%) grade.
3. One center lane to be used as a future reversible lane.

4. Two lane width right of way for bicycle and pedestrian traffic on east side of bridge.

5. New lift span bridge with 4 sets of heavy rail tracks, one or more set being for high speed or every heavy rail.

Northwest Passage Description

1. The Northwest Passage includes three bridges. First over the Columbia River, second the Columbia Slough, and third the Willamette River.

2. From Mill Plain in Vancouver (I-5) follows the BNSF line and uses as a viaduct "The Cut"
to Highway 30. This is 7 lanes, one center lane for emergency and emergency lanes on the curb side. (center lane reversible making 3-3 or 3-4 lane combination)

3. The NW Passage **does not include a lift span bridge** over the Columbia River and uses on and off ramps **not stop lights** on the express way.

4. An access road to Swan Island makes a second road out, that does not access I-5, and connects with the major industrial area on one continuous corridor.

5. The NW Passage also adds heavy rail capacity of 4 new train tracks and a for freight and commuter rail.

6. Accommodation is made for bicycle and pedestrian traffic.

West Arterial Description

1. A four-lane **lift span bridge** with two northbound and two southbound lanes.

2. **Includes 5 to 7 stop lights** which bring the traffic to a full stop.

3. No addition of heavy rail or commuter rail in comparison summaries

4. No additional lanes for bike and pedestrians.

*The NW Passage was not modeled by the BI-State I-5 Trade & Transportation Partnership.

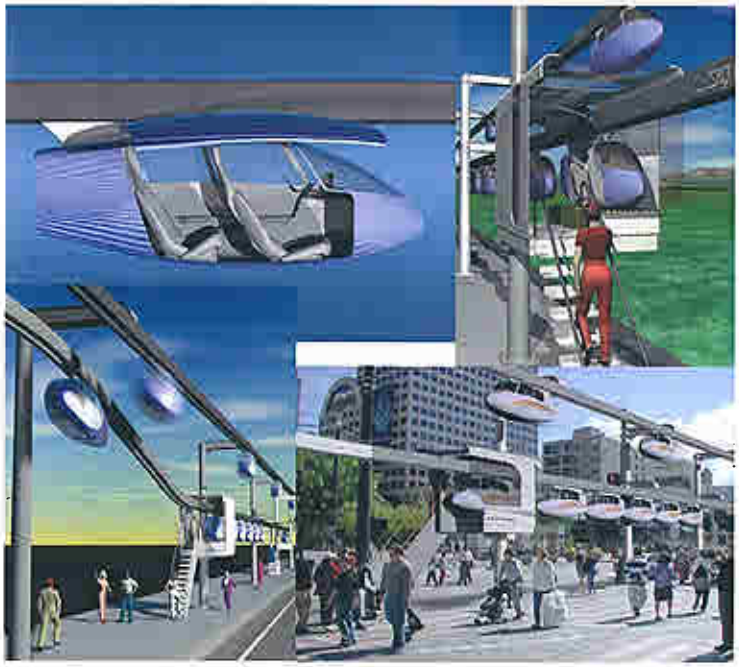
*The Western Arterial was a verion of NW Passage.

Columbia River Crossing SkyTran™ Proposal

By Ben Wilson
ben.wilson@accelero.info

What is SkyTran?

- Transportation system developed by UniModal™.
- Uses a network of elevated guideways.
- Small, computer-controlled, magnetically-levitated vehicles.
- Transit is point-to-point, non-stop.
- On-demand vehicles waiting at every boarding portal.



Key Features:

- Speed: Vehicles travel up to 100 mph.
- Cost: The lowest cost transportation mode to install and operate. 1/10th the cost of light rail.
- Capacity: One guideway has the same capacity as a 3-lane freeway.
- Energy & Pollution : Vehicles use clean electricity and get the equivalent of 200 miles per gallon.
- Maintenance: Magnetic levitation eliminates wheels, thus greatly reducing maintenance costs.
- Environment: Noiseless, visually unobtrusive lightweight vehicles and guideways blend into the city.
- Safety: Elevated guideways eliminate surface traffic collisions. Driverless, automated vehicles use computers, sensors and radar collision avoidance systems to merge and navigate.

Advantages Over Roads

- Congestion-free reliability
- Faster transit
- Cleaner energy
- No parking required
- Minimal land use required
- Significantly lower cost to build
- Significantly lower cost to operate

SkyTran for the Columbia River

- SkyTran can provide an effective extension to the MAX into Vancouver.
- SkyTran guideway can be attached to the existing bridge.
- SkyTran addresses the issue of commuter traffic, which is the primary cause of congestion.

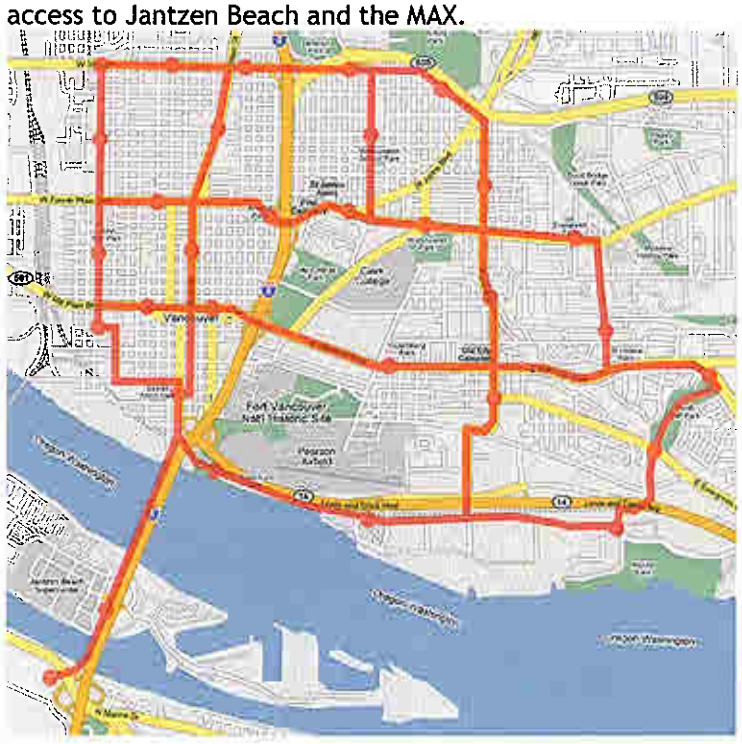
Phase 1

SkyTran link between 7th Street Transit Center and Expo Center MAX Station, with stop in Jantzen Beach

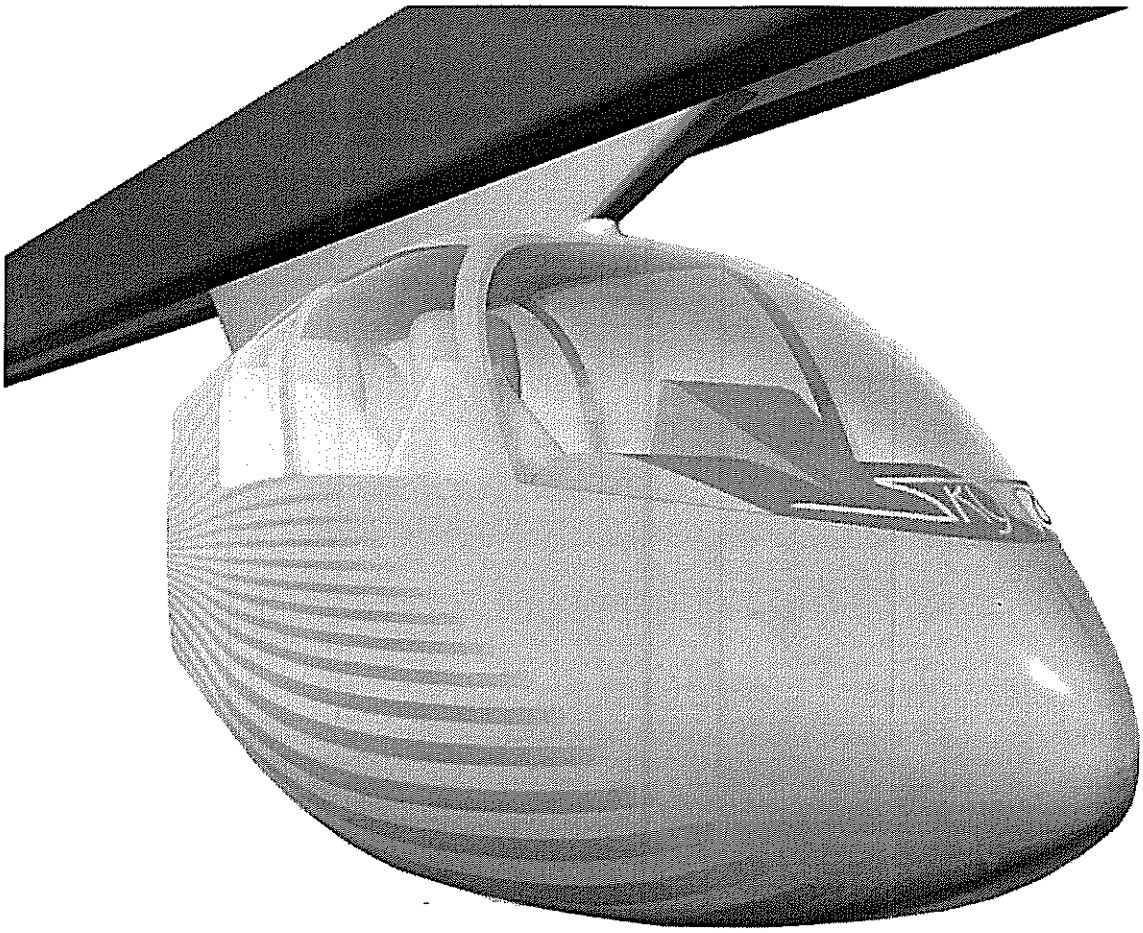
- 2-minute travel time from Vancouver to Expo Center.
- Estimated cost for research, development and installation: $90 million.
- Project Duration: 4 years.

Phase 2

SkyTran feeders covering SW Vancouver, providing direct access to Jantzen Beach and the MAX.



- Estimated cost: $100 million.
- SkyTran expects to be able to fund phase 2 privately - no tax money required.
- All that is required is permission to build along public right of way.



Faster, Safer...Smarter.

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SkyTran™ Personal Maglev Transporter™

On UniModal's SkyTran™ you travel the city using a network of elevated guideways on which small, computer controlled, magnetically levitated vehicles provide you with point-to-point, non-stop, on-demand transit service.

THE SKYTRAN EXPERIENCE

You board a 2 passenger vehicle from one of many small, conveniently located stops throughout the city. After entering your destination, you experience a mild acceleration as your vehicle leaves the offline stop and merges onto the main guideway joining the elevated network of vehicles moving 100 mph to their specific destinations without any stoppage or interruption.

SkyTran behaves like an automatic car...but faster. There's no traffic lights, no traffic jams, and it works with greater capacity, safety, energy efficiency and far better economy.

KEY ADVANTAGES...

Speed: Vehicles travel 100 mph in the city and 150 mph between cities.

Cost: The lowest cost transportation mode to install and operate. 10 times less than light rail.

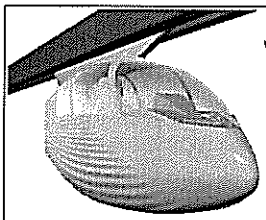
Capacity: One guideway has the same capacity as a 3 lane freeway.

Energy & Pollution : Vehicles use clean electricity and get the equivalent of 200 miles per gallon.

Maintenance: Magnetic levitation eliminates wheels, thus greatly reducing maintenance costs.

Environment: Noiseless, visually unobtrusive lightweight vehicles and guideways blend into the city.

Safety: Elevated guideways eliminate surface traffic collisions. Driverless, automated vehicles use computers, sensors and radar collision avoidance systems to merge and navigate.



SkyTran™ delivers public transit users the convenience of a car without the need for government subsidies to build and operate the system.

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Background

From Gridlock To Personal Freedom

Problem: The public overwhelmingly rejects light rail, monorails, buses, and car pool lanes as a solution to automobile gridlock.

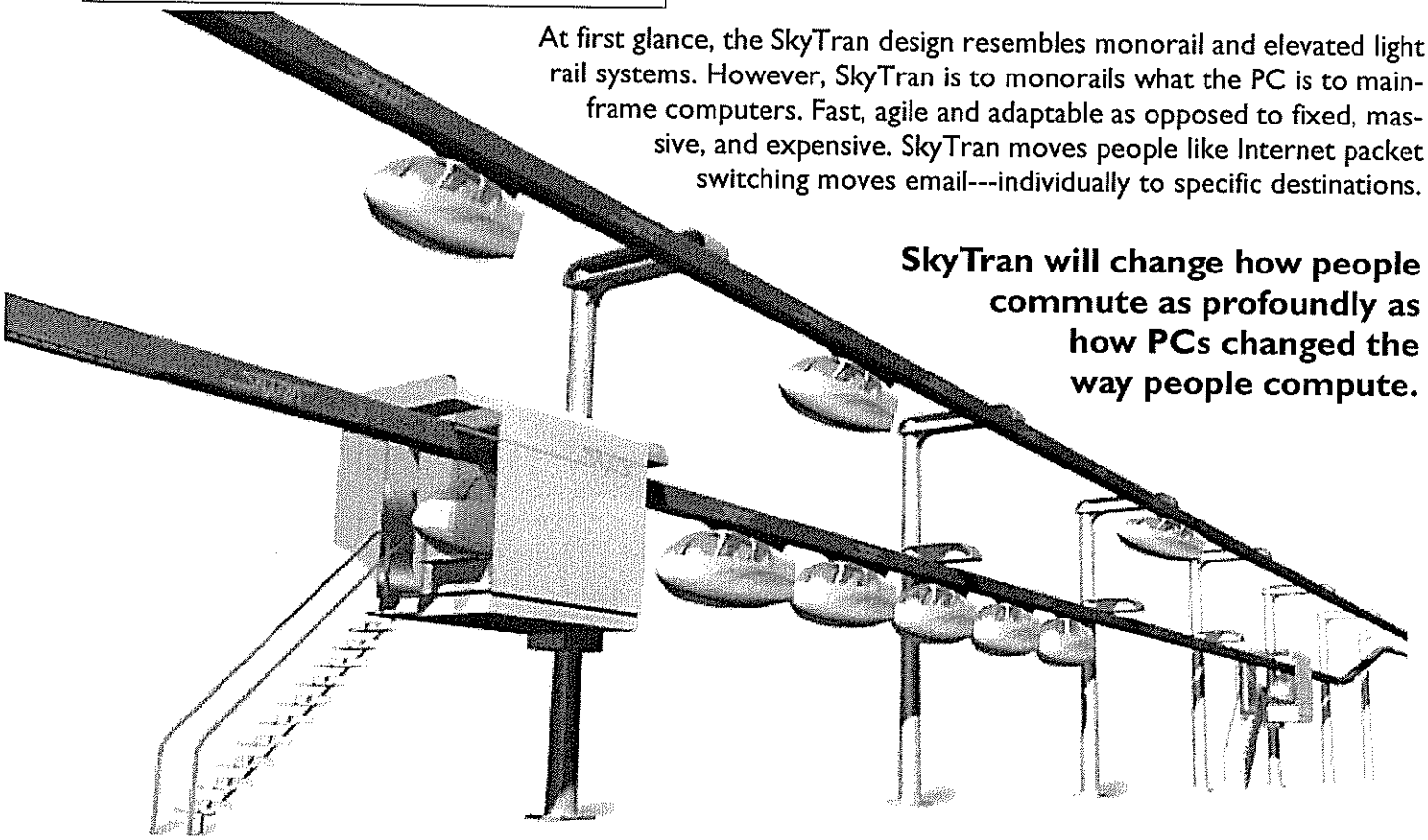
Analysis: Despite the reality of gridlock, the perceived convenience of cars outweighs the inflexibility that light rail, buses, and car pool lanes impose on personal transit.

Solution: A transportation option that allows personal point-to-point non-stop convenience like cars but at higher speeds and volumes and with less energy and pollution.

Q: Is the problem too many cars?

A: No. The real problem is how to quickly move small human payloads everywhere. Time to rethink using two ton machines to move 170 pound people.

The SkyTran Solution. SkyTran's unique design integrates key technical advances in engineering, automation, and propulsion and transforms them into a 21st century transportation solution that eliminates traffic gridlock and congestion.



At first glance, the SkyTran design resembles monorail and elevated light rail systems. However, SkyTran is to monorails what the PC is to mainframe computers. Fast, agile and adaptable as opposed to fixed, massive, and expensive. SkyTran moves people like Internet packet switching moves email---individually to specific destinations.

SkyTran will change how people commute as profoundly as how PCs changed the way people compute.

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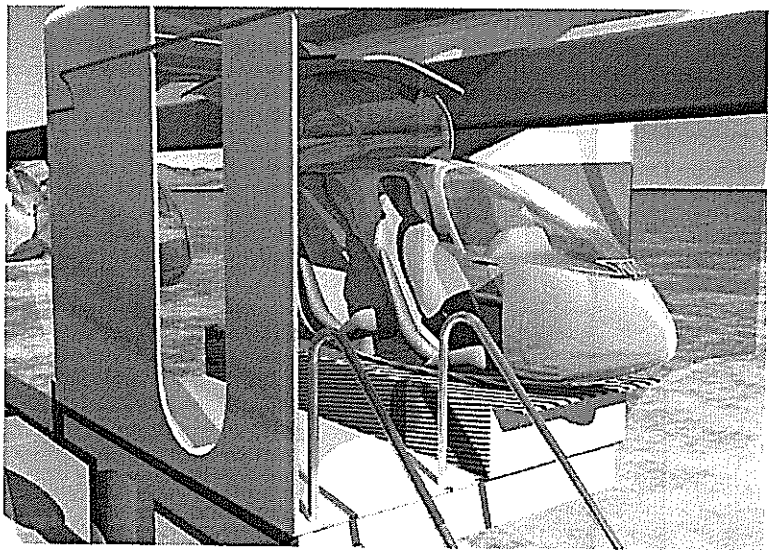
SkyTran Features

Safety, Convenience & Speed



Easy & Convenient. SkyTran is on-demand. There's no waiting, fixed routes or timetables. It's just like using your automobile. You board a waiting vehicle at the head of a queue at one of many city-wide off-line stops. The destination is either selected via display menu or voice activation. Payment is by credit card or a RFID device similar to a Mobil SpeedPass. Each vehicle has air conditioning, audio entertainment and vehicle-to-vehicle communication.

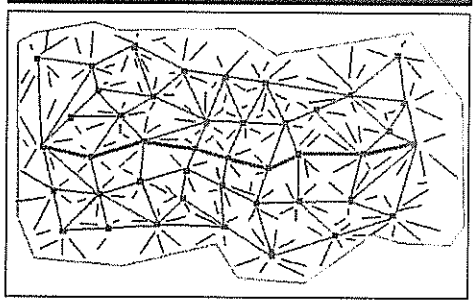
Fully Automated. Before departure occurs sensors determine the dynamic position of all oncoming SkyTran vehicles on the high speed guideway. At a precise calculated moment the off-line vehicle accelerates and merges safely with mainline traffic. A high reliability, high-speed, non-mechanical switch provides the transition onto the non-stop guideway. Once on-line you don't stop until you reach your destination. Then, the vehicle is switched off-line again. The rider exits and the vehicle joins the queue awaiting another rider to enter the vehicle, input a destination, and depart. In a fully developed system you are never more than a quarter mile from a stop to get on or off.

Fast: SkyTran utilizes line capacity more efficiently than light rail by moving the vehicles in a continuous stream. Every part of the line is continuously utilized network as opposed to light rail, where each line segment is utilized only for a few seconds when the train passes over it and then repeatedly sits idle at each station. When compared to the highway infrastructure, a SkyTran guideway has the same capacity as three lanes of freeway traffic.

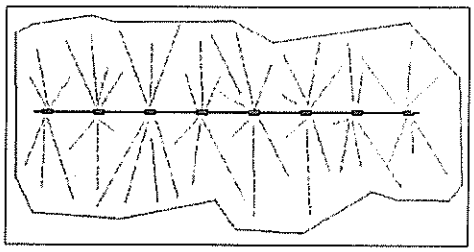
Energy Efficient : Gliding on no-contact, friction-free maglev bearings, the light plastic composite two-passenger vehicles add to energy efficiency by reducing wind resistance and drag through their aerodynamic design. This attention to vehicle shape and size allows for their suspension on narrow, lightweight, visually unobtrusive aerial guideways supported by standard utility poles with a very small right-of-way footprint.

Safe: There are no intersections where pedestrians or surface vehicles can collide with SkyTran because the system is elevated and the vehicles themselves run in only one direction eliminating the threat of vehicle collisions. The guideway's patented design "captures" the maglev-motor assembly in such a way that makes vehicle derailments impossible. Computer controlled collision-avoidance radar and guideway sensors update thousands of times per second to maintain proper position and speed with other vehicles.

SKYTRAN 3D NETWORK



SkyTran is laid out across a city in an elevated 3-D network configuration (above). You can get from any one point in the city to any another by a variety of different routes. And getting to any stop is only a short walk. In contrast, typical light rail design (below) serves an extremely limited number of stops, leaving most of the city without service.



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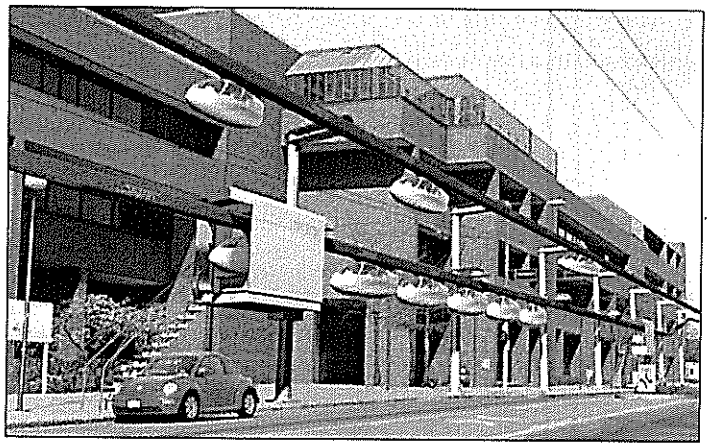
Design Philosophy

Mass Transit Transformed Into Personal Transit

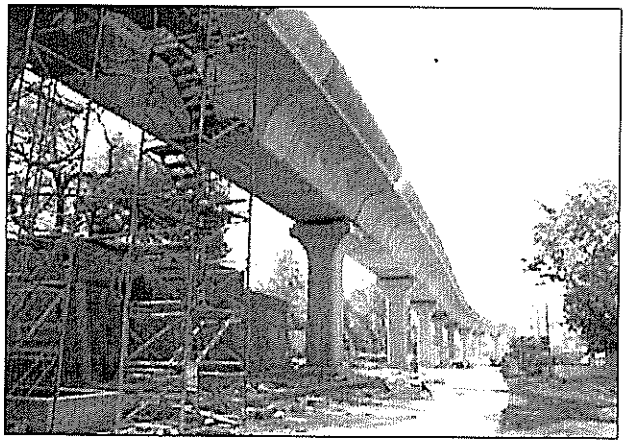


SkyTran uses off-the-shelf parts and civil engineering principles already proven in monorail and light rail systems. The paradigm shift is in how we design mass transit with those parts and principles. Instead of defining the *mass* as a few large groups of people moving in extremely heavy vehicles with multiple stops to a small number of destinations, SkyTran moves many tiny clusters of people (1 or 2) non-stop anywhere in a large network of destinations in an extremely light vehicle.

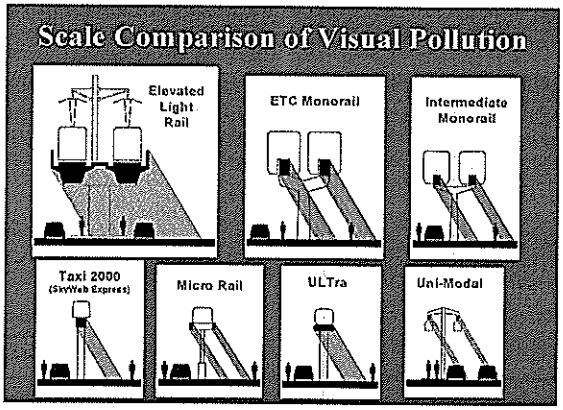
In contrast to a monorail's expensive, massive and visually intrusive support columns and trusses, the SkyTran design is so lightweight and agile that it can be suspended over residential sidewalks, attached to building exteriors, and even routed directly to gates at airport terminals or through shopping malls.

David vs. Goliath

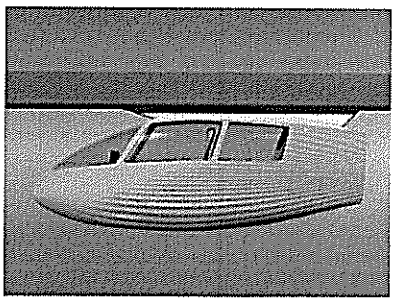
SKYTRAN: Lightweight, inexpensive, quick to install, and blends seamlessly into the urban landscape. Requires minimal right-of-ways.



LIGHT RAIL: Heavy concrete work, extremely expensive, difficult to install, and visually unappealing. Requires extensive right-of-ways.



Light vs. Shadow



Compared to other elevated forms of transit, the Unimodal design casts the smallest shadow on the urban landscape. Note the dramatic difference between the three current monorail and light rail designs and Unimodal. Even among other personal transit designs, Unimodal's SkyTran is the least visual obtrusive. The key is a philosophy that incorporates aerodynamic and lightweight design as its guiding principle.

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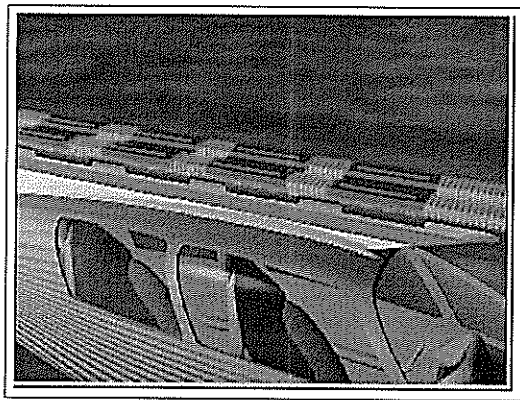
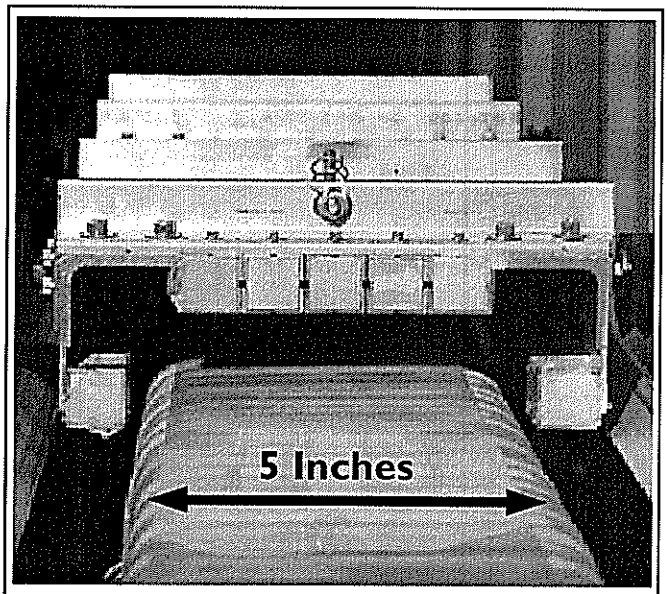
Maglev Technology

The "Wheel" of the 21st Century



SkyTran's PRT vehicle design is the first ever proposed that eliminates the use of wheels and mechanical rotary bearings. This revolutionary approach is possible by incorporating magnetic levitation (maglev) as a non-contact, no-friction bearing system that slashes costly maintenance because there are no moving parts to fail. Propelled by a linear motor, the vehicle requires no active electrical input for the magnets to levitate down the guideway at speeds of up to 150 mph. Energy efficiency is equivalent to a 200 mpg auto.

SkyTran uses a revolutionary maglev technology that stably rides an induced magnetic wave without requiring active electrical input to levitate. Unlike conventional active electrical input systems like the German Transrapid and Japanese HSST technologies, SkyTran's breakthrough approach allows for the design of elegant and compact linear motor/magnetic bearing suspension devices without the complex feedback systems and auxillary power supplies required by conventional maglev.



This photograph of an actual test of the first generation proprietary maglev technology used in SkyTran successfully demonstrated sustained, stable levitation and the feasibility of the compact bearing and guideway concept.

The magnetic bearings being developed for use in SkyTran use high performance permanent magnet materials combined with embedded conductive elements to provide an unprecedented combination of performance, safety, durability and economy. This approach is passively stable both laterally and vertically by improving upon the basic principle of electrodynamic suspension, producing lift from forward motion but also producing lateral centering forces to keep vehicles stable and on track without active control or unwanted vertical planar components that would hinder merging or diverging. And while in motion the vehicles are rigidly and precisely fixed in the vertical dimension by powerful repulsive magnetic forces and can carry wide ranging loads without requiring adjustment. These features allow the design of guideways that employ passive and fail-safe merge/diverge high speed switching operated solely by solid state devices on the vehicles——a technical achievement impossible to implement with conventional maglev designs. These proprietary switching methods are key to SkyTran's vehicle design. This arrangement allows for reduced guideway structural requirements and allows the safe use of under hanging vehicles which bank naturally in response to turning forces, providing greatly improved passenger comfort, higher cornering speeds, switching speeds and reduced torsion on guideway support structure.

In the event of a catastrophic power loss, vehicles continue to levitate while gliding gently down to a low speed before settling onto the track surface unlike conventional maglev designs. The complete lack of moving parts in both guideways and vehicles along with non-contact, friction-free vehicle motion ensures the highest level of reliability with extremely low maintenance requirements. Tightly integrated propulsion is by either linear synchronous or linear induction motors, or both depending on the application. High force and power capabilities enable rapid acceleration and steep grade climbing. Regenerative braking capability like that used in hybrid automotive vehicles improves overall system efficiency.

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SkyTran In Review

Specifications & Benefits

CONVENIENCE: SkyTran is on-demand—no fixed routes or timetables. It's just like your automobile. Vehicles are waiting for you whenever you need one and they take you straight to your destination without wasting time stopping at each and every station. A passenger keys in a desired destination address into a terminal at the originating portal.

EASE OF USE: No need to drive, vehicles are automatic. More affordable and safer than driving, much faster than auto, bus or light-rail.

VEHICLE CAPACITY: SkyTran vehicles can accommodate up to 2 people or 1 person with a luggage capacity equal to airline travel. Vehicle designs can accommodate special ADA needs.

SYSTEM CAPACITY: A single guideway is equivalent to 3 lanes of freeway traffic running at peak capacity. Anytime maximum capacity for a single guideway is 14,400 passengers per hour. SkyTran carries passengers in a continuous stream on a non-stop mainline unlike light rail which carries passengers in bursts where everyone stops at every station on the route. A stopping SkyTran vehicle does not cause other vehicles to stop, the vehicle branches off from the mainline and decelerates at an off-line line stop where passengers disembark.

SPEED: 100 miles per hour cruise speed non-stop in a city, 150 miles per hour non-stop between cities.

SAFETY: Elevated guideways insure there is no possibility of collisions with cars, trucks, pedestrians, children, animals or road debris. SkyTran vehicles move on a single guideway going only one direction—there is no risk of head-on collisions. Computers and sensors monitor vehicle spacing and speed for collision avoidance and each vehicle is enabled with safe high-g emergency braking. Compared to auto travel, there are no intersections where accidents can occur (75% of auto accidents happen at intersections), no dangerous passing or arbitrary lane changing. SkyTran is all-weather and unlike cars cannot slide out of control in rain, ice or snow. SkyTran can safely stop 10 times faster than a car. Derailments are impossible as the motor/maglev vehicle assembly is physically "captured" by the guideway.

COST: Under $10 million per installed mile including vehicles.

ENERGY EFFICIENCY: Each electric powered vehicle gets the equivalent of 200 miles per gallon. This is achieved by using no-contact, no-friction magnetic levitation bearings, a light weight, aerodynamic vehicle profile and regenerative braking technologies.

MAINTENANCE: A SkyTran vehicle has a mechanically simple, solid state design. Maglev means there's one moving part——the vehicle hovering down the guideway. There are no wheels, bearings, hydraulics, pistons, valves, tires, or linkages to fail resulting in very low maintenance.

ENVIRONMENTAL IMPACT: SkyTran has minimal environmental impact. Because there are no wheels, the vehicles travel almost silently and without vibration. Compared to an equivalent capacity three lane highway or a lower capacity light rail system, SkyTran has minimum visual impact .

LAND USE: Of all transportation options, SkyTran has the least intrusive right-of-way requirements. No expensive, destructive right-of-way acquisitions required, just easements on existing sidewalks. The installation footprint is only as large as the size necessary for the placement of standard utility poles that support the guideway.

INSTALLATION: No heavy digging, disruption or relocation of utilities and roads for installation. SkyTran's lightweight design enables installation on sidewalks, attachment to buildings, routing through shopping mall interiors even direct access to gates at airports.

ACCESSIBILITY: A mature 3-D network of SkyTran stops in a city would enable easy access to the system requiring a short walk. Stops are spaced approximately 1/8 to 1/4 mile apart. SkyTran has no large "stations" like those used with light rail. SkyTran is accessed by way of small portals or "stops" like a bus stop, that are conveniently sited through neighborhoods, cities and regions. The system can be accessed inside office buildings, hotels, malls, schools and airports.

PERSONAL CHOICE: SkyTran passengers always have the option to veto a particular vehicle due to sanitation or other issues.

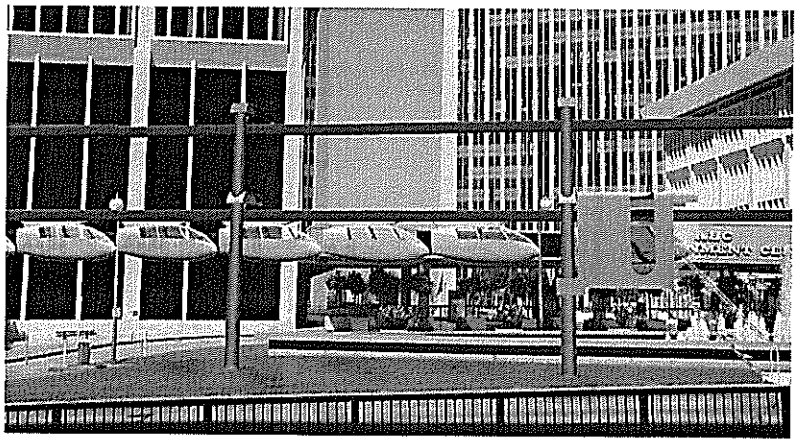
SECURITY: The whole idea of SkyTran is to empower the passenger to have the personal freedom to select time of departure and destination. You never have to share your vehicle with anyone. Should problems arise, the system is programmed to divert a vehicle for immediate emergency intervention. SkyTran provides privacy, safety and personal freedom.

COMFORT: Vehicles are air conditioned and have entertainment and vehicle-to-vehicle communication options. In normal operations vehicles never accelerate/ decelerate at more than ½ g —well within human body comfort zone.

unimodal

Transport Solutions for People, Products and Data

Unimodal, Inc.



UniModal is incorporated in the state of Montana whose principal stockholder is inventor, Douglas Malewicki.

UniModal owns key enabling technologies of the Skytran system. Mr. Malewicki is also the president and chief scientist at AeroVisons Inc., a company dedicated to the development, promotion and commercialization of aerospace related products. Some of his transportation accomplishments are: Guinness World record setting California Commuter vehicle that achieved 157 mpg at freeway speeds, and the world's fastest electric car, the White Lighting, clocked at 248 mph. Additional transportation firsts include the F-18 Jet Bike, an afterburning, jet powered motorcycle, the RB-2000 Personal Rocket Belt and Evel Knievel's canyon jumping, rocket powered X-1 Skycycle.

Mr. Malewicki's Aerovision is a qualified DARPA (Defense Advanced Research Project Agency, a US Defense agency) technology contractor. He recently worked on development of morphing wing UAV aircraft with DARPA. Mr. Malewicki has his Master's degree from Stanford University in Aeronautics and Astronautics. He also served as Senior Technical Specialist in Advanced Composites Manufacturing for Northrop on the B-2 project.

During his long and successful career working for key government and business organizations, Mr. Malewicki has specialized in low-cost design innovation, aerodynamics, engineering structural analysis, automation consulting, and vehicle performance analysis. He has authored numerous technical papers, books, and articles, including a cover feature story for *Scientific American*. He is often called upon by leading scientists for his insight and work as well as by the media for commentary on cutting-edge thinking and technology.

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Columbia River CROSSING

Memorandum

April 17, 2006

TO: Task Force Members

FROM: Doug Ficco and John Osborn

SUBJECT: Consolidated Responses to Task Force/Sponsor Questions

We have received written comments from Project Sponsor staff and from the Task Force about the Step A Screening. We thought it would be valuable for all of the Task Force members to see the questions and our responses, and have therefore included them for your review.

1. ***Dave Frei brought up need to have options for future, mid-speed vehicles, too fast for pathway, too slow for roadway. Where will this be addressed?***

Mid-speed vehicles will be addressed during the development of the project's alternatives phase, to be initiated this spring.

This vehicle type will need to be further defined because the National Highway Traffic Safety Administration currently defines only "low-speed vehicles" as vehicles that can travel up to 25 miles per hour (mph) and that are only allowed on streets with maximum posted speed limits of 35 mph. Alternatives that include arterial connections across the Columbia River could either mean arterials with speed limits of 35 mph or less or not accommodating low-speed vehicles. More assessment will be needed for this vehicle type.

Staff Action: address in project's alternative phase.

2. ***Northbound peak travel is 46 percent from Hayden Island. Do we know what percent of these are shoppers who are making discretionary trips that may be amenable to TDM approaches?***

According to Figure 3-3 in the CRC Draft Components Step A Screening Report (March 22, 2006), 46 percent of the two-hour afternoon/evening peak period traffic currently traveling northbound on I-5 across the Interstate Bridge enters I-5 from one of three on-ramps: Interstate Avenue/Victory Boulevard, Marine Drive, and Hayden Island. The northbound Hayden Island on-ramp actually accounts for about 11 percent of the total traffic traveling northbound across the I-5 bridge during the afternoon/evening peak period (conversely, the southbound Hayden Island off-ramp volume accounts for about four percent of the traffic traveling southbound on the I-5 bridge during the two-hour morning peak period).

Currently the level of detail needed to identify trip purposes is not available and was not planned to be modeled. Work this spring and summer could potentially provide this data for specific on-ramps (such as northbound Hayden Island) by trip type (shopping) and whether a shopping trip

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was linked with another type of trip (work, etc.). Estimates of the types of trips and number of linked trips could potentially be used to ascertain which trips could be amenable to TDM approaches. This is an area of analysis that could potentially be undertaken if requested by the Task Force.

Staff Action: Conduct additional analyses to consider trip purposes, if requested by Task Force and if feasible. Note: this may be additional work beyond the current work program.

3a. Can pie charts be made for north of the river like the ones south of the river so we can visually see the destination of transit users as well as origins? (Chart 3.7)

3b. Can we have a similar analysis for southbound travel?

Unfortunately at this time, we cannot replicate this analysis for southbound trips. Figure 3.7 in the CRC Draft Components Step A Screening Report (March 22, 2006) was developed using year 2020 person-trip projections estimated as a part of the Portland/Vancouver I-5 Transportation and Trade Partnership study. For the Partnership study, travel projections of peak period person-trips were generally limited to the peak directions, i.e., southbound during the morning peak period and northbound during the afternoon/evening peak period. Thus, at this point we do not have southbound or non-peak direction data for the evening peak.

Staff Action: Prepare requested person-trip charts during travel demand work this spring and summer.

4. Freight: All freight is not the same. Can we differentiate between freight by value and time-criticality? E.g., a truck traveling from LA to Seattle is not as sensitive to delay as a truck traveling from west Vancouver to PDX. Or, a truckload of gravel is less sensitive to delay compared to perishable goods.

Disagree with assertion. The CRC transportation analysis will differentiate freight movements by mode, time of day, origin and destination, and freight value, if feasible. However, freight mobility experts, shippers, and carriers agree that in today's global economy there is little or no room for “discretion” in moving freight. All goods in shipment – whether perishable or not, high-value or low-value – are subject to a precise schedule because of the need to load and unload for production purposes, to meet another mode, and/or to maximize equipment utilization. While non-perishable bulk goods might not need to be somewhere overnight, it is still scheduled to ensure that staff, equipment, and receivers of goods are available to handle it.

Staff Action: No recommended additional analysis.

5. 3.2.5, 3rd Bullet: Amend to say: Provide enough highway capacity OR REDUCE DEMAND to reduce congestion levels significantly..."

Staff Action: Agree. Recommend revision to say: “Provide enough highway capacity or reduce traffic demand to reduce congestion levels significantly, thereby improving transit performance.”

6. Safety: 3-21. Since vast majority of crashes are rear-enders, what strategies besides changes in road design are effective in reducing this type of crash?

Interstate 5 within the Bridge Influence Area does not meet current safety standards. There is a high correlation between the Bridge Influence Area's existing non-standard design and the frequency of rear-end collisions. In addition, the frequency of collisions is generally proportional to traffic volumes, except during near or at-capacity conditions, when the frequency of collisions is exacerbated.

Some studies indicate that lowering speed limits creates greater speed differentials between those who obey the lower limits and those who do not. Also, while lower speed limits may provide some benefit during off-peak periods, the greatest number of collisions occur during the peak periods when travel speeds are slow (e.g., under 30 mph).

Short of rebuilding the entire freeway, rear-end collision reduction strategies include: 1) use of higher visibility pavement striping and signage, and 2) the elimination of specific ramps or even reconfiguration of segments of the highway. The effectiveness of reducing speed limits is limited.

Staff Action: Requested information provided. No additional action unless further questions. (There will be an alternative that includes lower cost safety improvements to I-5 without adding capacity.)

7. 4-1: Again, general purpose capacity increases on I-5 aren't the only way to reduce congestion. Add in demand reduction in criteria.

Question #1 on page 4-1 in the CRC Draft Components Step A Screening Report (March 22, 2006) states: "Increase vehicular capacity or decrease vehicular demand within the Bridge Influence Area."

Staff Action: Believe request has already been addressed.

8. Arterial bridge options: since 24 percent of trips in AM southbound exit/enter within the Bridge Influence Area as do 38 percent PM northbound, and demand is projected to increase 15 percent (or 30 percent, see below) by 2020 (without TDM or pricing), why did model conclude that arterial only options won't meet capacity criteria Q.1?

RC-14, 15, 19, 22, and 23 all would leave the existing I-5 bridges in place and provide a separate arterial crossing. Within the limits of our existing modeling, all could be expected to perform similarly; that is, travel demand would still increase over 15 percent compared to existing conditions, resulting in six to seven hours of congestion on I-5 in the Bridge Influence Area during the year 2020 afternoon/evening peak period. While this does not compare favorably to the projected performance of a new I-5 freeway crossing, it does represent an improvement over the "no-build" forecast. Accordingly, it was concluded that these components may not necessarily fail Step A's Question #1. We were not consistent in applying Q.1 to the arterial components, and have corrected that so that all of the above arterial components are scored uniformly.

Finally, a note of clarification: all 2020 projections are using updated data from the I-5 Transportation and Trade Partnership study. All of the I-5 Partnership's models included robust TDM/TSM strategies so the projected performance of these non-I-5 river crossing components incorporate significant TDM measures. Those TDM/TSM measures do not include pricing.

Staff Action: Revise scoring to show that RC-14, RC-15, RC-19, RC-22, and RC-23 do not necessarily fail Question 1 in the Step A screening.

9. Re demand numbers: On 5-15, demand increase is 15 percent, on 5-17 and 5-18, 20 percent is used, and on 5-19 and 5-20, 30 percent is used. Why the variation???? Similar inconsistencies show up in collision projections (45 percent vs. 60 percent).

These demands vary because of differing locations and therefore differing travel demand characteristics. The traffic demand estimates presented in the report refer to each of the component's ability to reduce year 2020 peak traffic demands along I-5 within the Bridge Influence Area, consistent with Step A Question #1: "Does the component increase vehicular capacity or decrease vehicular demand within the Bridge Influence Area?"

Depending upon the proposed location and capacity of each of the alternative river crossing components, they would each serve different future traffic levels and would each result in different decreases in year 2020 traffic demands along I-5 within the Bridge Influence Area.

Similarly, since vehicle collision projections for the I-5 Bridge Influence Area are related to forecast traffic demands, each alternative river crossing component would result in different estimated increases in future vehicle collisions on I-5 within the Bridge Influence Area compared to existing conditions.

Staff Action: Differing travel demand is the result of differing component locations. No additional staff work recommended.

10. Language: one person's "improvement" is another person's "damage." Describe the components — don't use value statements.

Most jurisdictions use the term "improvement" when describing roadway or transit projects since, at the very least, replacing aging or outdated equipment, structures, or materials results in lower costs to maintain the "improved" facility.

Staff Action: Use non-value based descriptions of components and alternatives as appropriate.

11. WSDOT did a study on congestion responses that modeled highway, transit, and pricing strategies in the Vancouver/Portland area. The conclusions were that pricing increased transit and lowered traffic demand considerably. When Mr. Parisi argues that no TDM actions will affect demand sufficiently and presupposes that any TDM or pricing strategy would not also apply to I-205, he is making a policy statement, not a technical one.

The CRC project will provide technical assessments of TDM, tolling, and pricing as well as other alternatives selected by policy makers for further consideration. For alternatives that

include elements that are not now common practice in the northwest, policy issues about alternative desirability and appropriateness will need to be addressed by policy makers.

Staff Action: The identified alternatives will be technically evaluated using all available data. Policy decisions will have to be made in the future by policy makers about alternatives.

12. I'd like additional information on origin and destination of existing trips. The implication from some of the slides is that you surveyed and are reporting the actual trip origins and destinations (door to door), but I suspect you know what ramp people used to access I-5 and the home address of the registered owner of the vehicle (from your license plate survey). Is that what you are reporting?

October 2005 surveys collected no information on the actual origin and destination of each vehicle-trip traveling on I-5 through the Bridge Influence Area.

New Bridge Influence Area ramp usage survey data, additional data collected in October 2005, and up-to-date household and employment information are currently being used by the CRC project team to develop a year 2005 travel demand model. This model will be used to estimate origins and destinations of vehicle-trips within the study area and will be relied upon heavily during the course of the study. The model will be used to assess existing conditions and year 2030 conditions. Initial results are scheduled to be available later this spring.

Staff Action: Provide additional origin and destination information later this spring.

13. Do you have data on trip distances? I am particularly interested in knowing about short distance trips (less than 5 miles) that might use a supplemental arterial bridge if provided. This would be consistent with ODOT policy in their draft Oregon Transportation Plan and described recently by Gail Achterman of the OTC that trips less than 5 miles in the Portland region not use I-5 but instead use parallel arterials. A supplemental arterial bridge might also be used to provide access to Hayden Island in lieu of an I-5 interchange.

Vehicle-trip distances traveling northbound on I-5 and using the I-5 bridge during the year 2000 PM peak period were estimated during the I-5 Transportation and Trade Partnership study. About 10 percent of vehicle-trips using I-5 crossing the I-5 bridge were estimated to have total trip lengths of five miles or less.

New estimates of year 2005 and year 2030 trip-lengths across the Columbia River will be conducted using the CRC project travel demand model this spring.

Staff Action: Provide requested years 2005 and 2030 trip-length data for trips across the Columbia River on I-5 when available later this spring.

14. What are you considering with respect to number of through lanes on the I-5 bridge alternatives? And what is your assumption regarding the roadway cross section on I-5 south of the Bridge Influence Area? Based on discussions with ODOT Region I staff, it is my impression that we can expect that Interstate 5 will have three through lanes maximum in each direction from the Columbia River to the Rose Quarter. If you were to

provide more than three through lanes in each direction on I-5 across the Columbia River other than auxiliary lanes, then wouldn't the bottleneck just move south of the bridge?

For all alternatives, it is assumed that three travel lanes will be maintained in each direction along I-5 from approximately Columbia Boulevard to the Rose Quarter. Columbia Boulevard is the southern limit of the Bridge Influence Area study area.

Due to the short interchange ramp spacing within the Bridge Influence Area (there are eight interchanges within five miles) and the existing and forecast future traffic demand levels to, from, and between these ramps, additional auxiliary lanes will be needed to safely accommodate traffic flows within the Bridge Influence Area. The I-5 Transportation and Trade Partnership identified that a total of up to five or six directional travel lanes across the Columbia River may be required, but that through the use of add lanes, drop lanes, and auxiliary lanes the number of lanes would incrementally step down to three in each direction south of Columbia Boulevard.

The CRC project team will be conducting focused detailed traffic operations assessments to determine how I-5 and other roadways south of Columbia Boulevard may be affected through the provision of additional vehicle capacity on I-5 upstream of Columbia Boulevard.

Staff Action: Provide detailed traffic operations assessments of all alternatives, including the impacts to potentially affected areas outside the Bridge Influence Area (such as I-5 through North Portland), when available in late summer or fall.

Columbia River CROSSING

Memorandum

April 19, 2006

TO: Task Force Members

FROM: Doug Ficco and John Osborn

SUBJECT: Initial Examples of Alternative Packages

At the March 22 Task Force meeting some questions surfaced about how the river crossing and transit components would be combined with other project components such as transportation demand management measures. We are working toward presenting draft alternative packages to you at the May 17 meeting, but thought it would be helpful to provide a few examples at the April meeting. The examples are intended to illustrate how the packaging will work, as well as to provide some initial examples of alternatives that we believe will need to be studied over the next several months.

Context

As you will recall from our discussions about the evaluation framework, the initial packaging step is intended to bring together all of the various components that pass through our Step A process for further development and evaluation. The alternatives that result will be considered in more detail over the next several months. By fall 2006 we will be discussing the results of the analyses, including the application of the evaluation criteria to allow us to compare and contrast each alternative.

An important consideration at this step is that the packaged alternatives are developed primarily to test individual components. We expect that the alternatives selected for consideration in the Draft Environmental Impact Statement will include hybrids of the alternatives that are evaluated this spring and summer.

Packaging Principles

Ideas from each of the eight component categories are combined to form project alternatives. The principles used to form the alternatives include:

1) All components that pass Step A will be considered for inclusion in one or more alternatives.
2) Alternatives should be organized by theme – what is (are) the key feature(s)?
3) Alternatives should represent a full range of potential transportation solutions within the limits of the components that have passed Step A (those that have been determined to address the Purpose and Need).
4) Complementary components should be packaged together where feasible.

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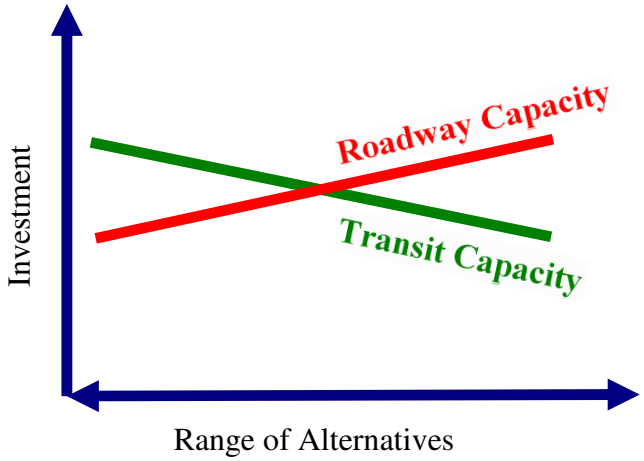
5) Alternatives should be structured to identify strengths and weaknesses of individual components.
6) Well-performing components may be re-packaged with other alternatives for the DEIS.

Range of Alternatives

Under the National Environmental Policy Act (NEPA), one of the alternatives considered must be a no-build alternative. Although this does not meet the project Purpose and Need, it establishes a baseline for comparison with other alternatives. It will include only existing facilities and services, as well as projects that can be reasonably anticipated for construction in the Metro and Southwest Washington regional transportation plans. Another alternative that will be considered will focus on transportation demand management (TDM) policies and techniques, without major capital investments for either roadway or transit capacity (although this would include additional bus service).

Beyond those initial two alternatives, others will focus on a mix of investments in transit, roadway capacity, and components from each of the other groups (river crossing, freight, etc.). As an organizing principle, the alternatives will represent a range of investment scenarios – from those with a transit-intensive focus, to a more balanced approach, to a roadway capacity focus – as shown in the illustration below.



A couple of points to note: First, all alternatives (other than No-Build and TDM, as noted above) will include a mix of transit and roadway capacity improvements. Second, the range of scenarios is structured to inform the decision process, rather than to produce specific DEIS alternatives. Thus, the goal will be to identify the benefits of varying investments in transit as well as varying levels of roadway capacity.

Initial Examples of Alternatives

The following table illustrates how the list of components was used to develop three alternatives that we will be proposing for evaluation. These alternatives include the No-Build and transportation system management (TSM) alternatives as noted above, and a "super-TDM and arterial" alternative. More detail about each of the three alternatives is provided in the following pages.

Note that the table also shows the alternatives falling within one of three broad categories:
1) Alternatives that do not create a new crossing (existing bridges only),
2) Alternatives that supplement the existing bridges, and
3) Alternatives that replace the existing bridges.

The blank columns under the supplemental and replacement categories represent those alternatives that have not yet been developed, but will be prepared for the May 17 meeting.

			Example Alternative Packages				
			Existing Bridges Only		Supplemental Bridge with Existing Bridges		Replacement Bridges
			#1	#2	#3	#4 to #__	#__ to #__
Alternative Focus			No Build	TDM/ TSM	Super TDM/TSM With Arterial		
RC Components	RC-1	Repl/Down/Low/Mov					
	RC-2	Repl/Up/Low/Mov					
	RC-3	Repl/Down/Mid					
	RC-4	Repl/Up/Mid					
	RC-7	Supl/Down/Low/Mov					
	RC-8	Supl/Up/Low/Mov					
	RC-9	Supl/Down/Mid					
	RC-13	Supplemental Tunnel					
	RC-23	Arterial			•		
Roadways North/South	RNS-1	Interchange Improvements					
	RNS-2	Arterial improvements			•		
	RNS-3	I-5 Safety Improvements		•	•		
Transit Components	TR-1	Express Bus in GP *	•	•	•		
	TR-2	Express Bus in Managed Lanes					
	TR-3	BRT-Lite			?	Either BRT or LRT, but not both	
	TR-4	BRT-Full			?		
	TR-5	LRT			?		
	TR-6	Streetcar					
Bicycle/ Pedestrian Components	B/P-1	Enhance Existing		•			
	B/P-2	Path on New Bridge			•		
	B/P-3	Path-only Bridge					
	B/P-4	Vanc. Connectivity		•	•		
	B/P-5	Hayden Is. Conn.		•	•		
	B/P-6	N. Portland Pathway		•	•		
Freight Components	F-1	Freight in Managed Lanes					
	F-2	Fr. Bypass Lanes			•		
	F-3	Freight Restrictions					
	F-4	Inc. Truck Size					
	F-5	Fr. DA Ramps					
TSM/TDM Components	TM-1	N. I-5 Managed		•	•		
	TM-2	N. Transit-only					
	TM-3	BIA Managed Lane					
	TM-4	BIA Transit-only					
	TM-5	Reversible Managed Lane					
	TM-6	DA Ramps					
	TM-7	Pref. Mngd. Merge		•	•		
	TM-8	Ramp Queue Jump		•	•		
	TM-9	Increased Bus		•	•		
	TM-10	Add'l Park-and-Rides	•	•	•		
	TM-11	ITS	•	•	•		
	TM-12	TDM Policies	•	•	•		
	TM-13	Reduce LRT Time		•	•		
	TM-14	Transit Priority		•	•		
	TM-15	Congestion Pricing			•		
	TM-16	On-Ramp Metering	•	•	•		
	TM-17	Arterial Managed		•			
	TM-18	Ramp Terminal Improvements		•	•		

Alternatives Under Construction (#4 to #__)

Alternatives Under Construction (#__ to #__)

* Includes use of existing northbound HOV lane in Portland.

ALTERNATIVE #1: 2030 No-Build Alternative

Overview
This alternative includes planned improvements to the year 2030 for which the need, commitment, and financing are identified and can reasonably expected to be implemented. All transportation improvements included in the No-Build Alternative are included in either Metro's 2025 Regional Transportation Plan (including amendments) or the Regional Transportation Council's 2030 Metropolitan Transportation Plan.

River Crossing
Under this alternative, the existing I-5 bridges would be retained, with three general-purpose traffic lanes in each direction.

Roadways North and South
With the exception of widening I-5 to six lanes from Lombard Street to Victory Boulevard, the No-Build Alternative does not assume any major capacity projects on Interstate 5 through the Bridge Influence Area. Outside the Bridge Influence Area, there are some minor I-5 capacity enhancements and several major maintenance projects specifically identified in the financially constrained regional transportation plans of both Portland's Metro and Southwest Washington's Regional Transportation Council (RTC).

Transit
Bi-state transit service would consist of C-TRAN express buses, and TriMet local service. Transit service growth and/or reductions to the year 2030 will be allocated system-wide among both transit properties, unless specifically identified in either regional plan. In addition, neither the RTP nor the MTP anticipate significant new funding for new bi-state transit services.

Bicycle/Pedestrian
No significant projects are currently planned, nor has funding been secured for either bicycle or pedestrian improvements within the Bridge Influence Area.

Freight
No freight-specific improvements are included in this alternative.

TDM/TSM
This alternative consists of four major sets of TSM and TDM measures:

- Additional Park-&-Ride lots;
- Enhanced Intelligent Transportation Systems (ITS);
- A package of TDM/TSM policy measures; and
- Additional ramp meters in Washington.

A package of TDM/TSM policy measures included in both Metro's 2025 Regional Transportation Plan (including amendments) or the Regional Transportation Council's 2030 Metropolitan Transportation Plan will reduce travel demand, and improve transportation system performance.

ALTERNATIVE #2: 2030 TDM/TSM Alternative

Overview
This alternative represents the "best that can be done" to manage overall transportation demand and improve the performance of the I-5 transportation system without building a new Columbia River crossing or making major capital investments in the Bridge Influence Area.

River Crossing
Under this alternative, the existing I-5 bridges would be retained, with three general-purpose traffic lanes in each direction.

Roadways North and South
With the exception of widening I-5 to six lanes from Lombard Street to Victory Boulevard, the TDM/TSM Alternative does not assume any major capacity projects on I-5 through the Bridge Influence Area. Some minor I-5 safety projects would be undertaken within the Bridge Influence Area. Outside the Bridge Influence Area, there are some minor I-5 safety improvements and several major maintenance projects, specifically identified in the financially constrained regional transportation plans of both Portland's Metro and Southwest Washington's RTC. This alternative assumes that I-5 would be re-striped wherever possible to provide for managed lanes.

Transit
Bi-state transit services will consist of C-TRAN express buses, C-TRAN local buses, and TriMet local service. Existing transit services would grow substantially to the year 2030 in order to better manage demand. Park-and-ride facilities would be improved along the I-5 corridor, and other transit passenger facilities would be constructed to make transit accessible to more residents.

Bicycle/Pedestrian
Bicycle and pedestrian improvements would be made on the existing I-5 bridge(s) where possible in an effort to enhance the current bike/pedestrian area. There would also be increased connections into downtown Vancouver, Hayden Island, and Metro's 40-mile loop pathway.

Freight
Freight vehicles would benefit from enhanced Intelligent Transportation Systems (ITS) in the corridor, TDM measures, and arterial street improvements. However, no freight specific improvements are included in this alternative.

TDM/TSM
This alternative consists of 11 major sets of TSM and TDM measures:

- North I-5 managed lanes (134^{th} to SR 500);
- A preferred managed lane merge location;
- Increased bus service for express buses traveling to downtown Portland and local bus connections to light rail trains operating from the Expo Center in Portland;
- A package of TDM policy measures;
- Additional park-&-ride lots;

- I-5 ramp queue jump lanes;
- Reduction of Interstate MAX run-time to downtown Portland, if possible;
- Transit signal priority;
- On-ramp meters;
- Arterial managed lanes; and
- Ramp terminal improvements.

The managed lane system would include a re-striping of I-5 north of SR 500. The managed lane system would include preferential managed lane merges north and south. In addition, this alternative would include selected ramp queue jumps for transit vehicles.

An enhanced package of TDM/TSM policy measures would be included to reduce travel demand and improve transportation system performance.

ALTERNATIVE #3: New Supplemental Arterial Bridge with High Capacity Transit and Enhanced TDM/TSM

Overview
This alternative includes construction of a new downstream arterial bridge which would carry arterial traffic between Oregon and Washington, coupled with a high capacity transit (HCT) option (which will be further defined prior to the May Task Force meeting). I-5 freeway traffic would remain on the existing I-5 bridges in general purpose lanes. The alternative includes congestion pricing to maintain a consistent level of service for the new facilities, and an enhanced set of TDM/TSM measures to manage travel demand.

River Crossing
The new supplemental arterial bridge would be located immediately downstream of the existing I-5 freeway bridges and would either be a low- or mid-level structure. The Hayden Island interchange on the existing I-5 bridges would be removed. Improvements to the existing I-5 bridges to address seismic deficiencies would be included (assuming improvements are determined to be feasible).

Roadways North and South
This alternative includes improvements both north and south of the river. The improvements would include arterial street connections to the new crossing. On I-5 within the Bridge Influence Area, safety improvements would significantly address critical existing non-standard design and safety features. Outside the Bridge Influence Area, there would be some minor I-5 safety improvements and several major maintenance projects, specifically identified in the financially constrained regional transportation plans of both Portland's Metro and Southwest Washington's RTC. This alternative assumes that I-5 would be re-striped to add lanes wherever possible to provide for managed lanes.

Transit
HCT would be provided on the new arterial bridge and would serve local and regional transit travel. Local bus connections to HCT stations would also be increased. Express buses carrying passengers from existing and/or new Clark County park-and-rides to downtown Portland would operate in general-purpose lanes on the existing I-5 freeway bridge. Additional bi-state transit services will consist of C-TRAN local buses and TriMet local service. Existing transit services would grow substantially to the year 2030 in order to better manage demand. Park-and-ride facilities would be improved along the I-5 corridor, and other transit passenger facilities would be constructed to make transit accessible to more residents.

Bicycle/Pedestrian
A new bicycle and pedestrian path would be provided on the new arterial bridge, and connections would be improved to North Portland, Hayden Island, and downtown Vancouver.

Freight
Freight vehicles could potentially benefit from arterial street improvements, and also potentially from increased mobility on I-5. In addition, this alternative would include freight bypass lanes on congested on-ramps where trucks have difficulty entering I-5.

TDM/TSM

This alternative consists of 11 major sets of TSM and TDM measures:

- North I-5 managed lanes;
- A preferred managed lane merge location;
- Increased bus service for express buses traveling to downtown Portland and local bus connections to HCT;
- A package of TDM policy measures;
- Additional park-&-ride lots;
- I-5 ramp queue jump lanes;
- Reduction of Interstate MAX run-time to downtown Portland, if possible;
- Transit signal priority;
- On-ramp meters;
- Arterial managed lanes; and
- Ramp terminal improvements.

The managed lane system would include a re-striping of I-5 north of SR 500 to add a lane in each direction. The managed lane system would include preferential managed lane merges north and south.

An enhanced package of TDM/TSM policy measures would be included to reduce travel demand and improve transportation system performance. This alternative would include ramp queue jumps for transit vehicles, managed lanes on arterial streets for transit use, and transit priority signal systems. Congestion pricing would be implemented for all travel lanes on the new arterial bridge and existing I-5 freeway bridge to maintain an appropriate and consistent level of service.

Columbia River CROSSING

DRAFT STEP A COMPONENT FACT SHEETS

April 19, 2006

DRAFT COMPONENTS STEP A SCREENING REPORT

April 19, 2006

Columbia River CROSSING

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ACRONYMS

AA	Alternatives Analysis
ADA	Americans with Disabilities Act
AGT	Automated Guideway Transit
BNSF	Burlington Northern Santa Fe Railroad
BRT	Bus Rapid Transit
CRC	Columbia River Crossing
CRD	Columbia River Datum
DEIS	Draft Environmental Impact Statement
EIS	Environmental Impact Statement
FAA	Federal Aviation Administration
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
HOV	High Occupancy Vehicle
I-5	Interstate 5
LRT	Light Rail Transit
NEPA	National Environmental Policy Act
ODOT	Oregon Department of Transportation
PDX	Portland International Airport
PRT	Personal Rapid Transit
RTC	Regional Transportation Council
RC	River Crossing
SOV	Single Occupant Vehicle
TR	Transit
TSM/TDM	Traffic System Management/Traffic Demand Management
WSDOT	Washington State Department of Transportation

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1. What's Inside

On March 22, 2006, the project team presented a *Components Step A Screening Report* to members of the I-5 CRC Task Force. The report described how a broad range of potential transportation improvements (also known as "components") was initially evaluated and screened, and presented the results of that screening.

This companion *Component Step A Fact Sheets* provides fact sheets for each of the 14 Transit and 23 River Crossing components taken through Step A screening. It was prepared to address questions posed by the Task Force and to more fully document the rationale underlying staff's recommendations to advance or drop from further consideration certain Transit and River Crossing components.

As described in more detail below, the Step A screening process applies the six "pass/fail" questions derived from the project's *Problem Definition* as adopted by the Task Force in November 2005. A "fail" response to any of the relevant questions represents a "fatal flaw" that is inconsistent with the project Purpose and Need. Staff recommended dropping from further consideration all components receiving one or more "fail" responses. Only those components free of any "fail" responses were recommended for further consideration.

The fact sheets present the "pass/fail" responses and supporting information for each of the Transit and River Crossing components.

1.1 Step A Screening Overview

In February 2006, the CRC Task Force adopted a six-step evaluation framework that defines the process for screening the large number of transportation components and subsequently, a limited set of multi-modal alternative packages. In general, the framework establishes screening criteria and performance measures to evaluate the effectiveness of the transportation components in addressing:

- The project Purpose and Need,
- Problems identified in the project's Problem Definition, and
- Values identified in the Task Force's Vision and Values Statement.

Component screening is the first stage in the complete evaluation framework and is itself a two-step process.

In Step A, transportation components were screened against up to six pass/fail questions *derived directly from the Problem Definition*. To determine if each component offers an improvement, they were compared to the No Build condition, which includes transportation improvements adopted in the regional transportation plans, but no additional improvements at the Columbia River crossing.

In Step A only the transit and river crossing components were screened. Components in the Pedestrian, Bike, Freight, Roadways, and TSM/TDM categories were not evaluated because their performance would critically depend upon how they were integrated with promising transit and/or river crossing improvements. As mentioned earlier, components in these categories (e.g., Ramp Queue Jump Lanes) could be implemented in a wide variety of ways. These components will be paired with complementary transit and river crossing components during alternatives packaging. Table 1-1 shows the six Step A questions and what questions pertain to the transit and river crossing components.

Table 1-1. Component Categories and Relevant Step A Questions

Question: Does the Component	Transit Components	River Crossing Components
1. Increase vehicular capacity or decrease vehicular demand within the bridge influence area?	♦	♦
2. Improve transit performance within the bridge influence area?	♦	♦
3. Improve freight mobility within the bridge influence area?		♦
4. Improve safety and decrease vulnerability to incidents within the bridge influence area?	♦	♦
5. Improve bicycle and pedestrian mobility within the bridge influence area?		♦
6. Reduce seismic risk of the I-5 Columbia River crossing?		♦

Note: Components were only screened against questions indicated by ♦

2. Transit Component Fact Sheets

In summary, six transit components are recommended to pass through Step A component screening and advance for further consideration and screening, while eight components are recommended to be dropped from further consideration via Step A screening.

This section presents fact sheets for each of the 14 transit components (TR-1 through TR-14) taken through Step A screening. Each fact sheet provides reasoning behind staff's responses to the six "pass/fail" questions and ultimately the recommendation to either advance the component or drop it from further consideration for this project. Table 2-1 summarizes the transit component responses.

Table 2-1. Transit Components Step A Results

COMPONENTS		COMPONENT SCREENING RESULTS						
ID	NAME	Q.1	Q.2	Q.3	Q.4	Q.5	Q.6	Overall
TR-1	Express Bus in General Purpose (GP) lanes	P	P	NA	U	NA	NA	P
TR-2	Express Bus in Managed Lanes	P	P	NA	U	NA	NA	P
TR-3	Bus Rapid Transit (BRT)-Lite	P	P	NA	U	NA	NA	P
TR-4	Bus Rapid Transit (BRT)- Full	P	P	NA	U	NA	NA	P
TR-5	Light Rail Transit (LRT)	P	P	NA	U	NA	NA	P
TR-6	Streetcar	P	P	NA	U	NA	NA	P
TR-7	High Speed Rail	F	F	NA	U	NA	NA	F
TR-8	Ferry Service	F	F	NA	U	NA	NA	F
TR-9	Monorail System	P	F	NA	U	NA	NA	F
TR-10	Magnetic Levitation Railway	F	F	NA	U	NA	NA	F
TR-11	Commuter Rail in BNSF Trackage	P	F	NA	U	NA	NA	F
TR-12	Heavy Rail	P	F	NA	U	NA	NA	F
TR-13	Personal Rapid Transit	F	F	NA	U	NA	NA	F
TR-14	People Mover/Automated Guideway Transit (AGT)	P	F	NA	U	NA	NA	F

P = Pass F = Fail NA = Not Applicable U = Unknown

Each transit component was screened against two of the six questions in Step A. These questions are, does the component:

Q1. Increase vehicular capacity or decrease vehicular demand within the Bridge Influence Area?, and

Q2. Improve transit performance within the Bridge Influence Area?

The transit components were also expected to be screened against Question #4, which is, does the component:

Q4. Improve safety and decrease vulnerability to incidents within the Bridge Influence Area?

To satisfy Question #4, a transit component would need to attract ridership sufficient to improve general traffic conditions for all vehicles (see Section 3.4.10). Answering this question, however, depends on knowing *with a fair degree of accuracy* how much future traffic volumes would be reduced by the transit component, and if the transit component would be complemented by new river crossing highway capacity. As promising components have not yet been combined, and detailed traffic modeling has not been completed, it is not yet possible to answer this question for the transit components. Therefore, all of the transit components received a rating of "unknown" for Question #4. In comparison, Question #1, asks *more generally* if a component is likely to reduce vehicle demand, and thus is possible to answer.

TR-1: Express Bus in General Purpose Lanes

Staff Recommendation: Advance

Step A Question	Pass/ Fail	Reasons
Q1. Traffic	Pass	Could increase vehicular capacity to serve transit and reduce auto demand within the Bridge Influence Area.
Q2. Transit	Pass	Could increase the speed of transit in the Bridge Influence Area, provided enough new general purpose capacity is added to reduce congestion levels. Transit reliability could also be improved if congestion were sufficiently reduced.
Q3. Freight	NA	
Q4. Safety	U	
Q5. Bike/Ped	NA	
Q6. Seismic	NA	

P = Pass F = Fail NA = Not Applicable U = Unknown

TR-2: Express Bus in Managed Lanes

Staff Recommendation: Advance

Step A Question	Pass/ Fail	Reasons
Q1. Traffic	Pass	Could decrease vehicular demand through shift to transit within the Bridge Influence Area by giving preference and a speed advantage to transit.
Q2. Transit	Pass	Could improve transit performance by managing congestion and reducing the potential for collisions, thereby improving transit reliability.
Q3. Freight	NA	
Q4. Safety	U	
Q5. Bike/Ped	NA	
Q6. Seismic	NA	

P = Pass F = Fail NA = Not Applicable U = Unknown

TR-3: Bus Rapid Transit (BRT)- Lite

Staff Recommendation: Advance

Step A Question	Pass/ Fail	Reasons
Q1. Traffic	Pass	Could decrease vehicular demand through shift to transit within the Bridge Influence Area by substantially increasing transit capacity and providing a travel preference and speed advantage to transit.
Q2. Transit	Pass	Could improve transit performance by managing congestion and thereby improving transit reliability.
Q3. Freight	NA	
Q4. Safety	U	
Q5. Bike/Ped	NA	
Q6. Seismic	NA	

P = Pass F = Fail NA = Not Applicable U = Unknown

TR-4: Bus Rapid Transit (BRT) - Full

Staff Recommendation: Advance

Step A Question	Pass/ Fail	Reasons
Q1. Traffic	Pass	Could decrease vehicular demand through shift to transit within the Bridge Influence Area by substantially increasing transit capacity and providing a dedicated transit lane that would relieve congestion and improve reliability for transit.
Q2. Transit	Pass	Could improve transit reliability and travel speed by completely separating bus rapid transit vehicles from other traffic and giving them a substantial travel time savings.
Q3. Freight	NA	
Q4. Safety	U	
Q5. Bike/Ped	NA	
Q6. Seismic	NA	

P = Pass F = Fail NA = Not Applicable U = Unknown

TR-5: Light Rail Transit (LRT)

Staff Recommendation: Advance

Step A Question	Pass/ Fail	Reasons
Q1. Traffic	Pass	Could decrease vehicular demand through shift to transit within the Bridge Influence Area by substantially increasing transit capacity and providing an exclusive guideway that would not be used by automobiles. Its operating characteristics allow it to serve both short and long distance trips.
Q2. Transit	Pass	Could improve transit travel time and reliability by completely separating LRT trains from automobile traffic.
Q3. Freight	NA	
Q4. Safety	U	
Q5. Bike/Ped	NA	
Q6. Seismic	NA	

P = Pass F = Fail NA = Not Applicable U = Unknown

TR-6: Streetcar

Staff Recommendation: Advance

Step A Question	Pass/ Fail	Reasons
Q1. Traffic	Pass	Could decrease vehicular demand through shift to transit within the Bridge Influence Area by increasing transit capacity and providing an exclusive guideway that would not be used by automobiles.
Q2. Transit	Pass	Could improve transit travel time and reliability by completely separating streetcars from automobile traffic. This critically assumes that it is possible to interline streetcar and LRT- meaning they each use the same guideway (tracks) such as the Interstate MAX corridor. While a determination on this issue has not yet been made, the idea includes significant challenges affecting its viability.
Q3. Freight	NA	
Q4. Safety	U	
Q5. Bike/Ped	NA	
Q6. Seismic	NA	

P = Pass F = Fail NA = Not Applicable U = Unknown

TRANSIT

TR-7: High Speed Rail

Staff Recommendation: Not Advance

Step A Question	Pass/ Fail	Reasons
Q1. Traffic	Fail	Operating speeds of 175+ mph are most compatible with long distance inter-city and inter-state service with at most one transit station in the greater Portland/Vancouver metropolitan area. This one transit station would only serve transit trips arriving from or destined to locations outside the region, and thus would not attract the ridership necessary to notably reduce vehicular demand within the I-5 Bridge Influence Area.
Q2. Transit	Fail	It is not feasible to integrate this transit mode with the existing regional transit system while both 1) taking advantage of the operational features of high speed rail, and 2) providing service to identified transit markets within the I-5 Bridge Influence Area. Thus, it would not appreciably improve transit performance within the I-5 Bridge Influence Area.
Q3. Freight	NA	
Q4. Safety	U	
Q5. Bike/Ped	NA	
Q6. Seismic	NA	

P = Pass F = Fail NA = Not Applicable U = Unknown

TR-8: Ferry Service

Staff Recommendation: Not Advance

Step A Question	Pass/ Fail	Reasons
Q1. Traffic	Fail	Lacks the capacity and operational characteristics to generate significant ridership needed to appreciably reduce vehicular demand within the Bridge Influence Area. Provides for long, out of direction travel times with limited access to I-5 travel markets.
Q2. Transit	Fail	Ferry service is most appropriate for longer distance travel with no intermediate stops. Service to I-5 travel markets would require more stops than could be achieved with ferry service. The travel time for a ferry service connecting downtown Vancouver to downtown Portland, for example, would likely be slower than the slowest land-based transit bus, even in the congested I-5 corridor, since the service would have to travel many miles out of direction to access the Willamette River. The service would have little or no connectivity to smaller markets and connecting transit services, and likely would not even serve intermediate but significant transit markets such as North Portland. Due to slow travel times and few docking stations, the service would carry relatively few passengers. Users would incur a time delay associated with embarking and debarking a ferry that makes ferry service less attractive. Significant issues would exist with siting ferry terminals.
Q3. Freight	NA	
Q4. Safety	U	
Q5. Bike/Ped	NA	
Q6. Seismic	NA	

P = Pass F = Fail NA = Not Applicable U = Unknown

TR-9: Monorail System

Staff Recommendation: Not Advance

Step A Question	Pass/ Fail	Reasons
Q1. Traffic	Pass	Could decrease vehicular demand through shift to transit within the Bridge Influence Area by increasing transit capacity and providing an exclusive guideway that would not be used by automobiles.
Q2. Transit	Fail	A monorail service could conceivably be designed to serve multiple destinations within the Bridge Influence Area and I-5 corridor, since the technology is not uniquely suited to long-distance or short-distance travel. In order to improve existing transit service in the Bridge Influence Area, however, it would have to be integrated with the existing bus and rail network, which is infeasible; the technology would require a completely grade separated right-of-way. For these reasons, monorail is not an appropriate public transportation component for the Bridge Influence Area.
Q3. Freight	NA	
Q4. Safety	U	
Q5. Bike/Ped	NA	
Q6. Seismic	NA	

P = Pass F = Fail NA = Not Applicable U = Unknown

TR-10: Magnetic Levitation (MagLev) Railway

Staff Recommendation: Not Advance

Step A Question	Pass/ Fail	Reasons
Q1. Traffic	Fail	Similar to high speed rail (TR-7), the high travel speeds (175+ mph) and acceleration characteristics associated with Maglev railways are most compatible with long distance inter-city and inter-state service with at most one transit station in the greater Portland/Vancouver metropolitan area. This one transit station would only serve transit trips arriving from or destined to locations outside the region, and thus would not attract the ridership necessary to notably reduce vehicular demand within the I-5 Bridge Influence Area.
Q2. Transit	Fail	It is not feasible to integrate this transit mode with the existing regional transit system while both, 1) taking advantage of the operational features of Maglev rail, and 2) providing service to identified transit markets within the I-5 Bridge Influence Area. Thus, it would not appreciably improve transit performance within the I-5 Bridge Influence Area.
Q3. Freight	NA	
Q4. Safety	U	
Q5. Bike/Ped	NA	
Q6. Seismic	NA	

P = Pass F = Fail NA = Not Applicable U = Unknown

TR-11: Commuter Rail Transit

Staff Recommendation: Not Advance

Step A Question	Pass/ Fail	Reasons
Q1. Traffic	Pass	Could decrease vehicular demand within the Bridge Influence Area through a shift to transit.
Q2. Transit	Fail	To improve existing transit service in the Bridge Influence Area, it would have to be integrated with the existing bus and rail network, which is infeasible, as the technology would operate in a completely grade separated right-of-way. Additionally, the existing railroad right-of-way misses some key I-5 transit markets. In addition, during the I-5 Partnership Study, an in-depth study of commuter rail options determined that due to projected congestion in the existing freight rail system in the next 20 years, commuter rail could only be implemented on a separate passenger rail-only network; it could not be implemented on existing regional freight rail trackage.
Q3. Freight	NA	
Q4. Safety	U	
Q5. Bike/Ped	NA	
Q6. Seismic	NA	

P = Pass F = Fail NA = Not Applicable U = Unknown

TR-12: Heavy Rail Transit

Staff Recommendation: Not Advance

Step A Question	Pass/ Fail	Reasons
Q1. Traffic	Pass	Could decrease vehicular demand within the Bridge Influence Area through a shift to transit.
Q2. Transit	Fail	To improve existing transit service in the Bridge Influence Area, it would have to be integrated with the existing bus and rail network, which is infeasible, as the technology would operate in a completely grade separated right-of-way. The Portland-Vancouver region is not projected to realize the population and density levels by 2030 on a par with the world's largest and most congested cities: New York, Washington D.C., London, Tokyo, etc. that can generate the necessary passenger demands that make an investment in heavy rail viable.
Q3. Freight	NA	
Q4. Safety	U	
Q5. Bike/Ped	NA	
Q6. Seismic	NA	

P = Pass F = Fail NA = Not Applicable U = Unknown

TR-13: Personal Rapid Transit (PRT)

Staff Recommendation: Not Advance

Step A Question	Pass/ Fail	Reasons
Q1. Traffic	Fail	PRT's conceptual advantage critically depends on building a comprehensive regional system that serves virtually every place that patrons want to go. PRT within the Bridge Influence Area would not attract significant demand because it simply would not go to many of the final I-5 corridor and regional destinations that patrons want to go. How a PRT system would "grow" from a river crossing to a local, or even a regional network, is unclear. It's inconceivable that a PRT system within the Bridge Influence Area could attract the ridership necessary to appreciably reduce vehicular demand.
Q2. Transit	Fail	Capacity is one of the primary limitations of PRT, and incompatibility with the existing regional transit systems. Unless a very large number of vehicles were used, the system would not have enough capacity to serve the large trip demands in the Bridge Influence Area and to significant destinations like downtown Portland. Using such a large number of vehicles, however, would be impractical and inefficient.
Q3. Freight	NA	
Q4. Safety	U	
Q5. Bike/Ped	NA	
Q6. Seismic	NA	

P = Pass F = Fail NA = Not Applicable U = Unknown

Note: A variation of this component referred to as "SkyTran" was introduced at the 3-22-06 Task Force meeting. Staff believes the "SkyTran" idea is substantially similar to TR-13 and would fail Step A screening questions 1 and 2 for similar reasons as cited above.

TR-14: People Mover/Automated Guideway Transit

Staff Recommendation: Not Advance

Step A Question	Pass/ Fail	Reasons
Q1. Traffic	Pass	Could decrease vehicular demand within the Bridge Influence Area through a shift to transit.
Q2. Transit	Fail	To improve existing transit service in the Bridge Influence Area, it would have to be integrated with the existing bus and rail network, which is infeasible, as the technology would operate in a completely grade separated right-of-way. AGT is a proven technology suitable for short-distance trips, and its limited application in North America has been to provide local circulator service (e.g. at airports). LRT and AGT share some of the same capacity and operating characteristics, but unlike LRT, AGT requires a completely grade separated right-of-way and either underground or aerial stations. For these reasons, AGT lines are not an appropriate public transportation component for the Bridge Influence Area.
Q3. Freight	NA	
Q4. Safety	U	
Q5. Bike/Ped	NA	
Q6. Seismic	NA	

P = Pass F = Fail NA = Not Applicable U = Unknown

3. River Crossing Component Fact Sheets

In summary, nine (9) river crossing components are recommended to pass through Step A component screening and advance for further consideration and screening, while 14 components are recommended to be dropped from further consideration via Step A screening.

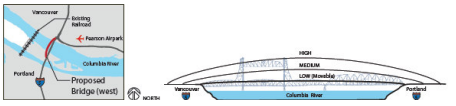
This section presents fact sheets for each of the 23 river crossing components (RC-1 through RC-23) taken through Step A screening. Fact sheets provide rationale for staff's responses to the six "pass/fail" questions and ultimately the recommendation to either advance the component or drop it from further consideration for this project. Table 3-1 summarizes the river crossing results. **Note-** Where components perform similarly across the six questions, they are grouped for reporting (e.g., RC 1-4, RC 5/6, RC 7-9).

Table 3-1. River Crossing Components Step A results

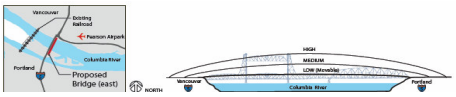
COMPONENTS		COMPONENT SCREENING RESULTS						
ID	NAME	Q.1	Q.2	Q.3	Q.4	Q.5	Q.6	Overall
RC-1	Replacement Bridge-Downstream/Low-level/Movable	P	P	P	P	P	P	P
RC-2	Replacement Bridge-Upstream/Low-level/Movable	P	P	P	P	P	P	P
RC-3	Replacement Bridge-Downstream/Mid-level	P	P	P	P	P	P	P
RC-4	Replacement Bridge-Upstream/Mid-level	P	P	P	P	P	P	P
RC-5	Replacement Bridge-Downstream/High-level	P	P	P	F	P	P	F
RC-6	Replacement Bridge-Upstream/High-level	P	P	P	F	P	P	F
RC-7	Supplemental Bridge-Downstream/Low-level/Movable	P	P	P	U	P	U	P
RC-8	Supplemental Bridge-Upstream/Low-level/Movable	P	P	P	U	P	U	P
RC-9	Supplemental Bridge-Downstream/Mid-level	P	P	P	U	P	U	P
RC-10	Supplemental Bridge-Upstream/Mid-level	P	P	P	F	P	U	F
RC-11	Supplemental Bridge-Downstream/High-level	P	P	P	F	P	U	F
RC-12	Supplemental Bridge-Upstream/High-level	P	P	P	F	P	U	F
RC-13	Tunnel to supplement I-5	P	P	P	P	P	U	P
RC-14	New Corridor Crossing	Note1	F	P	F	F	F	F
RC-15	New Corridor Crossing plus Widen Existing I-5 Bridges	Note1	F	P	F	F	F	F
RC-16	New Western Highway (I-605)	Note1	F	F	F	F	F	F
RC-17	New Eastern Columbia River Crossing	F	F	F	F	F	F	F
RC-18	I-205 Improvements	F	F	F	F	F	F	F
RC-19	Arterial Crossing without I-5 Improvements	Note1	P	U	F	P	F	F
RC-20	Replacement Tunnel	F	F	F	P	F	P	F
RC-21	33rd Avenue Crossing	F	F	F	F	F	F	F
RC-22	Non-Freeway Multi-Modal Columbia River Crossing	Note1	P	U	F	P	F	F
RC-23	Arterial Crossing with I-5 Improvements	Note1	P	U	P	P	U	P

[1] May provide some potential benefit in congestion management relative to 2030 No Build conditions.
P = Pass F = Fail NA = Not Applicable U = Unknown New since 3-22-06 TF mtg

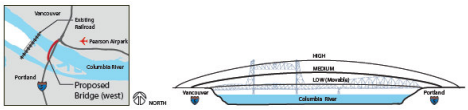
RC-1: Replacement Bridge Downstream/ Low Level/Moveable



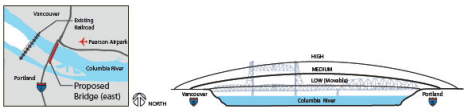
RC-2: Replacement Bridge Upstream/ Low Level/Moveable



RC-3: Replacement Bridge Downstream/Mid-level



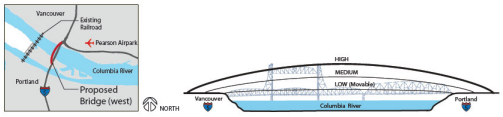
RC-4: Replacement Bridge Upstream/Mid-level



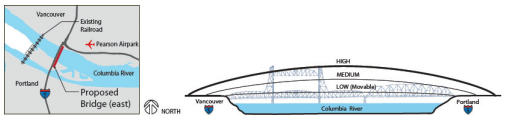
Staff Recommendation: Advance RC-1 through RC-4

Step A Question	Pass/ Fail	Reasons: *RC-1 through RC-4 each:*
Q1. Traffic	Pass	Increases vehicular capacity along I-5 in the Bridge Influence Area by adding new travel lanes. Serves projected year 2020 traffic levels, which is expected to increase by at least 40% (over 50,000 daily vehicles) over 2005 levels, at similar or fewer hours of congestion compared to 2005 conditions (i.e., 4 hours during the afternoon/evening peak along I-5 within the Bridge Influence Area).
Q2. Transit	Pass	Provides increased travel capacity to accommodate transit within the I-5 Bridge Influence Area serving the identified travel markets.
Q3. Freight	Pass	Provides increased travel capacity for truck-hauled freight along I-5. Would be compatible with improvements to interchanges within the Bridge Influence Area that would support improved truck operations.
Q4. Safety	Pass	Provides I-5 crossing that addresses many non-standard design features and would be compatible with substantially upgrading I-5 within the Bridge Influence Area to current standards. Would not encroach into Pearson Airpark airspace and would satisfy U.S. Coast Guard navigational interests.
Q5. Bike/Ped	Pass	Provides new Columbia River crossing with modern bike/ped pathway(s).
Q6. Seismic	Pass	Provides new I-5 crossing built to current seismic standards.

RC-5: Replacement Bridge Downstream High Level



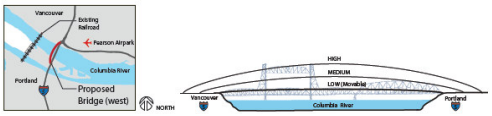
RC-6: Replacement Bridge Upstream High level



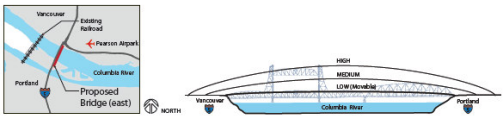
Staff Recommendation: Not Advance RC-5 and RC-6

Step A Question	Pass/ Fail	Reasons: *RC-5 and RC-6 each:*
Q1. Traffic	Pass	Increases vehicular capacity along I-5 in the Bridge Influence Area by adding new travel lanes. Serves projected year 2020 traffic levels, which is expected to increase by at least 40% (over 50,000 daily vehicles) over 2005 levels, at similar or fewer hours of congestion compared to 2005 conditions (i.e., 4 hours during the afternoon/evening peak along I-5 within the Bridge Influence Area).
Q2. Transit	Pass	Provides increased travel capacity to accommodate transit within the I-5 Bridge Influence Area serving the identified travel markets.
Q3. Freight	Pass	Provides increased travel capacity for truck-hauled freight along I-5. Would be compatible with improvements to interchanges within the Bridge Influence Area that would support improved truck operations.
Q4. Safety	Fail	Provides I-5 crossing that, while addressing many non-standard design features and substantially upgrading I-5 within the Bridge Influence Area to current standards, would be built at a height that unacceptably encroaches into Pearson Airpark airspace- presenting a critical safety flaw.
Q5. Bike/Ped	Pass	Provides new Columbia River crossing with modern bike/ped pathway(s).
Q6. Seismic	Pass	Provides new I-5 crossing built to current seismic standards.

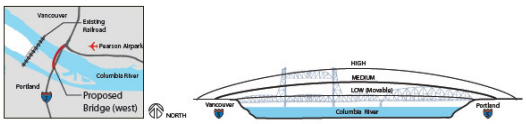
RC-7: Supplemental Bridge Downstream/Low Level/Moveable



RC-8: Supplemental Bridge Upstream Low Level/Moveable

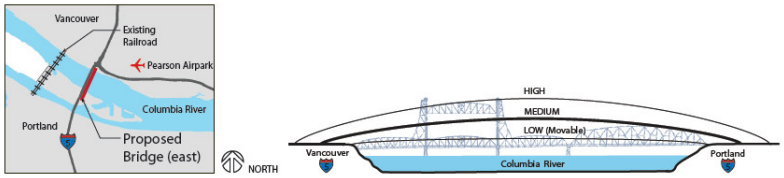


RC-9: Supplemental Bridge Downstream Mid-level



Staff Recommendation: Advance RC-7 through RC-9

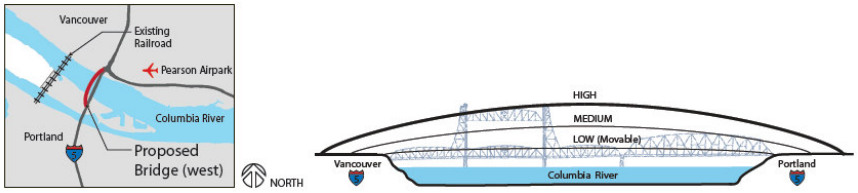
Step A Question	Pass/ Fail	Reasons: *RC-7 through RC-9 each:*
Q1. Traffic	Pass	Increases vehicular capacity along I-5 in the Bridge Influence Area by adding new travel lanes. Serves projected year 2020 traffic levels, which is expected to increase by at least 40% (over 50,000 daily vehicles) over 2005 levels, at similar or fewer hours of congestion compared to 2005 conditions (i.e., 4 hours during the afternoon/evening peak along I-5 within the Bridge Influence Area).
Q2. Transit	Pass	Provides increased travel capacity to accommodate transit within the I-5 Bridge Influence Area serving the identified travel markets.
Q3. Freight	Pass	Provides increased travel capacity for truck-hauled freight along I-5. Would be compatible with improvements to interchanges within the Bridge Influence Area that would support improved truck operations.
Q4. Safety	Unknown	Provides I-5 crossing that addresses many non-standard design features and would be compatible with substantially upgrading I-5 within the Bridge Influence Area to current standards. Would not encroach into Pearson Airpark airspace. Presents challenges to align piers of new and existing bridges to maintain, and make no worse, existing marine navigation.
Q5. Bike/Ped	Pass	Provides new Columbia River crossing with modern bike/ped pathway(s).
Q6. Seismic	Unknown	Provides new I-5 crossing built to current seismic standards. However, depending on the use of the existing I-5 bridges, they may need to be seismically upgraded to meet the new seismic criteria. It is not known at this point whether the existing bridges can be retrofitted to meet current seismic design standards.



RC-10: Supplemental Bridge Upstream/Mid-level

Staff Recommendation: Not Advance

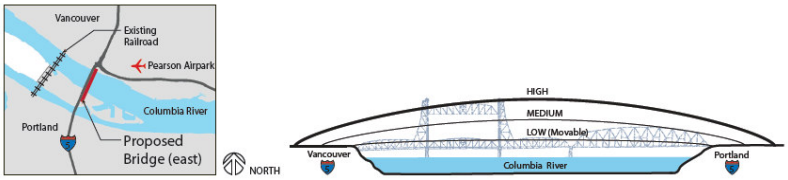
Step A Question	Pass/ Fail	Reasons
Q1. Traffic	Pass	Increases vehicular capacity along I-5 in the Bridge Influence Area by adding new travel lanes. Serves projected year 2020 traffic levels, which is expected to increase by at least 40% (over 50,000 daily vehicles) over 2005 levels, at similar or fewer hours of congestion compared to 2005 conditions (i.e., 4 hours during the afternoon/evening peak along I-5 within the Bridge Influence Area).
Q2. Transit	Pass	Provides increased travel capacity to accommodate transit within the I-5 Bridge Influence Area serving the identified travel markets.
Q3. Freight	Pass	Provides increased travel capacity for truck-hauled freight along I-5. Would be compatible with improvements to interchanges within the Bridge Influence Area that would support improved truck operations.
Q4. Safety	Fail	Retains the existing I-5 bridges, and therefore the opening for the supplemental bridge would need to line up with the existing lift span opening. This places the high point of the new bridge on the north side of the Columbia River channel. In addition, the new bridge's upstream location places it closer to Pearson Airpark. Due to the upstream and high point locations for the new bridge, this crossing unacceptably encroaches into the Pearson Airpark airspace.
Q5. Bike/Ped	Pass	Provides new Columbia River crossing with modern bike/ped pathway(s).
Q6. Seismic	Unknown	Provides new I-5 crossing built to current seismic standards. However, depending on the use of the existing I-5 bridges, they may need to be seismically upgraded to meet the new seismic criteria. It is not known at this point whether the existing bridges can be retrofitted to meet current seismic design standards.



RC-11: Supplemental Bridge Downstream/High Level

Staff Recommendation: Not Advance

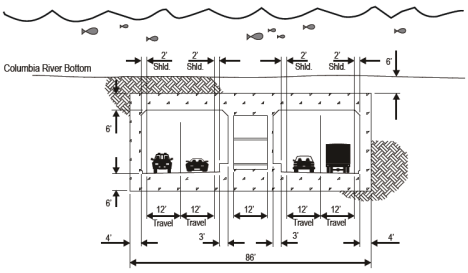
Step A Question	Pass/ Fail	Reasons
Q1. Traffic	Pass	Increases vehicular capacity along I-5 in the Bridge Influence Area by adding new travel lanes. Serves projected year 2020 traffic levels, which is expected to increase by at least 40% (over 50,000 daily vehicles) over 2005 levels, at similar or fewer hours of congestion compared to 2005 conditions (i.e., 4 hours during the afternoon/evening peak along I-5 within the Bridge Influence Area).
Q2. Transit	Pass	Provides increased travel capacity to accommodate transit within the I-5 Bridge Influence Area serving the identified travel markets.
Q3. Freight	Pass	Provides increased travel capacity for truck-hauled freight along I-5. Would be compatible with improvements to interchanges within the Bridge Influence Area that would support improved truck operations.
Q4. Safety	Fail	Provides I-5 crossing that, while addressing many non-standard design features and substantially upgrading I-5 within the Bridge Influence Area to current standards, would be built at a height that unacceptably encroaches into Pearson Airpark airspace.
Q5. Bike/Ped	Pass	Provides new Columbia River crossing with modern bike/ped pathway(s).
Q6. Seismic	Unknown	Provides new I-5 crossing built to current seismic standards. However, depending on the use of the existing I-5 bridges, they may need to be seismically upgraded to meet the new seismic criteria. It is not known at this point whether the existing bridges can be retrofitted to meet current seismic design standards.



RC-12: Supplemental Bridge Upstream/High Level

Staff Recommendation: Not Advance

Step A Question	Pass/ Fail	Reasons
Q1. Traffic	Pass	Increases vehicular capacity along I-5 in the Bridge Influence Area by adding new travel lanes. Serves projected year 2020 traffic levels, which is expected to increase by at least 40% (over 50,000 daily vehicles) over 2005 levels, at similar or fewer hours of congestion compared to 2005 conditions (i.e., 4 hours during the afternoon/evening peak along I-5 within the Bridge Influence Area).
Q2. Transit	Pass	Provides increased travel capacity to accommodate transit within the I-5 Bridge Influence Area serving the identified travel markets.
Q3. Freight	Pass	Provides increased travel capacity for truck-hauled freight along I-5. Would be compatible with improvements to interchanges within the Bridge Influence Area that would support improved truck operations.
Q4. Safety	Fail	Provides I-5 crossing that, while addressing many non-standard design features and substantially upgrading I-5 within the Bridge Influence Area to current standards, would be built at a height that unacceptably encroaches into Pearson Airpark airspace.
Q5. Bike/Ped	Pass	Provides new Columbia River crossing with modern bike/ped pathway(s).
Q6. Seismic	Unknown	Provides new I-5 crossing built to current seismic standards. However, depending on the use of the existing I-5 bridges, they may need to be seismically upgraded to meet the new seismic criteria. It is not known at this point whether the existing bridges can be retrofitted to meet current seismic design standards.



RC-13: Tunnel to Supplement I-5

Staff Recommendation: Advance

Step A Question	Pass/ Fail	Reasons
Q1. Traffic	Pass	Increases vehicular capacity along I-5 in the Bridge Influence Area by adding new travel lanes. Serves an express function within the Bridge Influence Area with Vancouver access limited to the SR 500 interchange and points north and Portland access limited to Interstate Avenue and points south. Serves projected year 2020 traffic levels, expected to increase by at least 40% (by over 50,000 daily vehicles) over 2005 levels, at similar or fewer hours of congestion compared to 2005 conditions (i.e., 4 hours during the afternoon/evening peak along I-5 within the Bridge Influence Area).
Q2. Transit	Pass	Provides increased travel capacity to accommodate transit within the I-5 Bridge Influence Area serving the identified travel markets.
Q3. Freight	Pass	Provides increased travel capacity for truck-hauled freight along I-5 within the Bridge Influence Area.
Q4. Safety	Pass	Provides a new I-5 crossing that could substantially reduce traffic levels using the existing I-5 bridges, thereby reducing the potential for collisions within the Bridge Influence Area.
Q5. Bike/Ped	Pass	Provides new Columbia River crossing with modern bike/ped pathway(s).
Q6. Seismic	Unknown	Provides new I-5 crossing built to current seismic standards. However, depending on the use of the existing I-5 bridges, they may need to be seismically upgraded to meet the new seismic criteria. It is not known at this point whether the existing bridges can be retrofitted to meet current seismic design standards.

Summary of Arterial River Crossings (RC-14, 15, 19, 21, 22, & 23)

There are six river crossing components that contain variations of an arterial roadway crossing of the Columbia River. To a degree, these six components each have strengths and weaknesses and some clearly have fatal flaws. In order for an arterial river crossing concept to pass adopted Step A screening, it must:

- provide an acceptable level of congestion relief (Q1- Traffic);
- be proximate to the I-5 corridor to both meet transit performance criteria and improve bicycle and pedestrian mobility in the I-5 corridor (Q2- Transit & Q5: Bike/pedestrian);
- address critical non-standard safety/design features in the BIA and avoid airport airspace (Q4-Safety); and
- attempt to address the seismic vulnerability of the current facility (Q6-Seismic).

The CRC project team is waiting for significant freight data that will be generated by the Regional Freight Study now underway. In the interim, limited data is available to evaluate the performance of components related to freight (Q3- Freight). For the purposes of Step A screening, the project team has considered how concepts perform regarding congestion relief as the best current surrogate for assessing a concept's freight performance.

The following table summarizes CRC project staff's assessment of how these six arterial concepts perform relative to the Step A screening questions.

Summary of Step A Screening Recommendation for Arterial River Crossing Components

	Q1 Traffic	Q2 Transit	Q3 Freight	Q4 Safety	Q5 Bike/ped	Q6 Seismic	Overall
RC-14	Note[1]	F	P	F	F	F	F
RC-15	Note[1]	F	P	F	F	F	F
RC-19	Note[1]	P	U	F	P	F	F
RC-21	F	F	F	F	F	F	F
RC-22	Note[1]	P	U	F	P	F	F
RC-23	Note[1]	P	U	P	P	U	P

[1] May provide some potential benefit in congestion management relative to 2030 No Build conditions.

P = Pass F = Fail NA = Not Applicable U = Unknown New since 3-22-06 TF meting

Question #1: Traffic and Congestion Relief

The degree of predicted traffic congestion relief for all 23 river crossing concepts ranges from lessening or maintaining current levels of afternoon/evening congestion (i.e., 4 hours or less), to worst-case scenarios where the peak period spreads substantially into the midday and evening

periods (i.e., 9 to 10 hours). All of the arterial river crossing components fall into a middle area between these extremes. Staff recommends that any arterial river crossing concept that results in:

- 8 or more hours of afternoon/evening congestion- component fails Question #1;
- 4 hrs or less of afternoon/evening congestion- component passes Question #1;
- 5 to 7 hours of afternoon/evening congestion- component is not eliminated from consideration based on this criterion because, while resulting in increased congestion and delay, it may result in other benefits.

RC-21, which would result in 8 to 9 hours of afternoon/evening congestion, fails Question #1 under this recommendation. The other five arterial river crossing components do not.

Question #2: Transit

In order for an arterial river crossing to improve transit service performance within the I-5 Bridge Influence Area and serve the key I-5 transit markets, it needs to be physically proximate to the current I-5 corridor. If it is not, it imposes unacceptable out of direction travel delays on transit, compromising the viability of serving key transit markets.

RC-19, RC-22 and RC-23 are all physically proximate to the current I-5 corridor and pass Question #2. RC-14, RC-15 and RC-21 are located one mile or more east or west of the current I-5 corridor and do not satisfy Question #2.

Question #3: Freight

As explained above, the project team has limited freight specific data against which to evaluate these arterial bridge components. Because all of these arterials but one (RC-21) provides marginal congestion relief (i.e., 6 to 7 hours), staff is proposing that only RC-21 fail for freight mobility reasons since it provides inadequate congestion relief (8-9 hours) along I-5 within the Bridge Influence Area. Concepts RC-19, RC-22 and RC-23 receive an “unknown” rating because it is not clear how they will tie into the regional arterial network and whether there would be freight mobility benefits as a result of those connections.

Because RC-14 and RC-15 provide direct connections to regionally significant freight destinations (the Ports of Portland and Vancouver and the regional freight resources adjacent to them), staff proposes they receive a “pass” on Question #3, in essence “giving them the benefit of the doubt” that these unique connections, coupled with their level of congestion relief, provide freight mobility benefits sufficient to meet the criteria of Question #3.

Question #4: Safety

In order for an arterial river crossing to improve safety within the I-5 Bridge Influence Area, it must do three things: 1) not significantly encroach into Pearson Airpark or Portland International Airport airspace, 2) maintain or improve navigational safety in the vicinity of the I-5 corridor crossings, and 3) reduce future I-5 traffic demands compared to today’s levels or redesign I-5 within the Bridge Influence Area to meet current design and safety standards to the greatest extent possible.

Only RC-21 creates an unacceptable encroachment into airport airspace and therefore should be eliminated from further consideration.

RC-14, RC-15, RC-19, and RC-22 do not make an investment in I-5 to substantially address existing non-standard design and safety features and therefore do not satisfy Question #4. As mentioned earlier, the congestion relief/demand reduction they provide falls in the marginal range.

Only RC-23 substantially addresses existing non-standard design and safety features within the I-5 Bridge Influence Area and therefore satisfies Question #4.

Question #5: Bicycle/Pedestrian Mobility

As with transit improvements, in order for an arterial river crossing to improve bicycle and pedestrian mobility within the I-5 Bridge Influence Area, its bicycle and pedestrian facilities need to be physically proximate to the current I-5 corridor and provide improved connections to the bicycle and pedestrian network.

RC-19, RC-22 and RC-23 are all physically proximate to the current I-5 corridor and could improve network connectivity, thereby satisfying Question #5. RC-14, RC-15 and RC-21 are located one mile or more east or west of the current I-5 corridor, imposing out of direction travel demands on cyclists and pedestrians seeking to move between points in the Bridge Influence Area and thus, do not satisfy Question #5.

Question #6: Seismic Vulnerability

In order for an arterial river crossing to reduce the seismic risk of the Columbia River Crossing, it must be designed to nationally accepted bridge standards and the existing I-5 bridges would need to be seismically retrofit. Note, however that it is not currently known whether the existing I-5 bridges can be retrofitted.

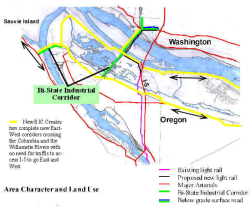
All arterial river crossing bridges would be designed to current seismic standards, however, only RC-23 proposes to seismically retrofit the existing I-5 bridges (if feasible), and therefore only RC-23 could potentially satisfy Question #6.

Summary

In summary, an arterial crossing can satisfy each of the six Step A screening questions so long as it provides:

- an acceptable level of congestion relief on I-5 to serve commuters and freight (Q1 & Q3);
- proximity to the I-5 corridor to both meet transit performance criteria and improve bike/pedestrian mobility in the I-5 corridor (Q2 & Q5);
- solutions to critical non-standard safety/design features in the BIA and avoids airport airspace (Q4);
- design upgrades to address the seismic vulnerability of the current facility (Q6).

Based on staff review of the six arterial components, RC-23 satisfies each of the Step A questions and is recommended to advance for further consideration during alternative packaging. Where appropriate, promising design features from the other five arterial components not recommended to advance could be integrated to further improve RC-23.



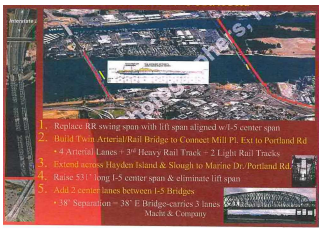
RC-14: New Corridor Crossing Near BNSF Rail Crossing

Staff Recommendation: Not Advance

Step A Question	Pass/ Fail	Reasons
Q1. Traffic	See note below[1]	Assuming construction of a new multi-lane tunnel under Mill Plain Blvd. and construction of high capacity interchange ramps between I-5 and Mill Plain Blvd., provides new Columbia River crossing that would serve up to 30,000 daily vehicles with most of these vehicles diverted from I-5. Some I-205 traffic shifts to I-5. By 2020, I-5 traffic demands still increase by at least 15% (by over 20,000 vehicles) over 2005 levels, resulting in 6-7 hours of afternoon/evening peak period congestion.
Q2. Transit	Fail	Does not improve transit service to identified I-5 corridor transit markets, nor does it improve the performance of the existing transit system within the I-5 Bridge Influence Area. Provides transit service along new corridor located approximately one mile west of I-5 to potential non-I-5 travel markets, but is out of direction for I-5 origins and destinations.
Q3. Freight	Pass	Results in 6-7 hours of afternoon/evening peak period congestion on I-5, however provides alternative route linking freight activity centers west of I-5.
Q4. Safety	Fail	Provides new Columbia River crossing located approximately one mile west of I-5 built to current safety standards, but does not address existing non-standard design features within the I-5 Bridge Influence Area. Traffic demands on I-5 within the Bridge Influence Area would increase by at least 15% by 2020 over 2005 conditions, resulting in 6-7 hours of afternoon/evening peak period congestion. Without added I-5 capacity and re-design of the Bridge Influence Area to meet standards, collisions would be expected to increase approximately 40 percent over 2005 conditions.
Q5. Bike/Ped	Fail	Provides new Columbia River crossing with modern bike/ped pathway(s). With a location approximately one mile west of I-5, it is out of direction for users with trip origins and destinations within the I-5 Bridge Influence Area.
Q6. Seismic	Fail	Provides new Columbia River crossing built to current seismic standards, but does not upgrade the existing I-5 bridges serving Interstate traffic and therefore the seismic risk of the I-5 bridges would not be reduced.

[1] May provide some potential benefit in congestion management relative to 2030 No Build conditions.

Note: A variation of this component was introduced at the 3-22-06 Task Force meeting. Staff evaluated the revised component and believes it fails for similar reasons as summarized above.



RC-15: New Corridor Crossing plus Widen Existing I-5 Bridges

Staff Recommendation: Not Advance

Note: It is not feasible to add two new travel lanes to I-5 between the existing bridges as this component calls for. This component is otherwise similar to RC-14 and would operate similarly.

Step A Question	Pass/ Fail	Reasons
Q1. Traffic	See Note below[1]	Assuming construction of a new multi-lane tunnel under Mill Plain Blvd. and construction of high capacity interchange ramps between I-5 and Mill Plain Blvd., provides new Columbia River crossing that would serve up to 30,000 daily vehicles with most of these vehicles diverted from I-5. Some I-205 traffic shifts to I-5. By 2020, I-5 traffic demands still increase by at least 15% (by over 20,000 vehicles) over 2005 levels, resulting in 6-7 hours of afternoon/evening peak period congestion.
Q2. Transit	Fail	Does not improve transit service to identified I-5 corridor transit markets, nor does it improve the performance of the existing transit system within the I-5 Bridge Influence Area. Provides transit service along new corridor located approximately one mile west of I-5 to potential non-I-5 travel markets, but is out of direction for I-5 origins and destinations.
Q3. Freight	Pass	Results in 6-7 hours of afternoon/evening peak period congestion on I-5, however provides alternative route linking freight activity centers west of I-5.
Q4. Safety	Fail	Provides new Columbia River crossing located approximately one mile west of I-5 built to current safety standards, but does not address existing non-standard design features within the I-5 Bridge Influence Area. Traffic demands on I-5 within the Bridge Influence Area would increase by at least 15% by 2020 over 2005 conditions, resulting in 6-7 hours of afternoon/evening peak period congestion. Without added I-5 capacity and re-design of the Bridge Influence Area to meet standards, collisions would be expected to increase approximately 40 percent over 2005 conditions.
Q5. Bike/Ped	Fail	Provides new Columbia River crossing with modern bike/ped pathway(s). With a location approximately one mile west of I-5, it is out of direction for users with trip origins and destinations within the I-5 Bridge Influence Area.
Q6. Seismic	Fail	Provides new Columbia River crossing built to current seismic standards, but does not upgrade the existing I-5 bridges serving Interstate traffic and therefore the seismic risk of the I-5 bridges would not be reduced.

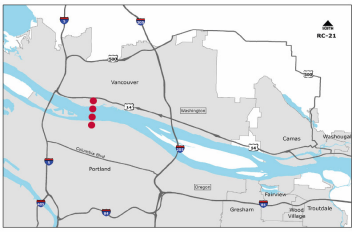
[1] May provide some potential benefit in congestion management relative to 2030 No Build conditions.

RC-19: Arterial Crossing without I-5 Improvements

Staff Recommendation: Not Advance

Step A Question	Pass/ Fail	Reasons
Q1. Traffic	See Note below[1]	Provides new Columbia River arterial crossing to supplement I-5. By 2020, I-5 traffic demands still increase by at least 15% (by over 20,000 vehicles) over 2005 levels, resulting in 6-7 hours of afternoon/evening peak period congestion.
Q2. Transit	Pass	Provides increased travel capacity to accommodate transit within the I-5 Bridge Influence Area serving the identified travel markets.
Q3. Freight	Unknown	Functionality for truck mobility would depend upon arterial roadway connections north and south of the Columbia River.
Q4. Safety	Fail	Provides new Columbia River crossing located immediately west of I-5 built to current safety standards, but does not address existing non-standard design features within the I-5 Bridge Influence Area. Traffic demands on I-5 within the Bridge Influence Area would increase by at least 15% by 2020 over 2005 conditions, resulting in 6-7 hours of afternoon/evening peak period congestion. Without added I-5 capacity and re-design of the Bridge Influence Area to meet standards, collisions would be expected to increase approximately 40 percent over 2005 conditions.
Q5. Bike/Ped	Pass	Provides new Columbia River crossing with modern bike/ped pathway(s).
Q6. Seismic	Fail	Provides new Columbia River crossing built to current seismic standards, but does not upgrade the existing I-5 bridges serving Interstate traffic and therefore the seismic risk of the I-5 bridges would not be reduced.

[1] May provide some potential benefit in congestion management relative to 2030 No Build conditions.



RC-21: 33rd Avenue Crossing

Staff Recommendation: Not Advance

Step A Question	Pass/ Fail	Reasons
Q1. Traffic	Fail	Provides new Columbia River crossing to supplement I-5 and I-205 with traffic shifting from each facility to the new corridor. By 2020, I-5 traffic demands still increase by about 25% (over 30,000 vehicles) over 2005 levels, resulting in 8-9 hours of afternoon/evening peak period congestion.
Q2. Transit	Fail	Does not improve transit service to identified I-5 corridor transit markets, nor does it improve the performance of the existing transit system within the I-5 Bridge Influence Area. Provides transit service along new corridor located approximately 2-3 miles east of I-5 to potential non-I-5 travel markets, but is out of direction for I-5 origins and destinations.
Q3. Freight	Fail	Results in 8-9 hours of afternoon/evening peak period congestion on I-5.
Q4. Safety	Fail	Provides new Columbia River crossing located approximately 2-3 miles east of I-5 built to current safety standards, but does not address existing non-standard design features within the I-5 Bridge Influence Area. Traffic demands on I-5 within the Bridge Influence Area would increase by 25% by 2020 over 2005 conditions, resulting in 8-9 hours of afternoon/evening peak period congestion. Without added I-5 capacity and re-design of the Bridge Influence Area to meet standards, collisions would be expected to increase approximately 60% percent over 2005 conditions. In addition, bridge would unacceptably encroach into PDX Airport airspace.
Q5. Bike/Ped	Fail	Provides new Columbia River crossing with modern bike/ped pathway(s). With a location approximately 2-3 miles east of I-5, it is out of direction for users with trip origins and destinations within the I-5 Bridge Influence Area.
Q6. Seismic	Fail	Provides new Columbia River crossing built to current seismic standards, but does not upgrade the existing I-5 bridges serving Interstate traffic and therefore the seismic risk of the I-5 bridges would not be reduced.

RC-22: Non-Freeway Multi-modal Columbia River Crossing

Staff Recommendation: Not Advance

Note: The proposed description for this component also included elevating the existing bridges and removing the lift spans. However, that part of the proposal was determined to not be feasible.

Step A Question	Pass/ Fail	Reasons
Q1. Traffic	See Note below[1]	Provides new Columbia River arterial crossing to supplement I-5. By 2020, northbound I-5 traffic demands still increase by about 15% (by about 20,000 vehicles) over 2005 levels, resulting in 6-7 hours of afternoon/evening peak period congestion.
Q2. Transit	Pass	Provides increased travel capacity to accommodate transit within the I-5 Bridge Influence Area serving the identified travel markets.
Q3. Freight	Unknown	Functionality for truck mobility would depend upon arterial roadway connections north and south of the Columbia River.
Q4. Safety	Fail	Provides new Columbia River crossing located immediately west of I-5 built to current safety standards, but does not address existing non-standard design features within the I-5 Bridge Influence Area. Traffic demands on I-5 within the Bridge Influence Area would increase by about 15% by 2020 over 2005 conditions, resulting in 6-7 hours of afternoon/evening peak period congestion. Without added I-5 capacity and re-design of the Bridge Influence Area to meet standards, collisions would be expected to increase approximately 40% percent over 2005 conditions.
Q5. Bike/Ped	Pass	Provides new Columbia River crossing with modern bike/ped pathway(s).
Q6. Seismic	Fail	Provides new Columbia River crossing built to current seismic standards, but does not upgrade the existing I-5 bridges serving Interstate traffic and therefore the seismic risk of the I-5 bridges would not be reduced.

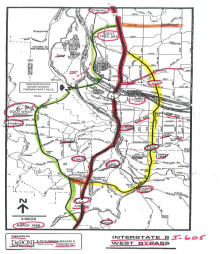
[1] May provide some potential benefit in congestion management relative to 2030 No Build conditions.

RC-23 Arterial Crossing with I-5 Improvements

Staff Recommendation: Advance

Step A Question	Pass/ Fail	Reasons
Q1. Traffic	See Note below[1]	Provides new Columbia River arterial crossing to supplement I-5. By 2020, I-5 traffic demands still increase by at least 15% (by over 20,000 vehicles) over 2005 levels, resulting in 6-7 hours of afternoon/evening peak period congestion.
Q2. Transit	Pass	Provides increased travel capacity to accommodate transit within the I-5 Bridge Influence Area serving the identified travel markets.
Q3. Freight	Unknown	Functionality for truck mobility would depend upon arterial roadway connections north and south of the Columbia River.
Q4. Safety	Pass	Provides new Columbia River crossing located immediately west of I-5 built to current safety standards. Provides safety improvements to I-5 within the Bridge Influence Area that significantly addresses critical existing non-standard design and safety features.
Q5. Bike/Ped	Pass	Provides new Columbia River crossing with modern bike/ped pathway(s).
Q6. Seismic	Unknown	Provides new Columbia River crossing built to current seismic standards for arterial roadway and upgrades the existing I-5 bridges serving Interstate traffic, if feasible.

[1] May provide some potential benefit in congestion management relative to 2030 No Build conditions.

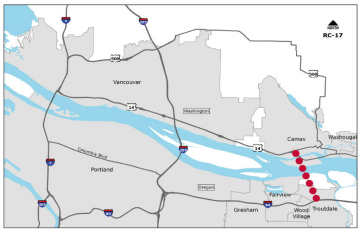


RC-16: New Western Highway

Staff Recommendation: Not Advance

Step A Question	Pass/ Fail	Reasons
Q1. Traffic	See Note below[1]	Provides new Columbia River crossing that would serve about 25,000 daily vehicles, with most of these vehicles diverted from I-5. Some I-205 traffic shifts to I-5. By 2020, I-5 traffic demands still increase by about 20% (25,000 vehicles) over 2005 levels, resulting in 7-8 hours of afternoon/evening peak period congestion.
Q2. Transit	Fail	Does not improve transit service to identified I-5 corridor transit markets, nor does it improve the performance of the existing transit system within the I-5 Bridge Influence Area. Provides transit service along new corridor located approximately 2-3 miles west of I-5 to potential non-I-5 travel markets, but is out of direction for I-5 origins and destinations.
Q3. Freight	Fail	Results in 7-8 hours of afternoon/evening peak period congestion on I-5.
Q4. Safety	Fail	Provides new Columbia River crossing located approximately 2-3 miles west of I-5 built to current safety standards, but does not address existing non-standard design features within the I-5 Bridge Influence Area. Traffic demands on I-5 within the Bridge Influence Area would increase by 20% by 2020 over 2005 conditions, resulting in 7-8 hours of afternoon/evening peak period congestion. Without added I-5 capacity and re-design of the Bridge Influence Area to meet standards, collisions would be expected to increase approximately 45% percent over 2005 conditions.
Q5. Bike/Ped	Fail	Provides new Columbia River crossing with modern bike/ped pathway(s). With a location approximately 2-3 miles west of I-5, it is out of direction for users with trip origins and destinations within the I-5 Bridge Influence Area.
Q6. Seismic	Fail	Provides new Columbia River crossing built to current seismic standards, but does not upgrade the existing I-5 bridges serving Interstate traffic and therefore the seismic risk of the I-5 bridges would not be reduced.

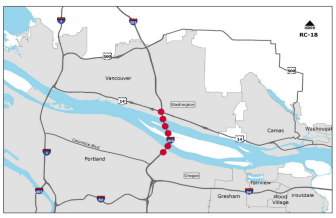
[1] May provide some potential benefit in congestion management relative to 2030 No Build conditions.



RC-17: New Eastern Columbia River Crossing

Staff Recommendation: Not Advance

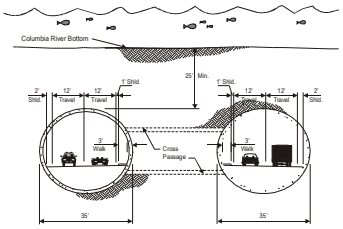
Step A Question	Pass/ Fail	Reasons
Q1. Traffic	Fail	Provides new Columbia River crossing to supplement I-205 corridor with most users shifting from I-205. By 2020, I-5 traffic demands still increase by at least 30% (over 40,000 vehicles) over 2005 levels, resulting in 9-10 hours of afternoon/evening peak period congestion.
Q2. Transit	Fail	Does not improve transit service to identified I-5 corridor transit markets, nor does it improve the performance of the existing transit system within the I-5 Bridge Influence Area. Provides transit service along new corridor located approximately 10-12 miles east of I-5 to potential non-I-5 travel markets, but is out of direction for I-5 origins and destinations.
Q3. Freight	Fail	Results in 9-10 hours of afternoon/evening peak period congestion on I-5.
Q4. Safety	Fail	Provides new Columbia River crossing located approximately 10-12 miles east of I-5 built to current safety standards, but does not address existing non-standard design features within the I-5 Bridge Influence Area. Traffic demands on I-5 within the Bridge Influence Area would increase by at least 30% by 2020 over 2005 conditions, resulting in 9-10 hours of afternoon/evening peak period congestion. Without added I-5 capacity and re-design of the Bridge Influence Area to meet standards, collisions would be expected to increase approximately 65 percent over 2005 conditions.
Q5. Bike/Ped	Fail	Provides new Columbia River crossing with modern bike/ped pathway(s). With a location approximately 10-12 miles east of I-5, it is out of direction for users with trip origins and destinations within the I-5 Bridge Influence Area.
Q6. Seismic	Fail	Provides new Columbia River crossing built to current seismic standards, but does not upgrade the existing I-5 bridges serving Interstate traffic and therefore the seismic risk of the I-5 bridges would not be reduced.



RC-18: I-205 Improvements

Staff Recommendation: Not Advance

Step A Question	Pass/ Fail	Reasons
Q1. Traffic	Fail	Upgrades I-205 corridor by adding one lane per direction between I-5 to the north and I-84 to the south. By 2020, I-5 traffic demands still increase by about 30% (over 40,000 vehicles) over 2005 levels, resulting in 9-10 hours of afternoon/evening peak period congestion.
Q2. Transit	Fail	Does not improve transit service to identified I-5 corridor transit markets, nor does it improve the performance of the existing transit system within the I-5 Bridge Influence Area. May increase transit service along I-205 located approximately 7 miles east of I-5 to potential non-I-5 travel markets, but is out of direction for I-5 origins and destinations.
Q3. Freight	Fail	Results in 9-10 hours of afternoon/evening peak period congestion on I-5.
Q4. Safety	Fail	Provides improvements to existing I-205 corridor located approximately 7 miles east of I-5, but does not address existing non-standard design features within the I-5 Bridge Influence Area. Traffic demands on I-5 within the Bridge Influence Area would increase by 30% by 2020 over 2005 conditions, resulting in 9-10 hours of afternoon/evening peak period congestion. Without added I-5 capacity and re-design of the Bridge Influence Area to meet standards, collisions would be expected to increase approximately 65 percent over 2005 conditions.
Q5. Bike/Ped	Fail	Does not improve existing I-5 bike/ped pathways. May improve I-205 bike/ped pathway(s), but with a location approximately 7 miles east of I-5, it is out of direction for users with trip origins and destinations within the I-5 Bridge Influence Area.
Q6. Seismic	Fail	Does not upgrade the existing I-5 bridges serving Interstate traffic and therefore the seismic risk of the I-5 bridges would not be reduced.



RC-20: Replacement Tunnel

Staff Recommendation: Not Advance

Step A Question	Pass/ Fail	Reasons
Q1. Traffic	Fail	Increases vehicular capacity along I-5 in the Bridge Influence Area by adding new travel lanes. Capacity is underground and would require an elaborate frontage road network to serve SR 14, Vancouver City Center and Hayden Island- resulting in substantial out of direction travel for drivers. Tunnel would connect above ground to interchanges north of SR 14 and south of Hayden Island.
Q2. Transit	Fail	Tunnel alignment results in significant out-of-direction travel for transit to serve I-5 transit markets. Would require elaborate frontage road system to link I-5 activity centers.
Q3. Freight	Fail	Tunnel alignment results in significant out-of-direction travel for freight to serve I-5 freight activity centers. Would require elaborate frontage road system to link I-5 activity centers.
Q4. Safety	Pass	Provides new Columbia River crossing built to current safety standards.
Q5. Bike/Ped	Fail	Tunnel alignment creates significant out-of-direction travel for bike/ped users to reach I-5 activity centers with the Bridge Influence Area. Not desirable to serve bicyclists and pedestrians via a tunnel.
Q6. Seismic	Pass	Provides I-5 crossing built to current seismic standards.

Columbia River CROSSING

March 22 Meeting Summary

Task Force
April 26, 2006

Columbia River CROSSING

Overview of April Open House Results

Task Force
April 26, 2006

Open House Highlights – Public Comments

- Hudson's Bay High School, Vancouver, April 12
- Jantzen Beach Red Lion Inn, Portland, April 13
  - 205 people signed in (103 in Vancouver, 102 at Jantzen Beach)
  - 85 people gave written comments via cards, flip charts, court reporter; about 30 provided comments afterward via email or forms dropped off at the project office.

Open House Highlights

River Crossing and Transit Components

Do you agree or disagree with staff recommendations?

22 agree, 14 disagree, 21 didn't respond

Of those who disagreed, few opposed everything

Retain or eliminate an idea
Wanted more detail or information
Had questions about issues other than the components

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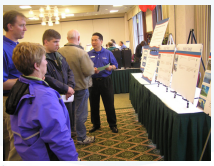
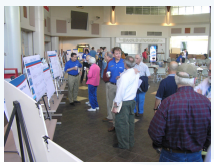
Open House Highlights

River Crossing - Some common themes:

- Don't build a lift span – that just replicates the problem
- Arterial/local crossing is favored
- Tunnel
- Consider a stacked/multi level bridge
- Third crossing – a handful think its good to do eventually, or do right now





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Open House Highlights

Transit – Some common themes

- Strong support for light rail and transit
- Support for reducing auto and energy dependency through transit or TDM
- Two "anti transit" comments – both opposing LR

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Open House Highlights

Other Components

- Freight – keep it moving
- Bike and Pedestrian access and improvements - show up a lot in the safety comments
- Roadways – concerns about additional lanes and impacts to communities

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Open House Highlights

Other common themes

- Community Livability/Environmental Justice
  - How will the project will affect homes, businesses, neighborhoods, downtown and historic areas
- Tolling and Finances
  - Nearly all who commented on it support tolling, two or three don't

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Public Comment Period

Task Force
April 26, 2006

Columbia River CROSSING

Component Packaging/Background Information

Task Force
April 26, 2006

Overview

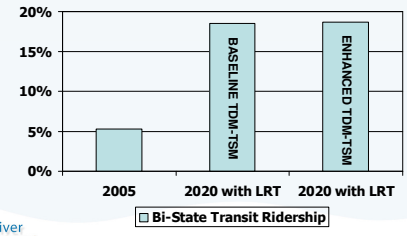
- Packaging components into alternatives
- TDM/TSM
- Travel times and speeds
- Safety analyses and strategies

TDM-TSM Overview

- How does TDM-TSM affect the performance of transportation components?
- The I-5 Partnership assumed an aggressive mix of TDM and TSM strategies
- The information about transportation components presented at the last Task Force meeting also included an aggressive mix of TDM and TSM strategies

How does TDM-TSM affect transportation components?

- Impacts on transit mode split from the I-5 Partnership Study



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Examples of TDM Strategies

- Strategies to reduce single occupant vehicle travel
  - Enhanced transit service
  - Incentives for transit use (i.e. transit pass programs)
  - Vanpools and carpools
  - Shuttle systems
  - Park and ride facilities
  - Incentives for bicycle & pedestrian travel
  - Traveler information
  - Parking policies
  - Telecommuting & flexible work hours
- The I-5 Partnership Strategic Plan and the CRC component screening included the above TDM strategies

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Examples of TSM Strategies

- Strategies to increase efficiency of the existing transportation system
  - Ramp meters
  - Incident management
  - Managed Lanes, i.e. HOV lanes
  - Adaptive signal control
  - Transit signal priority
  - Queue jumps
  - Roadway pricing
- The I-5 Partnership Strategic Plan and the CRC component screening included the above TSM strategies

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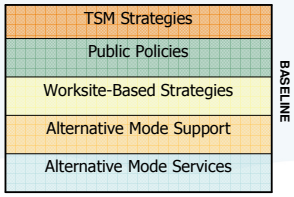
TDM/TSM Strategies Evaluated in the I-5 Partnership

- Baseline Package included in each I-5 Partnership Alternative and each CRC component



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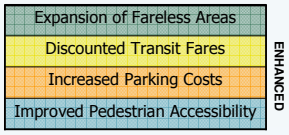
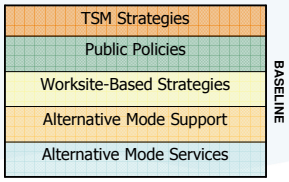
TDM/TSM Strategies Evaluated in the I-5 Partnership

- Enhanced Package in one I-5 Partnership Alternative

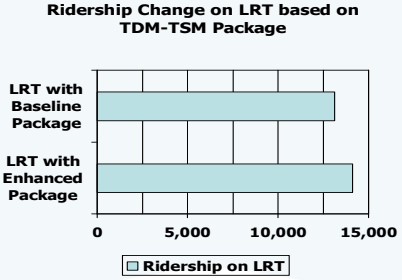


- Baseline Package included in each I-5 Partnership Alternative and each CRC component



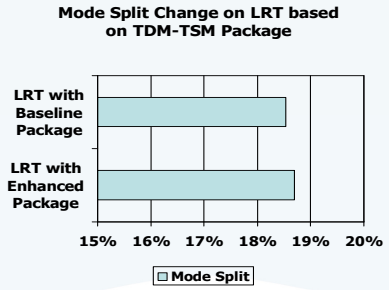
Columbia River CROSSING

TDM/TSM Strategies Evaluated in the I-5 Partnership (Year 2020, 4 hour PM peak)



Columbia River CROSSING

TDM/TSM Strategies Evaluated in the I-5 Partnership (Year 2020, 4 hour PM Peak)



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Conclusions

- "There is no silver bullet in the TDM/TSM arsenal…" as concluded in the I-5 Partnership Strategic Plan, Page 34.
- An even more enhanced TDM/TSM Alternative will be evaluated in the CRC project drawing from 18 TDM/TSM Components
  - The Enhanced TDM/TSM package will include congestion pricing, which was not evaluated in the I-5 Partnership

Columbia River CROSSING

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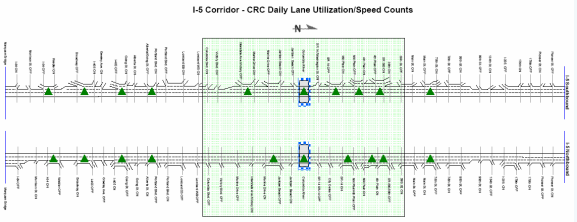
Travel Times & Speeds, Safety Analyses & Strategies

Task Force
April 26, 2006

Data Collection Program Included:

- Ramp/ramp terminal turning movement counts (24-hour)
- I-5 mainline vehicle classification counts (24-hour)
- Lane utilization/speed counts (24-hour)
- Travel time runs (4-hour peak periods)
- Auto occupancy (4-hour peak periods)
- Origin-destination counts (2.5-hour peak direction)

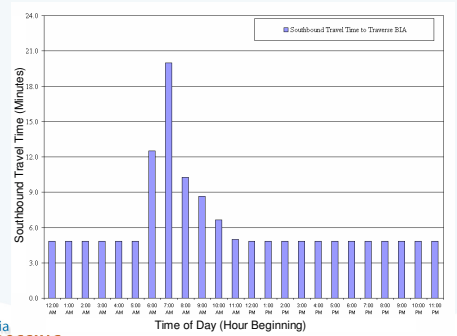
Lane Utilization & Speed Data Locations



Travel Time Runs

- Travel time runs were conducted along I-5, I-205 and I-84
- Travel time runs were completed for both directions during both AM and PM peak periods
- I-5 travel time runs were from Morrison Bridge to 99th Street Interchange
- I-205 and I-84 travel time runs were from Morrison Bridge to Padden Parkway

Southbound Travel Time to Traverse BIA



Columbia CROSSING

Total Crashes and Crash Rates

- In 5-year period, 2,204 crashes on I-5 mainline and ramps; average of 1.21 crashes per day
- 37% (818) involved injuries or fatalities
- Rear-end collisions result in higher proportion of injuries
- Highest amount of collisions occur during peak periods

Columbia River CROSSING

Existing Highway Design and Safety Features

- Non-standard design and safety features exist throughout the I-5 Bridge Influence Area, including:
  - Short ramp merges/acceleration lanes
  - Short ramp diverges/deceleration lanes
  - Short weaving areas
  - Vertical curves limiting sight distance
  - Narrow shoulders
- Most existing non-standard features are located along the Interstate Bridge and its approaches. Multiple non-standard features exist in this area

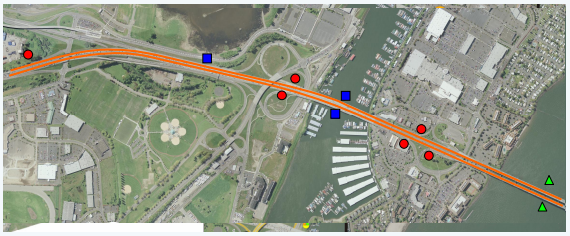
Columbia River CROSSING

Collision Types and Highway Geometrics - Washington

Ramp-to-highway acceleration lane length
Highway-to-ramp deceleration lane length
Ramp-to-ramp separation lengths
Highway weaving area lane length
Highway horizontal alignment
Highway vertical alignment
Highway shoulder width

Columbia River CROSSING

Collision Types and Highway Geometrics - Oregon



Ramp-to-highway acceleration lane length
Highway-to-ramp deceleration lane length
Ramp-to-ramp separation lengths
Highway weaving area lane length
Highway horizontal alignment
Highway vertical alignment
Highway shoulder width

Columbia River CROSSING

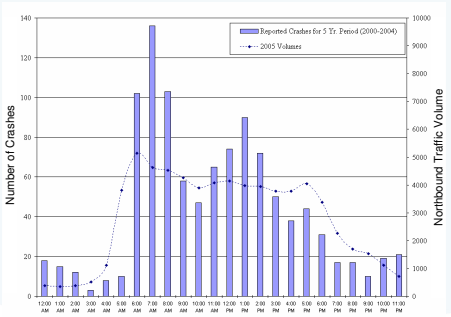
Collision Types and Highway Features

- There is a strong correlation between the presence of non-standard features and the frequency and type of collisions
- The consequences of the non-standard features are exacerbated during periods of high traffic volumes and congestion
- If traffic demands increase without redesigning I-5 within the Bridge Influence Area, the frequency of collisions will substantially increase

Columbia River CROSSING

Travel Times, Speeds & Safety Overview

Southbound I-5 Crashes within BIA vs. Traffic Volume



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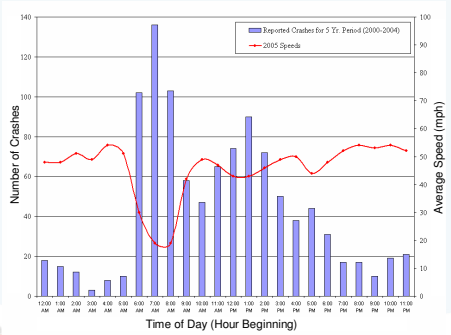
Travel Times, Speeds & Safety Overview

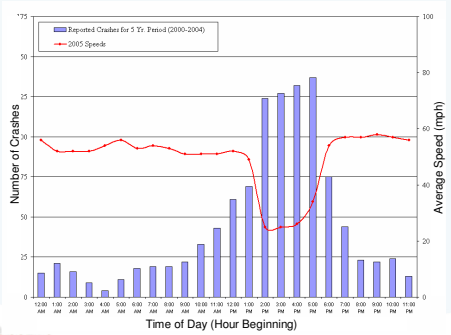
Southbound I-5 Crashes within BIA vs. Average Speed



Columbia CROSSING

Travel Times, Speeds & Safety Overview

Northbound I-5 Crashes within BIA vs. Average Speed



Columbia CROSSING

Reduction of Speed

- Studies indicate lowering speed limits create greater speed differentials between drivers who obey and don't obey the lower limits
- While lower speed limits may provide some benefit during off-peak periods, the greatest number of collisions occur during the peak periods when travel speeds are already slow (e.g., under 30 mph)
- Therefore, reducing speed limits does not necessarily improve safety

Potential Safety Strategies

Short of rebuilding the entire freeway, rear-end collision reduction strategies include:

- Use of higher visibility pavement striping and signage
- Elimination of specific ramps
- Reconfiguration of segments of the highway

Columbia River CROSSING

Component Selection for Further Study

Task Force
April 26, 2006

Agenda

- Focus: Task Force decision on Step A component screening recommendations tonight
- River crossing
  - components recommended not to advance
  - components recommended to advance
- Transit
  - components recommended to advance
  - components recommended not to advance

Component Fact Sheets

- Developed for all 14 Transit and 23 River Crossing Components to:
  - More fully communicate staff's rationale for recommendations to advance/drop components
  - Address Task Force questions stemming from 3-22-06 meeting
  - Support Task Force action to recommend which components to advance or drop from further consideration
- Additional traffic context provided where appropriate to address questions from 3-22-06 Task Force meeting

Step A Pass/Fail Questions

Does the component:

Q1- Increase vehicular capacity or decrease vehicular demand within the Bridge Influence Area (BIA)?
Q2- Improve transit performance within the BIA?
Q3- Improve freight mobility within the BIA?
Q4- Improve safety and decrease vulnerability to incidents within the BIA?
Q5- Improve bicycle and pedestrian mobility within the BIA?
Q6- Reduce seismic risk of the I-5 Columbia River Crossing?

Source: I-5 CRC Problem Definition

River Crossing Components

- 23 river crossing components
- Staff recommending to drop 14 from further consideration
- Staff recommending to advance nine for further evaluation during packaging
- Applied all six (6) Step A questions

Columbia River CROSSING

River Crossing Components Recommended to Advance

- RC-1: Replacement Bridge/Downstream/Low-Level/Movable
- RC-2: Replacement Bridge/Upstream/Low-Level/Movable
- RC-3: Replacement Bridge/Downstream/Mid-Level
- RC-4: Replacement Bridge/Upstream/Mid-Level
- RC-7: Supplemental Bridge/Downstream/Low-Level/Movable
- RC-8: Supplemental Bridge/Upstream/Low-Level/Movable
- RC-9: Supplemental Bridge/Downstream/Mid-Level
- RC-13: Tunnel to Supplement I-5
- RC-23: Arterial Crossing with I-5 Improvements

Columbia River CROSSING

River Crossing Components Not Recommended to Advance

- Mid to High Level I-5 Bridges that encroach into airport airspace (RC-5, RC-6, RC-10, RC-11, RC-12)
- Arterial crossings that are not consistent with problem definition (RC-14, RC-15, RC-19, RC-21, RC-22)
- Components proposing to invest in highway corridors other than I-5 (RC-16, RC-17, RC-18)
- Replacement tunnel that bypasses the I-5 Bridge Influence Area (RC-20)

Columbia River CROSSING

River Crossings- Arterials

Arterial River Crossings

- Much of the 3-22-06 Task Force meeting discussion centered around arterial components
- All river crossing components assumed an aggressive level of TDM/TSM as presented tonight
- Distinguish the six arterials regarding features/performance
- Explain rationale for staff recommendations

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River Crossings- Arterials

Summary of Arterial River Crossings

- RC 14, 15, 19, 21, 22 and 23 each represent a form of arterial crossing- grouped and evaluated together
- In order for an arterial river crossing concept to pass adopted Step A screening, it must:
  - provide an acceptable level of congestion relief (Q1- Traffic);
  - be proximate to the I-5 corridor to both meet transit performance criteria and improve bicycle and pedestrian mobility in the I-5 corridor (Q2- Transit & Q5: Bike/pedestrian);
  - address critical non-standard safety/design features in the BIA and avoid airport airspace encroachment (Q4-Safety); and
  - attempt to address the seismic vulnerability of the current facility (Q6-Seismic).
  - Waiting on more detailed freight data- congestion duration used as a surrogate for now (Q3- Freight)

Columbia River CROSSING

River Crossings- Arterials

Summary of Arterial River Crossings

- RC-14: New Corridor Crossing Near BNSF Rail Crossing
- RC-15: New Corridor Crossing plus Widen Existing I-5 Bridges
- RC-19: Arterial Crossing without I-5 Improvements
- RC-21: 33rd Avenue Crossing
- RC-22: Non-Freeway Multi-modal Columbia River Crossing
- RC-23: Arterial Crossing with I-5 Improvements

Columbia River CROSSING

River Crossings- Arterials

Summary of Arterial River Crossings

Summary of Step A Screening Recommendation for Arterial River Crossing Components

	Q1 Traffic
RC-14	Note[1]
RC-15	Note[1]
RC-19	Note[1]
RC-21	F
RC-22	Note[1]
RC-23	Note[1]

[1] May provide some potential benefit in congestion management relative to 2030 No Build conditions.

P = Pass F = Fail NA = Not Applicable U = Unknown New since 3-22-06 TF meeting

Columbia River CROSSING

River Crossings- Arterials

Summary of Arterial River Crossings

Summary of Step A Screening Recommendation for Arterial River Crossing Components

	Q1 Traffic	Q2 Transit
RC-14	Note[1]	F
RC-15	Note[1]	F
RC-19	Note[1]	P
RC-21	F	F
RC-22	Note[1]	P
RC-23	Note[1]	P

[1] May provide some potential benefit in congestion management relative to 2030 No Build conditions.

P = Pass F = Fail NA = Not Applicable U = Unknown New since 3-22-06 TF meeting

Columbia River CROSSING

River Crossings- Arterials

Summary of Arterial River Crossings

Summary of Step A Screening Recommendation for Arterial River Crossing Components

	Q1 Traffic	Q2 Transit	Q3 Freight
RC-14	Note[1]	F	P
RC-15	Note[1]	F	P
RC-19	Note[1]	P	U
RC-21	F	F	F
RC-22	Note[1]	P	U
RC-23	Note[1]	P	U

[1] May provide some potential benefit in congestion management relative to 2030 No Build conditions.

P = Pass F = Fail NA = Not Applicable U = Unknown New since 3-22-06 TF meeting

Columbia River CROSSING

River Crossings- Arterials

Summary of Arterial River Crossings

Summary of Step A Screening Recommendation for Arterial River Crossing Components

	Q1 Traffic	Q2 Transit	Q3 Freight	Q4 Safety
RC-14	Note[1]	F	P	F
RC-15	Note[1]	F	P	F
RC-19	Note[1]	P	U	F
RC-21	F	F	F	F
RC-22	Note[1]	P	U	F
RC-23	Note[1]	P	U	P

[1] May provide some potential benefit in congestion management relative to 2030 No Build conditions.

P = Pass F = Fail NA = Not Applicable U = Unknown New since 3-22-06 TF meeting

Columbia River CROSSING

River Crossings- Arterials

Summary of Arterial River Crossings

Summary of Step A Screening Recommendation for Arterial River Crossing Components

	Q1 Traffic	Q2 Transit	Q3 Freight	Q4 Safety	Q5 Bike/ped
RC-14	Note[1]	F	P	F	F
RC-15	Note[1]	F	P	F	F
RC-19	Note[1]	P	U	F	P
RC-21	F	F	F	F	F
RC-22	Note[1]	P	U	F	P
RC-23	Note[1]	P	U	P	P

[1] May provide some potential benefit in congestion management relative to 2030 No Build conditions.

P = Pass F = Fail NA = Not Applicable U = Unknown New since 3-22-06 TF meeting

Columbia River CROSSING

CRC Task Force Meeting 3/22/2006

River Crossings- Arterials

Summary of Arterial River Crossings

Summary of Step A Screening Recommendation for Arterial River Crossing Components

	Q1 Traffic	Q2 Transit	Q3 Freight	Q4 Safety	Q5 Bike/ped	Q6 Seismic
RC-14	Note[1]	F	P	F	F	F
RC-15	Note[1]	F	P	F	F	F
RC-19	Note[1]	P	U	F	P	F
RC-21	F	F	F	F	F	F
RC-22	Note[1]	P	U	F	P	F
RC-23	Note[1]	P	U	P	P	U

[1] May provide some potential benefit in congestion management relative to 2030 No Build conditions.

P = Pass F = Fail NA = Not Applicable U = Unknown New since 3-22-06 TF meeting

Columbia River CROSSING

CRC Task Force Meeting 3/22/2006

River Crossings- Arterials

Summary of Arterial River Crossings

Summary of Step A Screening Recommendation for Arterial River Crossing Components

	Q1 Traffic	Q2 Transit	Q3 Freight	Q4 Safety	Q5 Bike/ped	Q6 Seismic	Overall
RC-14	Note[1]	F	P	F	F	F	F
RC-15	Note[1]	F	P	F	F	F	F
RC-19	Note[1]	P	U	F	P	F	F
RC-21	F	F	F	F	F	F	F
RC-22	Note[1]	P	U	F	P	F	F
RC-23	Note[1]	P	U	P	P	U	P

[1] May provide some potential benefit in congestion management relative to 2030 No Build conditions.

P = Pass F = Fail NA = Not Applicable U = Unknown New since 3-22-06 TF meeting

Columbia River CROSSING

River Crossings- non I-5 Highway Corridors

Summary of non-I-5 Highway Corridor River Crossings

- RC-16: New Western Highway
- RC-17: New Eastern Columbia River Crossing
- RC-18: I-205 Improvements

Columbia River CROSSING

River Crossings- non I-5 Highway Corridors

Summary of non-I-5 Highway Corridor Crossings

Summary of Step A Screening Recommendation for non-I-5 Highway Corridor Crossing Components

	Q1 Traffic	Q2 Transit	Q3 Freight	Q4 Safety	Q5 Bike/ped	Q6 Seismic	Overall
RC-16	Note[1]						
RC-17	F						
RC-18	F						

[1] May provide some potential benefit in congestion management relative to 2030 No Build conditions.

P = Pass F = Fail NA = Not Applicable U = Unknown New since 3-22-06 TF meeting

Columbia River CROSSING

River Crossings- non I-5 Highway Corridors

Summary of non-I-5 Highway Corridor Crossings

Summary of Step A Screening Recommendation for non-I-5 Highway Corridor Crossing Components

	Q1 Traffic	Q2 Transit	Q3 Freight	Q4 Safety	Q5 Bike/ped	Q6 Seismic	Overall
RC-16	Note[1]	F					
RC-17	F	F					
RC-18	F	F					

[1] May provide some potential benefit in congestion management relative to 2030 No Build conditions.

P = Pass F = Fail NA = Not Applicable U = Unknown New since 3-22-06 TF meeting

Columbia River CROSSING

River Crossings- non I-5 Highway Corridors

Summary of non-I-5 Highway Corridor Crossings

Summary of Step A Screening Recommendation for non-I-5 Highway Corridor Crossing Components

	Q1 Traffic	Q2 Transit	Q3 Freight	Q4 Safety	Q5 Bike/ped	Q6 Seismic	Overall
RC-16	Note[1]	F	F				
RC-17	F	F	F				
RC-18	F	F	F				

[1] May provide some potential benefit in congestion management relative to 2030 No Build conditions.

P = Pass F = Fail NA = Not Applicable U = Unknown New since 3-22-06 TF meeting

Columbia River CROSSING

CRC Task Force Meeting 3/22/2006

River Crossings- non I-5 Highway Corridors

Summary of non-I-5 Highway Corridor Crossings

Summary of Step A Screening Recommendation for non-I-5 Highway Corridor Crossing Components

	Q1 Traffic	Q2 Transit	Q3 Freight	Q4 Safety	Q5 Bike/ped	Q6 Seismic	Overall
RC-16	Note[1]	F	F	F			
RC-17	F	F	F	F			
RC-18	F	F	F	F			

[1] May provide some potential benefit in congestion management relative to 2030 No Build conditions.

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Columbia River CROSSING

CRC Task Force Meeting 3/22/2006

River Crossings- non I-5 Highway Corridors

Summary of non-I-5 Highway Corridor Crossings

Summary of Step A Screening Recommendation for non-I-5 Highway Corridor Crossing Components

	Q1 Traffic	Q2 Transit	Q3 Freight	Q4 Safety	Q5 Bike/ped	Q6 Seismic	Overall
RC-16	Note[1]	F	F	F	F		
RC-17	F	F	F	F	F		
RC-18	F	F	F	F	F		

[1] May provide some potential benefit in congestion management relative to 2030 No Build conditions.

P = Pass F = Fail NA = Not Applicable U = Unknown New since 3-22-06 TF meeting

Columbia River CROSSING

River Crossings- non I-5 Highway Corridors

Summary of non-I-5 Highway Corridor Crossings

Summary of Step A Screening Recommendation for non-I-5 Highway Corridor Crossing Components

	Q1 Traffic	Q2 Transit	Q3 Freight	Q4 Safety	Q5 Bike/ped	Q6 Seismic	Overall
RC-16	Note[1]	F	F	F	F	F	
RC-17	F	F	F	F	F	F	
RC-18	F	F	F	F	F	F	

[1] May provide some potential benefit in congestion management relative to 2030 No Build conditions.

P = Pass F = Fail NA = Not Applicable U = Unknown New since 3-22-06 TF meeting

Columbia River CROSSING

CRC Task Force Meeting 3/22/2006

River Crossings- non I-5 Highway Corridors

Summary of non-I-5 Highway Corridor Crossings

Summary of Step A Screening Recommendation for non-I-5 Highway Corridor Crossing Components

	Q1 Traffic	Q2 Transit	Q3 Freight	Q4 Safety	Q5 Bike/ped	Q6 Seismic	Overall
RC-16	Note[1]	F	F	F	F	F	F
RC-17	F	F	F	F	F	F	F
RC-18	F	F	F	F	F	F	F

[1] May provide some potential benefit in congestion management relative to 2030 No Build conditions.

P = Pass F = Fail NA = Not Applicable U = Unknown New since 3-22-06 TF meeting

Columbia River CROSSING

CRC Task Force Meeting 3/22/2006

River Crossings

Other River Crossing Components Recommended to Not Advance

- RC-5: Replacement Bridge Downstream/high level
- RC-6: Replacement Bridge Upstream/high level
- RC-10: Supplemental Bridge Upstream/mid-level
- RC-11: Supplemental Bridge Downstream/high level
- RC-12: Supplemental Bridge Upstream/high level
- RC-20: Replacement Tunnel

Columbia River CROSSING

River Crossings

Summary of Other River Crossing Components Recommended to Not Advance

	Q1 Traffic	Q2 Transit	Q3 Freight	Q4 Safety	Q5 Bike/ped	Q6 Seismic	Overall
RC-5	P						
RC-6	P						
RC-10	P						
RC-11	P						
RC-12	P						
RC-20	F						

P = Pass F = Fail NA = Not Applicable U = Unknown

Columbia River CROSSING

River Crossings

Summary of Other River Crossing Components Recommended to Not Advance

	Q1 Traffic	Q2 Transit	Q3 Freight	Q4 Safety	Q5 Bike/ped	Q6 Seismic	Overall
RC-5	P	P					
RC-6	P	P					
RC-10	P	P					
RC-11	P	P					
RC-12	P	P					
RC-20	F	F					

P = Pass F = Fail NA = Not Applicable U = Unknown

Columbia River CROSSING

River Crossings

Summary of Other River Crossing Components Recommended to Not Advance

	Q1 Traffic	Q2 Transit	Q3 Freight	Q4 Safety	Q5 Bike/ped	Q6 Seismic	Overall
RC-5	P	P	P				
RC-6	P	P	P				
RC-10	P	P	P				
RC-11	P	P	P				
RC-12	P	P	P				
RC-20	F	F	F				

P = Pass F = Fail NA = Not Applicable U = Unknown

Columbia River CROSSING

River Crossings

Summary of Other River Crossing Components Recommended to Not Advance

	Q1 Traffic	Q2 Transit	Q3 Freight	Q4 Safety	Q5 Bike/ped	Q6 Seismic	Overall
RC-5	P	P	P	F			
RC-6	P	P	P	F			
RC-10	P	P	P	F			
RC-11	P	P	P	F			
RC-12	P	P	P	F			
RC-20	F	F	F	P			

P = Pass F = Fail NA = Not Applicable U = Unknown

Columbia River CROSSING

CRC Task Force Meeting 3/22/2006

River Crossings

Summary of Other River Crossing Components Recommended to Not Advance

	Q1 Traffic	Q2 Transit	Q3 Freight	Q4 Safety	Q5 Bike/ped	Q6 Seismic	Overall
RC-5	P	P	P	F	P		
RC-6	P	P	P	F	P		
RC-10	P	P	P	F	P		
RC-11	P	P	P	F	P		
RC-12	P	P	P	F	P		
RC-20	F	F	F	P	F		

P = Pass F = Fail NA = Not Applicable U = Unknown

Columbia River CROSSING

CRC Task Force Meeting 3/22/2006

River Crossings

Summary of Other River Crossing Components Recommended to Not Advance

	Q1 Traffic	Q2 Transit	Q3 Freight	Q4 Safety	Q5 Bike/ped	Q6 Seismic	Overall
RC-5	P	P	P	F	P	P	
RC-6	P	P	P	F	P	P	
RC-10	P	P	P	F	P	U	
RC-11	P	P	P	F	P	U	
RC-12	P	P	P	F	P	U	
RC-20	F	F	F	P	F	P	

P = Pass F = Fail NA = Not Applicable U = Unknown

Columbia River CROSSING

River Crossings

Summary of Other River Crossing Components Recommended to Not Advance

	Q1 Traffic	Q2 Transit	Q3 Freight	Q4 Safety	Q5 Bike/ped	Q6 Seismic	Overall
RC-5	P	P	P	F	P	P	F
RC-6	P	P	P	F	P	P	F
RC-10	P	P	P	F	P	U	F
RC-11	P	P	P	F	P	U	F
RC-12	P	P	P	F	P	U	F
RC-20	F	F	F	P	F	P	F

P = Pass F = Fail NA = Not Applicable U = Unknown

Columbia River CROSSING

River Crossings

River Crossing Components Not Recommended to Advance

- Mid to High Level I-5 Bridges that encroach into airport airspace (RC-5, RC-6, RC-10, RC-11, RC-12)
- Arterial crossings that are not consistent with problem definition (RC-14, RC-15, RC-19, RC-21, RC-22)
- Components proposing to invest in highway corridors other than I-5 (RC-16, RC-17, RC-18)
- Replacement tunnel that bypasses the I-5 Bridge Influence Area (RC-20)

Columbia River CROSSING

River Crossing Components Recommended to Advance

- RC-1: Replacement Bridge/Downstream/Low-Level/Movable
- RC-2: Replacement Bridge/Upstream/Low-Level/Movable
- RC-3: Replacement Bridge/Downstream/Mid-Level
- RC-4: Replacement Bridge/Upstream/Mid-Level
- RC-7: Supplemental Bridge/Downstream/Low-Level/Movable
- RC-8: Supplemental Bridge/Upstream/Low-Level/Movable
- RC-9: Supplemental Bridge/Downstream/Mid-Level
- RC-13: Tunnel to Supplement I-5
- RC-23: Arterial Crossing with I-5 Improvements

Columbia River CROSSING

RIVER CROSSING

Summary of River Crossing Recommendations RC 1 - 12

COMPONENTS		COMPONENT SCREENING RESULTS						
ID	NAME	Q.1	Q.2	Q.3	Q.4	Q.5	Q.6	Overall
RC-1	Replacement Bridge-Downstream/Low-level/Movable	P	P	P	P	P	P	P
RC-2	Replacement Bridge-Upstream/Low-level/Movable	P	P	P	P	P	P	P
RC-3	Replacement Bridge-Downstream/Mid-level	P	P	P	P	P	P	P
RC-4	Replacement Bridge-Upstream/Mid-level	P	P	P	P	P	P	P
RC-5	Replacement Bridge-Downstream/High-level	P	P	P	F	P	P	F
RC-6	Replacement Bridge-Upstream/High-level	P	P	P	F	P	P	F
RC-7	Supplemental Bridge-Downstream/Low-level/Movable	P	P	P	U	P	U	P
RC-8	Supplemental Bridge-Upstream/Low-level/Movable	P	P	P	U	P	U	P
RC-9	Supplemental Bridge-Downstream/Mid-level	P	P	P	U	P	U	P
RC-10	Supplemental Bridge-Upstream/Mid-level	P	P	P	F	P	U	F
RC-11	Supplemental Bridge-Downstream/High-level	P	P	P	F	P	U	F
RC-12	Supplemental Bridge-Upstream/High-level	P	P	P	F	P	U	F

Columbia River CROSSING

RIVER CROSSING

Summary of River Crossing cont. Recommendations RC 13 - 23

COMPONENTS		COMPONENT SCREENING RESULTS						
ID	NAME	Q.1	Q.2	Q.3	Q.4	Q.5	Q.6	Overall
RC-13	Tunnel to supplement I-5	P	P	P	P	P	U	P
RC-14	New Corridor Crossing	Note1	F	P	F	F	F	F
RC-15	New Corridor Crossing plus Widen Existing I-5 Bridges	Note1	F	P	F	F	F	F
RC-16	New Western Highway (I-605)	Note1	F	F	F	F	F	F
RC-17	New Eastern Columbia River Crossing	F	F	F	F	F	F	F
RC-18	I-205 Improvements	F	F	F	F	F	F	F
RC-19	Arterial Crossing to Supplement I-5	Note1	P	U	F	P	F	F
RC-20	Replacement Tunnel	F	F	F	P	F	P	F
RC-21	33rd Avenue Crossing	F	F	F	F	F	F	F
RC-22	Non-Freeway Multi-Modal Columbia River Crossing	Note1	P	U	F	P	F	F
RC-23	Arterial Crossing with I-5 Improvements	Note1	P	U	P	P	U	P

1 May provide some potential benefit in congestion management relative to 2030 No Build.

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Columbia River CROSSING

Transit Components

- 14 transit components
- Considered mode only
- Applied following Step A questions relating to:

  Q1. Vehicular capacity/demand

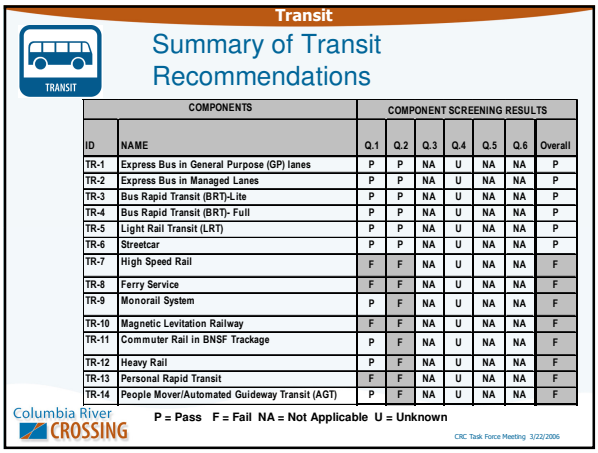
  Q2. Transit performance

Transit Components Recommended to Advance

- TR-1: Express Bus in General Purpose Lanes
- TR-2: Express Bus in Managed Lanes
- TR-3: Bus Rapid Transit (BRT)- Lite
- TR-4: Bus Rapid Transit (BRT)- Full
- TR-5: Light Rail Transit (LRT)
- TR-6: Streetcar

Transit Components Not Recommended to Advance

- Transit modes with **operational characteristics** that make them infeasible to effectively serve most I-5 transit markets and attract significant I-5-oriented ridership
  - TR-7: High Speed Rail
  - TR-8: Ferry Service
  - TR-10: Magnetic Levitation (MagLev) train
  - TR-13: Personal Rapid Transit (PRT)
- Transit modes requiring exclusive right-of-way or other infrastructure that makes **system integration** with existing regional transit system infeasible
  - TR-9: Monorail System
  - TR-11: Commuter Rail in BNSF Trackage
  - TR-12: Heavy Rail
  - TR-14: People Mover/Automated Guideway Transit (AGT)



COMPONENTS		COMPONENT SCREENING RESULTS						
ID	NAME	Q.1	Q.2	Q.3	Q.4	Q.5	Q.6	Overall
TR-1	Express Bus in General Purpose (GP) lanes	P	P	NA	U	NA	NA	P
TR-2	Express Bus in Managed Lanes	P	P	NA	U	NA	NA	P
TR-3	Bus Rapid Transit (BRT)-Lite	P	P	NA	U	NA	NA	P
TR-4	Bus Rapid Transit (BRT)- Full	P	P	NA	U	NA	NA	P
TR-5	Light Rail Transit (LRT)	P	P	NA	U	NA	NA	P
TR-6	Streetcar	P	P	NA	U	NA	NA	P
TR-7	High Speed Rail	F	F	NA	U	NA	NA	F
TR-8	Ferry Service	F	F	NA	U	NA	NA	F
TR-9	Monorail System	P	F	NA	U	NA	NA	F
TR-10	Magnetic Levitation Railway	F	F	NA	U	NA	NA	F
TR-11	Commuter Rail in BNSF Trackage	P	F	NA	U	NA	NA	F
TR-12	Heavy Rail	P	F	NA	U	NA	NA	F
TR-13	Personal Rapid Transit	F	F	NA	U	NA	NA	F
TR-14	People Mover/Automated Guideway Transit (AGT)	P	F	NA	U	NA	NA	F

Columbia River CROSSING

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DRAFT
Public Involvement Update

Report to the CRC Task Force

April 20, 2006

1. INTRODUCTION

The Columbia River Crossing (CRC) project held open houses on April 12, 2006, and April 13, 2006, to inform the public about the current status of the project and to solicit public comments about river crossing and transit component alternatives.

The April 12, 2006, open house was held at Hudson's Bay High School from 4:30 pm to 7:30 pm at 1206 E. Reserve Street in Vancouver, Washington. The April 13, 2006, open house was held at the Jantzen Beach Red Lion from 4:30 pm to 7:30 pm at 909 N. Hayden Island Drive in Portland, Oregon. A total of 103 attendees signed-in at the Vancouver open house and 102 attendees signed-in at the Portland open house.

The open houses were advertised through:

- Advertisements in the Asian Reporter, the Columbian, El Hispanic News, the Oregonian, Portland Observer, the Skanner, and the Reflector newspapers
- Media coverage in the Portland Tribune, the Oregonian, the Columbian, and the Reflector newspapers
- Media coverage on KATU Channel 2, KGW Channel 8, KPTV Channel 12, KOIN Channel 6 television stations, and KEX radio
- Press releases to regional print and broadcast media
- Postcards sent to approximately 10,000 physical addresses
- E-mails sent to 5,000 addresses on the Columbia River Crossing e-mail list, the Neighborhood Association Coalition of Clark County, City of Vancouver neighborhood associations, and the City of Portland Office of Neighborhood Involvement
- An announcement on Portland City Commissioner Sam Adams' website

The comments received from the public during the open houses will be used to help identify the range of issues to be addressed in the Environmental Impact Statement. This update describes the outreach efforts made during the April 12 and April 13, 2006, open houses, and provides a summary of the issues identified from the public comments.

2. DATA SOURCES AND METHODOLOGY

2.1 PUBLIC COMMENTS

The public comments summarized in Section 3 of this report came from two primary sources: 1) comment forms distributed at the two public open houses, and 2) other materials collected at the open houses.

2.1.1 COMMENT FORMS

Hard copies of the comment forms were distributed at the two public open houses at Hudson's Bay High School and the Jantzen Beach Red Lion on April 12 and April 13, 2006, respectively.

The comment form included two questions and a space to write additional comments. The comment forms were designed so they could be left with project staff at the open house or be mailed to the project office, in case an open house attendee needed more time to respond to the questions. The two questions on the comment form were:

- The Columbia River Crossing project is recommending that nine crossing ideas and six transit ideas be further evaluated and packaged with other items such as bike/pedestrian solutions, freight movement, and highway improvements. Do you agree with the staff recommendation? Yes or No? If no, please tell us how to improve the recommendation.
- In the next two years, the project team will consider a number or factors as we develop project alternatives. These include items such as interchange locations, air quality, noise, neighborhood connectivity, aesthetics, land use, community livability, cultural and water resources. What additional issues should the Columbia River Crossing project consider?

Responses to the questions are summarized in Section 3 of this report.

As of April 19, 2006, the project office has received 57 comment forms.

2.1.1 OTHER MATERIALS FROM OPEN HOUSES

The public was invited to write comments on a flip chart and a court reporter was available to transcribe oral comments at both open houses. 14 open house attendees wrote comments on the flip charts and 14 open house attendees provided oral comments to the court reporter. Additionally, one e-mail was sent to the project website several hours after the open house from an attendee who wished to follow-up on comments he provided on a comment form.

3. ISSUES IDENTIFIED DURING OPEN HOUSES

This section contains a summary of the public comments described in Section 2 above. 138 comments were gathered from the 85 combined flip chart and court reporter entries and comment forms. Because some of the individual comments related to more than one comment category, the total number of comments by type is 291. All comments have been categorized, as follows:

1. Travel Demand, Congestion and Accessibility
2. Economy and Freight
3. Public Transportation and Modal Choice
4. Safety and Seismicity
5. Community Livability and Human Resources
6. Natural Resources
7. Project Financing
8. Specific Alternatives
9. Process
10. Other Comments

Discussions of the comments for each category are given in the remainder of this section.

3.1 TRAVEL DEMAND, CONGESTION AND ACCESSIBILITY

Approximately 44 comments were received regarding travel demand, congestion and/or accessibility.

Similar to previous public comments received and reported to the CRC Task Force on November 30, 2005, concerns identified at the open houses included traffic congestion, bottlenecks in the I-5 north/Delta Park area, safety/capacity issues related to on/off ramps and access roads. Some commenters felt that traffic demand, as opposed to limited traffic capacity, was the cause of congestion problems in the I-5 corridor. Commenters felt that there was not enough merging space for on/off ramps, and found the lack of shoulders to be frustrating and dangerous.

Several commenters recommended that local traffic be separated from through traffic, by managing travel lanes or by constructing separate roadways.

3.2 ECONOMY AND FREIGHT

Approximately 19 comments were received regarding the economy and/or freight.

Commenters mentioned that if more jobs existed in Clark County, fewer people would commute to Portland, thereby reducing congestion. One commenter suggested using money from the CRC project to create jobs in Clark County, therefore alleviating the need for another crossing.

Comments on freight mirrored previous thoughts documented throughout the scoping process. Commenters were concerned that congestion on the I-5 corridor was slowing truck freight and harming the Oregon and Washington economies. These commenters had a variety of suggestions for facilitating truck freight travel to and from the Vancouver/Portland area. Ideas included creating new bridges and roadways; allowing trucks in the "fast lane" of I-5; replacing the I-5 Bridge with a bridge that does not raise/lower; and providing an express lane for trucks with origins and destinations outside the Portland/Vancouver area. Other commenters felt that rail and marine freight were more efficient than truck freight, and suggested the project invest in those other freight modes.

3.3 PUBLIC TRANSPORTATION AND MODAL CHOICE

Approximately 54 comments were received regarding public transportation and/or modal choice.

Of those commenters who mentioned public transportation, most of them supported public transportation for the CRC project. Many commenters spoke in favor of bringing light rail from Portland across the I-5 Bridge into Vancouver/Clark County. Many commenters said that without light rail, the CRC project will be unsuccessful. Several commenters also supported improved bus service in addition to light rail, or in place of light rail.

Some commenters disagreed with the project team's recommendation to drop commuter rail as a transit component, and suggested that commuter rail be reconsidered as a component.

Several commenters felt that the existing bicycling and pedestrian facilities on the I-5 Bridge were noisy, unsafe, or both, and requested improved facilities on the existing I-5 Bridge or any new Columbia River crossing.

3.4 SAFETY AND SEISMICITY

Approximately 11 comments were received regarding safety and/or seismicity.

One commenter noted that safety should be highly considered when designing a new crossing.

As in previous scoping efforts, many commenters feel that bicycle and pedestrian facilities on the existing bridge are unsafe. One commenter mentioned that the bicycle approach to the bridge from the southeast side is unsafe and should be improved.

Commenters noted that, in the event of an earthquake, multiple river crossings would be beneficial in case one or more crossings were damaged. One commenter noted that eliminating the current lift towers and the heavy counter weights would greatly reduce seismic risk. Additionally, the commenter suggested that the current piers could be further stabilized with additional peripheral piling and the trusses could be more securely anchored to the piers. Some commenters felt as though the existing bridges cannot be properly seismically retrofitted, and that entirely new crossings are necessary in order to be seismically sound.

3.5 COMMUNITY LIVABILITY AND HUMAN RESOURCES

Approximately 26 comments were received regarding community livability and/or human resources.

Historic/Aesthetic

A few comments were made regarding historic and aesthetic resources. One commenter asked that the project team avoid disturbing historic districts. Another commenter advised that the project team reconnect the two historic areas of downtown Vancouver that were separated when the interstate was originally built.

One commenter indicated that the best aesthetic approach would be to build a beautiful bridge, and if a beautiful bridge was not an option, build a tunnel instead. The commenter specifically advised against building a bridge that would look similar to the Marquam Bridge over the Willamette River. Another commenter said that aesthetics rank lower in importance than bridge functionality.

Neighborhoods/Environmental Justice

As mentioned during previous scoping efforts, the April open houses included comments regarding displacements and relocations. One commenter said that light rail should not be pursued as a component because he felt that homes would need to be removed to create a light rail park and ride facility. Another commenter asked where a floating home would be moved if it was displaced by the project. One commenter asked what kind of process would be used to purchase private property for the project and how residents would be made aware of any lost property value they might experience as a result of the project. Another commenter said that residents who may be displaced should vote on project alternatives. Commenters also noted that impacts to downtown Vancouver and Vancouver neighborhoods should be avoided.

A commenter mentioned building a lid over I-5 in Vancouver and several mentioned the importance of local access.

Quality

Commenters frequently cited traffic congestion as contributing to air pollution, and noted that mass transit would help to improve air quality. One commenter stated concerns over diesel emissions in the project corridor. The commenter recommended using a cleaner burning fuel source in heavy equipment during construction and developing a plan to mitigate air quality impacts during construction.

3.6 NATURAL RESOURCES

Approximately six comments were received regarding natural resources.

One commenter asked what impacts the project would have on the river and wildlife species. Another commenter asked the project team to consider the environment, fish, and water quality in the project selection process. One commenter said that the project area is already a major transportation corridor, and therefore the CRC project was likely to enhance, rather than degrade, the environment.

3.7 PROJECT FINANCING

Approximately 27 comments were received regarding project financing.

Tolling was the major theme of financing comments. Most commenters were in favor of tolling for a variety of reasons. The most common reason was the notion that those who use the bridge should pay for the bridge. One commenter said that tolls will help discourage single occupancy vehicles. Another commenter said that single occupancy vehicles should be charged larger tolls than higher occupancy vehicles.

Several commenters suggested electronic tolls to avoid delays. One commenter suggested frequent users could purchase toll cards that allow for multiple crossings at a lower per-crossing rate, and low-income users could buy toll cards at a reduced rate. Some commenters said that bicyclists, pedestrians and mass transit riders should pay tolls. A few commenters suggested collecting tolls now, in order to help pay for the project in the future.

One commenter supported tolls, but was concerned about the accountability for the money generated by tolls. Another commenter questioned how toll booths would impact bridge design.

Those who opposed tolling said that funds from Washington and Oregon taxes should be used to fund the CRC project. Some commenters said that tolls are unfair to people who live in Vancouver but work in Portland. Other commenters said that tolls are unfair to people with children in daycare or school, because they make frequent trips to drop children off or pick them up. Another commenter said that tolls will cause more congestion because they will confuse people and make drivers slow down to understand how to use the tolls.

One commenter asked how much money had been spent on public outreach meetings and materials over the past five years.

3.8 SPECIFIC ALTERNATIVES

Approximately 69 comments were received regarding specific alternatives.

Check boxes were included on the comment forms, so commenters could indicate if they agreed or disagreed with the river crossing and transit component recommendations of staff. Of the 57 surveys collected, 22 commenters indicated they agreed with staff, 14 disagreed with staff, and 21 chose not to check the boxes.

Though the river crossing and transit components presented at the open houses were identified by numbers (RC-1 to RC-23 for river crossings and TR-1 to TR-14 for transit components), most commenters did not reference these numbers when making their comments.

Several commenters supported the creation of an arterial or local access river crossing for cars, bicycles, and pedestrians, in addition to or in place of a new or improved freeway

crossing. Other comments about separating local traffic from freight traffic suggested multi-level bridges or lanes dedicated solely to freight. Most commenters favoring a new bridge supported a multi-modal bridge.

Several commenters supported a tunnel option, citing that the tunnel option has the least impacts on the surrounding environment. Some commenters were concerned about the cost of a tunnel.

Several commenters suggested new corridors for a river crossing, such as a new I-5 bridge and alignment west of downtown Vancouver, or a bridge from Camas-Washougal to Troutdale. Another new corridor idea included a bypass around Hayden Island and Jantzen Beach.

Many commenters said that a new bridge should not include a lift span because a lift span would perpetuate problems associated with the current bridge.

Some commenters supported a ferry system as a permanent or temporary means of alleviating congestion, and one commenter supported a form of personal automated transport.

Comments on transit components were included in Section 3.3, Public Transportation and Modal Choice.

3.9 PROCESS

Approximately 16 comments were received regarding process.

Several commenters asked what negative effects would occur in Vancouver and Portland from the project, and encouraged a further exploration of these effects before more potential alternatives are removed from consideration. Another commenter supported narrowing the current list of components, but indicated that there were likely components not on the list that should be discussed.

Many commenters expressed the importance of quickly moving the project forward. One commenter said that WSDOT and ODOT need to agree on a corridor now. Another commenter cautioned against letting the project get delayed.

One commenter said that the project should be built to accommodate traffic demands far into the future, because the commenter felt it could take 20 years for this project to be built. The commenter said that, at the very least, whatever the final alternative is, it should contain provisions for the next I-5 project.

Public Involvement

As mentioned in the Neighborhoods/Environmental Justice section, some commenters asked how and when people who may be displaced by the project will be informed of the process. One commenter asked the project team to make simpler posters, maps, and graphs for public outreach purposes.

Several commenters said the open houses were helpful and informative, and that they appreciated having knowledgeable staff on hand to answer questions. One commenter requested that once construction begins, the project team continue to hold open houses with engineers, project coordinators, construction managers, and site superintendents on-hand to provide project updates.

The Vancouver chapter of the American Institute of Architects (AIA) commented that they are working with the City of Vancouver to reintroduce a streetcar system into the downtown area. The AIA would like to coordinate their effort with the CRC project.

3.10 OTHER COMMENTS

Approximately 19 comments were received that did not correspond to the comment categories described above. One comment form received included no comments, only contact information.

A few commenters mentioned immigration control, limiting population growth in the area, development moratoriums, and future diminishing oil supplies as issues that should be taken into account by the project team. Comments were received for and against protecting the Pearson Air Park.

1764

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

No new freeway bridge, modify approach ramps. Light rail. Local bridge. Commuter rail-invest in freight trail infrastructure.

1765

Community Livability Human Resources:		Natural Resources:	x	Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety _Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

Peak oil. Global warming. Commuter rail.

1766

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

Light rail must be part of any new crossing.

1767

Community Livability _Human Resources:		Natural Resources:	x	Process :	
Travel Demand, Congestion _Accessibility:	x	Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

Environment--fish, water quality. Getting people out of cars.

1768

Community Livability Human Resources:		Natural Resources:		Process :	x
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety _Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

Yes, but do some of the ideas which are failed solve certain criteria better than the ideas remaining?

1769

Community Livability _Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

What impacts/effects will the crossing have on downtown Vancouver? What impact/effect will the crossing have on downstream traffic? Does the crossing solve the (6) criteria when applied to the entire metro area.

1770

Community Livability Human Resources:		Natural Resources:	x	Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety _Seismicity:			

Question: **No Question** **Source:** **Open House Survey**

What impacts will the crossing have on river and wildlife species? Light rail or street car connection would be a huge benefit to downtown Vancouver.

1771

Community Livability _Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

AIA Vancouver is working with the City of Vancouver to re-introduce a streetcar system into the downtown area with potential to expand and increase the livability of our community. Connecting with the CRC projects is something we will need. I spoke directly with Bob Dethlefs and Gregg Snyder. Please contact us for coordination. Thank you. Don

1772

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety _Seismicity:			

Question: **No Question** **Source:** **Open House Survey**

In my opinion it is important to extend tri-mets yellow light rail line into Vancouver. Perhaps having it on Washington St. would be a good idea. Light rail works! 55,000 or so people cross the river to work M-Fri. Often after the #6 tri-met bus pulls out of Hayden Island, headed for downtown Portland, it is already over half full. This one fact makes a case for light rail. Much consideration needs to be given to pedestrians and bicyclists. We need to reduce our dependence on the automobile. Thanks for your time, Dave.

1773

Community Livability _Human Resources:	x	Natural Resources:		Process :	x
Travel Demand, Congestion _Accessibility:	x	Public Transp# _Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

I think you have done a good job of advancing ideas that make sense or improve crossing the Columbia. On transit I think it is important that it encourage people to use transit by being faster than driving in a car and be efficient and reliable. We need to get people our of their cars to reduce congestion and air pollution.

1774

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:	x	Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:	x		

Question: **O - 2** **Source:** **Open House Survey**

I live in Clark County and commuted to Portland for 30 years. I think an important consideration that must be looked at by Clark County elected officials is encouraging job growth in Clark County. If we continue to focus on residential growth and remain a bedroom community to Portland, we will find it difficult to resolve the problems of crossing the Columbia River efficiently and safely.

1775

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **Open House Survey**

I'm questioning any alternative that includes a movable bridge solution. That's the problem we're trying to solve. Future generations would have to wonder, "What were they thinking? They had a chance to work around the "lift bridge" and all its problems and decided for it again. Why?"

1776

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

RC 11-with TR-5 makes most sense at this time. If RC-9 is used the existing bridges need retrofitting, none of this really help if the Haden Is bottle neck isn't fixed. Eventually two more crossing will be needed one at approx 192nd and one at RidgeField-(605)

1777

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

The exchange from 14 to new bridge will be a problem without making a loup North to enter the Bridge-May be a Loup South over the tracks would work better.

1778

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	x
Economy and Freight:		Project Financing:	x	No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **No Question** **Source:** **Open House Survey**

Biking and walking tax incentives. Electronic toll bridge.

1779

Community Livability _Human Resources:		Natural Resources:		Process :	x
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:	x	No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

Do not discount ridership of different transit options. The posters seem to kill ideas before they get a hearing. Tell what is being done right now to aleviate congestion. If efforts were made to help drivers understand that merging requires movement some of the problem would be solved. Enforce the HOV in Oregon, make it cross the bridge. Reinstate the south bound HOW in Washington. Collect $$$ from cheaters and use the money to get more improvements in the place.

1780

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:	x	Other:	x
Economy and Freight:	x	Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **No Question** **Source:** **Open House Survey**

Enumerate how you will encourage more people to use bicycles and transit. All of the transit proposals seem defeated at the outset. Do not discredit the potential for future inhabitants to use transit. If you do not believe in it how will you ever effect real change? No mention is made of the opportunity to limit population growth or discourage more people from putting pressure on all our infrastructure by their uncontrolled breeding. Consider proposing that the area limit growth. This does not necessarily mean discouraging economic growth.

1781

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety _Seismicity:	x		

Question: **O - 1** **Source:** **Open House Survey**

But, you must improve bicycle approach to the bridge from the sout east side. Currently, cyclists must come to a full stop, then look almost 180 degrees back over our left shoulder to check for oncoming traffic from the off ramp of I-5 and it is a nightmare and an accident waiting to happen.

1782

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

I particularly favor the local access bridge with SR 14 crossing on it and light rail, because this provides two additional ways to cross the river in the event an accident ties up either I-5 or I-205. Light rail should be added whichever alternative is selected, to provide additional bypass and reduce pollution. Bike lanes are also good, I bicycle across I-5 frequently. The tunnel idea and use of streetcars also have merit.

1783

Community Livability Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety _Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

Avoid disturbing residential neighborhoods, historical districts.

1784

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	x
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **No Question** **Source:** **Open House Survey**

The blue shirted aides were helpful and informative, good job.

1785

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

Give weight to the supplemental tunnel option. Put light rail on the existing bridge. It seems that the tunnel option just upstream is the best way to connect to Hwy 14 (underground) since elevation changes will be less of a problem.

1786

Community Livability _Human Resources:		Natural Resources:		Process :	x
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

A resounding NO on light rail. There is no money coming for pedestrians over bridge riders-until they contribute discount them. How much has been spent on these meetings and materials the last 5 years?

1787

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:	x	No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

Start collecting toll now, to pay for the final decision. If light rail is one of the alternatives, where are they going to park cars using it? Any bridge that is built should be west of downtown City of Vancouver.

1788

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	x
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety _Seismicity:			

Question: **No Question** **Source:** **Open House Survey**

Can Dean Lookingbill

1789

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

Thank you for including bicycle/ped considerations in your planning.

1790

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	x
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety _Seismicity:			

Question: **No Question** **Source:** **Open House Survey**

Congratulations for an excellent presentation!

1791

Community Livability Human Resources:	x	Natural Resources:		Process :	x
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

Stop pushing light rail. It would need parking and there's no land for parking unless you take peoples homes. Make sure the residents here get to vote on it or are you afraid to?

1792

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:	x	No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

A 3rd Bridge downstream to take traffic away from 134th and the 2 bridges. I have been told that there is at least 3 million set aside for light rail and none for another bridge. That's what is pushing light rail-has been for a number of years. Put a toll on bridge.

1793

Community Livability Human Resources:	x	Natural Resources:		Process :	x
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety _Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

Staff seems concern, but stops short of what's going to happen to "K" street in Vancouver, WA. You can't get a straight answer from know one. In 2000 I had to learn from the newspaper that I was going to loose my house along with 28 of my neighbors. You tried/tried dropping my tax base/my house by over $20,000 in one year. So when that "time" came, my house wouldn't be worth as much!!! What other "BS" is coming next. These meetings doen't mean much too me sense you can't get a straight answer! David Skagen, 2600 "K" St. Vancouver, WA, my "sign" says it all.

1794

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

I truly do think that an underground tunnel is going to be a good idea. A passage for pedestrians and another one for bikers.

1795

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety _Seismicity:	x		

Question: **O - 2** **Source:** **Open House Survey**

The safety of the people should be a highly considered concern.

1796

Community Livability Human Resources:		Natural Resources:		Process :	x
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **No Question** **Source:** **Open House Survey**

Make posters, maps, graphs, etc. more simple in the language department, please.

1797

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	x
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

Limit immigration now!

1798

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	x
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety _Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

Increase emmigration. Pass a moratorium on growth.

1799

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety _Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

How feasible is a multi-level system…e.g., trucks on bottom, cars on top, and/or North on bottom and South on top? Austin, TX has stacked lanes.

1800

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:	x	No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

Obviously cost. I favor strongly some form of a toll system. Those of us who use the bridges (I-5 and 205) should pay to do so. Frequent users could purchase toll cards that reduce the per-day rate. Low income users could buy toll cards at reduced rates. OR needs greater capacity from Downtown/Conv. area to/from the Columbia River. I also support toll roads/turnpikes.

1801

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

Whatever is built, put enough lanes on it. The I-5 partnership failed at this. Tunnel is preferred option. However, push the vertical alignment standards to get it in and out quicker. Bring it out on the Oregon side to land on Jantzen Beach. It technically would block some of the river channel, but its influence would be minimal in this tidal area.

1802

Community Livability _Human Resources:		Natural Resources:	x	Process :	x
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

This is already a major transportation corridor. The influence of this project is not going to degrade the environment and will probably enhance it over what is there now. The biggest factor is to get it built as soon as possible.

1803

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	x
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety _Seismicity:			

Question: **No Question** **Source:** **Open House Survey**

I was on the 1995 I-5/Clark County Transportation Committee

1804

Community Livability _Human Resources:		Natural Resources:		Process :	x
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

Yes, the options should be narrowed, but let's continue the think-tank on new options. See below

1805

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

Long term traffic solutions should recognize that future transportation will be determined by efficiency (energy efficiency). As commuter traffic will undoubtetly move more toward mass transit options, freight will continue to be a point-to-point transit in specialized vehicles. It is well known that vessel and rail transportation is more efficient, than truck transportation.

1806

Community Livability Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:	x	Other:	x
Economy and Freight:	x	Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **Open House Survey**

Vancouver has the opportunity and location (proximity to ocean, rail, and I-5 corridor) to become a major port city. Considering that one of the biggest obstacles to improving the port is the lack of a suitable I-5 connection. I think it is too early to rule out a more westerly river crossing, keeping access to the Port of Vancouver in mind. My personal proposal is as follows: Re-locate I-5 from between the Interstate Blvd area and the Main Street ramp in Vancouver. Move I-5 to the west side of downtown Vancouver. Extend SR-14 along the BNSF rail line into the port area. Extend SR-500 a little northward to re-connect with the new I-5. Next, use the existing Interstate bridges for surface-street traffic, light rail, buses, and bicycles. Re-connect the two historic areas of downtown Vancouver which were separated when the freeway was originally built. The entire economic impact on the prosperity of the whole area should be considered, not just the actual cost of the infrastrucutre. I have included a crude map of my thoughts on this. P.S. I have lived in Portland or Vancouver for the last 20+ years. I have a B.S. in C.E. from O.S.U. and I hold teaching credentials in advanced math and physics.

1807

Community Livability _Human Resources:		Natural Resources:		Process :	x
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

Yes, general approach of concepts, Now for some decisions and action

1808

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:	x	No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

Parking for commuters using mass transit--where would they be located? What is the cost?

1809

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:		Other:	
Economy and Freight:	x	Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **No Question** **Source:** **Open House Survey**

Proposal TR 3 looks good. Why not start truck freight traffic for non-rush hours-i.e. 6:30 PM to 6:00 AM-or permit use of H.O.V. lane during non-rush hour periods.

1810

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	x
Specific Alternatives:		Safety Seismicity:			

Question: **No Question** **Source:** **Open House Survey**

1811

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **No Question** **Source:** **Open House Survey**

AORTA's critique of the Columbia River Crossing Draft Components Step A Screening Report. The report claims the the Non-Freeway Multi-Modal Columbia River Crossing (Figure 5-23) failed component screening questions Q.1, Q. 3, Q. 4 and Q.6, assumes "it is not feasible to raise the existing I-5 Bridges" and recomments dropping commuter rail from further consideration. We disagree. Following is our rebuttal.

1812

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **Open House Survey**

Non-Freeway Multi-Modal Columbia River Crossing. Question 1: Does the component increase vehicular capacity or decrease vehicle demand within the bridge influence area? Yes, the multi-modal bridge meets both of these requirements. The freeway bridges would gain another through lane each way because they would no longer have to accommodate the acceleration lanes from the northbound and southbound approach ramps. As long as the main stem of the freeway remains at six lanes, there will be no need for additional freeway lanes across the river. The multi-modal bridge will add three to five additional lanes across the river for local and southbound freeway access traffic. It also will carry light rail, which would significantly reduce vehicle demand. Out of direction travel is not a major issue. The local access provided Hayden Island would more than offset the additional few minutes that will be required to travel to and from I-5 north through the Marine Drive Interchange. Commuter rail, in concert with light rail would further reduce vehicle demand. See later comments regarding commuter rail.

1813

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **Open House Survey**

Question 3: Does the component improve freight mobility within the BIA? Yes. Local access and light rail improve freight mobility by providing desirable alternatives for commuters, thus reducing congestion for trucks. In addition, improvements to the freight rail infrastructure that are needed and planned within the bridge influence area will reduce rail freight congestion, thus reducing the demand on motor freight. The assumption expressed in the report that the rate of growth for motor freight will be faster than rail freight is probably inaccurate given increasing fuel costs and the government finally recognizing that investment in railroad infrastructure is in the public interest. For example, Oregon will invest $100 million in the next few years on non-highway transportation infrastructure through the Connect Oregon Plan.

1814

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **Open House Survey**

1815

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **Open House Survey**

Question 4: Does the component improve safety and decrease vulnerability to incidents within the BIA? Yes. In addition to reducing traffic demand it improves freeway geometry, reduces the number of closely spaced ramps and lengthens weave distances. The grade and vertical sight distance can be improved at the north end of the bridge by eliminating the lift span and raising the trusses. The tight southbound on ramp from downtown Vancouver and SR 14 is eliminated by routing this traffic over the multi-modal bridge in a separate auxiliary lane. Both Hayden Island ramps to and from I-5 north are eliminated providing longer, safer weaves on Hayden Island. Greater northbound capacity is provided from Marine Drive by adding another lane on the Portland Harbor Bridge. Shoulder standards required for new structures by the FHWA are not possible on the existing bridge structures, but these are not new structures. Shoulders on the Marquam Bridge do not meet current standards either and it should be noted that the cross section of a possible tunnel, illustrated in this report, shows substandard shoulders. The geometry of the freeway north of the bridge can be modified or speed standards reduced if sight lines don't meet 70MPH freeway standards in this segment.

1816

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **No Question** **Source:** **Open House Survey**

Question 6: Does the component reduce seismic risk of the Columbia River Crossing? Yes. Eliminating the lift towers and the heavy counter weights greatly reduce the seismic risk. In addition, the piers could be further stabilized with additional peripheral piling and the trusses could be more securely anchored to the piers. We suspect the cost of seimic upgrading would be significant compared to the cost of a new bridge or tunnel. It is curious that in the report, this option (RC-22) failed this component but RC-7 through RC -13 that retained the existing briges with their vulnerable towers passed with an "Unknown (insufficient information)" rating.

1817

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **Open House Survey**

Feasibility of raising existing Bridges. Raising both of the bridges is feasible. The northbound bridge was raised to match the "hump" in the southbound bridge constructed in the 1950s. Although not explained in the report, we suspect the alleged reasons have to do with navigational clearances. Currently, most commercial river traffic forgoes the lift span in favor of the "hump" despite the need to make a 'S' turn maneuver between the highway and railroad bridges. It has been strongly recommended by the barge and rail companies that federal funds be invested in the railroad bridge by replacing the existing swing span with a wider lift span that would align with the "hump". This change may occur before the commencement of this highway project. If the long span (#5 on the attached diagram) could be raised high enough to meet the Coast Guard's clearance requirements for essential river traffic, the main channel could then be moved south and the lift spans decommissioned. The bridge raising option should not be eliminated prior to this determination. The Non-Freeway Multi-Modal Bridge we propose does not depend upon raising the existing bridges or eliminating the lift spans. However, if the lift spans are not eliminated, the new bridge would also need a lift span aligned with them.

1818

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **Open House Survey**

Commuter Rail. Commuter rail operating on existing regional rail tracks would greatly improve public transit service in the Bridge Influence Area. The stated claim that it would be infeasible to integrate with the existing bus and rail network is absurd. Throughout the world, commuter rail stations become hubs for local transit systems allowing seamless access to and from destinations far beyond the train stations with are not just park and ride lots. We acknowledge that commuter rail was not recommended in the "I-5 Rail Capacity Study" (Feb. 2003). This conclusion was based on a cursory commuter rail analysis done by ODOT of only one rather ambitious commuter rail scenario, which assumed that the freight rail infrastructure in the Influence Area would experience only modest incremental upgrades. A more conservative phased development of commuter rail, combined with a more aggressive freight rail infrastructure improvement plan, was never studied or vetted. For example, peak hour commuter rail service between Ridgefield and Union Station in the Amtrak corridor is feasible if combined with the incremental improvements and grade separation of the UPRR and BNSF rail lines at N. Portland Junction recommended in the Rail Capacity Report. Such rail infrastructure improvements are practical to accomplish within the time frame of the I-5 project, especially now that there is growing cooperation between the Class I railroads and state and local governments to share in the cost of rail improvements.

1819

Community Livability Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:	x	No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **No Question** **Source:** **Open House Survey**

I am strongly in support of mass transit as an integral part of this project. Here are my suggestions: 1. Do not be afraid of light rail. Its ability to connect communities is just what makes it special. 2. I believe having light rail in Vancouver would be very beneficial to this community. However, light rail is not a very fast way to travel long distances from point A to point B. Therefore, I suggest express buses (at least) as well. 3. Thank you for considering the needs of cyclists. As a bicyclist myself, I would be eternally grateful for a DIRECT BIKE PATH to Portland. (However, I understand this is not exactly your responsibility). 4. I associate tunnels with budget overruns (Big Dig). I believe I am not alone. That leaves the mid-level crosing as the only practical solution. 5. If we need a bypass, have it go way out west (splitting off of I-5 north of Salmon Creek) and joining on around 217-26 m Oregon. However, I don't think this should be part of this discussion I think it should be saved for later. 6. I hope that this project may assist in urban renewal in Vancouer. Light Rail provides high-capacity infrastructure critical to higher density. I believe that it will allow us to create a better community that thrives in its diversity and connection to Portland. (Portland is our greatest friend, Mr. Mayor, not a competitor). I urge the Columbia River Crossing team to keep the need for community development and critical social interaction that will allow us to create a first class community.

1820

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	
Economy and Freight:	x	Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

I think further consideration needs to be given to specifically relieve congestion for freight hauling vehicles. In addition to using a restricted use lane to add a transit solution to this corridor, it maybe important to provide managed lanes to allow freight haulers access to a open lane unburdened by commuter traffic.

1821

Community Livability Human Resources:	x	Natural Resources:		Process :	x
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety _Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

The project developers should pay particular attention to the negative impacts to homeowners along this corridor. How will the landowners be asked to take the decisions arrived at on their backs, and how will they lose out on their propertys' usability and future value?

1822

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

Transit recommendations tied to 19th century technology, we need to use 21st century technology.

1823

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety _Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

See attached (Attached to this comment form were two documents: 1. The Higherway Differences, Suburb to Suburb Quicker. Prepared by Tad Winieck, Higherway Transportation Research. 2. A Democratic Approach to Land Use and Transportation Planning for the Albuquerque Metro Retion. Primary Author: Ian Ford.

1824

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:	x	No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

Yes. I just wanted to say that I think a modern system of toll collecting could be very fair and practical. In Boston, for example, cars get a computer chip which registers each time they pass a gate; Owner of car gets a bill every three months. One way or another we DO need to expect to pay for transportation improvements and I think most of public is coming to realize it.

1825

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety _Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

I think the above is a good list. Costs need to be considered throughout but cannot be the deciding point, except that education of public of need to pay needs to be emphasized. People buy a 20, 000 car and don't realize it is worthless without good roads & bicycles.

1826

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

No. I agree with all except that operation of Pearson Air Park should not affect decision. Close PAP if needed to improve transit.

1827

Community Livability _Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

1) Absolutely do not cut more I-5 lanes into Vancouver neighborhoods. 2) Public transit consideration should be weighted over bridge styles and locations. Any solution without light rail or dedicated bus lanes will not work.

1828

Community Livability Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety _Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

As a whole the ideas seem to be well thought out. I would like to see a multi-level bridge rather than expanding lanes on I-5 (in Vancouver) since I live in our area near the bridge. In addition, I believe light rail is the way to go for transit options.

1829

Community Livability _Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

1) noise, 2) Livability

1830

Community Livability Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety _Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

Yes, but perhaps some of the failed options, like the ferry should only be looked at as a temporary option until the final solution is funded & built. Add design option (sub) to cap the I-5 in City center Vancouver and choose some ramps. There should be a separate option (short term). TDm + Travel Smart too + free C-Tran transfer)

1831

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

vehicle vibration and birds (poop& debris on bridge - poor maintenance); robustness of DATA, we need more sampling sites to establish a air quality baseline, one existing sampling point is not enough.; bridge grade and approach design for bicyclists and pedestrians cannot be too steep of isolated (scary); I-205 is too steep northbound & noisy.

1832

Community Livability _Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **Open House Survey**

Ctran has lost 25% of its ridership (120K) in the last year since the fare hike and ending of free transfers. They are mismanaging public transit here and are contributing to the bridge congestion. I do not own a car and use transit frequently, but Trimet is much better (hours, headway, etc). perhaps reform of CTran (service only in Vancouver) is in order. As far as CRT service, please consider providing a 4 Track section to allow express trains up here. It will be a very long trip to Vancouver Mall to Downtown Portland. Please do the tunnel. Yes, it is more money, but it is a long term solution and will help downtown Vancouver redevelop vs a wider highway on a double deck viaduct. For any bridge, please make the path wider for bikes and pedestrians and allow for places to sit and not as you cross it (help the elderly).

1833

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:	x	Public Transp# _Modal Choice:	x	Other:	
Economy and Freight:	x	Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:	x		

Question: **O - 1** **Source:** **Open House Survey**

No. The I-5 trade corridor study resulted in agreement by all jurisdictions that I-5 should have no more than 3 through lanes. Rehab the existing bridge, remove the on-ramps that are too close, so there are 3 full effective lanes. Then add a multi-modal bridge for arterial auto traffic, light rail and figure out where high speed rail should go. Then coordinate with freight railroads to replace the railroad swing span and improve rail freight.

1834

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety _Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

Reduce energy and petroleum use, reduce CO2 emissions, provide effective local and high speed transit options, keep cost to a minimum. We can't pour all our transportation resources into one site. Think Cost-effective! Don't go for the 100% solution if 50 % or 80% can be done for 20-40 % of the cost.

1835

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:	x	Public Transp# _Modal Choice:		Other:	
Economy and Freight:	x	Project Financing:	x	No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **Open House Survey**

RC-22 needs to be reconsidered. Make it work. It obviously meets all the project criteria. To say it doesn't reflects a bias against cheap solutions. So what would it take to lift the existing spans? It was already done for the older spans. What is needed to make a south channel under the "hump" work? Can you leave the lift span in for special moves at 2:00 am, and have normal river traffic use the "hump"? Work with the Coast Guard to save money.

1836

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

RC-9 . Good. Light wail that could be incorporated into A 3 state system along I-5.

1837

Community Livability _Human Resources:		Natural Resources:		Process :	x
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

Seems to me you need to be thinking 40 or 50 years out instead of only 20. It may take 20 years to make any solution. At the very least, whatever the final solution is it should contain provisions for the next expansion.

1838

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

What about a bridge from Camas - Washougal to Troutdale. The tunnel idea seems good, but if should go around Jantzen Breach, creating a new corridor. Consider reversible express lanes.

1839

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	x
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

Yes.

1840

Community Livability Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety _Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

Bike/Ped access from bridge into downtown Vancouver and beyond. I would like to see the project include a bike path along the I-5 corridor.

1841

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

No. No Lift bridges. Merely duplicated current problem. I feel that the western corridor crossing (RC 14) was the correct approach and the Arterial Corridor crossing would again be a vast improvement. I really feel that we need the Arterial plus the Western Highway (RC 16) all as bridges high enough to not need lifts.

1842

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

I agree with the proposal to ensure that the I-5 bridge meets seismic standards but not with proposals to enlarge or build more bridges. Not sure about the tunnel, but it seems like an expensive strategy. We need LIGHT RAIL!

1843

Community Livability Human Resources:		Natural Resources:	x	Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	x
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

Weather. Atlanta has paved so much to accommodate what has been called the largest population growth in the history of the plant. That there are not 4 sever storms per year more than in the past.

1844

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:	x	Public Transp# _Modal Choice:		Other:	x
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **No Question** **Source:** **Open House Survey**

If there is a group dedicated to light rail for transportation connectivity to Portland, I would appreciate contact information. This is the only solution I am willing to work for proactively.

1845

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

I like the proposal RC-9, Medium bridge Heights. I also favor a tunnel for light rail.

1846

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety _Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

Tunnel for light rail.

1847

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:	x	Other:	
Economy and Freight:	x	Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

Yes. 1) Seems the mid-level bridges should be favored for more study. High level bridges impact air lanes at Pearson & PDX, therefore, drop from further consideration. Low level bridges require lift spans. 2) To reduce traffic, focus on a combination of mass transit options - both light rail through the greater metropolitan area and greatly expanded/enhance bus service. 3) include bike and pedestrian facilities and access in every scenario consideration.

1848

Community Livability Human Resources:		Natural Resources:		Process :	x
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

Don't let the project get bogged down and delayed move ahead with deliberate speed so construction of new facilities can begin as soon as possible.

1849

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:		Other:	
Economy and Freight:	x	Project Financing:	x	No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

No. Everyone here is stuck in the I-5 box with no mention of how to pay for these "Boston-dig" type project. Tolls? I prefer that the Columbia Crossing focused more on a western crossing from Vancouver to US 30 to move heavy industrial traffic away from I-5.

1850

Community Livability Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety _Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

Impact on float home community. If home needs to be moved for bridge, where do you move them to?

1851

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:	x	No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

We were in Vancouver when second bridge was built. Tolls were collected and it worked well.

1852

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:		Other:	
Economy and Freight:	x	Project Financing:	x	No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

Yes. Is a two level bridge feasible? Consider rising fuel costs and how they may impact driving habits.

1853

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:	x	No Comment:	
Specific Alternatives:		Safety _Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

Consider costs and how we are going to pay for the new development.

1854

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **Open House Survey**

Eliminate the lift. Keep in mind that 20 years or so later we will need a new bridge downriver into Washington County.

1855

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:	x	Public Transp# _Modal Choice:	x	Other:	
Economy and Freight:	x	Project Financing:	x	No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

1) Since existing bridge costs to maintain, operate and is not seismic upgradeable, consider replacement only. 2) Bridge should include light rail component. 3) Bridge should be designed for future expansion (more lanes). 4) Traffic lanes should separate through traffic from local traffic. 5) If toll booths - what impact on design? 6)Consider two-level design with lower deck for local traffic and upper deck for through traffic.7) Remember the high point of bridge should be over the shipping lane (not over center of river). 8) If bridge spans over BHSF tracks, then area under ramp to bridge for connecting downtown Vancouver to FT Vancouver. 9) If bridge spans over BSNF tracks, then any direct connections to SR 14 may require spiral on /off ramps.

1856

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:	x	Public Transp# _Modal Choice:	x	Other:	
Economy and Freight:	x	Project Financing:	x	No Comment:	
Specific Alternatives:	x	Safety Seismicity:	x		

Question: **O - 1** **Source:** **Open House Survey**

10) Through suspension or stay-brace bridge would be beautiful, consider impact on Pearson Airfield and views. 11) Consider multi-level bridge, with transit, bicycle and pedestrian routes underneath for better views and safety. 12) Consider multi-level design, where lower level is reserved for additional future vehicular lanes - cause too hard to expand sideways or above. 13) Light rail on lower level would require less climb (4-5% grade) to high point of bridge. 14) Next presentation should focus on potential landing site and corrections. 15) Undertake a study of where bridge traffic originated and destinates - to determine feasibility of dedicated through-traffic lanes.

1857

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

Yes. I would appreciate a better, more clear definition of movable bridge. Fair (amount) of the proposed alternatives are listed as movable, but it is not clear explained. Would this mean a floating structure similar to Seattle's 520 bridge? If so, would this structure raise or move when will, this be decided?

1858

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

Public Statement - This is a chance to build an iconic structure that could be used to identify the area. This is one chance to show the world what we can do. I feel the selection of the a structure design should be weighted to include how unique a design is and how best it fits into the Northwest environment

1859

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

1) RC-1 & RC2 No because of movable component. 2) R-3 & RC 4 Yes. 3) RC-7, 8, 9 No., Because somewhere 8 lanes must split and that will extend the project N & South. Few will figure out new-old staging unless they travel routinely. This is a messy add-on fix. 4) No. RC-13 same "gotta select my lane 2 miles before the crossing" problem 5) RC-23. OK, but isn't it really time to nuke and pave these old bridges?

1860

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

1) TR-1 No. No inventive like fast bus to extract folks from their car. 2) TR-2 Yes. Because it extracts people from taking their car. 3) TR-3 through 6 See previous.

1861

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

I-5 TF studied transit options and recommended light rail - why redo this work? Tunnel Option w /retraining both bridges should include conversion of those bridges to arterials - local traffic and light rail.

1862

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

How can Portland's arterial network accommodate more vehicles? Focus resources on TDM & TSM that can improve existing conditions until capacity - transit & road - are added.

1863

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

I think they should keep the current I-5 bridge, and build a separate bridge next to the current bridge for additional auto traffic, light rail and bus and have additional walk and bike lanes on the additional bridge. Also they should have ferry service from Vancouver to downtown Portland. They should also have a commuter rail service from Vancouver Amtrak Station over the railroad bridge to the Portland Amtrak Station.

1864

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

Part of the solution must include a bridge to Hayden Island from Portland other than I-5. The new crossing must include ample space for light rail and express dedicated bus lanes. Both light rail and bus transit must be frequent service.

1865

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

Yes. Goals: 1) A true freeway solution along with local accesses 2) there must be rapid public transit - Vancouver must accept light rail. Both Ptld and Vanc. Must have thoughway lane dedication - bus ways. 3) Ctran should wake-up and get on board (new mgmt, should be blessing and brought into the fold) as well as a new limited access freeway bridge. We favor a I-5 freeway corridor, a light rail, bus and separate Jantzen Beach bridge (existing).

1866

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

If and when you complete this project especially doing the "right thing" for the long haul, by building a true I-5 corridor Rover Crossing as well at 9 to 10 lane freeway approaches as things are now. You will have not solved congestion, but merely moved the "cork" to traffic flow a few miles south i.e. Rose Garden area , I-405 west side and a few miles north here to 139th St and 179th Street areas. Portland must make a freeway from N. Portland to Wilsonville, Clark County, clear to 179th exclusive. Don't do this halfway. Good traffic for the future will depend on more than just a new bridge

1867

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	x
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **No Question** **Source:** **Open House Survey**

This type of community meeting - show is great (cookies were good too!) The ability for general public to talk directly to knowledgeable people in the planning process was very good. As this project jells and actual construction begins, you should include engineers, project coordinators, construction managers, and site superintendants who can provide direct, knowledgeable information "the good, bad and the ugly" as it goes, Phase out or low key the civic partisan slack, political agendas and "spin" artists. Be sure your factual information dispersed to the public eliminates the cover-ups (there will be booboos inevitably and a little room will fall on your parade and sometime s... just happens - deal with it and be forthright with the public and you will gain support all the way through (i.e. there are still Blazer fans hanging inspite of!)

1868

Community Livability _Human Resources:		Natural Resources:		Process :	x
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

I would like to see what impacts the approaches will have on both sides of the river. What will the impact zone be. This should be explored before any more of the potential solutions are deleted.

1869

Community Livability Human Resources:	x	Natural Resources:		Process :	x
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

Downstream traffic impact. Long term prognosis for the solutions. Impact to downtown vancouver.

1870

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

Retention of the existing bridges is impartial because of design constraints, those bridges would impose on a new bridge, and because the costs for seismic retrofitting would likely be very big, and possibly prohinitious. The best solution appears to be a 130' high 2-deck bridge whose navigation channel would move toward the rover's center. The 2- deck 10 lane (5 lanes each deck) would likely minimize the construction cost and minimize right of way impacts on Hayden Island and in Vancouver.

1871

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:	x	Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

Movement of the primary river navigation channel toward river center may also necessitate modification or reconstruction of the BNRR bridge immediately downstream. That modification / or construction could include additional freight tracks, dedicated tracks for light rail, and even truckl lanes to connect Portland and Vancouver port districts.

1872

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

No. No Growing US has ever solved auto transportation issues. Be envouraging auto usage let's try the following: 1) eliminate all access to Hayden Island from I-5. Vancouver no longer needs Hayden Island Retail. Most New residents on Hayden Island will commute to Portland. Entering I-5 disrupts I-5 traffic. Add a two lane bridge from Hayden Island to the Expo Center. 2) Add the 3rd Lane at Delta Point. 3) Remember the traffic stops at Jayden Island and Delta Park NOT on the bridge. 4) Move Jobs to Vancouver from Portland. Portland should continue to discourage business growth, Clark County should encourage business growth and restrict housing growth to regain commuter balance. 5) Have Oregon fix their school system so families do not have to move to Vancouver to get into good schools.

1873

Community Livability _Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:	x	No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

Money! As a billion dollar project expands to 2.3 Billion, the bill quickly approaches $3,000 - 5,000 per Clark County resident or $5,000 - 10,000 per family. This could be better spent envouraging businesses to move their jobs to Clark County & out of Portland. HOV lanes and commuter /bus parking in Vancouver and Clark County.

1874

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety _Seismicity:			

Question: **No Question** **Source:** **Flip Chart Notes**

Reverse Oregon HOV lane in the morning at Delta Park

1875

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:	x	Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **No Question** **Source:** **Flip Chart Notes**

Light Rail across the river and up Washington Street

1876

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **No Question** **Source:** **Flip Chart Notes**

Plan on using tolls to pay

1877

Community Livability _Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **No Question** **Source:** **Flip Chart Notes**

Where is the environmental justice for Vancouver?!

1878

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **No Question** **Source:** **Flip Chart Notes**

The tunnel concept has the least impact on the entire area

1879

Community Livability Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:	x	Public Transp# _Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **No Question** **Source:** **Flip Chart Notes**

Please do not fear light rail for its ability to connect culturally, economically, and racially diverse communities. We must not attempt to cut ourselves off from Portland.

1880

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **Flip Chart Notes**

Use trackless trolley, not light rail, has less infrastructure demands and is more flexible.

1881

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:	x		

Question: **No Question** **Source:** **Flip Chart Notes**

Supplemental (multiple bridges) are a good idea because is something (earthquake, boat crash, plane crash) happens to one bridge, we still have an alternate route and offers direct relief.

1882

Community Livability _Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **No Question** **Source:** **Flip Chart Notes**

I desire a better I-5. I live in a neighborhood next to it. I manage my driving on it by using transit, biking and living near work. Please do not widen the highway so that more traffic fills it with SUVs who keep moving further away from work. Consider tolls to help freight & transit mobility and drivers who have to get where they are going.

1883

Community Livability Human Resources:		Natural Resources:		Process :	x
Travel Demand, Congestion _Accessibility:	x	Public Transp# _Modal Choice:	x	Other:	
Economy and Freight:	x	Project Financing:	x	No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **Flip Chart Notes**

This major project needs to be done in phases: 1) new suspension bridge just east of current I-5 bridge or tunnel. 2) Use current bridges for Light Rail and local access. 3) Design into one of the bridges the capacity for High Speed Rail. Do this now as insurance and investment in our region. This corridor includes RAIL. If you don't, you can expect to spend over $500 million for a separate crossing just for High Speed Rail. OR and WA DOTs need to agree on a corridor now!

1884

Community Livability Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety _Seismicity:			

Question: **No Question** **Source:** **Flip Chart Notes**

Build It and they will come….LIGHT RAIL….Without a vision ('people') we will perish.

1885

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **No Question** **Source:** **Flip Chart Notes**

The traffic jam is NOT the bridge! It is Hayden Island Access and Delta Park Lane Reduction. Eliminate Hayden Island Access and give the (?) a dedicated 2 lane bridge to the Expo Center only (not north). Vancouver no longer needs Hayden Island Retail. Jantzen Beach was built in 1970 so Vancouver could avoid sales tax. I live in Vancouver and do most of my shopping on Hayden Island and Jantzen Beach. I would like to be able to ride light rail from downtown Vancouver to Jantzen Beach and then to downtown Portland.

1886

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **No Question** **Source:** **Flip Chart Notes**

We do use and need Hayden Island and will for the years to come!

1887

Community Livability _Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **No Question** **Source:** **Flip Chart Notes**

If I'm coming up MLK to get a drink at Shenanigans - I should NOT have to get on an Interstate Freeway.

1888

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	x
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety _Seismicity:			

Question: **No Question** **Source:** **Letter**

I retired from Tri-Met after thrity years of observing how public transportation benefits taxpayers of Oregon. Today I want to give you facts on why rail service should be included in the Columbia River Crossing Solution. The Amtrak Cascades ranks among the top Amtrak rail ines in the United States. This Passenger Railroad runs from Eugene, Oregon to Vancouver, British Columbia, following the Interstate 5 Corridor. In 2005 the passenger count increased 5.6 percent to 636,892 passengers in this corridor. The American Public Transportation Association (APTA) reports 9.7 billion trips were made in the US during the year 2005. This was a 100 million ride increase over 2004 public transit usage. Light Rail picked up the largest increase in passengers. Minneapolis Light Rail increased by 168% in 2005. Houston Light Rail trips increased by 38%, Salt Lake Light Rail increased by 13%. APTA also reported Commuter Rail trips increased significantly in 2005. San Carlso, CA Commuter Rail trips increased by 12.5% Indiana Commmuter Rail saw an increase of 7.3 in 2005. Tri-Met is building a Commuter Rail line from Wilsonville to Beaverton to be open before year 2010.

1889

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:	x	Other:	x
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety _Seismicity:			

Question: **No Question** **Source:** **Letter**

Referring to the CRC Draft Component Step A Screening Report, dated 3/22/06 on page 3-2, figure 3-1: The Oregon origins and Washington destinations shows where potential Interstate Bridge usage would occur in 2020. It is quite evident most are in close proximity of the Interstate 5 corridor. Light Rail is most effective when there is a concentration of potential riders as portrayed in this diagram. The Light Rail Yellow line along Interstate 5 picks up 12,000 rides daily. If the Yellow line were extended to Clark County it could pick up 12,000 rides during each rush hour by the year 2020. Planning and building rail options is the best solution in crossing the Columbia River. And it will cost less than a new freeway bridge. This includes a Light Rail bridge at the Interstate Bridge location. Adding a 22 foot wide Light Rail double track supported between the North and South lanes of the I-205 bridge. And upgrading the present heavy rail bridge will enhance Amtrak service, future Commuter Rail service plus improve freight movement.

1890

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:	x	Other:	x
Economy and Freight:		Project Financing:	x	No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

I attended the Open House last night. I want to urge the CRC Task Force to approve the Arterial Bridge option for further study. As I understand it, this option would provide for arterial capacity for local trips that now constitute 1/3 of the traffic on I-5. For this concept to work, it must also have transit ROW, preferably for lightrail. It can also be an opportunity for an outstanding bike/ped facility on the down stream side, assuming the new arterial bridge would be adjacent to the existing bridges on the downstream side. Staff raised a question as to whether federal highway $ could be used for this option. Federal FTA $ could bepart of the transit piece with local (toll?) funds covering the remainder. FHWA $ could be used to pay for the needed upgrades to the exiting freeway...eliminating substandards on/off ramps and seismic upgrades, etc. Clearly this option would be relatively low cost and would provide the best transportation options to commuters....arterial roadway, high capacity transit and direct bike route.

1891

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	x
Economy and Freight:		Project Financing:	x	No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

Another option that I urge the CRC TF to keep in the running is the Short Tunnel, with retention of the existing bridges. This is expensive but full of potential if the existing bridges are retrofit for arterial traffic and high capacity transit, again LRT would be preferred. The old freeway approaches between the bridges and the tunnel portals on both sides of the river could then be converted as well to boulevard designs, freeing upadjacent land for development, trying downtown Vancouver to the Historic Reserve, etc. The fundamental approach must be 1. provide for local rips...some arterial capacity...2. for a real transit option...extension of the Yellow Line just makes sense, and 3. a safe and direct bike/ped facility. Whwther this is achieved by construction of an arterial bridge LRT and upgrading the freeway OR by construction of a freeway tunnel and conversion of the existing bridges to arterial/lightrail depends on how deep our pockets are. Either would do the trick. But please...I shold NOT have to get on the west's Interstate Freeway to get from N. Portland to Shenanigans to have a drink.

1892

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

Yes. The Connection to HWY 14 (WA) when gong North on I-5 needs better signage, and perhaps new bridge lanes or this function.

1893

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:	x	No Comment:	
Specific Alternatives:		Safety _Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

I believe Tolls is way to fund addtion costs and time delay in traffic= $$ money

1894

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

I'm leaning toward construction of a tunnel and including light rail on the bridge. Although the tunnel is probably more expensive than some options, it impacts the environment less than other options.

1895

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

Extend Max, Light Rail across the river, it is begging to come acreoss noth now that is at the expo center. It could easily cross further west near the railsroad crossing.

1896

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	x
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

"Limit number of people who move to Washington or Oregon" Tom McCall

1897

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety _Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

No. Commuter Rail shold be studied further. Odots Columbia Rail study indicates the need for major improvements. With these improvements, rail may be feasible. Your traffic info indicated that a significant amount of the traffic is travelling longer distances than just the bridge zone. A 3 or 4 track rail bridge could solve or helo 2 problems 0freight and people in a more environmental way.

1898

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:	x	Other:	
Economy and Freight:	x	Project Financing:	x	No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **Open House Transcript**

I would like to make a recommendation to reward people for using alternative forms of transportation;i.e., bicycles or car pooling. And I don't know how it would be institued, but give them cash or tax incentives to use mass transit because many of us are -- have jobs in Oregon, we pay Oregon income tax, and I think it would be a good way to maybe give us a way to vote. Maybe if we don't get tax breaks, maybe these fundscould go into a pool for the new bridge or the new improvements. That's simply it. Maybe a card reader at the end of a bridge so you can record whether you're going across the bridge and you're using it. And I think that would be a way to get us to use alternative forms of transportation. We had an opportunity once when the bridge was closed and people took vacations, they car pooled, and they took the load off the system. And I don't think that the answers to this are going to be a great big sweeping ideas, I think it's going to be a combination of many ideas that will make this whole project work over the span of the project whether it be, I don't know, what 20 years, a hundred years. And that's it.

1899

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:	x	Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **Open House Transcript**

One thing that I saw in here was on this -- onthe Mill Plain to 205, I don't know what they call it,extension or something, there's a problem when you're on Mill Plain going west, the right lane backs up and takes 45 minutes if you stay in that line lane to either geton 112th north or 205 north. They need another right-turn lane going onto 112th so that the people trying to get on 205 and them aren't fighting for thatlane. It's probably the worst traffic in that part of the county. I think they might be better off, rather than doing the big extension on Mill Plain first, they might be better off doing 18th Street. They are doing this onramp interchange thing on 18th Street over 205 and itmight be better off doing that first.If they were to go around the neighborhoods within maybe a mile north of Mill Plain or two miles north of Mill Plain and off 205, a half-mile survey, all the people that live around there I think they might agree because we're the people that get affected by those two the most. That's it on that one. Somebody should talk to Oregon about making the HOV lane northbound by Delta Park reversible for the morning commute in the interim while they are building this new freeway system. That's it.

1900

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **Open House Transcript**

My suggestion does not depend upon which type of bridge is chosen, the height of the bridge or the approximate location of the bridge. My suggestion is that the bridge and associated highways on Hayden Island in the Delta Park area be used as a bypass for that whole area and the existing bridge and existing I-5 interchanges on the island and Delta Park be used as surface roads accessed from either end of the upcoming new construction.That means trucks, cars, shoppers and anybody with business on the island or in the Delta Park area including all interchanges and current highways exit southbound I-5 before approaching the new bridge to be built, do their business and then find their way south on existing highway and merge with the new structure south of Delta Park. So if you're heading south and you need to bypass all that commercial in the area just mentioned, you will not be bothered by all the trucks,et cetera, needing to go there because you will have a bypass of the entire area. And if that means that the bypass over that area needs to be elevated, which I think it does, so much the better. Just don't make it easy to get off of this new project onto the existing spaghetti that's there. The entrance and exits should be on either end of the project and nothing in the middle. That's it.

1901

Community Livability Human Resources:	x	Natural Resources:	x	Process :	
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **No Question** **Source:** **Open House Transcript**

I am a resident of North Portland and I have a small business up in St. Johns and I'm concerned with the non-containment diesel emission area for that corridor. I'd like the project to consider using or cleaner burning fuel sources in their equipment as they are building go the bridge. I am concerned with air quality and I hope they incorporate some plan to mitigate that or either try and use their most invasive equipment in off-peak traffic hours. Maybe at night, if possible.Second, I am a big proponent of a third bridge near the railroad bridge helping to alleviate the traffic in St. Johns because the St. John's bridge is horribly congested with freight traffic. Moving the bridge further west from there and then taking it up to Highway 30, the backside of Marine Drive and then crossing the rail bridge to the north side of Vancouver So that way we bypass all of downtown Vancouver and alleviate the freight traffic from St. Johns. And if we can build that new bridge and keep the existing bridge in the place meantime in order for us to build faster then we can go back and correct the existing I-5 bridge to be more structurally sound and encompass lightrail on the existing bridge or do whatever we need do there. Keep the same line on it. I don't feel like I can offer any way to help.□ Offer my -- I'd like to know how I can help further other than giving my comments here, how I can get involved. And I don't feel that the third, a new bridge to the west side has been thoroughly evaluated, communicated to me based on the presentations here today. And all the media access I have in finding information surrounding it, it still seems to be a very viable option. Thank you. I am in support of a new bridge, though. Appreciate them looking into all the environmental concerns.

1902

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **Open House Transcript**

While I think the interchanges on either side of the river need to be adjusted, I still think there is going to be a huge chronic traffic problem unless we somehow split off long distance thru-traffic away from local Hayden Island, Jantzen Beach, Marine Drive traffic; and so my favored alternative would be to build probably the medium height new bridges next to the existing bridges. I don't know if you can put them bookend on either side of the existing bridges or put both spans or a single span on one side, however that would work. But I think you need to have some sort of an express lane system like we've seen in other cities whereby Mill Plain or by the Delta Park area you split off thru-traffic away from anyone who just wants to goto Marine Drive, Hayden Island, to downtown Vancouver and split off that local traffic. Leave that on the existing bridges and make the three lanes in each direction in a new bridge solely for thru-traffic. If the people coming west on Highway 14 are trying to go to Portland it's just going to be toocomplicated to get a ramp onto any new bridge.

1903

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **Open House Transcript**

They would just have to stay the same as they are now and curl on to the old bridge, but I still think that wouldmove as quick as it does now if not better and they canjust drive over the old bridge southbound and then merge into the freeway when it reconstitutes all the lanes together. And the trick here, of course, is that if you're merging express lanes with existing bridge lanessome of the kinks and the traffic flows better for awhile but if you're looking twenty or thirty years out,that traffic level is just going to continue to build and you will end up with the same problem, the samechoke points where you have people coming in and out of downtown or Jantzen Beach and you need to kind of siphon that off, if you can, from thru-traffic if the whole I-5 corridor is going to remain a viable corridor for people just trying to get from Seattle to Portland or Seattle to Los Angeles or whatever they are using the freeway for. Just Tigard, Ridgefield to Tigard, whatever it may be. And that's what I've got.

1904

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:	x	No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **No Question** **Source:** **Open House Transcript**

I have a small berry farm in Washington and in the summertime I haul my berries to Salem, Oregon and I go down 205. I go down about 3 p.m. down to Salem and I come back about 6 p.m., and both ways in Oregon it's stop-and-go, stop-and-go. On the way back when I get to the Glenn Jackson Bridge on 205, then the traffic speeds, speeds right up. And the way I see it, Oregon needs to raise their gas tax and do something about the freeways. Just having another good bridge is not going to solve the problem because the freeways are too plugged up. In Washington, we raised our gas tax twice in the last few years and there's projects going on all over around Vancouver. Oregon, the last time they had it on the ballot in 1999 - worked against it and got it defeated and the roads in Oregon are a mess, they need to be upgraded and widened. When I go to the ocean, I go down to Lincoln City and the road is terrible. Sometimes it's a two-mile backup on Sunday afternoon coming back through Dundee at that one traffic light there. Now I know they're planning to build a bypass through Dundee but it should have been done 20 years ago. That's my comments

1905

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:	x	No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **No Question** **Source:** **Open House Transcript**

See about getting voter approval to support the tax base to bring MAX across the 205 bridge which I thought was a great idea in that they had made provisions or could do that with slight modifications. So if they could bring that up in the vicinity of Vancouver Mall, they could haul a lot of people to the airport or into downtown Portland to work in the greater downtown area, which are quite a few of them. I'm sure they made some sort of a study so that they knew proximate costs and what was going to happen with that. And beyond that, eventually I don't think it would be hard to develop MAX on an east-west access so that it could be closer to downtown Vancouver and maybe eventually they bring it across. I don't know if they got space between the two bridges or what they would have to do to connect to the other end of MAX over here time-wise and money-wise. And then if they, which they probably do, need another bridge or tunnel or need some access across, that's fine. But it seemed to me the financing and the time element involved to make those changes would be much less easier to do than digging tunnels or constructing the bridges. So that's about my thinking. But all this is going to happen beyond my time so I'm not too worried.

1906

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:	x		

Question: **No Question** **Source:** **Open House Transcript**

I was a structural inspector for construction of the southbound bridge that's out there now and some of the remodeling of the northbound bridge. The northbound bridge was essentially, it was originally straight through level bridge. They built the southbound bridge with one long span and a hump in it in order to facilitate river traffic and avoid -- reduce the interference with highway traffic. One of the interesting things about the northbound bridge is when they took out two spans and replaced it with a single span and raised the line and it necessitated jacking the one end of the span that supported the towers and they had to cut the towers free and as they jacked the span, when they tipped the tower back like a hinge, that was quite a challenge.Through the late fifties, or early fifties rather, the existing northbound bridge, which is very narrow, was actually carrying four lanes of traffic, two lanes in each direction, got hit very often; got hit one day with a truck hauling I don't know how many, but a truck load of chickens and had chickens all over the highway and the river. Next time, within about oh, a month or so, it got hit again with a load of chickens but this time they were frozen chickens. So they were

1907

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:	x		

Question: **No Question** **Source:** **Open House Transcript**

more interesting. In the late sixties, early seventies in the Vancouver shipyard they were fabricating drilling towers that would be used for oil drilling off the California coast, and moving one of those drilling towers downriver, why, they didn't get the lift span high enough and the tower had the hit the lift span on the northbound bridge and caused considerable damage. Fortunately, why, they got the new southbound bridge up high enough by then and the tower cleared that, but we had traffic. We kept traffic going but we had to restrict it for a while while the repairs were done.What else?□ When the lift span on the northbound, excuse me, on the southbound bridge was fabricated on barges over on Hayden□ Island about where we're sitting now and then floated into position in about a half-open position and the cables thatprovided for lifting the span were hooked up, the Corps of Engineers had a barge they wanted to move up the river that was -- the spuds for the barge were too high and they wanted the lift span in its half-open position. So we told them that we would have the bridge operational and raise it on a certain date. Had an electrical failure, couldn't raise it with electrical. So there's gasoline-powered generators that lifted the standby lifting equipment. Started up the gasoline-powered generators and ran out of gas. About that time the barge was,was coming up the river and I swear to gosh that I was looking up at the top of that spuds and fortunately it cleared by about a foot. Anyway, then after the northbound bridge, excuse me, the southbound bridge was completed, why then four lanes of traffic were shifted over on to the southbound bridge then. Still narrow but a lot wider than the other bridges. Anyway, some of the things. Have to think of more.

1908

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **No Question** **Source:** **Open House Transcript**

I'm David Rowe and I worked with Max for 20 years. I worked with TriMet for thirty all together. And I've seen how well public transportation can help public taxpayers and so I'd like to see them plan for the whole region instead of just the bridge influence area along I-5 because 205 effects I-5 corridor just as much as the interstate bridge does, and rail is the best way to solve highway congestion. In Orange County, California, in the 1950's they built highways, freeways, and it encouraged more people to buy more cars, use more gas and they have traffic jams that last almost 24 hours a day. If we continue on that same route we'll have the same problem. So this project that we're faced with now getting across the Columbia could be solved by many other things other than more highway bridges.

1909

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **No Question** **Source:** **Open House Transcript**

There's the option of Amtrak Cascades running from Portland to Seattle, if they would improve that rail structure in a few years they can start using high speed equipment on it.That's one method to take passenger traffic off of the I-5 corridor. Also by improving the rail infrastructure for heavy rail you also improve rail freight. Rail freight would alleviate the truck traffic between Seattle and Portland and Seattle on south into California. So that is one option that they should pursue. And I don't see that this study is looking into how much improvement would affect the I-5 traffic. And the next thing that they could be looking at is light rail on I-5 and 205. 205 is not part of the survey, it should be all-inclusive because whatever happens on 205 has a direct impact on I-5 because it's part of the overall regional transportation corridor up in, north and south. So one of the things to alleviate some of the passengers or auto traffic on 205 is installing a light rail bridge on top of the 205 bridge. I've talked to some engineers in TriMet and they think it's possible to put light rail, two tracks, which are 22 feet wide, where the bike trail is now. And that would be going all the way up to 205. The bike trail could be -- that's existing now on 205 could be relocated on put a cantilevered out from 205 bridge on the west side of the attached southboundbridge structure and that would improve bicycle transportation

1910

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:		Other:	
Economy and Freight:	x	Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **No Question** **Source:** **Open House Transcript**

because it's reducing the east wind which gets very atrocious most of the time when you're riding a bike across that bridge. So you have a natural windbreak from the bridge which you don't have now with the present bike trail. So you're correcting the bike travel by adding the light rail lane between the two north/south lanes. Back to the I-5 corridor. I think the solution or one of the options were presented by another citizen group put building another bridge alongside of the I-5 bridge structureand it could be used for light rail and also automobile trafficand local freight traffic on a two-lane bridge built on thewest side of the I-5 bridge. The center span could be raised up allowing river traffic. River traffic could be -- uses the center lane, center of the river and to safely go up and down the Columbia River. The thing about the river traffic, if we improve the heavy rail bridge downstream to put it in the center of the river, then river traffic doesn't have to make the dog-leg turn that they do presently. That would have a tremendous impact on river traffic. I would envision the time where they could have cruise ships come up into Vancouver. I envision cruise ships from Seattle coming down the coast, coming up to the Columbia River and that would be a very scenic route similar to Europe's trips on the Rhine and some of the river travel that they do in Europe. So but the bridges have to be made safe for river traffic. So all of these needs need to be looked at and I don't see the whole concept when they are looking at it. They are just -- they are reviewing the bridge influence area which is I-5 and so it's kind of focused on that point but they need to focus on the whole area, heavy rail traffic, I-5 traffic and 205 traffic and get it a comprehensive plan and then go forward with that plan for the next thirty years instead of just having one project now, then ten years from now they revisit the same problem again. I think do a comprehensive study now and do a complete plan and then go forward with it. That's it.

1911

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:	x	No Comment:	
Specific Alternatives:		Safety Seismicity:	x		

Question: **No Question** **Source:** **Open House Transcript**

I was listening to the gentleman talking about the bridge, the remodeling, and the different ideas that they have about elevating the bridge or having a draw bridge feature and I still think it's just still one bridge, and my concern is that if you widen the bridge or whatever revamping that you do to the bridge itself, it's still going to be a problem if it needs to be closed for a collision, an emergency of some sort, repair, something. There's still going to be a bridge out of commission.So I would say that there should be like three different bridges across, so that if there was one that was closed for a collision or an emergency of some sort or a fix, then there would be back-up bridges to keep the traffic flowing still. There could be different assignments to each of the bridges like one bridge for the trucks, and sometimes those trucks just go so fast going on the bridge, so they can justhave their own bridge and then another bridge additional bridges for other reasons. I would rather have additional bridges than have a bigger bridge on I-5 because it's still just one bridge. Because, you know, sometimes I get trapped on I-5 and you can't get anywhere else. If you're stuck there is no other way to cross the bridge. There's no way to really get to the 405 bridge. So I'm just stuck in the place I'm in There aren't any alternative routes. And the Marine Drive area there, the street, the boulevard itself is great. But the ramp, the onramp, is just too short. There's a Safeway and then that new restaurant, that Hooters restaurant that was just built right there, and then the Safeway grocery store are right there right next to the onramp. It's just so crowded right there. It seems like those two particular buildings should just be taken out of the way and then they can make the on-ramp have more space, more room to it. Because everyone makes such abrupt stops because sometime there's people on I-5 who want to go, you know, to the Jantzen Beach exit and when you're getting on you're having to cross traffic with them. So there's this constant stopping and halting and there's always getting -- everyone's getting in the way of each other. So if those two buildings were out of the way then there would be more space. Let me think what else was there? Yeah, I think just the main thing is I'd rather have several bridges than just one. I think that's it.

1912

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:		Other:	
Economy and Freight:	x	Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **Open House Transcript**

My suggestion, and I'm not going to read it, but my suggestion is to build a four-lane local bridge that connects Hayden Island with both Oregon and Washington. This would be the west side of the current two I-5 bridges and have MAX share one lane in each direction with cars, trucks and buses. Basically the track would be in the pavement and this would be instead of having MAX have a separate right-of-way to cross the river. I think it's more cost effective and more capacity-effective to have MAX share right-of-way on a local bridge with cars and trucks. Design the bridge such that it would divert most local traffic to and from Hayden Island off of the current interstate bridges. I personally think the interstate bridges have enough capacity now. If you have a three-lane freeway coming on to the bridge and off of the bridge in each direction, why do you need more lanes on the bridge if you have

1913

Community Livability _Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:	x	Project Financing:	x	No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **No Question** **Source:** **Open House Transcript**

a local bridge that would be connecting Hayden Island. That's where the traffic -- with three lanes in each direction on the freeway the bridge is not a bottleneck. Also to reduce traffic on the bridge I would recommend that a rail transfer yard for containers and truck trailers be built in Vancouver. Anything that had a point of origin or a point of destination in Washington would be unloaded in Washington and anything that had a point of origin or a point of designation in Oregon would be unloaded in Oregon. That would save a certain amount of truck traffic crossing the bridge if it's unloaded on the opposite - loaded or unloaded on opposite side of the river Another thing that I think needs to take place is we need to get rid of what I call the diamond discrimination lanes. It only slows down the entire freeway with people cutting from the diamond lanes over to the exits and weaving through traffic to get to the diamond lanes. Makes much more sense to have three free-flowing lanes that come on to the bridge in each direction. Finally, I want to say something about tolls. If tolls are one of the funding methods that's used, it shouldn't just be for autos, it should be for all users; that includes transit, bicyclists, pedestrians, ride-share. Everybody needs to help pay the tolls on the bridge. It's a matter of equity. The reason I suggest that the local bridge be on the west side of the current I-5 bridge is because that's where the destination points are on Hayden Island. It's where the job base is. It's where most of the traffic is going to the shopping center.

1914

Community Livability _Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:	x	Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **No Question** **Source:** **Open House Transcript**

For the short term I would like to see the commercial trucks be allowed to use HOV lanes on the Oregon side. I think that would -- those are just passing through on the way past Vancouver. It would free up a lot of space in the middle and the right-hand lanes for those that are accessing off and on to I-5. And the second one is that right now the official Hayden Island representative is a real estate developer of the Waterside Condominiums. I think the official representative should be a member of the neighborhood association. That's it□

1915

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:	x		

Question: **No Question** **Source:** **Open House Transcript**

I think allowing the big rigs to pass through is a good idea on the HOV lane. However, there needs to be a solidwhite line so that there is no changing lanes. It is against the law to change lanes over a solid white line, and therefore people have to plan ahead to get out of the HOV lane prior to the Jantzen Beach exit or Marine Drive exit. So I would just make it a solid line, prepare yourself, know where you're going, stay in that lane and it's against the law to change lanes.

1916

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **No Question** **Source:** **Open House Transcript**

Well, the first thing I wrote up there is a little philosophical or, well, it's spiritual. It's out of scripture. You know, without a vision, the people perish or we perish. You can take it philosophically; without some kind of goal or positive object or goal or -- trying to say? The steps you take toward a goal. What do you call that? The objectives. Without positive objectives you're just going to actually be staying. And, you know, we're growing so fast, you know, Clark County is projected to have four hundred thousand by maybe two years from now. It's here. I get to the point about the river crossing. I'm saying I agree with the tunnel concept and the retaining of the existing I-5 bridge for MAX and two lanes each way for auto and some bus travel on a close-in basis. And there needs to be three two-lane tunnels at three different entry points. So I'm an expensive one.And then in the next question, I'm saying that land use is a very serious problem, especially in Clark County It appears to me or it seems to me that developers present a□ special interest problem. Quote me that, you know, builders rule in Clark County. And I think some examination, you would find that they'll deny this, but the facts are there. Access points in and out of Clark County will depend, well, depend on developer cooperation. Somehow - this is my additional comment here - some options as I see it is to reconstruct the existing I-5 bridge to a double-deck bridge. The top deck being fixed and the lower deck being movable or raisable, if you will, lift span, I should say.

1917

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:	x		

Question: **No Question** **Source:** **Open House Transcript**

Or construct a new double-deck bridge with a lower deck as a lift deck and the top deck fixed. Talking with some engineers here, that's a little tricky because of the height differential; in other words, you would probably have to lift the lower deck more often because it would sit lower to try to get the whole thing balanced out. So maybe that's not necessarily the best idea. I did fix up a situation here where I think this three-tunnel thing would come into a new alternate I-5 east with that tunnel going underneath Washington State Route 14 up into a portion of the edge of Pearson Airpark and into SR 14. That would be a route. But you wouldn't want it to congest with the main I-5. So extend an alternate I-5 east as the tunnel comes out of the ground. Call it daylights. And then join main I-5 down near Delta Park or something like thatThat tunnel should be just a two-lane tunnel for auto traffic only and I'll say more about that in a second. Likewise, I was saying, suggesting, that another tunnel maybe be parallel to the existing I-5 bridge. Two lanes for auto traffic only that would -- would be extended past Jantzen Beach but would divide traffic between the bridge whichcould be used, the existing bridge, which could be used for local, so to speak, Jantzen Beach area traffic. Then the third tunnel - I told you expensive - would be an alternate I-5 west. A permanent alternate. That would have a tunnel going into the port area; maybe trucks would be using that. Mixing trucks and tunnels is a little bit spooky to me because if you have -- well, fuel trucks I would keep up on the bridge. I would never allow -- personally I would never allow, I would not recommend or suggest fuel trucks in the tunnel, any tunnel at all. Anyway, the I-5 alternate tunnel west, I-5 west alternate tunnel would go underneath Jantzen Beach and pop up somewhere near Delta Park which is going to be widened anyway. But I think they should prepare to maybe run a tunnel underneath Jantzen Beach or somewhere of that vicinity and cross the river that way and go into the port area or come around through the port area. Again, trucks would be fine except for fuel trucks.

1918

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	x
Economy and Freight:		Project Financing:	x	No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **No Question** **Source:** **Open House Transcript**

I'm old enough to remember a very horrible truck crash underneath a viaduct almost similar to a tunnel. And anyway I think that's about all I have scribbled out. I appreciate the efforts. I've been here long enough to see the difference between Portland Metro and which includes Vancouver and Seattle. You have the progressive people moving, seems like, getting together in Seattle and Seattle grows and flourisheswhere Portland has been an extremely liberal city town. It's a major city but it acts like a town sometimes. I don't know how to say this. But the lack of progressiveness and, you know, getting together, you hear more, to me sometimes, from the folks that - if they want to quote here, and I've heard this - if they want to work in Portland, let them live in Portland. These are some Vancouver folks. Well, you can't live like this, you know. I mean, I'm sort of at three score and 13 and a half. I'm steeped in any ways, too. But, you know, I don't want grandkids andnybody's grandkids to have to undergo the pay me now or pay me later thing. And they are the pay me later situation. You know, that's a little stupid. So we need to get on with it. I don't know where the money's coming from. You know, I probably just trippled the cost even if it is or is halfway engineering feasible. That isn't a good sentence but feasible engineering-wise. So thank you for letting me ramble on and I'm sure that chamber of commerce of Portland and Vancouver, Idon't know what they do, being awful facetious, seems likecities like Atlanta and Boston and other cities seem to - SanDiego now is building a great sports complex which includes a mall where everybody, maybe grandma goes, and she doesn't know a baseball from a basketball, you know. That's a little nasty but... But, you know, progress. You know in a lot of these cities and we seem to be like deer standing in the headlights,you know. I hope that we can really progress and really progress for the good of the order which includes our families.Thank you.

1919

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:	x	Public Transp# _Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

Could we provide incentives to use alternative modes of transportation? Provide tax credit incentives to those employed in Oregon or put funds into the bridge project to facilitate alternative modes of transport (e.g. tram, bicycle, etc. Please give me a call (503) 757 7660 anytime. Thank you.

1920

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:	x		

Question: **No Question** **Source:** **Open House Survey**

Walk - bicycle "one less car in front of you - one more public parking spot!!" Please let us help auto traffic - don't (maim and kill us) hurt us.

1921

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re:Theme Week Coming Up] Lenny Anderson (4-14-06: I was up at the CRC Open House at the Red Lion last night and noted that my old neighbor here on Swan Island, Shenanigan's, is now in that hotel. I drove via MLK and of course had to get on the freeway to get to Hayden Island. So I asked or commented..."I should be able to drive up MLK and have a drink at Shenanigans without having to get on an Interstate freeway! Where's the arterial bridge?" Remember 1/3 of I-5 trips are local. Two options that have arterial pieces...Arterial Bridge with lightrail plus freeway upgrades and Short Tunnel with retension of one or both existing bridges are still in the running. The problem with the former is "Can you get federal $ to build an arterial bridge?" I think you could get FTA money for a lightrail bridge, then use other sources for the arterial lanes/bike-ped facilities, etc. FHWA money could pay for upgrading the freeway...i.e. eliminating some substandard on/off ramps, etc. The Tunnel, a guy from PB told me is 3 times the cost of a bridge! But converting the old bridges to arterial plus LRT and the freeway approaches to boulevards would free up some land for development, off-setting some of the costs. We will see. The best solution may be to study this for 50 or so years.

1922

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re:Theme Week Coming Up] Ron Swaren (4-14): My favorite option --RC-14, Fig 5-16 on page 5-15 of the screening report--got knocked out, but then revived as RC-23. Well, of course, we didn't figure that nothing would have to be done at all to I-5! But, honestly, I'm not sure what. There were some some ideas in a Tribune ope-ed. It is an attempt to arrive at a Happy Medium. Hopefully solving two problems in, essentially, one plan. Lenny seemed to be posing a slanted question. So, now, if we could just get together on what sort of arterial bridge and the location! Shenanigans may be important to him, yet some other spot to someone else. But I would like to know why anyone would want to open up more corridors than already exist, which is why I would prefer the RC-15. I do think a strategic component of that alternative is the future of Central Vancouver, so they definitely would need representation. The report poses the criteria then subjects each alternative to pass-fail marks on those criteria. Are they even asking the correct questions? They always bring analyses back to one essential argument--How is the I-5 corridor affected. Should not the question be: How can we cost effectively and safely improve travel between two regions on either side of a natural barrier? For example, in citing the seismic insufficency of the current bridge do they examine options to rectify that? (cont.)

1923

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re:Theme Week Coming Up] (cont.) Ron Swaren (4-14): I worked on the seismic upgrade of the I-5/Ship Canal Bridge in Seattle. It was insufficient, too, but we upgraded it. The screening report says that traffic will increase by 15% in 2020 and collisions by 40%. Yet if some traffic is rerouted don't these stats change? Also, I think Interstate speeds should be 45-50mph within city limits, if it would greatly reduce accidents. When I lived in Seattle people sometimes drove frighteningly fast, just because they could. It has a bigger, wider I-5, and night time joyrides sometimes got out of hand. I guess I would be eating my shorts if RC-15 was built and congestion got worse and worse on the I-5 resulting in mass car pile ups in foggy weather just when a Richter 9 chose to hit. So what solutions could, also, improve traffic on the route, as it presently stands? Hey, we've all got free advice to offer...It would ne nice to "study this for 40-50 years." This is a stressful time as many complicated decisions must be made in a rather short span of time. Its definitely a Time of Transition for our Metropolitan area... time to rise to the challenge!

1924

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:	x	No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re:Theme Week Coming Up] Doug Allen (4-15) I attended the open house also, and was disappointed with several aspects of the project, although my kids enjoyed building bridge models with "Connects." One Blue Shirt told me that Max takes 45 minutes to go from downtown to Expo Center, and that a Max crossing would end up costing $20 per ride (amortizing the capital cost over 20 years, 0% interest rate). Since the schedule shows 29 minutes from Pioneer Sq. to Expo, this shows more than a little ignorance from someone who claimed to be an expert at doing economic analysis. I also can't figure out his Max costs. If Max is added to an Portland Transport Columbia River Crossing Comments http://www.portlandtransport.com/crc_comments.html arterial crossing, we should be able to get from Expo Ctr. to downtown Vancouver for $100 million more than a bridge without Max, and ridership should increase by at least 15,000 per day if C-Tran can provide good feeder service. That comes out more like $1 per rider over 20 years. I think that shows a general bias towards high cost solutions. I noticed that all options that rehabbed the existing bridges for continued I-5 use presumed that they would not get seismic upgrading. Therefore those options failed their criteria! There was also a bias towards handling all capacity on the freeway, seemingly ignoring the regional agreement in the previous I-5 study that limits I-5 to a maximum of three through lanes. It looks like the idea is that since there is no regional money allocated for a project, the sky's the limit, because it has to be funded 100% by pork-barrel appropriation, and the best way to do that is to have a big project that can attract lobbying by contractors and engineering firms. This stinks. The fundamental premise of this project needs to be re-thought, because the screening questions all seem aimed at a freeway project on a massive scale.

1925

Community Livability _Human Resources:		Natural Resources:		Process :	x
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re:Theme Week Coming Up]Chris Smith (4-15) Michael, the short answer to your question is No. The private sector participation in the task force seems to be from the trucking industry and chamber of commerce types.

1926

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	x
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re:Theme Week Coming Up] Ray Whitford (4-15): I went to the Vancouver Open House on Wednesday Night (nice neighborhood near the freeway with the schools, parks, and sports fields). After speaking to one and then a second engineer, it looks like a suspension bridge of any kind isn't going to happen. Flight paths into Pearson Airport will not be overlooked as their were back when the current drawbridge towers were designed. Secondly, an idea I was hoping could fly is dead in the water since tall towers (500-1000') will not fly because of PDX flight paths. I'm hoping for a tunnel for I5 (not likely) and for using the current bridges with longer/higher spans for local traffic and mass transit. What just upsets me is the lack of vision for High Speed Rail, mainly from the Oregon side. Washington is spending money but Oregon isn't. And Oregon DOT doesn't have any direction to proceed from the elected officals. CRC could be the place and time to get serious about our regional identity and to be able to link our three main economic hubs to feed off each other. Think of the 2010 Winter Olympics in Vancouver and how Portland isn't going to be affected by it. People from around the world might like the idea of seeing our vineyards and possibly investing in our industries. But Oregon can't see beyond our School Funding issue. Which must be solved for us to move ahead anyway. Why is it so hard to solve? Why are teachers at public schools so under-valued? I volunteer at a school in SMART and I think teaching should be valued higher than administrators. Give the Admins better pensions over time. Not salaries that are four times higher than the teachers.

1927

Community Livability Human Resources:		Natural Resources:		Process :	x
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re:Theme Week Coming Up] Chris Watson (4-16): Justin, the CRC task force was put together starting with the two Governors' offices, so I would assume the membership selection was pretty political, with the most powerful stakeholders elbowing for seats at the table. I'm happy that the Coalition for a Livable Future got one seat.

1928

Community Livability _Human Resources:		Natural Resources:		Process :	x
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re:Theme Week Coming Up] Michael Wilson (4-16): Chris not knowing how these task forces are set up I'll ask the $64 question. Who decides which companies and industries get a seat on the task force?

1929

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re: Rail Transit, TR-5, TR-6, TR-11, TR-12] April 17, Lenny Anderson Says: Commuter Rail just doesn't have the numbers. Look at figures 3-1 and 3-7. The O&D for trips in 2020 are concentrated along I-5, the rail line north is along the western edge of this area. Likewise in figure 3-7, one can see that while Central City has 8500 origins, N Portland, Delta Park, Hayden Island and Rivergate together have twice that...17K. CR does not lend itself to distribution as well as lightrail does. I expect that all the talk of BRT, etc., is just going through the motions...extending MAX makes the most sense.□Travel time from Expo to Rose Quarter is 20 minutes...add 5 to Downtown Vancouver and 10 to Pioneer SQ, and□you have a pretty competetive travel time that allows links to Rivergate, Swan Island, Lloyd, with stops on Hayden□Island, Delta Park, Lower Albina, etc

1930

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re:Theme Week Coming Up] Justin (4-16) And anyways, the CRC isn't about what kind of trainsets might potentially run over the river. The CRC committee seems like they don't want any, anyways.

1931

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re: Rail Transit, TR-5, TR-6, TR-11, TR-12] April 17, EvergreenTransitFan Says: With our SOUNDER Commuter Rail line, the communities North of Seattle are calling it a waste of public dollars,□but that is about to change very soon. In many neighborhoods within Seattle, Premium is now over $3 per gallon,□and mid-grade is a few cents away. When Regular hits $3.01 per gallon in Snohomish County, the two-zone□Everett-Seattle fare will be cheaper than a gallon of Regular Gasoline. SOUNDER-SOuth has the benefit of serving□more communities, creating more possible trips, and in the case of KENT, has spawned development around the□station. The trains get more passengers when fuel prices go up. They may face the same fuel costs, but in terms□of Passenger-Miles Per Gallon, a 10 car Commuter Train, seating 120-140 passengers per car, will still get more□PMPG, even if the locomotive only gets 3 Gallons Per Mile.□Also, in Tacoma, Pierce Transit responded to an air quality crisis in the late-1980s by going to CNG as soon as□their buses came due for replacement. That is now virtually-complete, and since their is not much CNG refueling□infrastructure, they are dependent on their pumps not failing. They failed once, but thankfully their were□alternatives. The Regional Express routes to Seattle they contract with Sound Transit are for the most part still□using Diesel, so they were able to suspend route 590, and advised passengers to take SOUNDER. Fortunately□they got the pumps working again by the Morning Rush-hour. The problem is, Tacoma-Seattle Commuter Trains□are already packed, but they can add cars to them as needed, and that is an advantage.□Hopefully if Gas Prices continue to hit $3 per gallon every summer, we could see a move to begin expanding□Tacoma LINK, and maybe even gain support. It would be a win-win for everybody. (cont.)

1932

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:		Other:	x
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re:Theme Week Coming Up] Michael Wilson (4-16): Justin my comments were in one post, but they were not intended to be complementary. I am not suggesting that anyone around the area try to use a fuelcell powered vehicle for transit. I do see the need for a variety of ideas that are not now being,imo, seriously considered and believe that opening the marketplace may give those ideas some exposure. Secondly I think it is wise to look down the road a few years. The U.S. is in serious financial difficulty and it may take awhile to get things straightened out. At the same this nation and that includes Portland has a population that is growing older. These two things coupled with a few other items may make it more difficult to use tax dollars to finance transportation projects, thus I believe that looking to the private sector may be in the best interest of all involved. Besides I happen to believe in an open society and that includes the marketplace for goods and services. From what I have seen the evidence is in and the government hasn't done a good job in the transit business. We simply need a greater variety of service providers.

1933

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:	x	No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re: Rail Transit, TR-5, TR-6, TR-11, TR-12] April 18, Ron Swaren says Evergreen Transit Fan, I would like to see a little imagination at work in these heavy rail commuter lines to make them cost effective. I suppose with Sounder they want to use a standard diesel-electric and conventional cars. Probably the same will happen with our Hwy 217 route, since it will run on Standard Guage track. However, we have a quirky little scenic train that has been running from NW Portland out to Astoria and back as an excursion. They use some high quality, but out of date, passenger cars. When I have been in Europe I have seen huge yards of older passenger cars. Would these be so hard to refurbish? You already have the basic carriage and car. If they were not available stateside, why not bring a group of them over by ship?□So there could be a number of underutilized standard guage rail lines in the Northwest that could have a scheduled service---if the cost was low enough. I guess governments don't think in very tight budget constraints. I know it is imperative that governments have safe facilities. But weren't railcars of the 1950's built to high standards?

1934

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re: RC-7 to RC-12 the Supplemental Bridges] Isaac Smith Says (4-17): [Re: RC 7 and 13:]This comment applies to any new or replacement bridges.□It's unclear if these will just be freeway bridges. If so, these plans will do nothing to solve the root problem, which□is the lack of options. Will local traffic still be on the freeway? If so, that's stupid. Any plan should include more travel choices. Local trips must not be on the freeway and light rail must be extended to Vancouver. This the minimum level of acceptance.

1935

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:	x	Other:	x
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re: Rail Transit, TR-5, TR-6, TR-11, TR-12] April 19, EvergreenTransitFan Says:□Their were stories about UTA in Utah going to use ex-Metra Gallery Cars in their new Front Runner system, but□they have since ordered new rolling stock from Bombardier. Miami's South Florida RTA started using used cars□from Toronto, because it was only going to be temporary, but now they are going for Colorado Railcar DMUs.□Probably due to their higher capacity, and the fact that Colorado Railcar goes against the grain. Commuter Rail□coaches are usually 85ft, their's are 89ft. Wheelchair lifts would probably take the place of seats on the older□cars.□In Dallas, RDCs still run next to modern rolling stock. Up in Canada, West of Toronto, 1950s vintage rolling stock□still runs on VIA 1 and 2, the Canadian, and until recently, they were also using them in corridor service. Amtrak□even used inherited equipment on runs East of Chicago for decades, the coaches and sleeprs have been retired,□but the baggage cars and diners continue to run. On the Heartland Flyer out of Dallas, they use ex-Santa Fe High□Level coaches, these cars were built in the 1950s, and they are capable of operating with Superliners, as they do□on the Coast Starlight. Toronto's Go Transit still uses bi-levels that date back 2 or three decades, alongside□brand new ones. Also before the Gallery Cars pioneered by Chicago and Northwestern and the Burlington,□railroads often used rolling stock that had been retired from main-line passenger duty.

1936

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re: Rail Transit, TR-5, TR-6, TR-11, TR-12] April 17, EvergreenTransitFan Says: Nice artwork on the Rail, I thought that Sound Transit would buy whatever rolling stock TriMet used, for ease of maintenance and other issues, but unfortunately, the higher voltage requirement made it a free-for-all on the bidding. As for High Speed Rail, I can understand why it may not be a good idea, right now. We cannot seem to get the necessary capitol to improve the tracks on the Pacific Northwest Rail Corridor, throughout it's entire length. There are many choke points, where either a third main track or just another crossover could clear it up. North of 49, I believe the line is single-tracked, and it prevents Amtrak 516 from terminating in Vancouver B.C.(It currently turns back in Bellingham. It is T-4 years until the Vancouver Olympics, and it would be nice if Amtrak Cascades had at lest the pre-Amtrak schedule ont hat route with 2 daily trains running). Ferries crossing a river do have problems with constrained space. The Evergreen Fleet(Washington State Ferries) is phasing out Passenger Only ferries, due to high operating costs. Vehicles pay fares of around $10 a crossing, and the Auto-Ferries get close to being self-supporting. Under Long-Range Planning, the two routes with multiple stops are going to be broken up in the next decade or two. Private operators stood up last year to take over Passenger Only operations, and so far, one is working well, with Kitsap Transit, and the other went out of buisness after a few months. High Diesel Prices were one reason. I am not sure if a Passenger-Only Ferry or Water Taxi could work in the Columbia River crossing.

1937

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re: Rail Transit, TR-5, TR-6, TR-11, TR-12] April 19, 2006 07:16 PM EvergreenTransitFan Says: EMUs sound great, and perhaps somebody can apply some better styling to them, compared to the M-7 EMUs that Metro-North and Long Island RR use, or the SEPTA Silverliners. SEPTA's Commuter Rail system in Philadelphia is entirely Electric, either with Locomotives or EMUs. THere has been some problems with the bidding process on the new Silverliner V and it had to go to re-bid.

1938

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re: Rail Transit, TR-5, TR-6, TR-11, TR-12] April 17, Isaac Says: People might not be interested in commuter rail at the moment, but it would be a good investment in our future. As central Vancouver densifies, more people will be closer to the train station and likely be willing to ride. It would be successful if it were integrated into the existing transit system (CTRAN). It's ridiculous to think that would be difficult or impossible. There's no reason for that kind of assumption. It's evidence that this study is biased at the core to one size fits all superhighway construction. Light rail would be the highest priority for transit improvements as it's already so close and could generate high ridership. There will always be traffic on I-5. Whatever we do now to alleviate it will just be a temporary fix as traffic will grow indefinitely. The only good way to think about this is to offer as many different alternatives as possible to the single-occupancy vehicle, which there aren't very many of right now (express bus, commuter rail, light rail, streetcar, freight rail, etc.). This is of the highest priority as oil is becoming more expensive (peak oil).

1939

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re: Arterial Crossings, RC-19, RC-22 and RC-23] April 19, Lenny Anderson Says: Chris, The short tunnel could also offer options for local trips & transit, if the existing bridges are converted to arterial structures with lightrail. It remains in the running, but would be costly.

1940

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re: Rail Transit, TR-5, TR-6, TR-11, TR-12] April 17, EvergreenTransitFan Says: (cont.) In Vancouver, Light Rail would be one great option, if only the funding can be found. I have been following(and participating) in discussions on a few different boards up here on the alternatives to the rejected Green Line Monorail. An increasingly popular idea on one discussion board is the idea of a hybrid-Light Rail line connecting Ballard, Downtown, and West Seattle, with Streetcars as feeders. Now in Vancouver, that may seem like an idea that is ahead of it's time, but I wished just once, a Washington State City would do something to be ready for future traffic problems other than just putting in more ashphalt and concrete.

1941

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re: AORTA Response] April 17, 2006 12:08 PM Jim Howell Says: Ron, The new bridge would be built downstream (west) of the existing bridges (see aerial photo).

1942

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:	x	No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re: Rail Transit, TR-5, TR-6, TR-11, TR-12] April 18, EvergreenTransitFan Says: One thing that is needed, is a funding mechanism that makes sure their is the money to build. A legsilator from Vancouver has to learn to work with legislators from Seattle, Spokane, Bellignham, and other parts of the state, to show that legalizing the use of Tax-Increment Financing in Washington State benefits every region, it is not a single region centric thing

1943

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re: RC-13 and RC-20, the Tunnel Options] April 18, 2006 09:16 AM adron Says: Don't like it. :(

1944

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re: Rail Transit, TR-5, TR-6, TR-11, TR-12] April 19, EvergreenTransitFan Says: They are using locomotives and multi-level cars on SOUNDER. It has been running since 2000, and ridership has been steadily growing. For the Everett line, I have suggested the use of DMUs. We also have the BNSF Woodinville Sub, which runs on the Eastside of Lake Washington, it has little freight traffic, and runs from Tukwilla□to Snohomish, and has the potential of being a suburb to suburb link. It currently hosts the Spirit of Washington□Dinner Train, and the slow orders are many, and BNSF wants to drop the line North of Renton's Coulon Park(they□still need to get to the Boeing Plant). There are people on the internet up here that are vocal about preserving it,□and so are 8 of 9 County Councilmembers. SOUNDER has proven it's worth for special events at the Stadiums,□and for the NFC Championship Game, they ran three trains from Pierce County to King Street Station. They have□4 daily trains, but perhaps more will be added in the next few years. Gas Prices are now hitting $3, which for the□Everett Line, is the fair to Seattle. Also on the Everett Line, their is a deal in place called RailPlus, where Amtrak□Cascades cross-honors passes(but no single-trip tickets) on Amtrak Cascades Trains running North of Seattle. It□has not yet been extended to the South segment, but it might be a good idea. THe fare for SOUNDER between□Everett and Seattle is $3, now equivalant to a gallon of gas, and just a little more than ST Express Bus Fares, and□Community Transit charges $3 for Commuter buses, $3.75 from Stanwood in the northern part of Snohomish□County to Seattle. There may be an un-tapped market North of Everett as far as Stanwood, but nobody is□considering it right now. (cont.)

1945

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:	x	No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re:TR-7 High Speed Rail] April 18, 2006 02:47 PM Lenny Anderson Says:□The State of Washington is spending serious dollars to get the travel time to Seattle from Portland to 3 hours.□Oregon is spending hardly anything. Just to get the Talgo to do all it is designed to do would be a great□improvement. We should push for the modest freight rail improvements in the Portland/Vancouver area that the□Governors' TF recommended; public $ should be used on the assumption that these improvements will allow for□more and faster passenger rail trips from Union Station across the river and beyond.

1946

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	x
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re: Rail Transit, TR-5, TR-6, TR-11, TR-12] April 19, EvergreenTransitFan (con't) Also, on a railfan board, I saw an article from the Billings Gazzette about an idea for the very cars used on the□Lewis and Clark Explorer. The Montana/Wyoming Association of Rail Passengers thinks they could work on being□a feeder to the Empire Builder that can serve most of Montana's biggest cities. One of the three cars was used by□Great Northern on that very route. It was dropped in 1962.□We need an interconnected network of rail transit, but paying for it is the problem.

1947

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re:TR-7 High Speed Rail] April 19, 2006 02:18 PM Lenny Anderson Says: Look at the data...most trips across the river are local or intra-regional...and the rail lines are on the edges of where folks live in Clark county. Commuter and High Speed rail need to be part of our future, but they to not address the cross river need. For that we need just a "Broadway Bridge" with MAX.

1948

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	x
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re: Rail Transit, TR-5, TR-6, TR-11, TR-12] April 19, 2006 Jon Says: I think it makes a lot of sense to get MAX to downtown Vancouver where the hub for the C-Tran local system is and which is also a major metro regional center. As far what happens past downtown Vancouver and with what mode I think is a matter of large debate in the Vancouver area. The local C-Tran bus system can serve as a feeder system for the MAX line to Portland but they can also operate independently with C-tran feeding into the heart of Clark County with or without riders transfering between systems. I question commuter rail in that most commuter rail systems are peak-hour in peak direction on weekdays only and have only about 3-4 trains per commute time. If it could be more frequent it could be a more logical option in my opinion. I dont understand the logic behind using a streetcar in the Columbia River Bridge area. Light Rail makes a lot of sense especially with the existing yellow line, but a streetcar seems so out of place in this setting.

1949

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

The Columbia River crossing by itself is insufficient information in relation to the rest of the traffic congestion. The bridge can stay the same but increase the lane traffic south of the bridge. Need a new bridge to the west of the ports starting in Ridgefield area, across the Columbia, Hillsboro reentering I-5 around Wilsonville.

1950

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re: Rail Transit, TR-5, TR-6, TR-11, TR-12] April 19, April 19 Justin Says: You know, I'd rather see Electric Multiple Unit trains than DMUs, because of the pollution issue, and electric trains are cheaper on maintenance and fuel costs.□California is looking at electrifying the Caltrains corridor in the Bay Area, in addition to their high speed rail system on the planning boards. Which will cost $25 billion, by the way. =P

1951

Community Livability Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety _Seismicity:			

Question: **No Question** **Source:** **Open House Survey**

You destroyed lots of homes the past time you widened I-5. Why should we lose our homes just so new ones can be built? We live here 37 year and now new people and their homes are forcing us out.

1952

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:	x	No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re: Rail Transit, TR-5, TR-6, TR-11, TR-12] April 19, Lenny Anderson: Ride the Yellow Line out to Expo...you are about 1 minute from Jantzen Beach, 5 from downtown Vancouver. It would need to continue to some logical first phase endpoint like Clark college (then you could ride from CC to PSU on the Yellow Line in about 45 minutes). Funding? locat match...bridge tolls, C-Tran sales tax increase, City of Vancouver sales tax increase? Interstate URA extension to Hayden Island.

1953

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **No Question** **Source:** **Open House Survey**

How will you be including neighborhood associations in the NEPA?

1954

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re: Arterial Crossings, RC-19, RC-22 and RC-23] April 19, Lenny Anderson Says: It would seem that the Jim's proposal, RC 22, would pass muster if it is coupled with freeway improvements as is RC 23. The key data point is the % of current freeway trips that are local. The best way to improve freeway operation is to offer a real option to people who don't want to be on it in the first place...those making local trips.

1955

Community Livability Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety _Seismicity:			

Question: **No Question** **Source:** **Open House Survey**

Don't enlarge the footprint of the I-5 corridor so that you remove our homes. Why haven't we heard about environmental justice for the Vancouver side of this project?

1956

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:	x	No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re: Arterial Crossings, RC-19, RC-22 and RC-23] April 19, Isaac Smith Says: The (multimodal non-freeway bridge) would make the most sense of any of the solutions. It is the simplest and most likely the cheapest. If near 30% of all traffic on the bridges is local, you could reduce the congestion by 1/3 (giving room for trucks) by just rerouting them onto a local bridge. As it is, it's such a hassle to get to Hayden Island, and it would just make sense to give the people what they want, easy access to local destinations and smoother freeway traffic, uninhibited by all those clogging the entrance and exit lanes getting to the island. This gives more options to people which, if you ask them is what they want. Coupled with light rail, this is the best solution. There would be no need for further freeway improvements as the□current bridges would have the equivalent of another lane of capacity, very cost-effective.

1957

Community Livability _Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

No. The recommendation is not clear enough. What are the impacts. Some of these will hurt my neighborhood. Where is the environmental justice to protect us and our homes? Not enough detail on the Number of lanes.

1958

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re: AORTA Response] April 17, 2006 10:53 AM Ron Swaren Says: Jim (or anyone), Where exactly would this "Non-Freeway Multimodal Bridge" be placed? Alongside the existing crossing?

1959

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	x
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

No. I need more information on the impacts to neighborhoods, with these recommendations. I can't make a decision base on the information so far.

1960

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re: AORTA Response] April 17, 2006 08:14 PM Isaac Smith Says: Question: What does the acronym AORTA stand for? This is the best solution, as I have stated in previous strands. It's by far the cheapest, especially if the current bridges are not lifted, and gives the most travel options to a corridor that has very few. There's no reason to spend a lot of money when we can solve the problem cheaply. Light rail MUST NOT be removed from any crossing plan as it's so close already and the ridership potential is huge.

1961

Community Livability _Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:	x	Other:	x
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

I strongly support! Lane consistency, environmental justice, economic justice, increase bus service

1962

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re: AORTA Response] April 18, 2006 08:16 AM Jim Howell Says: Isaac, AORTA is the acronym for the Association of Oregon Rail and Transit Advocates which is a statewide volunteer organization working for safe, environmentally sound, cost-effective transportation since 1976.

1963

Community Livability Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	
Economy and Freight:	x	Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

Neighborhood livability, freeway lane continuity, environmental and economic justice, more mass transit

1964

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re:TR-7 High Speed Rail] April 18, 2006 09:18 AM adron Says: Just on the positive side... we still at least have the current rail right of way, it could almost be high speed. (If the track would be upgraded between Vancouver and PDX we already have Talgo Equipment in the area, which could at least hit 100mph)

1965

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	x
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety _Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

No. There needs to be more information and details. I need to know the impact of these ideas and solutions before to anything.

1966

Community Livability Human Resources:		Natural Resources:		Process :	x
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	x
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re:TR-7 High Speed Rail] April 18, 2006 09:59 AM Ray Whitford Says: Agreed Chris, the CRC will go down as the time that we lost the opportunity to create a right of way for true "high speed rail" in Oregon. It will cost us over 1 Billion dollars 20 years from now when we realize that we need a separate bridge or tunnel just for this needed corridor. 20 years from now the US will not be able to support us, like now (if they can). But I have even less faith in the US Treasury in 20 years. I have asked the CRC over and over again to understand that HSR needs to be a capacity that is built into the design. DON'T BUILD THE CORRIDOR! PLAN FOR IT!!! How hard is this to understand? Where is Earl B. and Brian B. on this critical issue!

1967

Community Livability _Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

Environmental and economic justice, increase mass transit /bus system, lane consistency.

1968

Community Livability Human Resources:		Natural Resources:		Process :	x
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re:TR-7 High Speed Rail] April 18, 2006 05:56 PM Isaac Smith Says:□I completely agree with Ray. You don't need to build HSR now, but dedicated space must be included in any new□crossing. Just like I-205 was built with space for a future transitway, so should the crossing be built with this in□mind. We WILL need HSR in the future, whether it's 20 years or 50 years from now. To provide the ROW for it□now and to plan for it will save hundreds of millions of dollars in the future. "A local high speed rail service would likely have very few stops or stations, and perhaps no stops within the Bridge Influence Area, and thus would not actually carry many passengers for local trips..." This report and committee are too narrowly focused. They seem to think that only the immediate "bridge influence area" should be considered for this crossing. Should people in the influence area be the only ones served by this interstate crossing? This is a multi-REGIONAL corridor. It is the axis for ALL land travel between California and Vancouver, BC. We MUST acknowledge that this crossing is part of a much greater whole and□provide for future needs, i.e. HSR. It won't cost too much to build the ROW into the crossing, especially compared□with the cost of a future crossing dedicated to HSR. "Finally, in order to improve existing transit service in the Bridge Influence Area, it would have to be integrated with the existing bus and rail network, which is infeasible..." They said this sort of thing before in regards to commuter rail. This is simply not true! Throughout the world and even the US HSR stations are fully integrated into local transit systems and are usually the major hub in the transportation system. It's not difficult. I don't know why the keep saying this. They're lying. There are too many major assumptions based on speculation or less that are dictating major decisions in this study.

1969

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

Will the I-5 corridor be widened? None of the proposals seemed to address this.

1970

Community Livability Human Resources:		Natural Resources:		Process :	x
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	x
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re:TR-7 High Speed Rail] April 18, 2006 11:51 PM Ray Whitford Says:□I really don't understand the rational for saying on one hand that the I5 Corridor is critical for the West Coast of□the US and then on the other hand say that HSR isn't needed at CRC because it most likely wouldn't make a□impact in the BIA. Their wishes to convey the importance of the corridor is not a hard sell on citizens of PDX/VAN. But this logic seems to suggest that the corridor isn't the reason for the CRC, its only the BIA that matters. Its like nothing□else matters. Why have the statements in the roll out of the issue and then do nothing to support the corridor and the region?

1971

Community Livability _Human Resources:	x	Natural Resources:		Process :	x
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	x
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

You need to be specific about how many homes you will demolish with each alternative. You also need to get the environmental justice involved on this side of the river. You have 2 taskforce people on EJ. What are they doing for us?

1972

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re: TR-1 to TR-4 the Bus Options] April 18, 2006 02:41 PM Lenny Anderson Says: The problem with the bus options is that for any to work you must have right of way...so two lanes of any new or supplemental bridge would dedicated to buses/HOV...not such a bad idea. But what happens on the OR side? I-5 will not be widened through N. Portland, and we have already built MAX, so the BRT or Express Bus either go into regular traffic or a GP lane s-bound is switched to HOV (OK by me, but not likely to be popular in Clark county). The other option is that buses deliver riders to the existing bays at Vanport/Delta Park to transfer to MAX Yellow Line. Why not just do the transfer in downtown Vancouver and put MAX across the river. MAX from Expo to Rose Quarter is 20 minutes...add 5 minutes to get to downtown Vancouver; its another 5-10 into downtown Portland. A pretty competitive trip. You will note in the Governors' TF a firm commitment to MAX across the river was made, as well as a recommendation that express bus service only to be areas NOT served by MAX. Fred Hansen insisted on this and was supported by TF members from both sides. I expect that including bus options is comparable to the South Corridor study that started with everything butMAX, only to conclude that rail is the most cost effective option with the highest ridership, etc.

1973

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

Comment: I commented at the Hudson Bay High meeting and want to add to those comments. Ped Bike facilities: First of all the brigde must provide a first class bike/ped crossing. This would include: Wide unobstructed paths. The stand 10 wide path is not adiquate because of the speed and volume of bike traffic. View points to the west. The east side of the existing brigde provides magnificant views of the the mighty Columbia River and Mount Hood. This treasure must be preserved and enhanced. The enhancement should include but not limited to the following: No obstructions to the east. Seating out of the way of bike and ped traffic and most important Sound mitigation. The bridge needs to include local access to both Vancouvers Downtown and river front as well as to Jansen Beach area. I recommend 12'wide pathes on both sides of the bridge with wider sections for view point . The paths on both sides have a side benefit as emergency access Transit Service I like the full BRT alternative. This appears to be the most cost effective alternative. Open House. I was disapointed not see or hear any information about how the bridge will land in Vancouver.

1974

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

[Re: TR-1 to TR-4 the Bus Options] April 18, 2006 07:07 PM EvergreenTransitFan Says: Long Trunk Routes that get caught in street congestion and freeway congestion are in-efficient. Rail Transit works for long trips, and buses can feed into the rail system. I think that it might be a better idea to have MAX cross the river, and that way C-Tran can re-deploy service hours, stretching resources.

1975

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	
Economy and Freight:	x	Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

Comment: It is critical that you include light rail and improved bus service in any plans you have for the corridor. A wider freeway and bridge will likely be over filled by the time it could be finished. Any new bridge also needs to be free of disruption from shipping on the Columbia.

1976

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

No. None of these show how wide I-5 will be.

1977

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

Comment: How about a bridge or tunnel East near Troutdale and anouther one west of I-5? I think the population is growing so fast by the time you get anything built you will have to build another. so lets look at more then one crossing spaced out so our other roads leading to those passes across the river doesn't get over run with traffic.

1978

Community Livability Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety _Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

How many homes will each one destroy?

1979

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety _Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

Comment: As a resident of the Arnada Neighborhood I want to say that I don't believe that widening I-5 is the best way to alleviate traffic congestion. Let's focus on mass transit solutions: trains, bus lanes, freight (truck) lanes, tunnels, another bridge for trains and buses, etc., etc.

1980

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

No, because not enough detail was provided to the impact of each recommendation, such as: How many lanes will there be? Are you planning to increase the number of lanes? Increasing the footprint of the bridge will necessarily adversely impact the I-5 neighborhoods in the future.

1981

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

Comment: I urge to Columbia Crossing that I-5 should add a tunnel with MAX Tracks and vehicles access and secondly adds another bridge for Grand Blvd and Grand Avenue both of Vancouver & Portland. I urge to support "Dig In" that compares other state had already "Dig In" campaign. I want seeing that underground tunnels for MAX light rail□and all vehicles in widest lanes and both above and below bridge and tunnel supports. Let me know give me different nine options! Send me FAX immediately! Thanks David Johnson

1982

Community Livability _Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:	x	No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

The issue of environmental justice needs to be strongly considered relative to any changes and plans. The number of lanes should remain consistent throughout the I-5 corridor focusing more on bus commuter service. Unless Clark County residents have a say financially on light rail relative to taxes and maintenance, I am against it.

1983

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	
Economy and Freight:	x	Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

The recommendation should include a provision that prohibits the removal of homes and businesses along the corridor?

1984

Community Livability _Human Resources:	x	Natural Resources:	x	Process :	
Travel Demand, Congestion _Accessibility:	x	Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

Environmental justice for neighborhoods along the corridor, neighborhood livability - no home removal! Park over the corridor - similar to Seattle.

1985

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	x
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

No. I need more information on all of these solutions. This is a fairly vague question, and should be broken into more than one question.

1986

Community Livability Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety _Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

How many homes will each proposal destroy? I am more conscious of the views of the popular than your entire team. You haven't once said what the project will do to the communities it destroys/

1987

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:	x	No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

Only match what Oregon is building.

1988

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **No Question** **Source:** **Open House Survey**

I want bus not train. We don't have control owner train costs. Buses are feasible.

1989

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	x
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety _Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

Environmental justice needs to be addressed. Keeping the lanes on the Washington Side consistent with the Oregon Side. Increase in the bus system.

1990

Community Livability _Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:		Other:	x
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

No. I don't agree and I need more details about highway improvements, how they will impact my own home, before I will agree to anything that the staff recommends. The number of lanes on the bridge will impact the whole of the project. What about the environmental justice?

1991

Community Livability Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety _Seismicity:			

Question: **No Question** **Source:** **Open House Survey**

How are you going to involve the neighborhood associations in NEPA?

1992

Community Livability _Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	x
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

I need more information on impacts of each item. The question is to broad and vague.

1993

Community Livability _Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	x
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

I need more details about the impact these "improvements" will have before I could agree to staff recommendations.

1994

Community Livability Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	x
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

I strongly support! Lane consistency, environmental justice, economic justice, increase bus service

1995

Community Livability _Human Resources:		Natural Resources:		Process :	x
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

they should consider what will be happening in the future 10 or 15 years from now. Also buses.

1996

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	x
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety _Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

Too vague - need more details and info on how these items would impact the big picture of the crossing before agreeing.

1997

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	x
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

Need more details about the recommendations before I could agree

1998

Community Livability _Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:	x	Public Transp# _Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

Induced travel, capacity consistent throughout the study area. No more lanes in WA than in OR. Environmental Justice mitigation efforts, bus rapid transit.

1999

Community Livability Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety _Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

environmental justice - effect on neighborhoods

2000

Community Livability _Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

The lane capacity should be consistent with the number of lanes on the Oregon side. Highway Improvements were not well detailed. Those improvements will have serious effects on our neighborhood

2001

Community Livability Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety _Seismicity:			

Question: **O - 1** **Source:** **Open House Survey**

There are no recommendations that do not impact Hayden Island!

2002

Community Livability _Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **O - 2** **Source:** **Open House Survey**

I believe it is essential that sound walls become a requirement as the project is developed and constructed to protect the quiet enjoyment of households that live on the N. Portland Harbor waterways.

2003

Community Livability Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety _Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

Comment: If you take a walk through the parking lot at the Delta Park-Vanporrt park and ride of the MAX Yellow Line on any given day of the normal work week, you will find the vast majority of the vehicles parked there have Washington license plates. This leads one to conclude that these Vancouver/Clark county residents are "voting with their feet," so to speak, indicating their preference for the light rail option. How many more Clark county residents would make the same choice if they didn't have to travel across an overcrowded Interstate Bridge and, instead, could go to a park and ride light rail station closer to their home in Vancouver? Quite a few, I'll bet. □As TriMet's light rail system continues to expand on the Portland side of the river, I suspect more and more Vancouver residents are going to look at it and the tremendous service it provides and say to themselves, "Why don't/can't we have something like that over here?" I remember a conversation I had with a C-Tran bus driver several months ago. In the course of that conversation, this man - who is an east Clark County resident - acknowledged that when he and his family want to come to downtown Portland, they just drive over I-205 to one of the MAX Red Line's park and rides and take the train the rest of the way. Again, the question: how many more are there like him?□□Here are some comments abut the public transit options retained for further study. (1) Express buses, even those with their own lanes or rights of way, are still part of the overall traffic mix on the roadway. Look at how often the C-Tran express buses get slowed by clogged traffic conditions. (2) Each bus, since it's powered by an internal combustion□engine, is a source of pollution in our airshed AND contributes to global warming. (3) Buses can only carry a limited number of passengers for each operator.

2004

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

Let's take a look at light rail. (1) Light rail trains, since they have their own exclusive roadway are not vulnerable to delays caused by traffic tie-ups on vehicle lanes. (2) Trains are a clean form of transportation, contributing neither to pollution in our airshed nor to global warming. (3) Light rail is also more efficient when you look at the operator-to-rider ratio. A bus operator can transport a maximum of around 50 passengers in their vehicle. By contrast, a single light rail□operator can transport around 200 passengers. □□And then, there's the comfort factor. A train is just a whole lot more comfortable and pleasant to ride on than the bus.□□I realize that some may be skittish about the light rail option because of its rejection by Clark County voters a number of years ago. Since then, there hae been some potentially significant changes that have taken place in our region, changes which could affect how people view the issue. First, population has continued to grow and, with it, the daily congestion in the I-5 corridor between the two states. Second, TriMet's light rail has grown significantly since then, with the opening of service to west side and Hillsboro, the Red Line to Portland International Airport, and the Yellow Line to the Expo Center. Add to that plans to extend service out to Clackamas Town Center along the I-205 corridor and to Milwauke, plus renovate the Portland Transit Mall including adding rail service to 5th and 6th avenues.□□I am sympathetic to Jonathan Schlueter's concerns, as quoted in last Thursday's editions of The Oregonian, about solving the bottleneck here in the Portland area affecting the freight and commerce delivery system. Besides actually adding capacity, I believe a concurrent way of achieving that objective is to give non-commercial users of the transportation system other viable options.

2005

Community Livability Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:		Other:	x
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:		Safety Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

Comment: I AM INTERESTED IN THE COLUMBIA RIVER CROSSING. I COULDN'T FIND ADDESSES WHERE THE APRIL OPEN HOUSE MEETINGS WILL BE HELD. A COUPLE COMMENTS. I WAS A STRUCTURAL INSPECTOR ON THE CONSTRUCTION OF□THE SOUTH BOUND STRUCTURE AND ON PART OF THE NORTH BOUND STRUCTURE RECONSTRUCTION. I WAS THE PROJECT MANAGER ON THE I-205 (JACKSON) BRIDGE. □□ONE OF THE ARTI CLES MENTIONED A TUG WITH A BARGE IN TOW HITTING THE SOUTH BOUND BRIDGE IN 1994. IN 1969 +or- THE NORTH BOUND BRIDGE WAS STRUCK BY AN OIL DRILLING PLATFORM ON A BARGE RESULTING IN CONSIDERABLE DAMAGE TO THE LOWER CHORD OF THE LIFT SPAN.□□PRIOR TO CONSTRUCTION OF THE SB BRIDGE THE 1917 BRIDGE CARRIED 4 LANES OF TRAFFIC(AFTER THE TROLLEY QUIT RUNNING) AND WAS HIT MANY TIMES BY TRUCKS ON THE HIGHWAY. THE SB BRIDGE CARRIED 4 LANES OF TRAFFIC WHILE THE NB STRUCTURE WAS BEING REMODELED.

2006

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:	x	Public Transp# _Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

I am in favor of any means of having another access point to Portland, whether bridge or tunnel.□□A big question, when you have another bridge or tunnel, be it 6 lane, 8 lane, 10 lane, is what do you connect the new structure to? Interstate 5 on the Washington state side, where I live, has had on-going improvements for years in an attempt to handle the increasing traffic flow.□□Interstate 5 in Oregon, from the Columbia River to south of the Tewilleger curves, has not significantly changed since the Fremont Bridge was built. The freeway in the Metro area still necks down to 2 lanes in several spots. This is amazing in 2006.□□The new tunnel or bridge will provide the opportunity to have larger traffic jams until I-5 through Portland has at least the same traffic carrying capacity as the new tunnel or bridge.□□ Portland's history of promoting mass transit and having a non-driving mayor, stunted freeway development and has caused our automotive transportation plan to be years behind schedule.□Sincerely, Bruce Haebe Kalama, WA□□

2007

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion Accessibility:	x	Public Transp# Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

Having lived in downtown Vancouver for 40 years it's my opinion that a 3.5 mile tunnel from Mill plane to just beyond Columbia blvd. along I-5 would be the best solution.I know that the cost are high but so is the delay and the sheer interruption of constructing a bridge of that size. □□Invariably there will be cost over-runs and other complications of building a structure of that magnitude in such a small area, while maintaining a vital link of transportation.By by-passing Jantzen beach and Delta park it would allow for inter-port truck traffic witch tends to slow traffic anyway and ease the bottle-neck at the SR 14 and downtown interchanges.Construction of such a thing would pale in comparison to that of a bridge and comparatively, should hardly be noticed.The price is worth it. Mike Baur

2008

Community Livability _Human Resources:		Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

Comment: I also do not like the traffic using the Columbia Bridge, and using MAX still gives me the problem of sitting in line getting on the freeway and getting through the bottleneck from MArine Drive over the Columbia. (negates the time saved using MAX) I would suggest a loop that would run pass the EXPO and cross over Columbia next to the train tracks, and continue to the I-5 205 exchange. Seems that would relieve some tension and get people home faster that□live in that area, and leave some space for drivers that need to get through North, or SR500. Just a suggestion.

2009

Community Livability Human Resources:	x	Natural Resources:		Process :	
Travel Demand, Congestion _Accessibility:	x	Public Transp# _Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety _Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

Comment: Any proposed project crossing the Columbia would be remiss if it did not include light rail and mass transit at the heart of its mission statement. While mass transit would ease congestion, link the cultural centers of both cities, and decrease the region's dependency on fossil fuels, having a reliable transportation network such as light rail would ensure that we are not talking about a fourth bridge across the Columbia in twenty years. Growth in the region will occur whether we in Vancouver are prepared for it or not. The key to maintaining the distinctive lifestyle that so many value in the city is to be ahead of the curve and forward thinking enough to handle growth in a sustainable and□responsible manner. By linking SW Washington with Portland light rail, we could establish a region that is able to withstand the impact of future energy crisises, while meeting the challenges of accomodating growth--this would good for our region's economy and good for the citizens of Vancouver.

2010

Community Livability _Human Resources:		Natural Resources:		Process :	x
Travel Demand, Congestion Accessibility:		Public Transp# Modal Choice:		Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

Comment: I attended the Open House last night. I want to urge the CRC Task Force to approve the Arterial Bridge option for further study. As I understand it, this option would provide for arterial capacity for local trips that now constitute 1/3 of the traffic on I-5. For this concept to work, it must also have transit ROW, preferably for lightrail. It can also be an opportunity for an outstanding bike/ped facility on the down stream side, assuming the new arterial bridge would be adjacent to the existing bridges on the downstream side. Staff raised a question as to whether federal highway dollars could be used for this option. Federal FTA $ could be part of the transit piece with local (toll?) funds covering the remainder. FHWA $ could be used to pay for the needed upgrades to the existing freeway...eliminating substandard on/off ramps and seismic upgrades, etc. Clearly this option would be relatively low cost and would proivde□the best transportation options to commuters....arterial roadway, high capacity transit and direct bike route.□Another option that I urge the CRC TF to keep in the running is the Short Tunnel, with retension of the existing bridges. This is expensive, but full of potential if the existing bridges are retrofit for arterial traffic and high capacity transit, again LRT would be preferred. The old freeway approaches between the bridges and the tunnel portals on both sides of the river could then be converted as well to boulevard designs, freeing up adjacent land for development, tying downtown Vancouver to the Historic Reserve, etc. The fundamental approach must be 1. provide for local trips...some □arterial capacity...2. for a real transit option...extension of the Yellow Line just makes sense, and 3. a safe and direct bike/ped facility. Whether this is achieved by construction of an arterial bridge with LRT and upgrading the freeway OR by construction of a freeway tunnel and conversion of the existing bridges to arterial/lightrail depends on how deep our pockets are. Either would do the trick. But please....I should NOT have to get on the west coast's Interstate□Freeway to get from N. Portland to Shenanigans to have a drink!

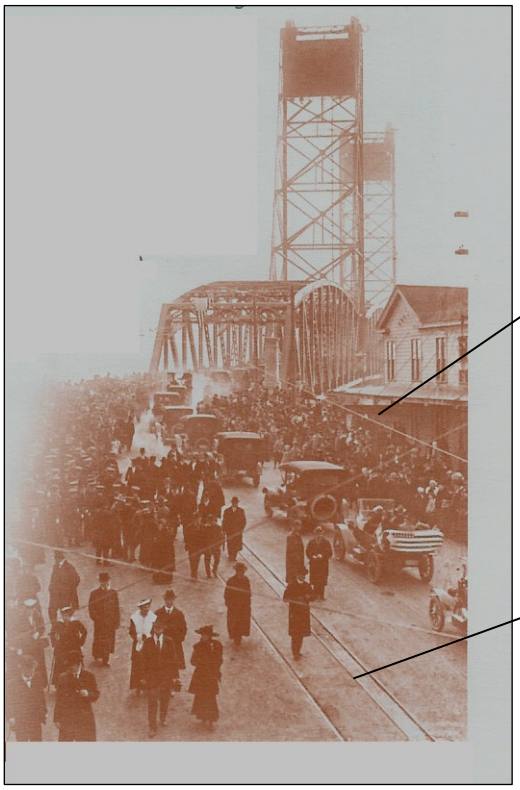
2011

Community Livability _Human Resources:		Natural Resources:	x	Process :	
Travel Demand, Congestion _Accessibility:		Public Transp# _Modal Choice:	x	Other:	
Economy and Freight:		Project Financing:		No Comment:	
Specific Alternatives:	x	Safety Seismicity:			

Question: **No Question** **Source:** **WSDOT "ContactUs" - emails/letters**

Comments I attended the April 13 Red Lion session. These are my two comments: 1. Eliminate movable bridge options. That era is long past, and movable bridges mean time lost waiting for lifts, pollution while idling, accidents and slowed river traffic.□□2. I like the supplemental tunnel concept. Leave the existing bridge for local traffic, pedestrians, bikes, mass transit. Use the tunnel to move through traffic. And consider having the southbound tunnel come up and parallel the southbound lanes and rejoin after Columbia Blvd, possibly eliminating the need to reconstruct that part of the freeway. □Sincerely, Craig Walker

The Interstate Bridge
was built in 1917
with Railroad Tracks
for Transit and Freight service



Trolley Wire for Electric Trains

Three rails for running narrow gage Trolley Cars and standard gage for Interurban Streetcars and freight trains

Submitted by David L. Rowe
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E-mail: dlrowe3162@aol.com

My name is David L. Rowe, I live in Battle Ground.

I retired from Tri-Met after thirty years of observing how public transportation benefits the taxpayers of Oregon.

I am here today to give you facts on why rail service should be included in the Columbia River Crossing solution.

The Amtrak Cascades ranks among the top Amtrak rail lines in the United States. This Railroad runs from Eugene, Oregon to Vancouver, British Columbia, following the I-5 Corridor. In 2005 the passenger count increased 5.6 percent to 636,892 passengers.

The American Public Transportation Association (APTA) reports 9.7 billion transit trips were made in the United States during the year 2005. This was a 100 million ride increase over 2004 public transit usage. Light Rail picked up the largest increase in passengers. (MAX rider ship is approaching 100,000 rides per day)

Minneapolis Light Rail increased by 168% in 2005.
Houston Light Rail trips increased 38%
Salt Lake Light Rail increased 13 %

APTA also reported Commuter Rail trips increased significantly in 2005.

San Carlos, California Commuter Rail trips increased by 12.5%
Indiana saw an increase of 7.3%
(Tri-Met is building a Commuter Rail Line to be completed in two years.)

Referring to the Columbia River Crossing Draft
Component Step A Screening Report
dated March 22, 2006

On page 3-2 figure 3-1:
The Oregon origins and Washington destinations shows where potential Interstate Bridge usage would occur in 2020. It is quite evident most are in close proximity of the Interstate 5 corridor. Light Rail is most effective when there is a concentration of potential riders as portrayed in this diagram.
Today the Light Rail Yellow line along Interstate 5 picks up 12,000 rides daily. If the Yellow line were extended to Clark County it could pick up 12,000 rides during each rush hour by the year 2020.

Planning and building Rail options are the best and less costly solutions in solving congestion in I-5 corridor. This includes a Light Rail bridge at the Interstate Bridge location. Adding a 22 foot wide Light Rail double track supported between the north and south lanes of the I-205 Bridge. Upgrading the present heavy rail to enhance Amtrak passenger service and future Commuter Rail service is important too. In addition to improvements for rail passenger service, the rail freight infrastructure must be improved at the Columbia River crossing. Rail freight efficiency has improved dramatically in the last 20 years. It is estimated a freight train can move one ton of goods 400 miles with one gallon of diesel. A truck can move one ton of goods only 60 miles with one gallon of diesel. Due to the rising price of fuel Rail traffic use will increase.

Rail improvements are the most effective options for the Columbia River Crossing.

Jim Karlock

Cost of Light rail to Vancouver

(All calculated results below are from data on [illegible])

Compared to Express Bus-Short: $302,000 per increased rider
Compared to Express Bus-Long: $495,000 per increased rider

It would literally be cheaper to buy a Pearl district condo for each of those light rail riders that would not ride the bus.

Effect of Light Rail on Traffic Congestion

The proposed light rail system is forecasted to increase the capacity across the Columbia by only 7%.

Are new riders attracted to transit by Light Rail?

Compared to Express Bus-Short, rail gives a 31% increase in ridership for $1.2 billion.
Compared to Express Bus-Long, rail gives an 18% increase in ridership for $1.19 billion.
(Spending 37 times the money increases transit ridership by only18%.)

Questions that should have been asked:

1. How much must we spend on a deluxe bus system to match the ridership of light rail?
2. How many riders would we get if we spent $1.2 billion on a really good bus system?
3. For a given amount of money, which option will give the highest transit use?
4. How accurate are the projections? (The tram is now 700% over its original estimate.)

Portland is a national leader in light rail construction.
Portland was also the nation's leader in increased traffic congestion.

These two facts *are not un-related.* It is time to admit that light rail is a failed experiment that didn't deliver on its promise to reduce congestion.

Light Rail:

Costs too much, does too little.

Cost of Light rail to Vancouver

The Portland/Vancouver I-5 Transportation and Trade Partnership was formed by the governors of Oregon & Washington to make recommendations about the congestion problem on I-5 between the Rose Quarter and SR-500. They forecasted the costs and riderships of two bus options and light rail for a loop going up I-5, over to I-205 and down I-205 to Gateway.
(all data is for the evening rush hour and is from the I-5 partnership -- see bottom of next page):

Express Bus-Short

3 lane/LRT loop	cost: $1,222 million	for 13,000 riders
3 lane/Express Bus-**Short**	cost: $14 million	for 9,000 riders
Increase due to rail	cost: $1,208 million	for 4,000 more riders (subtracting the two)

Cost per increased rider: $1,208,000,000 ÷ 4000 = **$302,000 per increased rider**

Express Bus-Long

3 lane/LRT loop	cost: $1,222 million	for 13,000 riders
3 lane/Express Bus-**Long**	cost: $32 million	for 10,600 riders
Increase due to rail	cost: $1,190 million	for 2,400 more riders (subtracting the two)

Cost per increased rider: $1,190,000,000 ÷ 2400 = **$495,000 per increased rider**

It would literally be cheaper to buy a Pearl district condo for each of those ridders that would not ride the bus. (Of course it would hard to identify those individuals)

Effect of Light Rail on Traffic Congestion

The proposed light rail system is forecasted to carry only 2400-4000 passengers that would not have otherwise taken the bus, thus its real effect is to remove those 2400-4000 people from the road.

Using the higher number of riders: Since the study period was a four hour evening rush period, those 4000 people are 1000 people per hour. At an average car loading of 1.2 people, that is 833 cars per hour removed from the road. The capacity of a freeway lane is about 2000 cars per hour, so the effect is to add 42% of one lane of freeway capacity (or 25% of one freeway lane if you use the 2500 riders forecast).

Considering that the current capacity is 6 lanes (the forecast was for I-5 and I-205 river crossings combined), the added 42% of one lane is an **increase in capacity of 7% to the current 6 lanes in the study area** (or 4% if you use the 2500 number). ----- **For $1.2 Billion.**

(Over)

Are new riders attracted to transit by Light Rail?

Another way to look at the projected data is how much does constructing light rail increase transit rider ship?

(Repeating the charts)

3 lane/LRT loop	cost: $1,222 million for 13,000 riders
3 lane/Express Bus-**Short**	cost: $14 million for 9,000 riders
Increase due to rail	cost: $1,208 million for 4,000 more riders (subtracting the two)
Increased ridership:	4,000 ÷ 13,000 = 0.31 - **A 31% increase in ridership** for spending an additional $1.2 billion

Express Bus-Long

3 lane/LRT loop	cost: $1,222 million for 13,000 riders
3 lane/Express Bus-**Long**	cost: $32 million for 10,600 riders
Increase due to rail	cost: $1,190 million for 2,400 more riders (subtracting the two)
Increased ridership:	2,400 ÷ 13,000 = 0.18 - **An 18% increase in ridership** for spending an additional $1.19 billion. This is spending 37 times the money for an additional 18% transit rider ship.

Notice that as the bus system got better, it captured even more of the light rail riders. A spending increase of 229% got 15% (9,000 to 10,600) more riders. Would another 229% spending increase get another 15% ridership increase? If so, the bus would be carrying around 12,484. This is only 515 riders less than rail, or only 4% less than rail, for a cost of only $74 million compared to$1.2 BILLION.

Here is the question that should have been asked:
How much must we spend on a deluxe bus system to match the ridership of light rail?
Look at dedicated bus ways AND buses on HOV lanes.

Date source: http://www.i-5partnership.com/reports/q3.html (Attached).
Rider Ship is from the "Travel Time" section (circled in red).
Costs are from the 'Cost' section (circled in red).

According ODOT, the cost estimate was made by consultant Parsons Brinkerhoff in cooperation with Tri-Met and the ridership projections were by Metro and David Evans.

Also see the video: Evaluation of Rail Transit Projects with Tom Rubin (19 meg file) at http://www.saveportland.com/

Portland / Vancouver I-5 Transportation and Trade Partnership

Washington and Oregon working together for the economy, jobs, and quality communities

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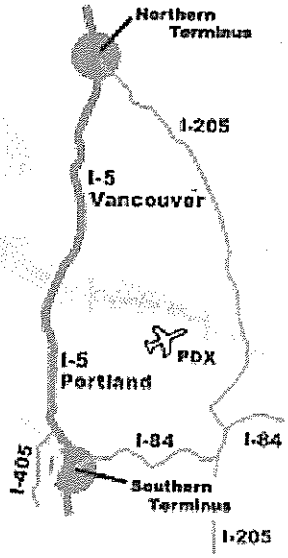

Do we need additional transit service? What type of transit service?

Express Bus - Short	Express Bus - Long	Light Rail Loop
• Express bus system in Clark County • Express bus on I-5 in HOV lane from 134th in Clark County to Expo Transit Center • New bridge to carry HOV lane across the Columbia River • Includes expanded park and ride and more feeder bus service	• Express bus system in Clark County • Express bus on I-5 in HOV lane from 134th in Clark County to downtown Portland • A fourth lane in each direction from 134th to the Fremont Bridge would operate as an HOV lane during peak periods • Includes expanded park and ride and more feeder bus service	• Light rail system in Clark County • New bridge to carry light rail • Includes expanded park and ride and more feeder bus service

Summary of Findings
(See Details of Summary Findings below)

Rating Scale

Measure	Baseline 2020	Express Bus - Short	Express Bus - Long	Light Rail Loop
Reduce transit travel times Downtown Portland to downtown Vancouver in p.m. peak period	41 min.	35 min.	26 min.	25 min.
Increase ridership Number of people crossing the Columbia River using transit in the p.m. peak period	6,500 riders	9,000 riders	10,600 riders	13,100 riders

Promote transportation choice Percent increase in people using transit from downtown Vancouver to all destinations in p.m. peak				
Flexibility of service Ability to re-route service to meet changing travel demands				
Serves a variety of transit markets All day service, 7 days a week, available for multiple trip purposes				
Encourages compact communities Improved transit service and predictability of service remaining in corridor				
Minimizes environmental Impacts Impacts to natural resources such as fish, wildlife, plants, wetlands	Moderate	Moderate	Moderate	to mod/major
Minimizes displacements Number of residential and other displace-ments given conceptual design	12 (Rose Quarter)	+1 See 3 lane	+1 See 3 lane	+79 with current alignment (w/o bridge)
Cost (2001 dollars)	NA	+$14 M plus $668 M hwy upgrades	+$31 M plus $1,477 M hwy upgrades	+$1,222 M

Summary Details

Express Bus - Short	Express Bus - Long	Light Rail Loop
Travel Time		
Provides greater speed and reliability over Baseline 2020 transit operations in the corridor.	Provides better speed and reliability compared to short express bus.	Provides the best speed and reliability of the transit options because LRT is in its own right-of-way.
Improves time to travel on transit between downtown Portland and downtown Vancouver in the evening peak period: *Baseline = 41 min.* *Express Bus - Short = 36 min.*	Significantly improves time to travel on transit between downtown Portland and downtown Vancouver in the evening peak period: *Baseline = 41 min.* *Express Bus - Long = 15 min.*	Significantly improves time to travel on transit between downtown Portland and downtown Vancouver in the evening peak period: *Baseline = 41 min.* *Light rail loop = 16 min.*

Does not maintain transit travel times in the I-5 corridor: Transit travel times with express bus short will be approximately 9 minutes longer than they are today.	Maintains transit travel times in the I-5 corridor: Transit travel times with express bus long will be approximately the same as they are today	Maintains transit travel times in the I-5 corridor: Transit travel times with light rail will be approximately the same as they are today
Least change in transit travel time between Portland and Vancouver	High transit travel time savings - is equal to the LRT Loop option.	High travel time savings - equal to Express Bus - Long.
Increases transit ridership over baseline. Number of people using transit during the evening peak period: • Baseline 2020 = 6500 riders • Express Bus - Short = 900	Increases transit ridership over baseline. Number of people using transit during the evening peak period: • Baseline 2020 = 6500 riders • Express Bus - Long = 10,600	Increases transit ridership over baseline. Number of people using transit during the evening peak period: • Baseline 2020 = 6500 riders • Light Rail Loop = 12,600
This option, however, has the lowest ridership attraction compared to other transit options: • Express Bus - Short = 9000 riders • Express Bus - Long = 10,600 riders • Light rail loop = 13,000 riders	This option has the second highest ridership attraction compared to other transit options: • Express Bus - Short = 9000 riders • Express Bus - Long = 10,600 riders • Light rail loop = 13,000 riders	This option has the highest ridership attraction compared to other transit options: • Express Bus - Short = 9000 riders • Express Bus - Long = 10,600 riders • Light rail loop = 13,000 riders
Does little to promote transportation choice. For instance, • Transit ridership in downtown Vancouver increases by 8% for express bus-short option compared to 40-50% with LRT	Like Express Bus - Short does little to promote transportation choice. For instance, • Transit ridership in downtown Vancouver increases by 10% for express bus-long option compared to 40-50% with LRT	Does the most to promote transportation choice. For instance, • Transit ridership in downtown Vancouver increases by 40-50% for LRT compared to 8-10% with Express Bus.
Express Bus - Short	**Express Bus - Long**	**Light Rail Loop**
Environmental Impacts		

Moderate environmental impacts that are difficult to avoid and will need to be mitigated. Least impacts of construction on the natural environment and land use impact of any transit option.	Moderate environmental impacts that are difficult to avoid and will need to be mitigated.	Moderate environmental impacts. Refinement of various alignment options design could reduce or av many of these impacts.
Express Bus - Short	**Express Bus - Long**	**Light Rail Loop**
Displacements		
One displacement directly from express bus due to the fact that it operates on the highway in already established right-of-way.	One displacement directly from express bus due to the fact that it operates on the highway in already established right-of-way.	Highest number of displacements of the transit options (79) The number of displacements may be reduced with alternative routes or alignments of light rail. The high number of displacements is due to the fact that light rail has its own new right of way.
Express Bus - Short	**Express Bus - Long**	**Light Rail Loop**
Cost		
• $14 million ($2001) • Least cost of any transit option. • Express bus is the least cost transit option due to the fact that it operates on the highway in an already established right-of-way (see 3 vs. 4 Lane).	• $32 million ($2001) • Express bus is a lower cost transit option due to the fact that it operates on the highway in an already established right-of-way (see 3 vs. 4 Lane).	• $1,222 million ($2 • Highest cost of the transit options. • High cost is due to the fact that it operates on its own right-of-way and with a track system.
Express Bus - Short	**Express Bus - Long**	**Light Rail Loop**
Other		
Compared to light rail transit (LRT), buses have the following advantages: • Buses can be flexibly routed to serve different origins and destinations, and to address particular traffic congestion problems • Buses can effectively serve	Compared to LRT, buses have the following advantages: • Buses can be flexibly routed to serve different origins and destinations, and to address particular traffic congestion problems. • Buses can more effectively serve	Compared to express bus, LRT has the following advantages: • Does the most to promote transportation choice (transit ridership in downtown Vancouver increases by 40-50% with LRT, compared to 8-10% for express bus options). • Serves a range of trip purposes throughout

outlying population centers such as Battle Ground and Ridgefield • Buses can readily be placed on new routes • Compared to light rail, express bus serves a more limited transportation market. Express bus, as evaluated, is point-to-point service that serves the commuter market and runs Monday - Friday in the a.m. and p.m. peak periods only.	outlying population centers such as Battle Ground and Ridgefield • Buses can readily be placed on new routes. • Compared to light rail, express bus serves a more limited transportation market. Express bus, as evaluated, is point-to-point service that serves the commuter market and runs Monday - Friday in the a.m. and p.m. peak periods only	the day, seven days a week. • Light rail can provide service to multiple points along the line and be a catalyst for community redevelopment. • Reinforces the Vancouver and Portland Central Cities and Regional Centers such as Vancouver Mall and Gateway. • Across all measures, I-5 performs better when paired with Light Rail Transit than with Express Bus Transit because Light Rail attracts more riders. • Completing the LRT system is consistent with regional and local goals. • A low span Columbia River bridge with its occasional bridge lifts would compromise light rail operating reliability.

For more information see:

Graphs:
Transit

Data Table (Microsoft Word format | Adobe Acrobat format)

Maps:
Express Bus - Short/3 Lanes
Express Bus - Long/4 Lanes
Light Rail Loop/3 lanes
Light Rail Loop/4 lanes

Costs of Option Packages Studied

Environmental Findings

Will Peak Oil Bring Down Modern Society?

To believe that society will be brought to its knees by running out of oil you have to believe:

That, after 100 years of false alarms, we really ***will run out*** of oil.

AND
That, contrary to widely accepted economic laws,
higher prices will not reduce demand,.

AND
That, contrary to widely accepted economic laws,
higher prices will not bring additional supplies.

AND
That the experts are wrong about the amount of shale oil.

AND
That the experts are wrong about the amount of tar sands oil.

AND
That we cannot use hydrogen because we will run out of uranium
to run the nuclear power plants necessary to make hydrogen.

AND
That we cannot make gas from our huge reserves of coal like
the Germans did to run their war machine in 1943.

AND
That, after harnessing steam power, electric power and the atom. Placing a man on the moon and exploring other planets. Creating the telegraph, telephone, radio, television and computers. Conquering plagues, famine, polio, smallpox and dozens of other diseases and decoding the genetic code. After centuries of solving every kind of problem imaginable, mankind will suddenly lose his ability to solve problems.

---- Gimme me a break ----

COLUMBIA RIVER CROSSING PROJECT

Robert A. Johnson 360-571-8348 Vancouver, Wa April 26, 2006
Degree: Environmental studies, Regional and City Planning

Congress has just passed a law, stating that gasoline can not longer be used by people for commuting to and from their work place, if the driving distance is 6 miles or more in each direction.

If such a law were passed, it would require a "change of life style". Could such an event happen, you bet. Shall we follow our old style of thinking and wait until it happens; no, the time to starting plan for this life changing event is now, before such a law is passed. The solution is not to build more roads and more freeway lanes (traffic expands to fill all available freeway); it's to stop or reduce the need for people to commuting to and from the work place. This would require people to work at home or in offices closer to their homes and connect these locations with their existing work places; through the use of modern communication methods. The UK and Japan are way ahead of us in solving these problems; so it does not require reinventing the wheel. We need to reduce or stop the waste of work and free time hours caused by commuting. Use the available gasoline for recreational purposes and not for commuting would be one of the benefits.

The bridge needs to be replaced to resolve public safety issues and to provide for the unimpaired movement of commercial and private vehicles. But it plays only a small part in the problem of moving people or reducing traffic congestion. Going from three lanes to two lanes and back to three lanes on the freeways in it's self causes traffic congestion; along with changing speed limits. Replacing the bridge and adding or realigning lanes will improve the congestion in that area; but it will only move the congestion problem north and south of the bridge project.

Implementing such a plan will not be easy. But we must take the first step.