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1. Draft Meeting Agenda

Task Force Meeting Agenda
Wednesday, November 30, 4:00–8:00 p.m.

Optional Information Briefing 3:30–4:00

OAME, Main Conference Room
4134 North Vancouver (at North Skidmore), Portland, Oregon

Time	Topic	Action
3:30–4:00	Transportation Demand Management Briefing	Information only (optional)
4:00–4:15	Public Comment	Receive public comment
4:15 – 4:20	October 12 Task Force Meeting Summary	Approve
4:20–4:35	Public Involvement Update	Report
4:35–5:30	Problem Definition	Discuss & adopt
5:30–6:00	Evaluation Framework Update	Discuss
6:00–6:15	Dinner Break	
6:15–7:15	Small Group Session—Evaluation Framework	Discuss
7:15–8:00	Small Group Report to Full Group	Report

2. Transportation Demand Management (TDM) Presentation

TDM: Transportation Demand Management

TSM: Transportation System Management

- TDM and TSM measures are designed to improve operation of area streets and make transit, bicycling, and pedestrian circulation safer and more efficient without costly development of new infrastructure
- TDM and TSM measures are different techniques for managing travel on a transportation system
- TDM measures generally focus on demand issues; TSM measures typically focus on managing supply

TDM: Transportation Demand Management

TDM programs intend to minimize automobile travel by:

- Increasing the number of persons in a vehicle
- Changing modal choice
- Influencing the time of, or need to, travel

Examples of TDM Measures

- Education and outreach about travel options
- Ridesharing programs
- Vanpooling program
- Subsidized or discounted transit passes
- Alternate work schedules
- Telecommuting and teleconferencing
- Transportation Management Associations

Examples of TDM Measures

- Improved transit routing
- Transit-oriented development
- Roadway pricing strategies
- Parking pricing strategies
- Limits on parking supply

TSM: Transportation System Management

TSM measures are defined as operating, regulatory and service policies that can achieve maximum efficiency and productivity of a transportation system

Examples of TSM Measures

- Traffic signal coordination
- Real-time travel information
- Ramp metering
- Incident management
- Signal priority and/or extension for buses and LRT
- Improved transit shelters
- Separated sidewalks and bike lanes

Examples of TSM Measures

- High Occupancy Vehicle (HOV) lanes
- High Occupancy Toll (HOT) lanes
- Investment in public transit
- Dedicated bus lane

I-5 Partnership Findings

- There is no single silver bullet in the TDM/TSM arsenal
- Additional transit service is the single most important investment necessary to achieve TDM/TSM targets
- TDM/TSM strategies are most effective when used in a coordinated approach

3. October 12 Task Force Meeting Summary



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VANCOUVER, WA 98660
360-737-2726 | 503-256-2726

Meeting Summary
Columbia River Crossing Task Force
October 12, 2005
4–6:30 p.m.

WSDOT SW Region Headquarters
11018 NE 51st Circle, Vancouver, Washington

Members Present:

Rex Burkholder, Metro
Bob Byrd, Identity Clark County
Serena Cruz, Multnomah County
Hal Dengerink, Washington State
University Vancouver (Task Force Co-chair)
Jill Fuglister, Coalition for a Livable Future
Lynne Griffith, C-TRAN
Jerry Grossnickle, Columbia River Tugboat
Association
Brad Halverson, Overlook Neighborhood
Association
Fred Hansen, TriMet
Henry Hewitt, Stoel Rives (Task Force Co-
chair)
Eric Holmes, City of Battle Ground
Monica Isbell, Portland Business Alliance
Dean Lookingbill, Regional Transportation
Council

DICK MALIN, Central Park Neighborhood
Association
MARK MCCLOUD, Greater Vancouver
Chamber of Commerce
WALLY MEHRENS, Columbia Pacific Building
Trades
LARRY PAULSON, Port of Vancouver, USA
BOB RUSSEL, Oregon Trucking Association
JONATHAN SCHLUETER, Westside Economic
Alliance
KAREN SCHMIDT, Washington Freight
Mobility Strategic Investment Board
JERI SUNDVALL, Environmental Justice Action
Group
WALTER VALENTA, Bridgeton Neighborhood
Association
SCOT WALSTRA, Greater Vancouver Chamber
of Commerce
TOM ZELENKA, Oregon Freight Advisory
Committee

Member Substitutes Present:

Tom Miller for Sam Adams, City of Portland

Andrew Ness for Lora Caine, Friends of
Clark County

Absent Members:

Sam Adams, City of Portland
Charles Becker, City of Gresham
Dr. Wayne Branch, Clark College
Rich Brown, Bank of America
Lora Caine, Friends of Clark County
Elliot Eki, Oregon/Idaho AAA
Dave Frei, Arnada Neighborhood
Association
Ed Lynch, Vancouver National Historic
Reserve Trust

Bart Phillips, Columbia River Economic
Development Council
Royce Pollard, City of Vancouver
Janet Ray, Washington AAA
Art Schaff, Washington State Trucking
Association
Steve Stuart, Clark County
Bill Wyatt, Port of Portland

Project Team Members Present:

Katy Brooks, The JD White Company, Inc.
(JDW)
Rob DeGraff, Oregon Department of
Transportation (ODOT)
Amy Echols, Washington State Department
of Transportation (WSDOT)
Doug Ficco, WSDOT

Jay Lyman, DEA
Tom Markgraf, Tom Markgraf & Associates
David Parisi, Parisi Associates
Marcy Schwartz, CH2M Hill
Kris Strickler, WSDOT
Don Wagner, WSDOT

I. Meeting Minutes

Hal Dengerink, Columbia River Crossing (CRC) Task Force Co-chair, requested the adoption of the September 12, 2005, meeting minutes.

Action: Meeting minutes were adopted with no discussion.

II. Vision and Values Statement

Hal introduced the Vision and Values Statement and emphasized the importance of moving it forward. Task Force members discussed prioritization of the values and concluded that the listing of values does not reflect any level of priority. Several members emphasized the importance of biking, pedestrian, and vehicle safety as one of the primary reasons for the project. Others discussed the effects of congestion on the economy, the freight industry and commuter mobility.

Rex Burkholder, on behalf of the Bi-State Coordination Committee, submitted a written amendment concerning mobility and vehicle type. The amendment promotes solutions that favor truck mobility over solutions that increase single occupant vehicle capacity. The amendment is attached in Appendix A.

Members inquired about the public comment process in regards to the Vision and Values Statement. Several members want to ensure that public comments are considered before a final vote is taken on the statement. Co-chairs stated changes could be made to the document after open houses for the scoping phase, if necessary. A summary of Task Force comments on the Vision and Values is summarized in Appendix B.

Action: The Vision and Values Statement was adopted, 23 ayes and 1 nay, after discussion. Public comments regarding the statement will be discussed at the November 30, 2005 meeting.

III. Project Problem Definition

Rob DeGraff, Project Co-director, and Jay Lyman, Consultant Team Project Manager, presented the project's problem definition. The Problem Definition document provides a common understanding of problems the project will address. Per discussion, Jay will make minor changes to the travel markets section on page 2 and edit the seventh problem statement regarding future problems with regional growth and the decline of mobility and accessibility.

Task Force members inquired about distinguishing transit service markets and times, vehicular and marine accident data, design standards, and growth rates. Members would like the project to include consideration of marine traffic safety, area growth projections, international market trends, and bridge lift impacts to freight. Comments are summarized in Appendix C.

Action: No action required. Discussion to be continued on November 30, 2005, pending revisions from this discussion and public comments from the scoping phase.

IV. Evaluation Criteria

Kris Strickler and Jay Lyman presented the draft evaluation criteria and explained that, in the future, each criterion will have a performance measure tied to it. The evaluation criteria will be presented for comment to the public at the upcoming open houses.

Task Force members primarily commented on Table 2 of the evaluation criteria. Members posed questions regarding what they would be measuring and the system of metrics. They recommended that language should match the Vision and Values Statement language, and correlate with its community livability sub-points. In addition, text regarding bike/pedestrian safety and communities and people needs to be enhanced and livability needs to be defined. Task Force members requested that emergency vehicle movement and vehicle through-put be added to the criteria. Comments are summarized in Appendix D.

Action: No action required. Discussion to be continued on November 30, 2005.

V. Transportation Demand Management Overview

This presentation was tabled until the November 30, 2005, meeting due to time constraints.

Action: No action required.

VI. Upcoming Meeting

Hal announced that the next meeting had been rescheduled from November 28, 2005, to November 30, 2005.

Tentative Agenda:

November 30, 2005, 4:00–6:30 p.m., OAME, Main Conference Room, 4134 N. Vancouver Avenue, Portland.

- Public comment summary from all elements of outreach during scoping, including the October 22, 25, and 27 open houses, the project Web survey, etc.
- Adoption of problem definition
- Discussion and potential adoption of evaluation criteria

VII. Public Comment

Hal Dengerink received comments from four citizens. No written comments were submitted.

The following people provided comments: Sylvia Evans, Sharon Nasset, Jim Howell, and Vinton Erickson.

Sylvia Evans discussed chronic health problems and environmental damage potentially caused by pollution along the I-5 corridor. She mentioned elevated asthma rates, particulate on plants, and other health concerns related to exhaust and diesel emissions in North and Northeast Portland neighborhoods. Ms. Evans asked that the Task Force be aware of documentation on diesel emissions and potential continued health impacts in relation to I-5.

Sharon Nasset's comments included an explanation of the importance of open meetings and documents in the public process. She also expressed her concern about the Web site not accurately identifying the current project. Further, she would like maps to show the project's complete influence area.

Jim Howell stated that the project should start with a low cost option.

Vinton Erickson emphasized the need for a bypass instead of a new bridge.

Note: The full text of public comments is available in the meeting transcript posted on the CRC Web site.

VIII. Adjournment

The meeting adjourned at 6:30 p.m.

11-15-05

Bi-State Coordination Committee

Appendix A

The Bi-State Coordination Committee is chartered by member agencies to review, discuss and make recommendations about transportation and land use issues of bi-state significance.

Metro
Councillor Rex Burkholder
CHAIR

City of Vancouver
Mayor Royce Pollard
Vice-Chair

Clark County
Commissioner Steve Stuart

Multnomah County
Commissioner Serena Cruz

City of Portland
Commissioner Sam Adams

City of Battle Ground
Eric Holmes, City Manager

City of Gresham
Mayor Chuck Becker

C-TRAN
Lynne Griffith, Executive
Director/CEO

Tri-Met
Fred Hansen, General Manager

Port of Vancouver
Larry Paulson, Executive Director

Port of Portland
Bill Wyatt, Executive Director

WSDOT
Don Wagner, SW Administrator

ODOT
Matthew Garrett, Reg. 1 Manager



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October 12, 2005

Mr. Hal Dengerink
Co-Chair
Columbia River Crossing Task Force
700 Washington Street
Vancouver, WA 98660

Mr. Henry Hewitt
Co-Chair
Columbia River Crossing Task Force
700 Washington Street
Vancouver, WA 98660

Dear Hal and Henry

On behalf of the Bi-State Coordination Committee I would like to voice support for the revised Values and Vision Statement dated 10-12-05.

However, I do have one item that remains to be addressed. This issue concerns mobility and vehicle type. Specifically, trucks carrying freight on Interstate 5 are vital to our manufacturing, warehousing and shipping employers in the region as well as those along the West Coast. If we want to maintain and enhance our economy, we must ensure that we promote truck mobility in the region and particularly on Interstate 5, including the bridge influence area. However, simply building more general purpose travel lanes could result in the lanes being filled with more single occupant vehicles - not the most efficient use of lane capacity - and not helping truck movement.

Accordingly, I suggest that the Values and Vision statement include the following addition (underlined phrase):

"Enhancing the I-5 corridor as a global trade gateway by addressing the need to move freight efficiently and reliably through the I-5 bridge influence area, promoting solutions that favor truck mobility over solutions that simply increase single occupant vehicle capacity, and allowing for river navigational needs."

Thank you for this opportunity to comment.

Sincerely,

Rex Burkholder, Chair

Appendix B

Comments on Vision and Values Statement

(Based on the Task Force Vision and Values Statement included in appendices)

Columbia River Crossing Task Force Meeting October 12, 2005

- Under regional economy, add that the goal is to look at solutions that do not increase single occupancy vehicle use
- The value of congestion reduction is a non-deliverable outcome. We can improve mobility, but reducing congestion will not be possible
- We need public input around vision and values. We will then move on to the problem definition. After that, we will move on to how we will judge alternatives
- Is here because she supports her community's vision and values. Task Force cannot dictate vision and values. Environmental Justice checks things with the community
- There will be an opportunity to check in with the vision and values after it is adopted
- The project team will discuss the Vision and Values with the public at the end of the month during open houses (Oct. 22, 25, 27)
- There is a consensus to move forward. How do we provide a feedback loop?
- The Task Force review sequence includes the Vision and Values Statement, Problem Definition and the Evaluation Criteria (Framework)
- If values aren't right, they can be modified. But we need to move forward.
- Congestion reduction and freight mobility are different sides of the coin –the problem we are trying to solve
- Concerned that freight and commuter mobility are taking a back seat.
- Emphasize safety, economy, and transportation
- The order of the values in the document does not dictate their priority
- The Task Force will receive a summary of public input on the Vision and Values Statement and can include these comments and reconsider the Statement if they choose to do so
- Put Vision and Values checkpoint on the next meeting agenda (November 30, 2005)

Appendix C

Comments on Problem Definition

(Based on Problem Definition hand out included in the meeting appendices)

Columbia River Crossing Task Force Meeting October 12, 2005

This document will be updated after public comment is taken in the scoping phase open houses.

Project team is seeking input on the text in the left column describing the problem. Text on right includes technical description and data.

First six problems are today's problems; the seventh category includes future problems.

Front page Problem Definition, third paragraph, Add "or 99E" to 3 to 4 State Highways

General Comments to Introduction:

- Recognize the I-205 Corridor link
- There will likely be impact to marine navigation
- The Problem Definition should include the Burlington Northern/Santa Fe (BNSF) bridge
- Perhaps change the Bridge Influence Area (BIA) acronym.

Comments regarding Current Problems:

Travel Demand #1:

- I-5 Corridor will influence/affect I-205 Corridor
- Marine navigation/drawbridge will be affected (include in bridge traffic section)
- Add language regarding BNSF rail bridge impacts to this project
- Improve barge traffic
- State that the number of single occupancy vehicles (SOVs) is a problem

Transit Service #2:

- Distinguish transit markets (commuter and local service)
- Be more specific on time and areas of service
- Include transit travel times and markets
- Separate modes

Truck/Freight Access #3:

- The description is narrow and parochial. Bridge constrains traffic (freight) on the entire West Coast (California to Mexico)—It is an interstate, international corridor
- Add reference to I-5 as a major interstate corridor

Safety #4:

- Include bridge lift safety impacts in this section
- Bridge lift issue should be its own bullet point (impact to traffic/back-ups)
- Bridge lifts increase congestion and potential for accidents
- Consider/include maritime traffic safety
- The I-5 bridge is the most dangerous spot on the river for marine traffic
- Can you provide us with an accident history for marine traffic?
- Narrow lanes—are they more narrow than normal?
- Can crash rates be compared to national or West Coast statistics?
- Is there any national safety considerations/data that might be useful here?
- What design standards will be used on this project? –Use the word “substandard” carefully and precisely
- State standards are similar to national standards
- Should state that the bridge doesn’t meet current design standards
- The accident rate is stated as 2.5 times greater than the average; is this accurate?

Bike and Pedestrian Facilities #5:

- State that this does not meet federal highway standards, based on current national standards

Seismic Standards #6:

- Most bridges do not meet seismic standards
- Research regional bridges that meet current seismic standards

Future Problems #7:

- Strike out the word “vehicular” before freight
- Make sure population, employment and vehicular projections are accurate
- Consider growth projections from the rest of the California to Mexico West Coast
- Reference the effective distribution of jobs
- Concerned that predicted growth rates have been inaccurate historically—can that be improved?
- Make sure we consider the specific types of growth/uses near the bridge
- Add data on freight projections to background text –make sure it is up-to-date and accurate, as freight is expected to grow exponentially
- Consider costs to how people travel (does it influence mode of choice?)
- Freight numbers may be low—will triple by 2025—using “50% truck traffic” and “substantial” to describe rate of freight growth underplays severity
- Consider Asia/import market trends
- Project team would like forecasts from both ports
- Freight will persist through fuel hikes, but will affect how people will travel
- Add air quality issues to traffic delay impacts
- Consider bridge lift impacts to freight congestion if peak time expands into bridge lift time

- How do we address federal/larger issues—terrorism and endangered species
- Would like to see public comment on problem definition before deciding if she is close to voting

10-17-05

Draft

Appendix D

Evaluation Framework Comments

(Based on Evaluation Framework worksheet included in the meeting appendices)

Columbia River Crossing Task Force Meeting October 12, 2005

- Table #1 is pass/fail
- Table #2: Describe more detail on metric systems (performance measure)
- How will evaluations get specific-Task Force needs to know range of what we are considering
- Table #2, 4.2: Change language to enhance bike/pedestrian safety
- Consider different language other than “avoid or minimize” when talking about people/communities
- We need to clarify how we evaluate bi-state decisions on growth and land use impacts
- Table #2, 5: Bridge may impact economy livability and land use
- Bike/pedestrian safety should be enhanced, not just maintained
- Ensure that language in the evaluation criteria matches language used in the Vision and Values Statement (2 mentions of this issue)
- Community Livability Criteria (#1) needs to include Vision and Values sub points: Public Health, aesthetics, etc.
- Address/include emergency vehicle movement
- Table #2, 7: Include that the beneficiary pays and better define who we aim to increase transportation value (distribution of costs between those who will use the facility –be it transit, commuter or freight)
- Table #2, 2: Think about how this will effect accessibility and reliability (how fast you go).
- Table #2, 3: Add vehicle through-put
- Add language to emphasize importance of I-5 as a West Coast corridor
- Better define livability

4. Public Involvement Summary



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DRAFT
Environmental Impact Statement
Public and Agency Involvement
Scoping Update

Report to the CRC Task Force
November 30, 2005

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1. INTRODUCTION

The Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) initiated the National Environmental Policy Act (NEPA) Environmental Impact Statement (EIS) process for proposed highway and transit improvements in the Interstate 5 (I-5) corridor between the areas of Portland, Oregon and Vancouver/Clark County, Washington.

NEPA is the basic national charter for protection of the environment, and provides an interdisciplinary framework to ensure that federal agency decision-makers consider environmental factors. The key procedure required by NEPA is the preparation of an EIS for any major federal action that may significantly affect the quality of the environment. Public involvement, an important aspect of NEPA procedures, is provided at various steps in the development of an EIS. The first opportunity for public involvement is the EIS scoping process. This report briefly describes the EIS scoping process, and summarizes the issues identified to date during the scoping process.

The “scope” of an EIS is the range of environmental issues to be addressed, the types of project effects to be considered, and the range of project alternatives to be analyzed. The EIS scoping process is designed to provide an opportunity for the public and other federal and state agencies to help determine the scope of an EIS. This EIS is being performed for the improvements project known as the Columbia River Crossing (CRC) project.

The first formal step in the preparation of an EIS is publication of a Notice of Intent (NOI) to prepare an EIS. The FHWA and FTA published the NOI for this proposed action in the *Federal Register* on September 27, 2005 **Appendix A**. The NOI describes the proposed action and the reasons an EIS is being prepared. A public notice announcing the proposed action and the CRC scoping meeting was published in seven newspapers (see Table 1). The scoping meetings were also advertised through:

- 43,854 newsletters mailed to a carrier route distribution in the project area and the project mailing list,
- a project introduction letter sent to 5998 email addresses on the project mailing list,
- the City of Portland’s Office of Neighborhood Involvement electronic newsletter,
- the reader board located outside the Jantzen Beach SuperCenter along I-5,
- posters inside the Jantzen Beach SuperCenter,
- the distribution of 70 flyers to properties at or near the Jantzen Beach SuperCenter,
- the distribution of approximately 1,000 newsletters to community locations in North and Northeast Portland and the City of Vancouver, and

Table 1. Scoping Meeting Advertising Publications and Dates

Paper	Ad Date
Asian Reporter	Oct. 11, 2005
Columbian	Oct. 13, 2005
El Hispanic News	Oct. 6, 2005
Oregonian	Oct. 12, 2005
Portland Observer	Oct. 12, 2005

Table 1. Scoping Meeting Advertising Publications and Dates

Skanner	Oct. 12, 2005
St. Johns Review	October 7, 2005
	October 21, 2005

Project staff also issued a media release to regional print and broadcast media to gain coverage of the meetings, the Web-based survey and other input opportunities. Project staff was interviewed by radio stations and print media (*The Oregonian*, *The Columbian*, and *The Skanner*) regarding the scoping meetings (see Table 2).

Table 2. October Radio Interview Schedule

Radio Station	Date/Time
KEX	October 12, 9 a.m.
KPAM	October 14, 12 p.m.
KEX	October 18, 3 p.m.
KPAM	October 20, 5 p.m.
KINK	October 27, 7 a.m.

The comments received from the public and agencies during the scoping process will be used to help identify the range of issues to be addressed in the EIS. This update describes the scoping efforts made to date, and provides a summary of the issues identified from the public and agency comments.

2. DATA SOURCES AND METHODOLOGY

Although public and agency scoping share some of the same tools and methods, the solicitation of public and agency scoping comments occurred independently. Unless otherwise noted, this report reflects both agency and public comments received as of November 14, 2005.

2.1 PUBLIC COMMENTS

The public comments summarized in Section 3 of this report came from six primary sources: 1) a Web-based survey, 2) a questionnaire distributed at public open houses, 3) emails to the CRC Website, 4) other materials collected at open houses (post-it notes, flip chart notes, and court reporter transcripts), 5) letters and phone call logs received during the scoping period, and 6) public comments made during the October 12, 2005 CRC Task Force meeting.

2.1.1 Web-based Survey

This survey was posted on the CRC Website from September 30, 2005 to November 20, 2005 at:

<http://www.columbiarivercrossing.org/survey.aspx>

Hard copies of the survey were distributed at CRC public open houses at the Jantzen Beach SuperCenter, Clark College, and Oregon Association of Minority Entrepreneurs on October

22, October 25, and October 27, 2005 respectively. This survey was also mailed, when requested, to interested individuals without access to the Internet.

In addition to 23 closed-ended questions, the survey included three open-ended questions. Answers to the questions (listed below) are summarized in Section 3 of this report:

- What is the primary concern or frustration you have about using the I-5 Bridge?
- In your opinion, what should be the number one priority for planners and decision makers as they consider changes to the bridges, access roads, and ramps in the I-5/Columbia River Crossing project area?
- Do you have any other concerns or comments you would like to share about changes to I-5 and the bridge at the Columbia River Crossing?

The full text of the survey is shown in **Appendices C**.

As of November 20, 2005, the project office had received 620 survey responses through the CRC Website and 22 hard copy surveys that were distributed at the public open houses or mailed to interested individuals. For this report, survey entries from the project Website were transferred into an MS Word table. Hard copies of the survey were scanned as image files. All comments were then transferred or hand-keyed into an MS Access compatible format to generate the comment summaries shown in **Appendix B**.

2.1.2 Open House Questionnaires

A two-page questionnaire was prepared for distribution at the public open houses referenced above. The questionnaire included three open-ended questions. Answers to the questions (listed below) have been summarized in Section 3 of this report:

- What are the problems of the bridge area?
- What concerns and issues should we consider as we develop solutions?
- What criteria should be used to evaluate potential solutions?

The full text of this questionnaire is shown in **Appendix D**.

As of November 17, 2005, the project office had received 22 completed hard copies of the questionnaire. For this Task Force Report, copies of the completed questionnaires were scanned as image files. All comments were then hand-keyed into a spreadsheet and transferred into an MS Access compatible format to generate the comment summaries shown in **Appendix B**.

2.1.3 Columbia River Crossing Website

The CRC project continuously provides opportunities for public comment through its Website. The project contact Webpage is located at:

<http://www.columbiarivercrossing.org/contactus.aspx>

Since September 2004, the project has received over 1,400 emails regarding the CRC project. The majority of emails received on this site have been auto-reply messages and requests to be removed from the project mailing list. As of November 17, 2005, the project received 22 public comments about the CRC project through this Website. These comments were then hand-keyed into a spreadsheet and transferred into an MS Access compatible format to generate the comment summaries shown in **Appendix B**.

2.1.4 Other Materials from Open Houses

Hand-written post-it notes and flip chart comments, and transcripts of public comments were collected during the three public open houses. Post-it notes and flip chart comments were hand-keyed into a spreadsheet and transferred into an MS Access compatible format to generate the comment summaries shown in **Appendix B**. Transcripts were delivered to the project team in a .txt format. These comments were transferred into the MS Access database and also appear in the comment summaries in **Appendix B**.

2.1.5 Miscellaneous Comments

Two local phone numbers (one with a southern Washington area code and one with a Portland region area code) and a physical mailing address for the CRC project office were provided to the public through various forms of outreach, including a project newsletter, scoping meeting newspaper advertisements, the project Website, radio and print media interviews, and at three public open houses. Phone message logs and mailed comments were scanned as image files. These comments were hand-keyed into a spreadsheet and transferred into the MS Access database and also appear in the comment summaries in **Appendix B**.

2.1.6 CRC Task Force Meeting

The CRC Task Force held a regularly scheduled meeting on October 12, 2005 to discuss the project. The meeting was open to the public, and public comments were heard. A court reporter's verbatim transcript of the meeting was posted on the CRC Website and a hard copy was delivered to the project office in .txt format. The public comments from the Task Force meeting were transferred into the MS Access database and also appear in the comment summaries in **Appendix B**.

2.2 AGENCY COMMENTS

The agency comments summarized in this report are from three sources: 1) comments from an agency scoping meeting, 2) a survey used at the agency scoping meeting, and 3) a letter received from an agency during the scoping process.

2.2.1 Agency Scoping Meeting Transcript

An agency scoping meeting was held on October 21, 2005 at the Washington State Department of Transportation (WSDOT) Southwest Region Headquarters in Vancouver, Washington. A court reporter made a verbatim transcript of the meeting, and delivered a .txt file of the transcript to the project team. The agency scoping meeting transcript appears in a .txt file in **Appendix E**.

2.2.2 Agency Scoping Meeting Questionnaire

The two-page questionnaire prepared for the public open houses was distributed to agency staff at the October 21, 2005, agency scoping meeting. As of November 14, 2005, two agencies had completed and delivered this questionnaire to project staff. For this report, copies of the questionnaires were scanned as image files. All comments were then hand-keyed into a spreadsheet and transferred into an MS Access compatible format to generate the comment summaries shown in **Appendix B**.

2.2.3 Agency Scoping Letter

As of November 14, 2005, one agency scoping letter has been delivered to project staff. For this report, a copy of the letter was scanned as an image file. All comments were then hand-

keyed into a spreadsheet and transferred into an MS Access compatible format to generate the comment summaries shown in **Appendix B**.

3. ISSUES IDENTIFIED DURING SCOPING

This section contains a summary of public and agency comments received to date in the EIS scoping process. These comments are categorized, as follows, with the first four categories relating directly to the Problem Definition, and the other categories relating to aspects of the CRC Task Force's Vision and Values Statement or other project-related issues:

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

3.1 TRAVEL DEMAND, CONGESTION AND ACCESSIBILITY

Many of the comments in this category relate to issues identified in the CRC Problem Definition.

The City of Vancouver mentioned that travel time reliability and predictability, and spillover traffic from I-5 onto parallel arterials, were not included in the project's purpose and need statement, and were not sure if any of those issues needed to be included. Another commenter indicated that the problem statement should reflect that there are too many cars, trucks, and buses that use the I-5 Bridge during the peak AM and PM periods.

Commenters identified traffic congestion in general, bottlenecks in the I-5 north/Delta Park Area and safety/capacity issues related to on/off ramps and access roads as significant problems. 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 and off ramps, and found the lack of shoulders to be frustrating.

3.2 ECONOMY AND FREIGHT

Many of the comments in this category related to issues identified in the CRC Problem Definition.

The Oregon Department of State Lands asked how the project staff determined there was a relationship between access to jobs and traffic congestion.

Freight

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 (see Section 3.8); 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 instead.

Commuters

Commenters disagreed over whether road and bridge capacity should be increased to aid automobile commuters. Some commenters felt that the time commuters spend in traffic harms the economy by reducing productivity. Other commenters felt that increased road capacity leads to development patterns that favor large businesses over small businesses, thereby harming the local economy.

3.3 PUBLIC TRANSPORTATION AND MODAL CHOICE

Many of the comments in this category relate to issues identified in the CRC Problem Definition.

C-TRAN stated that their express bus commuter service between Clark County and central Portland serves a viable transit market and operates on a cost-recovery basis. C-TRAN indicated that this express bus commuter service should be included in the No Build alternative and in each of the Build alternatives evaluated in the EIS. C-TRAN indicated that any proposed high capacity transit service should include an evaluation of the means of providing local, coordinated transit service in support of high capacity transit. C-TRAN also stated that there must be a high degree of consistency between the selected alternative and its long-range plan, which will be complete in 2006.

Commenters disagreed over the importance of public transit, bicycling, and pedestrian infrastructure in easing congestion in the I-5 corridor. Many commenters spoke in favor of bringing light rail from Portland across the I-5 Bridge into Vancouver/Clark County. Some also spoke in favor of bringing light rail from Portland across the Glenn Jackson Bridge on Interstate 205 (I-205), and in favor of other forms of passenger rail, such as inter-city and commuter rail. Several commenters also favored express bus service, express bus lanes, carpooling, vanpooling, and the creation of a ferry system. Some 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 bridges crossing the Columbia River. Some commenters who supported alternative modes of transportation also supported increased road capacity for automobiles.

Many commenters felt that public transportation and bicycle and pedestrian facilities should not be included in the CRC project, because they felt these facilities serve a small minority of the public and therefore would not ease road congestion.

3.4 SAFETY AND SEISMICITY

Many of the comments in this category relate to issues identified in the CRC Problem Definition.

Traffic Safety

The Oregon Department of State Lands questioned whether it was correct to say that the crash rate on the I-5 Bridge was 2.5 times higher than comparable facilities, as there did not appear to be any truly comparable facilities in Oregon or Washington. Commenters indicated that increasing motorist safety was important, and the existing rate of traffic accidents is too high. Longer on-ramps, improved lines of site, added breakdown lanes, increased lane width, and a reduction in the number of interchanges were all ideas commenters had for reducing

traffic accidents. One commenter felt that exit ramps should always be placed before entrance ramps, to eliminate traffic conflicts. Another commenter suggested that the I-5 Bridge be redesigned or replaced to look like an extension of the freeway. Commenters disagreed over the safety impacts of slowing traffic, increasing enforcement of traffic laws, and installing ramp meters.

Seismicity

Commenters stressed the need for a repaired or replaced I-5 Bridge to be seismically sound because of the important role these structures play in moving traffic around and through the region. Some commenters also favored adding additional bridges between Vancouver and Portland so at least two routes would still be available, should one bridge be damaged in an earthquake. One commenter felt that the seismic issue was being raised by project staff to mislead people into thinking a new bridge was needed immediately.

3.5 COMMUNITY LIVABILITY AND HUMAN RESOURCES

Historic/Aesthetic

Some commenters wanted to preserve the existing bridges due to their historic nature, while other commenters wanted the existing bridges replaced with more aesthetically significant structures. One commenter indicated that project costs were more important than bridge aesthetics. The Washington Department of Archeology and Historic Preservation indicated that only the northbound structure of the I-5 Bridge is on the national register. They indicated that the southbound structure is eligible for listing on the national register, and therefore, it is afforded the same legal protections as the northbound structure.

Neighborhoods/Environmental Justice

The Port of Vancouver asked whether language should be added to the purpose statement about avoiding disruptions to the community in the course of the project. Commenters expressed a desire to minimize project impacts to residences and businesses in a variety of geographic areas, including Fort Vancouver, downtown Vancouver, Hayden Island, and the north and northeast area of Portland. Potential impacts to avoid include noise, traffic, visual, and air quality impacts. Some commenters specifically mentioned a desire to minimize negative consequences to the minority community in north and northeast Portland.

Air Quality

The Oregon Department of Environmental Quality (DEQ) asked if the air quality analysis for the project would include an examination of toxic air pollutants. Commenters were concerned about potential health impacts, including asthma and cancer, from increased air toxins if the CRC project should result in additional traffic along the I-5 corridor. Commenters were also concerned about the effect of increased air toxins on gardens and vegetation within the I-5 corridor. Several parties were in favor of increasing traffic capacity along the I-5 corridor because they believed that existing traffic congestion burns more fuel and therefore leads to more air pollution.

Commenters frequently cited traffic congestion as harming the quality of life for commuters.

3.6 NATURAL RESOURCES

Some commenters felt that the project should seek to protect and restore natural habitat and fish and wildlife species, though other commenters felt the protection of natural resources should not be a project priority. The Oregon Department of State Lands suggested including historic tidal and non-tidal wetlands in the environmental baseline for the project. They also

suggested that project staff begin developing a list of potential mitigation opportunities, including wetland, riparian habitat, and floodplain restoration.

3.7 PROJECT FINANCING

C-TRAN raised a number of project financing comments and questions. They indicated that the project's financial plan needs to clearly detail the capital and operating plan of all bridge and transit options, and that potential funding sources need to be brought into public discussion early. C-TRAN felt that transit services and facilities that are beyond what C-TRAN outlines in its 20-year Transit Development Plan need to be evaluated to ensure sufficient capital and operating funds over a 20-year horizon, and they requested that the financial plan be verified by peer review, accounting reviews, or stakeholder interviews.

Commenters disagreed over whether tolling was a fair project financing mechanism. Many commenters who lived in Washington and worked in Oregon felt that the income tax they paid in Oregon should be used in lieu of tolls to pay for the project. Other commenters who were against tolls favored a sales tax, property tax, gas tax, development fee, or federal assistance for funding the project.

Some commenters from Oregon and Washington supported tolling. Some tolling supporters mentioned that tolling should be used to discourage single occupancy commuters and encourage alternative modes of transportation. Other commenters specifically mentioned that any tolls levied should be applied equally to automobile drivers, pedestrians, bicyclists, and transit users.

Some commenters expressed concern over the study costs of the CRC project.

3.8 SPECIFIC ALTERNATIVES

Commenters asked why the surface arterial option was eliminated prior to the start of the current CRC study, and asked whether transportation demand management techniques would be employed in any of the build alternatives, since transportation demand management is one of the alternatives.

As commenters were divided over the nature of the congestion problem, they were also divided over the preferred solution to the problem. Many commenters wanted changes that would increase the traffic capacity on the I-5 Bridge and corridor. Commenters favoring increased traffic capacity made suggestions ranging from adding I-5 travel lanes and renovating or replacing the I-5 Bridge, to building several additional bridges. New bridge ideas included a bridge and road system connecting the Port of Portland with the Port of Vancouver; a bridge and road system connecting Oregon Highway 30 with Vancouver and/or North Clark County; a bridge from Swan Island to Oregon Highway 30; a bridge and road system connecting Washougal, Washington with Troutdale, Oregon; a bridge and road system connecting Vancouver with NE Portland; and a bridge and road system connecting Clark County with U.S. 26, creating a complete freeway loop around the Portland/Vancouver area.

Some commenters suggested that portions of I-5, such as the Delta Park area, were the primary cause of traffic congestion. These commenters expressed strong support for adding lanes to portions of I-5, especially for the portions of I-5 in Oregon, or creating additional highways to divert traffic from I-5. Several commenters felt that the region will continue to grow, and therefore, any bridge and road improvements should be built with options for future capacity increase.

Many commenters felt that traffic demand, as opposed to limited traffic capacity, was the cause of congestion problems in the I-5 corridor. Many of those who expressed this opinion suggested investments in transit, bicycle, and pedestrian infrastructure as a means to solve traffic congestion problems (see Section 3.3).

Commenters were also divided over whether changes in traffic management would reduce congestion. Comments were received for and against express lanes, high occupancy vehicle lanes, reducing the number of off ramps, and the use of ramp meters.

Favorable comments were received for reversible lanes, for more quickly towing stalled cars from the I-5 Bridge, for alternative work shifts, and for encouraging truck lines to use I-5 at night to reduce congestion.

Commenters living in the north Portland area expressed a desire for improved access to the Portland International Raceway, Delta Park, and the Jantzen Beach SuperCenter.

Some commenters supported tunneling under the Columbia River rather than replacing the existing I-5 Bridge. Other commenters supported adding additional decks to the existing bridge.

3.9 PROCESS

Selection Criteria

The FHWA recommended that compliance with legal and permitting requirements and the consistency with the project's Purpose and Need statement be used as selection criteria. The Washington Department of Ecology (Ecology) asked whether screening criteria would be used sequentially, or if an alternative could fail to meet one screening criteria and continue to be screened using additional criteria. Ecology recommended that agencies review the adequacy of data collection and analysis methods. A commenter felt that the screening criteria would eliminate too many lower cost alternatives. This commenter suggested that the CRC study begin with an examination of lower cost solutions, and consider higher cost solutions only if the lower cost solutions prove to be unfeasible.

Alternative Selection

The FHWA requested that the selected alternative balance effects on people and the natural environment. The Confederated Tribes of Grand Ronde asked when the preferred alternative will be selected. C-TRAN believes that a transit system proposal should only advance out of the EIS process if it is clear that its operating and capital financing needs are supported by the public and policy makers. C-TRAN stated that all transit options must include thorough cost-estimating before moving beyond the screening process. Some commenters wanted local neighborhoods adjacent to I-5, such as north and northeast Portland, Hayden Island, and Vancouver, to have more control over which alternative is selected. Other commenters wanted all members of the public to have an equal say in which alternative is selected.

Public Involvement

A commenter felt that the CRC Task Force meeting notes on public comments were abbreviated and/or had missing entries. The Hayden Island Neighborhood Network Association requested a seat on the CRC Task Force. Commenters requested an open house in Vancouver and in other Clark County communities and wanted those living and working near I-205 to be included in the decision-making process. Commenters wanted potentially impacted neighborhoods to be kept informed of the project status through flyers, postings, announcements, door-to-door solicitations, and meetings at malls and community centers. One commenter felt that survey questions, which grouped economic and environmental

considerations into a single category, prevented those concerned primarily about the environment from having their views accurately reflected.

Other

Commenters felt that elected officials and government employees had taken too long to recognize the traffic congestion problem, and some commenters felt that the CRC study process will take too long to develop a solution.

3.10 OTHER COMMENTS

Ecology asked whether the project's Purpose and Need statement should reference the possibility of a future expanded project footprint, assuming growth would some day necessitate an expansion of I-5 and/or the I-5 Bridge. Commenters disagreed over whether the Pearson Air Field should be preserved. Some commenters felt that growth in general, and residential growth in Vancouver specifically, has increased congestion on I-5. Some commenters felt that the creation of more jobs in Clark County would decrease I-5 congestion. Commenters expressed concerns over possible CRC project construction impacts.

4. ADDITIONAL WEB-BASED SURVEY RESULTS

The online survey available on the CRC Website included 23 closed-ended questions designed to obtain public comments and opinions related to transportation in the I-5 bridge corridor area and the potential impact changes to transportation patterns in that area may have on the community. Section 2 of this report summarizes the tools and methods used to promote the availability of the survey.

Readers are cautioned that results from the online survey are not statistically valid and should only be used as part of the public involvement process. Percentage responses are noted to assist decision makers and represent only the opinions of those who participated.

4.1 ONLINE SURVEY RESULTS

4.1.1 Participant Profile

Of the 620 participants in the CRC online survey, 61 percent were men and 39 percent women. Age distribution include 26 percent age 18 to 34 years, 27 percent age 35 to 44 years, 22 percent age 45 to 54 years, 18 percent age 55 to 64 years and 7 percent age 65 years and older. Based on home ZIP Codes, 56 percent of the participants live in Washington State and 44 percent in Oregon. No other demographic information was collected.

4.1.2 Travel Profile

When participants were asked how often they travel across the I-5 Bridge between Vancouver, Washington, and Portland, Oregon, 49 percent said at least three to five times per week. Another 18 percent traveled the route less than three times per week, followed by 17 percent who crossed the bridge several times a month and 16 percent several times a year.

Among three modes of transportation to travel across the bridge, 90 percent of the online questionnaire participants said they were traveling in a car driven by themselves, a family member or friend. 4 percent were traveling in a commercial vehicle, 3 percent in bus or other public transit vehicle, and 3 percent said other ways.

4.2 CLOSED-ENDED QUESTIONS

Participants were asked their primary reason for using I-5. The responses are indicated in Table 3 below:

Table 3. I-5 Commuter Usage Percentages

Type of Usage	Percent of Usage
Commuting to and from work	32%
To shop or visit friends	29%
Other business reasons	15%
Move freight	2%
Commuting to and from school	1%
Other	12%

Participants were asked to rate whether they considered each of eight problems others have identified with the existing I-5 crossing at the Columbia River as a major problem, minor problem, or not a problem. The results are shown in Table 4:

Table 4. Problem Types and Percentages

	Major Problem	Minor Problem	Not a Problem
The I-5 bridge cannot handle traffic during peak-use/rush hour periods	87%	10%	3%
The I-5 bridge is not capable of meeting future traffic demands as the region's population grows	87%	9%	4%
Congestion in the I-5 bridge influence area decreases public transportation travel speed and service reliability	75%	20%	5%
Access roads, entrance ramps and merge lanes are unable to handle traffic leading to the I-5 bridge	73%	22%	5%
The bridge does not meet standards to withstand earthquakes or natural disasters at the I-5/Columbia River Crossing	70%	25%	5%
Truck access to port and commercial facilities is inefficient in the I-5 Columbia River Crossing project area	59%	33%	8%
Bicycle and pedestrian facilities in the I-5 Columbia River Crossing area are inadequate or nonexistent	41%	40%	19%
The I-5 bridge cannot handle traffic during non-peak/non-rush hour periods	41%	37%	22%

Participants were asked to rate the importance of potential project issues. The results are indicated in Table 5:

Table 5. Priority of Project Issues

	Major Priority	Minor Priority	Not a Priority
Reduce commute time during peak use/rush hour periods	77%	17%	6%
Make sure there is a sound plan to pay for changes to the transportation facilities and services in the project area	74%	23%	3%
Improve public transportation services between Portland and Vancouver	73%	28%	9%
Improve transportation safety in the project area	63%	32%	5%
Reduce delay for truck-haul freight traffic that uses the I-5 corridor and bridge for local and regional commerce	54%	38%	8%
Limit the environmental and economic impact that changes may have on residents and businesses in the project area	51%	41%	9%
Make sure benefits and negative impacts associated with the project area are equitably distributed	50%	41%	10%
Preserve fish and wildlife in the project area	48%	39%	13%
Preserve historic sites, and cultural and recreation resources in the project area	48%	41%	10%

5. Problem Definition



DRAFT

PROBLEM DEFINITION

November 21, 2005

Introduction

Major transportation agencies in the Vancouver-Portland region have joined together to lead development of transportation improvements to the 5-mile segment of Interstate 5 (I-5) between State Route (SR) 500 in Vancouver and Columbia Boulevard in Portland, including the bridges across the Columbia River (the I-5 Bridge Influence Area). Improvements are expected to address highway, vehicular freight, transit, pedestrian, and bicycle needs.

Function and Role of the I-5 Bridge Influence Area

I-5 is the only continuous north/south interstate highway on the West Coast, providing a commerce link for the United States, Canada, and Mexico. In the Vancouver-Portland region, I-5 is one of two major highways that provide interstate connectivity and mobility. I-5 directly connects the central cities of Vancouver and Portland. Interstate 205 (I-205), a 37-mile long freeway that extends from its connection with I-5 at Salmon Creek to its terminus with I-5 near Tualatin, provides a more suburban and bypass function and serves travel demand between east Clark County, east Multnomah County, and Clackamas County.

Operation of the I-5 crossing over the Columbia River is directly influenced by the 5-mile segment of I-5 between SR 500 in Vancouver and Columbia Boulevard in Portland. Known as the I-5 Bridge Influence Area, this segment includes interchanges with three state highways (SR 14, SR 500, and SR 501) and five major arterial roadways that serve a variety of land uses, and provides access to downtown Vancouver, two international ports, industrial centers, residential neighborhoods, retail centers, and recreational areas.

The existing I-5 crossing of the Columbia River consists of two side-by-side bridges that have lift spans. They were built four decades apart and the cost of each was financed with bridge tolls. The eastern bridge (serving northbound traffic) was built in 1917 and the western bridge (serving southbound traffic) was built in 1958. The two-bridge crossing, which served 30,000 vehicles per day in the 1960s, now carries more than 125,000 automobiles, buses, and trucks each weekday. While many of these trips are regionally-oriented (average trip length is 16 miles), it is estimated that 70 to 80 percent of trips using the I-5 crossing actually enter and/or exit I-5 within the 5-mile long I-5 Bridge Influence Area.

A second interstate highway river crossing is located 6 miles east (upstream) of the I-5 crossing. The I-205 Glenn Jackson Bridge, which opened in 1982, carries about 140,000 vehicles per day and is reaching its peak-hour period carrying capacity. This bridge has a fixed span. No other river crossing options in the metropolitan area are available between the two states. The next closest bridges for automobile use are located at Longview, Washington, 46 miles to the west, and at Cascade Locks, Oregon, 40 miles east of the I-5 bridge crossing.

A rail bridge is located about a mile west (downstream) of the I-5 crossing. The Burlington Northern-Santa Fe rail bridge was built in 1908 and features a swinging span to accommodate river traffic. The I-5 crossing's lift spans were designed to align with the rail bridge's swing span.

The I-5 Bridge Influence Area serves several broad travel markets:

- Through travel. These users travel from outside the Vancouver-Portland region to destinations that are also outside the region—for example, a freight or tourist trip from Seattle, Washington to Eugene, Oregon. These users represent about 7 percent of the total vehicle-trips crossing the river.
- Regional travel. Most of these users travel between Clark County and the Portland metropolitan area (Multnomah, Washington and Clackamas counties), or vice-versa, without stopping in the I-5 Bridge Influence Area. These trips account for about 47 percent of the total vehicle-trips crossing the river.

Seven percent of the total trips crossing the river originate within the region and are destined outside of the region, or originate outside of the region and are destined within the region, for example, a trip from Salem, Oregon to Clark County.

- Local travel. Most of these users travel between the I-5 Bridge Influence Area and other locations within the Vancouver/Portland metropolitan area, or vice-versa. For example, a trip from a southeast Portland neighborhood to downtown Vancouver is considered a local trip. These trips account for about 32 percent of the vehicle-trips crossing the I-5 bridge.

Two percent of the total trips crossing the river originate outside the region and are destined to a location within the I-5 Bridge Influence Area, or originate within this area and are destined outside of the region, for example, a trip from Longview, Washington to Portland Meadows.

- Internal travel. These users stay entirely within the I-5 Bridge Influence Area—for example, from downtown Vancouver to Hayden Island. This constitutes about 5 percent of the trips crossing the I-5 bridge.

Definition of the Problem

Current Problems	Details/Background
<p>1. Travel demand exceeds capacity in the I-5 Bridge Influence Area, causing heavy congestion and delay during peak travel periods for automobile, transit, and freight traffic. This limits mobility within the region and impedes access to major activity centers.</p>	<p>Heavy traffic congestion has resulted from growth in regional population and employment and in interstate commerce over the last two decades. The existing I-5 bridge crossing provides 3 lanes of capacity in each direction, with a directional capacity of about 5,500 vehicles per hour. Travel demand currently exceeds that capacity during peak periods. As a result, stop-and-go traffic conditions last 2 to 5 hours in the mornings and afternoons. These conditions are aggravated by vehicle merges, traffic accidents, and vehicle breakdowns. Due to excess travel demand in the I-5 Bridge Influence Area, many travelers take longer, alternative routes such as I-205, or circulate on local streets to less direct I-5 interchanges. In addition, spillover traffic from I-5 onto parallel arterial roadways increases local congestion.</p> <p>Although the lift span is used only in off-peak periods, it affects travel reliability across the river and creates extensive traffic delays. The span is opened 20 to 30 times a month, with the greatest number of lifts occurring during the winter when water levels are at their highest. Each lift takes approximately 10 minutes, creating traffic delays that can last up to an hour. During peak periods when the lifts are not allowed, river traffic must maneuver a tight S-curve route through the rail bridge opening and the highest fixed span of the I-5 crossing, creating hazardous navigation conditions.</p>
<p>2. Transit service between Vancouver and Portland is constrained by the limited capacity in the I-5 corridor and is subject to the same congestion as other vehicles, affecting transit reliability and operations.</p>	<p>The I-5 bridge is a critical bi-state transit link for transit patrons traveling between Vancouver and Portland. Bi-state transit service includes local fixed-route bus service between downtown Portland and downtown Vancouver (using the I-5 bridge), commuter-oriented peak period express routes from Clark County park-and-rides and transit centers to downtown Portland on both I-5 and I-205, and I-205 shuttle service between Fisher’s Landing Transit Center and the Parkrose Transit Center.</p> <p>Current congestion in the I-5 Bridge Influence Area has an adverse impact on transit travel speed and service reliability. Between 1998 and 2005, local bus travel times between the Vancouver Transit Center and Hayden Island increased 50 percent during the peak period. Local buses crossing the I-5 bridge in the southbound direction currently take up to three times longer during parts of the morning</p>

	<p>peak period compared to off peak periods. On average, local bus travel times are between 10 percent and 60 percent longer when traveling in the peak period direction.</p> <p>Commuter buses also experience congestion and incident-related delays. Commuter buses traveling southbound during the morning peak period have travel times between 45 percent and 115 percent longer than commuter buses traveling during off-peak periods. Commuter buses traveling northbound during the afternoon peak period have the advantage of using the northbound High Occupancy Vehicle lane, however, these buses still experience travel times between 35 percent and 61 percent longer than commuter buses traveling during the off-peak periods.</p>
<p>3. The access of truck-hauled freight to nationally and regionally significant industrial and commercial districts, as well as connections to marine, rail, and air freight facilities, is impaired by congestion in the I-5 Bridge Influence Area.</p>	<p>I-5 is the primary supply-chain for goods moving into and out of the Vancouver-Portland region and the Pacific Northwest. Access to nationally and regionally significant industrial and commercial districts, including the Ports of Vancouver and Portland, and connections to marine, rail and air freight facilities, is adversely affected by congestion in the I-5 Bridge Influence Area. Congestion is increasingly spreading into the off-peak periods (including weekends) used by freight carriers. Declining freight carrier access slows delivery times and increases shipping costs, diminishing the attractiveness of I-5 and the uses served by I-5, and negatively affecting the region's economy.</p> <p>Recent forecasts indicate that truck traffic in the region will double, and the logistics requirements for freight delivery time will become increasingly "just-in-time" – placing even more pressure on travel time reliability.</p>
<p>4. The I-5 bridge crossing area and its approach sections experience crash rates up to 2.5 times higher than statewide averages for comparable urban freeways in Washington and Oregon, largely due to outdated design. Incident evaluations attribute crashes to congestion, closely spaced interchanges, short weave and merge sections, vertical grade changes in the bridge span, and narrow shoulders.</p>	<p>Over 300 reported crashes occur annually in the I-5 Bridge Influence Area. Crashes have resulted in substantial property damage and injury; some have resulted in fatalities. The causes are:</p> <p>Close Interchange Spacing The 5-mile Bridge Influence Area contains eight closely spaced interchanges. These interchanges provide access to several east-west highways and arterial roadways that serve a mix of interstate, regional, and local trip purposes. The average distance between the interchanges is 1/2 mile, as compared with a recommended minimum spacing of 1 mile between interchanges located in urban areas.</p> <p>Short Weave and Merge Sections Short weave sections for vehicles entering and exiting the freeway generate backups and delay due to difficulty in</p>

	<p>maneuvering, especially for large trucks. The proportion of trucks is high because this segment provides arterial street access to both ports.</p> <p>Outdated designs for entrance and exit ramps cause backups onto the mainline at exit ramps. Most of the entrance ramps do not provide enough space for vehicles to merge safely with through traffic.</p> <p>Vertical Grade Changes Vertical grade changes in the bridge span over the Columbia River create sight distance limitations that reduce speeds and create potential hazards to motorists.</p> <p>Narrow Highway Shoulder Width Several segments of the I-5 Bridge Influence Area, including the I-5 bridge, have narrow inside and outside shoulders in both travel directions. In several locations, shoulders are as little as 1-foot wide (10- to 12-foot wide shoulders are standard).</p> <p>The lack of shoulders positions many motorists undesirably close to physical barriers that border I-5. Many drivers respond with caution by slowing down to increase separation from vehicles ahead and behind. Increased vehicle spacing reduces vehicle throughput and contributes to freeway congestion.</p> <p>In addition, the lack of safe areas for incident response, disabled vehicle pullout, and driver recovery also impairs the ability to manage highway operations and recover from events that interrupt traffic flow.</p> <p>Hazards for River Navigation The I-5 crossing's lift span cannot be raised during peak traffic periods. This requires river traffic heading downstream on the Columbia River to navigate under the bridge's high fixed spans near the middle of the river, then quickly turn to line up with the narrow opening of the rail bridge on the north side of the river. This maneuver is especially difficult during high river levels and could result in a collision between a vessel and one of the bridges.</p>
<p>5. Bicycle and pedestrian facilities for crossing the Columbia River in the I-5 Bridge Influence Area are not designed to promote non-motorized access and connectivity across the river.</p>	<p>The width of the bicycle/pedestrian facility on the I-5 bridge is substandard (6 to 8 feet) and located extremely close to traffic. Separated multi-use paths should be at least 10 feet wide.</p> <p>Bicycle and pedestrian connections between North Marine Drive, Hayden Island, and Vancouver require out-of-direction travel. For example, no connection exists for pedestrians or bicyclists wanting to stay on the west side of</p>

	the bridge between Hayden Island and North Marine Drive. In addition, many of the I-5 Bridge Influence Area's features are not in compliance with Americans with Disabilities Act design guidelines.
6. The I-5 bridges across the Columbia River do not meet current seismic standards, leaving them vulnerable to failure in an earthquake.	Previous studies concluded that the existing structures could not be upgraded to fully meet seismic design standards without full bridge reconstruction.
Future Problems	Details/Background
7. As the Vancouver/Portland metropolitan region grows, mobility and accessibility for automobile, freight, and transit will decline unless the disparity between demand and capacity in the I-5 Bridge Influence Area is addressed. The increasing disparity between demand and capacity will lead to longer delays, increased accident potential, and diminished quality of life and economic opportunity.	<p>Regional Growth Consistent with regionally adopted comprehensive plans, the region's growth forecasts indicate that population, employment, and commercial trade will continue to grow, increasing regional travel demand.</p> <ul style="list-style-type: none"> • Between 2005 and 2030, the population of the four-county Vancouver-Portland region is projected to increase by 44 percent, from 1.96 million to 2.82 million. • Regional trade is expected to almost double over the next 25 years to over 520 million tons. While currently 64 percent of the region's freight tonnage is hauled by truck, by 2030 it is projected that 73 percent will be carried by truck, many including container loads. <p>Increased Travel Demand Daily traffic demand over the I-5 bridge is expected to increase by more than 40 percent in 20 years, from 125,000 vehicles in 2000 to 180,000 vehicles in 2020 (traffic is expected to further increase beyond 2020; new travel demand modeling is currently being conducted to predict 2030 levels). The projected increase in use of the bridge is constrained by the lack of capacity to accommodate more vehicles, resulting in an expansion of the peak period to accommodate the projected traffic increase. There will also be a potentially large and underserved transit market for trips between key regional locations traveling or connecting through the I-5 Bridge Influence Area.</p> <p>Deteriorating Traffic Conditions Unless improvements are made, traffic conditions in the I-5 Bridge Influence Area are predicted to worsen over the next 20 years:</p>

	<ul style="list-style-type: none"> • Traffic congestion and delay will increase, with stop-and-go conditions occurring in both directions for 10 to 12 hours on weekdays. Increased delays on weekends will also result. • The current off-peak periods, which are generally uncongested and favored by freight carriers, will blend into adjacent peak period congestion, increasing freight delay throughout much of the day. • Vehicle-hours of delay during the evening commute period will increase nearly 80 percent, from 18,000 hours to 32,000 hours each day. Vehicle-hours of delay on truck routes will increase by more than 90 percent, from 13,400 hours to 25,800 hours each day. • Average travel times for buses traveling in general purpose lanes on I-5 between downtown Vancouver and downtown Portland are expected to almost double, from 27 minutes in 2000 to 55 minutes in 2020. • With an extension in the duration of congestion, there may be pressure to increase the bridge lift closure periods, further hampering river navigation and increasing the likelihood of accidents between vessels and the bridge. • As traffic demands increase, accident levels will likely rise within the Bridge Influence Area. <p>Diminished Mobility and Accessibility</p> <ul style="list-style-type: none"> • Slower highway speeds will reduce access to jobs, shopping, and recreational uses. • Regional truck freight is projected to increase by about 130 percent in the next 30 years; however, increasing delays between I-5 and freight centers will adversely affect freight distribution and access to ports and terminals, thereby shrinking market areas served by the Vancouver-Portland region. <p>The current Regional Transportation Council Metropolitan Transportation Plan and the Metro Regional Transportation Plan recognize the need for additional capacity to improve the flow of people and freight in the I-5 Bridge Influence Area. Both plans include the I-5 Transportation and Trade Partnership Strategic Plan recommendations to increase mobility and accessibility in the I-5 Bridge Influence Area.</p>
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6. Evaluation Framework and Criteria

DRAFT Evaluation Framework

Screening Purpose and Process

This framework establishes a logical process for narrowing (or screening) the large number of transportation components that will be generated at the outset of the project. The framework also establishes screening criteria and related performance measures to:

- Measure the effectiveness of components and subsequent alternative packages in addressing the problems identified in the *Problem Definition*, and
- relate the degree to which community values as identified in the CRC Task Force's *Vision and Values Statement* are achieved.

The project will use the same criteria throughout the process. However, measures for gauging the performance of alternatives against the criteria will become successively more specific and may be modified as more detailed data becomes available.

Through successive evaluation and screening, the most promising components are packaged into viable alternatives. These are then narrowed further to provide alternatives to be considered in the Draft Environmental Impact Statement (DEIS). Components and alternatives that do not pass from one screening level to the next will be dropped from further consideration. Ultimately, the evaluation criteria will be used to support selection of a preferred alternative.

Generation of Components

The I-5 Transportation and Trade Partnership *Final Strategic Plan* provided recommendations to shape transportation improvements on I-5 between Columbia Boulevard in Portland and State Route (SR) 500 in Vancouver, an area referred to as the “bridge influence area.” However, many of the recommendations were not specific, leaving many ways to package and implement solutions. In addition, new ideas requiring further evaluation may surface through the National Environmental Policy Act (NEPA) scoping process.

Schedule

The project team will follow this screening schedule:

- Feb/April 2006 — Component screening and packaging of remaining components into alternatives to be evaluated further
- Late fall 2006 — Screening of alternatives and deciding which alternatives will be evaluated in the Draft Environmental Impact Statement (Draft EIS)
- Early 2008 — Selection of a preferred alternative

The evaluation framework is comprised of three elements, which are attached:

Contents

The following materials comprise the remainder of this framework:

- **Glossary of terms**
- **Overall Steps in the Screening Process**
- **Component Screening Step A**
- **Component Screening Step B**
(Criteria for Step B are also used during the alternative package screening)

Glossary of Terms

Component- A specific idea proposed to address one or more of the identified needs in the I-5 bridge influence area. For example, each of several viable river crossing ideas is a separate component under the “river crossing” category.

Transportation Category- Components are organized and screened among eight (8) transportation categories based on the nature of the component. For example, all transit components (bus, light rail, other) are organized within the “transit” category and all river crossing components within the “river crossing” category. Due to their common reliance on highway and bridge facilities, bicycle, pedestrian, and freight components will be screened jointly with roadway and river crossing categories.

Screening- The process of assessing and narrowing the range of components and alternative packages relative to established screening criteria and documentation of the screening process and resulting outcomes. Screening represents the body of work completed in forming the range of alternatives to advance into the EIS. Component screening occurs among and not across transportation categories. Alternative packages are screened relative to one another.

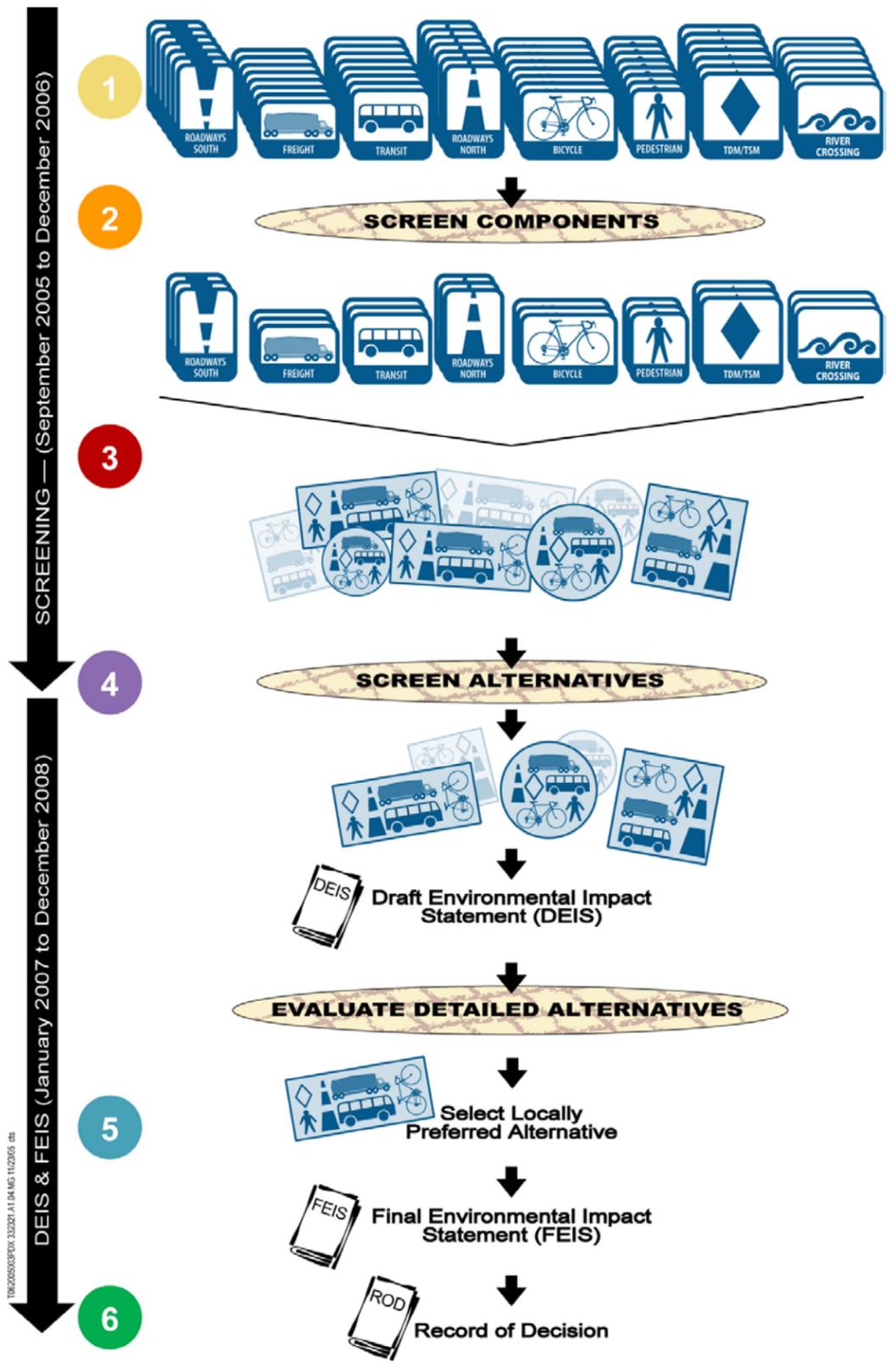
Screening Criteria- Standards reflecting the CRC Task force adopted *Vision and Values Statements* by which components and alternative packages will be considered.

Screening/Performance Measure- Used to assess the degree to which the established screening criteria are satisfied. Measures are mostly qualitative during component screening given limited available data and become more quantitative during alternative package screening as detailed data is generated.

Alternative- The end result of the screening process, each alternative is a carefully matched and fully formed assembly of components intended to address the project purpose and need and allow for evaluation of performance relative to established evaluation criteria

Evaluation- Different and distinct from screening, evaluation is the process of comparing and contrasting the adopted range of alternatives during the EIS, leading toward selection of a preferred alternative. Criteria at this stage are the most detailed and most quantifiable.

Scoping Process- A process for early identification of potentially significant environmental issues and suggestions for potential improvements. This process begins with a project/process introduction to the environmental review agencies and the public, the purpose of which is to initiate coordination and involvement activities that will span the life of the project.



Steps in the Screening Process

1 Identify Transportation Components

To begin, a wide range of improvement ideas (or components) will be generated from two sources: (1) recommendations in the 2002 I-5 Transportation and Trade Partnership Final Strategic Plan; and (2) additional suggestions from the public and affected agencies received during the National Environmental Policy Act (NEPA) scoping process. The project team will organize these components into transportation categories to make the process of screening the components more clear: Roadways North, River Crossing, Roadways South, Freight, Transit, Bicycle/Pedestrian, and Transportation Demand Management (TDM)/Transportation System Management (TSM).

2 Screen Components

Component screening occurs using a two-step process (Steps A and B) for each component within the above categories to successively narrow the number of possible solutions. **Step A** is a pass/fail process in which transportation components are screened against questions derived from the *Problem Definition* (See attachment *Step A: Component Screening*). To determine if each component offers an improvement, they will be compared to the No Build condition. Components that pass in Step A will be evaluated further against **Step B** criteria that were developed to reflect values identified in the CRC Task Force's *Vision and Values Statement* (See attachment *Step B: Component Screening*). Project staff will rate each of the remaining components numerically on an established scale (for example 1-5) using data drawn mostly from previous studies. They will identify components that perform better than others in each category and recommend which components to advance for inclusion in alternative packages. Results will be presented in a Component Screening Report. Although many of the components may have benefits that extend beyond the BIA, for this component screening, measures will focus on changes within the BIA.

3 Assemble Alternative Packages

Project staff will assemble a representative set of alternative packages spanning the bridge influence area from the components that pass the first screening. Alternative packages will include components from each transportation category that blend together in a logical manner considering, for example, alignment and operational requirements. In some instances, one alternative package may sufficiently represent several other possible component combinations for analysis purposes. Assembling alternative packages allows project staff to model and analyze the integrated transportation system performance of I-5 within the bridge influence area, as well as other impacts and benefits, that cannot be assessed at the component level.

4 Narrow Range of Alternatives

Further screening will reduce the set of alternative packages to a reasonable range of Build Alternatives for comparison with the No-Build Alternative in the Draft Environmental Impact Statement (EIS). Performance measures will be modified to take advantage of new data available at this point in the project. Project staff will rate the performance of each alternative against these measures and will summarize results in an Alternatives Analysis Report. The most effective packages will advance into the Draft EIS either "as is" or after being modified based on screening results. Agreement on the alternatives to be evaluated in the Draft EIS is a major decision point in the project development process.

Select a Locally Preferred Alternative

Following preparation of the Draft EIS, project staff will again compare alternatives against the evaluation criteria using more detailed data compiled during preparation of the Draft EIS. This evaluation will be presented in a report to support selection of a preferred alternative.

6

Secure Federal Approval

The project team will document the locally preferred alternative in the Final EIS and submit it to the Federal Highway Administration and the Federal Transit Administration for approval. If all requirements have been met, these agencies will issue a Record of Decision to document final selection of the alternative to be built.

Step A: Pass/Fail Transportation Component Screening

Component: _____ Screening Questions	Roadway North/ Freight/ Bicycle/ Pedestrian	River Crossing/ Freight/ Bicycle/ Pedestrian	Roadway South/ Freight/ Bicycle/ Pedestrian	Transit	TSM/ TDM	Pass	Fail	Not Applicable	Unknown	Reason(s) to Drop
						Does the component achieve the following?				
Increase vehicular capacity or decrease vehicular demand within the bridge influence area? For example, will the component provide additional travel lanes, remove a constraining bottleneck, or provide other modes of travel that can reduce the demand to travel by vehicle in the I-5 bridge influence area?	♦	♦	♦	♦	♦					
Improve transit performance within the bridge influence area? For example, will the component provide an exclusive high-capacity transitway in the I-5 bridge influence area? Will the component provide for transit preferential lanes or other bus-specific improvements that increase vehicular capacity or decrease vehicular demand enough to improve transit capacity in the bridge influence area?				♦	♦					
Improve freight mobility within the bridge influence area? For example, will the component provide truck freight priority or increase vehicular capacity or reduce vehicular demand enough to improve truck-hauled freight movements and reduce truck congestion in the bridge influence area? Will it improve or maintain access to existing freight facilities?	♦	♦	♦		♦					
Improve safety and decrease vulnerability to incidents within the bridge influence area? For example, will the component eliminate or minimize features that may be attributable to incidents within the bridge influence area such as a key bottleneck, closely spaced on and off ramps, or narrow shoulders?	♦	♦	♦	♦	♦					
Improve bicycle and pedestrian mobility within the bridge influence area? For example, will the component provide a continuous, connected and functional bicycle and pedestrian facility across the Columbia River?	♦	♦	♦							
Reduce seismic risk of the I-5 Columbia River crossing? For example, will the component seismically retrofit the existing Columbia River crossing and/or provide a new crossing that meets seismic standards?		♦								

Notes:

- Components will be screened only against the questions relevant to their categories (indicated by ♦)
- Components that fail the relevant questions will be screened out, and the only way components will be prevented from proceeding to Step B component screening is if they receive a "fail" rating.
- Bicycle, pedestrian, and freight components will be evaluated with the roadway and river crossing categories given their inter-relationship.
- All components will be compared to the No Build, which includes transportation improvements adopted in the regional transportation plans but no improvements at the Columbia River crossing.

Step B: Component Screening	
Screening Criteria	Component Screening Measures
1 Community Livability and Human Resources	
1.1 Minimize adverse impacts to, or reduce noise levels	1.1 Magnitude (on a qualitative scale) of residential properties within approximate noise impact contour
1.2 Minimize adverse impacts to, or enhance neighborhood cohesion	1.2 <i>Criteria 1.2 to be assessed during alternative package screening</i>
1.3 Minimize adverse impacts to, or enhance air quality	1.3 <i>Criteria 1.3 to be assessed during alternative package screening</i>
1.4 Avoid or minimize residential displacements	1.4 Magnitude (on a qualitative scale) of residential properties crossed by component's conceptual footprint
1.5 Avoid or minimize business displacements	1.5 Magnitude (on a qualitative scale) of commercial/industrial properties crossed by component's conceptual footprint
1.6 Avoid or minimize adverse impacts on historic and cultural resources	1.6 Magnitude and significance (on a qualitative scale) of historic and cultural resource properties crossed by component's conceptual footprint
1.7 Avoid or minimize adverse impacts on public park and recreation resources	1.7 Magnitude and significance (on a qualitative scale) of public park and recreation resources crossed by component's conceptual footprint
1.8 Support local comprehensive plans	1.8 <i>Criteria 1.8 to be assessed during alternative package screening</i>
2 Mobility, Reliability, Accessibility, Congestion Reduction, and Efficiency	
2.1 Reduce travel times and delay on I-5 within the bridge influence area for passenger vehicles	2.1 Potential (on a qualitative scale) for component to improve peak period passenger vehicle travel times and delay on I-5 through the bridge influence area
2.2 Reduce travel times and delay on I-5 within the bridge influence area for transit modes	2.2 Potential (on a qualitative scale) for component to reduce peak period travel time and delay for transit vehicles on I-5 through the bridge influence area
2.3 Reduce the number of hours of daily highway congestion along I-5	2.3 Potential (on a qualitative scale) for component to reduce the number of hours of daily highway congestion within the bridge influence area
2.4 Enhance or maintain accessibility of jobs and housing to I-5 within the bridge influence area	2.4 <i>Criteria 2.4 to be assessed during alternative package screening</i>
2.5 Improve person and vehicle throughput of I-5 Columbia River crossing	2.5 Potential (on a qualitative scale) for component to increase the level of persons and vehicles crossing Columbia River via I-5 by mode during the peak period
3 Modal Choice	
3.1 Promote transportation choices	3.1 Potential (on a qualitative scale) for increasing transit capacity as a percentage of total daily capacity and peak period capacity across the I-5 Columbia River
3.2 Improve service to target markets	3.2 Potential (on a qualitative scale) to improve transit service in the I-5 corridor to identified travel markets
3.3 Improve bike/pedestrian connectivity	3.3 Ability (on a qualitative scale) to improve connectivity of bicycle and pedestrian trips through the I-5 bridge influence area
3.4 Decrease percentage of Single Occupancy Vehicle travel	3.4 Potential (on a qualitative scale) for component to reduce the percentage of single occupancy vehicle travel during the peak period travel on I-5 within the
4 Safety	
4.1 Enhance vehicle/freight safety	4.1 Potential (on a qualitative scale) for component to improve vehicle/freight safety within the bridge influence area
4.2 Enhance bike/pedestrian facilities and safety	4.2 Quality (on a qualitative scale) of bicycle and pedestrian pathways provided within a component
4.3 Enhance or maintain marine safety	4.3 Quality (on a qualitative scale) of navigation channel geometrics to accommodate ship movements
4.4 Enhance or maintain aviation safety	4.4 Ability (on a qualitative scale) to accommodate FAA clearance zone for Pearson Airpark
4.5 Provide sustained life-line connectivity	4.5 Ability (on a qualitative scale) to accommodate life-line connections in the I-5 corridor across the Columbia River to be maintained in an earthquake
4.6 Enhance I-5 incident/emergency response access within the bridge influence area	4.6 Quality (on a qualitative scale) to accommodate incident/emergency service access to incidents on I-5 in the bridge influence area
5 Regional Economy; Freight Mobility	
5.1 Reduce travel times and reduce delay for vehicle-moved freight on I-5 <u>within</u> the bridge influence area	5.1 Range of travel times (on a qualitative scale) between up to five origin/destination pairs of typical freight centers within the bridge influence area (e.g., between Port of Vancouver and Columbia Blvd. interchange)
5.2 Reduce travel times and reduce delay for vehicle-moved freight on I-5 <u>through</u> the bridge influence	5.2 Potential (on a qualitative scale) for component to reduce daily delay for trucks on I-5 through the bridge influence area during midday periods
5.3 Enhance or maintain efficiency of marine navigation	5.3 Potential (on a qualitative scale) for component to avert extension of "no bridge lift" periods tied to I-5 congestion
5.4 Improve freight truck throughput of the bridge influence area	5.4 Potential (on a qualitative scale) for component to increase freight vehicle throughput across the Columbia River via I-5
6 Stewardship of Natural Resources	
6.1 Minimize adverse impacts to, or enhance threatened or endangered fish or wildlife habitat	6.1 Magnitude (on a qualitative scale) of direct impact on designated critical habitat and other threatened or endangered species habitat
6.2 Minimize adverse impacts to, or enhance other fish or wildlife habitat	6.2 Magnitude (on a qualitative scale) of direct impact on other fish and wildlife habitat
6.3 Avoid or minimize adverse impacts to rare, threatened, or endangered plant species	6.3 Magnitude (on a qualitative scale) of direct impact on rare, threatened, or endangered plant species
6.4 Minimize adverse impacts to, or enhance wetlands	6.4 Magnitude and significance (on a qualitative scale) of direct impact on wetlands
6.5 Minimize adverse impacts to, or enhance water quality	6.5 Magnitude (on a qualitative scale) of net increase in impervious surface area
6.6 Reduce total energy consumption of construction and operations	6.6 <i>Criteria 6.6 to be assessed during alternative package screening</i>
7 Distribution of Benefits and Impacts	
7.1 Avoid or minimize disproportionate adverse impacts on low income and minority populations	7.1 Magnitude (on a qualitative scale) of potential residential property acquisitions in blocks or block groups with high share of low income or minority populations (compare to impacts in other blocks or block groups)
7.2 Provide for equitable distribution of benefits	7.2 Potential improvements (on a qualitative scale) to vehicle and transit travel times between representative low income or minority areas and selected destinations (including employment, education and commercial areas)
8 Cost Effectiveness and Financial Resources	
8.1 Ensure cost effectiveness	8.1 <i>Criteria 8.1 to be assessed during alternative package screening</i>
8.2 Ensure a reliable funding plan for the project	8.2 <i>Criteria 8.2 to be assessed during alternative package screening</i>
9 Bi-State Cooperation	
9.1 Support adopted regional growth management and comprehensive plans	9.1 <i>Criteria 9.1 to be assessed during alternative package screening</i>
10 Constructability	
10.1 Maintain transportation operations during construction	10.1 <i>Criteria 10.1 to be assessed during alternative package screening</i>
10.2 Minimize adverse construction impacts	10.2 <i>Criteria 10.2 to be assessed during alternative package screening</i>

- Notes:
- Bicycle, pedestrian and freight components will be evaluated with the roadway and new crossing categories given their interrelationship.
 - These criteria will be used in alternative screening, but the performance measures will change. At that time, each alternative will be evaluated against all the criteria.
 - Where noted, insufficient data will exist to report on certain criteria during component screening. Data will be available during subsequent analysis of alternative packages.