Columbia River CROSSING

March 22 Meeting Summary

Task Force
April 26, 2006

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Overview of April Open House Results

Task Force
April 26, 2006

Open House Highlights – Public Comments

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

Open House Highlights

River Crossing and Transit Components

Do you agree or disagree with staff recommendations?

22 agree, 14 disagree, 21 didn't respond

Of those who disagreed, few opposed everything

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

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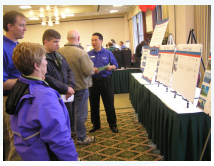
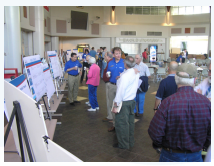
Open House Highlights

River Crossing - Some common themes:

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





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Open House Highlights

Transit – Some common themes

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

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Open House Highlights

Other Components

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

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Open House Highlights

Other common themes

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

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Public Comment Period

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Component Packaging/Background Information

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Overview

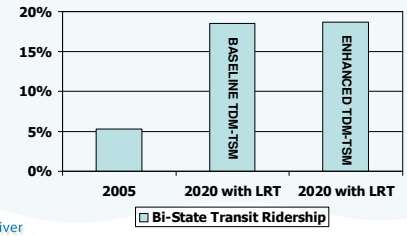
- Packaging components into alternatives
- TDM/TSM
- Travel times and speeds
- Safety analyses and strategies

TDM-TSM Overview

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

How does TDM-TSM affect transportation components?

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



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Examples of TDM Strategies

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

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Examples of TSM Strategies

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

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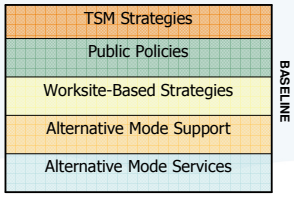
TDM/TSM Strategies Evaluated in the I-5 Partnership

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



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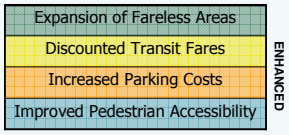
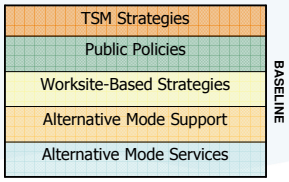
TDM/TSM Strategies Evaluated in the I-5 Partnership

- Enhanced Package in one I-5 Partnership Alternative



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



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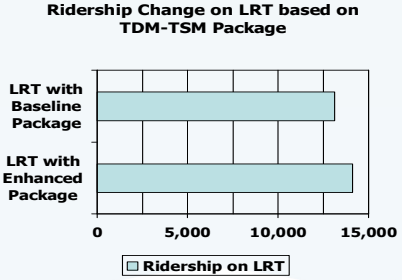
TDM/TSM Strategies Evaluated in the I-5 Partnership (Year 2020, 4 hour PM peak)



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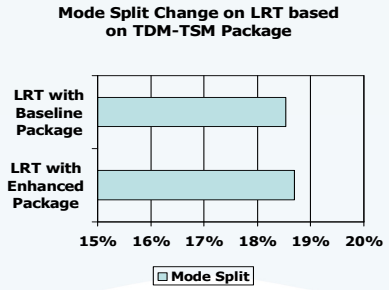
TDM/TSM Strategies Evaluated in the I-5 Partnership (Year 2020, 4 hour PM Peak)



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Conclusions

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

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Travel Times & Speeds, Safety Analyses & Strategies

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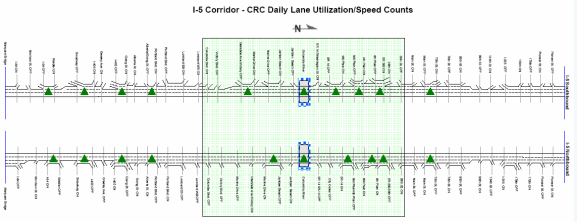
Data Collection Program Included:

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

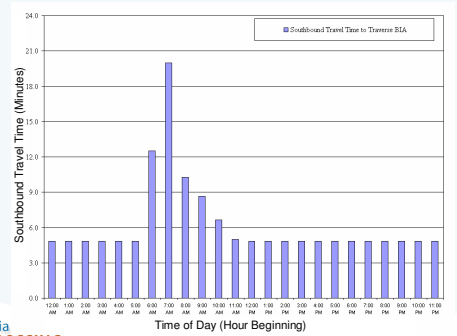
Lane Utilization & Speed Data Locations



Travel Time Runs

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

Southbound Travel Time to Traverse BIA



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Total Crashes and Crash Rates

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

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Existing Highway Design and Safety Features

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

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Collision Types and Highway Geometrics - Washington

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

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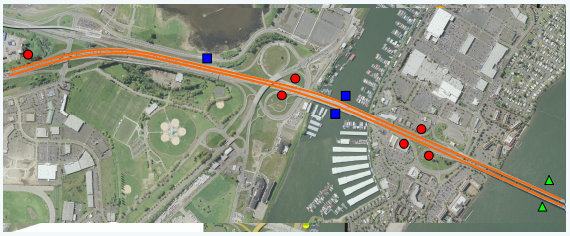
Collision Types and Highway Geometrics - Oregon



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

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Collision Types and Highway Features

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

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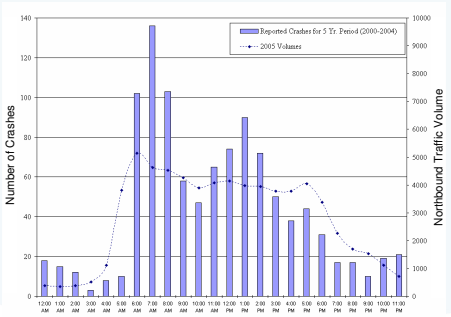
Travel Times, Speeds & Safety Overview

Southbound I-5 Crashes within BIA vs. Traffic Volume



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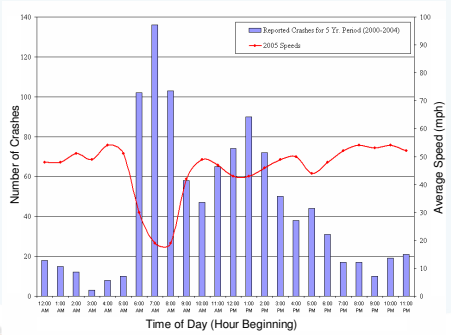
Travel Times, Speeds & Safety Overview

Southbound I-5 Crashes within BIA vs. Average Speed



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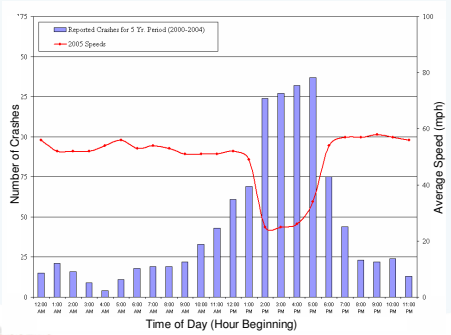
Travel Times, Speeds & Safety Overview

Northbound I-5 Crashes within BIA vs. Average Speed



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Reduction of Speed

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

Potential Safety Strategies

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

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

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Component Selection for Further Study

Task Force
April 26, 2006

Agenda

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

Component Fact Sheets

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

Step A Pass/Fail Questions

Does the component:

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

Source: I-5 CRC Problem Definition

River Crossing Components

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

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River Crossing Components Recommended to Advance

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

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River Crossing Components Not Recommended to Advance

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

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River Crossings- Arterials

Arterial River Crossings

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

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River Crossings- Arterials

Summary of Arterial River Crossings

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

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River Crossings- Arterials

Summary of Arterial River Crossings

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

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River Crossings- Arterials

Summary of Arterial River Crossings

Summary of Step A Screening Recommendation for Arterial River Crossing Components

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

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

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

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River Crossings- Arterials

Summary of Arterial River Crossings

Summary of Step A Screening Recommendation for Arterial River Crossing Components

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

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River Crossings- Arterials

Summary of Arterial River Crossings

Summary of Step A Screening Recommendation for Arterial River Crossing Components

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

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River Crossings- Arterials

Summary of Arterial River Crossings

Summary of Step A Screening Recommendation for Arterial River Crossing Components

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

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River Crossings- Arterials

Summary of Arterial River Crossings

Summary of Step A Screening Recommendation for Arterial River Crossing Components

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

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CRC Task Force Meeting 3/22/2006

River Crossings- Arterials

Summary of Arterial River Crossings

Summary of Step A Screening Recommendation for Arterial River Crossing Components

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

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River Crossings- Arterials

Summary of Arterial River Crossings

Summary of Step A Screening Recommendation for Arterial River Crossing Components

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

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River Crossings- non I-5 Highway Corridors

Summary of non-I-5 Highway Corridor River Crossings

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

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River Crossings- non I-5 Highway Corridors

Summary of non-I-5 Highway Corridor Crossings

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

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

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

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River Crossings- non I-5 Highway Corridors

Summary of non-I-5 Highway Corridor Crossings

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

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

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River Crossings- non I-5 Highway Corridors

Summary of non-I-5 Highway Corridor Crossings

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

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

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CRC Task Force Meeting 3/22/2006

River Crossings- non I-5 Highway Corridors

Summary of non-I-5 Highway Corridor Crossings

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

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

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CRC Task Force Meeting 3/22/2006

River Crossings- non I-5 Highway Corridors

Summary of non-I-5 Highway Corridor Crossings

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

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

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

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River Crossings- non I-5 Highway Corridors

Summary of non-I-5 Highway Corridor Crossings

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

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

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

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CRC Task Force Meeting 3/22/2006

River Crossings- non I-5 Highway Corridors

Summary of non-I-5 Highway Corridor Crossings

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

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

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

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River Crossings

Other River Crossing Components Recommended to Not Advance

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

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River Crossings

Summary of Other River Crossing Components Recommended to Not Advance

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

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

Columbia River CROSSING

River Crossings

Summary of Other River Crossing Components Recommended to Not Advance

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

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

Columbia River CROSSING

River Crossings

Summary of Other River Crossing Components Recommended to Not Advance

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

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

Columbia River CROSSING

River Crossings

Summary of Other River Crossing Components Recommended to Not Advance

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

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

Columbia River CROSSING

CRC Task Force Meeting 3/22/2006

River Crossings

Summary of Other River Crossing Components Recommended to Not Advance

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

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

Columbia River CROSSING

CRC Task Force Meeting 3/22/2006

River Crossings

Summary of Other River Crossing Components Recommended to Not Advance

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

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

Columbia River CROSSING

River Crossings

Summary of Other River Crossing Components Recommended to Not Advance

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

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

Columbia River CROSSING

River Crossings

River Crossing Components Not Recommended to Advance

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

Columbia River CROSSING

River Crossing Components Recommended to Advance

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

Columbia River CROSSING

RIVER CROSSING

Summary of River Crossing Recommendations RC 1 - 12

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

Columbia River CROSSING

RIVER CROSSING

Summary of River Crossing cont. Recommendations RC 13 - 23

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

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

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

Columbia River CROSSING

Transit Components

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

  Q1. Vehicular capacity/demand

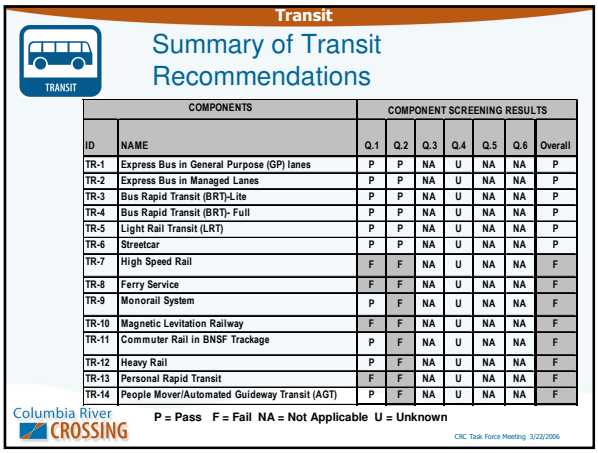
  Q2. Transit performance

Transit Components Recommended to Advance

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

Transit Components Not Recommended to Advance

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



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