# Columbia River

# **Problem Definition**

#### TASK FORCE MEETING

September 12, 2005

### **Problem Definition**

- Review existing and projected transportation performance data
- Dialogue with the public concerning problems to be solved





- Only continuous north/south interstate on West Coast
- Interstate connectivity in Vancouver-Portland





- 5-mile long Bridge Influence Area
- I-5 connects with 3 state highways and 6 major arterial roadways
- Provides access to variety of land uses





- 2 side-by-side bridges
- Eastern (northbound) built in 1917
- Western (southbound) built in 1958
- 3 lanes each
- 125,000 vehicles per day







**Columbia River** 

**CROSSING** 







#### I-5 Columbia River Bridge Traffic 2020 Through Trips vs. Bridge Influence Area Trips



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.



























## 2. Transit service between Vancouver and Portland is slow, inefficient, and uncompetitive with the automobile.















3. The access of truck-hauled freight to the Ports of Vancouver and Portland and to regionally significant industrial and commercial districts is impaired by congestion in the I-5 bridge influence area.













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 substandard 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.



















Average Interchange Spacing = 0.5 miles

Minimum standard spacing = 1.0 mile



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.









6. The I-5 bridges across the Columbia River do not meet current seismic standards, leaving them vulnerable to failure in an earthquake.











7. As the Portland/Vancouver region grows, mobility and accessibility for automobile, transit and freight will decline unless added capacity is provided in the I-5 influence area. An increasing disparity between demand and capacity will lead to longer delays, increased accident rates, and diminished quality of life and economic opportunity.











#### **Duration of Congestion**



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### Deteriorating Traffic, Diminished Mobility and Accessibility

- Increased travel demands
- Increased congestion and delay for all modes
- Safety deterioration due to increased congestion
- Reduction in access to jobs, shopping and recreation
- Adverse affects to freight distribution and access



# **Columbia River** CROSSING

# Discussion

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