I-5 Bridge Planning Inventory

Kris Strickler, PE, WSDOT Southwest Regional Administrator

December 14, 2017

Presentation Outline

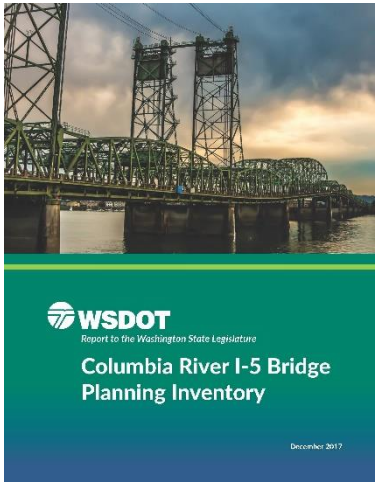
- **Substitute Senate Bill 5806 (SSB 5806)**
  - **Brief summary of requirements set forth in bill**

- **Interstate 5 Bridge Planning Inventory Report**
  - **Brief summary of report**

SSB 5806 - Columbia River I-5 Bridge Planning

WSDOT was directed to provide:

- **A planning inventory that documents previous planning data related to construction of a new Interstate 5 bridge over the Columbia River**
- **Submit a report to the legislature by December 1, 2017 that details the findings of the inventory of existing planning work**



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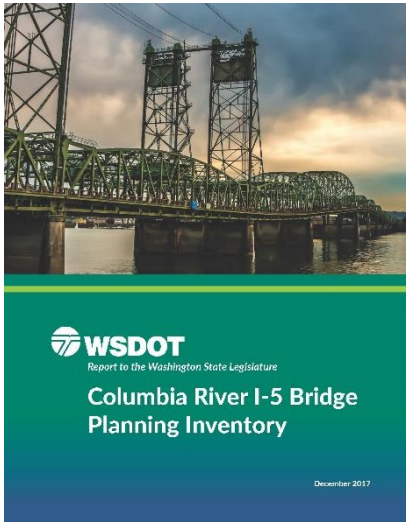
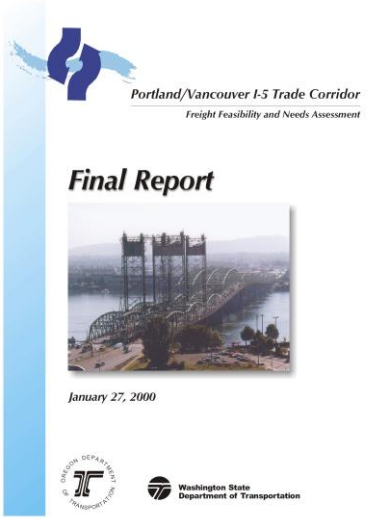


Long Range Planning (Pre-CRC)

Bi-State Transportation Committee (1999)

- **I-5 is the primary economic lifeline on the west coast**
- **The region needs to develop a strategic plan for the I-5 Trade Corridor**
- **To maintain the economic competitiveness of the region, develop a strategic plan for managing demand in the I-5 Trade Corridor**
- **Improvements will be costly and most cannot be funded with existing transportation revenues**



Long Range Planning (Pre-CRC)

Portland/Vancouver Transportation and Trade Partnership (2001)

The Governors of Washington and Oregon appointed a Task Force to address the growing congestion of Interstate 5 in the metro areas of Vancouver and Portland between I-205 and I-84.

The 26 member task force included:

- **Metro, Tri-Met, City of Portland, ODOT, Ports, WTC, C-Tran, City of Vancouver, Clark and Multnomah counties, neighborhoods, businesses, industry, citizen groups**

Long Range Planning (Pre-CRC)

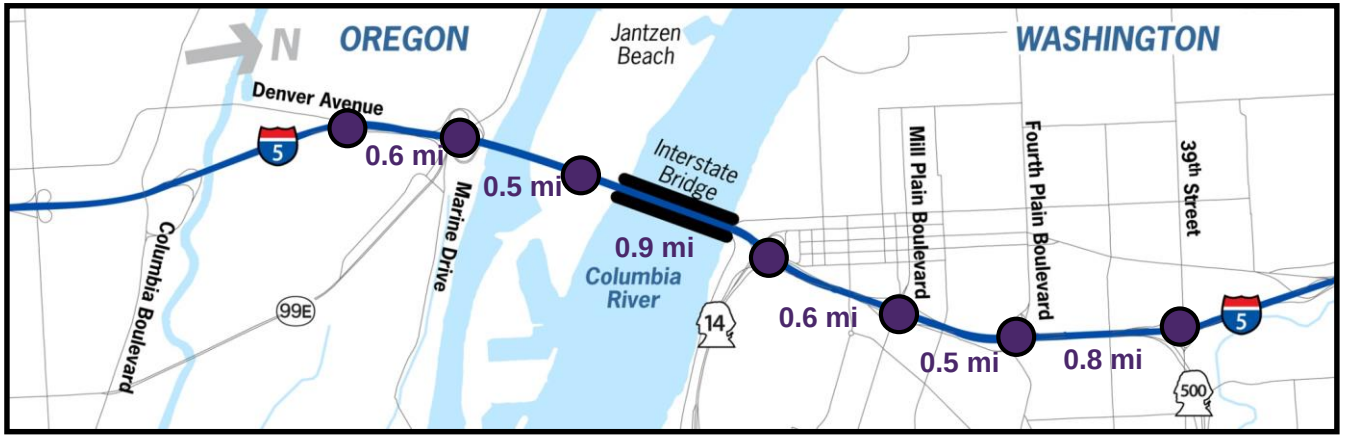
Portland/Vancouver Transportation and Trade Partnership (2001)

- **Recommended physical improvements in the I-5 Trade Corridor to meet the transportation, economic and livability needs of the Portland/Vancouver Region including:**

<u>Widen from 2 to 3 lanes</u>

• Vancouver 99th to 134th	Completed - 2009
• Vancouver Main St. to 99th	Completed - 2002
• Bridge Influence Area Improvements	CRC Project
• Victory to Lombard	Completed - 2010
• I-405 to I-84	Funded - 2017

Context and Constraints

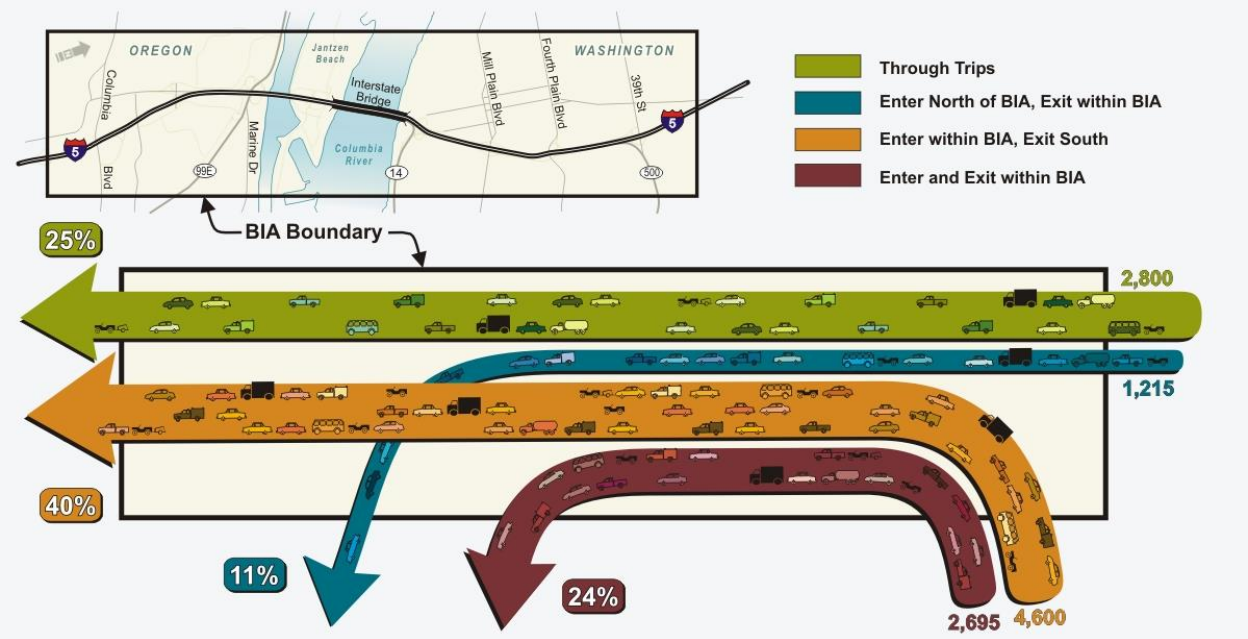


Interchange Spacing: Optimal = 2 Miles
Desirable = 1 Mile

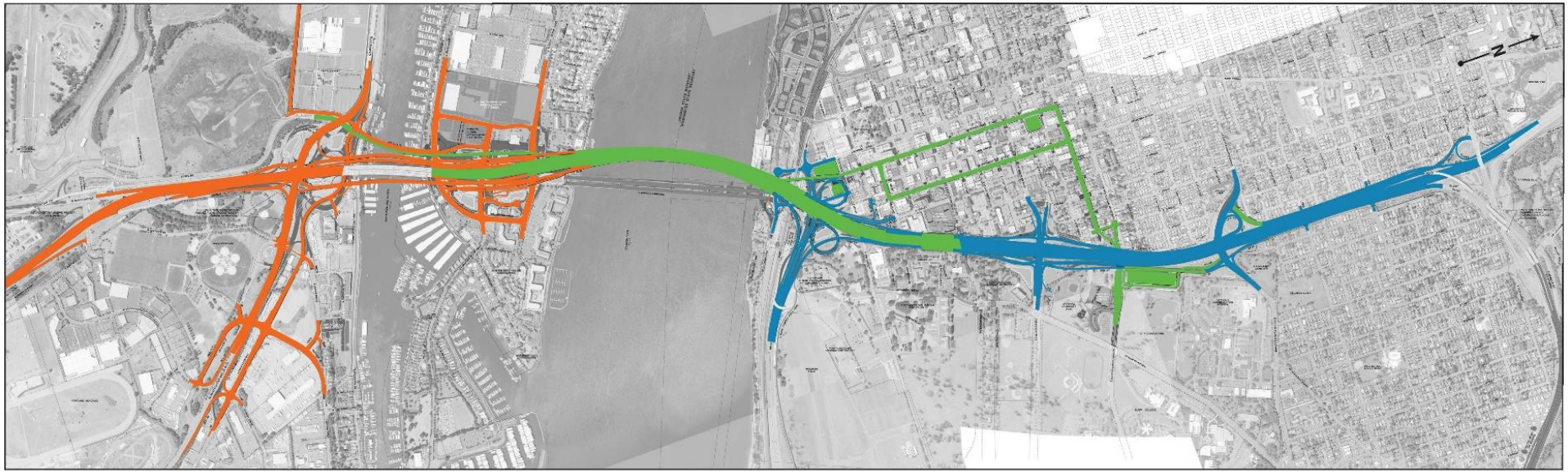
Context and Constraints

- Natural and built environment
  - Fort Vancouver National Historic Site
  - Downtown Vancouver
  - I-5 is the only access to Hayden Island
  - Light Rail terminus at Expo Center
- Aviation (PDX and Pearson)
- Columbia River (Navigation and ESA)
- I-5 access to Ports of Portland and Vancouver

Context and Constraints



Finance



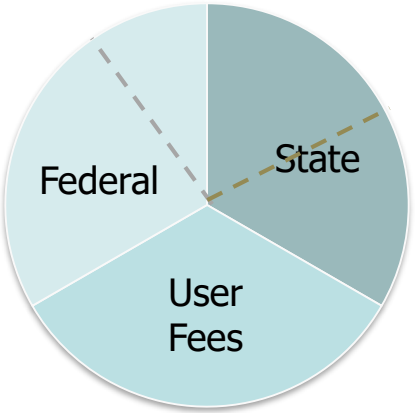
Oregon Roadway and Interchanges	Cost	Funding Source
Oregon Roadway and Interchanges Total	$595 million	State and/ or federal funds

Columbia River Bridge and Approaches	Cost	Funding Source
Columbia River Bridge and Approaches Total	$1.2 billion	Tolls and State or Federal funds

Light Rail Transit Extension	Cost	Funding Source
Light Rail Transit Extension Total	$850 million	FTA New Starts

Washington Roadway and Interchanges	Cost	Funding Source
Washington Roadway and Interchanges Total	$435 million	State and/ or Federal Funds

Finance



Federal	User Fees	State
FTA ($850 M) FHWA ($400 M)	Toll revenue ($900 M - $1.3 B) TIFIA (loan to leverage tolls)	Washington ($450 M) Oregon ($450 M)

In December 2013, A bonding analysis of an Investment Grade Analysis found that Net Toll Revenues with pre-completion tolling would provide approximately $1.35 billion and $1.57 billion

Project Management

- 39 Member Task Force
- Project Sponsor's Council
- Working Groups
  - Community and Environmental Justice
  - Freight
  - Portland
  - Vancouver
  - Pedestrian and Bicycle
  - Urban Design

U.S. Department of Transportation
Federal Highway Administration
Federal Transit Administration

Oregon Department of Transportation

Washington State Department of Transportation

City of Vancouver

City of Portland

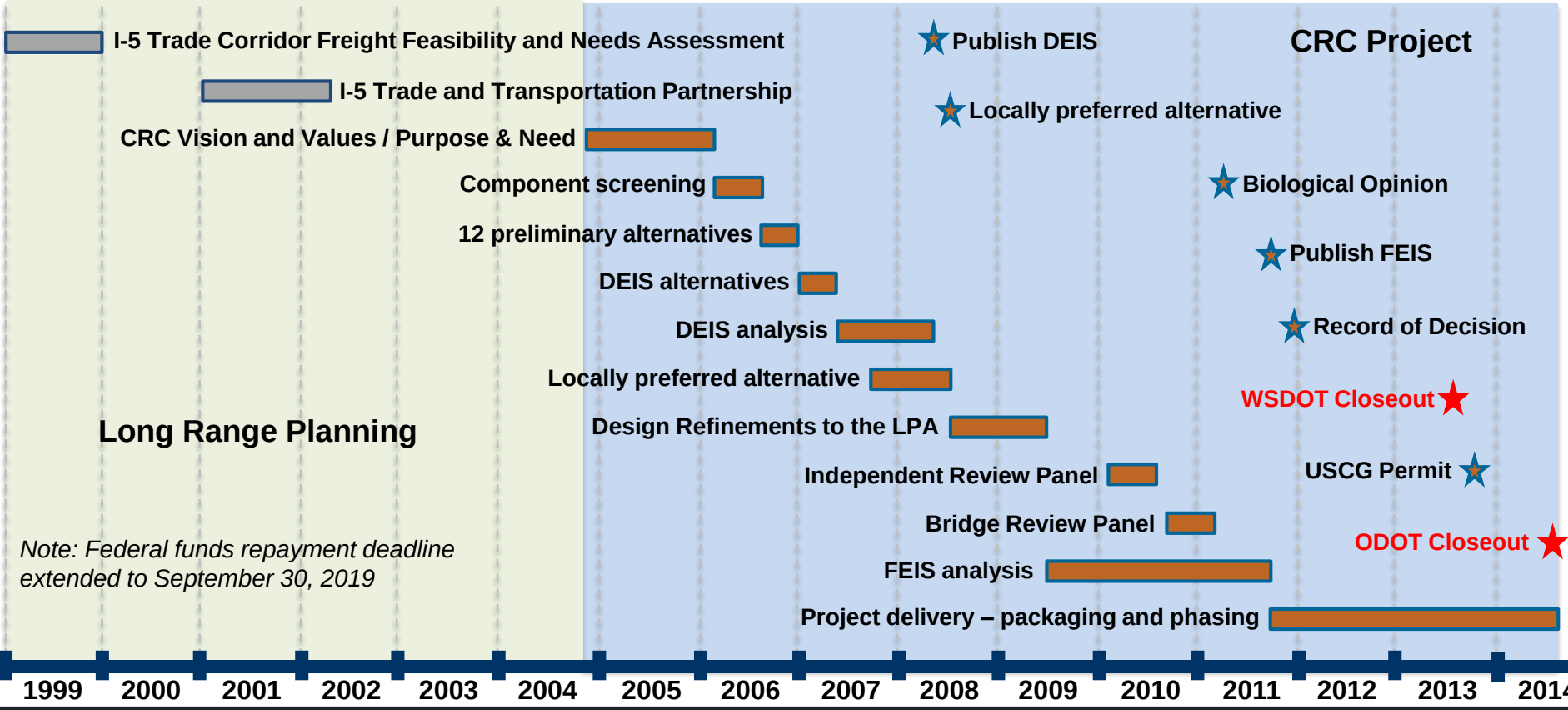
SW Washington Regional Transportation Council

Metro

C-TRAN

TriMet

Project Development – Timeline

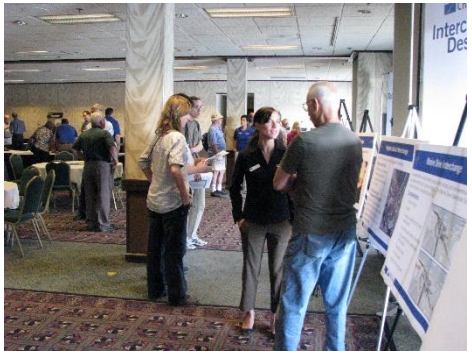


Note: Federal funds repayment deadline extended to September 30, 2019

Project Development

Public Involvement (as of March 2013)

- **1,277 public events**
  - **653 in WA**
  - **624 in OR**
- **33,984 face-to-face contacts**
  - **17,175 in WA**
  - **16,809 in OR**
- **Approximately 12,000 public comments**
- **Contact list: 6,000 email / 14,000 mailing addresses**



Project Development

Alternatives Development - <u>Components</u>

- **Components identified from previous long range planning, public comments and project stakeholders**
- **Component categories:**
  - **River crossing (23 screened / 4 passed)**
  - **Transit (14 screened / 5 passed)**
  - **Pedestrian and bicycle (12 screened / 10 passed)**
  - **Freight (5 screened / 3 passed)**
  - **TDM/TSM (18 screened / 10 passed)**
  - **Roadways north and south (2 screened / 2 passed)**

Project Development

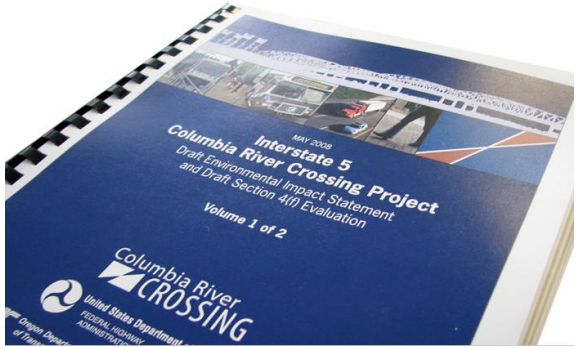
Alternatives Development – <u>12 Representative Alternatives</u>

- **Components that passed screening were packaged into 12 preliminary alternatives to measure performance**
- **Each alternative included a river crossing component and transit component**
- **Analysis demonstrated that a replacement river crossing, LRT and BRT performed best among remaining river crossing and transit components**

Project Development

Alternatives Development – <u>DEIS Alternatives</u>

1. **No Build**
2. **Replacement bridge with bus rapid transit**
3. **Replacement bridge with light rail transit**
4. **Supplemental bridge with bus rapid transit**
5. **Supplemental bridge with light rail transit**



All "build" alternatives included interchange, freight and pedestrian/bicycle improvements between SR500 and Delta Park

Project Development

Alternatives Development – <u>Locally Preferred Alternative</u>

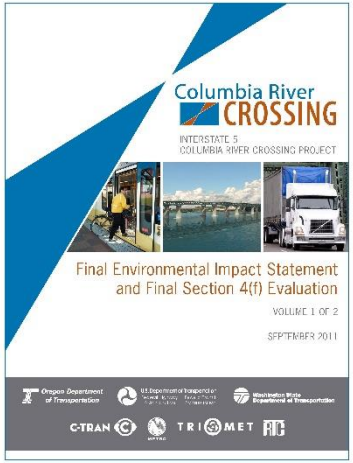
- **Replacement I-5 bridge with 3 through lanes and up to 3 add/drop lanes**
- **Light rail transit to Clark College**
- **Highway and pedestrian/bicycle improvements**

Adopted by the CRC Task Force by a 37-2 vote on June 24, 2008. Endorsed by project stakeholders (WSDOT, ODOT, City of Vancouver, City of Portland, RTC, Metro, C-Tran, TriMet)

Project Development

Alternatives Development – <u>FEIS and Record of Decision</u>

- **Re-confirmed the purpose and need**
- **Reviewed and validated technical work**
- **Reviewed and validated the process used to select a locally preferred alternative**
- **Approved mitigation for unavoidable impacts**
- **Completed the planning phase, indicating the end of the NEPA process**



This I-5 Columbia River Crossing Project Record of Decision is hereby approved.

Daniel M. Mathis	Phillip Ditzler	R.F. Krochalis
FHWA Washington Division Administrator	FHWA Oregon Division Administrator	FTA Regional Administrator, Region 10
12/07/2011	12/07/2011	12/07/11
Date of Approval	Date of Approval	Date of Approval

Existing Bridges and Costs

- Northbound bridge had it's 100th birthday on February 14, 2017
- One of 6 remaining movable bridges on the Interstate Freeway System; the only one on I-5 between Canada and Mexico
- Operations and Maintenance costs for existing bridges equal $1.2 million per year
- Capital maintenance for the existing bridge is estimated to cost $282 million by 2040 (including trunnion replacement, bridge deck replacement, SB bridge painting and electrical systems)

Questions?

Kris Strickler

360-905-2001

StricklerK@wsdot.wa.gov