

Economic/Trade Ties Between Oregon and Washington

presented to

Joint Meeting of the Oregon and Washington Transportation Commissions

presented by

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Overview

- Trade between Washington and Oregon is critical to the economies of both states and contributes significantly to their overall freight movements
- Freight movements between Washington and Oregon involve important industry sectors and major commodities
- Freight movement between Washington and Oregon is mostly by truck and highly concentrated in the I-5 corridor



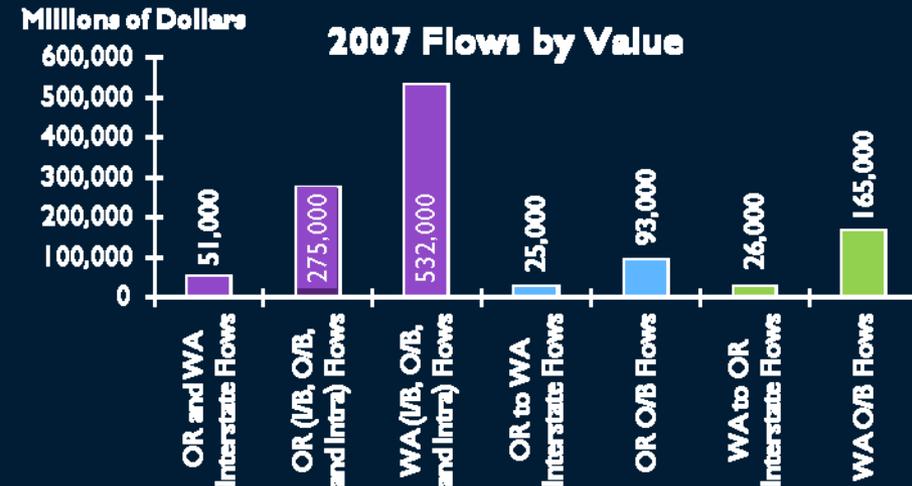
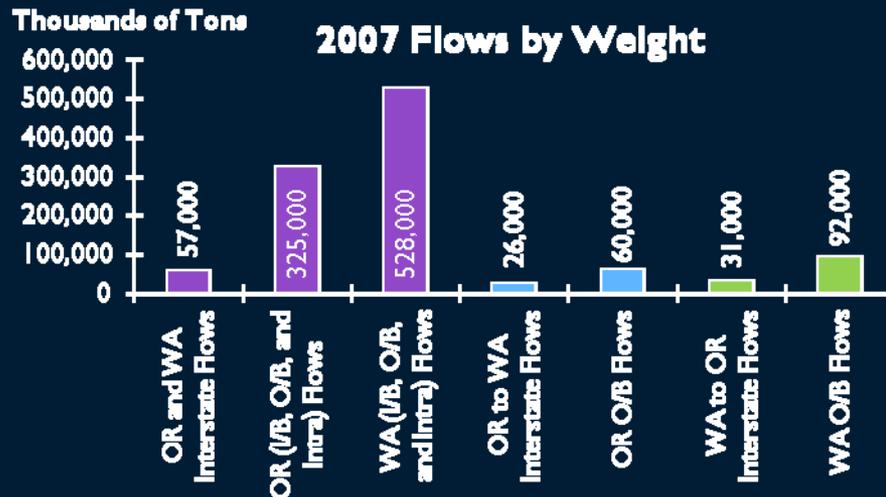
Related Efforts and Sources of Freight and Economic Information – The Foundation

- Freight and Economic Data
 - » FHWA Freight Analysis Framework (FAF3)
 - » ODOT Statewide Integrated Model (SWIM)
- Current State Efforts
 - » Washington Freight Mobility Plan
 - » Oregon Rail Plan Update
- Recent State Freight Publications
 - » 2010 Oregon Rail Study
 - » 2011 Oregon Freight Plan
 - » Washington State 2010-2030 Freight Rail Plan
 - » The Impact of Truck Congestion on Washington State's Economy
 - » 2011 Freight and Goods Transportation System, WSDOT

**How Much of
Oregon/Washington's Freight
Movement is Between
the Two States?**

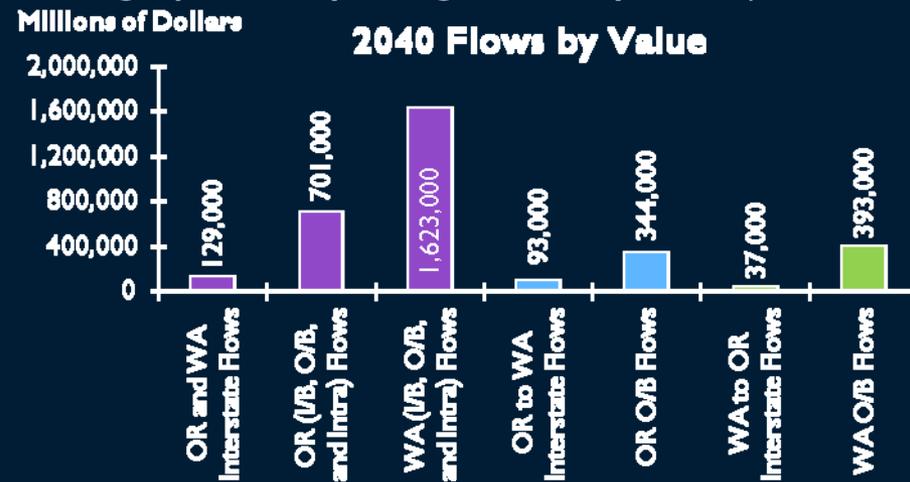
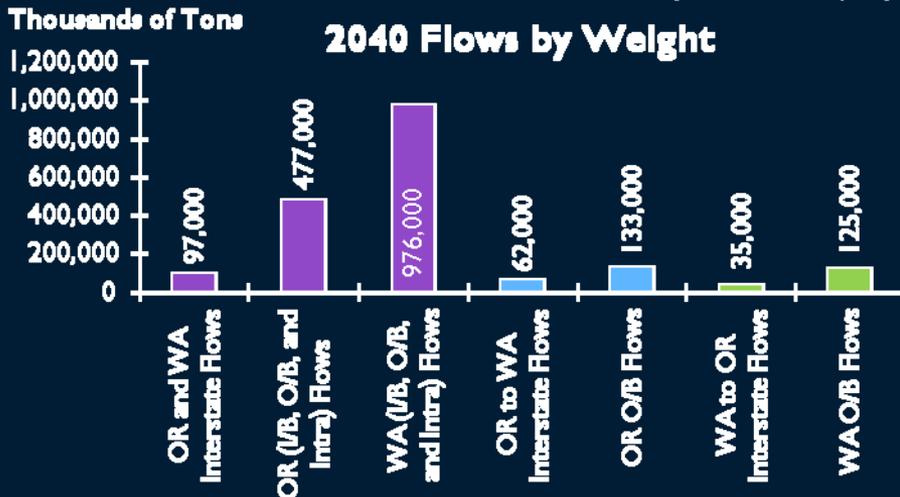
How Much of Oregon/Washington's Freight Movement is Between the Two States?

- Trade between Oregon and Washington make up 18% of Oregon freight movement and 11% of Washington total freight movement by weight, and 19% and 10% of the total freight movement by value, respectively
- Outbound shipments from Oregon to Washington make up 43% of Oregon outbound shipments by weight and 27% by value
- Outbound shipments from Washington to Oregon make up 34% of Washington outbound shipments by weight and 16% by value



How Much of Oregon/Washington's Freight Movement is Between the Two States?

- Compared to 2007, trade between the states is expected to increase by 70% in weight, and 153% in value by 2040, indicating continued shift to higher value products
- Outbound shipments from Oregon to Washington are forecasted to increase as a share of total outbound shipments in terms of weight (4 percentage points), but is forecasted to experience a slight decrease in share by value (1 percentage point)
- Outbound shipments from Washington to Oregon are forecasted to decrease as a share of total outbound shipments (6 percentage points by weight and by value)



**What Are the Significant Trade
Flows Between Oregon and
Washington and How Are They
Related to Key Industry Sectors?**

What Are the Significant Trade Flows Between Oregon and Washington?

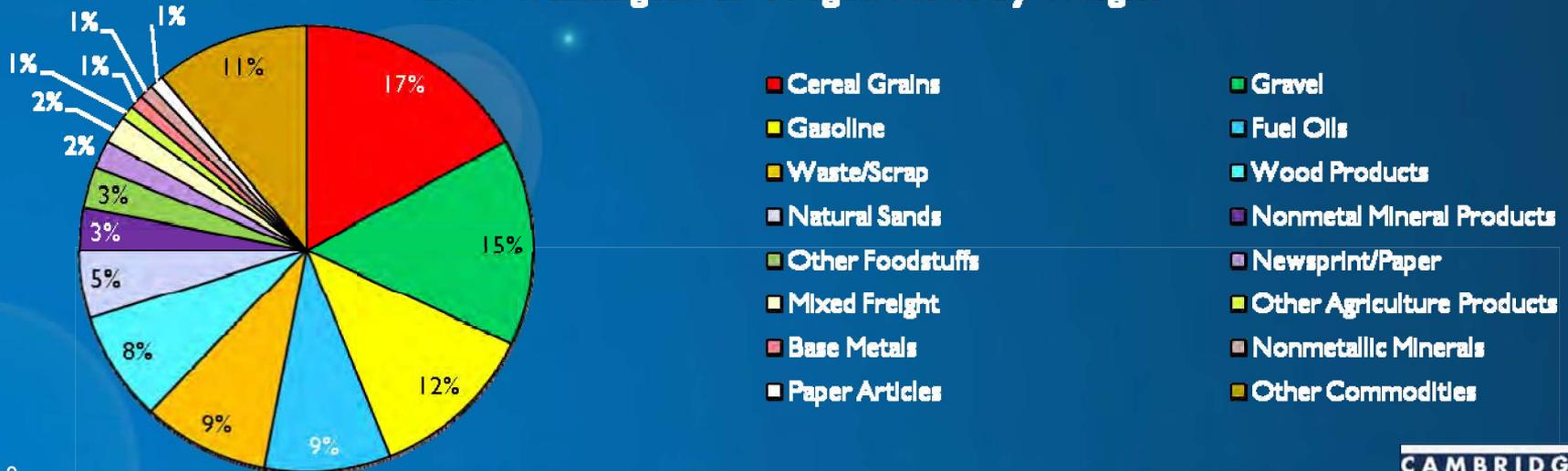
- In terms of value of shipments, a large share of Oregon shipments to Washington are durable goods and mixed freight/consumer products, whereas Washington ships a more varied mix of manufactured products (durable and non-durable), fuels, and some mixed freight/consumer products
- In terms of weight both states ship large amounts of construction- and agriculture-related products – Washington also ships a large amount of fuels to Oregon by weight
- By 2040 miscellaneous manufactured products, textiles, electronics, and waste/scrap will all experience increases in share of Oregon shipments to Washington, whereas mixed freight (consumer goods), machinery, waste/scrap, and textiles will experience increases in share of Washington shipments to Oregon

What Are the Significant Trade Flows Between Oregon and Washington

2007 Oregon to Washington Flows by Weight



2007 Washington to Oregon Flows by Weight



What Are the Significant Trade Flows Between Oregon and Washington (continued)

2007 Oregon to Washington Flows by Value



2007 Washington to Oregon Flows by Value

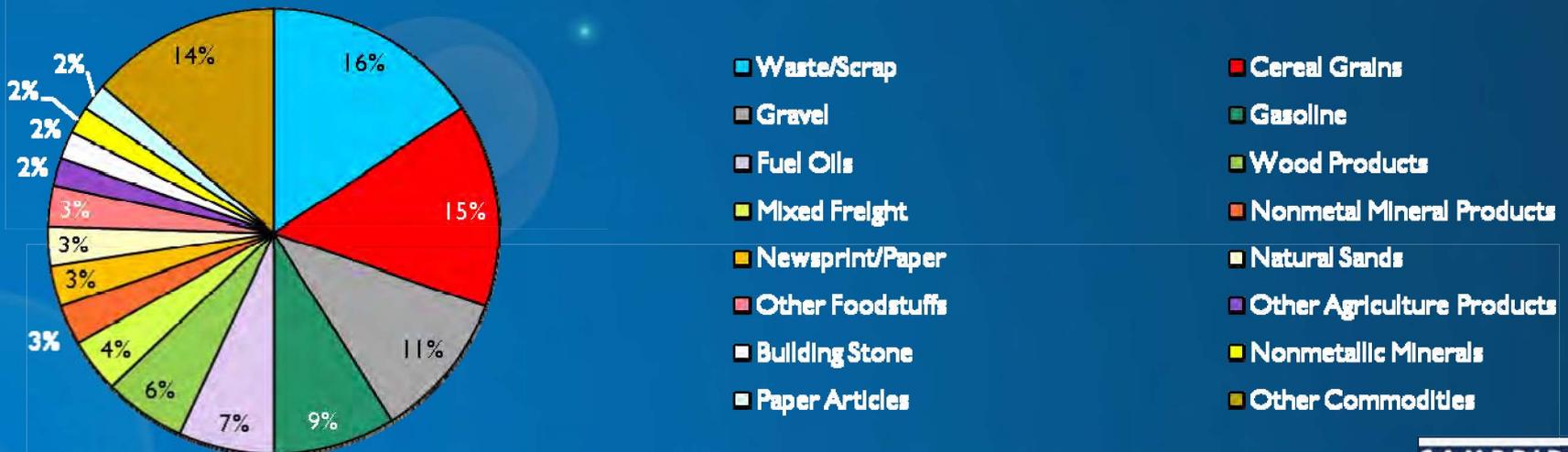


What Are the Significant Trade Flows Between Oregon and Washington (continued)

2040 Oregon to Washington Flows by Weight



2040 Washington to Oregon Flows by Weight



What Are the Significant Trade Flows Between Oregon and Washington (continued)

2040 Oregon to Washington Flows by Value



2040 Washington to Oregon Flows by Value



Freight Dependent Industries that Contribute to Oregon/Washington Trade

2009 Real GSP by Sector (in Millions of CPI Adjusted Current Dollars)

Sector	Oregon	Washington
Agriculture, Forestry, Fishing, and Hunting	4,195	5,566
Mining	109	511
Construction	4,361	14,260
Durable Manufacturing	57,109	28,089
Nondurable Manufacturing	5,428	9,512
Wholesale Trade	11,435	17,720
Retail Trade	11,749	22,134
Transportation and Warehousing	4,851	8,966
Military	551	8,031
Utilities, Services, Government (Non-Military), and Other	101,553	216,532
Total	201,340	331,321

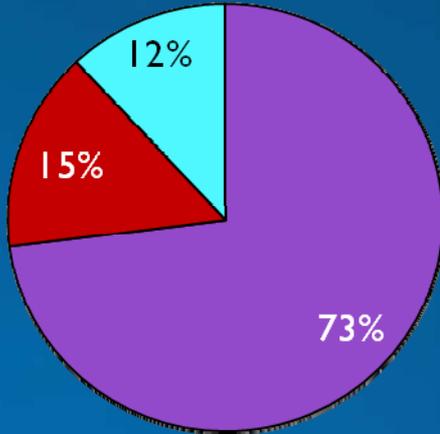
Source: U.S. Bureau of Economic Analysis and Oregon Office of Economic Analysis

- Freight dependent industry sectors accounted for 49.3% of GSP in Oregon and 32.2% of GSP in Washington in 2009.
- Sectors including agriculture, construction, durable goods manufacturing, wholesale trade, and transportation and warehousing generated much bi-state trade

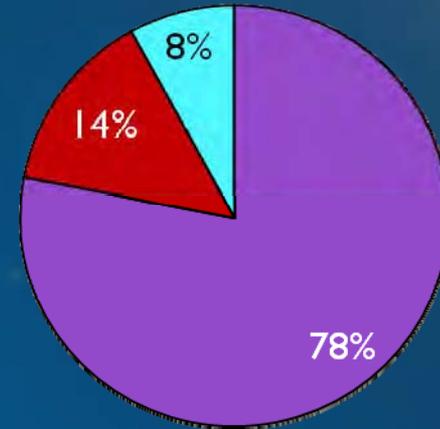
**What Modes Are Used to
Transport Freight Between
Oregon and Washington and
Which Corridors Carry the
Greatest
Bi-State Trade?**

Which Transportation Modes are Most Important for Oregon/Washington Trade?

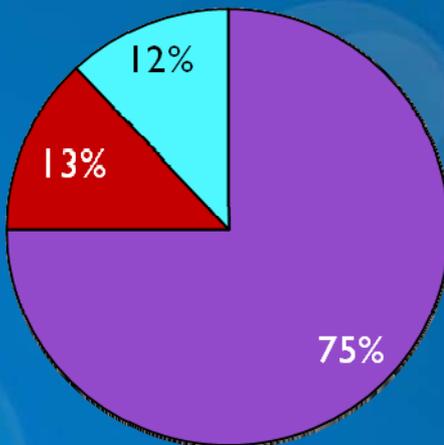
2007 Flows by Weight



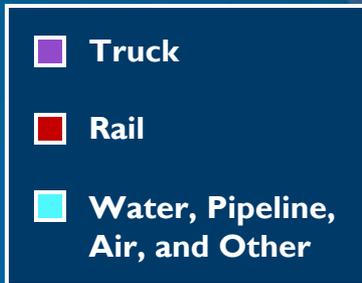
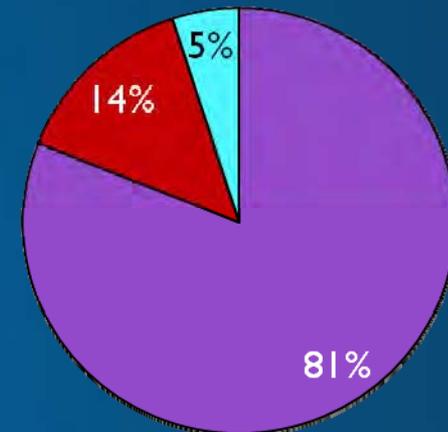
2007 Flows by Value



2040 Flows by Weight



2040 Flows by Value



Examining Freight Corridors

- The Oregon Statewide Integrated Model (SWIM) was adapted to provide commodity analysis capabilities for key corridors in Oregon and neighboring states
- Focus is on highway movements
- Detail in Washington is not comprehensive but provides basis for analyzing certain key corridors

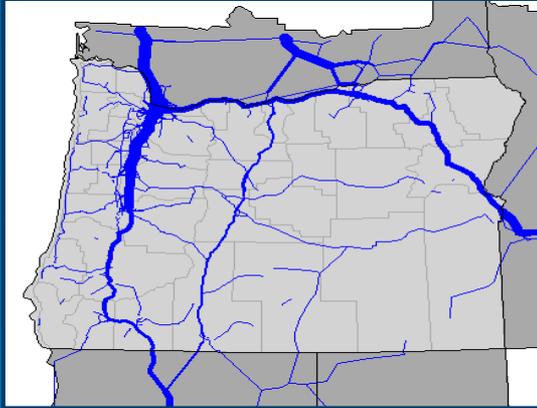
Oregon/Washington Trade Flows in Key Highway Corridors

- Most Oregon-Washington interstate trade occurs in the I-5 Corridor
 - » Analysis suggests that for the Cascadia megaregion, Washington-Oregon trade dominates highway flows at least from Olympia to Salem – reach for some commodities extends beyond this but for other commodities the trade is mostly within the Portland/Vancouver metro area
 - » U.S. 97 is the only other corridor of significance from a bi-state trade perspective
- Patterns of movement along I-5 and U.S. 97 vary considerably for different commodities

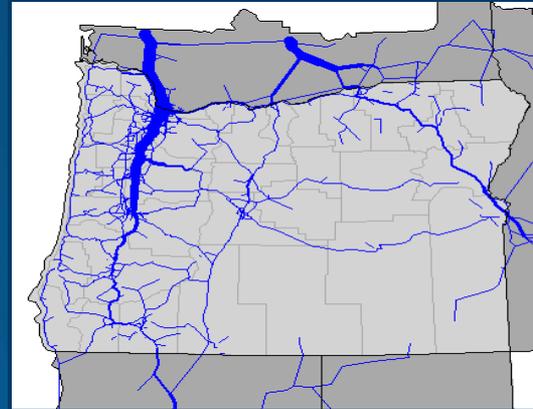
Which Corridors Carry the Most Significant Trade Between Oregon and Washington?

For All Commodities

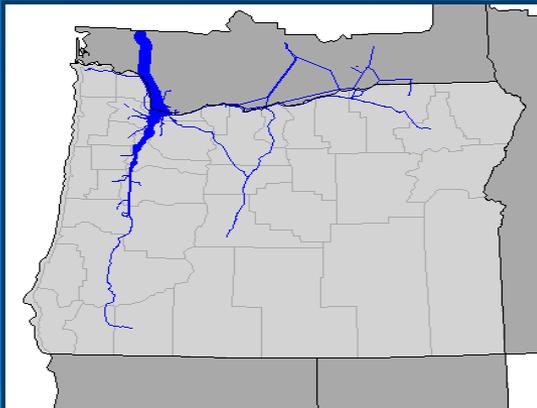
All Value Flow



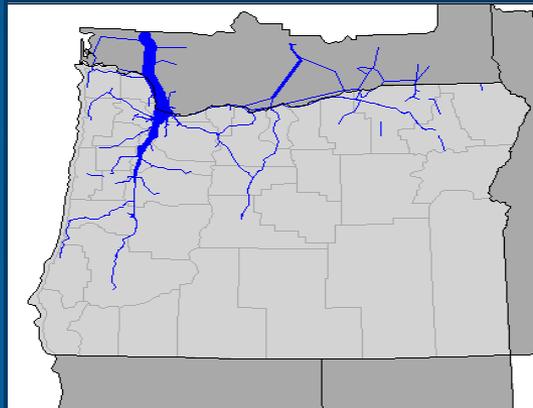
All Tons Flow



Oregon-Washington Value



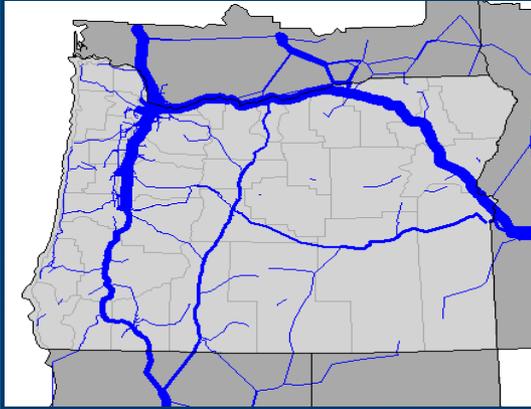
Oregon-Washington Flow



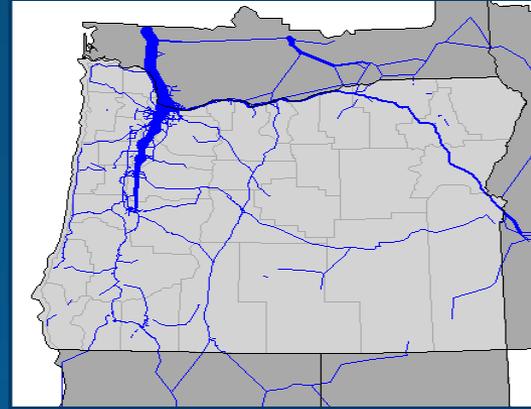
Which Corridors Carry the Most Significant Trade Between Oregon and Washington?

Machinery, Instruments, Transportation, Equipment, Metals

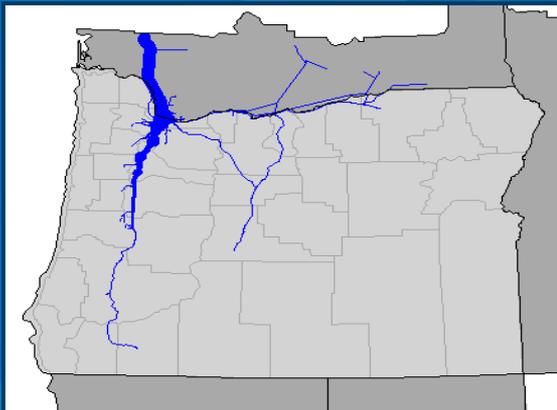
All Value Flow



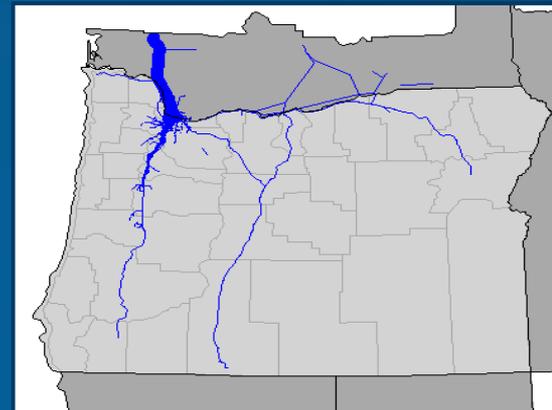
All Tons Flow



Oregon-Washington Value



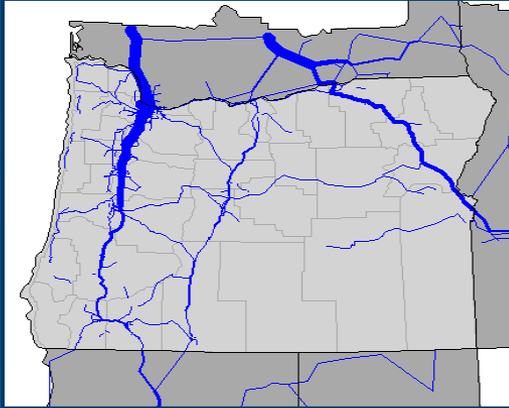
Oregon-Washington Flow



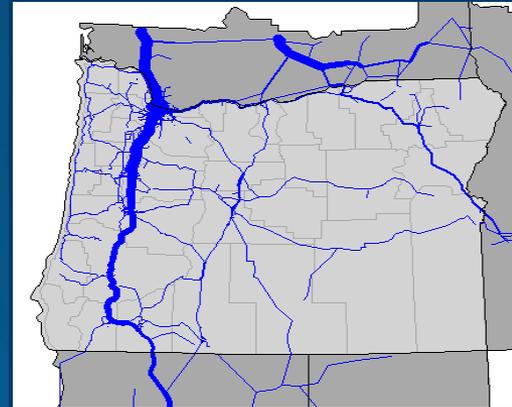
Which Corridors Carry the Most Significant Trade Between Oregon and Washington?

Other Manufactured Products (e.g., Textiles, Furniture)

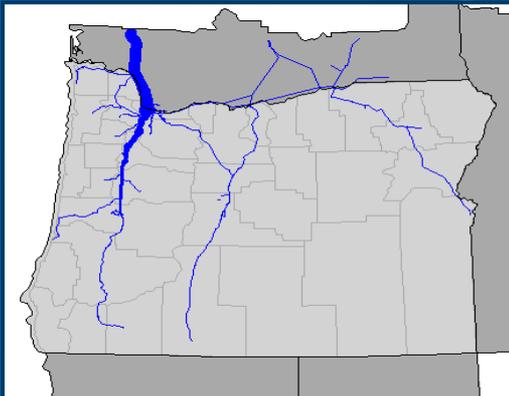
All Value Flow



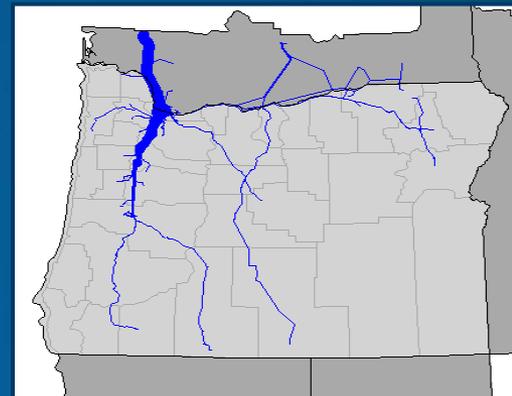
All Tons Flow



Oregon-Washington Value



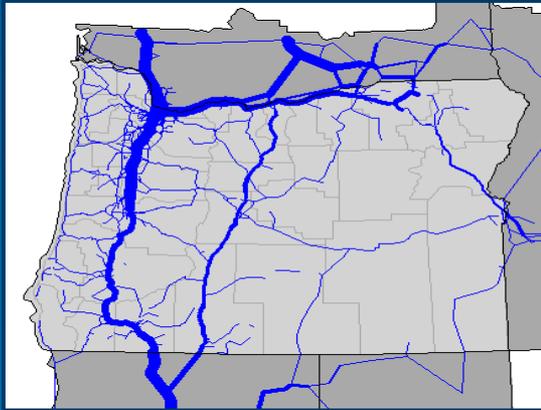
Oregon-Washington Flow



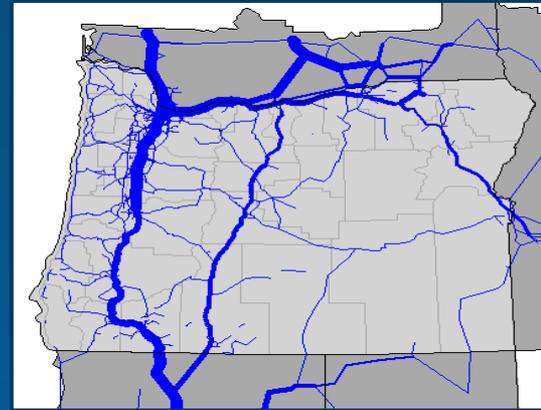
Which Corridors Carry the Most Significant Trade Between Oregon and Washington?

Ag, Food, Kindred, Products

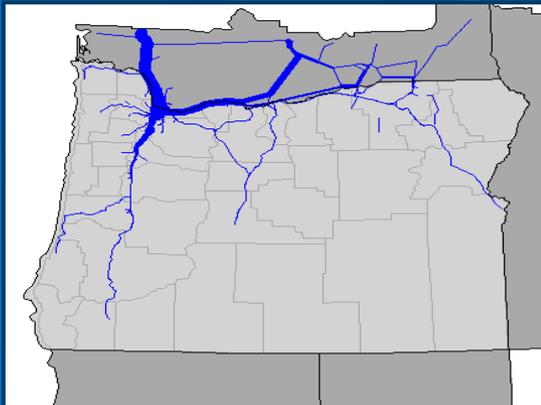
All Value Flow



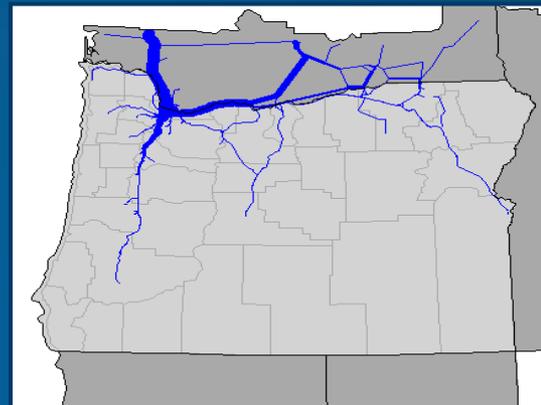
All Tons Flow



Oregon-Washington Value



Oregon-Washington Flow



Thoughts for the Future of Oregon-Washington Trade and Economic Ties

- Trade between Oregon-Washington is and will continue to be an important part of both state economies and freight profile
 - » Both states are shifting to higher value products which will change traditional interdependencies built around resource commodities
- Megaregion trends and shifts to high-value products will extend both state's trading partnerships but will also create even greater focus on truck movements and the I-5 corridor
- Opportunities to explore alternative modes, especially in a fully integrated and multimodal approach to the I-5 corridor, should be a focus of future planning