Washington Transportation Plan Update

Freight Systems

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Washington State Department of Transportation

Washington Freight Transportation Systems Support

I. International and National Trade Through Washington Gateways

II. Washington State's Own Producers and Manufacturers

III. Distribution, Wholesale and Retail

The components of Washington's freight system – international gateways, and transportation serving Washington's producers and manufacturers, retail and wholesale distribution systems - support one another.

International goods enter Washington state gateways and become part of Washington's manufactured output, or are distributed in our retail system.

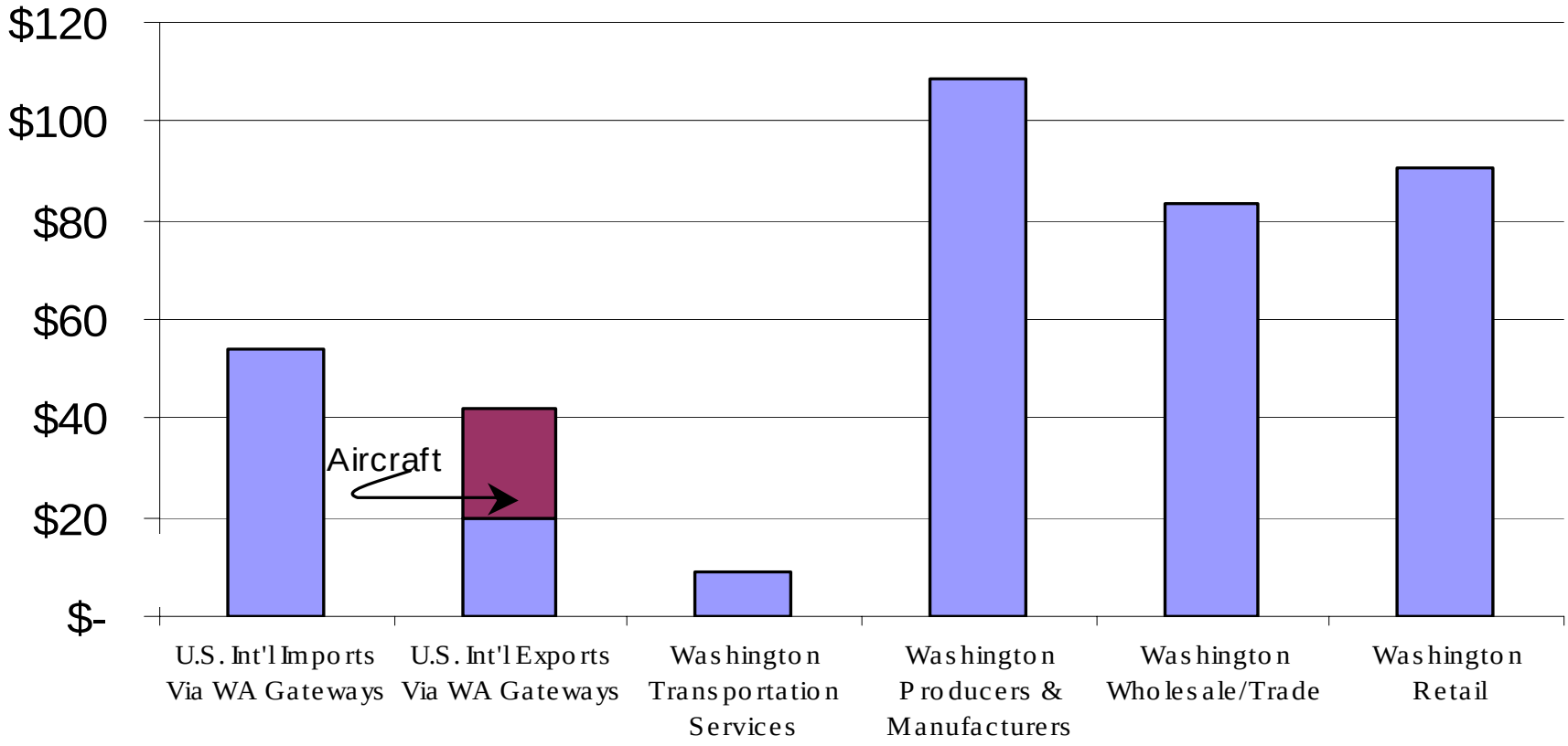
Washington manufacturers and farmers ship products directly to customers and to wholesalers in national and international markets.

Washington wholesalers supply retailers with goods from all over the U.S. and the world.

Washington's global gateways also carry national and international goods to and from the larger U.S. market.

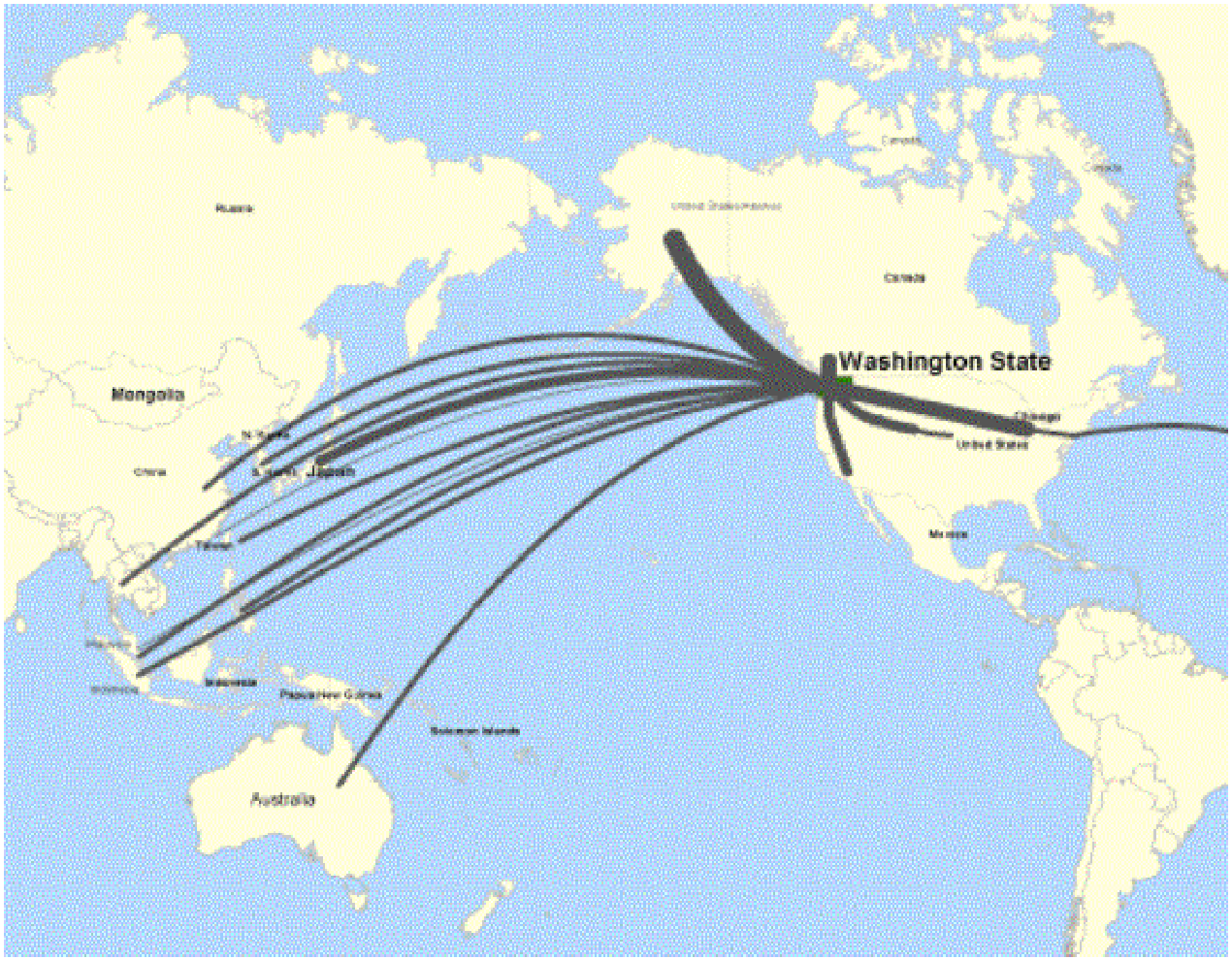
Washington State Value of Freight Shipments

2002: Billions of Dollars



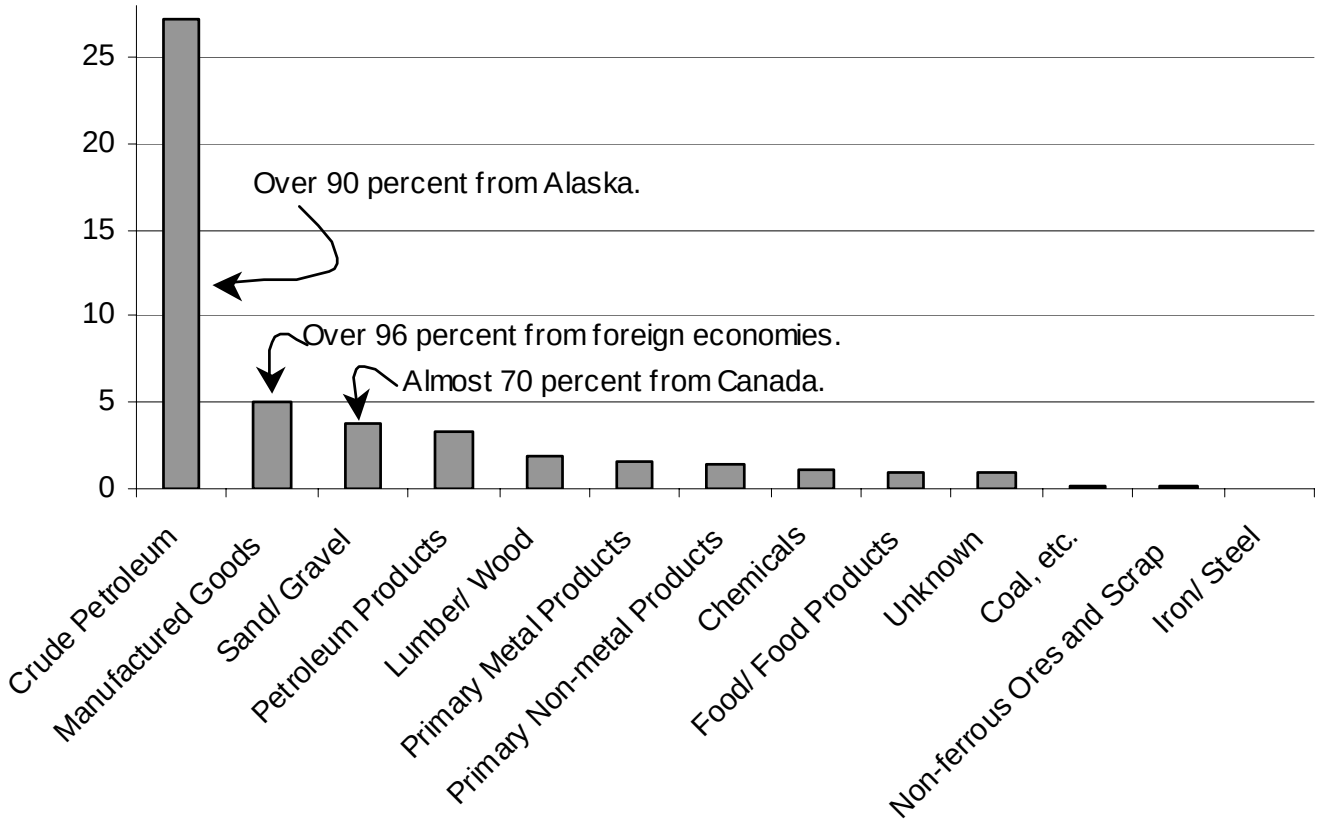
Source: U.S. Customs Bureau; WA State Dept. of Revenue.

I. Transportation Systems Carrying International and National Trade Through Washington's Gateways



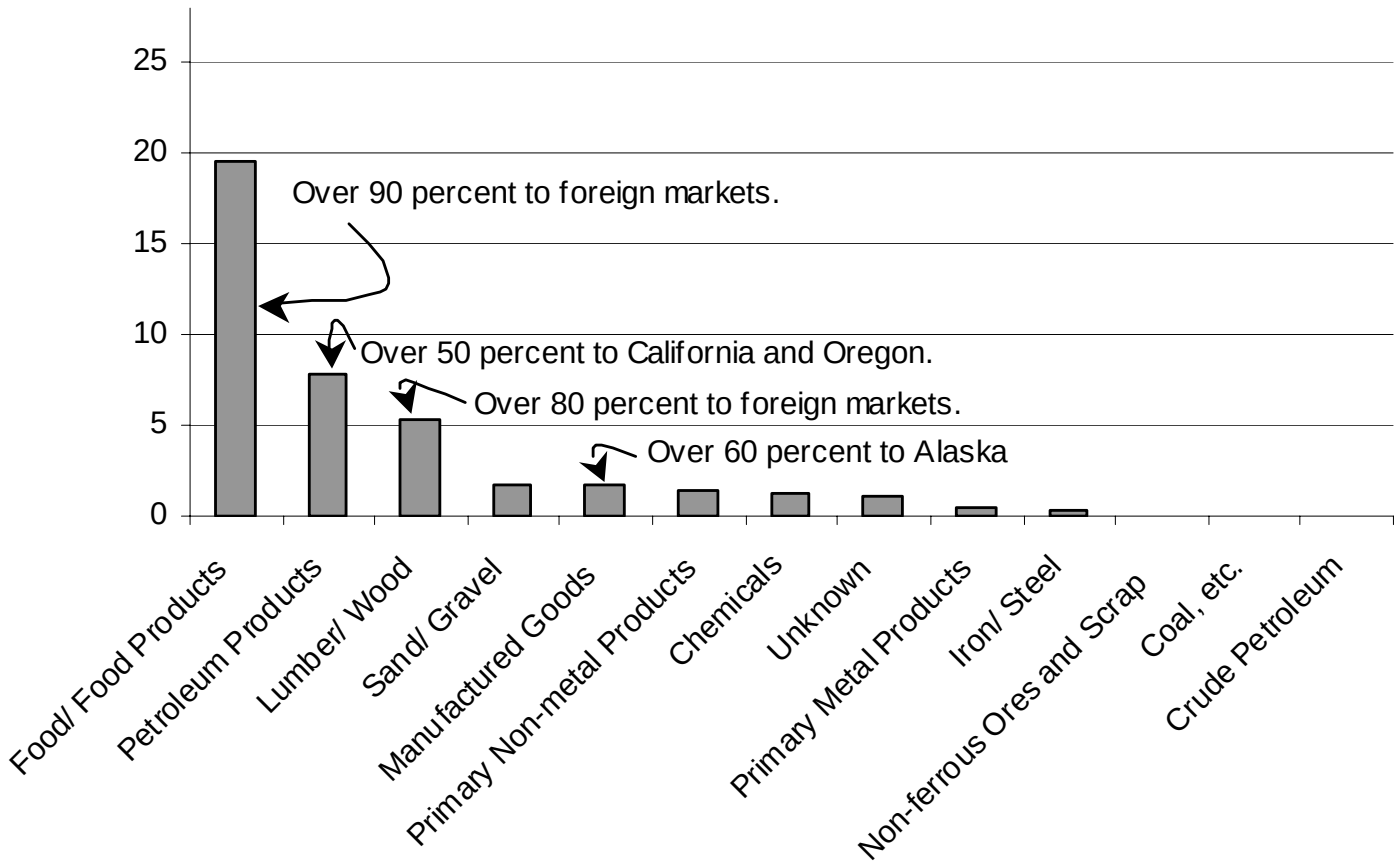
By Tonnage, Crude Petroleum Dwarfs All Other Waterborne Inbound Commodities

Goods Entering Washington State by Water
2002, Million Tons



By Tonnage, Food/ Food Products Outweigh Other Waterborne Outbound Commodities

Goods Leaving Washington State by Water
2002, Million Tons

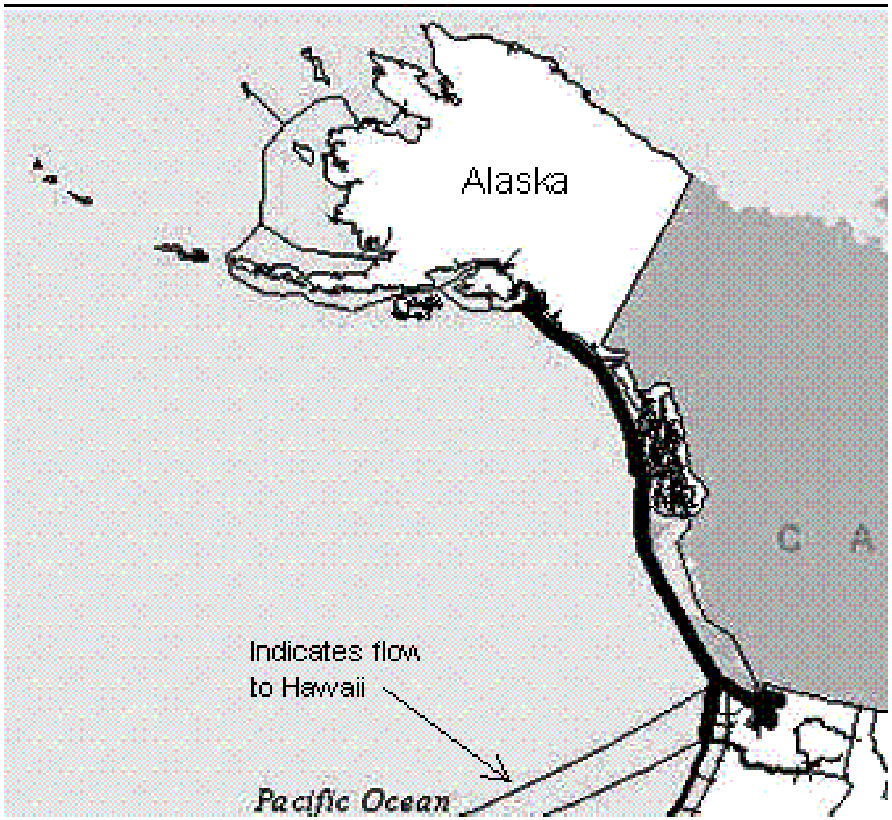


Washington is also the Gateway to Alaska

By value and volume – 24.62 million tons – the most significant commodity carried to Washington State from Alaska, using the inland waterway and landing at refineries, is crude petroleum.

Commodities shipped from Washington to Alaska include manufactured goods, as well as food and food products.

Domestic Freight Flows Moving By Water to and From Washington State

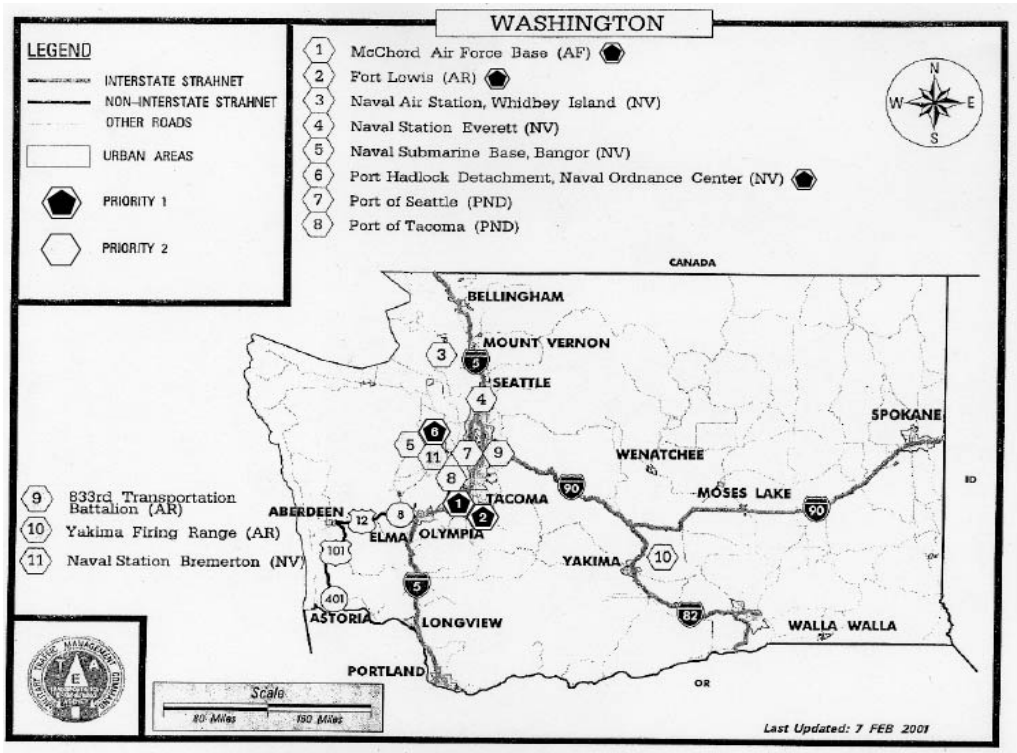


Source: Adapted from Washington: Total Domestic Water Flows, 1998 (US DOT)

Washington Gateways Play an Essential Role in Supporting National Security

- Fort Lewis is a key location for gathering, staging and mobilizing forces and material.

  During a major regional conflict, cargo from all over the United States will move by road and rail to Fort Lewis.
- The Port of Tacoma: PNW strategic port supporting Fort Lewis
- The Port of Seattle: sustainment port to ship supplies to troops
- Port Hadlock Naval Ordnance Center: one of nine national centers



II. Transportation System Serving Washington State's Own Producers and Manufacturers

Exports, plus much, much more!

Agriculture: $5.6 billion in food and agricultural products in 2002.

Washington agriculture produces three times as much food – and for some commodities up to twenty times as much on a tonnage basis – as it consumes. The transportation system must reach world and national markets.

Manufacturing: $88.3 billion in Gross Business Revenues in 2003, 21.3 percent of the total State Gross Business Income.

Washington's Regions Have Built Distinct Economies Based on Industry and Agriculture

Central Puget Sound
Center of Manufacturing and Commerce

Freight System Views

- The Boeing Company employs 53,000 in Washington State in 2004
- Boeing Aircraft reported $22.4 billion revenues in 2003
- There were 4,433 small and medium-sized manufacturing firms in King, Pierce and Snohomish Counties in 2003
- Seattle: home of the North Pacific fishing fleet. Catches up to 40 percent of U.S. harvest; revenues of $2.91 billion in 2003.
- Maritime industry employed 22,000 in King County in 2002.

484,000 Jobs Directly Depend on Freight

	Jobs	Average Wage
Construction	92,406	$36,551
Manufacturing	202,988	$44,625
Wholesale/Trade	94,311	$41,883
Transportation/Utilities	94,040	$44,752

Central Puget Sound:
Freight System Views

Sixty-five percent of South Sound manufacturers, and 63 percent of East Side manufacturers are very satisfied with current freight system performance.

Only fifty percent of Central Puget Sound trucking companies are very satisfied with the current performance of the freight system.

What is the Freight Users' Goal?

- **Eastside Manufacturers:**

  On-time: 56%

  Predictable trip time: 20%

  Price: 17%

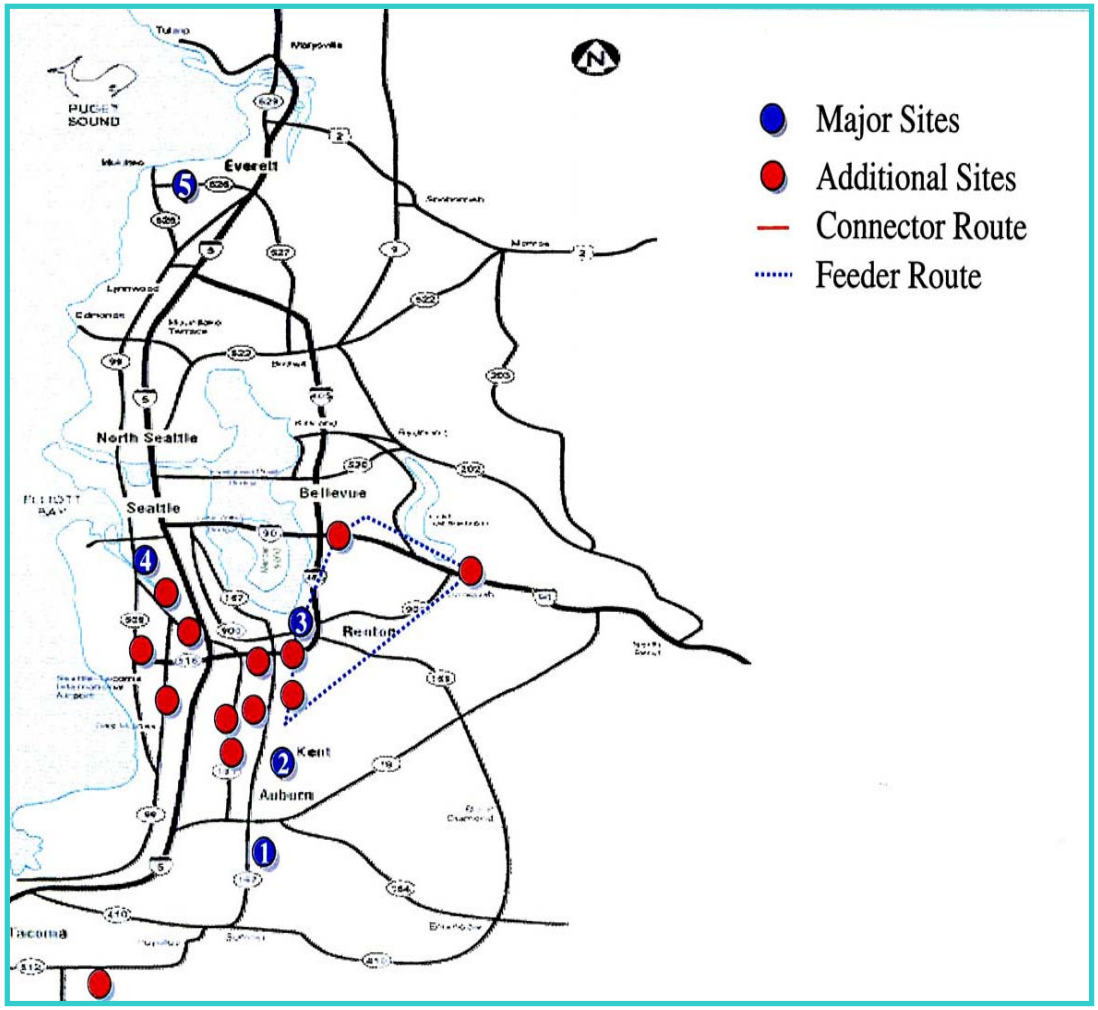
- **South Sound Manufacturers:**

  On-time: 52%

  Price: 31%

  Predictable trip time: 7%

Central Puget Sound:
The Boeing Company



Moving by night four times a week starting in 2006, the entire oversize 7E7 empennage (horizontal and vertical tail surfaces) will be trucked up Hwy 167, I-405 and I-5 from the Structural composites plant in Frederickson to final assembly in Everett.

Central Puget Sound

Big Transportation Issues :

- Solution to I-5 congestion – bottlenecks and constraints from Olympia to Everett. No redundancy in the major freight corridors.
- Solution to I-405 congestion: From Tukwila to Renton, and I-405/Hwy 167 Interchange.
- Complete major freight corridors by connecting:

  Hwy 167 to I-5 in South Sound

  SR 18 to Hwy 167 in Auburn

  SR 509 to I-5
- Alaskan Way Viaduct; connections to I-5
- Port connections to rail, I-5 & intermodal yards. Freight volumes to double at nexus of NAFTA and Asia-US freight corridors by 2030
- FAST projects including SR519/Royal Brougham
- Local truck route programs for thruput and metro delivery systems

Central Puget Sound

Big Transportation Issues (continued):

- SR 18 to I-90
- Cross Base Hwy: economic development in Pierce County
- Ferry system freight runs to serve Bremerton and the Olympic Peninsula
- Industry inventory reduction strategies are driving shorter on-time delivery windows for producers and carriers
- 95% of Washington State air cargo moves through SeaTac and King County Airports. I-5 congestion directly impacts reliability and on-time performance of air cargo system.

III. Transportation Systems Supports Distribution, Wholesale and Retail

- Up to 80% of truck trips operate in the local distribution system
- The trip lengths are 100 miles or less daily, or in some cases up to 250 miles.
- Commercial truck registrations: 1994-2001 up 53%
- 80,000 people are employed in trucking or warehousing in Washington State

Enormous Variety of Goods and Services Are Handled in This Freight System

- Food and groceries
- Fuel
- Pharmaceuticals and medical supplies
- Retail stock, from furniture and appliances to clothing and books
- Cash and negotiable instruments (armored trucks)
- Office supplies and documents
- Trash and garbage (garbage trucks)
- Moving vans
- Construction materials and equipment

What is the Goal of the Freight System for the Distribution Sector?

On-time	50%
Price	38%
Reliable trip time	12%

What Is Meant By “On-Time”?

25% say:	Less than one-hour delivery window
63% say:	Within one to two hours of appointment
12% say:	Within two to three hours

Wholesale Distribution Centers Grow Across the Landscape

- **Green River Valley:** Land scarcity and traffic congestion are forcing private sector site selection to outlying areas.
- Distribution centers are spreading across the landscape. For example, there are 1,800 new jobs in these seven new centers:
  - **Home Depot:** Existing center in Kent. New 756,000 sq. ft. facility in Lacey taking 50-75 trucks inbound for Port of Seattle, Tacoma; 30-50 outbound loads, seven states.
  - **Target:** 1.5 million sq. ft. in Lacey
  - **Dollar Tree:** 665,000 sq. ft. in Ridgefield
  - **Wal-Mart:** 900,000 sq. ft. in Grandview
  - **Safeway:** 1.4 million sq. ft. in Auburn
  - **Ferguson Enterprises:** 340,000 sq. ft. in Richland
  - **Vanity Fair (Jansport):** Everett

- Commercial/industrial land use is a major transportation issue due to the inadequacy of core-area roadway infrastructure.

VI. Ideas for Additional Study?

- What Did We Miss?
- We Want the Conversation About Freight Strategy To Involve All the Players.