



Freight Transportation Drives Washington's Economy

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Panel 2: Transportation and
Infrastructure

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Overview

WSDOT Freight Planning

Freight System Plan

Corridors and Supply Chains

Goal: Economic Vitality

Goal: Preservation



Freight Planning at WSDOT

The Washington State Department of Transportation's Rail, Freight, and Ports Division actively engages and coordinates with trucking companies, railroads, shippers, port districts and others to efficiently move people and goods.

The division's primary responsibilities include the planning, coordination and implementation of the state's freight activities. The multimodal freight transportation system in Washington allows for the safe, reliable and efficient movement of goods to support the state's economic vitality.

Freight modes include truck, rail, marine (ship and barge), air cargo, pipeline, and others.

Freight is an Agency-Wide Focus at WSDOT

In addition to the Rail, Freight, and Ports Division, almost every aspect of WSDOT is affected by, impacts or works with freight in some capacity:

- Multimodal Planning
- Aviation
- Ferries
- Safety
- Development
- Construction
- Traffic and Maintenance Operations
- Transportation Data and GIS
- Strategic Assessment
- Mega Programs
- Regional offices
- Capital Program Development and Management
- Budget and financial analysis
- Innovative Partnerships
- Quality Assurance and Transportation System Safety
- Intergovernmental & Tribal Relations
- Tolling

Trade Dependence and Freight Dependence

Washington is the second most trade-dependent state in the nation on a per capita basis

- 11,352 small and medium-sized goods exporters
- \$126.8 billion in total imports and exports value

The freight-dependent industries have a major economic effect

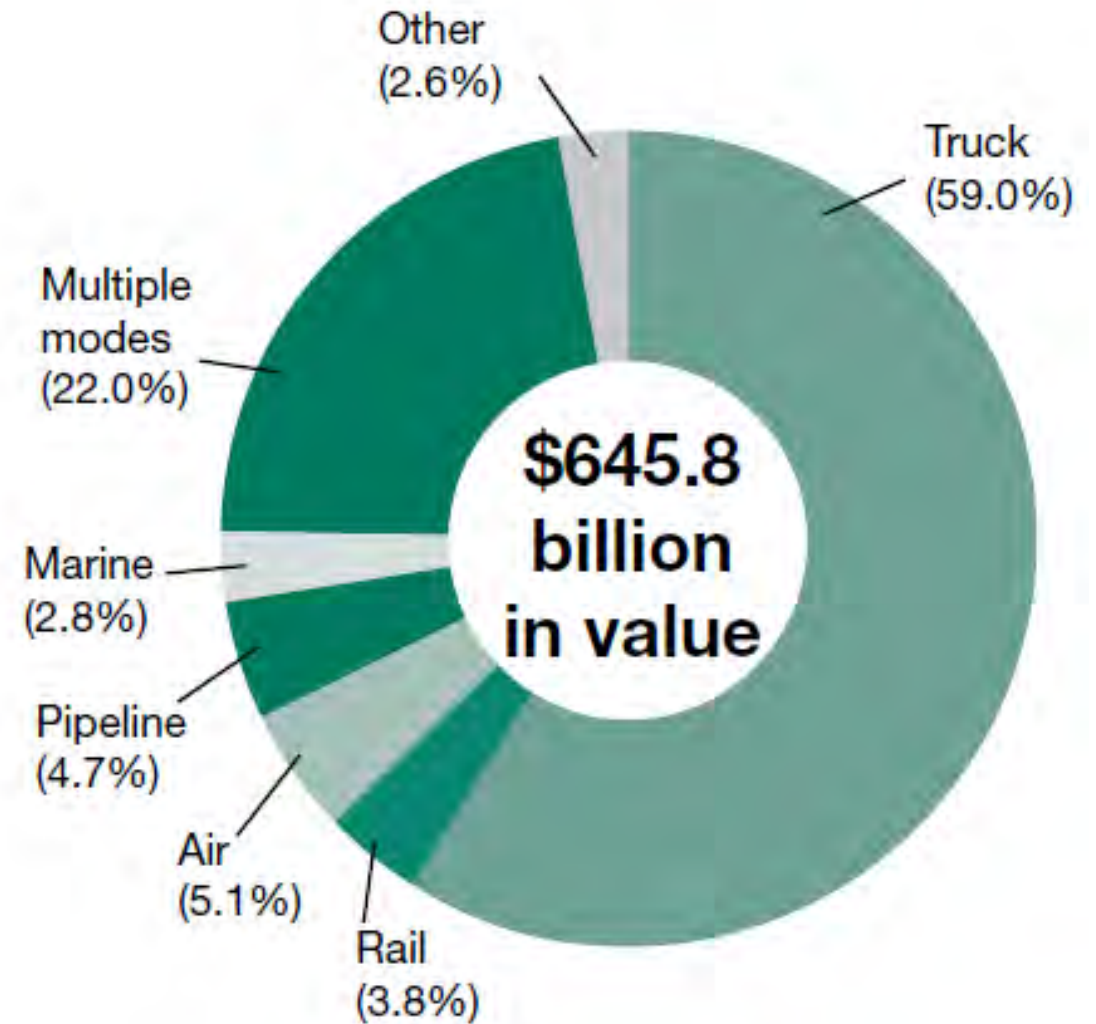
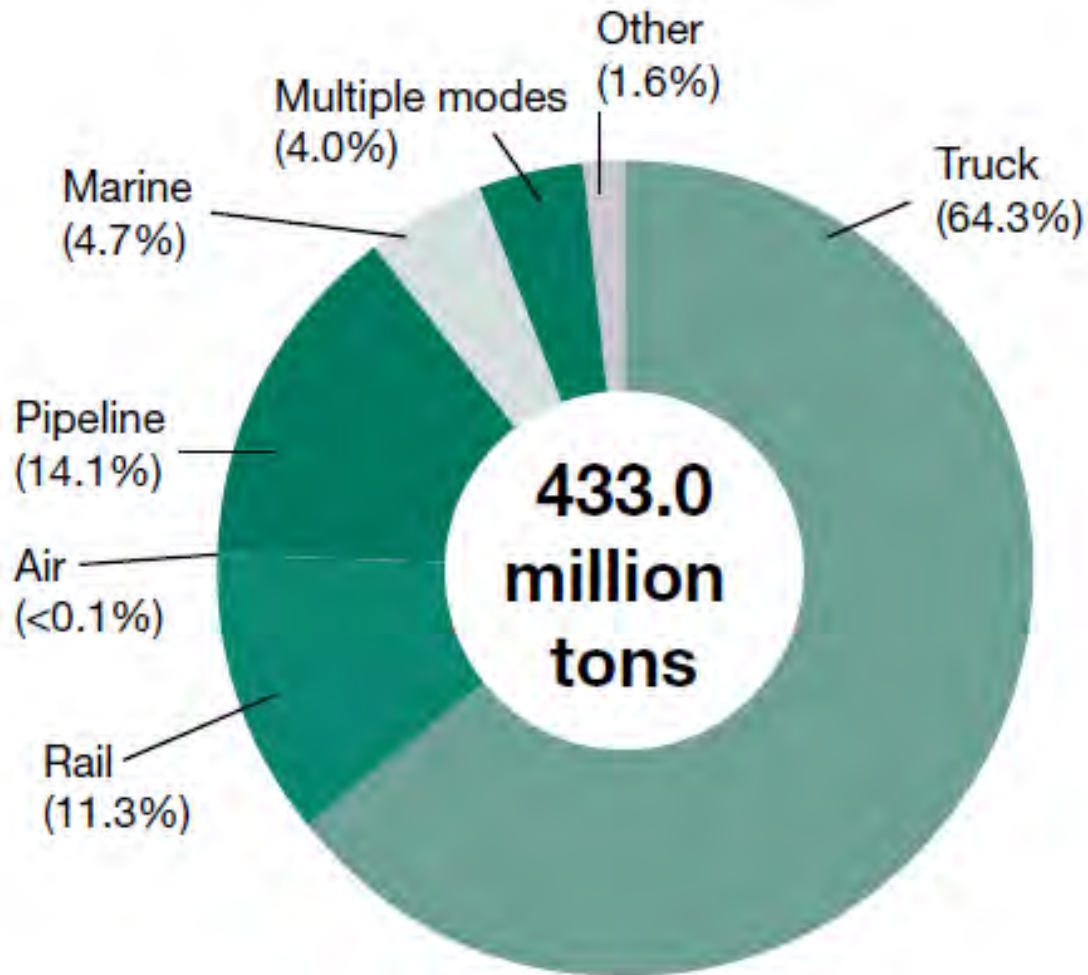
- 1.41 million jobs in freight-dependent industries (wholesale/retail, manufacturing, construction, transportation, agriculture, forest products)
- \$550.5 billion in gross business income for freight-dependent sectors



Freight Volumes and Forecast

Tonnage

Value



2017 Freight System Plan

Components:

- Freight and the Economy
- System description
- Trends, issues, needs
- Performance measures
- Strategies
- Freight Investment Plan
- Marine Ports and Navigation Plan

Implementation:

- Path forward with partners



Components of the Freight Transportation System



The freight transportation system has three components

- **Global Gateways:** access to national and international markets
- **Made in Washington:** freight manufactured or produced in Washington, statewide
- **Delivering Goods:** local delivery

Global Gateways

Maritime sector:

- Over \$21.4 billion in gross business income, 146,000 jobs, and \$30 billion in economic activity
- International trade through NWSA over \$74.7 billion.

Air cargo at SeaTac:

- \$16.3 billion in business revenue, 171,796 jobs



Global Gateways



Alaska

- Freight to Alaska from the Puget Sound estimated at \$5.4 billion, one of the nation's most important domestic waterborne commerce routes.

Canada

- Canadian goods valued at more than \$12.8 billion entered the U.S. economy through Washington, and American goods valued at \$7.0 billion entered Canada through Washington

Asia

- Valued at \$37.7 billion, 52 percent was transportation equipment, 24 percent was agricultural products.

Made in Washington

Food and agriculture

- \$49 billion industry employs approximately 140,000 people, and 13 percent of the state economy comes from agriculture.

Manufacturing

- \$176 billion in gross business income, 23 percent of the total



Delivering Goods



Warehousing and distribution

- Serves the retail, wholesale, and business service sectors, produces up to 80 percent of all truck trips in metropolitan areas.
- Approximately 717,000 employees work in the retail/wholesale sector, which produced over \$302 billion in gross business income in 2015.

Fuel supply chain

- Refineries in Washington can refine 633,700 barrels per day

Freight and Goods Transportation System

FGTS uses a data-based freight classification system widely used to support multiple efforts

- FMSIB designation of Strategic Freight Corridors and establishment of funding eligibility for FMSIB grants
- Statewide and regional transportation planning process

WSDOT updates FGTS every two years to fulfill state legislative requirements

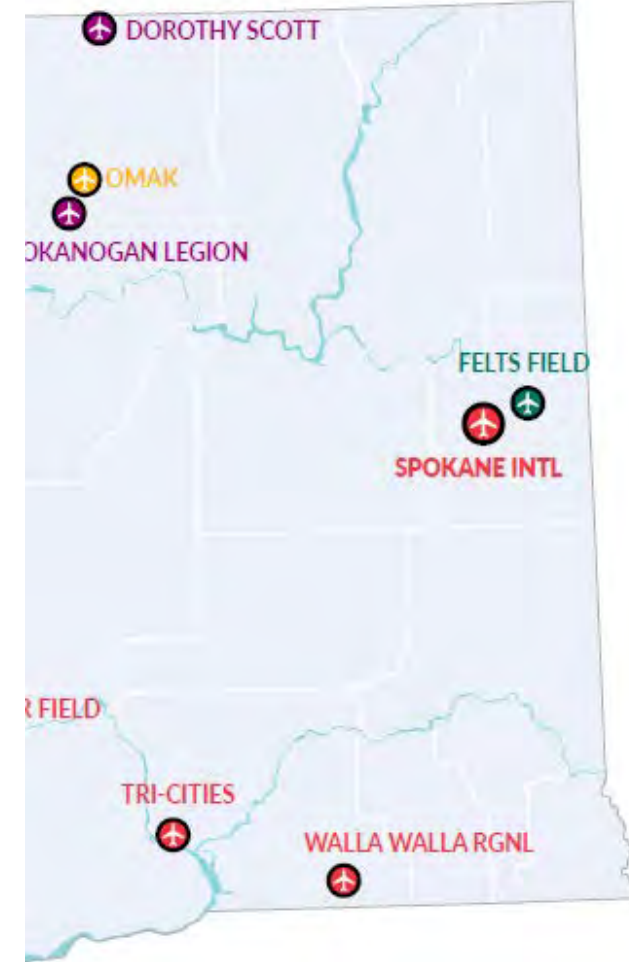
2017 FGTS Update was completed and published in March 2018, including final report, online map application, and full list of corridor designations (<https://www.wsdot.wa.gov/Freight/FGTS/>)

Freight Corridors and Nodes

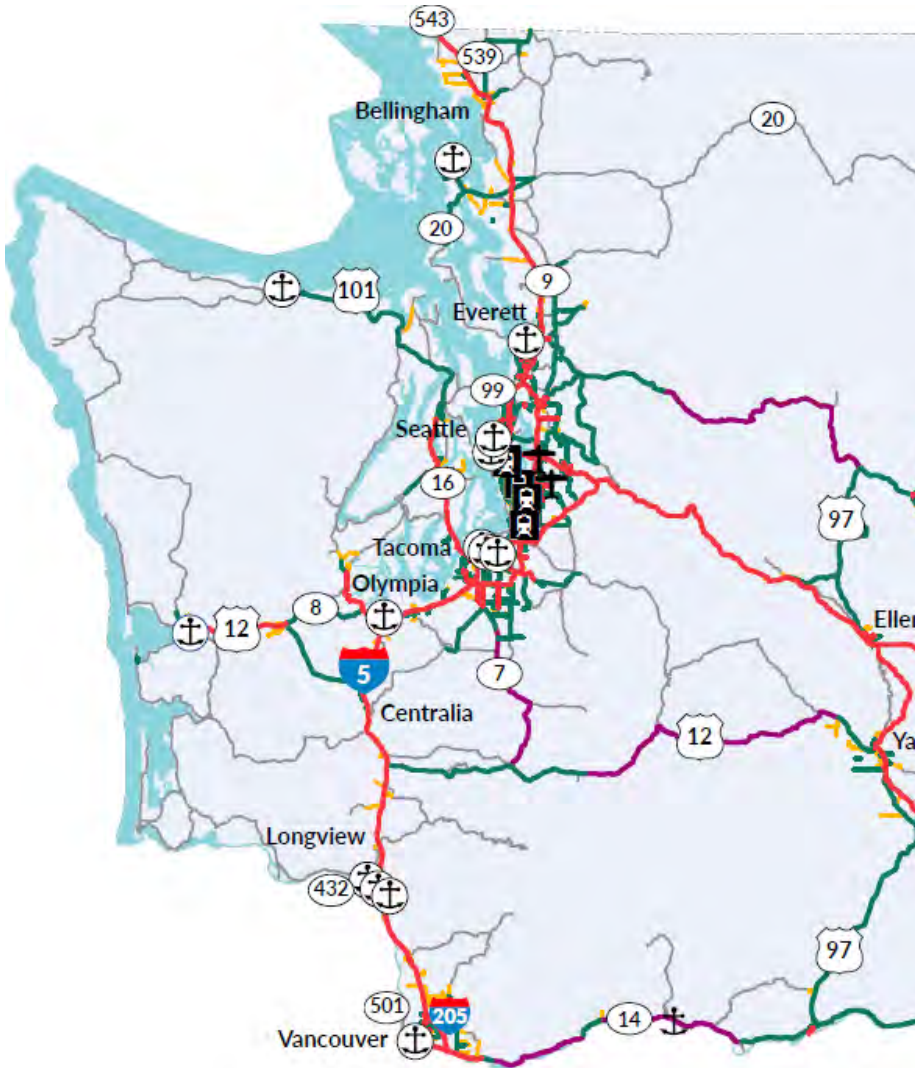
Marine

Rail

Air Cargo



Freight Economic Corridors



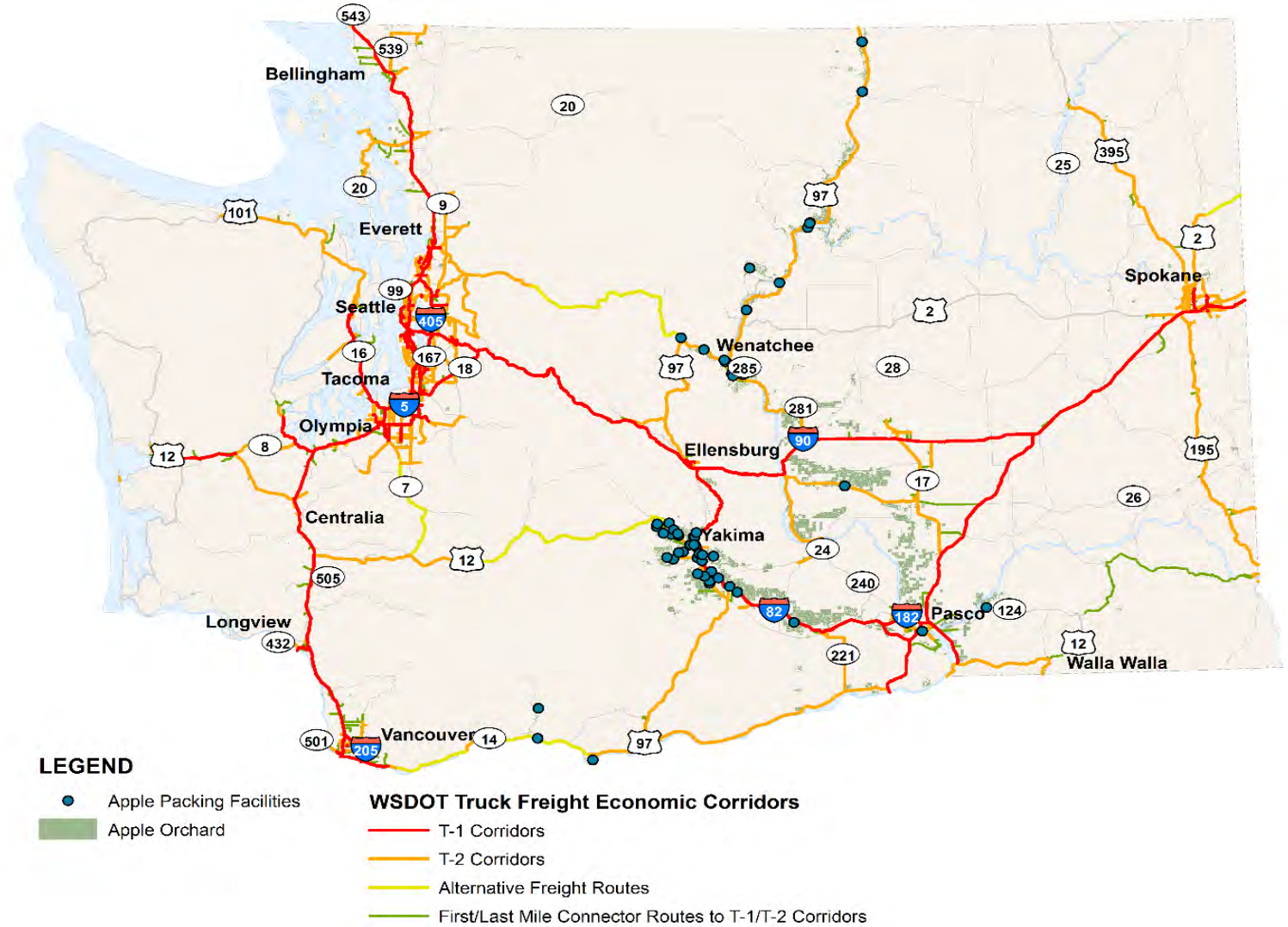
Truck Freight Economic Corridors

- T1 freight corridors that carry more than 10 million tons per year
- T2 freight corridors that carry 4 to 10 million tons per year
- Alternative freight routes that serve as alternatives to T1 truck routes that experience severe-weather closures, and carry 300,000 to four million tons per year
- First/last mile connector routes between freight-intensive land uses and T1 and T2 freight corridors.

Key Commodity Supply Chains

Supply Chain Maps

- Aerospace
- Forest products
- Apple
- Milk
- Wheat
- Potato



2017 Freight System Plan Implementation

ECONOMIC VITALITY

- Promoting international trade
- Improving competitiveness of marine ports
- Protecting freight-dependent industrial sites
- Addressing freight employment needs

PRESERVATION

- Addressing pavement and bridge preservation needs on major truck routes
- Addressing rail infrastructure needs
- Addressing port and terminal infrastructure and navigation aides
- Addressing air cargo pavement conditions

SAFETY

- Reducing truck-related fatalities and serious injuries
- Assessing opportunities to improve truck parking
- Improving rail safety
- Enhancing rail crossing safety
- Enhancing freight security and defense capabilities

MOBILITY

- Addressing traffic congestion and truck bottlenecks
- Improving rail system capacity
- Improving marine system congestion
- Evaluating air cargo capacity statewide
- Addressing changing supply chain dynamics
- Monitoring emerging technologies

ENVIRONMENT

- Assessing vulnerability to climate impacts
- Reducing diesel emissions
- Monitoring the safety and security of fuel supply chains

STEWARDSHIP

- Improving freight system resiliency
- Addressing regulatory challenges
- Identifying stable freight funding
- Improving data, transportation models, and performance measures
- Enhancing communication and coordination

Goal: Economic Vitality

5.1 International trade is changing:

Promoting international trade

5.2 Port competition is increasing:

Improving competitiveness of marine ports

5.3 Pressure builds to convert freight-oriented sites to other uses:

Protecting freight-dependent industrial sites

5.4 Freight industry labor is in short supply:

Addressing freight employment needs

5.5 Intermodal connector routes lack attention:

Improving intermodal connections



Goal: System Preservation



6.1 Truck corridors have pavement and bridge preservation needs

Addressing pavement and bridge preservation needs on major truck routes

6.2 Deferred maintenance threatens sustainability of the rail system

Addressing rail infrastructure needs

6.3 The marine system requires regular maintenance

Addressing port and terminal infrastructure and navigation aides

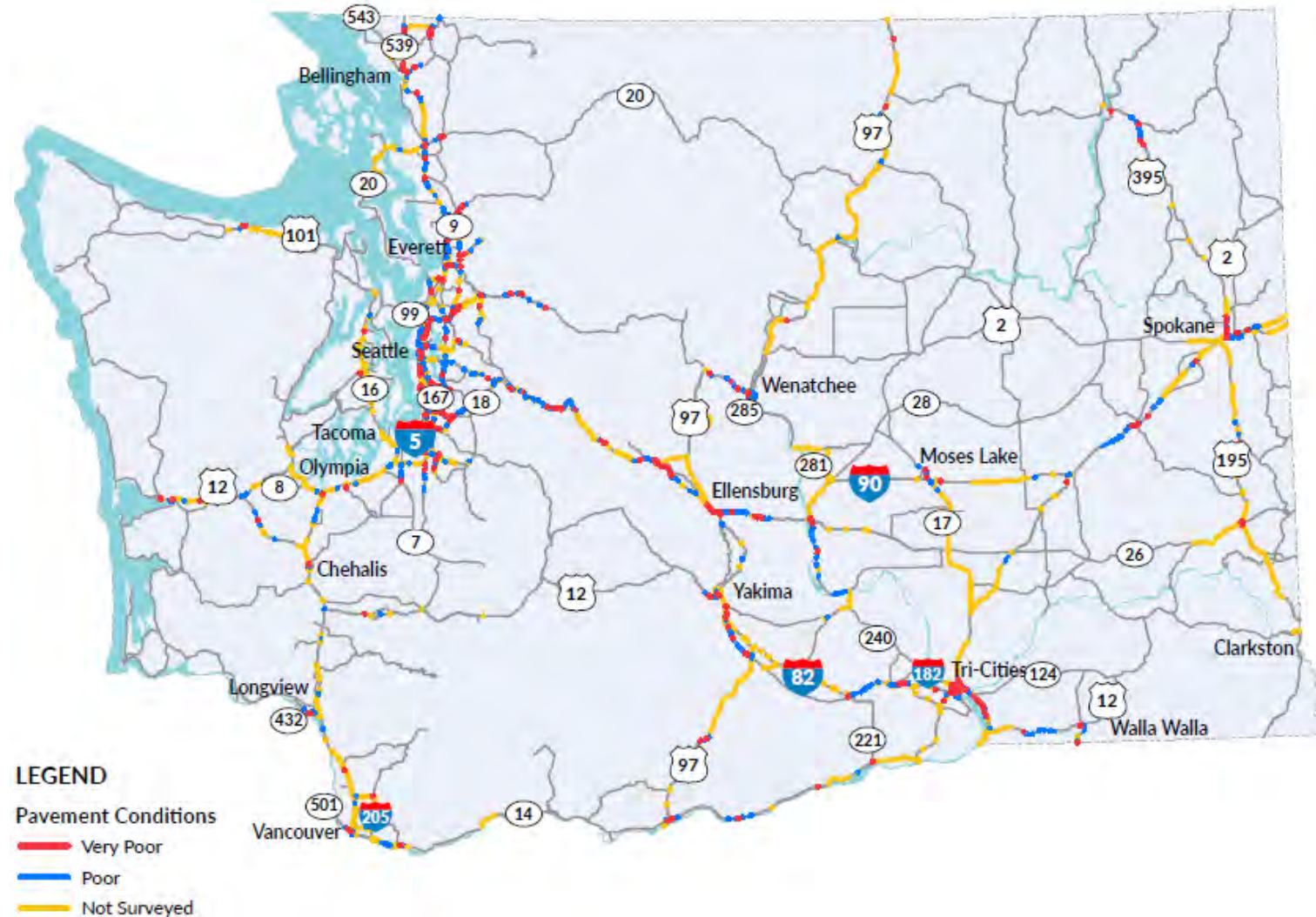
6.4 Air cargo pavement needs repair

Addressing air cargo pavement conditions

Goal: Preservation

Pavement:

- 76 percent good/very good, 17 percent fair, 5 percent poor, and 2 percent in very poor condition
- Congressional Budget Office estimates the cost of pavement damage caused by truck traffic between 0.7 to 1.0 cents per ton-mile.



Goal: Preservation

Bridges:

- 37 percent of state-owned bridges by deck area in good condition, 54 percent in fair condition, and nine percent in poor condition



Thank You!



For more information,
please contact:

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Documents are available at the WSDOT
freight planning site:

<http://www.wsdot.wa.gov/freight/>