

Washington State – Spokane Vicinity Freight

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Freight Matters

Washington's freight system is important to the economy of our state and country in many ways.

- It underpins our national and state economies, supports national defense, directly sustains hundreds of thousands of jobs, and delivers the necessities of life to residents on a daily basis. Goods are shipped into, out of, and around Washington through our system of roads, railroads, marine and air ports, waterways, and other intermodal facilities.

WHY does freight MATTER to Washington?

- Maintains the urban goods movement system, supporting jobs, the economy, and clean air for all; and provides goods delivery to residents and businesses.
- Keeps Washington competitive as a Global Gateway for the State, nation and world.
- Supports rural economies' farm-to-market, manufacturing, and resource industry sectors.



2014

Washington State Freight Mobility Plan

Lynn Peterson
Secretary

Cam Gilmour
Deputy Secretary



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The full Washington State Freight Mobility Plan may be found at:
<http://www.wsdot.wa.gov/Freight/freightmobilityplan>

What are the Key Deliverables in the State Freight Plan?

The Washington State Freight Plan has:

1. Identified the Washington State Freight Truck, Rail and Waterway Economic Corridors, including first and last mile connector routes based on freight-intensive land use.
2. Set measurable freight performance goals for the State Truck and Waterway Freight Economic Corridors.
3. Systematically analyzed current performance gaps and needs on highways in State Truck Freight Economic Corridors.
4. Developed a new process to include Tribal, Metropolitan Planning Organization (MPO), Regional Transportation Planning Organization (RTPO), port and state freight strategies to improve performance on the Washington State Economic Freight Corridors in the Plan.

Truck Freight Performance Measures

CONFORMS TO NATIONAL FREIGHT GOALS

Informed by research, data, analysis, and stakeholder input, this Plan will improve Washington's ability to achieve national freight goals:

- Improve the contribution of the freight transportation system to economic efficiency, productivity, and competitiveness
- Reduce congestion on the freight transportation system
- Improve the safety, security, and resilience of the freight transportation system
- Improve the state of good repair of the freight transportation system
- Use advanced technology, performance management, innovation, competition, and accountability in operating and maintaining the freight transportation system
- Reduce adverse environmental and community impacts of the freight transportation system

The Washington State Department of Transportation (WSDOT) will use these six measures to track the performance of the Truck Freight Economic Corridors.

Reducing:

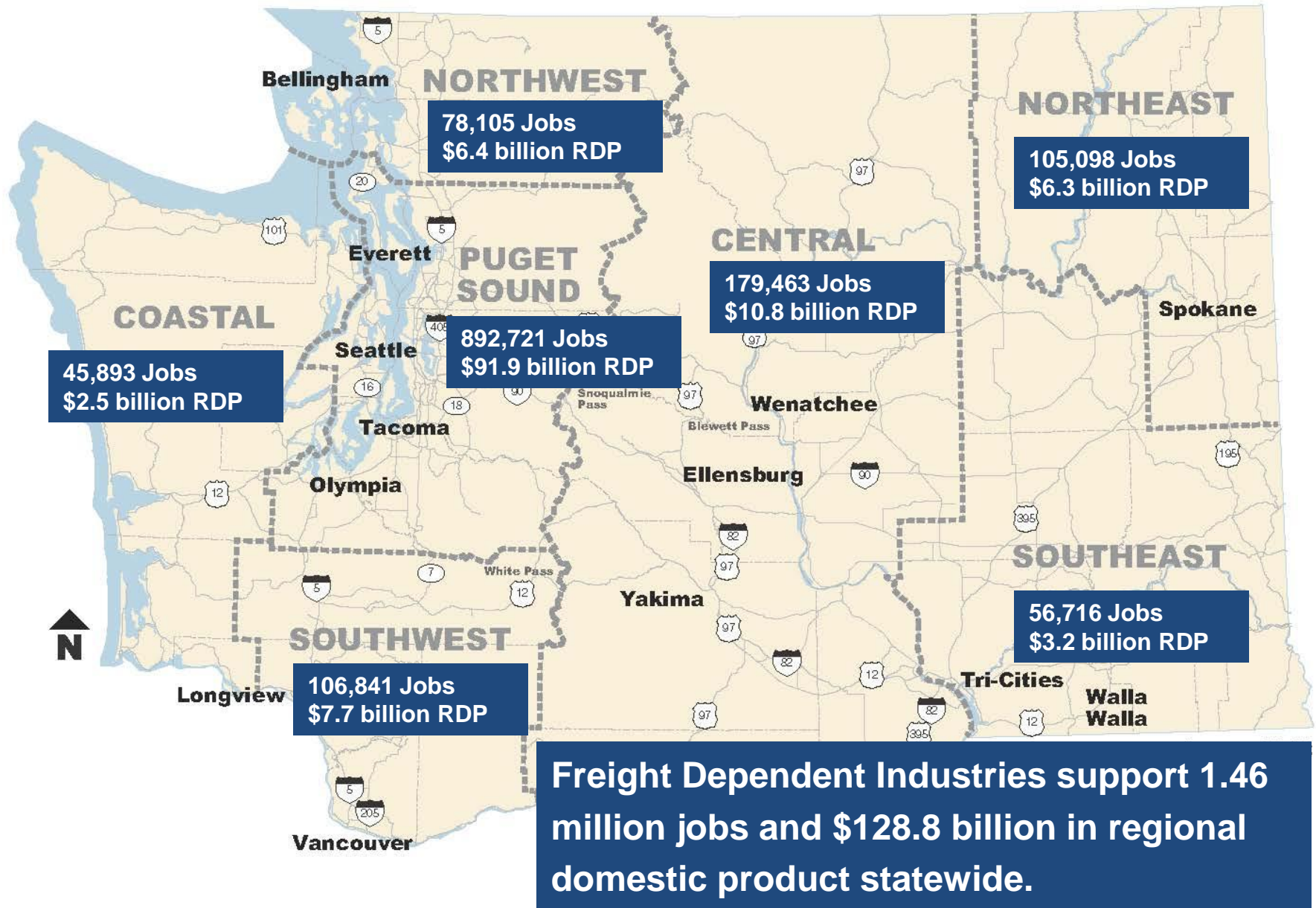
1. Truck travel time
2. Direct truck operating costs
3. Truck engine emissions

Improving:

4. Economic output
5. Network resiliency
6. Reliability



We Have a Strong Freight System in Washington



Washington State Truck Freight Economic Corridors

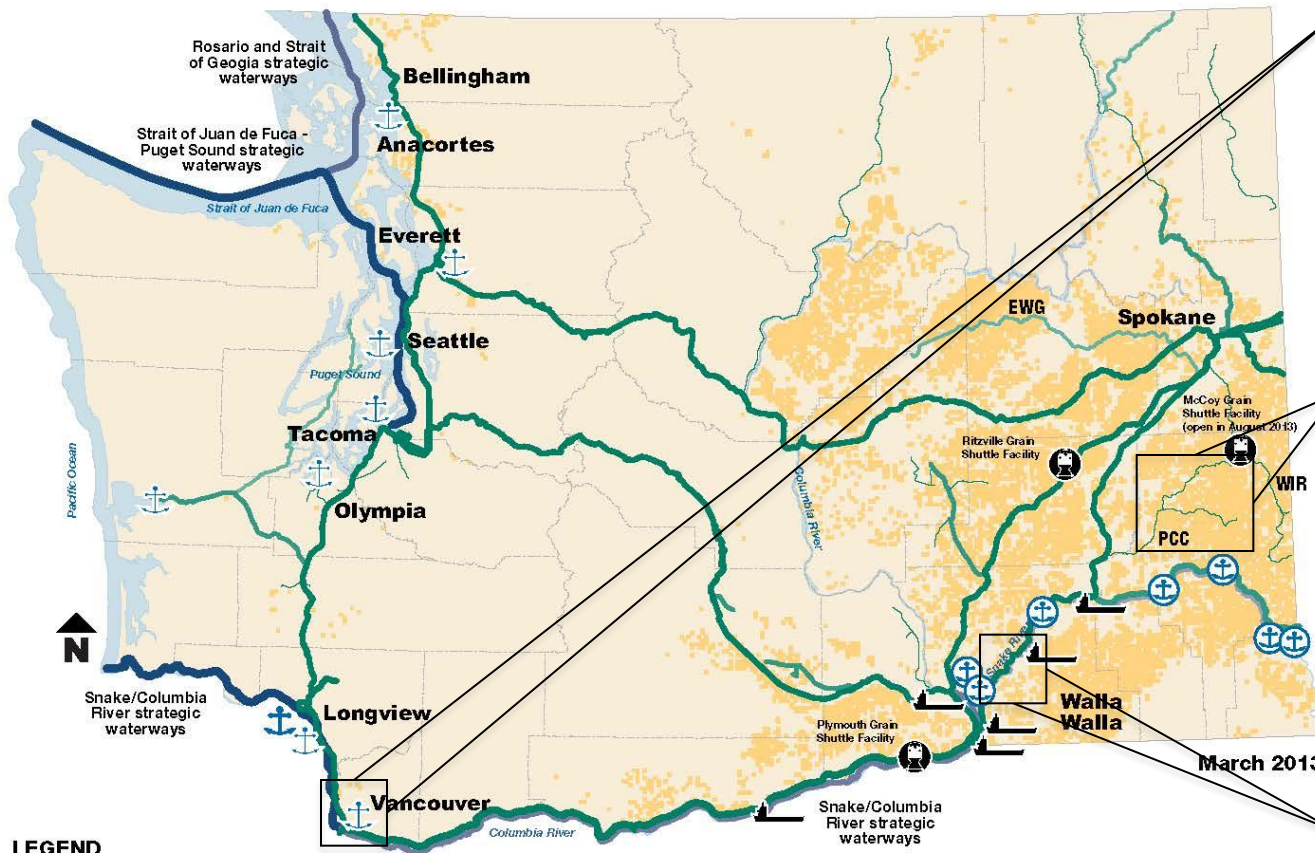


LEGEND

- **T1 Truck Freight Economic Corridors:** Freight corridors carrying more than 10 million tons per year.
- **T2 Truck Freight Economic Corridors:** Freight corridors carrying 4 million to 10 million tons per year. Also includes corridors serving as alternatives to primary freight routes (US 2, US 12, SR 7, SR 14).
- Major marine port** **Major air cargo airport** — **Other state roads** --- **County line**

Source: 2011 Freight and Goods Transportation System.

Wheat Supply Chain: Example Freight Mobility Improvements



LEGEND

Economic rail corridors:

- R1 - Greater than 25 million tons
- R2 - 1 million to 5 million tons
- R3 - 5 hundred thousand to 1 million tons
- R4 - 1 hundred thousand to 5 hundred thousand tons

Economic waterway corridors:

- W1 - Greater than 25 million tons
- W2 - 10 million to 25 million tons
- W3 - 5 million to 10 million tons
- W4 - 2.5 million to 5 million tons

- Major marine port
- Barge ports
- Grain Shuttle facilities
- Barge intermodal facility (non-port)
- Cereal Grain Production Field
- County line

Source: WSDOT Freight System Division – 2012 Freight Rail Data.

West Vancouver Freight Access

New freight rail entrance to the Port of Vancouver from the mainline and internal rail track storage to accommodate unit trains.

PCC Freight Rail Preservation

Multiple preservation and rehabilitation projects.

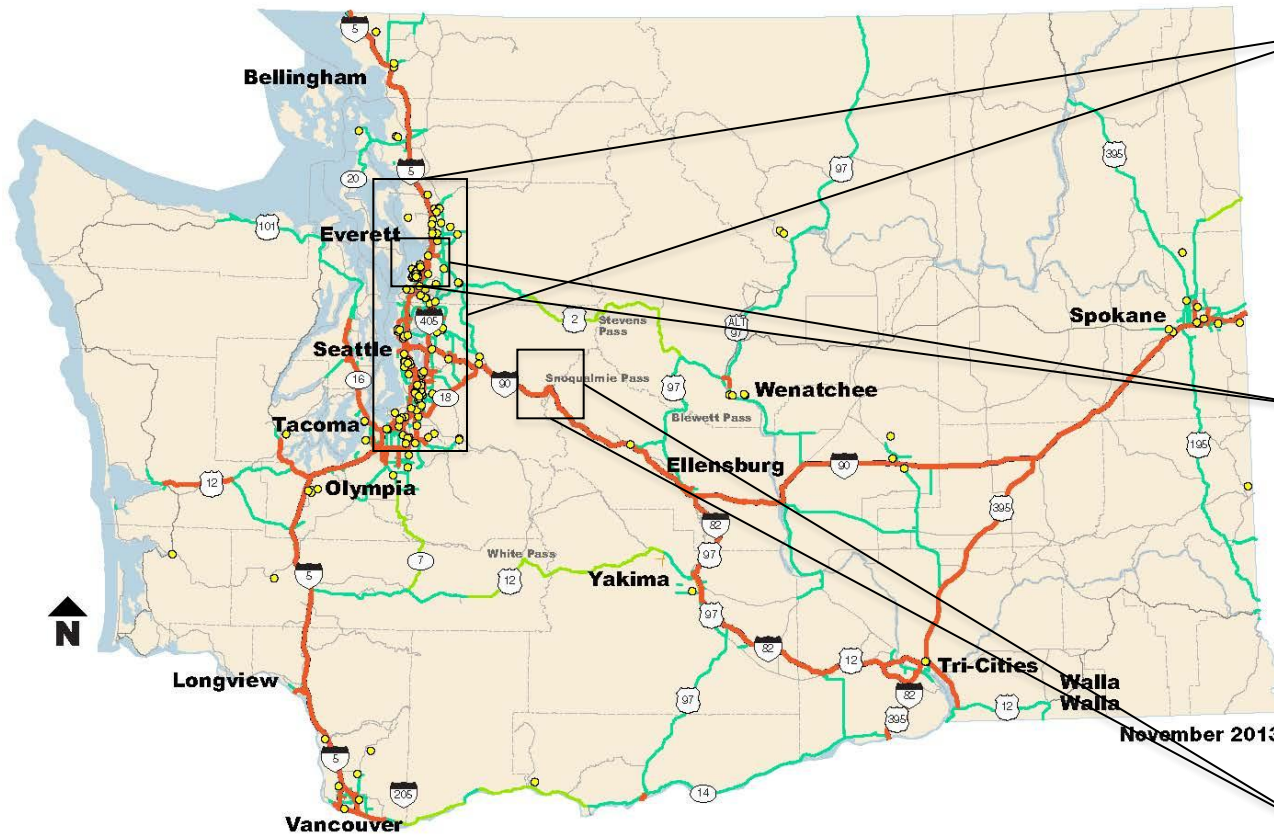
Ice Harbor Lock & Dam

Lock and dam maintenance project.

Wheat is a \$1.14 billion industry in Washington State

LOCATE STATE SUPPLY CHAINS

Aerospace Supply Chain: Example Freight Mobility Improvements



LEGEND

● Aerospace Product and Parts Manufacturing Business Locations

Freight Economic Corridors

- **T1 Truck Freight Economic Corridors:** Freight corridors carrying more than 10 million tons per year
- **T2 Truck Freight Economic Corridors:** Freight corridors carrying 4 million to 10 million tons per year.
- **Alternative Freight Economic Corridors:** Corridors carrying 600,000 to 4 million tons per year and serve as alternatives to T1 freight routes

I-5 Tacoma to Everett mobility improvements
Multiple improvements to I-5.

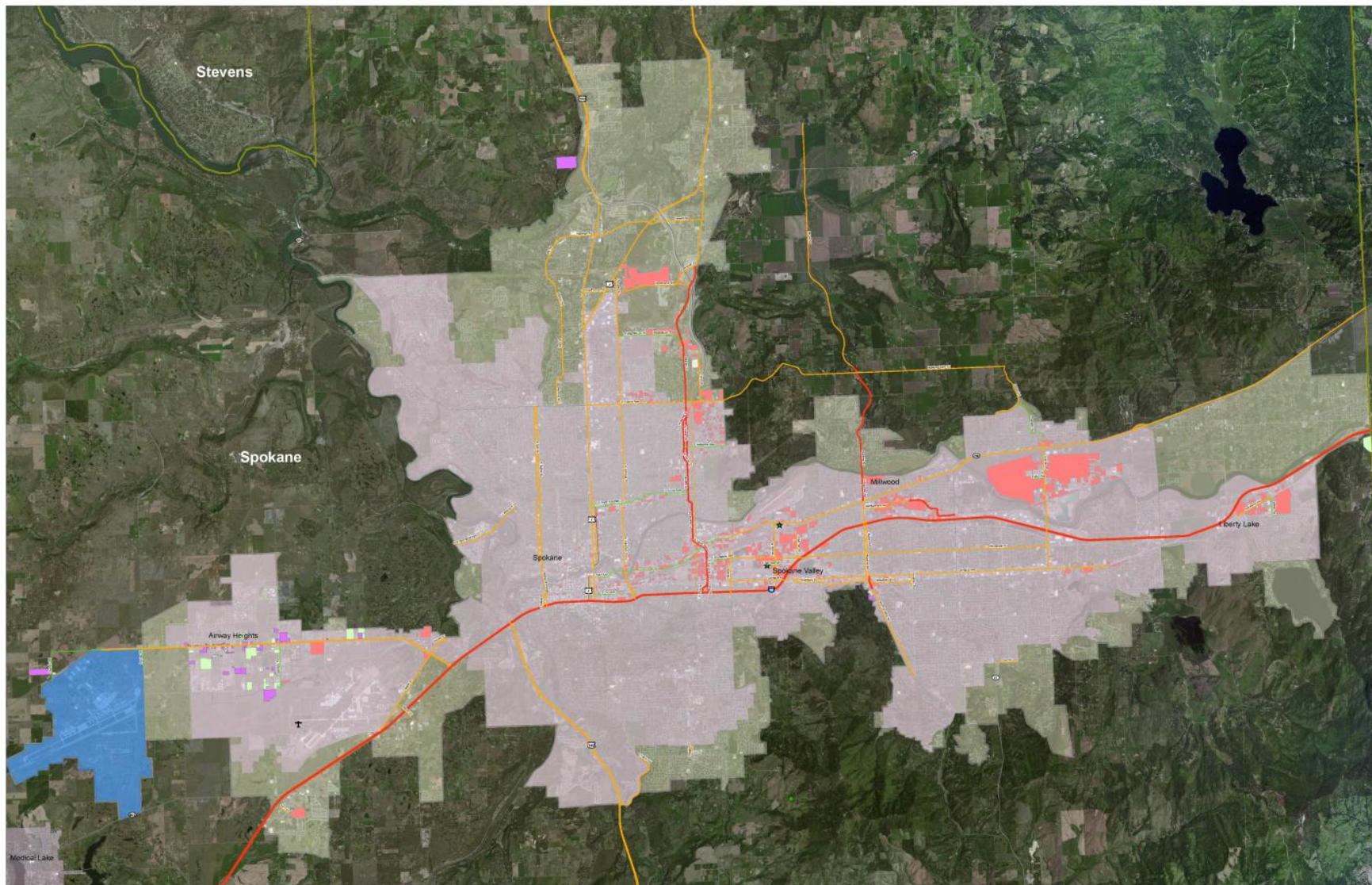
Phase I -Re-designation of SR 529 & Improvements
Access improvements from Port of Everett to I-5 and intersection improvements to better accommodate over-dimensional freight traffic.

I-90 Snoqualmie Pass--widen to Easton
Widening and interchange improvements.

Source: Washington State Department of Revenue; Washington State Freight and Goods Transportation System

Aerospace products and part are a \$52.2 billion industry in Washington State

LOCATE STATE SUPPLY CHAINS



- Legend**
- Intermodal Facilities**
- ✈ Major Air Cargo Airports
 - ★ Rail Intermodal Terminals
 - 🚢 Barge Loading Facilities
 - ⚓ Marine Port Terminals
- Freight Economic Corridors**
- T1 Corridors
 - T2 Corridors
 - Missing Links in T-1/T-2 network
 - Alternative Freight Routes
 - First/Last Mile Connector Routes to T1/T2 Corridors

- Agricultural Processing Facilities of WA's top 4 agricultural products by value**
- 🍏 Apple Packing Plant
 - 🥩 Beef Plant
 - 🥛 Dairy Plant
 - 🥔 Potato Processing Facility
- Industrial/Commercial Zoned Land**
- 🏭 Industrial Zoned Land in Urban Area
 - 🏭 Commercial Zoned Land within 5 miles of T1 and T2 highways in Rural Area
 - 🏭 Industrial Zoned Land within 5 miles of T1 and T2 highways in Urban Area
 - 🏭 PSRC Manufacturing and Industrial Center

- Agricultural Processing Facility Clusters**
- 0-1
 - 1-2
 - 2-3
 - 3-4
 - 4-5
 - 5-6
 - 6-7
 - 7-8
- Military Installations**
- 🏰 Military Installations
 - 🏰 City Limits
 - 🏰 County Boundary
 - 🏰 MPO/RTPO Boundary
 - 🏰 Indian Reservations

Note: Agricultural processing facility cluster shown facility density and value indicates number of facilities within 2-mile radius.

0 0.75 1.5 3 Miles

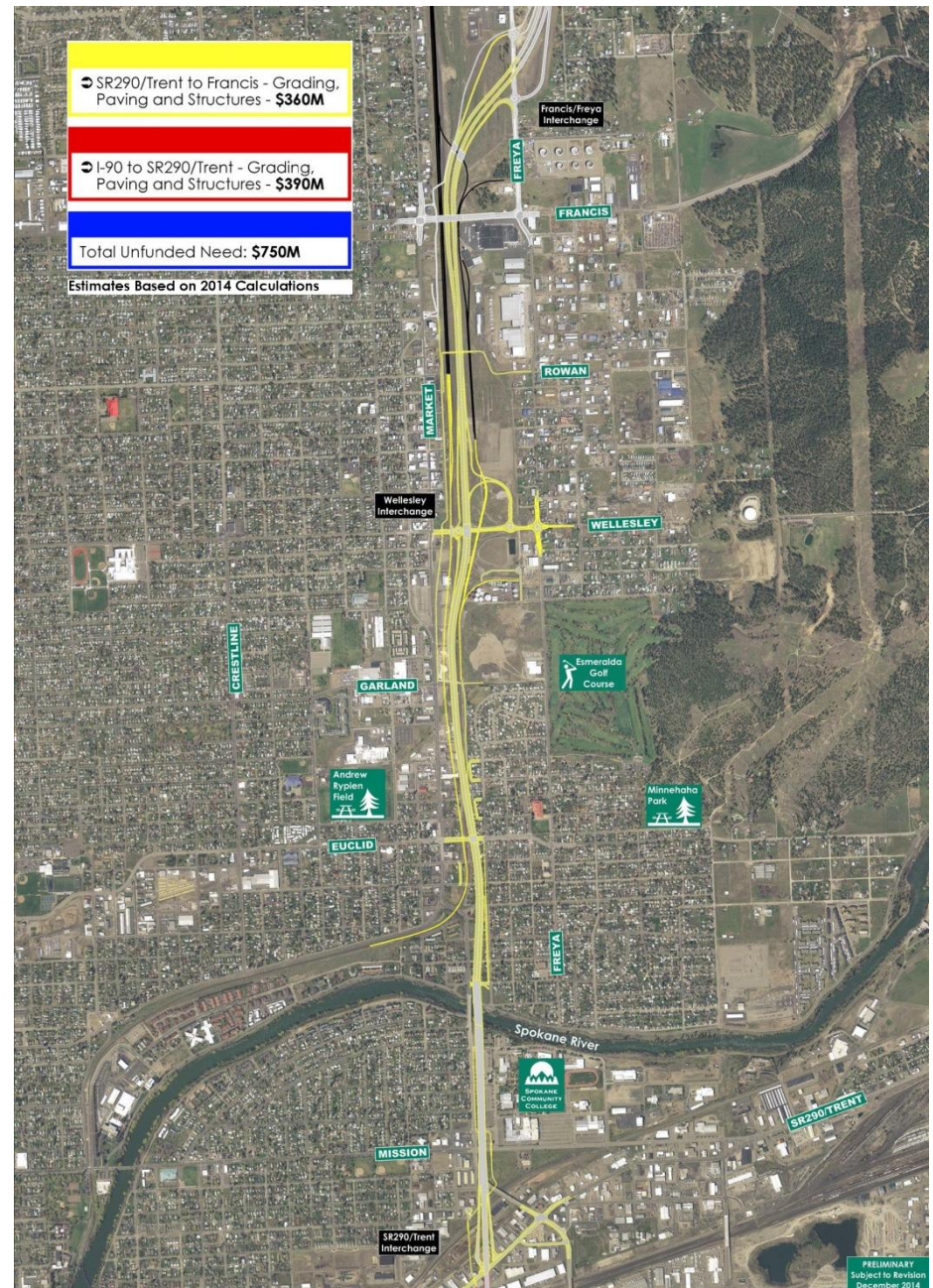
Truck Freight Economic Corridors in Spokane Regional Transportation Council (MPO)

US 395 NORTH SPOKANE CORRIDOR

The EIS states that the purpose for this project is: “to improve the efficiency of the people- and freight-carrying capacity on and between city streets, county roads, and major north side transportation routes, particularly US 2 and US 395.”

The following were documented as the needs for the project:

- Rapid growth in the northern suburban and eastern valley suburban areas
- Economic development dependent upon transportation facilities
- Anticipated degradation of existing arterials
- Lacking connections to public transportation, and between rail and truck
- Need to reduce the number of vehicles using the existing arterial system east of Division Street and north of I-90



US 395 NORTH SPOKANE CORRIDOR

I-90 to Trent/SR290 Interchange

➡ SR290/Trent to Francis - Grading,
Paving and Structures - **\$360M**

➡ I-90 to SR290/Trent - Grading,
Paving and Structures - **\$390M**

Total Unfunded Need: \$750M

Estimates Based on 2014 Calculations

MISSION

SR290/Trent
Interchange

SR290/TRENT



SPRAGUE

US 395/I-90
Interchange

PRELIMINARY
Subject to Revision
December 2014

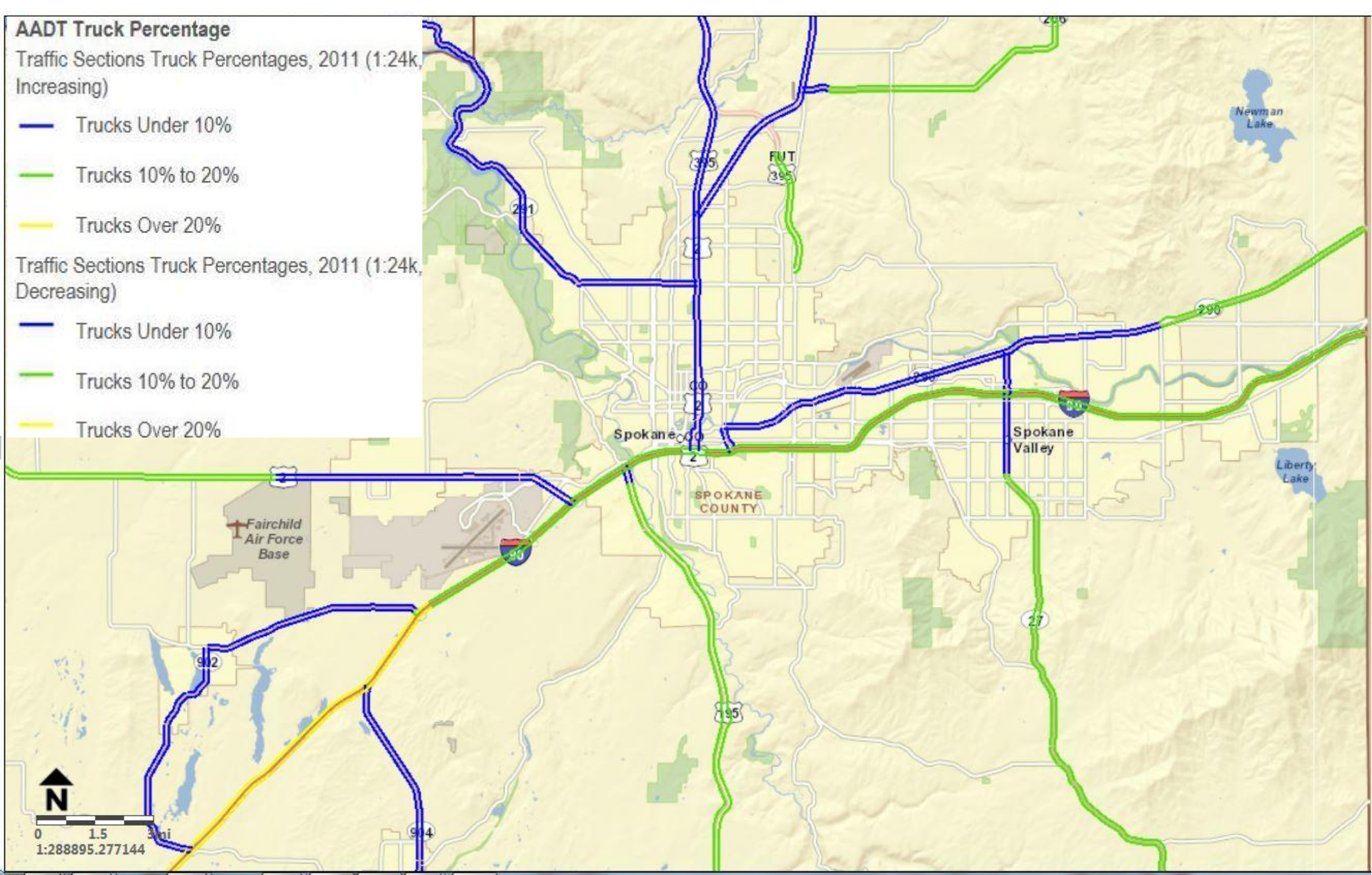
AADT Truck Percentage

Traffic Sections Truck Percentages, 2011 (1:24k, Increasing)

- Trucks Under 10%
- Trucks 10% to 20%
- Trucks Over 20%

Traffic Sections Truck Percentages, 2011 (1:24k, Decreasing)

- Trucks Under 10%
- Trucks 10% to 20%
- Trucks Over 20%



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WSDOT Freight and Goods

WSDOT Freight and Goods Transportation System (FGTS)

T-1 Freight Corridors



T-2 Freight Corridors



T-3 Freight Corridors



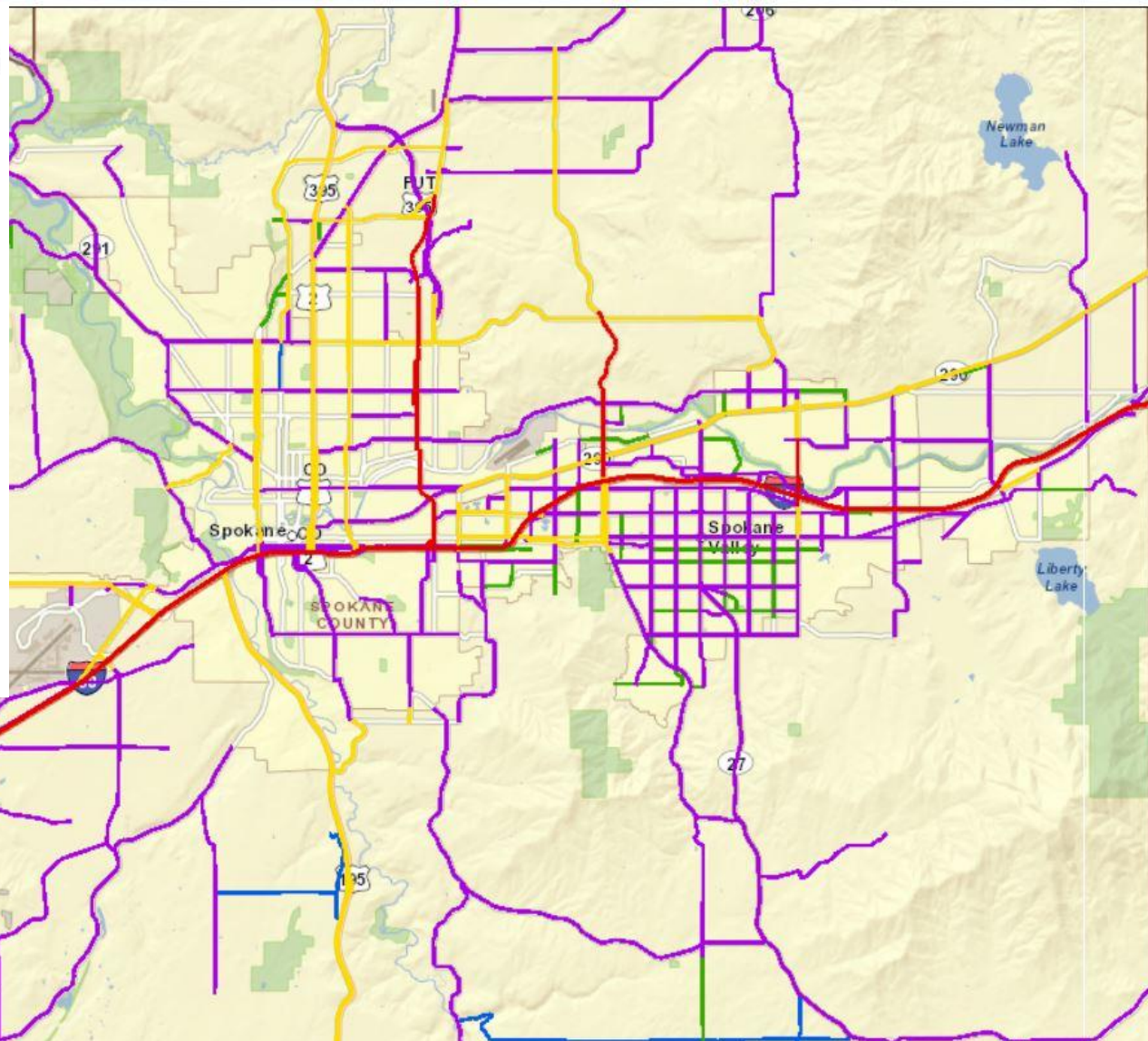
T-3 Freight Corridors (Private)



T-4 Freight Corridors



T-5 Freight Corridors



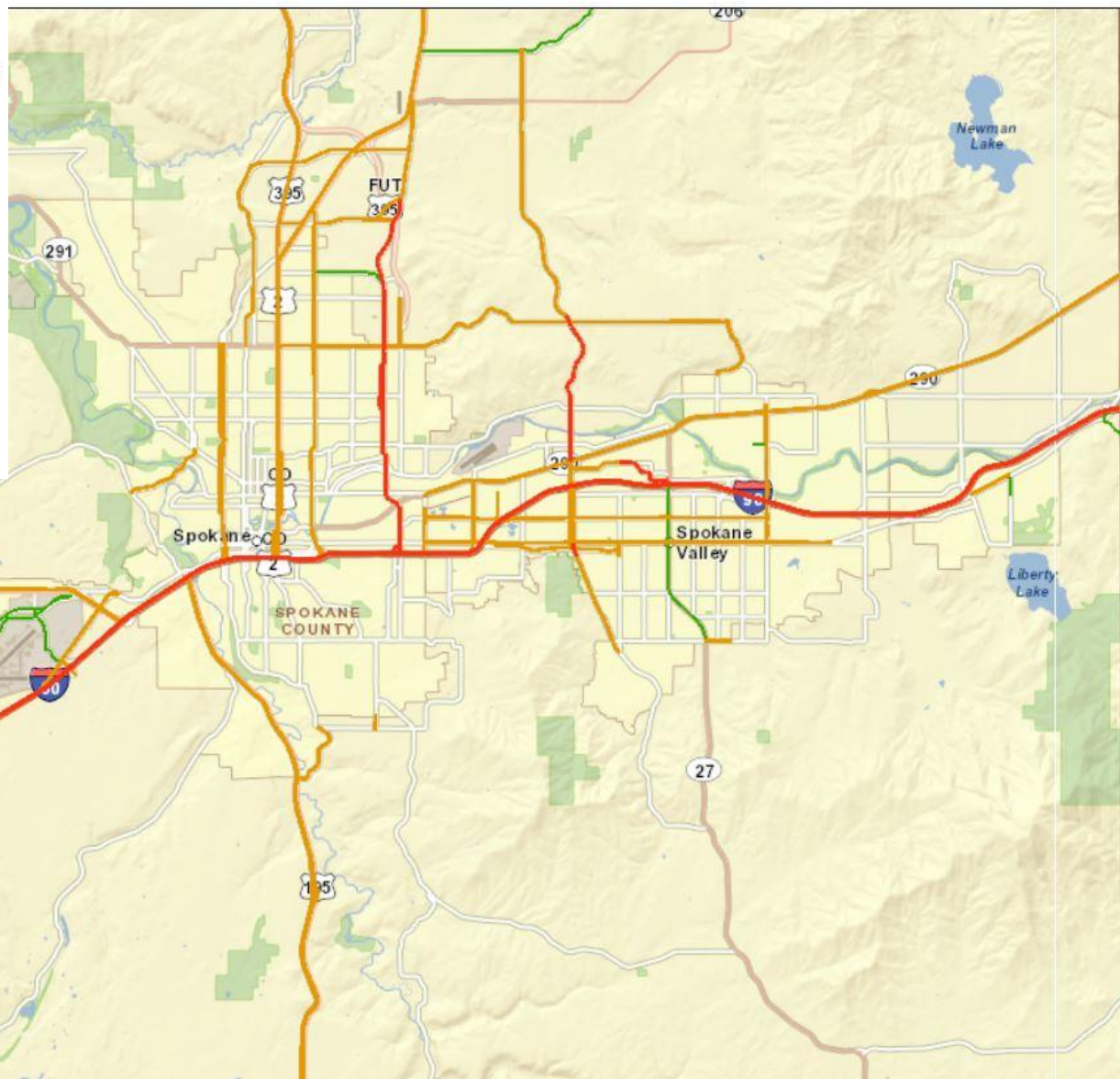
- T-1 more than 10 million tons per year
- T-2 4 million to 10 million tons per year
- T-3 300,000 to 4 million tons per year
- T-4 100,000 to 300,000 tons per year
- T-5 at least 20,000 tons in 60 days and less than 100,000 tons per year



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Primary Freight Corridors: T-1 corridors carrying more than 10 million tons per year

Connector Freight Corridors



Intermodal Facilities

Major Air Cargo Airports



Rail Intermodal Terminals



Major Marine Ports



Barge Loading Facilities



State Truck Freight Economic Corridors

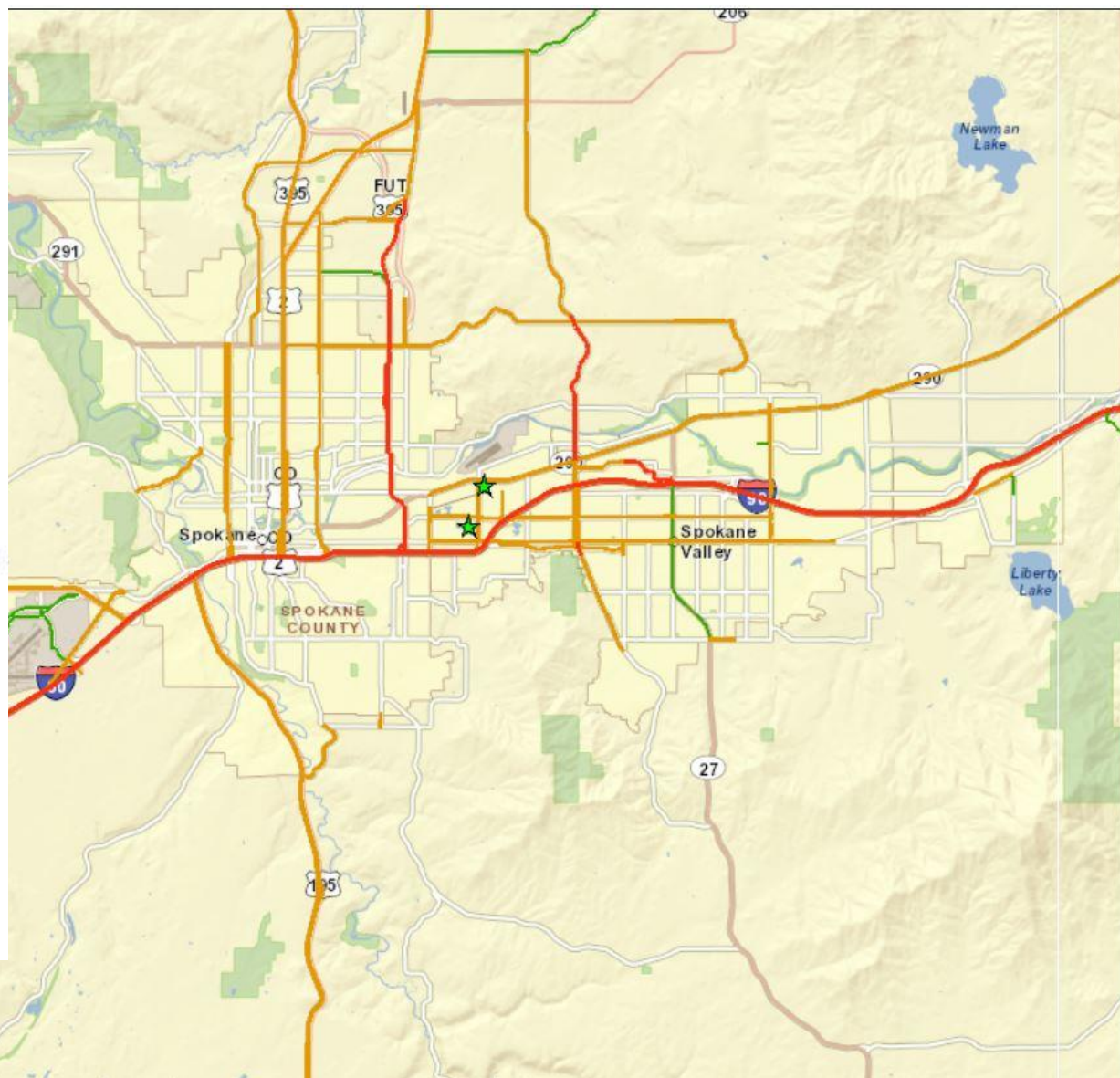
Primary Freight Corridors: T-1 corridors carrying more than 10 million tons per year



Secondary Freight Corridors: T-2 corridors carrying 4 million to 10 million tons per year. Also includes alternatives to primary freight routes (US 2, SR 7, SR 12 and SR 14)



Connector Freight Corridors



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% of Trucks Traveling below 60% of Posted Speed

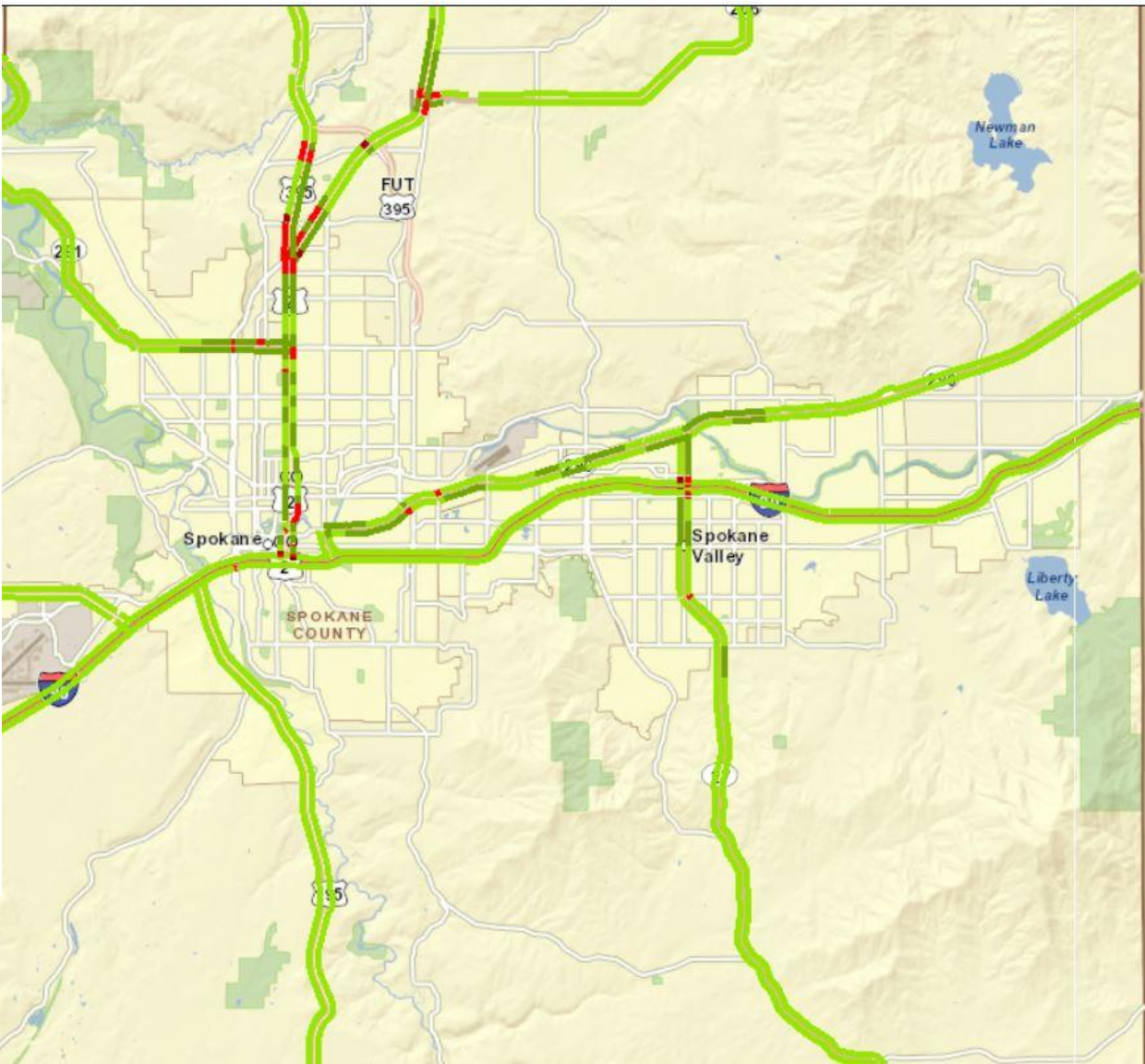
Performance During 2011-2012

% of Trucks Traveling below 60% of Posted Speed
(Increasing Milepost Direction)

- 81% - 100%
- 61% - 80%
- 41% - 60%
- 21% - 40%
- 0% - 20%

% of Trucks Traveling below 60% of Posted Speed
(Decreasing Milepost Direction)

- 81% - 100%
- 61% - 80%
- 41% - 60%
- 21% - 40%
- 0% - 20%



2011- 2012

Average Speed

Average Speed During 2011 - 2012

Average Speed (Increasing Milepost)

- 8 - 10 mph
- 11 - 20 mph
- 21 - 30 mph
- 31 - 40 mph
- 41 - 50 mph
- 51 - 60 mph
- 61 - 70 mph

Average Speed (Decreasing Milepost)

- 8 - 10 mph
- 11 - 20 mph
- 21 - 30 mph
- 31 - 40 mph
- 41 - 50 mph
- 51 - 60 mph
- 61 - 70 mph

The map shows Spokane, Washington, with major roads like I-90, I-5, and US-2. Speed ranges are indicated by colors: red (8-10 mph), pink (11-20 mph), purple (21-30 mph), yellow (31-40 mph), light green (41-50 mph), green (51-60 mph), and dark green (61-70 mph). The map also shows Newman Lake and Liberty Lake.

Average Speed

Average Speed During 2011 - 2012

Average Speed (Increasing Milepost)

- 8 - 10 mph
- 11 - 20 mph
- 21 - 30 mph
- 31 - 40 mph
- 41 - 50 mph
- 51 - 60 mph
- 61 - 70 mph

Average Speed (Decreasing Milepost)

- 8 - 10 mph
- 11 - 20 mph
- 21 - 30 mph
- 31 - 40 mph
- 41 - 50 mph
- 51 - 60 mph
- 61 - 70 mph

The map shows Spokane, Washington, with major roads like I-90, I-5, and I-2. The legend indicates that speeds are generally higher on I-90 (green/yellow) and lower on local roads (purple/pink). The map also shows Newman Lake and Liberty Lake.

Average Speed

Average Speed During 2011 - 2012

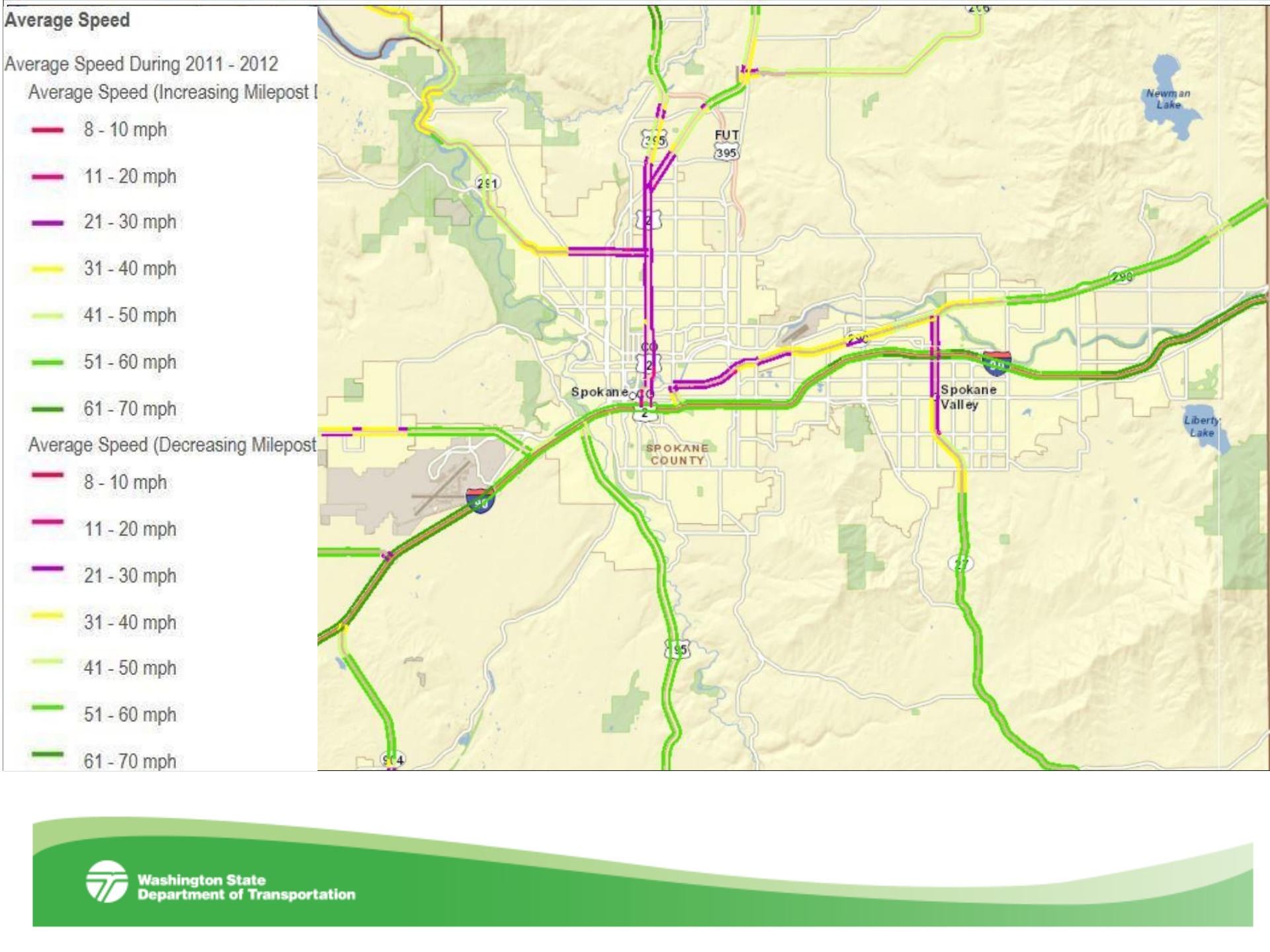
Average Speed (Increasing Milepost)

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- 31 - 40 mph
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- 51 - 60 mph
- 61 - 70 mph

Average Speed (Decreasing Milepost)

- 8 - 10 mph
- 11 - 20 mph
- 21 - 30 mph
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- 41 - 50 mph
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- 61 - 70 mph

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Average Speed

Average Speed During 2011 - 2012

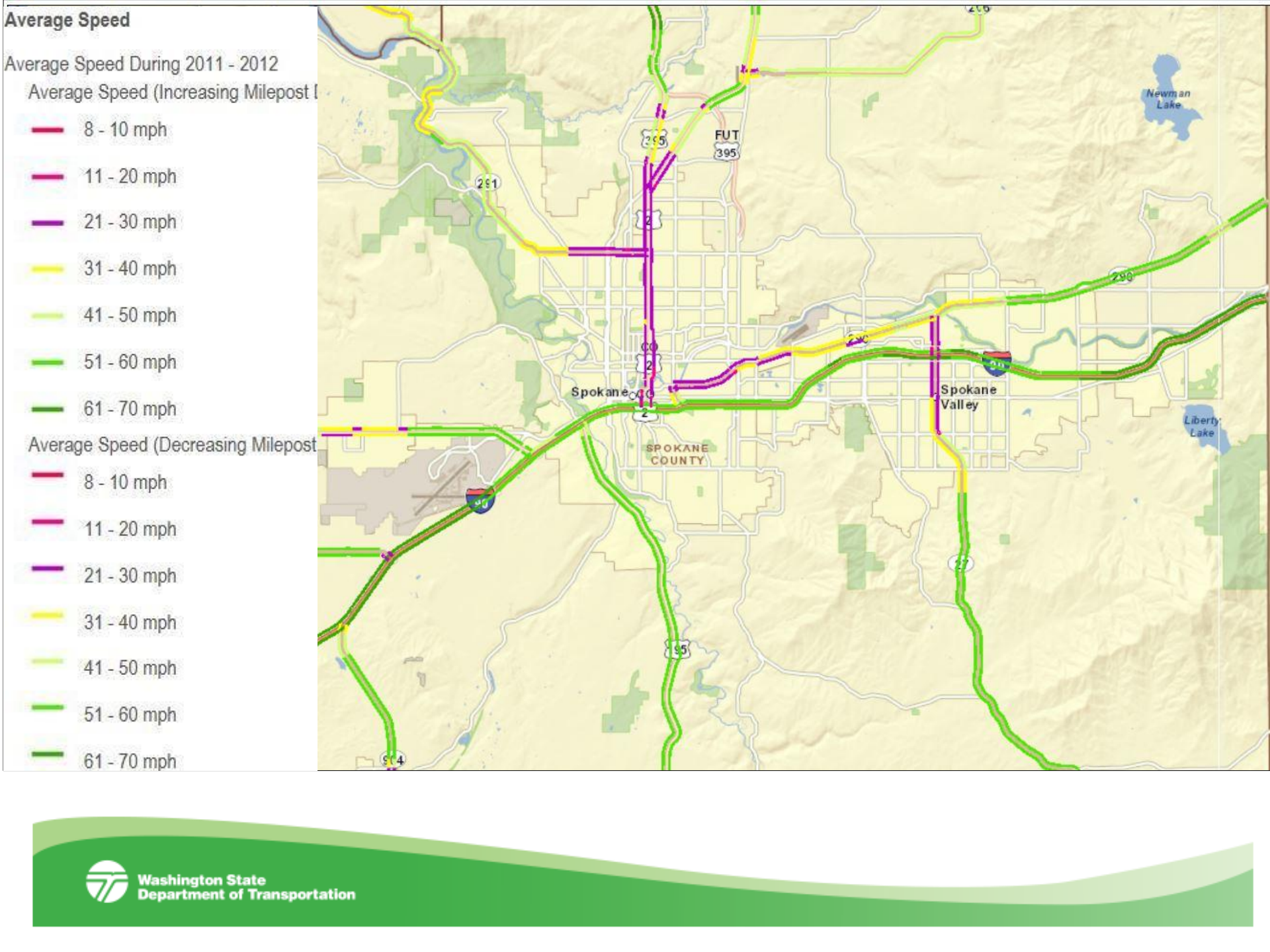
Average Speed (Increasing Milepost)

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- 21 - 30 mph
- 31 - 40 mph
- 41 - 50 mph
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- 61 - 70 mph

Average Speed (Decreasing Milepost)

- 8 - 10 mph
- 11 - 20 mph
- 21 - 30 mph
- 31 - 40 mph
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The map shows Spokane, Washington, with major roads like I-90, I-2, and I-5. The legend indicates that speeds are generally higher on I-90 (green/yellow) and lower on local roads (purple/pink). The map also shows Newman Lake and Liberty Lake.



Locations with very slow Truck Speed Performance

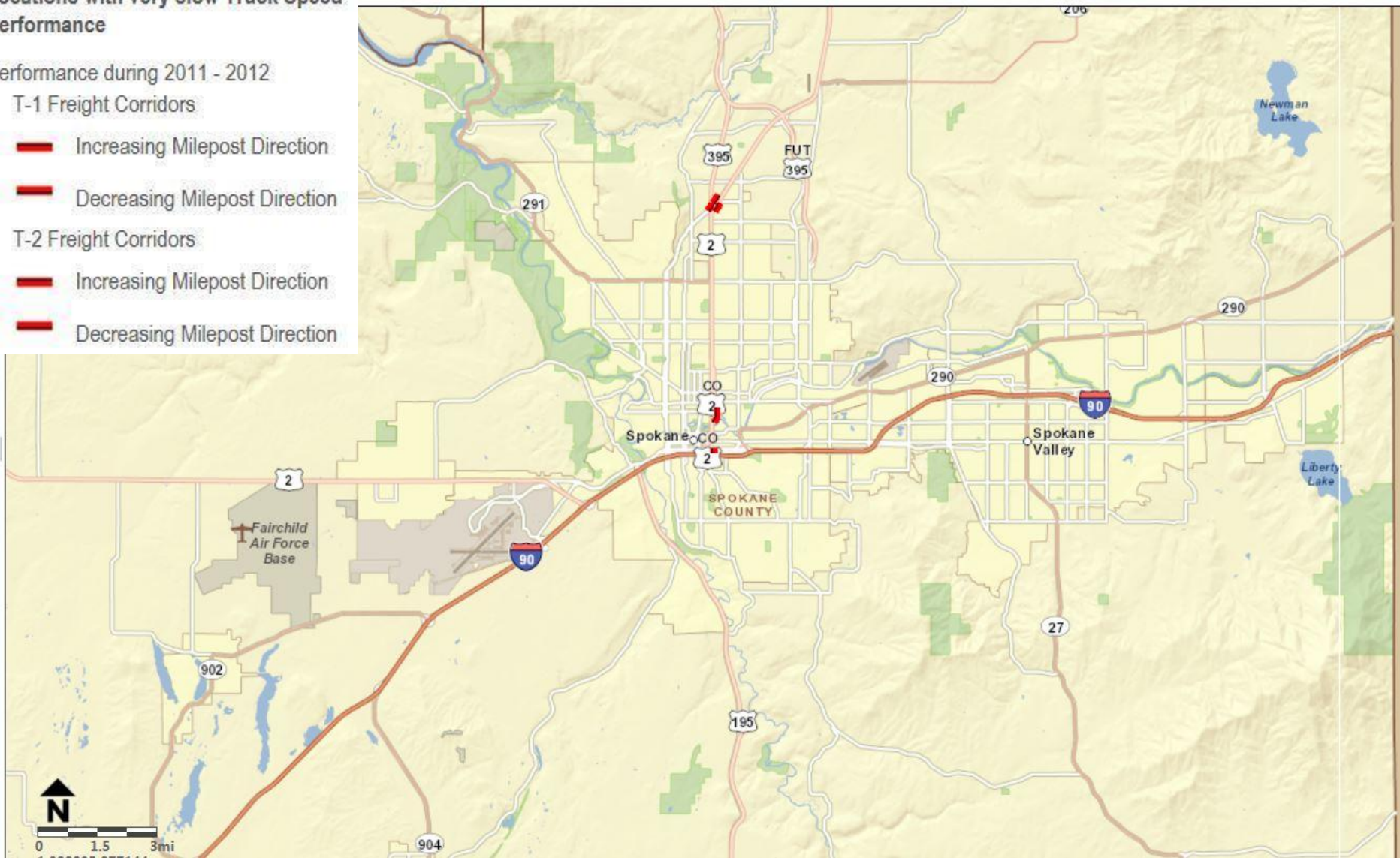
Performance during 2011 - 2012

T-1 Freight Corridors

- Increasing Milepost Direction
- Decreasing Milepost Direction

T-2 Freight Corridors

- Increasing Milepost Direction
- Decreasing Milepost Direction



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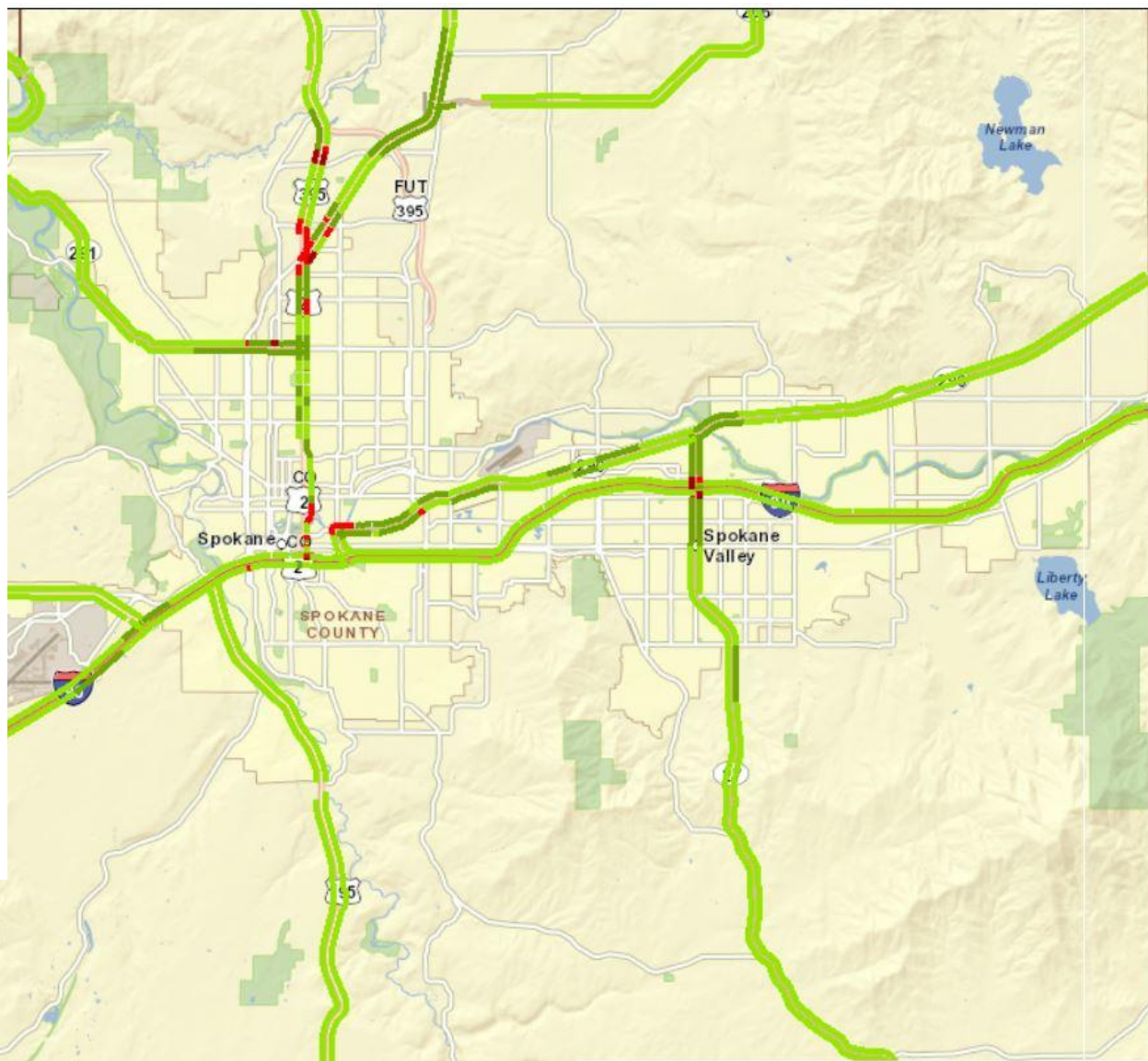
% of Trucks Traveling below 60% of Posted Speed

Performance During 2011-2012

% of Trucks Traveling below 60% of Posted Speed
(Increasing Milepost Direction)



% of Trucks Traveling below 60% of Posted Speed
(Decreasing Milepost Direction)



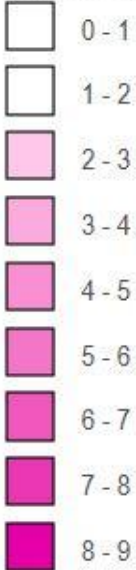
2010- 2011



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Rural Agricultural Processing Centers
Rural Food Processors

Rural Agricultural Processor Clusters



Intermodal Facilities

Major Air Cargo Airports



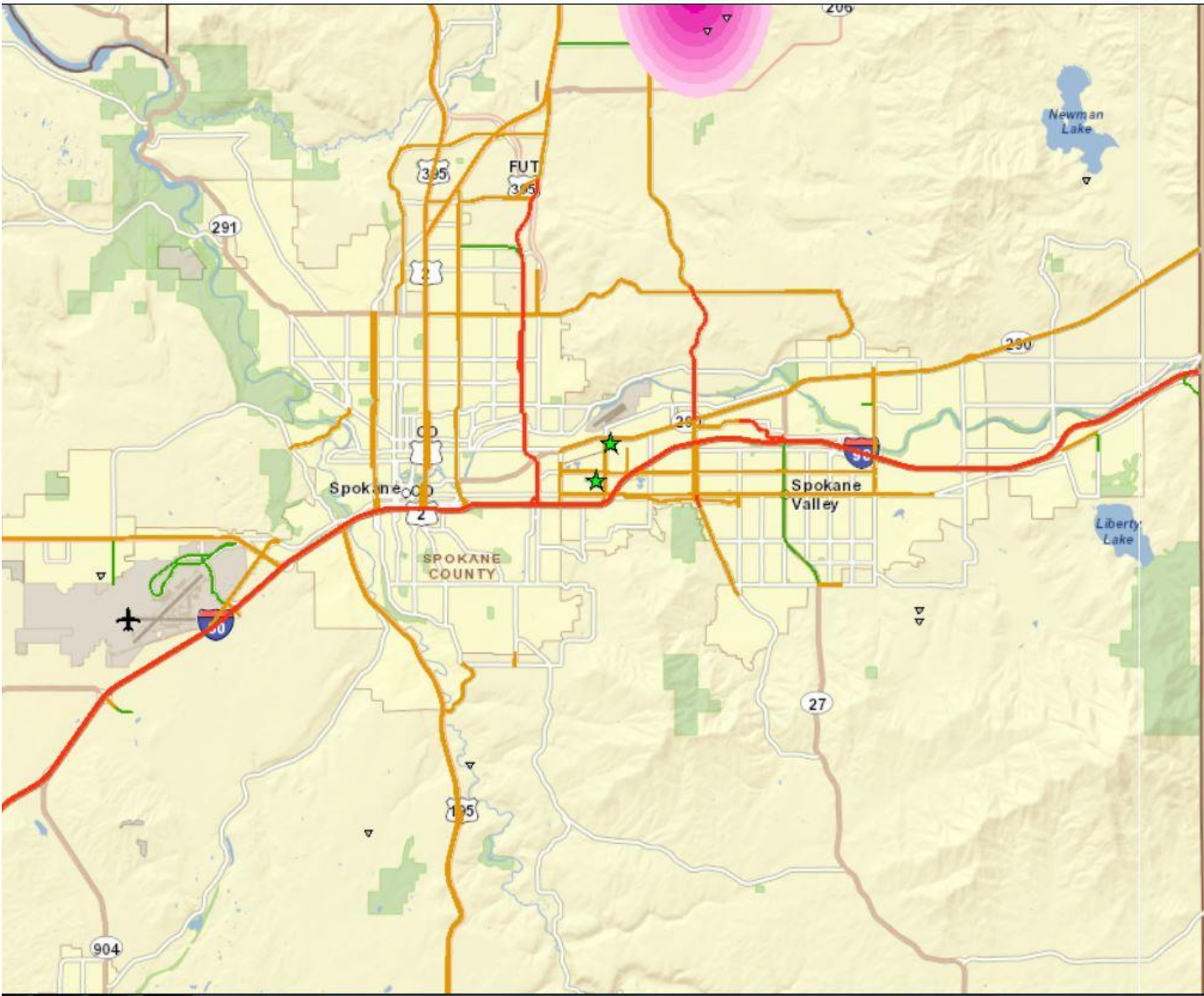
Rail Intermodal Terminals



Major Marine Ports



Barge Loading Facilities



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Industrial and Commercial Lands

- Industrial / Commerical Lands in Rural Areas within 5 Miles of Interstate and Ports
- Industrial Lands in Urban Areas

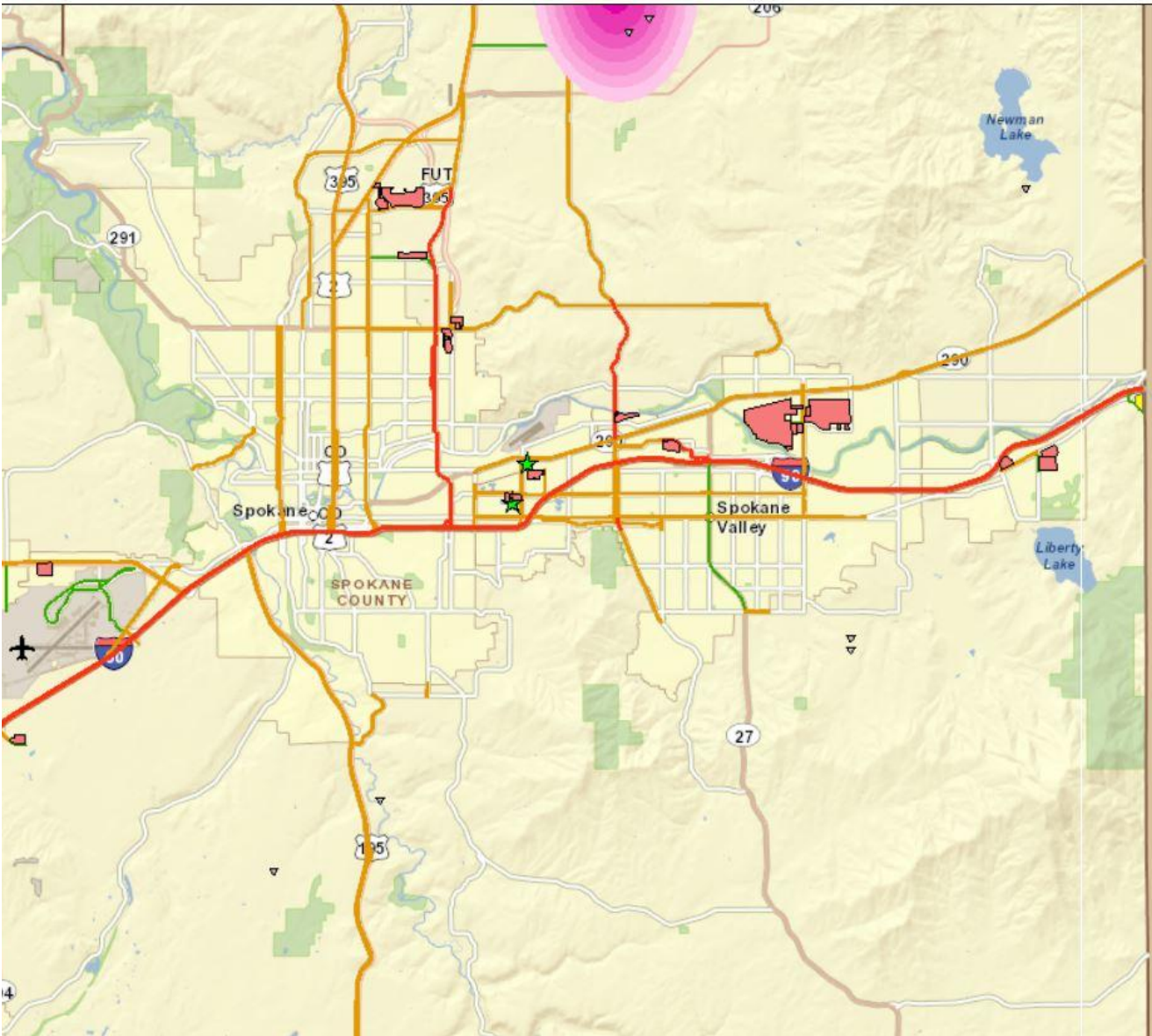
PSRC Manufacturing and Industrial Centers

Rural Agricultural Processing Centers

Rural Food Processors

Rural Agricultural Processor Clusters

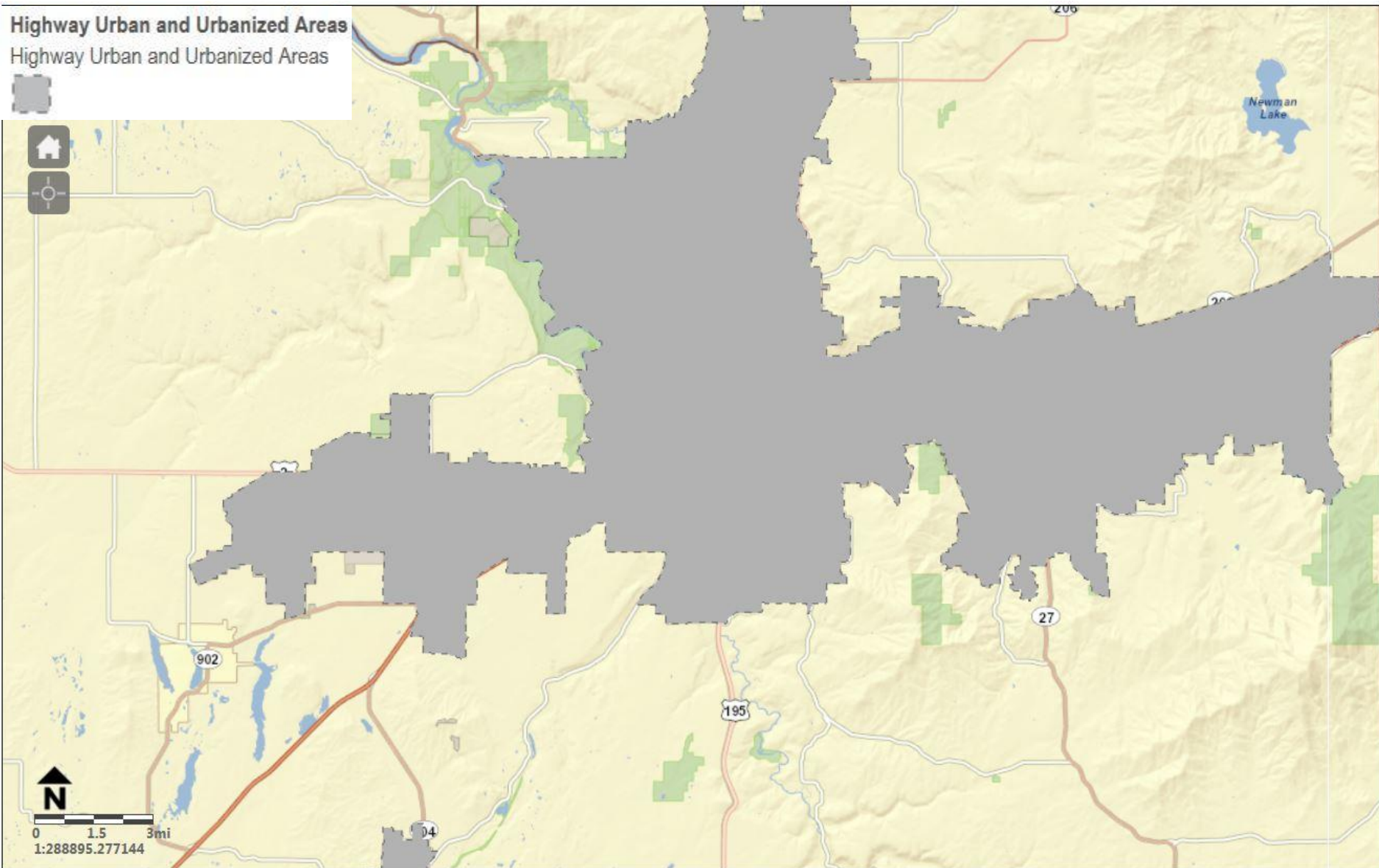
- 0 - 1
- 1 - 2
- 2 - 3
- 3 - 4
- 4 - 5
- 5 - 6
- 6 - 7
- 7 - 8
- 8 - 9



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Highway Urban and Urbanized Areas

Highway Urban and Urbanized Areas

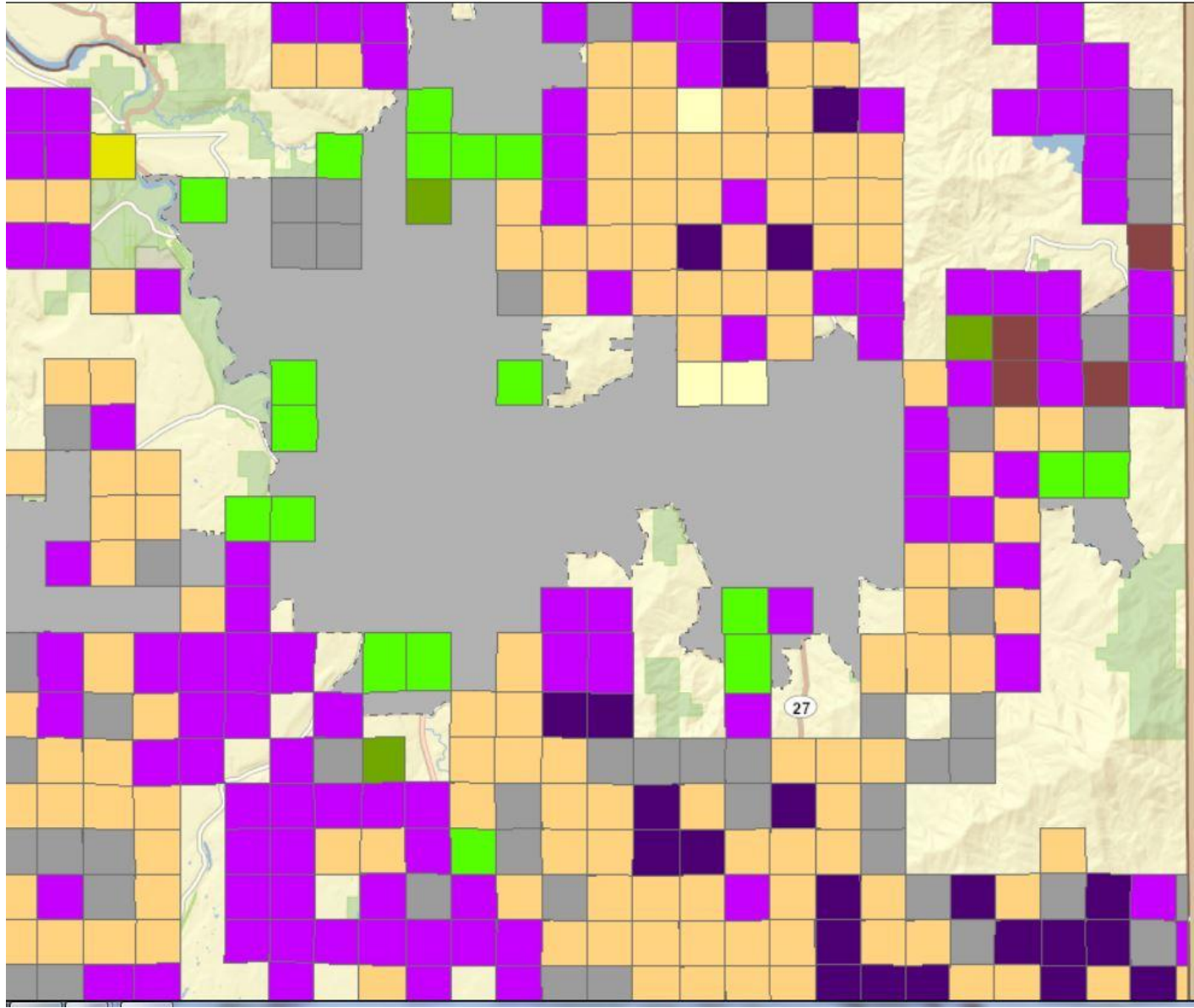


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Agricultural Land Use

Agricultural Land Use

- Cereal Grain
- Flower Bulb
- Hay/Silage
- Melon
- Oilseed
- Other
- Shellfish
- Vegetable
- Berry
- Commercial Tree
- Green Manure
- Herb
- Nursery
- Orchard
- Seed
- Turfgrass
- Vineyard



Highway Urban and Urbanized Areas

Highway Urban and Urbanized Areas

