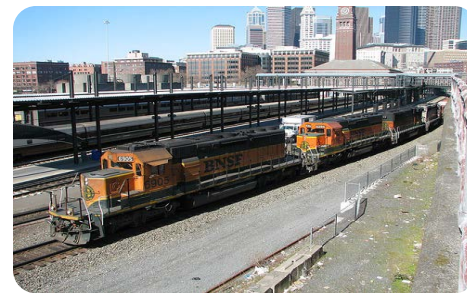


Mapping State Freight Corridors Based on Freight-Intensive Land Use

Washington State Freight Plan



Barbara Ivanov

Director, Freight Systems Division
Washington State Department of Transportation (WSDOT)

**National Academy of Sciences
Transportation Research Board
Webinar**

September 2, 2015

Washington State Freight Mobility Plan

The State Freight Plan is compliant with:

- The Moving Ahead for Progress in the 21st Century Act (MAP-21),
- State law (RCW 47.06.045), and
- Addresses state transportation goals (RCW 47.04.280), including economic vitality and mobility.

The Plan is guided by three objectives:



Urban goods movement systems that support jobs, the economy, and clean air for all, and provide goods delivery to residents and businesses.



Washington's competitive position as a Global Gateway to the nation with intermodal freight corridors serving trade and international and interstate commerce, and the state and national Export Initiatives.



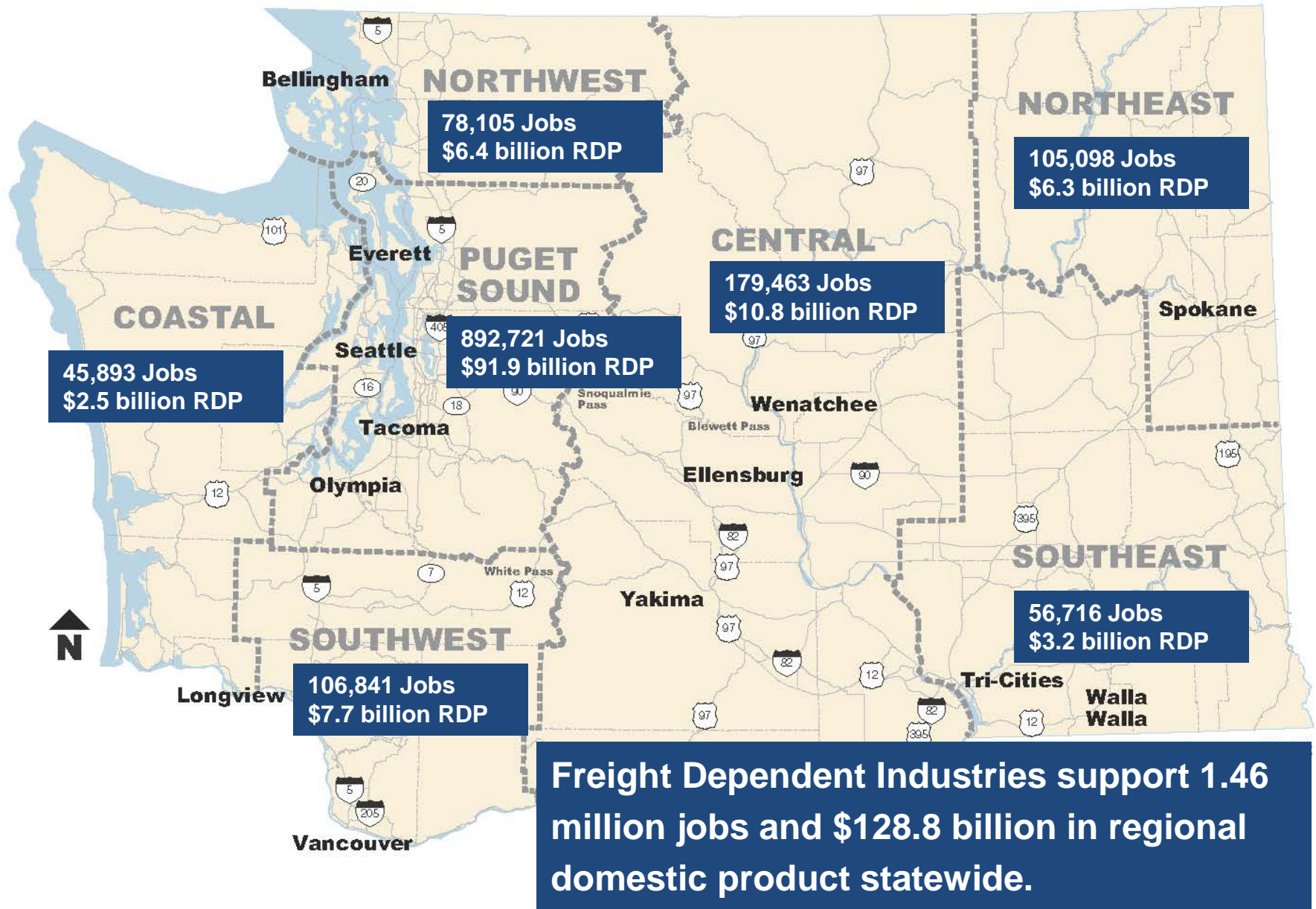
Rural economies' farm-to-market, manufacturing and resource industry sectors.

What are the Key New 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.

We Have a Strong Freight System in Washington



Past Freight Plans only included high-volume multimodal freight routes



March 2013

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



Why did WSDOT identify Freight Economic Corridors in the State Freight Plan?

The freight system exists to support freight-intensive land uses.

WSDOT and its partnering state agencies and regional governments needed to develop, test and gain public acceptance of a new methodology, criteria and rules to objectively define the State's Multimodal Freight Corridors to:

- Map and show exactly which first-and-last mile routes connect to high-volume freight routes to link the state's freight-intensive land uses to U.S. and global commerce.
- Determine which freight corridors WSDOT will track and measure to improve performance of the state's high-value supply chains.
- Determine where to focus needs analysis and solution development.

How does WSDOT use the State Freight Corridor designation?

- WSDOT prioritizes state and federal freight investments and implementation of other improvement strategies on the Washington State Freight Economic Corridors.
- Although federal benefits for projects listed in State Freight Plans are not substantial now, new bills aimed at Reauthorization of the Surface Transportation Act indicate that there may be a funded freight program in the future.
- Tribal, port, local and regional agencies' freight projects are included in the State Freight Plan if they:
 - Are located on a State Freight Economic Corridor; and
 - Are listed in a Tribal, Port, Metropolitan Planning Organization (MPO) or Regional Transportation Planning Organization (RTPO) Long-range Plan.

How did WSDOT develop criteria to identify first-last mile routes in the State Freight Plan?

WSDOT organized three technical teams across the state, each focused on a Freight Plan goal, to develop the high-level criteria to identify first and last mile connector routes.

- Urban Delivery
- Global Gateway
- Rural Economies

After considering state and federal policies, industry and public benefits, they recommended these criteria.

Statewide:

- To-and-from high-volume truck routes and strategic U.S. defense facilities;
- Over-dimensional truck freight routes that connect the state's significant intermodal facilities to the high-volume highway system.

What criteria is used to identify first-last mile routes in urban and rural areas?

In urban areas:

- To-and-from the Interstate system and the (1) closest major airport with air freight service, (2) marine terminals, ports, barge loaders and other intermodal facilities, and (3) warehouse/industrial lands
- From high-volume urban freight intermodal facilities to other urban intermodal facilities, e.g. from the Port of Seattle to the BNSF rail yard in Seattle

In rural areas:

- To-and-from state freight hubs located within five miles of highways with high truck volume. Freight hubs are defined as: (1) agricultural processing centers, (2) distribution centers, (3) intermodal facilities, and (4) industrial/commercial zoned land
- Routes that carry one million tons during three months of the year (reflecting seasonality) of agricultural, timber or other resource industry sector goods

What lessons did WSDOT learn while working with its partners?

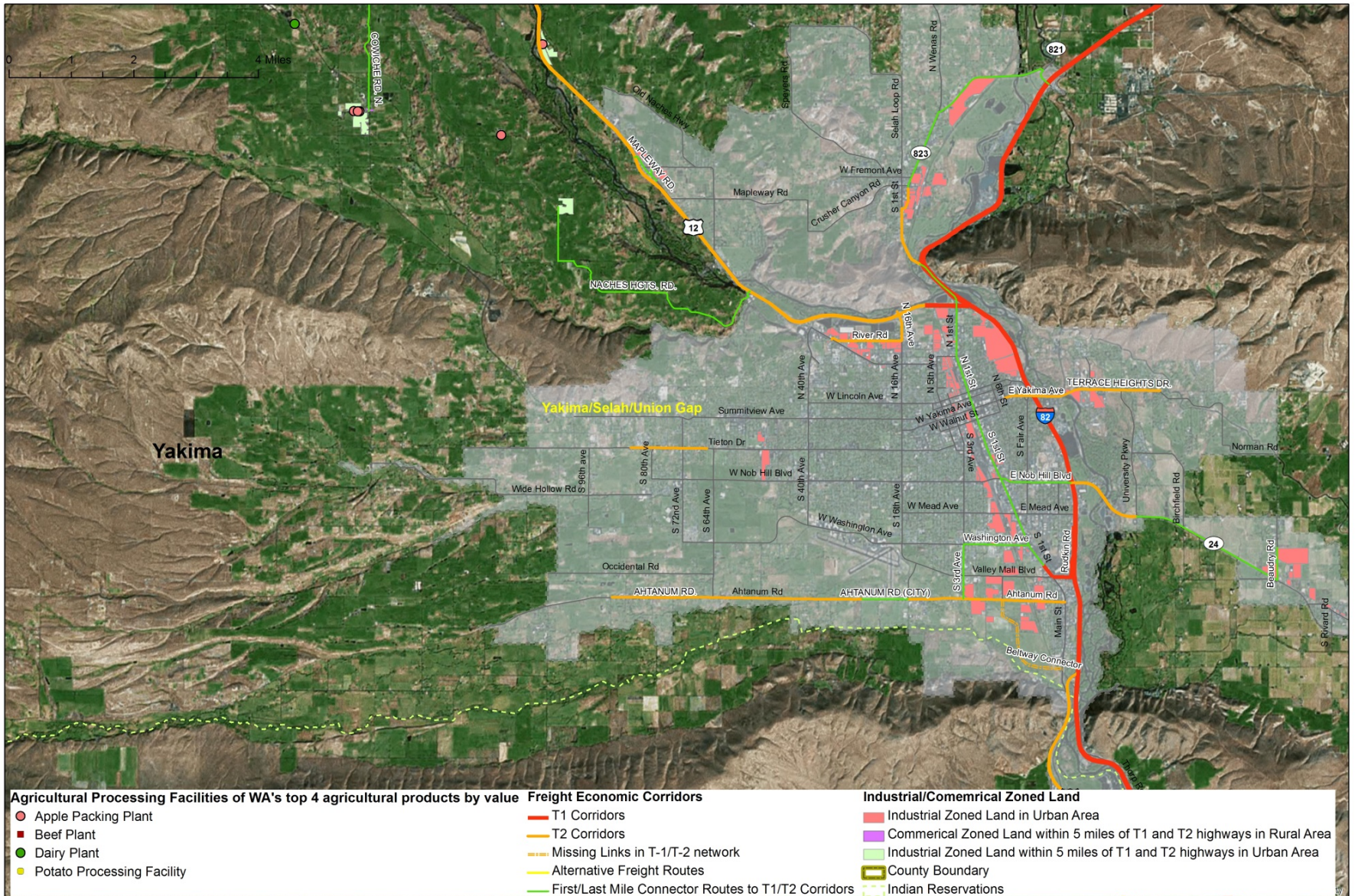
The methodology and criteria are transparent, and were vetted by every MPO and RTPO in the state, along with many ports, cities and Tribes.

While working with Tribal and regional governments to create criteria to identify the corridors, we had to keep an open mind. We repeatedly changed the criteria based on knowledgeable input. For example:

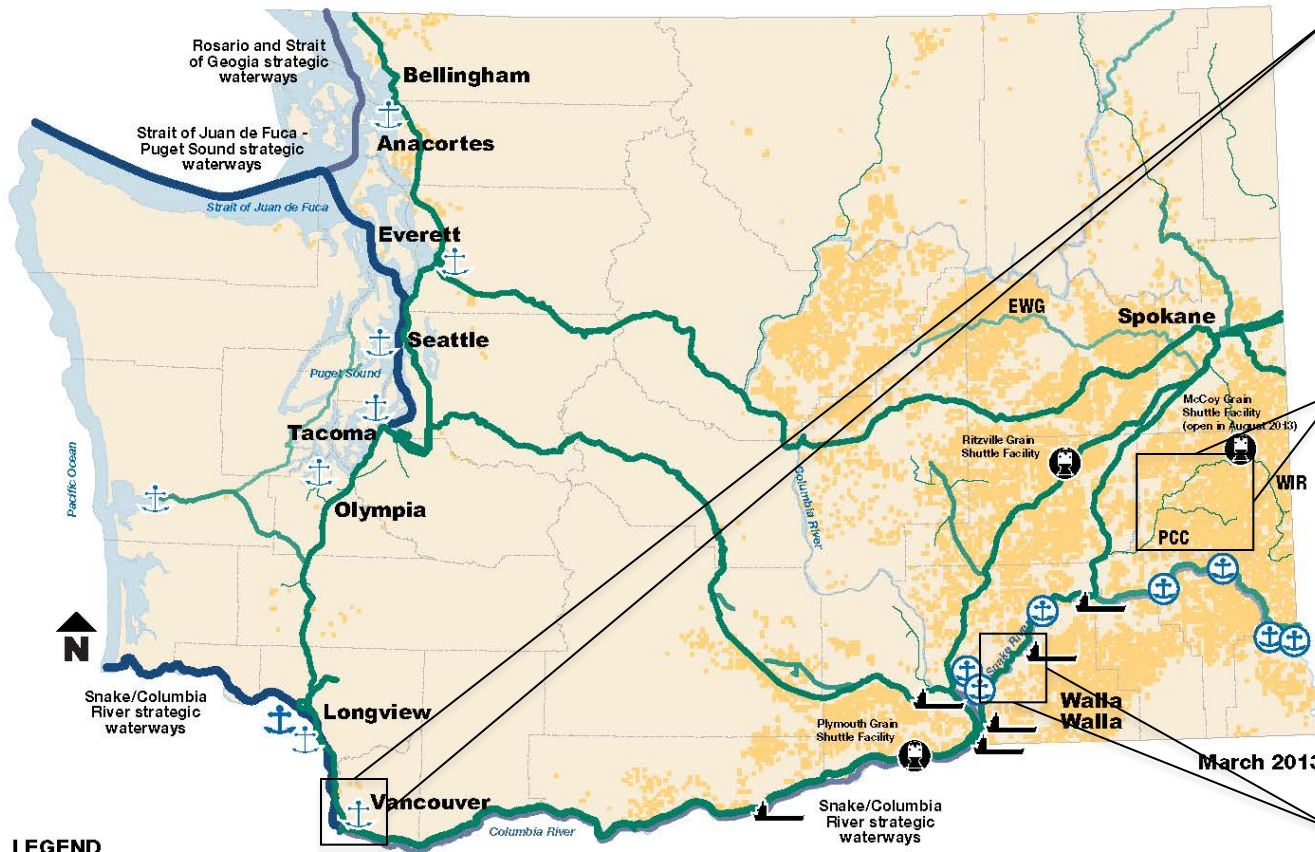
- Should marine industrial land be connected by first-last waterway routes to high-volume waterways?
- Should we include mining land uses in natural resource lands?
- Should we include routes that are the only close route to rural towns, in recognition that they need freight deliveries?

Determining objective criteria that we could apply everywhere in the state was an iterative process between the Freight Division, other WSDOT divisions, and with many external partners until most parties accepted the goals and methodology.

Example of Freight Economic Corridors in Yakima, WA



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

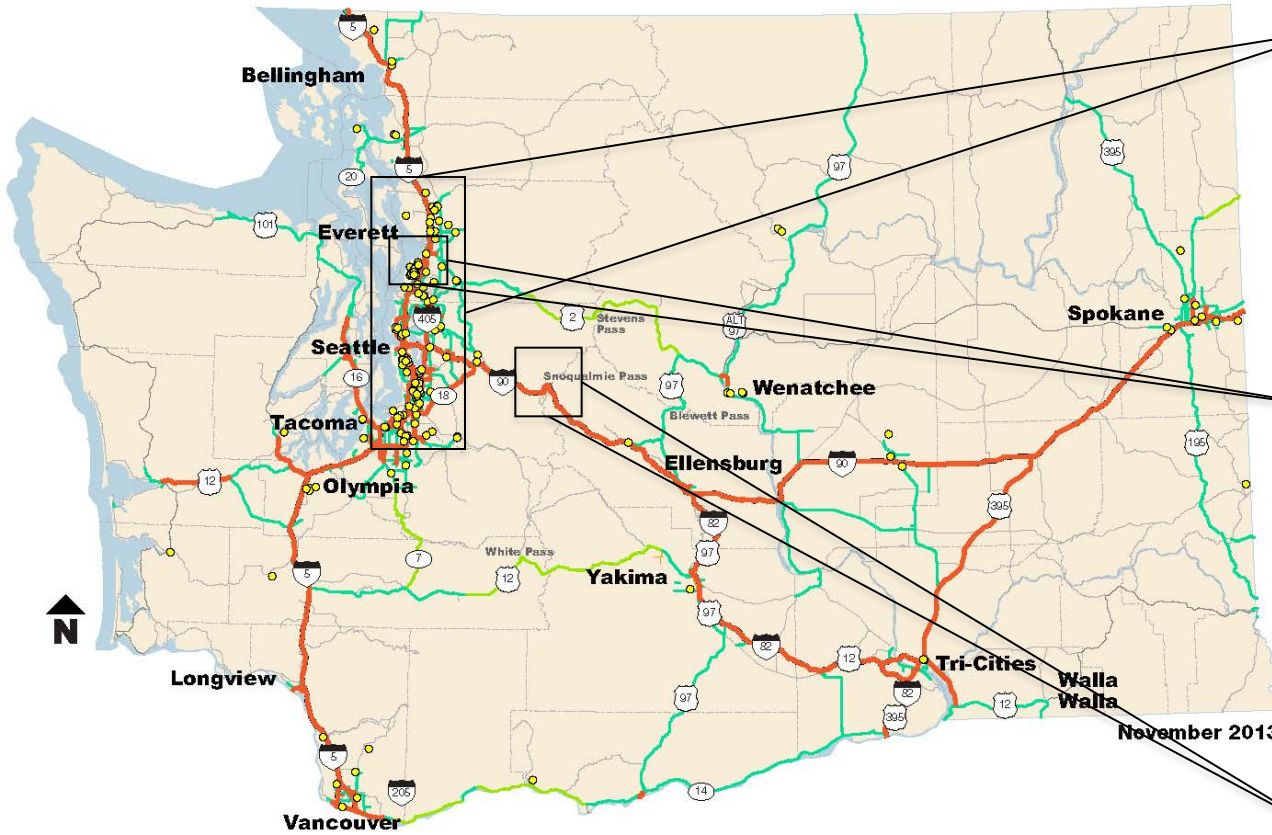
Multiple preservation and rehabilitation projects.

Ice Harbor Lock & Dam

Lock and dam maintenance project.

Wheat is a \$1.14 billion industry in Washington State

Aerospace Supply Chain: Example Freight Mobility Improvements



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.

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

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

We're very interested in your feedback and questions.

For more information, please contact:

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WSDOT Freight Systems Division

ivanovb@wsdot.wa.gov

The full Washington State Freight Mobility Plan may be found at:

<http://www.wsdot.wa.gov/Freight/freightmobilityplan>

Using Existent Data Sets to Map State Freight Economic Corridors Throughout a State

Wenjuan Zhao

Washington State Department of Transportation (WSDOT)

2014 Washington State Freight Plan

Truck Freight Economic Corridor Criteria

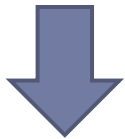
1. T-1 freight corridors that carry more than 10 million tons per year
2. T-2 freight corridors that carry 4 to 10 million tons per year
3. Alternative freight routes that serve as alternatives to T-1 truck routes that experience severe-weather closures, and carry 300,000 to four million tons per year
4. First/last mile connector routes between freight-intensive land uses and T-1 and T-2 freight corridors. These criteria were used to identify the connector routes:
 - **Statewide:**
 - To-and-from T-1 and T-2 truck routes and strategic U.S. defense facilities
 - Over-dimensional truck freight routes that connect the state's significant intermodal facilities to the T-1 and T-2 highway system
 - **In urban areas:**
 - ▶ To-and-from the Interstate system and the (1) closest major airport with air freight service, (2) marine terminals, ports, barge loaders and other intermodal facilities, and (3) warehouse/industrial lands
 - ▶ From high-volume urban freight intermodal facilities to other urban intermodal facilities, e.g. from the Port of Seattle to the BNSF rail yard in Seattle
 - **In rural areas:**
 - ▶ To-and-from state freight hubs located within five miles of T-1 and T-2 highways; freight hubs are defined as: (1) agricultural processing centers, (2) distribution centers, (3) intermodal facilities, and (4) industrial/commercial zoned land
 - ▶ Routes that carry one million tons during three months of the year (reflecting seasonality) of agricultural, timber or other resource industry sector goods

Data Need Assessment and Data Collection

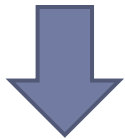
Data Need	Datasets Used/Collected
Freight-intensive land use	2009 Statewide land parcel data, published by WA Dept. of Ecology
Agricultural processing centers	Collected the locations of agricultural packaging and processing facilities from the Agricultural Commissions
Freight intermodal facilities	<ul style="list-style-type: none">• National Highway System intermodal facility list• Gathered GIS data on other major intermodal facilities missing from NHS list
Strategic U.S. defense facilities	Military Installation data, published by WA Department of Natural Resources
Truck network	Freight and Goods Transportation System, published by Washington State DOT

Develop Rules for Applying Connectivity Criteria

Use parcel size and proximity to identify major industrial/commercial land

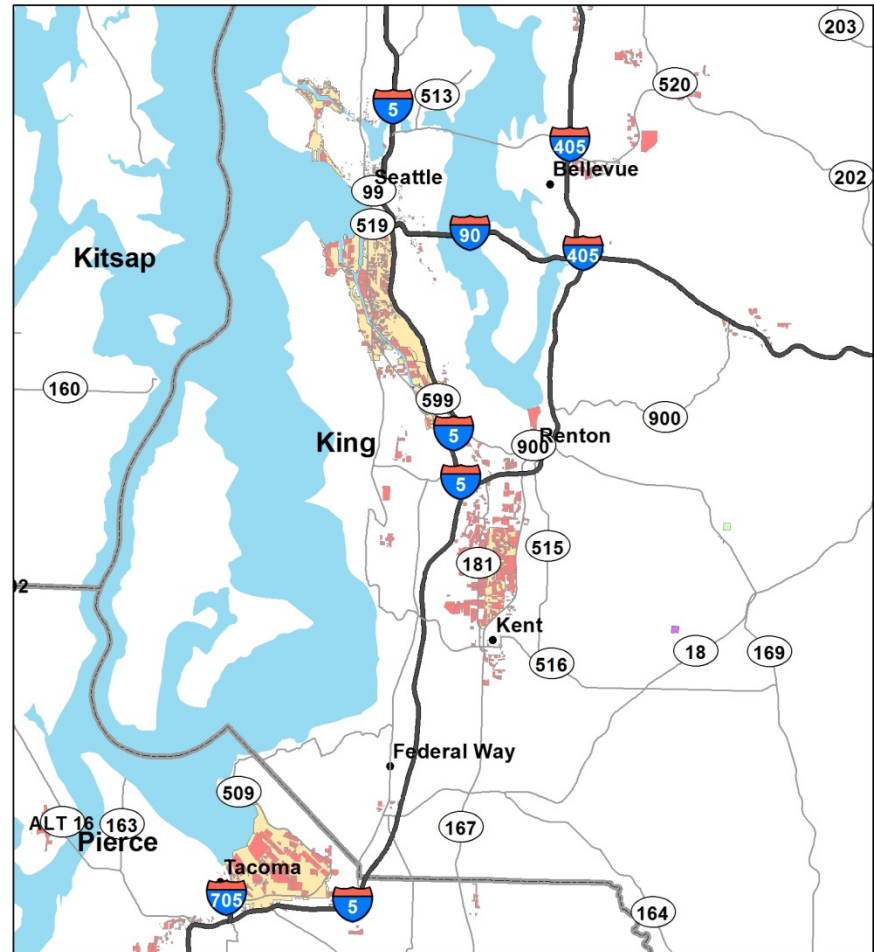


Establish a minimum size of 30 acres for a cluster of freight land use parcels within 1/4 mile buffer zone



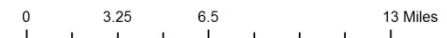
Extract major industrial lands statewide, and commercial lands in rural areas from statewide parcel data in ArcGIS by applying established threshold

Freight Land Uses in Central Puget Sound



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
- County Boundary



Develop Rules for Applying Connectivity Criteria

Identify major agricultural processing centers based on concentration of facilities in the region

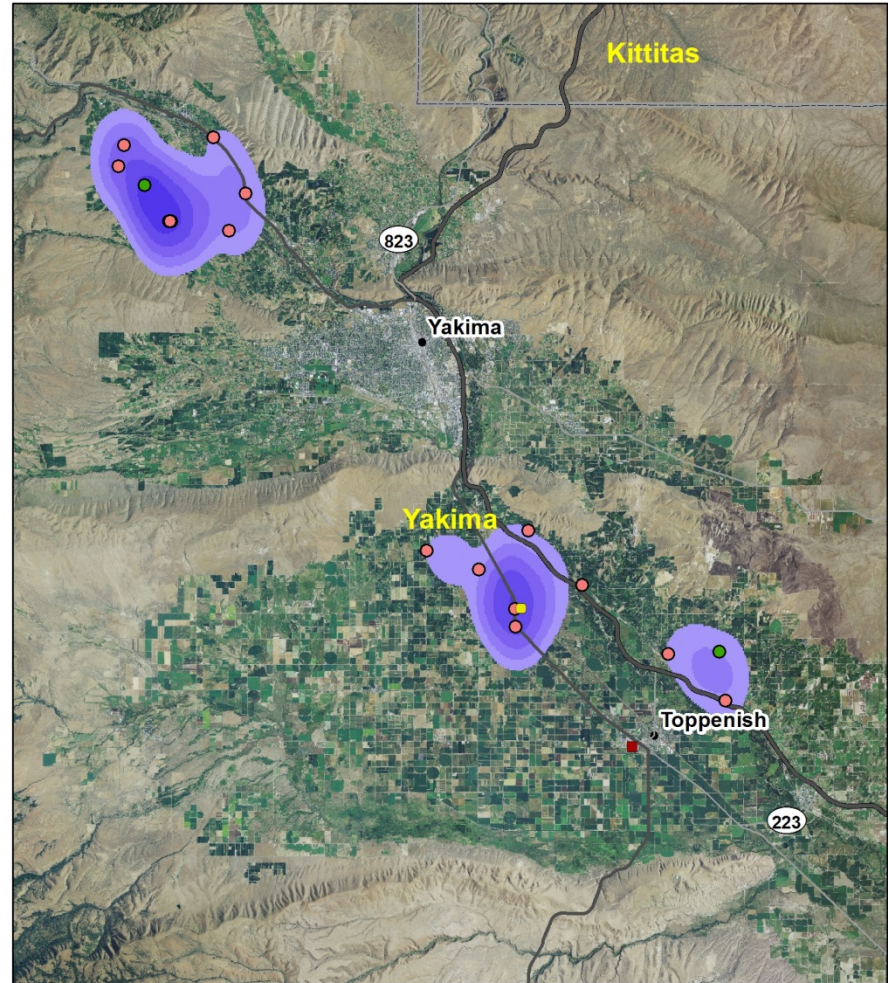


at least three agricultural processing facilities concentrated within a 2-mile radius



Perform density analysis in ArcGIS to identify facility concentration patterns across the state

Agricultural Processing Facilities in South Central Washington



Agricultural Processing Facilities of WA's top 4 agricultural products by value

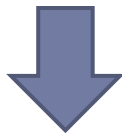
- Apple Packing Plant
- Beef Plant
- Dairy Plant
- Potato Processing Facility

0 3.5 7 14 Miles

Develop Rules for Applying Connectivity Criteria

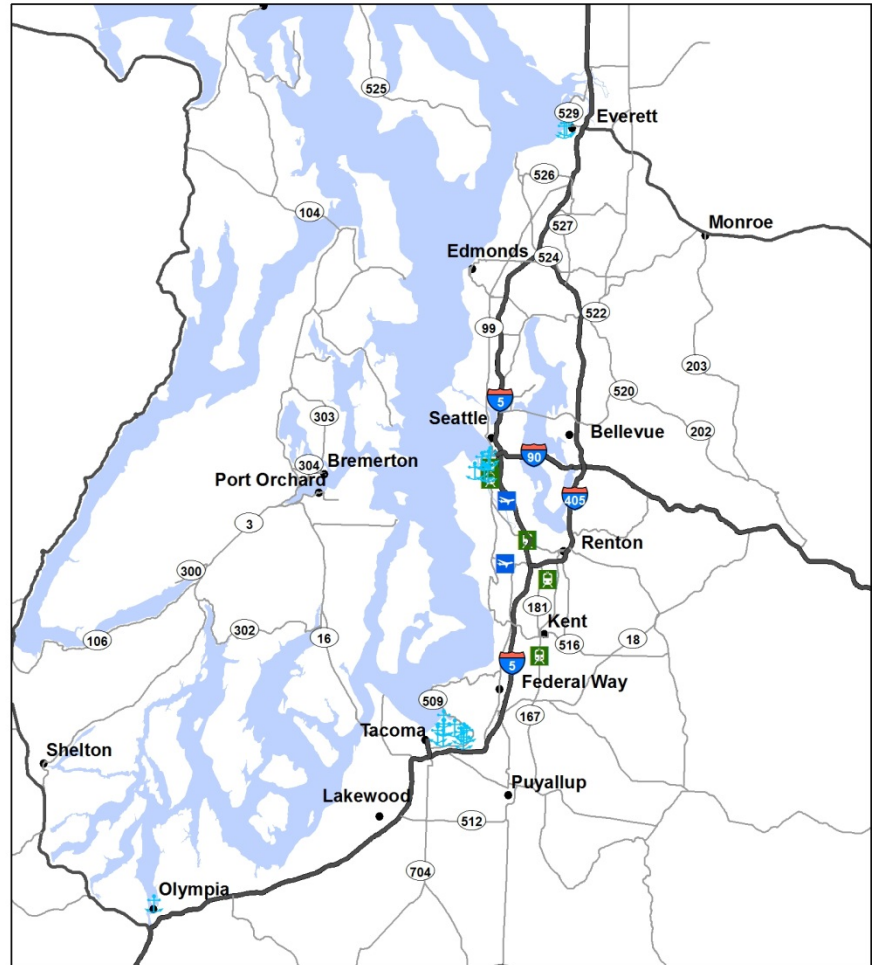
Use National Highway System intermodal facility criteria to identify major intermodal facilities:

- ▶ *handle more than 50,000 TEUs (a volumetric measure of containerized cargo which stands for twenty-foot equivalent units) per year,*
- ▶ *or 500,000 tons of bulk commodities per year by highway,*
- ▶ *or 100 trucks per day in each direction on the principal connecting route.*



Collect and map the GIS location of entrance gates to each intermodal facility

Freight Intermodal Facilities in Puget Sound



Intermodal Facilities
✈ Major Air Cargo Airports
🚢 Marine Port Terminals
🚂 Rail Intermodal Terminals
🚛 Barge Loading Facilities

0 5 10 20 Miles

Methodology for Mapping Truck Freight Economic Corridors

The methodology employed by WSDOT in mapping freight economic corridors include following steps:

1. Determine the backbone freight network — T-1 and T-2 freight corridors with high truck volume;
2. Map alternative freight routes that serve as alternates to T-1 corridors experience severe-weather closures, and meet T-3 tonnage threshold (0.3 million to 4 million tons annually);
3. Identify road segments that meet T-3 tonnage threshold and provide the shortest path from backbone system to:
 - 1) access major industrial or commercial land;
 - 2) centers of agricultural processing facility clusters;
 - 3) the entrance gate of air cargo ports, marine terminals, rail intermodal terminals, and barge loading facilities;
 - 4) entrances to strategic U.S. defense facilities as the first/last mile connectors;
4. Review to check whether any freight facilities or lands are unconnected.

Freight Economic Corridors in Central Puget Sound



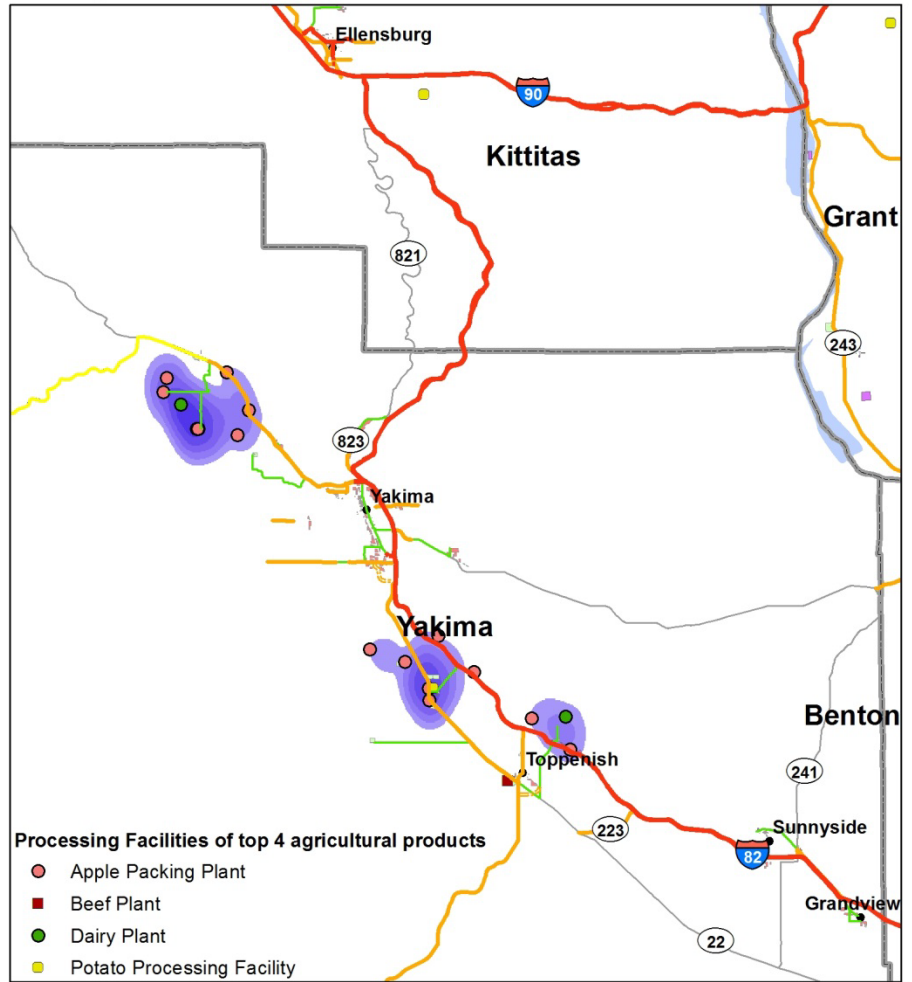
Freight Economic Corridors

- T1 Corridors
- T2 Corridors
- Missing Links in T-1/T-2 network
- Alternative Freight Routes
- First/Last Mile Connector Routes to T1/T2 Corridors

Industrial/Commercial Zoned Land

- Industrial Zoned Land in Urban Area
- Commercial Zoned Land in Rural Area
- Industrial Zoned Land in Rural Area
- PSRC Manufacturing and Industrial Center

Freight Economic Corridors in South Central Washington



Processing Facilities of top 4 agricultural products

- Apple Packing Plant
- Beef Plant
- Dairy Plant
- Potato Processing Facility

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

Industrial/Commercial Zoned Land

- Industrial Zoned Land in Urban Area
- Commercial Zoned Land in Rural Area
- Industrial Zoned Land in Rural Area
- PSRC Manufacturing and Industrial Center



Truck Freight Economic Corridors in Washington State



LEGEND

-  Major Cargo Airports
-  Rail Intermodal Terminals
-  Barge Loading Facilities
-  Marine Port Terminals

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
-  **Missing Links in T-1/T-2 network**
-  **First/Last Mile Connector Routes to T1/T2 Corridors**

2014 Washington State Freight Plan

Rail and Waterway Freight Economic Corridor Criteria

The State Rail Freight Economic Corridors have four elements:

- ▶ R1 -- carrying greater than 5 million tons of freight per year;
- ▶ R2 -- carrying 1 to 5 million tons of freight per year;
- ▶ R3 -- 5 hundred thousand to 1 million tons of freight per year;
- ▶ R4 -- 1 hundred thousand to 5 hundred thousand tons of freight per year.

The State Waterway Freight Economic Corridors have five elements:

- ▶ W1 -- carrying greater than 25 million tons of freight per year;
- ▶ W2 -- carrying 10 million to 25 million tons of freight per year;
- ▶ W3 -- carrying 5 million to 10 million tons of freight per year;
- ▶ W4 -- carrying 2.5 million to 5 million tons of freight per year;
- ▶ W5 -- carrying 0.9 million to 2.5 million tons of freight per year.

Rail Freight Economic Corridors



March 2013

LEGEND

Economic rail corridors:

- █ R1 - Greater than 5 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

- IRY Intermodal rail yards
- Major air cargo airport
- County line


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

Waterway Freight Economic Corridors



LEGEND

Waterway economic 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
-  W5 - 0.9 million to 2.5 million tons

-  County line
-  Major air cargo airport
-  Major marine port
-  Barge ports
-  Barge intermodal facility (non-port)

Source: US Army Corps of Engineers, Navigation Data Center – 2011 Waterway Commodity Data.

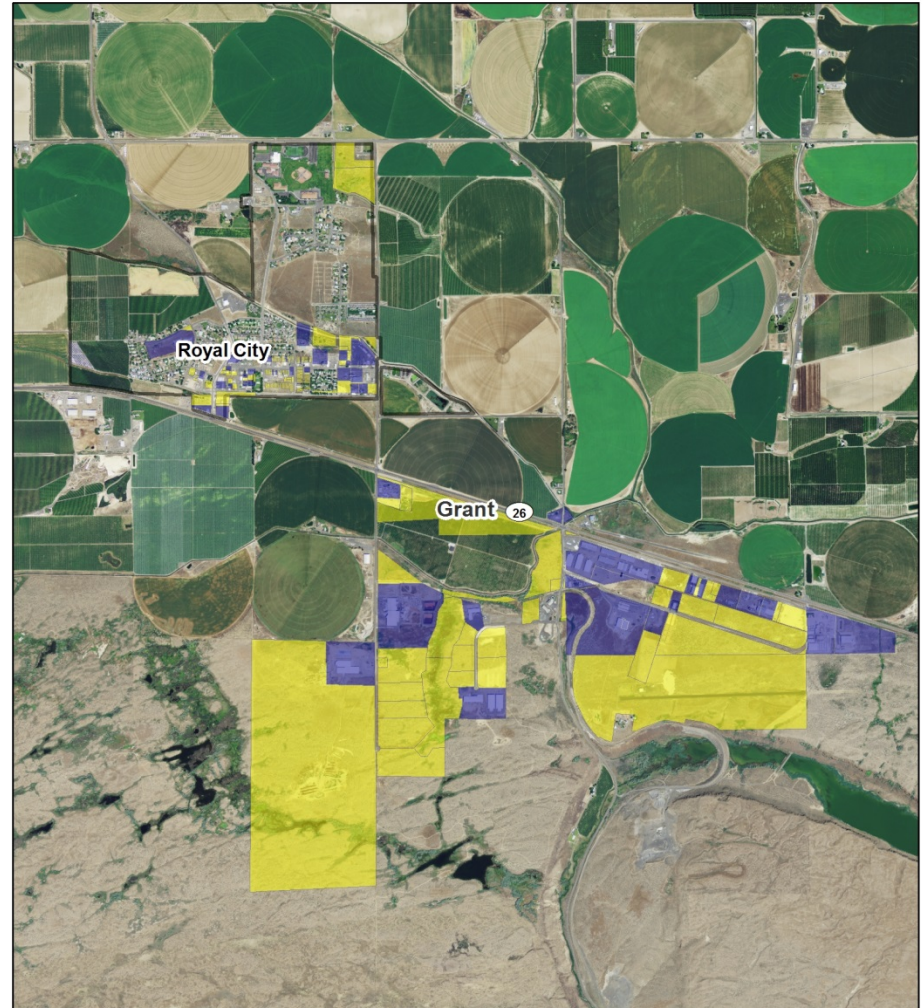
Stakeholder Review Process

- ▶ Created a webpage to publish corridor criteria, and draft maps of freight economic corridors at regional level
- ▶ Engaged WSDOT internal group, all Metropolitan Planning Organizations (MPO), Regional Transportation Planning Organizations (RTPO) and Ports to review the draft state freight economic corridors to:
 - Verify freight-intensive land use data in map
 - Add new or delete first/last mile connectors in their regions
 - Add over dimensional truck routes and seasonal truck routes
 - Add missing waterway corridors
- ▶ Refined and finalized GIS map of freight economic corridors by incorporating stakeholder inputs

2015 Update of Freight Economic Corridors

Freight Land Use by Market Value Improvement in Royal City, WA

- ▶ WSDOT will apply the same connectivity criteria but use new dataset to update freight economic corridors
- ▶ Use 2012 statewide parcel database for extracting freight land use data and removing vacant lands based on market value improvement of parcels
- ▶ Improve criteria for waterway economic corridors to link marine land uses with waterway connector routes
- ▶ Develop a [web map application](#) tool for users to view GIS data



Freight Land Use by Market Value Improvement per square foot

- Market Vaue Improvement per SQ < \$0.1
- Market Vaue Improvement per SQ >= \$0.1
- City Boundary

Lessons Learned

- ▶ Assess data needs and search for datasets available at federal, state, and regional level. Use best information available and understand the limitation of different datasets
- ▶ Test different thresholds developed for identification of freight land uses at a few areas first, and validate with aerial imagery and other data sources
- ▶ Automate the mapping process of first/last mile connectors to the extent possible
- ▶ Stakeholder engagement is critical

Thank You

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Washington State Freight Economic Corridor is available here:

<http://www.wsdot.wa.gov/Freight/EconCorridors.htm>





Mapping First and Last Mile Connector Routes Across the State: The Metropolitan Planning Perspective

September 2, 2015

Central Puget Sound Region

- **3.8 million people**
- **1.9 million jobs**
- **4 counties: Kitsap, King, Pierce, Snohomish**
- **82 cities & towns**
- **Urban & rural**





PSRC Freight Planning

PSRC Freight Planning

- Implement Transportation 2040
- Examine future freight needs and opportunities
- Integrate freight considerations throughout the planning process
- Listening to stakeholders and broader transportation issues as they relate to freight and goods movement
- Complete current freight projects

Transportation Policy Board

PSRC Staff

**Other PSRC
Advisory
Committees**

**FAST Freight
Advisory
Committee**

**Regional
Freight
Mobility
Roundtable**



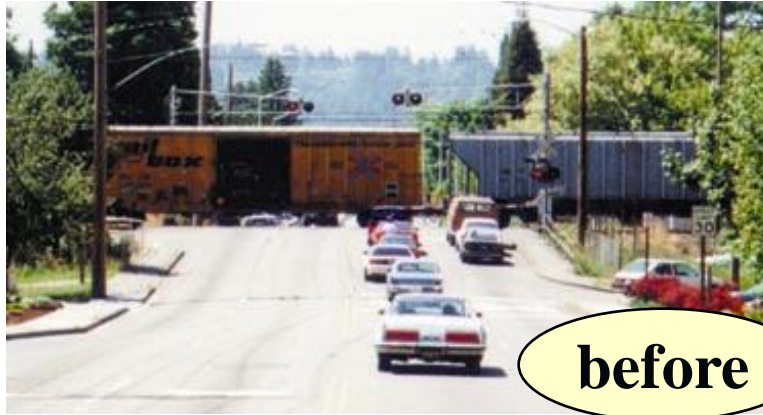
The Task - What were we assigned to do?

- **Under MAP-21 all freight projects must be in the State Freight Plan in order to be eligible for additional federal matching funds**
- **WSDOT requested MPOs and tribes to submit a list of freight projects that are either in the regional TIP, or in the Long Range Transportation Plan**
- **2.5 months to submit projects for consideration**



The Challenge – How to develop a list of freight projects?

What is a Freight Project?



**It's not always
this obvious!**



The Challenge – How to develop a list of freight projects?

- **PSRC considers freight mobility in the TIP and Long Range planning process using prioritization, but does not develop a separate list of “freight” projects.**
- **Not all regional projects are reflected in the long range plan capacity project list.**
- **Projects that change capacity, add new interchanges, grade separations, or change alignment are in the plan.**
- **Rehabilitation and maintenance, safety, reconstruction, or ITS projects under \$100 million not subject to requirements to be listed in the plan, therefore don’t appear on an adopted “list”.**



The Challenge – How to develop a list of freight projects?

- **Many capacity projects in the plan are WSDOT projects and would provide regional improvement for freight. Should the region submit a list of state projects that are important to the region?**
- **Each project submitted for consideration required an application requesting detailed information**
- **Short time frame to work with PSRC members to develop an approach.**
- **Some PSRC members have limited staff to participate**



Methodology and Working With Stakeholders

- First step was to get Freight Advisory Committee engaged – Increased meetings and lots of work in between.
- Send announcements to 82 Cities and 4 Counties
- Not all of which have staff to devote to this effort
- Not all of which have projects that would be considered beneficial for freight



Methodology and Working With Stakeholders

- Develop a draft methodology to identify projects in the TIP and Transportation 2040
- First, review the PSRC Prioritization Process. This process has been developed as part of Transportation 2040 and has been well-vetted through committees and policy boards
- Includes evaluation of potential benefits for freight.
- Identify projects based on this previously established Prioritization process
- No need to start from scratch!

Freight

This measure addresses the extent to which projects provide benefits to freight users of the transportation system (travel time and reliability) as well as a reduction in conflicts with other modes of travel, improve access to freight-related areas, and improve key freight-related facilities.

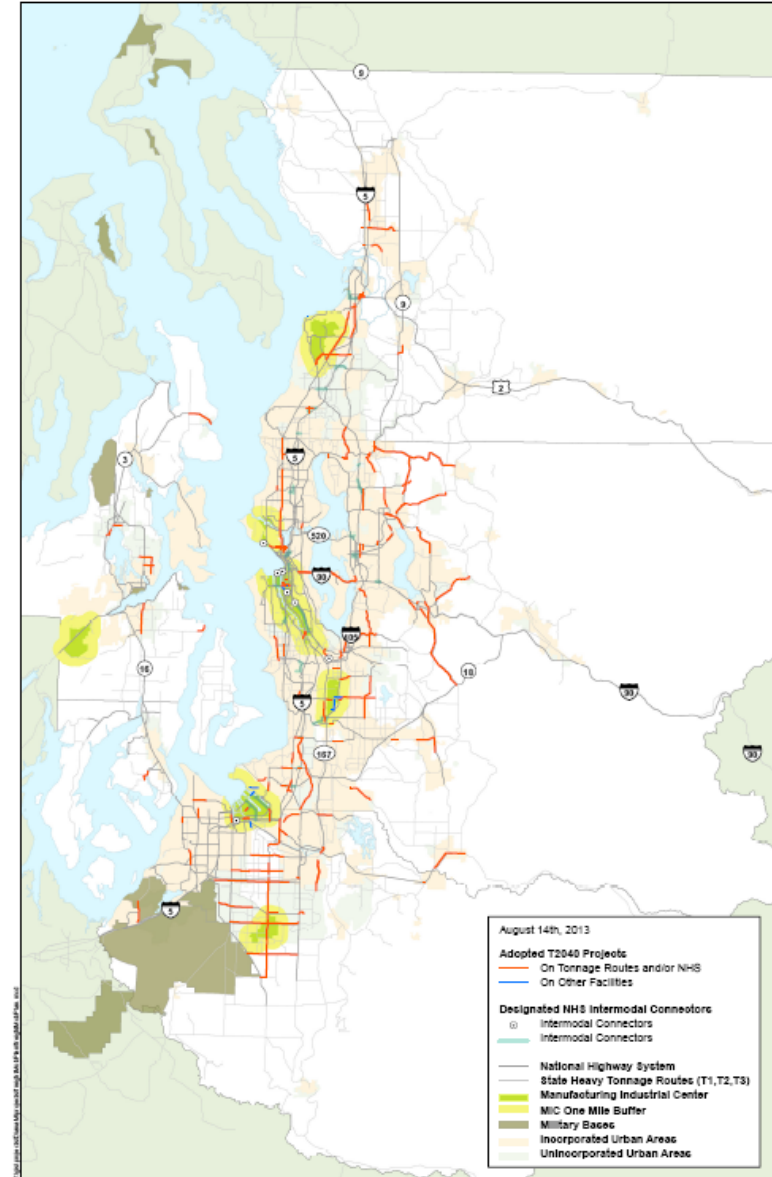
Purpose: System performance benefits for freight. How well does the project provide benefits to freight-related system users by improving travel time, reliability, and efficiency for freight haulers (all freight modes), and how well does the project reduce conflicts?				Prepopulated	% No Response
F1	3	The project improves a facility identified as a freight bottleneck through the Washington State Department of Transportation's Truck Performance Measures program ³ or other adopted agency plan.		Yes	0%
F2	1	The project reduces conflict between freight modes (truck and rail)—e.g. grade separation or bridge openings.		No	10%
F3	1	The project reduces conflict with freight and one or more passenger modes—e.g. through a separation of modes such as a pedestrian overpass or separated parallel bicycle facility.		No	8%
Purpose: Access to freight-related areas. How well does the project support planned development in Manufacturing and Industrial Centers (MICs) and other freight-related areas?					
F4a	Choose one	2	The project improves access within, or to, more than one MIC (or between a MIC and a Regional Growth Center).	Yes	0%
F4b		1	The project improves access within or to one MIC	Yes	
F5	1	The project improves access to an area identified in the Regional Freight Strategy as a freight generator. ⁴		Yes	0%
Purpose: Improves key freight facility. How well does the project serve designated <i>Freight and Goods Transportation System</i> ⁵ routes?					
F6	2	The project is on a designated T-1 or T-2 route.		Yes	0%
10 points maximum score					



Methodology and Working With Stakeholders

- Next we mapped the Transportation 2040 projects as they overlay the state's heaviest tonnage routes for trucks.
- Additional projects mapped based on previous Prioritization process
- Additional projects for which one of the regional ports is the lead agency.

Draft Local Projects for Discussion – Washington State Freight Plan

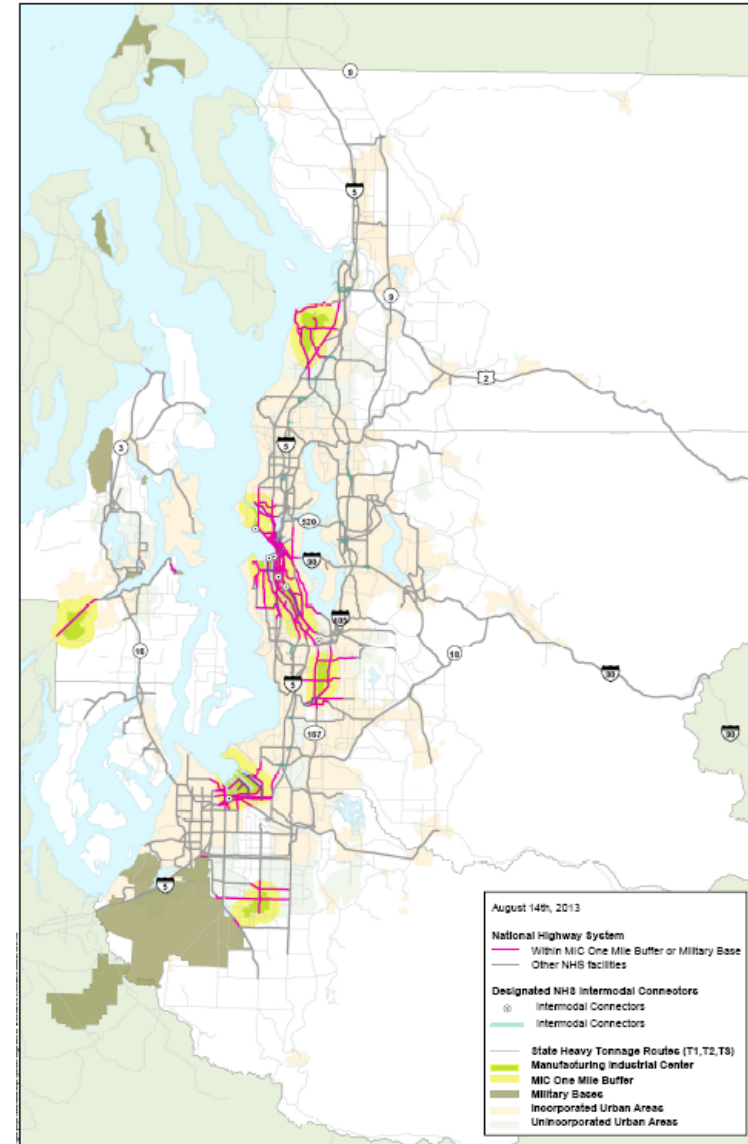




Methodology and Working With Stakeholders

- Lastly, we mapped the regional designated Manufacturing Industrial Centers, and applied a one mile buffer
- Mapped the newly expanded NHS system that includes principal arterials
- This allowed for ability to identify any “last mile” connectors for consideration

Draft Potential Local Connectors for Discussion - Washington State Freight Plan





Methodology and Working With Stakeholders

- These maps and lists were examined against the draft WSDOT economic corridors maps by committee members
- Projects were examined individually – transit, HOV projects may have secondary benefits for freight, but were not included
- Only projects with completion estimates in the first two decades were considered
- A refined list of more than 80 capacity projects was identified in Transportation 2040, and about 8 projects in the TIP
- Different approaches to submitting projects or lists were discussed
- Ultimately, it became more practical to rely on each lead agency to submit individually.

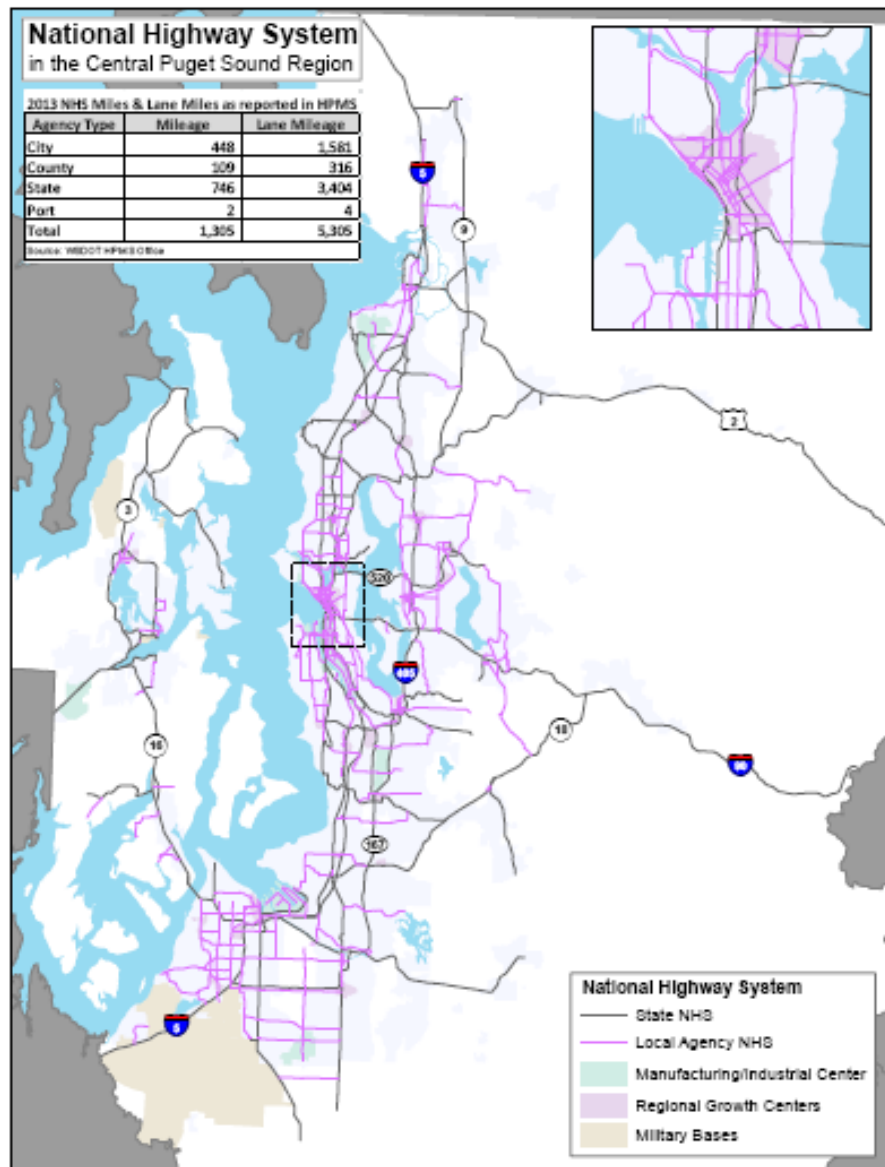


Benefits to Project Identification for Freight

- If MAP 21 reauthorization builds in a funded freight program based on this model, the region will be better prepared to identify investments that may qualify for federal funding opportunities
- Development of the WSDOT economic corridors maps and associated criteria is extremely valuable as we continue to discuss not only how, but where projects in the region may have strategic benefit for freight and goods movement.
- Regional projects are currently reflected in the Washington State Freight Plan

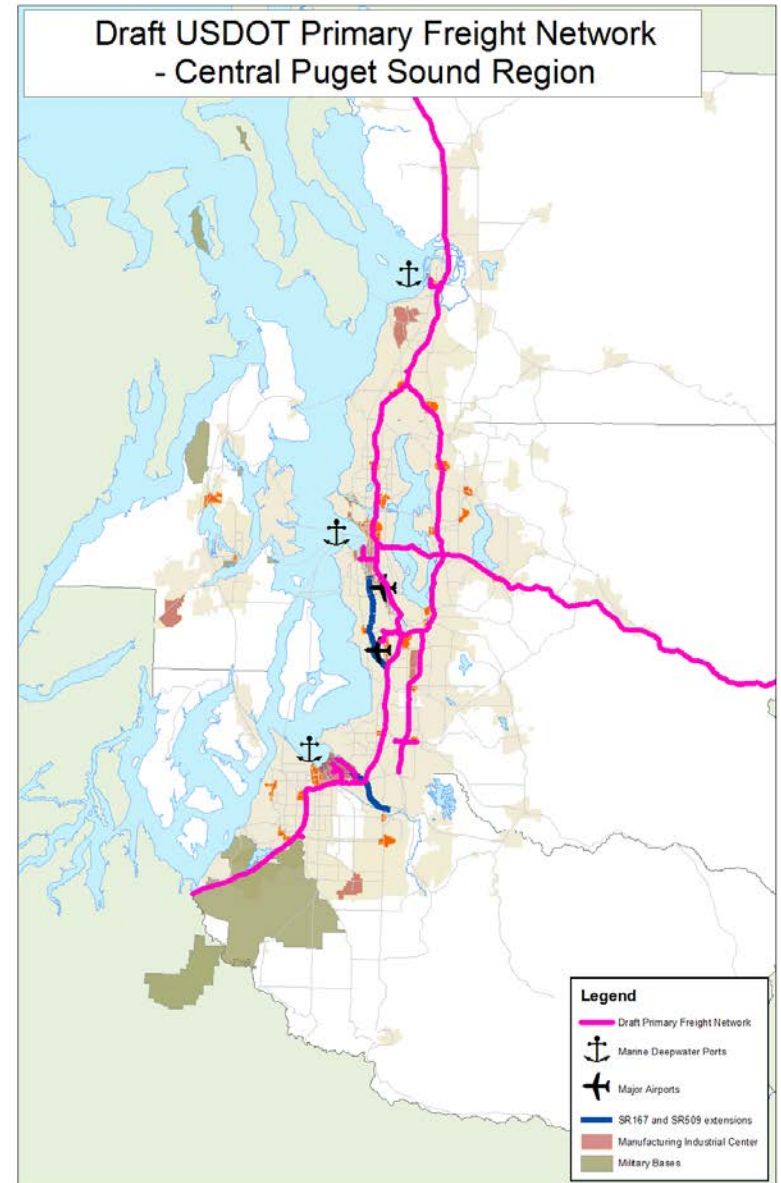
Benefits to Project Identification for Freight

- Designated NHS – 1305 Miles
- Not strategic, although may be more representative of last mile needs.



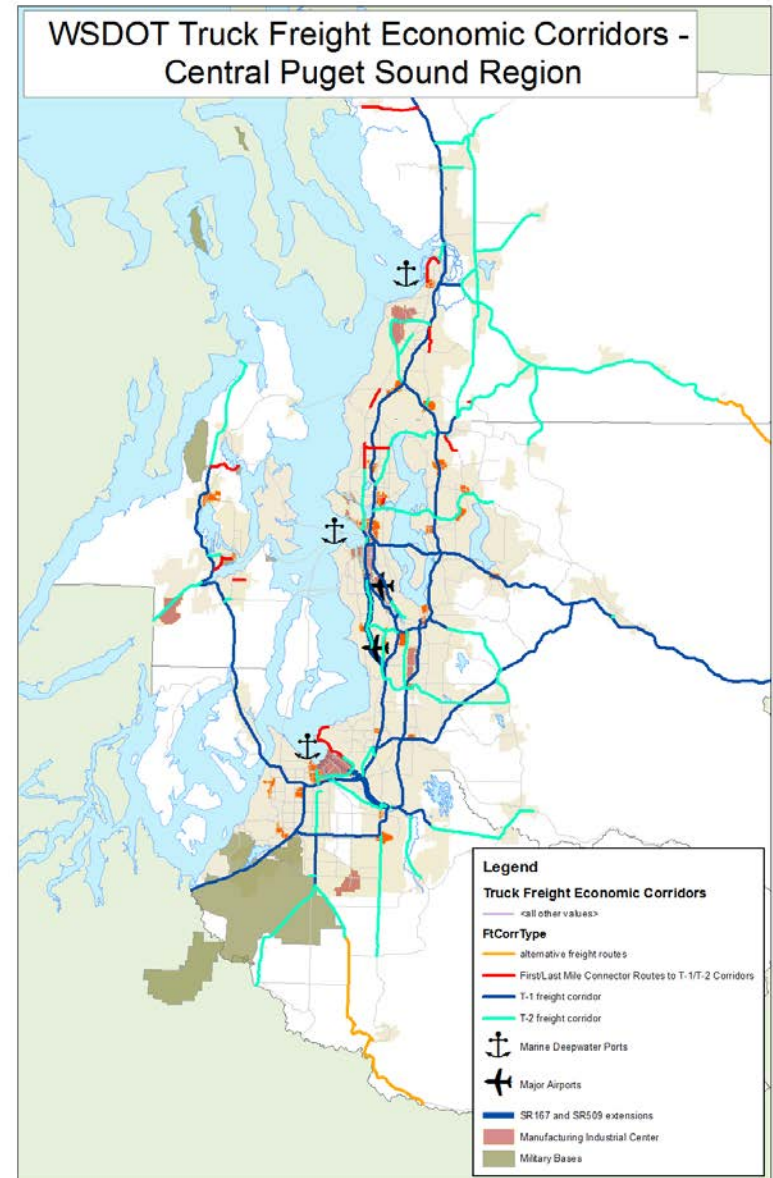
Benefits to Project Identification for Freight

- Draft Primary Freight Network – 220 Miles
- Insufficiently represents regional freight and goods relationship to the national economy



Benefits to Project Identification for Freight

- WSDOT Economic Corridors Maps provide a good starting point for identifying future important locations for freight, and the projects that may provide benefit.
- Economic Corridors – 1244 Miles
- More representative of regional and state freight and goods movement





Lessons Learned

- Having an established subject matter expert group, or committee was key. For a region this size, you can't just do this as a staff effort alone.
- It is difficult to get broad participation for an unfunded program
- Having a strong, established planning framework to build from was key. Established prioritization measures really helped to narrow the list from the start. Much easier than starting from scratch!
- A funded program will be accompanied by nationally established, and specific criteria. What is and is not a project with benefit for freight, AND would provide statewide and national benefits is subject to interpretation



Next Steps

Build on the established economic corridors layer as the PSRC updates Transportation 2040

Consider examining certain mixed industrial / commercial zoning to the economic corridors maps as many of these areas are freight intensive

Refine criteria for regional project lists based on final rulemaking for MAP 21

Support for a funded program that implements the state-level freight planning that was encouraged through MAP 21



Questions?

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