

# Metro | Agenda

Getting there with a connected region



## 2018 REGIONAL TRANSPORTATION PLAN UPDATE

### Regional Freight Work Group - Meeting # 7

Date: October 18, 2017  
Time: 1 p.m. – 3 p.m.  
Place: Metro Regional Center, Council Chamber  
600 NE Grand Avenue, Portland, OR 97232

#### Agenda items

1:00	<b>Welcome, and introductions</b> <ul style="list-style-type: none"> <li>Overview of meeting expectations</li> </ul>	Tom Kloster/All
1:10	<b>2018 Regional Freight Strategy – Draft Table of Contents</b> (Metro staff will provide overview of major changes and new sections)	Tim Collins
1:25	<b>History of the Regional Freight Plan</b> (Regional Freight Work Group provides input)	Tim Collins/All
1:35	<b>Regional Freight Network Concept and Regional Policy</b> <ul style="list-style-type: none"> <li>Five current freight policies and new freight safety policy</li> <li>Regional Freight Concept</li> </ul>	Tim Collins/All
1:55	<b>New Draft Regional Freight Network map and Intermodal Connectors</b> <ul style="list-style-type: none"> <li>New format for Regional Freight Network map</li> <li>Recently completed and planned freight connections</li> <li>Rail yards, Marine facilities and Industrial land</li> <li>Regional Freight Network and Intermodal Connectors</li> </ul>	Tim Collins/All
2:20	<b>Top general and specific freight-related issues</b> (Freight Work Group to review and reaffirm the Regional Freight and Goods Movement Task Force lists of freight-related issues)	Tim Collins/All
2:30	<b>Need for Future Regional Freight Studies</b> (Freight Work Group discussion of future regional freight studies) <ul style="list-style-type: none"> <li>Regional Freight Rail Study</li> <li>Kenton Rail Line Study</li> <li>Willamette River Channel Deepening Study</li> <li>Regional Freight Delay and Commodities Movement Study</li> </ul>	Tim Collins/All
2:50	<b>Next steps</b> <ul style="list-style-type: none"> <li>Review and comments on 3.3 Key freight studies by Oct. 27</li> <li>Review RTP freight projects for Regional Freight Strategy</li> <li>Review draft of last six chapters of Regional Freight Plan (Nov. 20)</li> </ul>	Tom Kloster/Tim Collins
3:00	<b>Adjourn</b>	

#### Irving Street Garage visitor parking policy

Visit our website for a list of parking options for visitors conducting business at the Metro Regional Center: <http://www.oregonmetro.gov/metro-regional-center>

# Metro | Agenda

## **Meeting packet:**

- Agenda
- Meeting minutes from Regional Freight Work Group meeting on May 17, 2017
- Regional Freight Strategy - update on Chapters 1 through 4 (PowerPoint presentation available at the meeting)
- Regional Freight Strategy - Draft Table of Contents
- 2.1 History of the Regional Freight Plan
- 2.3 Regional Freight Network Concept and Regional Freight Policy
- 2.4 Updating the Regional Freight Network
- New Draft Regional Freight Network map
- 2.5 Regional Freight Network and Intermodal Connectors
- 3.1 Top general freight-related issues
- 3.2 Specific issue identification
- Regional Freight Rail Study
- Regional Freight Delay and Commodities Movement Study
- Chapter 4: Freight Generation in the Region
- Link to Chapters 1, 2, 3 and 4 of Regional Freight Strategy:  
For review of 1.9 Congestion's cost; 3.3 Key freight studies and projects that identify freight issues; and Chapter 4 Freight generation in the region.



# Meeting minutes

Meeting: **2018 RTP Freight work group meeting**  
Date/time: Wednesday, May 17, 2017 | 1-3 p.m.  
Place: Metro Regional Center, Council chamber  
Purpose: Updates on Additions to National Highway Freight Network and Development of Regional Freight Strategy

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## Work Group Attendees

William Burgel  
Tim Collins, Work Group Lead  
Kate Dreyfus  
Nicholas Fortey  
Jerry Grossnickle  
Phil Healy  
Robert Hillier  
Tom Kloster  
Steve Kountz  
Kate McQuillan  
Zoe Monahan  
Don Odermott  
Patrick Sweeney  
Erin Wardell  
Steve Williams

## Affiliate

Burgel Rail Group  
Metro  
City of Gresham  
Federal Highway Administration  
Bernert Barge Lines  
Port of Portland  
City of Portland  
Metro  
City of Portland  
Multnomah County  
City of Tualatin  
City of Hillsboro  
City of Vancouver  
Washington County  
Clackamas County

## Interested Parties

Corky Collier  
Jon Makler  
Mike Mason  
Jordan Vance

## Affiliate

Columbia Corridor Association  
Oregon Department of Transportation  
Oregon Department of Transportation  
City of Wilsonville

## Staff Attendees

Lake McTighe, Metro  
Marie Miller, Metro  
Cindy Pederson, Metro  
Jamie Snook, Metro

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## Welcome & introductions

The meeting was called to order by Tom Kloster at 1:05 p.m. A round of introductions was made. A question was asked on freight Capital Transportation Plan (CTP). The process on how this works was discussed. It was encouraged for members to talk within their jurisdictions how the importance of freight works with this strategy.

Tim Collins presented key points presented to Metro Policy Advisory Committee (MPAC) and Metro Council on Regional Freight Strategy. Current freight plan goals were presented; noting that Metro

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Council asked for an additional policy on freight safety be developed. It was asked how this fit with freight. Tom Kloster reported that Lake McTighe received approval to proceed on Zero Vision policy plans, including creating livable streets that incorporate freight design. It was noted that McTighe be asked to address this issue at the fall 2017 work group meeting.

Discussion was held on challenges and opportunities to improve freight and goods movement on the designated Regional Freight Network. Increased demand for trucking on the region's roadways and highways presents a major challenge to moving freight during congested hours. Freight is impeded by times of slow rail speeds, at-grade crossings with heavy truck traffic, and shared tracks for freight and passenger services.

Constraints and challenges around air freight, marine/river traffic and energy pipelines were discussed. Air freight demand with access to the Portland International Airport (PDX) is expected to grow. Pipelines that supply fuels and other energy sources to the region are clustered in the NW industrial area facing challenges of retrofits for seismic resiliency. These same seismic retrofits are challenging for the major freight system also. Freight river travel faces challenges with demand for more marine terminal space, river channel deepening costs, and bridge span lifts.

Phil Healy noted that the RTP needs funding tied to these strategies. It was asked who the sponsor for rail projects was. Tom Kloster reported that public projects partly funded some projects, but with more funding needed, a separate category in the freight plan should be identified. A study of rail projects that incorporates private funding strategies with public funding included would be desired.

Don Odermott asked if there was a rail vision. Tim Collins reported this is the next big plan to be developed. Odermott noted that Port plans are Port centric, and may be challenging to incorporate with Metro's freight plans. It was mentioned that the I-5 Rail Project Study could be a basis for strategy review, and to find a copy of this for the committee. Tim Collins was tasked to map out more of these items for committee review.

Nick Fortey commented on investments in terminals with roadbeds and surface improvements. There are access challenges to the terminals themselves.

Discussion was held on system management and technology as a way to address freight challenges:

- ITS that inform drivers and truckers of accidents, delays, and other changing roadway conditions
- ITS improvements at key signals that detect vehicle queuing and adjust signal timing accordingly
- Ramp meters that detect vehicle queuing at freeway on-ramps and travel speeds on the freeway, and adjust meter timing according

The committee liked the idea to provide adjustments to system timing configuration to interchanges where possible. Truck queue bypasses could improve the system also. Corky Collier cautioned against relying on ITS for the whole solution. He recommended having an ongoing, more sophisticated approach with creative roadway changes that includes more vehicles that have less emissions, and can travel roadways with more options.

### **Update on FAST Act and Additions to the National Highway Freight Network**

Tim Collins reported on the new roadway segment additions in the Portland Metro Region for USDOT's National Highway Freight Network (NHFN). This has been developed in coordination with ODOT. The FAST Act requires the FHWA Administrator to establish a NHFN to strategically direct Federal resources and policies toward improved performance of the Network. Attachment 1 is being recommended to Metro Council for roadway additions for the National Highway Freight Network. Attachment 2 lists recommended future Critical Highway Segments to add to the NHFN if ODOT is allotted more miles.

Tim Collins directed attention to the Regional Freight Network Map (2014 Regional Transportation Plan Update), Attachment 5, where segments marked red are highly recommended for freight investments. A second map, Attachment 3, details the recommended additions, with future critical route segments to add if more miles are allotted.

Bill Burgel expressed concern that Cornelius Pass, and Tualatin/Sherwood road segments were missing freight lines on the map. Erin Wardell noted that priorities had to be made for consideration with limited miles; selection was hard to make and not a perfect system.

### **Changes to Regional Freight Network Map**

To help define the new Regional Freight Network Map (from current 2010 version) designations, an update for 2018 is needed, with main roadway routes mapped (Interstate and State Highways) and intermodal connectors included.

Intermodal Connectors – The current Regional Freight Network map does not call out intermodal connectors as a separate designation, and includes them as part of the Roadway connectors. Intermodal connectors are the roadways that connect between intermodal facilities (air freight, rail yards, marine terminals, etc.) and the interstate and state highway system. ODOT finished the Oregon Freight Intermodal Connector System (OFICS) Study earlier this year that inventories intermodal facilities and intermodal connectors statewide; and shows the statewide significance of these roadways for goods movement. These roadways have enough significance to goods movement in the region that staff is recommending that they have a separate designation on the regional freight map.

Recommendation for changing the Regional Freight Network map:

- Intermodal connectors should have a separate designation on the regional freight map and be considered a higher level than the Roadway connectors. This will require a policy change that would be reviewed and approved by JPACT and the Metro Council.
- Add intermodal connectors to the Regional Freight Network map that were developed as part of the OFICS Study and as some of the Metro Council approved additions to the National Highway Freight Network.
- Update locations of land use designations for employment centers and industrial areas based on local zoning and regional land use planning changes since 2010.
- Update locations of marine facilities and rail yards that have changed since 2010; and update proposed projects that have been completed (example: Sunrise Highway to 122<sup>nd</sup>)

- Make the Regional Freight Network map more readable:
  - Create a second version of the map that does not include the railroad lines. This should eliminate the conflicts on the map between roadway designations and rail line designations
  - Create two insets (instead of the one for the Central City); one for the NW Industrial Corridor (around Highway 30 west of I-405) and Swan Island; and another for the Central Eastside Industrial Area and the Brooklyn Rail Yard (near Highway 99E and Holgate Blvd.).

Comments on these recommendations:

- The Port of Portland needs more consideration with the plans
- A caution against too much updating; highlight the obvious need
- Like to see a third map that shows the connection with intermodal corridors to channel deepening and channel widening with rivers and freight facilities
- Break out freight for rail and barge
- Clark County should be located on the map, too, that show extensions of freight between the two states in the region. It may help to show outside state boundary if significant for freight and give context to system.
- Clackamas County staff agrees with additional designations placed on the map
- Create an inset box on the map to show navigation lines for pipelines, i.e. terminal to Vancouver.
- Show West Hayden Island on the map more clearly
- Intermodal connector is possible on Hayden Drive
- Natural gas pipeline will have security issues
- Classifications for these are correct. Are the intermodal connectors' new designations on National maps or identified in other maps?
- Regarding Clark County, there are freight demands on major systems in both states for the region. Can we show the freight system on both sides of the Columbia River on the freight map?
- Are these intermodal connections now or future ones? The intent for higher level of classification with needs and purpose needs to be shown. Congestion will change the intermodal system. We need to focus on key access; how much to divert when change occurs.
- Explain how the two new inserts in the recommendations respond/relate to other roads.
- The freight needs are beyond our regional boundaries and should include Clark County. Make a larger map to show details. Have online map that zooms in for great details.

The discussion on recommendations was appreciated. Tim Collins welcomes other ideas and suggestions for further comments.

### **Developing a Technical Draft of Regional Freight Strategy**

Tim Collins presented the planned development of the Regional Freight Strategy, which is part of the 2018 Regional Transportation Plan (RTP) update. The following are key freight work items and information that will be added and/or updated in the 2018 Regional Freight Strategy:

- Updated priority needs and issues for freight (completed)

- Updated economic figures, commodity flow data and other key freight data will be compiled (new draft Key Freight Trends and Logistics Issues Report – Summer 2017)
- Include new freight measures that inform near- and long-term investment priorities:
  1. Reliability measure (monitoring measure – Summer 2017)
  2. Travel times to/from key intermodal facilities and industrial areas (draft measure completed for testing in Summer 2017)
  3. Freight access to industry and freight intermodal facilities measure (draft measure completed for testing in Summer 2017)
  4. Congestion – Freight truck delay and the cost of freight truck delay (draft measure completed for testing in Summer 2017)
- Updated Regional Freight Network map that includes the Freight Intermodal Connector System designation (Spring-Summer 2017)
- New section on regional freight funding, and the federal FAST Act and FASTLANE grants. (Summer 2017)
- New section on freight roadway bottlenecks/delay areas in the region. (Summer 2017)
- New section on freight safety that addresses conflicts between freight modes and with other non-motor vehicle modes. (Summer-Fall 2017)
- Update the Freight Action Plan to include strategies and freight projects that are informed by new freight measures, regional design guidelines, and the 2018 RTP priority investments that are both near-term and long term. (Summer-Fall 2017)

These work items will lead to a technical review draft of the Regional Freight Strategy around October/November of 2017.

Comments from the committee on Freight Highway Bottlenecks List:

- Rename the “Bottleneck Map” the “Freight Highway Delay Map” (ODOT)
- Is the Delay map the map for the region? It currently does not show all the freight delay areas that are known.
- What is the methodology for the Freight Highway Delay map?
- Shows limited number of facilities as Freight Delay area.
- Suggested that bullet points be added to the map.
- Decision makers will be confused if regional strategies do not express the need and where this need is located.
- Interpret the map for policy makers.
- Provide examples of freight safety to share with officials, so they can better understand freight decisions on safety, how this affects delivery, and the investment for it.
- Union Pacific and Burlington Northern Santa Fe can provide some national definitions for freight movements.
- Seismic strategy is still missing in the plan for resilience planning
- Connections between industrial land and freight plans are need to show regional plan coordination
- Modeling predictions interplay/future plans for freight systems. This is critical to investments.
  - Tim Collins responded that truck models are not good at routing systems. A new model showing commodity flow can provide value. Freight scenario of future isn’t possible in the current RTP update, but could be a placeholder in the plan.

- This is an opportunity for the freight committee to lead on safety and environment delivery of this message.
- Information can be included from the Governor's Task Force Freight Study. Phil Healy can provide information. Economy is named as the main reason for changes in numbers, with cost to shippers and impact on industries.
- High water impacts with barge traffic.
- RTP Call for Projects should get creative. Columbia River Bridge issues and freight are important.

The committee was encouraged to send further freight plan ideas to Tim Collins this summer. ODOT has a Capacity Projects list out, with freight benefit, to coordinate with the Freight Plan. These pieces of the draft Regional Freight Strategy updates will be reviewed and shared. The next 2018 RTP Freight work group meeting is expected either late September or early October 2017.

#### **Adjourn**

There being no further business, the meeting was adjourned at 2:50 p.m.

Respectfully submitted,  
Marie Miller



Attachments to the Record

Item	Topic	Document Date	Description
1	Agenda	5/17/2017	Agenda for May 17, 2017 Freight work group meeting
2	Meeting summary	2/6/2017	Meeting summary from February 6, 2017 Freight work group meeting
3	Memo	5/1/2017	Summary of Regional Freight Challenges and Opportunities
4	Handout	5/17/2017	Freight Highway Bottlenecks List (ODOT)
5	Map	5/17/2017	Freight Highway Delay Areas Map
6	Staff Report	4/10/2017	Staff Report on Roadway Segments Additions for USDOT's National Highway Freight Network
7	Table		TPAC Recommended Roadway Additions for the National Highway Freight Network
8	Table		TPAC Recommended Future Critical Highway Segments to add to the National Highway Freight Network if ODOT allotted more miles
9	Map		Recommended Additions to the National Highway Freight Network Map
10	Map		Regional Freight Network Map
11	Handout	5/10/2017	Draft Regional Freight Strategy Updates/Additions
12	Handout	5/17/2017	Definitions for new Regional Freight Network Map Designations
13	Map		State Highway Classification System and Intermodal Connectors on the NHS
14	Presentation	5/17/2017	PowerPoint Presentation to Regional Freight work group

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- Regional freight goals and outcome-driven action.....
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  - Washington County Freight Study
  - Highway Over-Dimension Load Pinch Point Study (ODOT)
  - Corridor Bottleneck Operations Study (ODOT)
- 3.4 **Future Freight Studies (will move to section 7.6)**
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	C3: Create “state of freight” report for the region .....	
	C4: Coordinate with and include the economic development community.....	
	C5: Host Operation Lifesaver training session (delete or ODOT can address)	

Goal D. Sustainable freight transportation system .....

    D1: Provide useful “green freight” links from Metro’s freight program webpage.....

    D2: Establish a regional “green freight, goods and jobs” roundtable series .....

    D3: Pursue reduction in greenhouse gas and other pollutant reduction policies and strategies for freight .....

Goal E. Freight-sensitive land use planning.....

    E1: Develop strategies to protect existing supply of industrial land.....

    E2: Examine need for additional industrial land .....

    E3: Provide freight perspective to revision of Metro’s livable street design guide.....

    E4: Explore and develop regional industrial sustainability and co-location strategies .....

Goal F. Strategic transportation investments .....

    F1: Work toward implementation of the RTP freight priority projects.....

    F2: Strengthen the tie between project prioritization and the framework for freight performance.....

    F3: When appropriate, focus regional funds on large capital projects (include JPACT finance decision on top 3 highway projects?) .....

    F4: Make strategic incremental improvements when large capital projects are unfunded .....

    F5: Ensure that unfunded freight projects are on an aspirational RTP project list .....

    F6: Develop policy and evaluation tools to guide public investment in private freight infrastructure (notably rail projects) .....

    F7: Develop regional freight rail strategy(timing and TPAC support?) .....

**11 Conclusion.....**

Appendix A: Regional Transportation Plan freight priorities project list.....

**Appendix B: Regional Freight Goods Movement Task Force Members**

## 2.1 History of the Regional Freight Plan

The 2010 Regional Freight Plan defined goals, strategies and actions designed to guide the stewardship of our critical multimodal regional freight infrastructure and industrial land supply, to support a sustainable, balanced and prosperous tomorrow.

The 2010 Regional Freight Plan was an element of the RTP update and was guided by the Metro Council-appointed 33-member private-public sector Regional Freight and Goods Movement (RFGM) Task Force and a technical advisory committee. The plan is built on a foundation of technical work, including research on the region's freight transportation systems and facilities, needs and issues. A more detailed history of the RFGM Task Force (including a membership roster), and the Regional Freight Advisory Committee, that served as the technical advisory committee, is included in Appendix B of this Regional Freight Strategy.

The 2010 Regional Freight Plan provided implementation strategies for addressing environmental and community impacts, system management, economic development and financing that were reviewed and recommended.

The Regional Freight Work Group was one of eight technical work groups identified to provide input and technical expertise to support the 2018 Regional Transportation Plan (RTP) update. In this role, the work groups were convened to advise Metro staff on implementing policy direction from the Metro Council, the Metro Policy Advisory Committee (MPAC) and the Joint Policy Advisory Committee on Transportation (JPACT). The Regional Freight Work Group met nine times from January 2016 through early 2018.

The primary charge of the Regional Freight Work Group has been to:

- Review status of 2010 Regional Freight Plan recommendations and help update freight data.
- Review document on key trends and challenges with updated existing conditions data.
- Review shared freight investment strategy.
- Review draft freight policy refinements and actions to support implementation.

The regional freight work group consists of topical experts, Portland Freight Committee members, TPAC and MTAC members or their designees, and staff from the City of Portland, larger cities in the region, Clackamas County, Multnomah County, Washington County, Port of Portland, Port of Vancouver, Regional Transportation Council (RTC), Federal Highway Administration (FHWA), and Oregon Department of Transportation (ODOT).

The following is a list of the members of the Regional Freight Work Group:

<b><u>Name</u></b>	<b><u>Affiliation</u></b>
1. Nathaniel Brown	Portland Business Alliance
2. William Burgel	Burgel Rail Group
3. Gary Cardwell	NW Container Services, Inc.
4. Tim Collins	Metro, Regional Freight Work Group Lead
5. Lynda David	Regional Transportation Council, Washington State
6. Kate Dreyfus	City of Gresham
7. Nicholas Fortey	Federal Highway Administration
8. Jerry Grossnickle	Bernert Barge Lines
9. Jim Hagar	Port of Vancouver
10. Brendon Haggerty	Multnomah County – Public Health
11. Phil Healy	Port of Portland
12. Robert Hillier	City of Portland – Bureau of Transportation
13. Jana Jarvis	Oregon Trucking Association
14. Todd Juhasz	City of Beaverton
15. Steve Kountz	City of Portland – Bureau of Planning & Sustainability
16. Kathleen Lee	Greater Portland, Inc.
17. Jon Makler	Oregon Department of Transportation
18. Kate McQuillan	Multnomah County – Planning
19. Zoe Monahan	City of Tualatin
20. Joel Much	Sunlight Supply, Inc.
21. Don Odermott	City of Hillsboro
22. Carly E. Riter	Intel
23. Patrick Sweeney	City of Vancouver
24. Erin Wardell	Washington County
25. Pia Welch	FedEx Express
26. Steve Williams	Clackamas County

Alternates for the Regional Freight Work Group:

1. Steve Kelley	Washington County
2. Gregg Snyder	City of Hillsboro
3. Joanna Valencia	Multnomah County



## **2.3 Regional Freight Network Concept and Policies**

The Regional Freight Strategy addresses the needs for freight through-traffic as well as regional freight movements, and access to employment, industrial areas, and commercial districts.

The Regional Freight Network Concept contains policy and strategy provisions to develop and implement a coordinated and integrated freight network that helps the region's businesses attract new jobs and remain competitive in the global economy.

### **Five policies serve as the foundation of this freight network concept:**

Use a systems approach to plan for and manage the freight network

Reduce delay and increase reliability

Protect industrial lands and freight transportation investments

Look beyond the roadway network to address critical marine and rail needs

Pursue clean, green and smart technologies and practices

### **Metro Council recommended Freight Safety Policy**

In the spring of 2017 the Metro Council directed Metro staff to add a sixth policy that will serve the freight network concept. The sixth policy addresses the issue of freight safety regarding the interaction of different freight modes (trucks, railroad trains, etc.) with passenger cars, bicyclist and pedestrians. It also addresses the overall freight safety issues that occur at the region's marine terminals, rail yards and other intermodal facilities.

The sixth freight policy is:

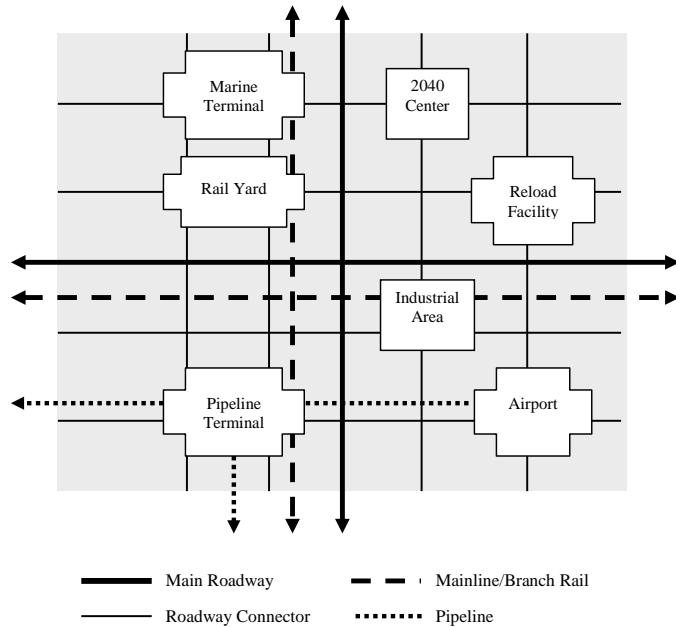
Prioritize roadway and freight operational safety to eliminate fatalities and serious injuries caused by freight vehicle collisions with autos, bicycles, and pedestrians.

## Regional Freight Concept

The transport and distribution of freight occurs via the regional freight network, a combination of interconnected publicly and privately owned networks and terminal facilities. The concept in Figure 1 shows the components of the regional freight system and their relationships.

Rivers, mainline rail, pipeline, air routes and arterial streets and throughways connect the region to international and domestic markets and suppliers beyond local boundaries. Inside the region, throughways and arterial streets distribute freight moved by truck to air, marine and pipeline terminal facilities, rail yards, industrial areas and commercial centers. Rail branch lines connect industrial areas, marine terminals and pipeline terminals to rail yards. Pipelines transport petroleum products to and from terminal facilities.

**Figure 1. Regional freight concept**



*Note; Figure 1- Regional freight concept, will be modified in a later draft to include Regional Intermodal Connectors, and this revised figure will also be in Chapter 2 of the updated RTP.*

The Regional Freight Network map, shown as Figure 2 in the next section (Updating the Regional Freight Network Map), applies the regional freight concept on the ground to identify the transportation networks and freight facilities that serve the region and state's freight mobility needs.

## 2.4 Updating the Regional Freight Network Map















The Regional Freight Network map has been updated for the latest Regional Freight Strategy and is significantly different than the one found in the 2014 Regional Transportation Plan and the 2010 Regional Freight Plan. The previous Regional Freight Network map was difficult to read and many of the main roadway routes and road connectors were being covered up by the main rail lines and branch rail lines. The updated Regional Freight Network map now has the main roadway routes and road connectors as the top GIS layers and has offset the rail lines where possible to make them more visible. The Regional Freight Strategy now features the Regional Freight Network map as an 11x17 inch map to enhance readability. To highlight the importance of the rail network, and have better visibility for the rail lines that are still partially hidden on the main map, the updated Regional Freight Network map has added six inset maps (brown dotted line boxes) that focus on the key intermodal facilities (marine terminals, rail yards and pipeline facilities) and rail lines. These inset maps are located on the back side of the main map (see the next page).

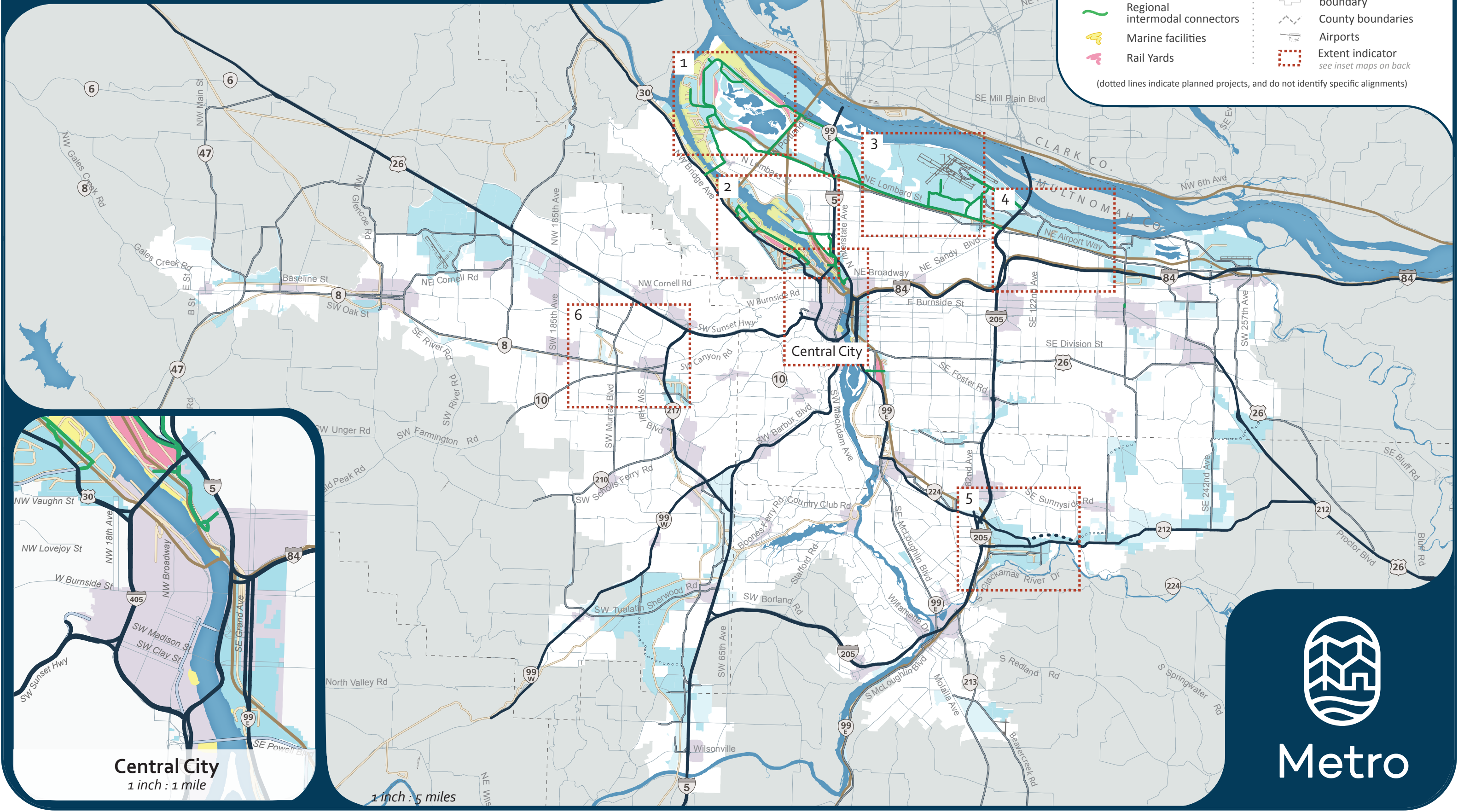
*Replace Figure 2, Regional freight system with a new updated Regional Freight Network map on the next page.*

The other major update to the Regional Freight Network map is the addition of a new freight roadway designation for Regional Intermodal Connectors. The Regional Intermodal Connectors represent National Highway System (NHS) intermodal connectors and other Tier 1 intermodal connectors that were designated by ODOT as part of the Oregon Freight Intermodal Connector System (OFICS) Study completed in 2017. The description and importance of NHS intermodal connectors and other Tier 1 intermodal connectors is described in the next section of this strategy.

# Regional Freight Network

October 4, 2017

-  Main rail lines
  -  Branch rail lines
  -  Main roadway routes
  -  Roadway connectors
  -  Regional intermodal connectors
  -  Marine facilities
  -  Rail Yards
  -  Employment
  -  Industry
  -  Urban centers
  -  Urban growth boundary
  -  County boundaries
  -  Airports
  -  Extent indicator  
*see inset maps on back*
- (dotted lines indicate planned projects, and do not identify specific alignments)



**Central City**  
1 inch : 1 mile

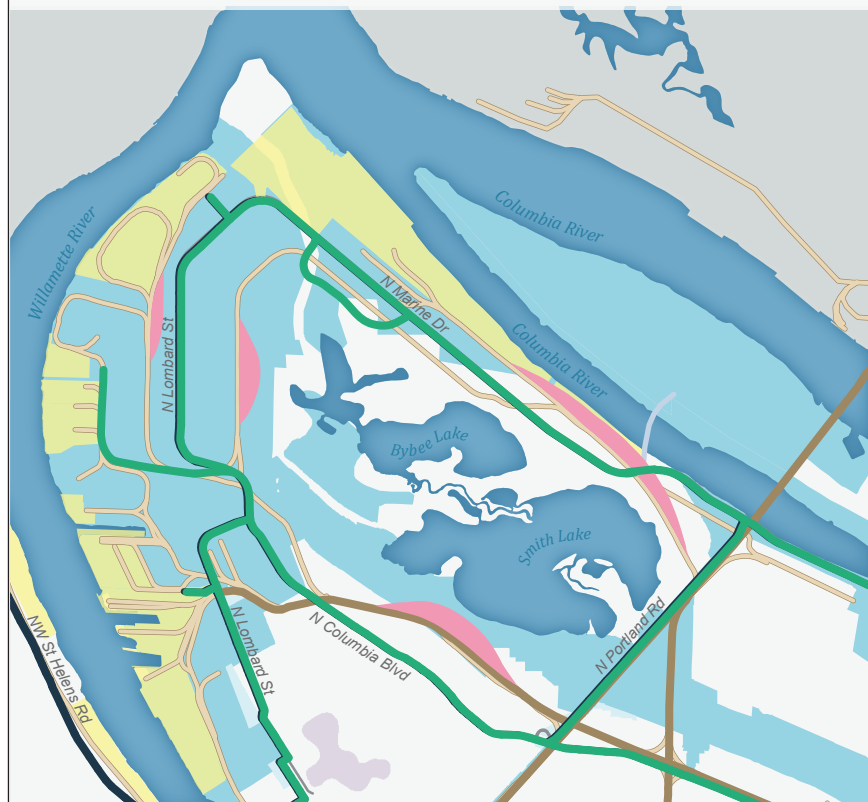
1 inch : 5 miles



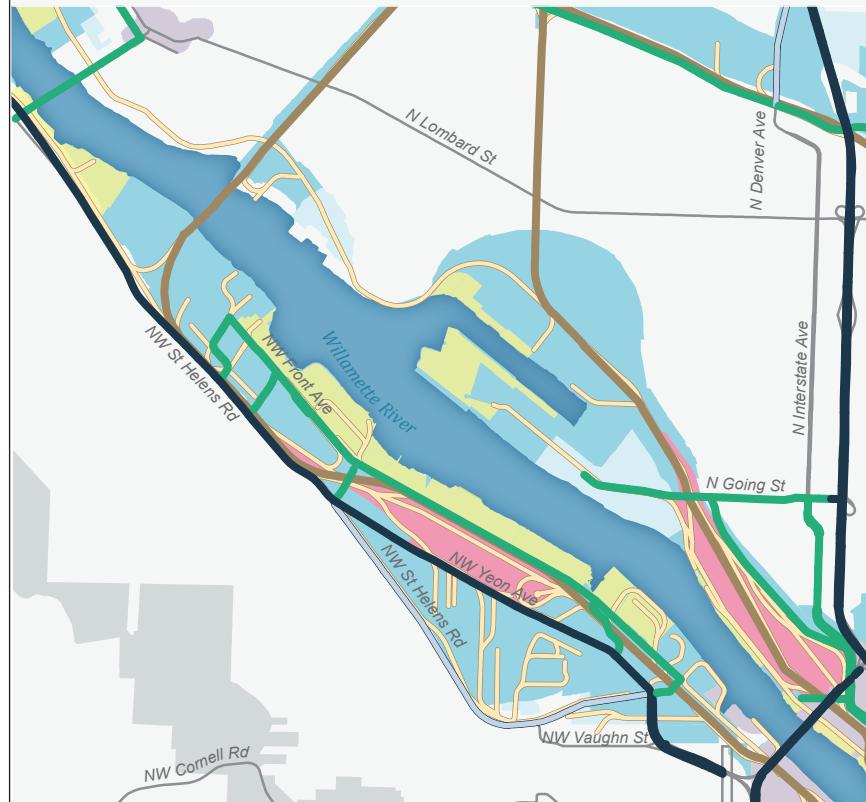
**Metro**



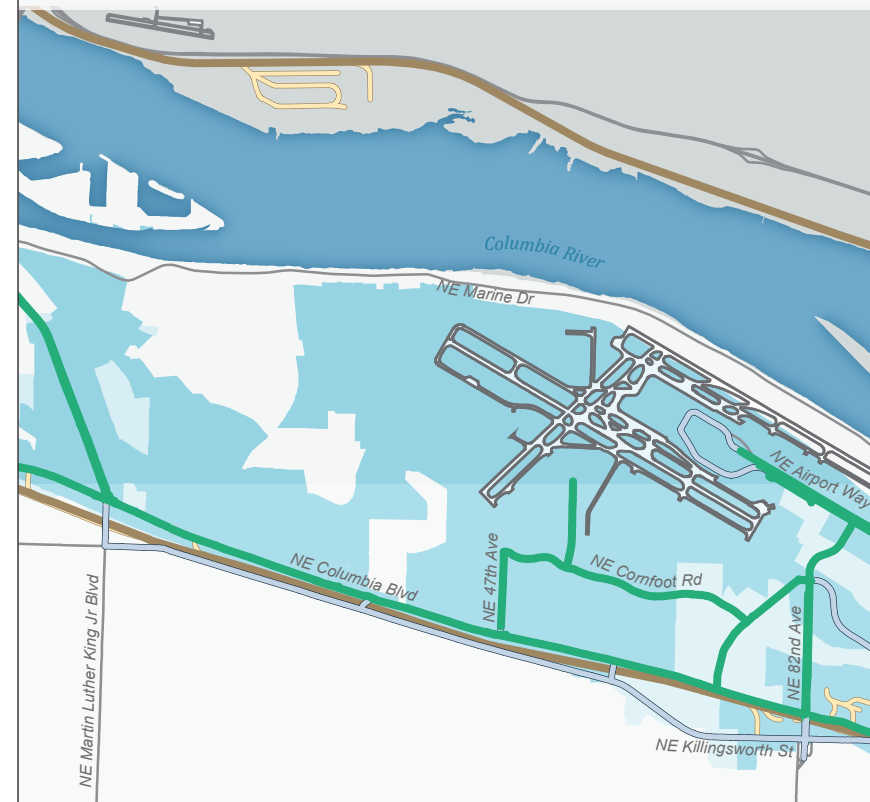
### 1. North Portland Marine Terminals



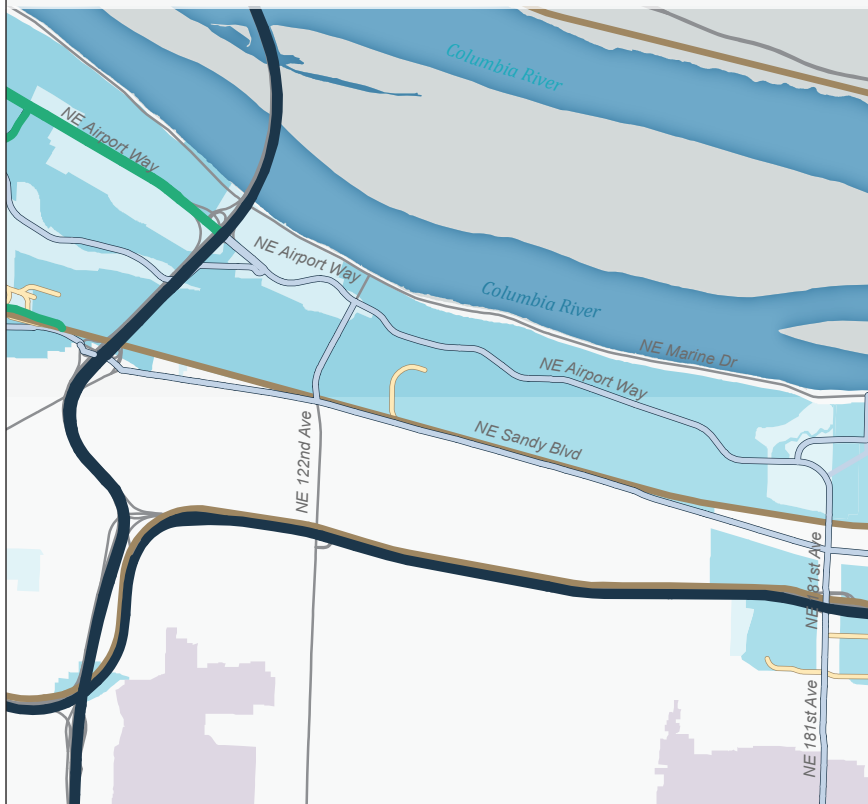
### 2. NW Industrial and Swan Island Areas



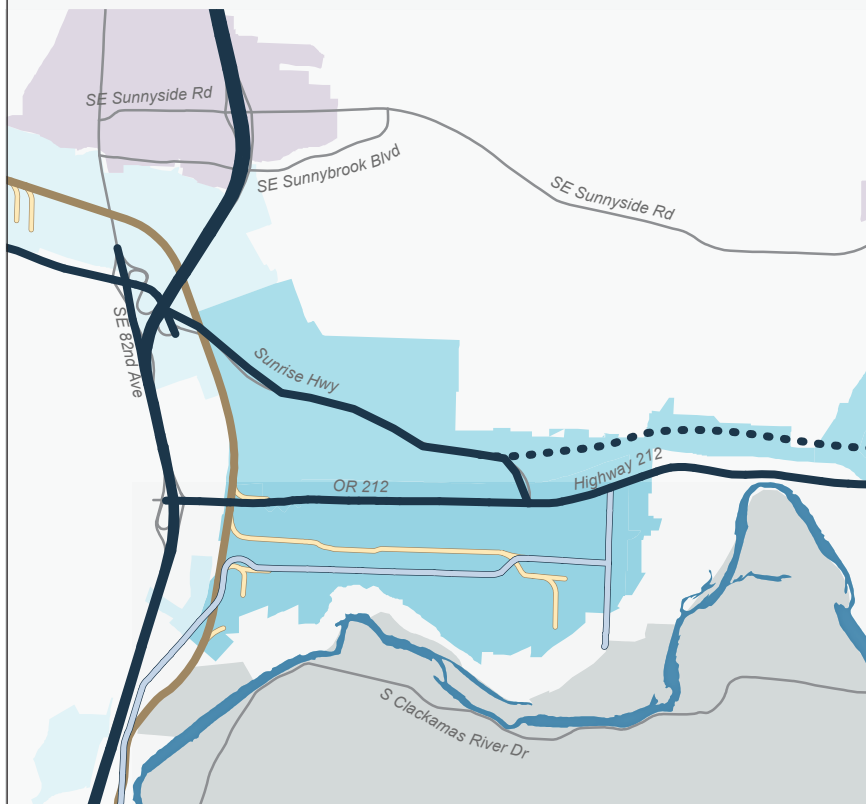
### 3. Portland International Airport + Air Freight



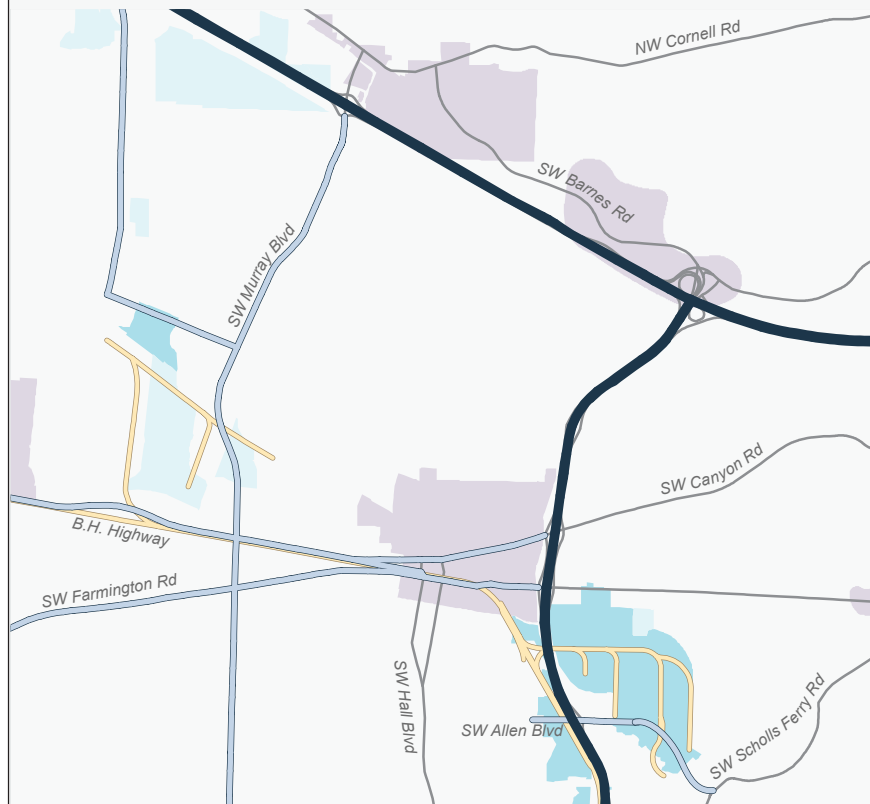
### 4. Kenton Rail Line / Columbia Corridor



### 5. Clackamas Industrial Area



### 6. Beaverton Industrial + Branch Rail Lines



### Legend

(dotted lines indicate planned projects, and do not identify specific alignments)

- Main rail lines
- Branch rail lines
- Main roadway routes
- Roadway connectors
- Regional intermodal connectors
- Marine facilities
- Rail Yards
- Employment
- Industry
- Urban Centers
- Urban Growth Boundary
- County Boundaries
- Airports

All insets adhere to the following scale:

**1 inch : 1 mile**

October 18, 2017

## 2.5 Regional Freight Network and Intermodal Connectors

National Highway System (NHS) intermodal connectors are roads that provide the “last-mile” connections between major rail, port, airport, and intermodal freight facilities and the rest of the National Highway System. NHS Intermodal Connectors are defined by the FHWA’s Freight Management and Operations as “roads that provide access between major intermodal facilities and the other four subsystems making up the National Highway System” (*footnote: FHWA Freight Management and Operations NHS Connectors*). The four subsystems are Interstates; Other Principal Arterials; the Strategic Highway Network; and Major Strategic Highway Connectors. NHS intermodal connectors account for less than one percent of total nationwide NHS mileage, but these roads are critical for the timely and reliable movement of freight. (*Footnote: US DOT Federal Highway Administration, Freight Intermodal Connectors Study, April 2017*)

### Oregon Freight Intermodal Connector System (OFICS) Study

The Oregon Freight Intermodal Connector System (OFICS) Study was completed by ODOT in April of 2017, and defined and identified freight intermodal terminals and intermodal connectors within the Portland region (and the rest of Oregon). Freight intermodal terminals are defined as facilities which provide for the transfer of freight from one freight mode to another. Examples include the NHS intermodal terminals such as Port of Portland’s Terminal 5 and Union Pacific’s Brooklyn Yard. Smaller intermodal terminals and businesses that use more than one freight mode onsite, along with the smaller intermodal terminals are defined as “Intermodal Terminals/Businesses” (ITB), and were identified by the study.

The OFICS Study identified the locations of new intermodal connectors using the following criteria:

- They must be a public road
- They must serve as a primary access between an ITB and a state highway or an existing NHS intermodal connector
- Be a maximum length of 5 miles unless a longer length is justified

A review of the existing NHS Intermodal Connectors was completed as part of the study. The review determined if the connectors still met the FHWA’s criteria for NHS Intermodal Connectors. All of the NHS Intermodal Connectors in the Portland region meet the NHS primary criteria of an average of 100 trucks in each direction per day.

Since a wide range of freight activity occurs on intermodal connectors, the study developed three tiers that sort the already recognized and new intermodal connectors by levels of importance. One of the main criteria for determining which tier an intermodal connector should be in is the average number of trucks per day on the intermodal connector. Sometimes this data was difficult to obtain so the study developed other criteria. The Tier 1 Primary Intermodal Connectors must meet the NHS Intermodal Connector criteria, which generally include:

- 50,000 TEUs/year or 100 trucks/day in each direction (*footnote: TEU is a Twenty-foot Equivalent Unit that is equal to a 20 foot shipping container*)

- Secondary Criteria: Connecting routes targeted by the state or MPO to address existing deficiency caused by increased traffic

The study defined Tier 2 Secondary Intermodal Connectors and Tier 3 Minor Intermodal Connectors (*footnote*). However, Metro determined that these intermodal connectors that don't meet NHS criteria, and have less than 100 trucks/day each direction or serve smaller ITBs, are not of regional significance and are not included on the Regional Freight Network map. The Regional Freight Network map includes the Tier 1 Primary Intermodal Connectors and designates them as Regional Intermodal Connectors.

The Tier 1 intermodal connectors are the highest level of connectors and are considered as the primary classification in Oregon. The majority of the state's and the Portland region's ITBs are served by the Tier 1 intermodal connectors. In the Portland region the Tier 1 intermodal connectors consist of 16 existing NHS intermodal connectors and 3 recommended additional intermodal connectors. The three additions meet the NHS Intermodal Connector Criteria, and ODOT will recommend to FHWA that these three additional intermodal connectors be designated as NHS intermodal connectors. These three additions are:

- North Rivergate Blvd. – between Terminal 5 and multiple ITBs, and N. Lombard St.
- North Leadbetter Road – a loop road south of Marine Dr. between the Terminal 6 access road and Portland French Bakery.
- NE Alderwood Road – between NE Cornfoot Road and Columbia Blvd.

### **Regional Intermodal Connectors**

It is important to understand the truck usage and performance of the region's tier 1 and NHS intermodal connectors since they have a direct impact on goods movement efficiency and the health of the region's economy. Marine terminals, truck to rail facilities, rail yards, pipeline terminals, and air freight facilities are the primary types of intermodal terminals and businesses that the tier 1 and NHS intermodal connectors are serving in the Portland Metro region. An example of a NHS intermodal connector is Marine Drive between the marine terminals (Terminal 5 and 6) and I-5; which in 2014 had over 4,100 average daily trucks. Another NHS intermodal connector is Columbia Boulevard between I-5 and OR 213 (82<sup>nd</sup> Avenue) which had over 3,500 average daily trucks and is a vital freight connection between the air-freight terminal at Portland International and both I-5 and I-205. Another example is NW Front Avenue/NW 26th Drive that provides a vital connection between the energy pipeline terminals (near NW 61<sup>st</sup>), and marine Terminal 2 and US 30, which had between 568 and 866 average daily trucks.

These Regional Intermodal Connectors are carrying many more trucks than the typical road connectors on the Regional Freight Network map. They are also of critical importance for carrying commodities that are being exported from and imported into the state and across the county.

### **3.1 Top general freight-related issues**

In 2009, Regional Freight and Goods Movement Task Force identified six problem areas to target: The task force targeted the following top issues from a broad perspective:

- congestion and hotspots – chronic road and rail network bottlenecks that impede regional freight/goods movement
- reliability – unpredictable travel time due to crashes, construction, special events and weather
- capacity constraints due to physical and operational issues as well as lack of capacity in critical corridors
- network barriers – safety concerns and out of direction travel resulting from weight-limited bridges, low bridge clearances, steep grades, at-grade rail crossings and poorly designed turns or intersections
- land use – system capacity and land for industrial uses that is being lost to other activities
- impacts – managing adverse impacts including diesel emissions, greenhouse gas emissions, water quality, noise and land use conflicts

In line with sound regional planning practice in the area, the RFGM task force believed that a systems approach must be taken in order to produce important outcomes such as reduced delay, better travel time reliability, safer travel across all modes and trip types, and broader shipping choices and better customer service to help area businesses remain competitive. Such an approach must also consider the economic context in which projects are built, and link transportation investment decisions to the local, regional and national economy.

In 2017, the Regional Freight Work Group reaffirmed that these six problem areas are the ones that need to be targeted.



## 3.2 Specific issue identification

The Regional Freight Work Group had open discussions at their meetings that served as the basis for identifying challenges affecting freight and goods movement on the designated Regional Freight Network. A summary of current constraints, challenges and opportunities to improve freight and goods movement (by mode) follows.

### Constraints and challenges on roadways and highways

- Increased congestion and congestion spreading over more hours per day on I-5 north of the Freemont Bridge (I-405).
- Capacity constraints exist at the Columbia River Bridge on I-5 that should be addressed.
- Constraints on roadway connections and intermodal connectors to I-5 are causing goods movement delays.
- I-5 at the Rose Quarter has been identified as a major traffic constraint.
- Highway 217 south of Beaverton-Hillsdale Highway has been identified as a major traffic constraint.
- Intra-county freight movements; such as high value commodities from Washington County that need to get to the air freight facility near PDX in Multnomah County, present a major challenge.
- Increased congestion and congestion spreading over more hours per day on US 26 (west of downtown Portland) create traffic constraints that cause trucks to avoid the freeway and travel out of direction on NW Cornelius Pass Road (north of US 26) and Highway 30 as an alternative route to avoid delays and unreliable travel times.
- For truck trips, NW Cornelius Pass Road has curvature and other design issues that need to be addressed.
- Increased demand for trucking on the region's freeway systems presents a major challenge to moving freight during congested hours.

### Constraints and challenges on and around rail lines

- Rail speed is slow, with some industrial trains that are a mile long (100+ cars), and at-grade railroad crossings cause major traffic impacts on the roadway system.
- Grade separating rail crossings at many more locations in the region presents a challenge. An example that was mentioned is the need for grade separation of the Union Pacific line as it crosses SE 8<sup>th</sup> Ave., SE Milwaukie Ave., and SE 12<sup>th</sup> Ave. (south of SE Division St.). The current at-grade crossings cause major delays to cars and trucks on the street network around these crossings in an active industrial area. This delay is amplified when freight trains and scheduled Light Rail Transit occur within a short time of one another.
- Freight rail demand on shared rail tracks at North Portland and Peninsula Junction is causing long delays to other freight trains and passenger trains (Amtrak). In 2017 the Oregon Transportation Commission approved an \$8.2 million Connect Oregon VI project for rail improvements at North Portland Junction. However, improvements at Peninsula Junction were not included in this project.
- The Union Pacific Kenton Line that runs adjacent to Sandy Boulevard needs some double-tracking to address rail capacity constraints.

- There is an opportunity to address the issue of double-tracking with the Kenton Rail Line Study.
- Short term need for speed improvements to the Union Pacific Railroad line just north of the Steel Bridge river crossing. The current train speeds are 6 mph in the curves and would require a realignment of the tracks to improve speed.
- Capacity constraints on major rail lines in the region may require consideration of more double-tracking to: 1) improve freight train reliability; and 2) provide staging locations for freight trains off-line of the Seattle/Portland/Eugene passenger train corridor.

### **Constraints and challenges around air freight**

- Providing increased access to the Portland Airport (PDX) and consolidation facilities is challenging. Air freight demand will grow as the area's population grows.
- The US Post Office has moved to NE Cornfoot Road near PDX. Increased truck demand, construction project impacts and overall traffic in the airport area will be challenging.
- The Westside Logistics Study showed computer and electronics shipments face constraints get to the air freight facility on Air Trans Way, with congestion and reliability issues on US 26 (Sunset Highway) causing delays and other freight routing to get to east Portland.

### **Constraints and challenges around energy pipelines**

- Pipelines that supply fuels and other energy sources to the region are clustered along the Willamette River in the NW Portland Industrial area face the costs and challenges of retrofits for seismic resiliency.
- There are also challenges with providing seismic retrofits for resiliency on the regional freight system.

### **Constraints and challenges for Marine/River (ships and barges)**

- Providing more marine terminal space could be challenging.
- Deepen the Willamette River Channel for shipping has high costs and environmental challenges.
- There is a need to restore full container service at Terminal 6. The impacts and short term challenges for commodity movement and freight modal changes have been addressed by ODOT and the Port of Portland.
- The barges on the Columbia River cause the lift span on the I-5 Bridge to open when the river rises over six feet. There have been some years with nine months of high water.
- The location of the narrow opening of the railroad bridge (adjacent to the I-5 Bridge) makes for a difficult s-curve maneuver of barge traffic on the Columbia River that comes under these two bridges without lifting the I-5 Bridge. Barge safety is a major concern at this location. Barge traffic must avoid causing I-5 bridge lifts during peak traffic periods. During high water bridge lifts on I-5 cause major traffic delays even during off-peak hours.
- There is a need to restore operations of the Willamette Falls Locks to expand freight traffic on the Willamette River and reduce demand for trucks on the highways coming into the region. The historic Willamette Falls Locks in West Linn "were built in the early 1870s to move river traffic around the 40-foot horseshoe-shaped basalt ridge between Oregon City

and West Linn” (US Army Corps of Engineers website). Since December 2011, the Willamette Falls Locks have been in a “non-operational status”.

In 2009, the Regional Freight and Goods Movement Task Force, developed a list of key issues that the Regional Freight Strategy should continue to address.

Table 3.1, below, provides a categorized list of the key issues and needs.

**Table 3.1. Priority issues for freight**

Issue category	Key issues
<b>Mobility and accessibility</b>	<ul style="list-style-type: none"> <li>• Road congestion on regional truck routes</li> <li>• Travel time reliability on regional truck routes</li> <li>• Accessibility between intermodal terminals, industrial areas, centers and the interstate highway system</li> <li>• Class 1/short line rail – throughput and velocity, capacity constraints in rail yards, sidings</li> <li>• Improved rail access and service for regional shippers</li> <li>• Barriers: weight/vertical clearance issues on bridges; gaps in connectivity (new roads/bridges)</li> <li>• Safe barge navigation in I-5/BNSF bridges area</li> <li>• At-grade rail crossings – grade separation</li> <li>• River channel deepening</li> </ul>
<b>System management</b>	<ul style="list-style-type: none"> <li>• Preservation and efficient use of existing capacity</li> <li>• Intelligent Transportation System tools (signal timing, cameras)</li> <li>• Access management</li> <li>• Increase in truck crash rate</li> <li>• Faster response to roadway incidents (crashes)</li> <li>• Truck parking: hours of service limitations</li> <li>• Efficient loading/unloading operations in commercial centers</li> <li>• Advances in traveler information (road conditions, directional signage)</li> <li>• Workforce access to industrial and employment areas</li> <li>• Maintenance dredging and Willamette Falls Locks repair</li> <li>• Rail system management (directional running, grade crossing info)</li> <li>• Modal redundancy</li> </ul>

<b>Issue category</b>	<b>Key issues</b>
<b>Land use</b>	<ul style="list-style-type: none"> <li>• General population growth and impacts to transportation system</li> <li>• Competition between industrial and other uses for interchange capacity</li> <li>• Adequate supply of industrial land served by transportation system (i.e., marine accessible)</li> <li>• Incompatible land uses along rail lines and major truck corridors</li> <li>• Accommodation of truck delivery in pedestrian-friendly areas and corridors (street design trade-offs)</li> </ul>
<b>Environment</b>	<ul style="list-style-type: none"> <li>• Air quality impacts from diesel engine emissions</li> <li>• Residential noise impacts from truck, rail and air cargo operations</li> <li>• Water quality</li> </ul>
<b>Investment strategies</b>	<ul style="list-style-type: none"> <li>• Link transportation investment decisions to regional, state and national economy.</li> <li>• Expand types and amounts of funding for infrastructure and programs (i.e., gas tax indexing, user pays cost responsibility).</li> <li>• Use public-private partnerships to fund improvements.</li> <li>• Create a role for the public sector in funding private operations.</li> <li>• Use a building block approach to fix corridors (i.e., ITS first, then graduate to other solutions).</li> <li>• Incorporate lifecycle cost (maintenance) into project.</li> </ul>
<b>Coordination</b>	<ul style="list-style-type: none"> <li>• Create better coordination between freight system stakeholders in the region.</li> <li>• Educate decision makers and public about importance of region's freight transportation system.</li> <li>• Consider rail service needs for regional shippers.</li> <li>• Consider freight/goods movement needs in project development.</li> </ul>
<b>Research and data</b>	<ul style="list-style-type: none"> <li>• Freight system performance over time</li> <li>• Ongoing truck count program</li> <li>• Economic impact assessments of investments</li> </ul>

In 2017, the Regional Freight Work Group reaffirmed that this list of key issues has the appropriate categories and issues that the Regional Freight Strategy should continue to address.

## Regional Freight Rail Study

Metro Council adopted the Regional Freight Plan as part of the Regional Transportation Plan in June, 2010. The RTP included a Regional Freight Plan, which called out a need for a regional freight rail strategy, and an economic development/industrial development strategy that would guide project development and implementation for all freight modes, including rail.

## RFFA Regional Strategy Development for Regional Freight/Passenger Rail

As part of the Regional Flexible Fund Allocation (RFFA) regional strategy development, Metro provided a description, project objectives and expected outcomes for a Regional Freight/Passenger Rail Investment Strategy.

The regional freight/passenger rail investment strategy that was proposed, would pivot off the findings of the Port of Portland Rail Plan (completed in September 2013), and work in tandem with the Oregon State Rail Plan (completed September 2014). The regional freight/passenger rail investment strategy calls for a refined scope of work that could include:

- **Market analysis to focus rail strategy work efforts.** This could pivot off and expand the work of the Port of Portland, and would engage shippers, carriers and operators to identify economically viable opportunities to expand freight rail's role in regional economic development.
- **Address rail access for local shippers.** The need for addressing access to the Class I freight rail and Shortline networks to support local industrial land uses was identified in the Business Interview Results of the Working Harbor Reinvestment Strategy which identified "overcommitted rail as the most pressing competitive need." This study was conducted by the Portland Development Commission, the Portland Bureau of Planning and the Port of Portland, which conducted interviews with 25 businesses and four focus groups in Portland Working Harbor area which includes the Rivergate, Swan Island, Lower Albina and Northwest Industrial Districts.
- **Address regional freight and passenger rail needs in shared corridors.** A fast-emerging issue central to those identified above is the need to prevent conflict between freight and passenger needs on a near-capacity system. The integrated evaluation of freight and passenger rail transportation, community and economic development and land use must occur at all scales within the Pacific Northwest. Application of a regional lens to these issues is important to achieving Metro's 2040 regional land use goals, which must be supported by non-roadway passenger travel opportunities, as well as the need for a robust economy supported by well-planned freight infrastructure.
- **Develop a funding strategy.** Promote stable and sufficient funding for the publicly supported elements of the passenger and freight rail systems. Among the goals of this strategy will be maximum leveraging of private funds for rail investment.
- **Stakeholder engagement.** To accomplish all these goals, we need accurate and relevant information and close collaboration between agencies and jurisdictions, between the

operators (Class 1, regional rail, short lines and passenger transit) and between public and private sectors.

### **Regional Freight/Passenger Rail Study Objectives and Expected Outcomes**

The study should seek to identify and produce increases in rail capacity, safety, land use compatibility and operational efficiencies; which is important to our long-term economic and environmental sustainability, and will help to maintain the region's competitive advantage in a global marketplace.

Some of the potential outcomes of the proposed study are:

- Identification of economically viable opportunities to develop short line intermodal hubs or logistics parks or other cargo-oriented development
- A strategy to identify, develop and position top projects for confirmed and potential future federal and state funding, as appropriate, including
  - An updated, re-prioritized list of regional freight rail projects focused on improving capacity constraints and targeting industrial access to the rail networks;
  - A funding strategy for regional freight/passenger rail bottlenecks
  - A strategy to fund needed grade separations
  - A strategy to fund critical modernization projects on the short rail lines

Fact-based guidance for stakeholders to use in negotiating claims over passenger/freight conflicts, balancing passenger and freight goals, and a viable set of solutions and initiatives to meet those goals;

- Regional guidance for public/private investment partnerships to guide investment of regional and national pots of money in identifying and developing freight rail corridors of local, regional and national significance; and
- Specific guidance for local jurisdictions as they develop their transportation system plans (TSPs) in order to avoid or minimize conflicts, and preserve or enhance the functionality of rail facilities and connected industrial land uses

On January 22<sup>nd</sup> 2015, Metro staff called a meeting with staff from City of Portland, Clackamas County, Multnomah County, Washington County, Port of Portland, ODOT Region 1, ODOT Rail, and a local rail expert, to discuss the potential need and purpose for a Regional Freight/Passenger Rail Study.

The Port of Portland Rail Plan had concentrated on Class 1 railroad lines and was focused on the Port of Portland interests, especially the Port terminals. The Port's plan was not focus much on the short lines and other non-Class 1 railroad lines that run in Clackamas County (west of the Willamette River) and Washington County. The Port's plan identified grade separations as a key strategy to address capacity and safety, including projects along the Kenton Line (Class 1 railroad line) in Portland and Multnomah County.

It was suggested that the study should examine the issue of long trains (up to 7,000 feet long) that take a long time to separate and store the cars when accessing Portland inter-modal terminals due to a lack of storage capacity.

Clackamas County staff suggested that the study address freight rail and passenger rail within Clackamas County and Washington County. Clackamas County staff thought the study should look at improved short line service and providing sufficient freight rail service on the Brooklyn rail line.

Washington County staff stated that the county has shown interest in potential expansion of service and improving speeds with double-tracking some areas on the Portland Western railroad line. Washington County staff identified three areas for the study to consider: 1) Better understanding of existing and future private rail operations in Washington County; 2) Future added service on the WES commuter rail line; 3) Pedestrian crossing improvements to enhance safety at railroad crossings.

City of Portland staff suggested that the study look at a regional strategy for how and when to partner with private railroads to address funding of rail projects.

ODOT Rail staff suggested that any study of rail capacity needs should consider operational improvements, and not just infrastructure expansion.

The group agreed that the study should move forward after the completion of the Regional Over-Dimensional Truck Route Study, and that the input received at this meeting should be considered by Metro in the scoping and budgeting for this study.

## **Regional Freight Delay and Commodities Movement Study**

The purpose of the study would be to evaluate the level of commodity movement on the regional freight network within each of the mobility corridors identified in the Regional Transportation Plan's Mobility Corridor Atlas. The study would use Metro's new truck model to summarize the general types of commodities, the tonnage of the commodities and the value of the commodities that are using these freight facilities within each of the mobility corridors.

Some of the potential outcomes of the proposed study are:

- Developing a methodology for determining which freight facilities and mobility corridors are carrying the highest tonnage of goods and commodities, and the highest amount of value for those commodities.
- Based on the tonnage and value of the goods and commodities carried in each corridor, a measure could be developed for which corridors should be prioritized for transportation projects based on their importance for freight and economic value.
- Based on the congestion and unreliability found in each of the mobility corridors, transportation projects could be developed and prioritized for corridors that have the most importance for freight and economic value.
- The study would likely utilize a new freight monitoring measure for reliability and the evaluation measures for cost of delay on the freight network, and freight access to industrial land and intermodal facilities (being developed as part of the current RTP update).
- Recommend prioritized freight projects for the next RTP and Regional Freight Plan based on the new freight measures, congestion, unreliability, and the highest tonnage and value of commodities within each mobility corridor.



## **4 FREIGHT GENERATION IN THE REGION**

### **4.1 Manufacturing, warehousing and distribution**

The Portland metro region is home to a number of traded sector firms engaged in a broad array of activities. These firms bring wealth from outside the local economy into the region, helping communities to prosper. All of these enterprises have unique goods movement needs, some local, others national or international.

Unlike many areas of the country which have witnessed a substantial decline in manufacturing/industrial employment, the region has experienced some fluctuations, but overall growth in the trade-related sector of the economy during the last 15 years. This has created a need to efficiently deliver the materials needed for production (domestically and internationally) and to cost effectively ship finished products. Manufacturers in the region assemble products from components delivered from around the globe and ship components for assembly internationally. The mobility needed to support commerce in the region is as diverse as the commerce itself.

Manufacturers and shippers from throughout Oregon and Southwest Washington depend on the Portland metro region's warehousing, distribution, logistics, customs and multimodal goods movement infrastructure to move raw materials, semi-finished and finished products. In the summer of 2017, there were more than 92,000 jobs in Transportation, Warehousing, and Wholesale Trade, within the 7 county, Portland-Vancouver-Hillsboro Metropolitan Statistical Area (MSA). In the trade-related sector (includes manufacturing, wholesale, retail, transportation and warehousing) the total in 2017 rises to about 337,000 jobs within the same MSA. (*Source: Current Employment Statistics (CES) Nonfarm data*).

These activities are spread throughout the region, with concentrations in Rivergate, the Columbia Corridor, Sunset Corridor, Swan Island, Clackamas-Milwaukie, Springwater-Damascus, inner Eastside, North Wilsonville-Tualatin-Sherwood, Beaverton-Tigard, Beaver Creek and Northwest Portland industrial areas.

### **4.2 Port activities**

In 2016 the ports of Portland and Vancouver hosted nearly 1,000 ocean-going ships. The Port of Portland alone hosted 678 ships that year. These vessels transported almost 14 million short tons of cargo to and from public and private facilities located in the Portland-Vancouver Harbor. Another 6.1 million tons of inland barge cargo also moved through these facilities. In total, \$14 billion in foreign trade moved through Portland Harbor in 2016. Much of this cargo is transported beyond the Portland metropolitan area, through key truck and rail corridors.

In addition, the Port of Portland operates the largest international airport in Oregon. It is the hub for the vast majority of air freight activity in the Portland metro region, western Oregon and Southwest Washington. Approximately 231,298 tons of domestic and international air freight shipped through Portland International during 2016.



Metro

# **Regional Freight Strategy – Update on Chapters 1-4**

Presentation to Regional Freight Work Group,  
October 18, 2017

Tim Collins, Senior Transportation Planner

# Meeting Purpose

- Update Regional Freight Work Group on draft of Chapters 1-4 of Regional Freight Strategy
- Review and get input on new freight safety policy, draft Regional Freight Network map, and freight related issues
- Discuss future regional freight studies

# Background

- 2018 Regional Freight Strategy updates and replaces 2010 Regional Freight Plan
- Regional Freight Strategy defines a vision for enhancing freight and goods movement

# Draft Table of Contents

- Yellow highlights indicate areas of new information or significant revision from 2010 freight plan
- Sections 1.1 to 1.4 are common to all the new RTP modal plans and will be added soon
- Today's meeting will focus on Chapter 2 and 3
- Chapters 5 thru 10 will be covered at our November 20<sup>th</sup> Freight Work Group meeting

# History of Regional Freight Plan

- 2010 Reg. Freight Plan guided by Metro Council appointed 33-member task force
- 2010 Regional Freight Plan provided implementation strategies
- Primary charge of Regional Freight Work Group has been four-fold.

# Regional Freight Network Concept and Policy

Five current freight policies:

- Use a systems approach to plan and manage the freight network
- Reduce delay and increase reliability
- Protect industrial lands and freight transportation investments
- Look beyond the roadway network to address critical marine and rail needs
- Pursue clean, green and smart technologies and practices

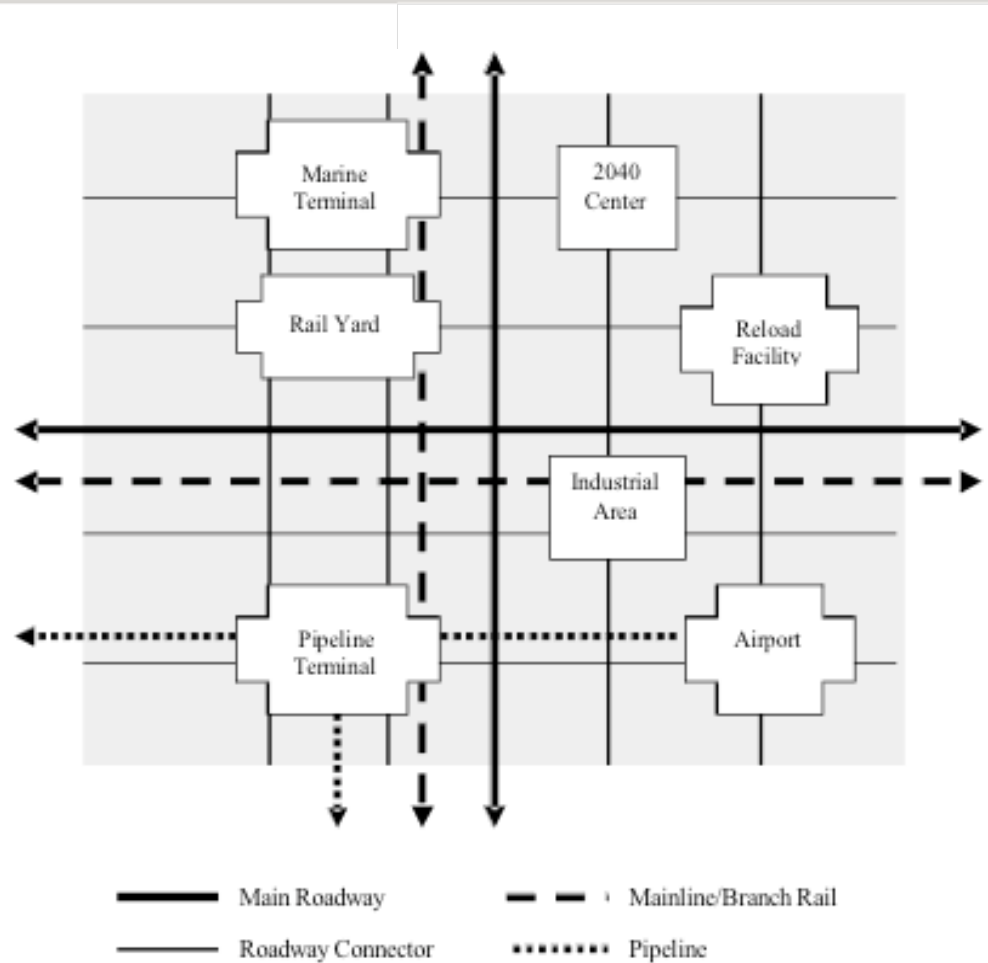
# Metro Council recommended Freight Safety Policy

- Metro Council recommended adding a sixth freight policy for safety
- Metro staff developed the following draft regional freight safety policy:
  - Prioritize roadway and freight operational safety to eliminate fatalities and serious injuries caused by freight vehicle collisions with autos, bicycles, and pedestrians.



# Regional Freight Network Concept

RTP defines a vision and supporting policies to guide investments in the multimodal regional freight network.



# Updating the Regional Freight Network Map

Regional Freight Network map has major updates from 2014 RTP

- Main roadway routes and road connectors are more visible
- 11 x 17 inch map enhances readability
- Six new inset maps on the back of main freight map
- New freight roadway designation for Regional Intermodal Connectors

# Regional Freight Network and Intermodal Connectors

- NHS intermodal connectors are roads that provide the “last-mile” connections between major rail, port, airport, and intermodal freight facilities and the rest of the National Highway System
- Regional Intermodal Connectors are carrying many more trucks than the typical road connectors on the Regional Freight Network map
- They are of critical importance for carrying commodities being exported from and imported into the state and across the county

# OFICS Study and Regional Intermodal Connectors

- OFICS study purpose was to define and identify freight intermodal terminals and intermodal connectors for the whole state
- OFICS study developed three tiers that sort the already recognized and new intermodal connectors by levels of importance
- Only NHS intermodal connectors and Tier 1 OFICS roadways are considered Regional Intermodal Connectors
- The Tier 1 Intermodal Connectors must meet the NHS Intermodal Connector criteria which include:
  1. 50,000 TEUs/year or 100 trucks/day in each direction
  2. Connecting routes targeted by the state or MPO to address existing deficiency caused by increased traffic

# Top general freight-related issues

## The RFGM task force targeted the six top freight issues:

- Congestion and hotspots – roadway and rail bottlenecks
- Reliability – unpredictable travel time due to crashes, construction, special events and weather
- Capacity constraints due to physical and operational issues
- Network barriers – safety concerns and out of direction travel due to weight-limited bridges, low bridge clearance, and other barriers
- Land use – capacity and industrial land being lost to other activities
- Environmental impacts – manage diesel and greenhouse gas emissions, water quality, noise and land use conflicts

# Specific freight issue identification

- Regional Freight Work Group (RFGW) identified challenges, constraints and opportunities by freight mode (truck, rail, air freight, etc)
- RFGM Task Force identified a list of key freight issues and needs by issue categories (mobility/accessibility, system management, land use, environment, etc)
- Asking RFGW to reaffirm that these key freight issues should continue to be addressed

# Future Regional Freight Studies – Regional Freight Rail Study

- Study would identify potential increases in rail capacity, safety, land use compatibility, and operational efficiencies

## **Potential outcomes of the proposed study:**

- Identify opportunities to develop short line intermodal hubs or logistics parks or other cargo-oriented development
- A strategy to identify, develop and position top projects for confirmed and potential future federal and state funding

*Staff from Portland, Clackamas County, Multnomah County, Washington County, Port of Portland, and ODOT have agreed that this study should move forward*

# Future Regional Freight Studies – Regional Freight Delay and Commodities Movement Study

- Purpose of the study would be to evaluate the level of commodity movement on the regional freight network

Potential outcomes of the study are:

- Determine which freight facilities have the highest value and tonnage of commodities
- Based on value and tonnage of commodities, develop a measure to identify corridors to prioritize for projects
- Utilize new freight measures for reliability, cost of delay and freight access to industrial land and intermodal facilities
- Recommend prioritized freight projects for next RTP and Regional Freight Strategy



# Future Regional Freight Studies – other potential studies

## **Brief work group discussion on the need for other potential studies**

- Kenton Rail Line Study
- Willamette River Channel Deepening Study

# Next Steps

- Work group to provide comments on 1.6 Jobs and infrastructure and 3.3 Key freight studies by October 27, 2017
- Review RTP freight projects for Regional Freight Strategy
- Review draft of Chapters 5 thru 10 of the Regional Freight Strategy (available for November 20 Freight Work Group meeting)
- MTAC and TPAC review of draft Regional Freight Strategy (December 2017)

# Questions / Comments?

- Does Regional Freight Work Group have any comments related to freight and goods movement to address as part of chapters 1 to 4 of the Regional Freight Strategy?
- Email [tim.collins@oregonmetro.gov](mailto:tim.collins@oregonmetro.gov) with any feedback