



# Freight Master Plan

Advisory Committee Meeting  
August 27, 2015

# Overview

- Freight network
  - Purpose
  - Criteria
  - Address Advisory Committee comments
- Safety issues and bottlenecks
- Performance measures



# Purpose of freight network

- Define freight corridors
- Help direct freight investments
- Develop associated design guidelines

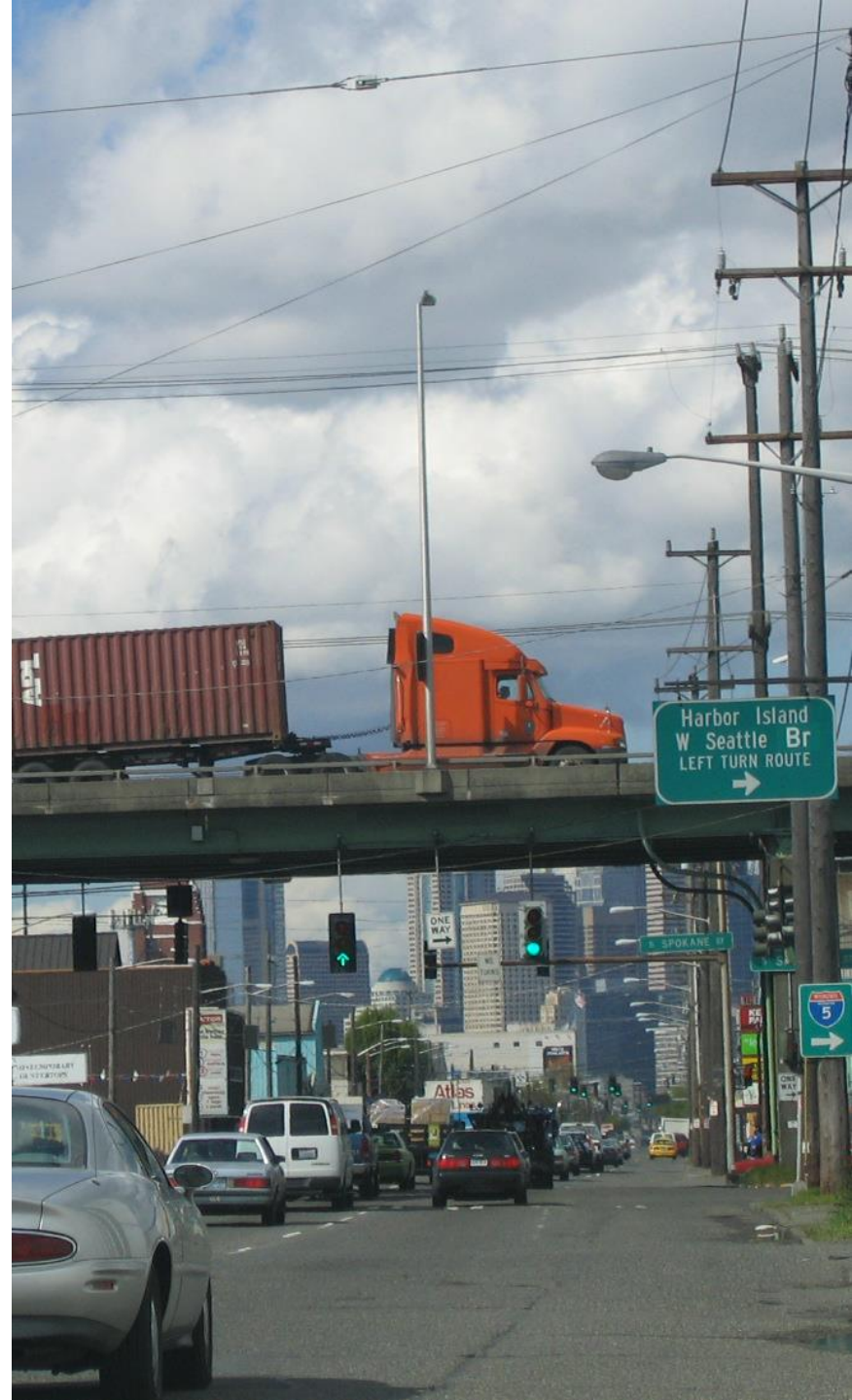


# Refresher: Freight network criteria

Criteria	Limited Access Facility	Major Truck Street	Minor Truck Street	First/Last Mile Connectors
Functional Purpose	Long Distance Trips	Through Trips	To/From	Industrial Trips
Supports Freight-Generating Land Uses	Primary connections between industrial centers and the rest of the region	Main connections between industrial land use (Manufacturing Industrial Centers and intermodal terminals)	Provides connections between urban villages; commercial distribution network	Access to industrial uses
Roadway Classification	Highway	Minor arterial or higher	Minor arterial or higher	Minor arterial or lower
Truck Volume	All Volumes	500+ trucks per day	500+ trucks per day	250+ trucks per day

# Address comments on draft network

- Comments fell into 2 categories
  - Changes to proposed network designation
  - Segment additions to the network
- See handout



# Assess network performance

- Identify safety issues and bottlenecks
- Used to define future freight improvement locations



# Step 1: Identify safety issues

- Reviewed 5-years of truck collision data
- Focused on locations with fatalities and 6 or more truck collisions



# Step 2: Identify bottlenecks

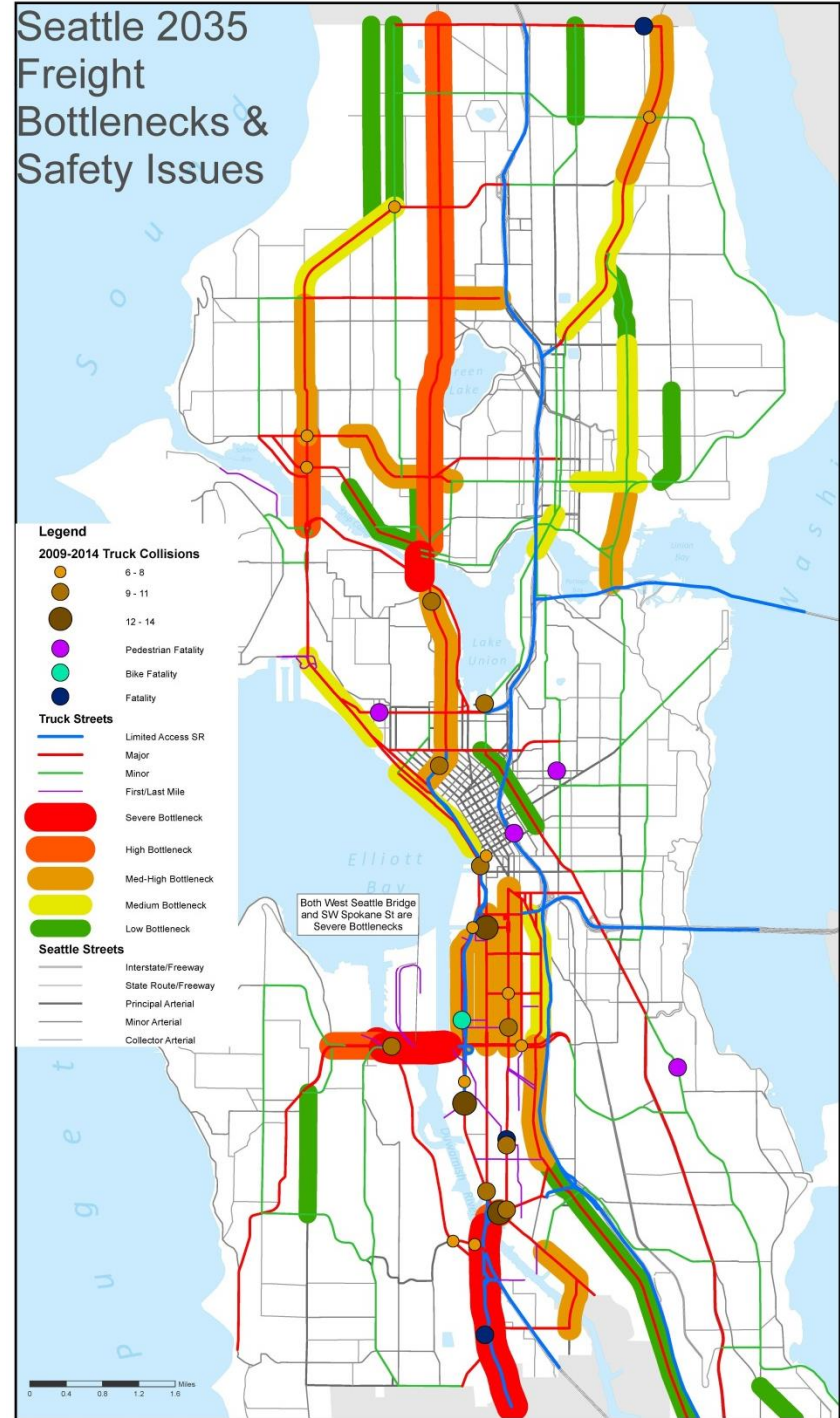
- Bottleneck areas were identified and stratified based on future 2035 truck volumes and general congestion levels

		Congestion (volume to capacity ratio)		
		Low From 0.90 to 1.05	Medium From 1.05 to 1.20	High 1.20+
Truck volumes (per day)	Low <1000	Low	Medium	Medium-high
	Medium 1000-1999	Medium	Medium-high	High
	High 2000+	Medium-high	High	Severe (Very High)



# Step 3: Map it!

- Severe (Very High)
  - ✓ Fremont Bridge
  - ✓ S Spokane Street
  - ✓ West Seattle Bridge
  - ✓ First Ave S Bridge
- High
  - ✓ Aurora Ave N
  - ✓ Ballard Bridge (to NW Market)
- Medium-High
  - ✓ Lake City Way NE
  - ✓ N 85<sup>th</sup> St
  - ✓ N 46<sup>th</sup> St
  - ✓ Montlake Blvd NE
  - ✓ Montlake Bridge
  - ✓ Aurora Ave N (south of ship canal)
  - ✓ E Marginal Way
  - ✓ 1<sup>st</sup> Ave S
  - ✓ 4<sup>th</sup> Ave S
  - ✓ Airport Way S
  - ✓ 16<sup>th</sup> Ave S
  - ✓ 15<sup>th</sup> Ave NW (Market to Holman Rd)



# Performance Measures

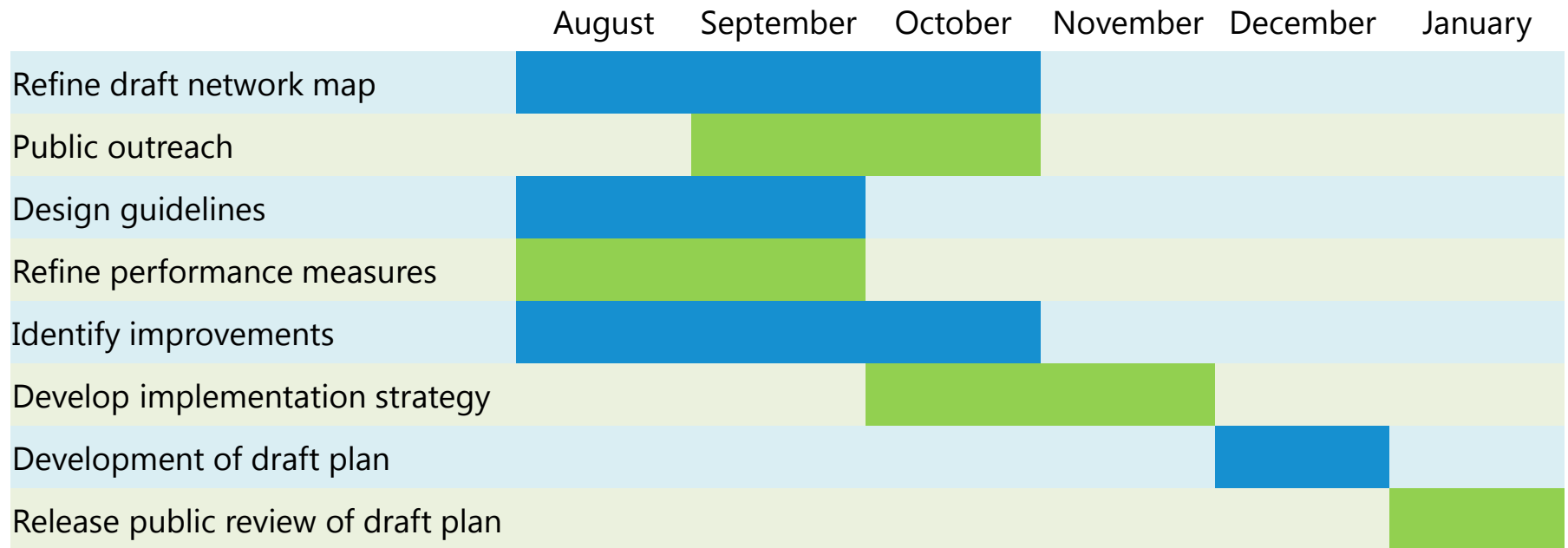
- Evaluate freight system performance over time
- To be effective, measures need to:
  - Be meaningful to stakeholders
  - Assess progress towards desired outcomes
  - Be feasible with anticipated data and resources
- Considered federal, state, and best practices guidance



# Potential performance measures

Category	Goal	Potential Performance Measures
Safety	Improve safety and the predictable movement of goods and people.	<ul style="list-style-type: none"> <li>• Truck collision rates</li> <li>• Collision history</li> </ul>
Mobility	Reliably connect manufacturing/industrial centers and business districts with the local, state, and international freight networks	<ul style="list-style-type: none"> <li>• Volumes and vehicle classifications</li> <li>• Speed</li> <li>• Travel time</li> <li>• Buffer index (cost of congestion)</li> <li>• Truck load zone count</li> </ul>
Economy	Provide a freight network that supports a growing economy for Seattle and the region	<ul style="list-style-type: none"> <li>• Buffer index (cost of congestion)</li> </ul>
State of Good Repair	Maintain and improve the freight transportation network to ensure safe and efficient operations.	<ul style="list-style-type: none"> <li>• System constraints               <ul style="list-style-type: none"> <li>◦ Weight and height restrictions</li> <li>◦ Signal, ITS</li> </ul> </li> <li>• Pavement rating on truck freight network</li> </ul>
Equity	Benefit residents and businesses of Seattle through equity in freight investments and improve the health of communities impacted by freight movement	<ul style="list-style-type: none"> <li>• Investment in freight projects (including mitigation)</li> <li>• Tree canopy</li> <li>• Noise complaints</li> </ul>
Environment	Improve freight operations in Seattle and the region by making goods movement more efficient and reducing its environmental footprint	<ul style="list-style-type: none"> <li>• Congestion/delay- from speed and travel time</li> <li>• Companies participating in EPA SmartWay program</li> <li>• Citywide air quality</li> </ul>

# Next steps



# Questions?

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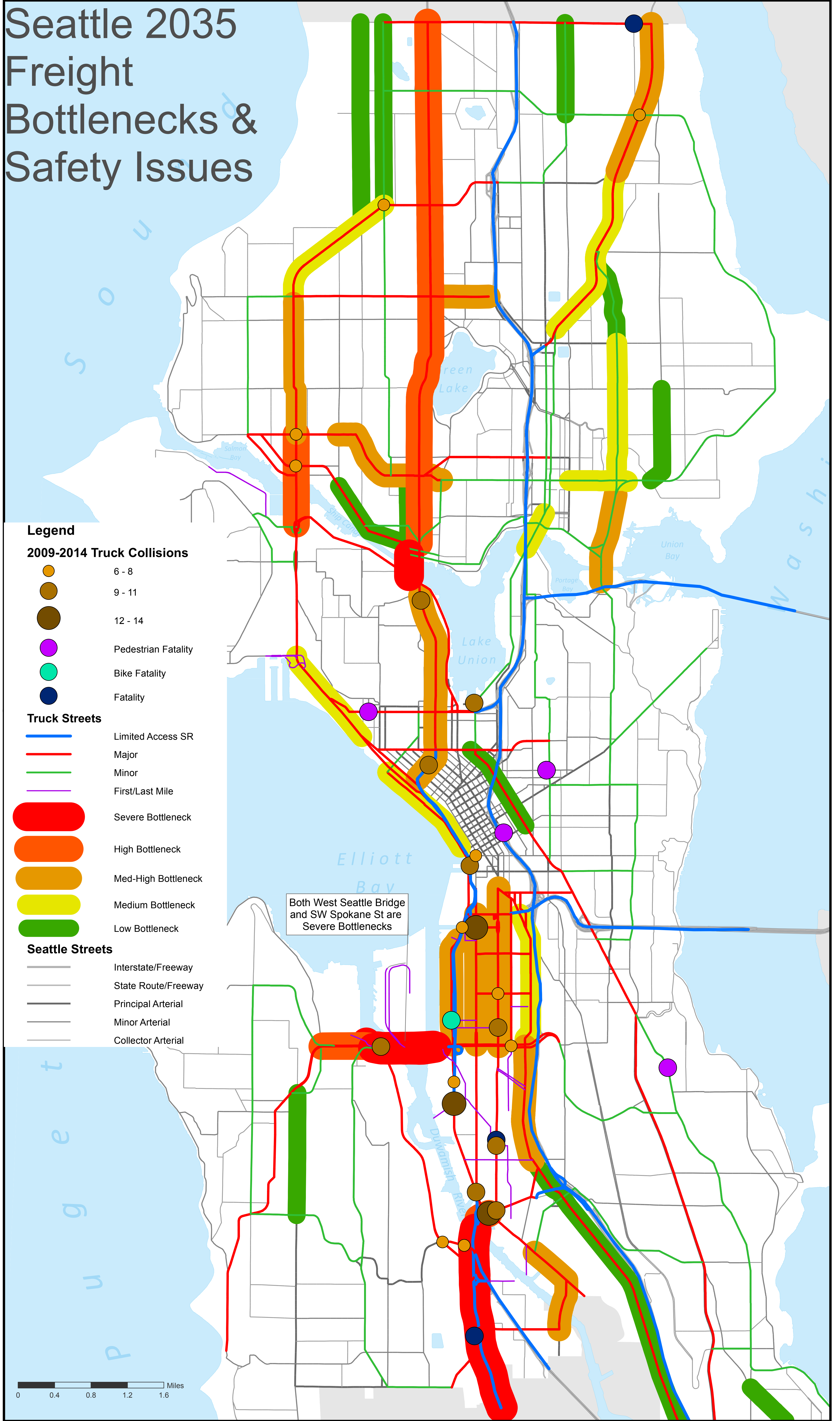
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[http://www.seattle.gov/transportation/freight\\_fmp.htm](http://www.seattle.gov/transportation/freight_fmp.htm)

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# Seattle 2035 Freight Bottlenecks & Safety Issues



## Legend

### 2009-2014 Truck Collisions

- 6 - 8
- 9 - 11
- 12 - 14
- Pedestrian Fatality
- Bike Fatality
- Fatality

### Truck Streets

- Limited Access SR
- Major
- Minor
- First/Last Mile

- Severe Bottleneck
- High Bottleneck
- Med-High Bottleneck
- Medium Bottleneck
- Low Bottleneck

### Seattle Streets

- Interstate/Freeway
- State Route/Freeway
- Principal Arterial
- Minor Arterial
- Collector Arterial

Both West Seattle Bridge and SW Spokane St are Severe Bottlenecks

