Seattle Industrial Areas Freight Access Project

Summary of Future Conditions

Image Credit: Port of Seattle

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Freight Advisory Board
June 17, 2014

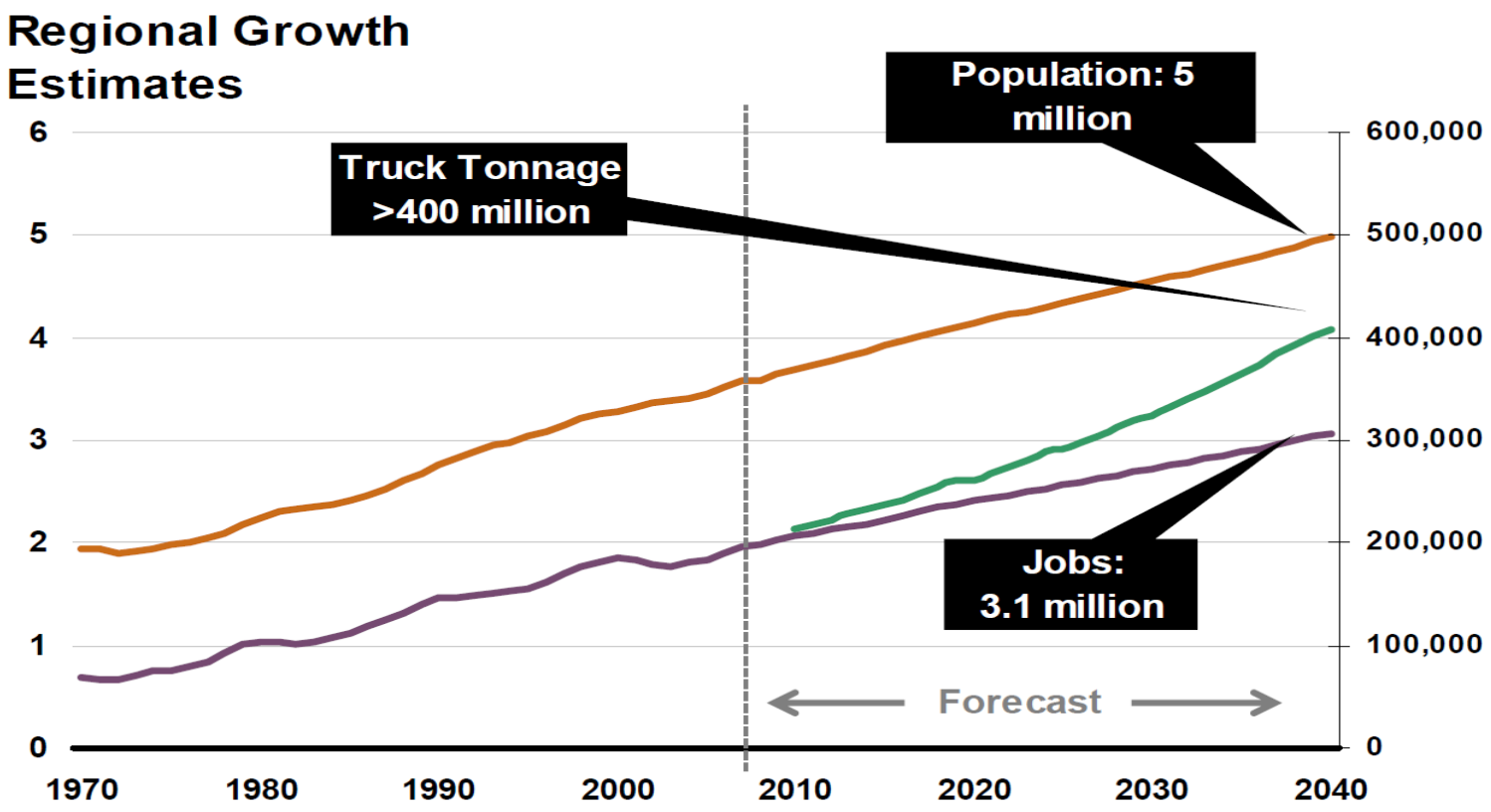
Port of Seattle®

SDOT
Seattle Department of Transportation

Presentation overview

- What drives future traffic growth – overview of assumptions
- Changes to the transportation network – assumed improvements
- Forecast traffic volumes along key corridors
- Next steps
- Questions

Regional growth and truck tonnage



[4] PSRC, Washington State Department of Employment Security

Future travel demands

- Population and employment are expected to grow by more than 25% by 2035
- Future travel demand will grow with population and economic activity
- Vehicle trips will not grow as significantly due to transit expansion and tolling
- Truck activity will grow faster than regional traffic
- Street network will remain much the same except for programmed projects and SDOT changes in managing streets for transit, bicycles, and passenger rail

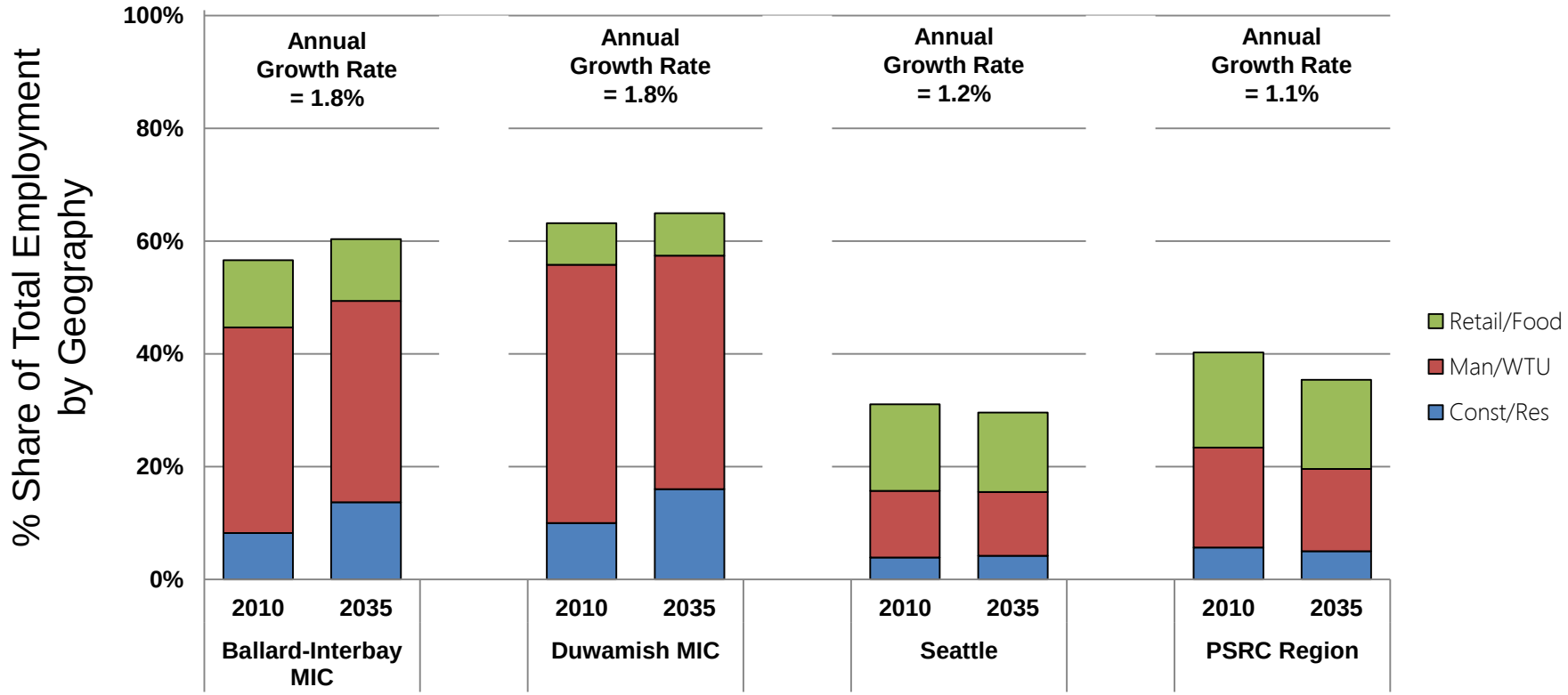
What drives future traffic growth?

Vehicle mode	Reasons change occurs
Passenger Vehicles	• Population and employment growth • Changes in land use and modal options Sources → • Alaskan Way Viaduct Tolling Study • PSRC Travel Demand Model
Non-Port Trucks	• MIC industrial growth • Changing industry composition Source → Commodity Flow Profile from Freight Analysis Framework (FAF3)
Port Trucks	• Trade growth and intermodal shifts Source → Port of Seattle Container Terminal Access Study

Non-port truck trips growth

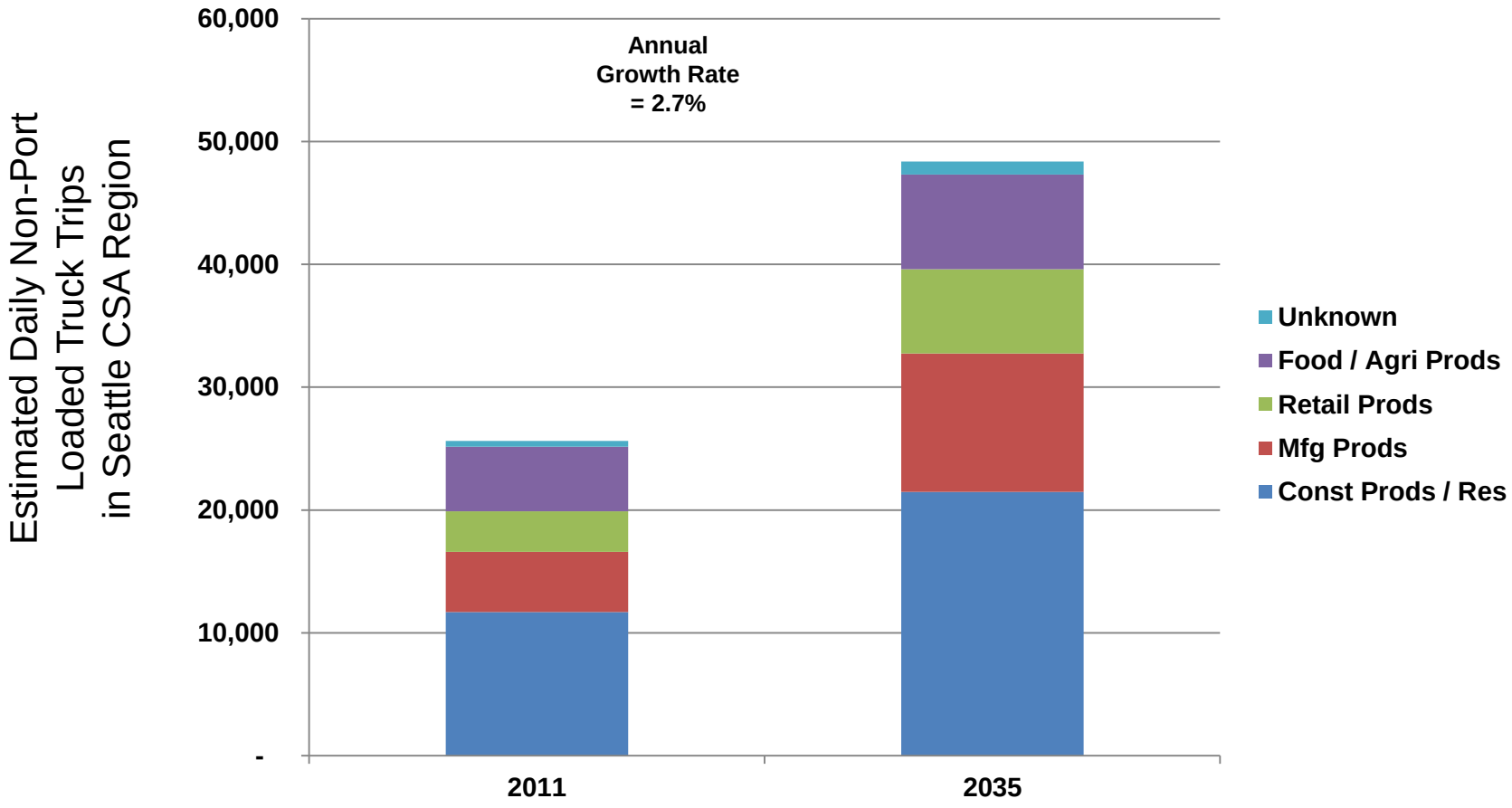
- MICs will comprise an increasing share of regional goods movement dependent industry activity
  - Construction
  - Natural Resources
  - Manufacturing
  - Wholesale
  - Transportation
  - Utilities
  - Retail
  - Food Services
- Output and demand from goods movement dependent industries is growing faster than employment – productivity gains
- As a result, non-port truck trips will grow faster than overall regional traffic

Goods movement dependent industry growth



Source: PSRC Employment Forecasts, 2010.

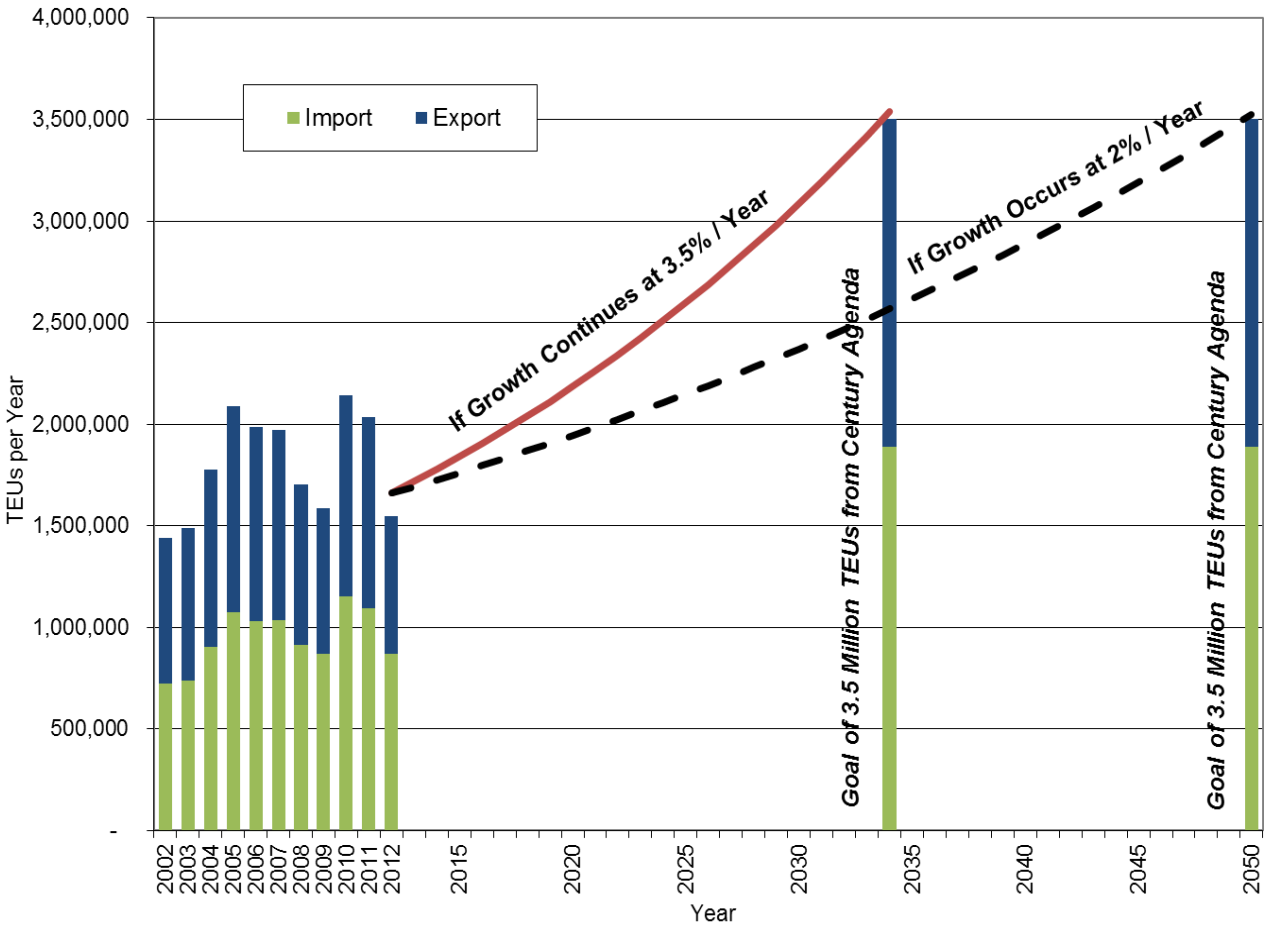
Non-port truck trips growth by commodity type

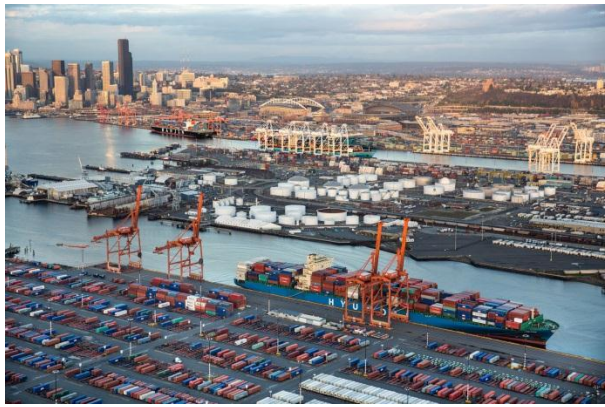


Source: Regional Forecasts from FHWA's FAF3 National Model and Cambridge Systematics Assumptions on Average Truck Payload Factors by Commodity.

Port truck trips growth

- Consistent with the Port of Seattle Growth Goal of 3.5 million TEUs/Year





Source: Port of Seattle Container Terminal Access Study, 2014.

Transportation network changes

- Improvements to the transportation system will change routing patterns
  - New projects
  - Tolling

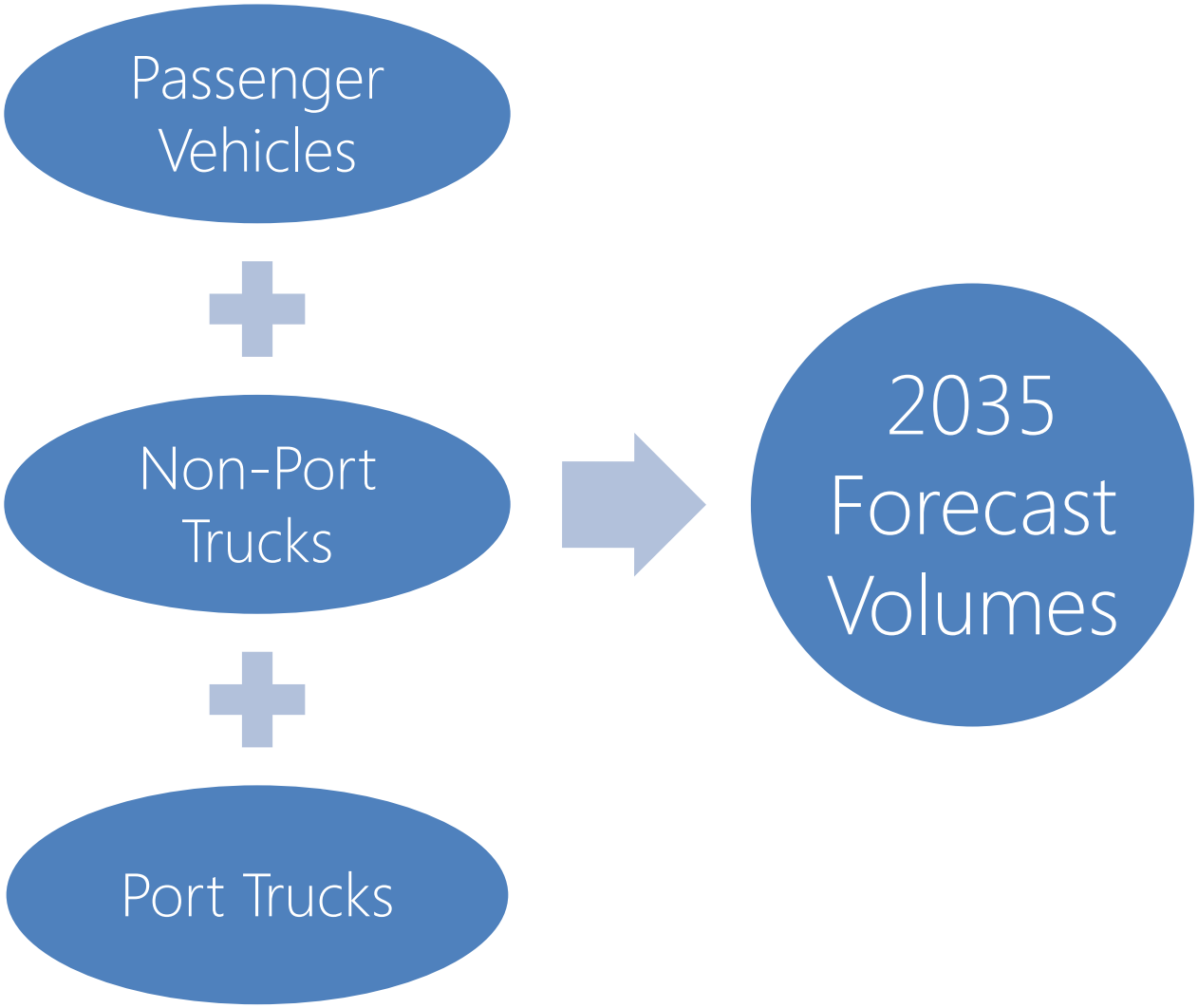
- Shifting routes of auto trips and changes in congestion will impact truck routing
  - Relative pattern of truck route shifts obtained from PSRC model

Assumed improvements

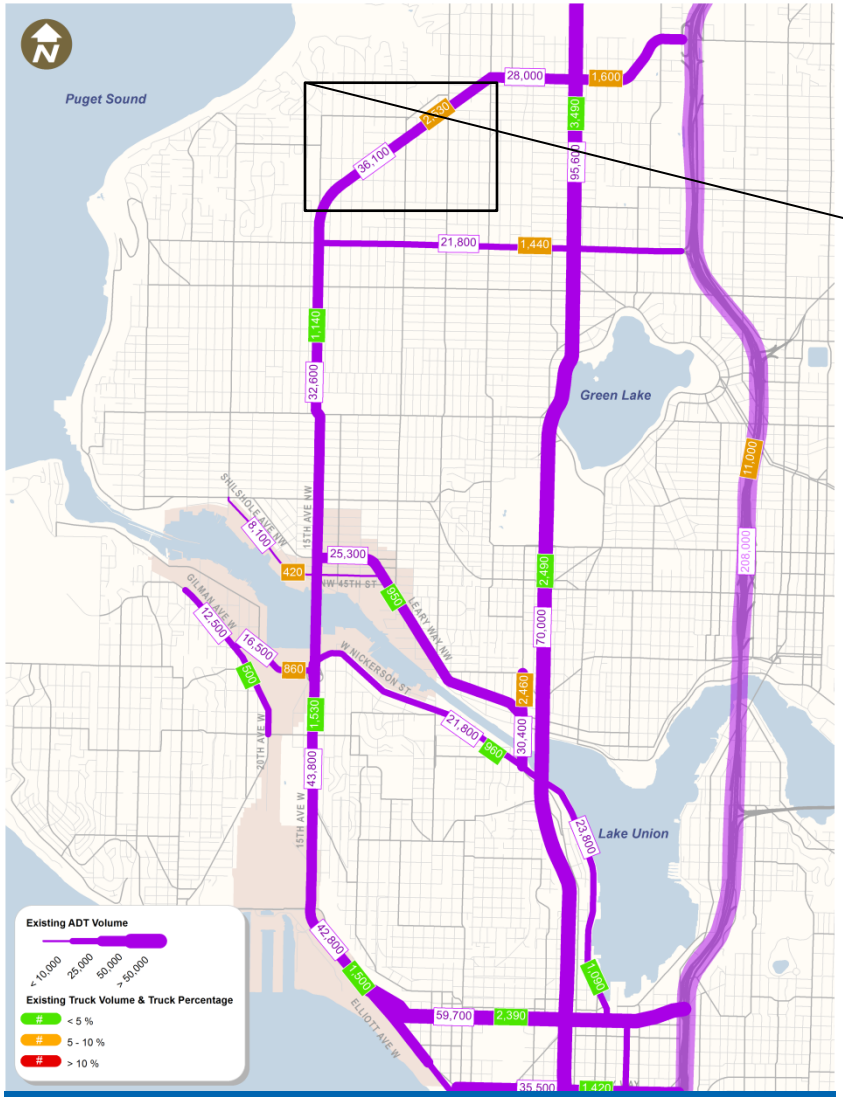
- Transportation projects identified in previous planning studies
- Major projects include:
  - Alaskan Way Viaduct Replacement
  - Mercer Street Improvements
  - Seattle Waterfront / Alaskan Way
  - Lander Street Grade Separation

Major Projects

Forecasting methodology



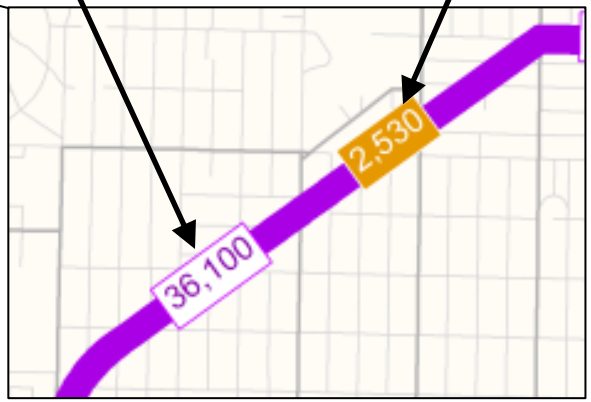
Truck volumes – reading the maps



Example Map

Average Daily Traffic Volume (ADT)

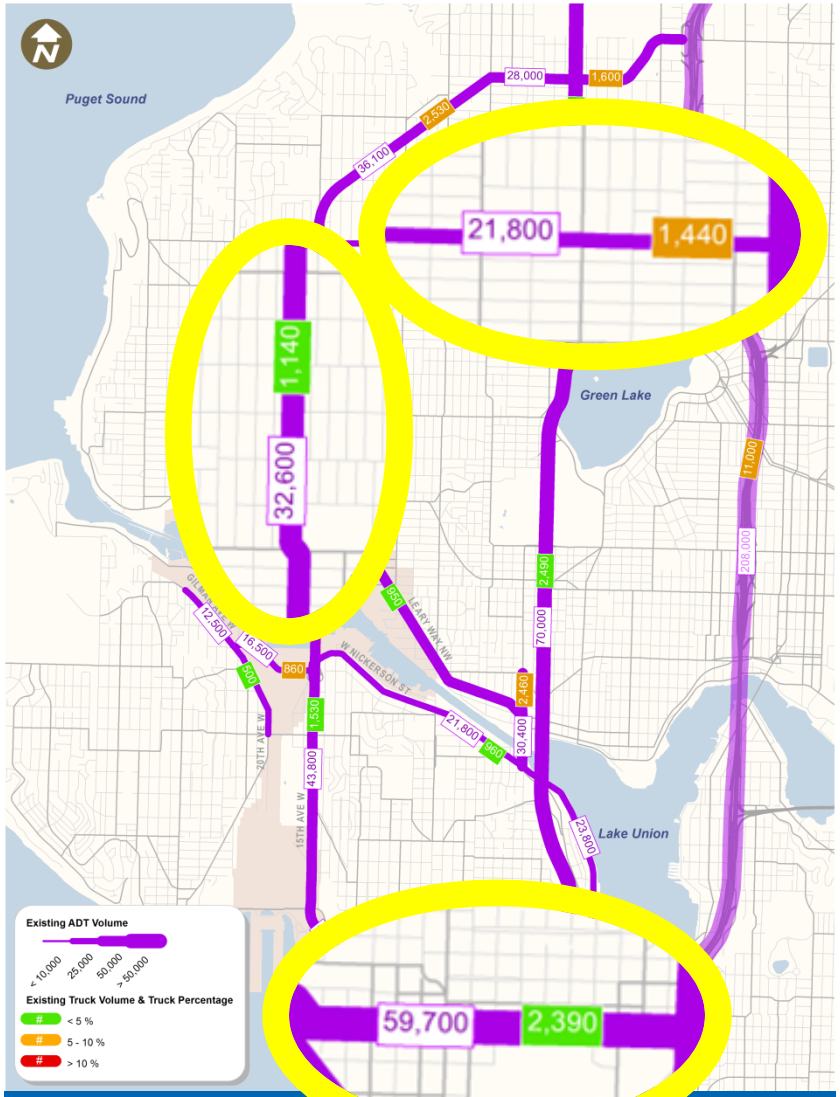
Average Daily Truck Volume



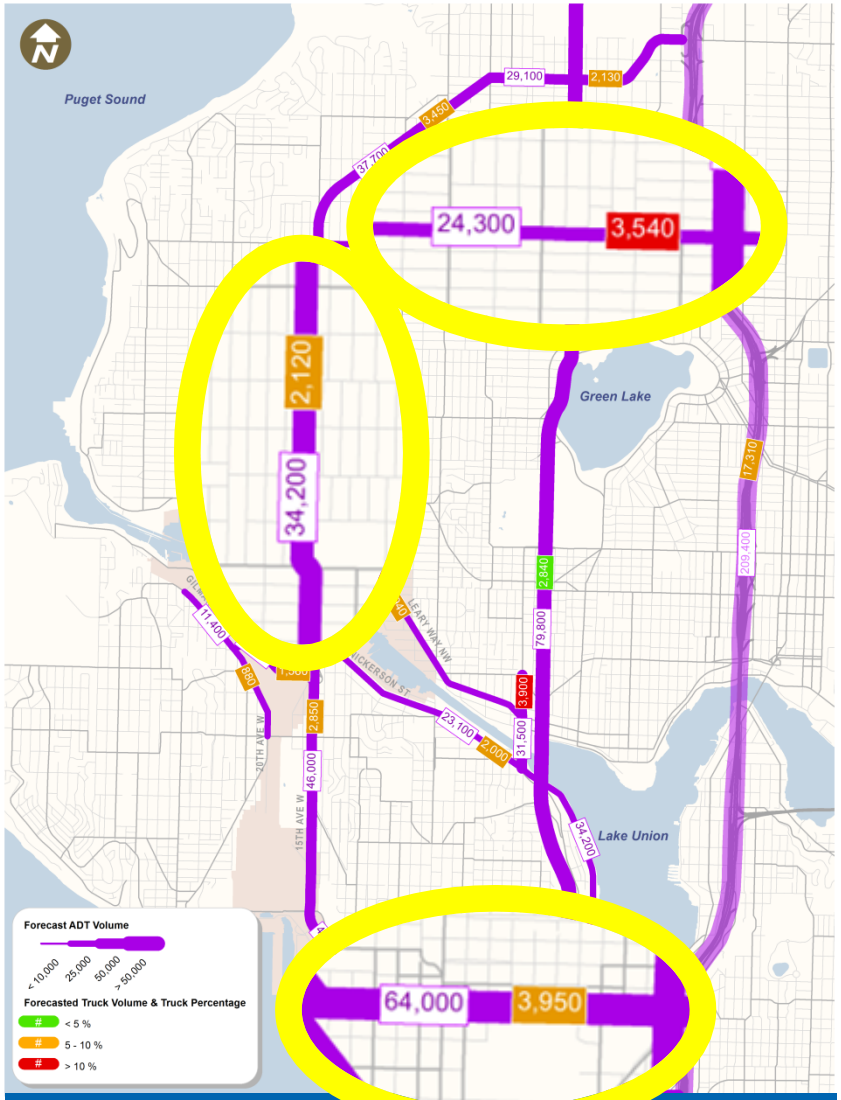
Color represents percent of trucks in the traffic stream

Truck volumes – north

PRELIMINARY



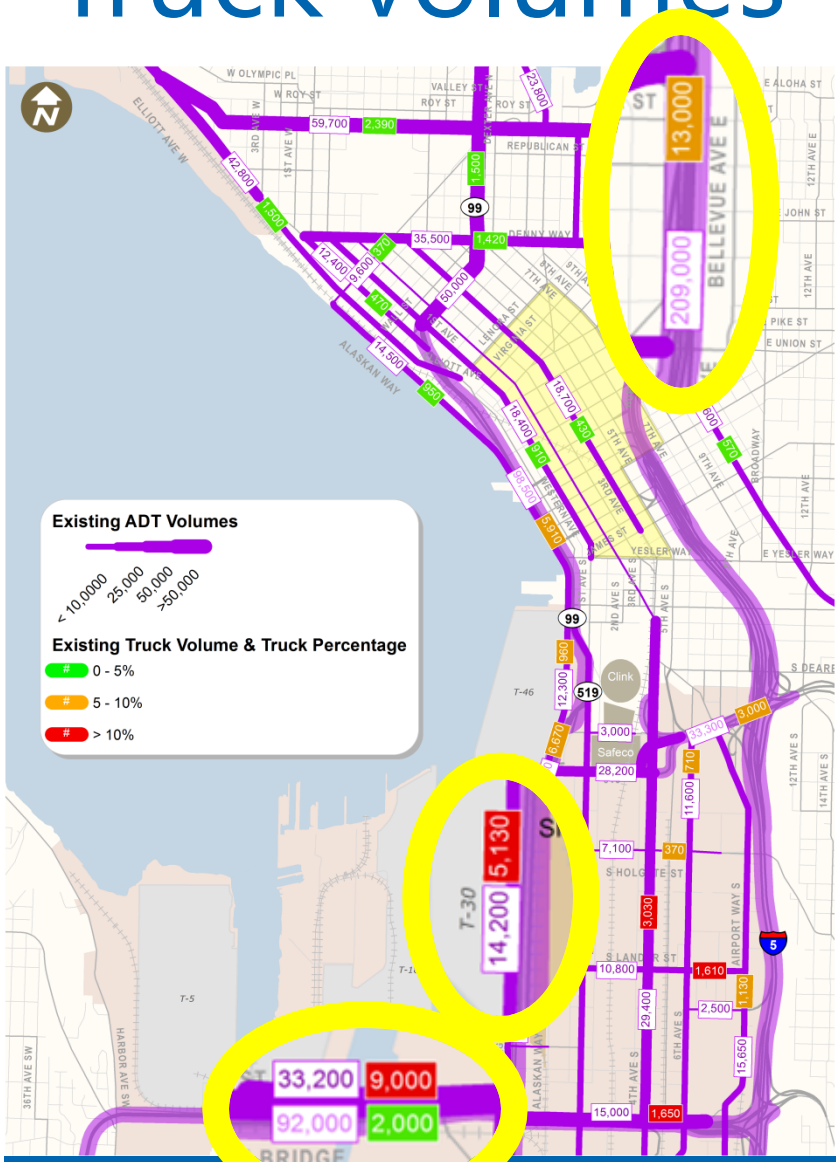
Existing



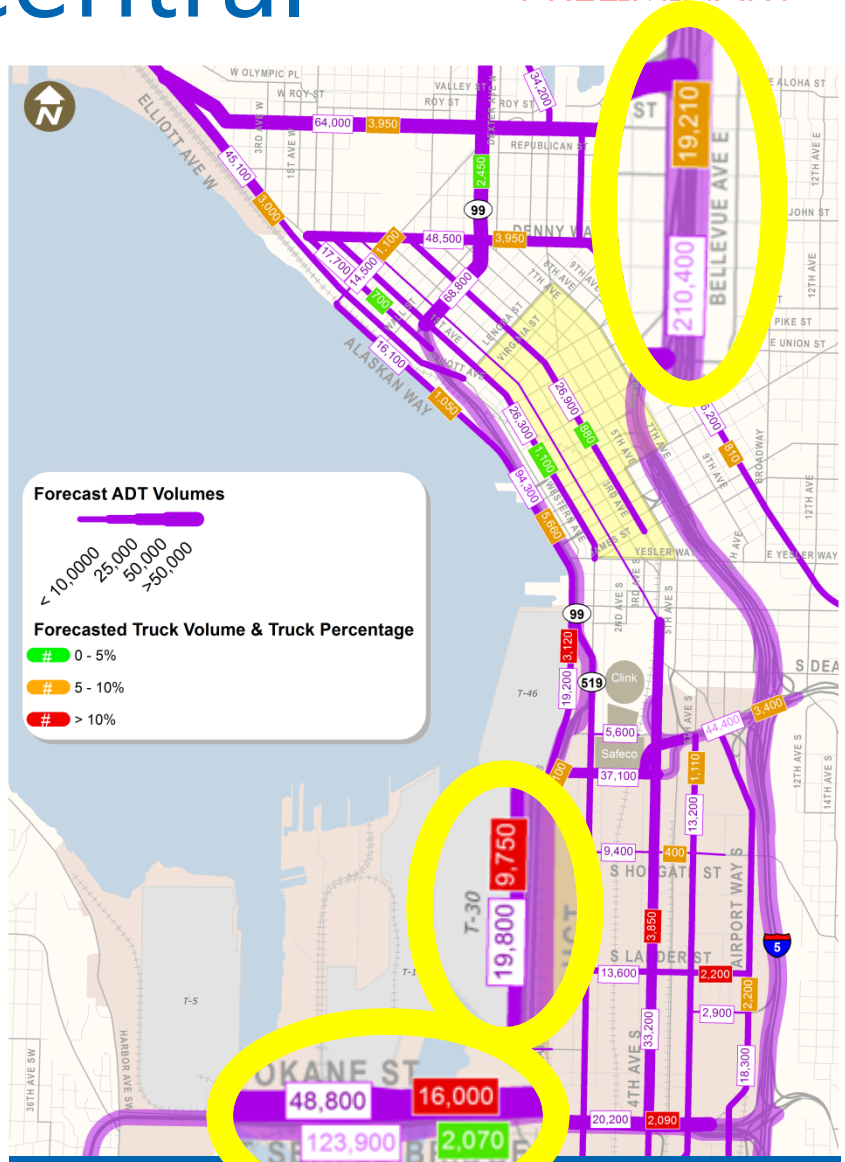
Forecast

Truck volumes – central

PRELIMINARY



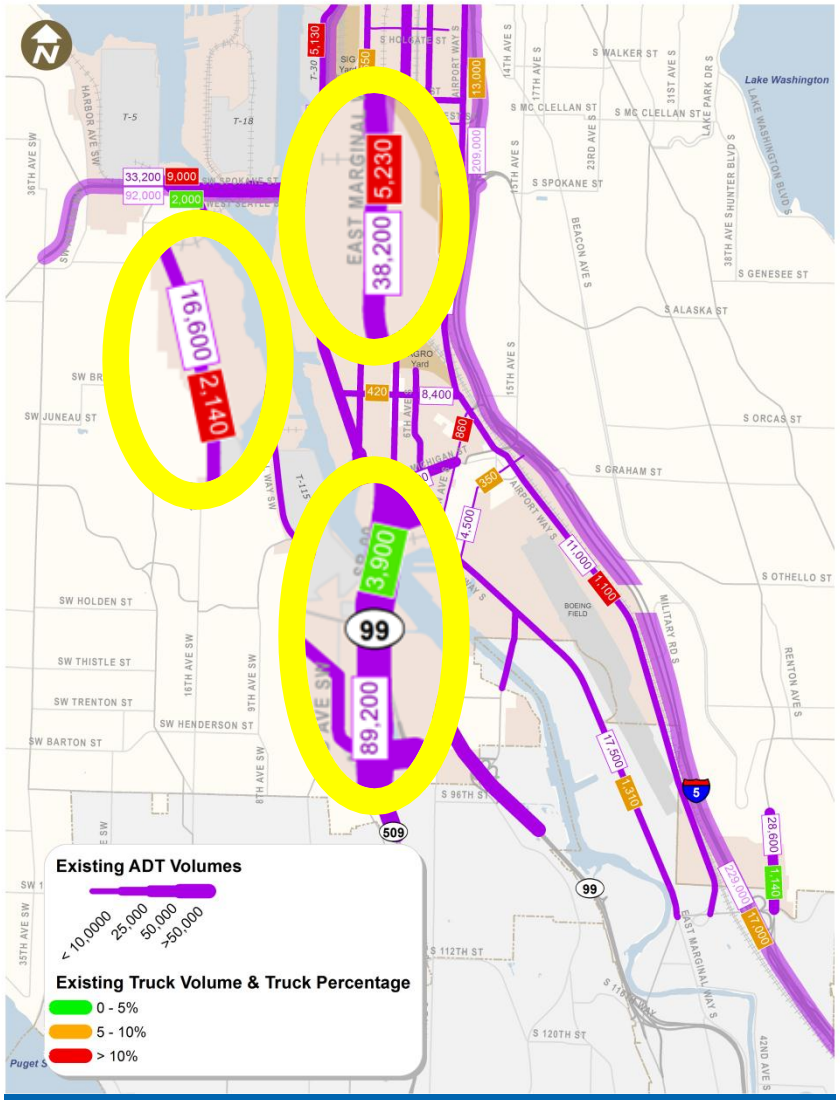
Existing



Forecast

Truck volumes – south

PRELIMINARY



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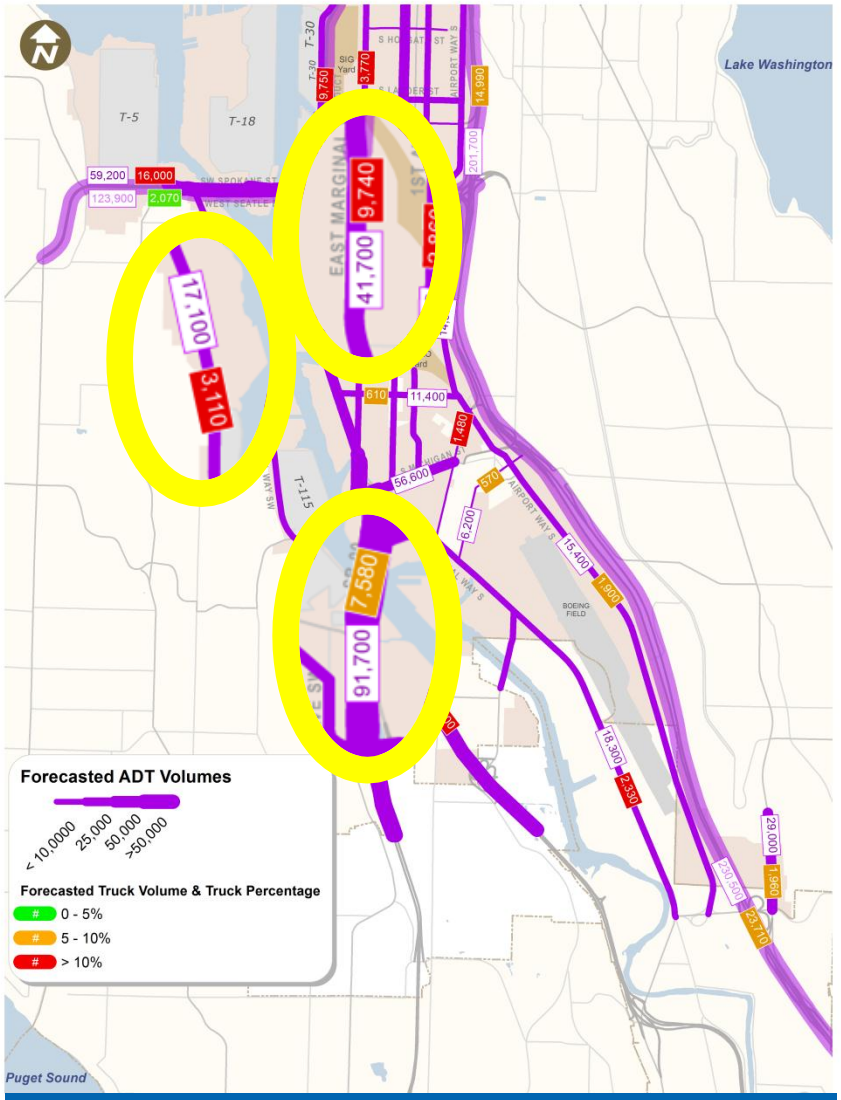

Forecast

Next steps

July	Future Conditions and Needs Identification
September	Improvement Project Identification and Prioritization
October / November	Preparation of Draft Plan

Questions?

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www.seattle.gov/transportation/freight_industrialareas.htm

http://www.seattle.gov/transportation

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