

Washington Regional Freight Trends

presented to

**Washington
Regional Freight Forum**

presented by

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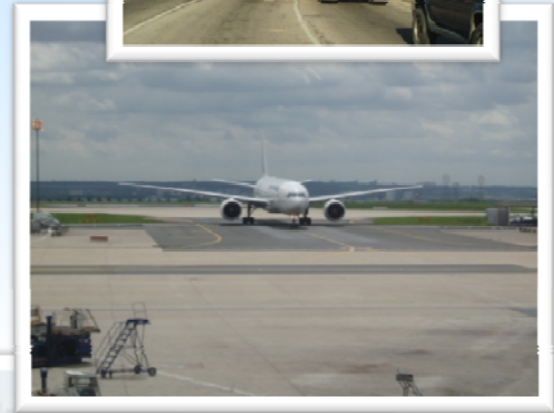


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Presentation Overview

- **Freight demand factors**
 - » Demographic trends
 - » Commodity flow trends
- **Other trends**
 - » Freight land use / regional distribution
 - » Through demand
 - » Intermodal growth



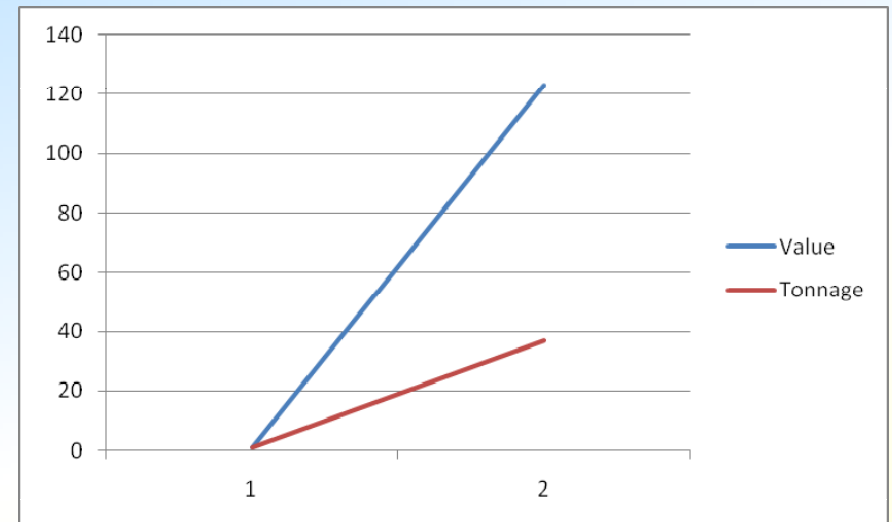
Freight Growth Trends

- **Washington regional freight growth**

- » **37% tonnage growth by 2040**
- » **123% value growth by 2040**

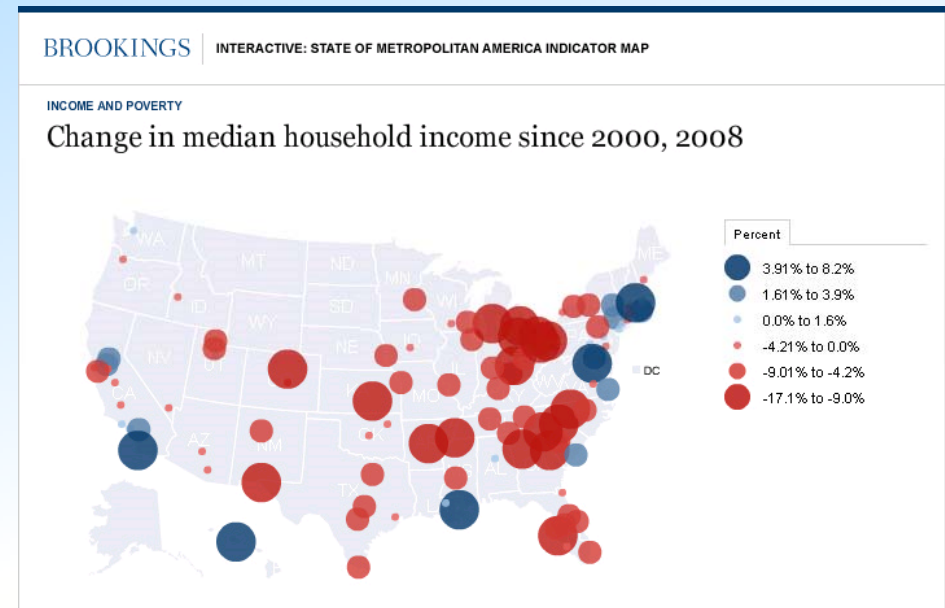
- **Driven by....**

- » **Population growth**
- » **Manufacturing growth**
- » **Trade growth**
- » **Supply chain practices**



Demographic Demand Factors

- **Growing population**
 - » High international migration 2000 to 2009
 - » 38% growth 2010 to 2040
- **High household income**
 - » Ranked 2nd in US behind San Jose, CA
 - » Income is growing

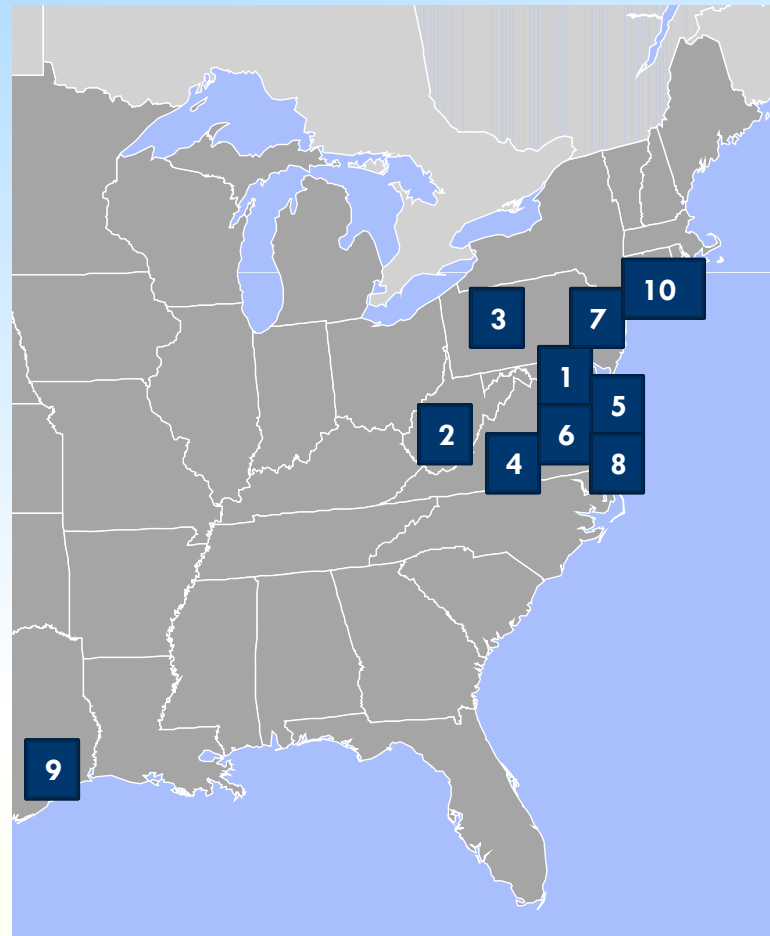


Demographic Demand Factors

- **Highest educational attainment of any large metro**
 - » 47% of adults 25 yrs + with at least a bachelor's degree
 - » 22% of adults 25 yrs + with a graduate degree
- **Low unemployment**
- **High employment growth**

Top Tonnage Inbound Flows (2007)

- » Baltimore 19.1%
- » WV 14.9%
- » PA 8.2%
- » VA 7.3%
- » MD 5.6%
- » Richmond 4.8%
- » Philadelphia 4.1%
- » Norfolk 3%
- » Houston 2.8%



FHWA FAF3



Heaviest Commodities

● Highest Tonnage (2007)

- » Gravel
- » Waste/Scrap
- » Nonmetallic mineral products
- » Coal n.e.c.
- » Natural Sands
- » Other foodstuffs

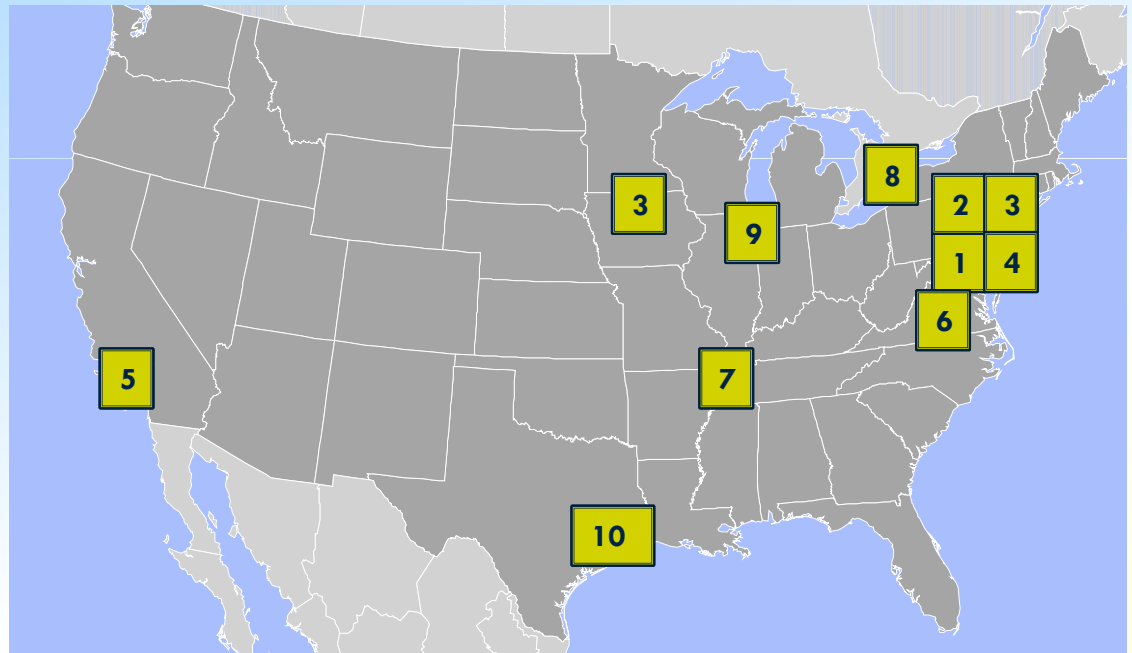
● Highest Tonnage (2040)

- » Gravel
- » Waste/Scrap
- » Mixed Freight
- » Nonmetallic mineral products
- » Coal n.e.c.
- » Natural Sands

Analysis of FHWA FAF3, 2007 to 2040 STGC value

Top Value Inbound Flows (2007)

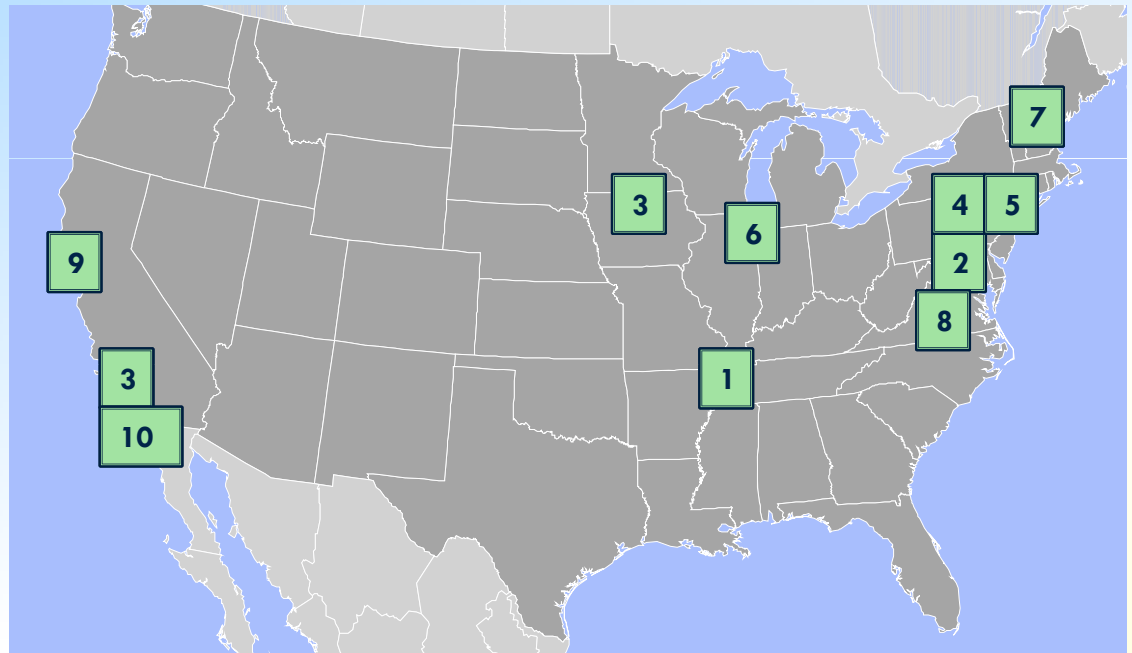
- » Baltimore 12.4%
- » PA 6.4%
- » NYC 5.8%
- » Philadelphia 5.4%
- » LA 4.7%
- » VA 3.8%
- » Memphis 3.7%
- » Buffalo 2.8%
- » Chicago 2%



FHWA FAF3

Top Value Inbound Flows (2040)

- » Memphis 8%
- » Baltimore 6%
- » LA 6%
- » PA 5%
- » NYC 5%
- » Chicago 4%
- » NH 4%
- » Richmond 4%
- » San Francisco 3%
- » San Diego 3%

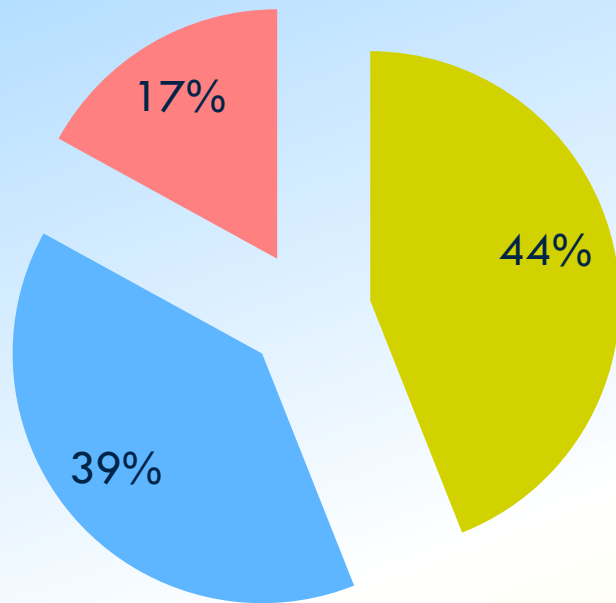


FHWA FAF3

Growing External Trade Dependence

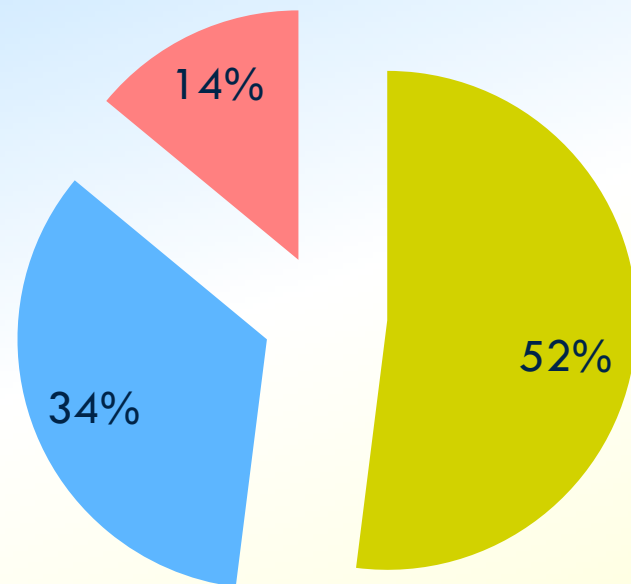
2007 Value

■ Inbound ■ Internal ■ Outbound



2040 Value

■ Inbound ■ Internal ■ Outbound



FHWA FAF3

Commodities of the Future

(2040 ranked by value)

● Top Regional Exports

- » Precision instruments
- » Pharmaceuticals
- » Misc. manufactured products
- » Mixed freight
- » Machinery
- » Electronics

● Top Regional Imports

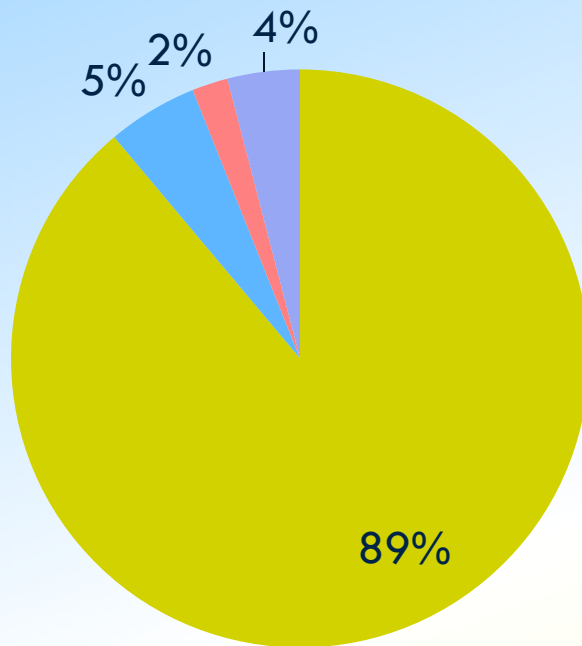
- » Pharmaceuticals
- » Precision instruments
- » Mixed freight
- » Machinery
- » Misc. manufactured products
- » Textiles / Leather

Analysis of FHWA FAF3, 2007 to 2040 STGC value

Tonnage Mode Split (2007 to 2040)

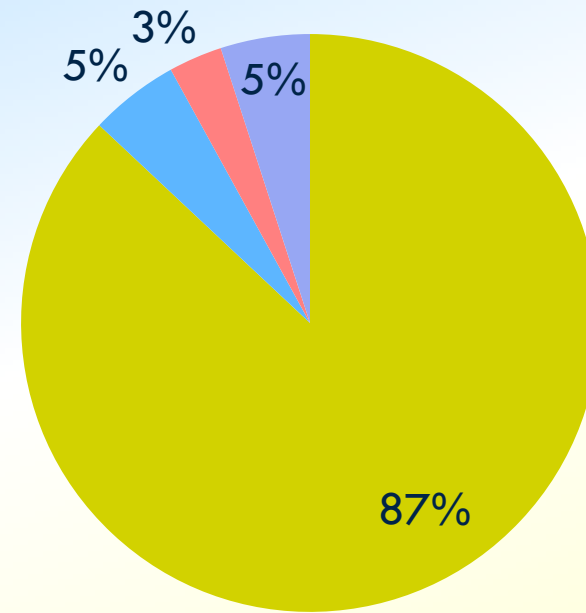
2007 Mode Split (Tonnage)

■ Truck ■ Rail ■ Intermodal ■ Pipeline



2040 Mode Split (Tonnage)

■ Truck ■ Rail ■ Intermodal ■ Pipeline

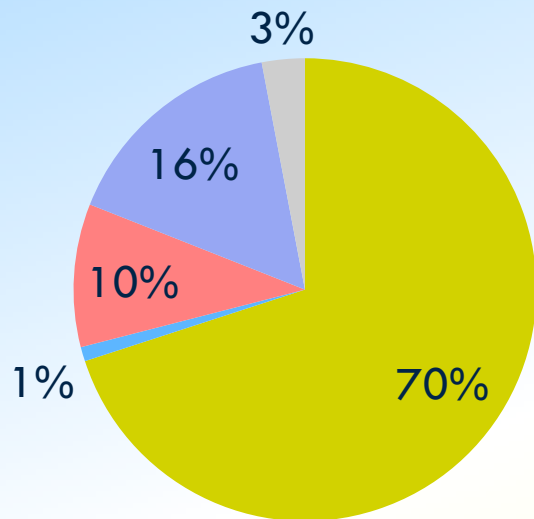


FHWA FAF3

Value Mode Split (2007 to 2040)

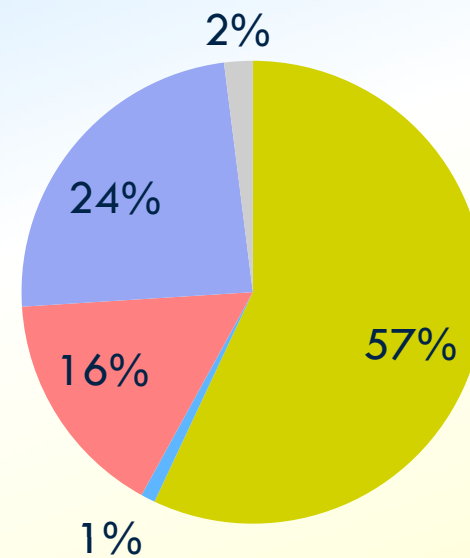
2007 Mode Split (Value \$)

- Truck
- Rail
- Air
- Intermodal
- Pipeline / Other



2040 Mode Split (Value \$)

- Truck
- Rail
- Air
- Intermodal
- Pipeline / Other

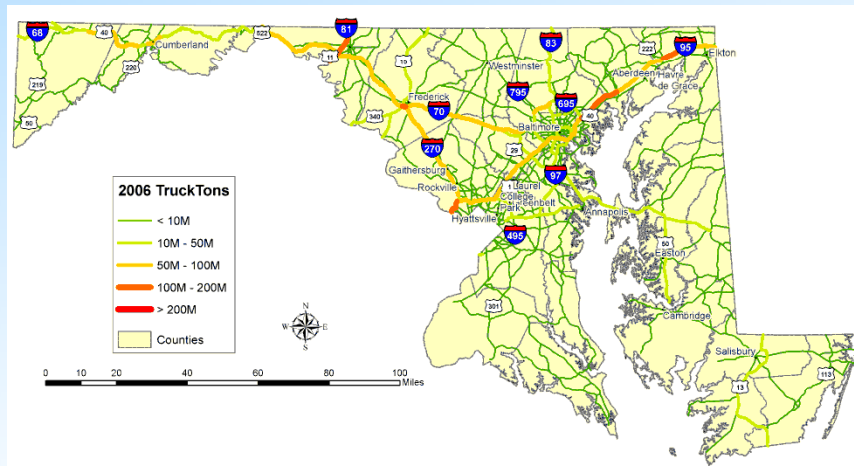


FHWA FAF3

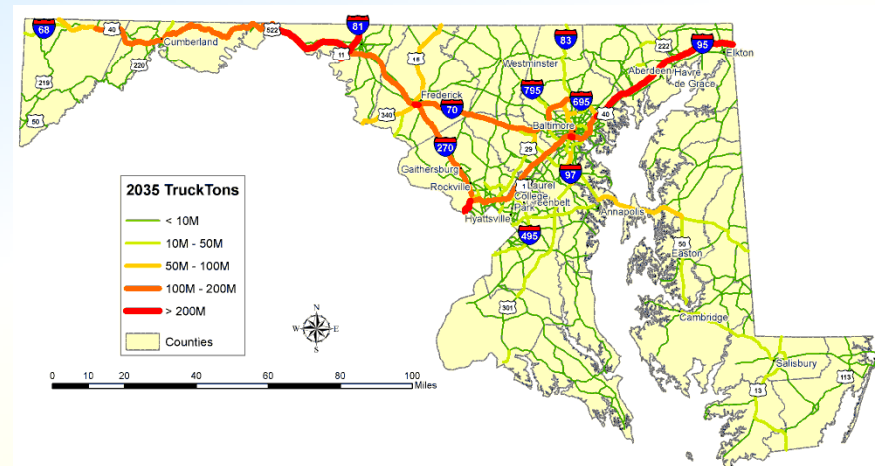


Freight-Intensive Industries

- Freight-intensive industries predicted to grow faster;
 - » In Maryland by 100% versus 75% for all freight 00' to 25'
- Concentrated along I-270, I-95, MD-100, I-66, VA-28, VA-267



2006 Truck Tons

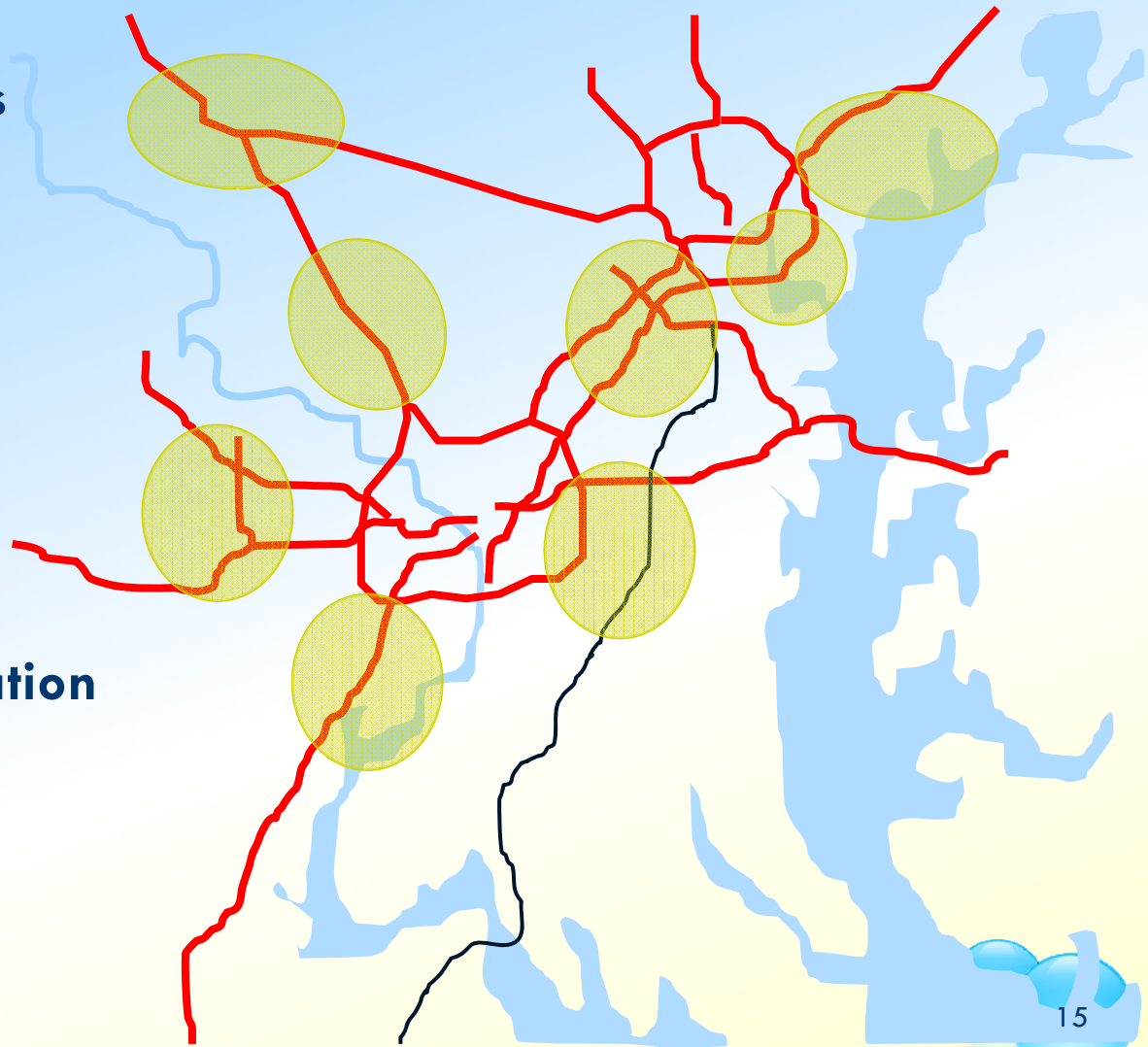


2035 Truck Tons

Freight Land Use Issues

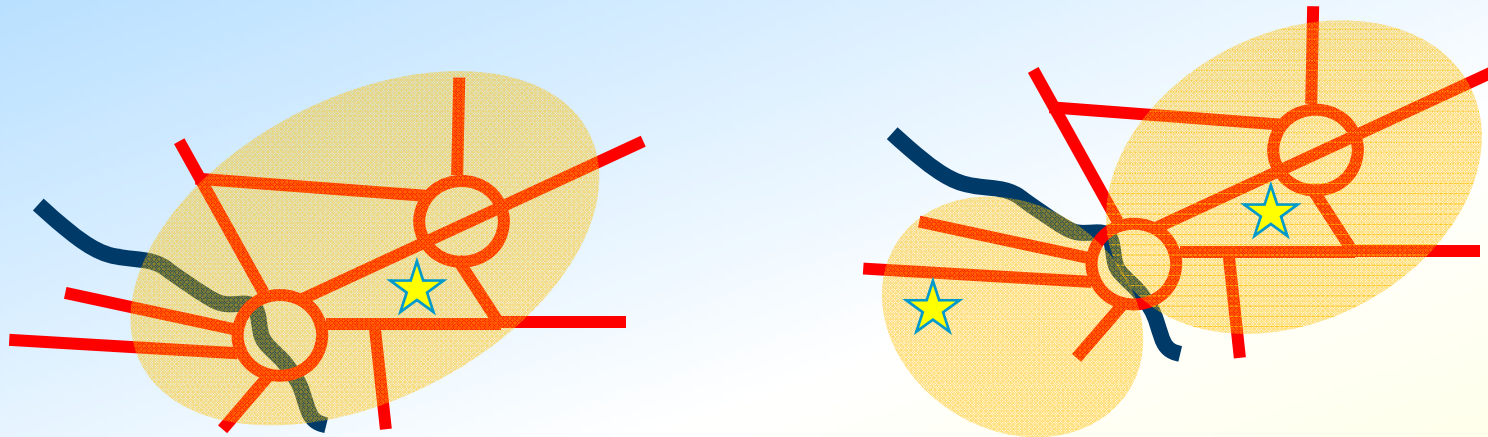


- **Transportation access**
- **Highway congestion**
- **Residential conflicts**
- **Truck parking**
- **Rail corridor preservation**
- **FOD vs. TOD**



Regional Distribution Patterns

- Traffic congestion affecting distribution
- Businesses operating multiple regional distribution centers



Through Demand

- Washington region will continue to experience heavy “through” flows on regional highways (~50% of all trucks)
- Regional rail initiatives will increase “through” rail movement



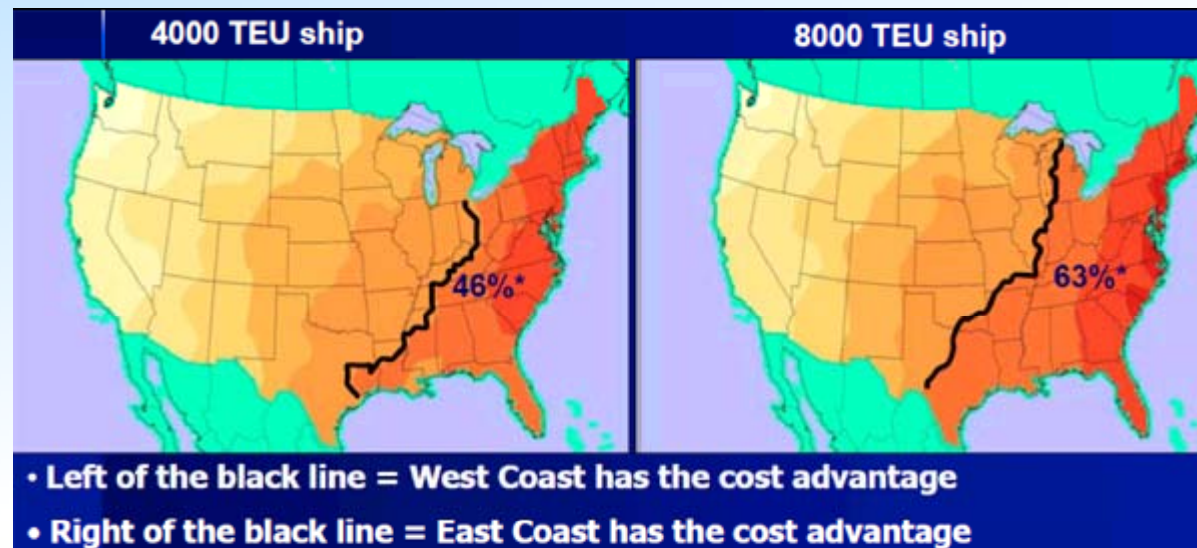
Intermodal Rail Demand

- Fuel efficiency
- Labor efficiency
- Regional intermodal hubs
- Intercity passenger rail



Panama Canal Expansion Regional Impacts

- Shift from “land bridge” to all water
 - » More trucks terminating in region
 - » More trucks and rail transiting region



Thank You

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