

Maritime Shipping and Port Challenges

Transportation Commission

October 15, 2014



Captain Michael Moore

Pacific Merchant Shipping Association

(Ocean Carriers, Terminal Operators, Tug Companies, Agents, Others)

40% of All Jobs in Washington



Port related economic activity affiliated with \$138 Billion in total economic activity = 1/3 of State GDP

Source: Marine Cargo Study October 2014

Vessel & Cargo Diversity

- Auto Carriers
- Bulk
- Containerships
- Cruise
- General Cargo
- Refrigeration
- Roll On/Roll Off
- Tankers
- Ocean-Going Tugs
- Other

About 2,800 Vessel Calls/Year – 1,200 are Container Vessels



Container Sector

Large % of cargo in PNW is discretionary



**Seattle and Tacoma in intense competition
with other gateways for cargo and jobs**

Imports, Exports & Empties



**Empty Containers =
Low Cost Opportunity
for Our Exporters**



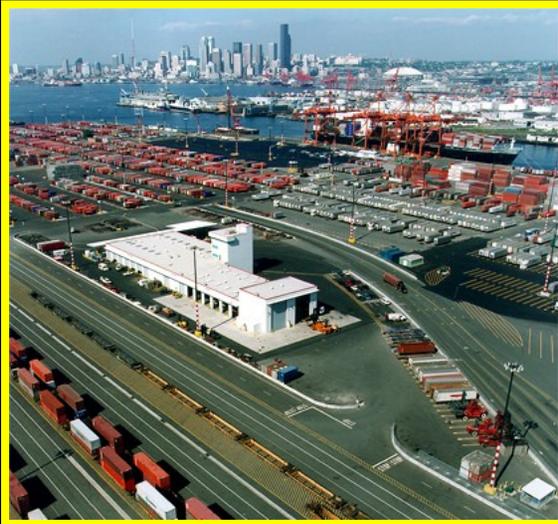
Container Terminals

- Load and unload to/from trucks & rail
- Ports lease to terminal operators



Reliability, Cost, Productivity are Keys

Port Related Rail



On Dock



Switching



Line Haul

Rail Efficiency & Cost Matter

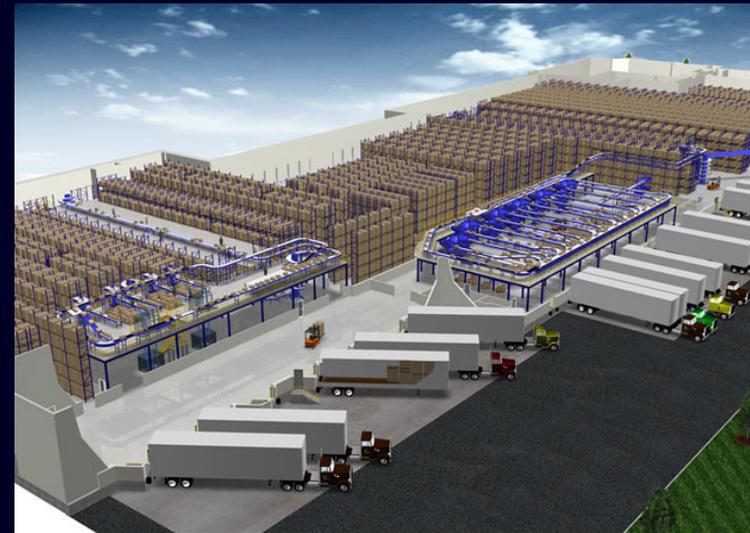
Trucking

- To and From Railyards
- Warehouses and Distribution Centers
- Longer Hauls like Eastern Wa.



Reliable Freight Corridors are Essential

Warehouse & Distribution Centers



**Location and Reliable
Connections to Ports are Key**

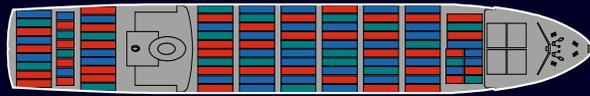
Last Mile Connections



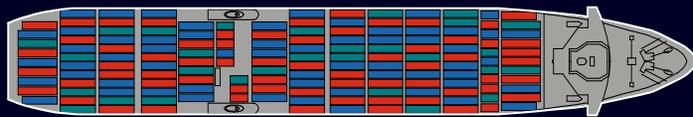
Changes In Industry

Vessel Size Increasing

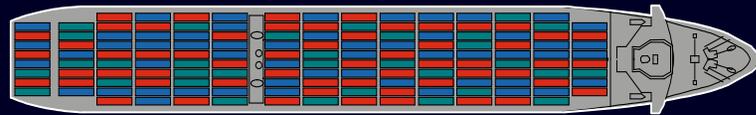
TEU Capacity



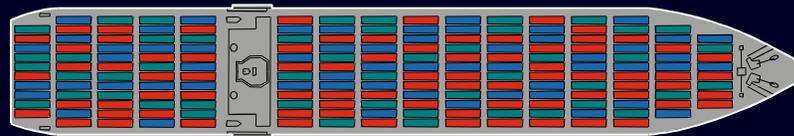
1st Generation (Pre-1960 - 1970)



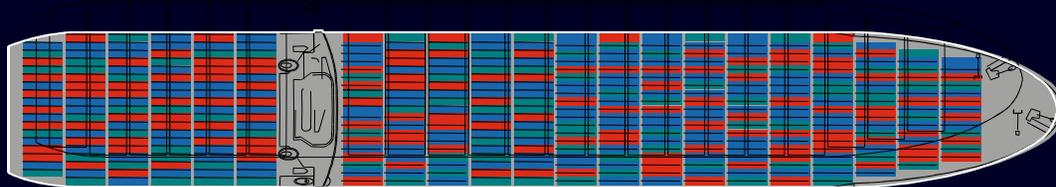
2nd Generation (1970 - 1980)



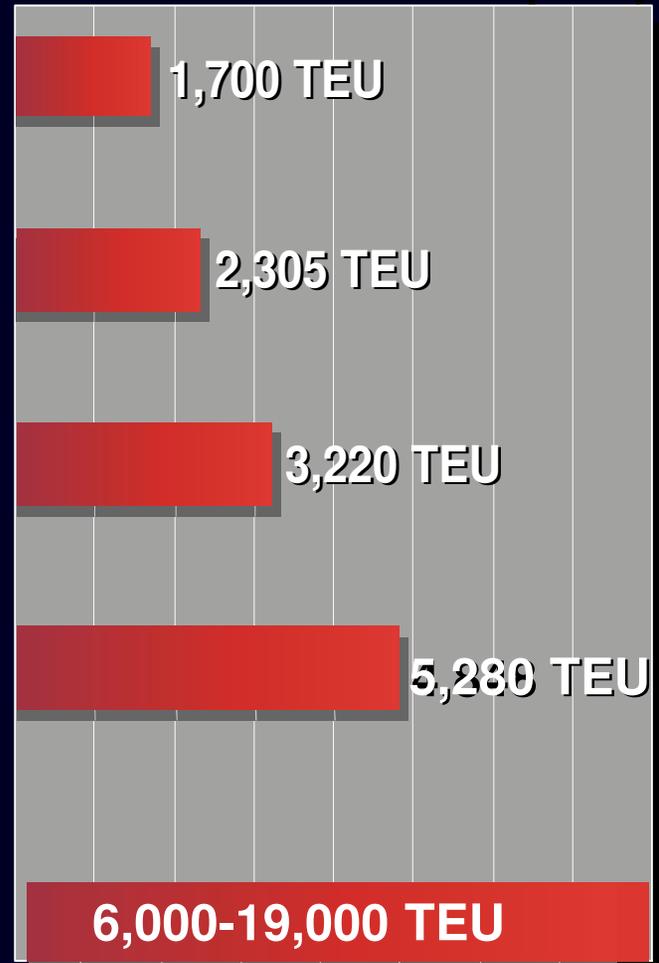
3rd Generation (1985)



4th Generation (1986 - 2000)



5th Generation (2000 - Present)



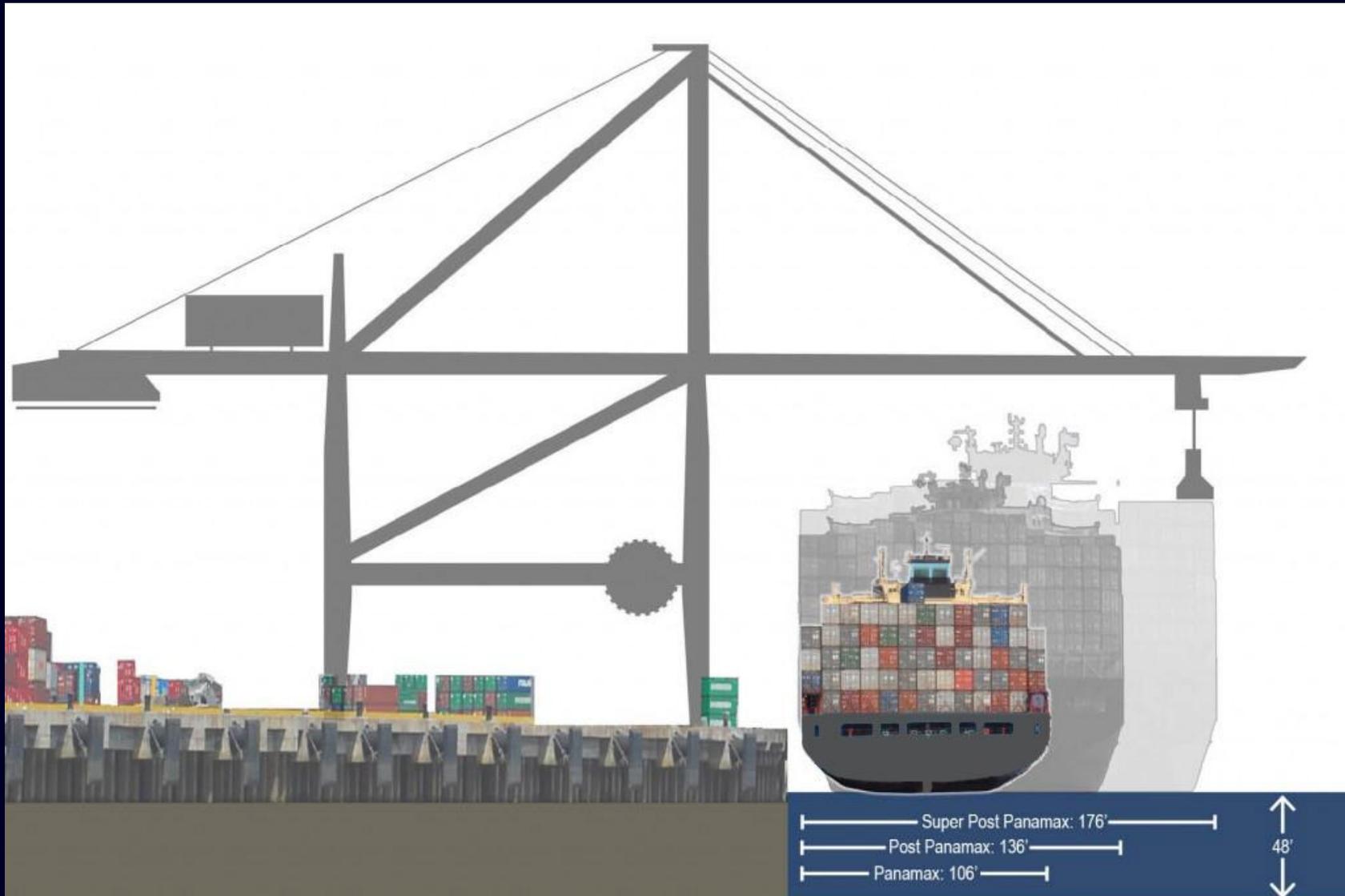
Mega Ships

Up to 72 miles of containers on one ship



What Ports Can Handle this Size?

Port/Terminal/Waterway Capacity



Some Have Capacity; Most Don't - \$\$\$'s?

Paradigm Shift – Mega Alliances

BATTLE FOR EAST-WEST DOMINANCE

The G6 Alliance has unveiled plans to expand into the trans-Atlantic and Asia-U.S. West Coast trade lanes in a widely expected response to the proposed P3 Network partnership.

G6 Vs. **P3**

The infographic features two stylized cargo ships, one red (G6) and one blue (P3), facing each other on a green base. Above the ships are logos for the G6 alliance (Hapag-Lloyd, APOL, MOL, OOCL, NYK, HMM) and the P3 alliance (CMA CGM, MSC, COSCO).

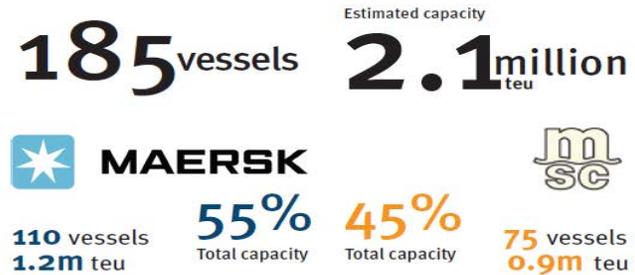
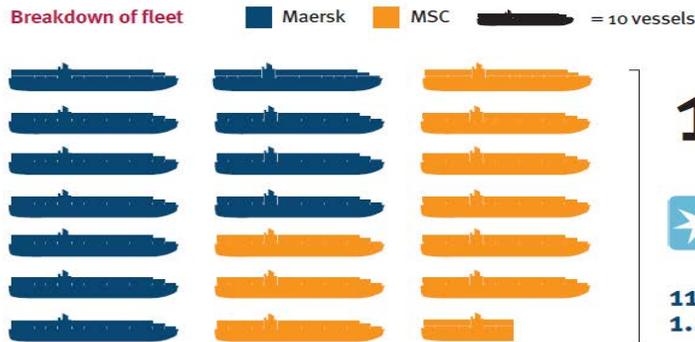
Cargo Routing Implications?



Alliances: P3 Denied... 2M Created

THE 2M ALLIANCE

Breakdown of fleet

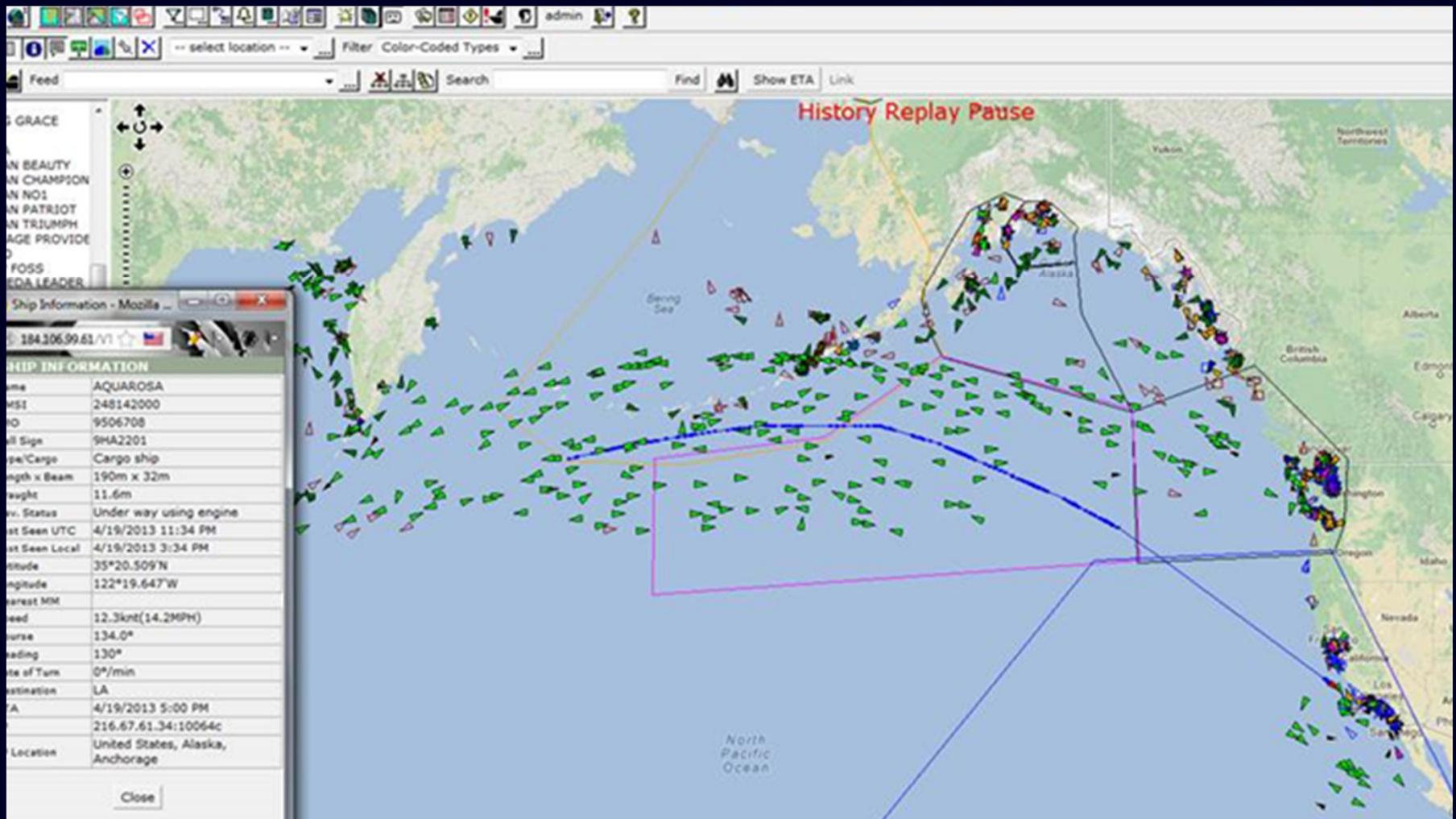


Total number of strings



New Fuel Rules = Big \$\$'s

Great Circle Routing = Less Fuel, Less Time
Canada, PNW closest to Asia



Pacific Rim Trade

- **LA/LB, Oakland, Tacoma, Seattle**
- **Panama Canal Expansion - 2014**
 - **East & Gulf Ports Competing for Pacific Rim Cargo Share**
- **Mexico Port Development?**
- **Canada – Vancouver & Prince Rupert**
 - **National Investment**
 - **Rail Connections**
- **Suez Canal?**

Port Competitiveness

- ✓ **Cost... All Costs**
- ✓ **Reliability...Infrastructure**
- ✓ **Regulatory Certainty**
- ✓ **Cargo Owner Preferences**

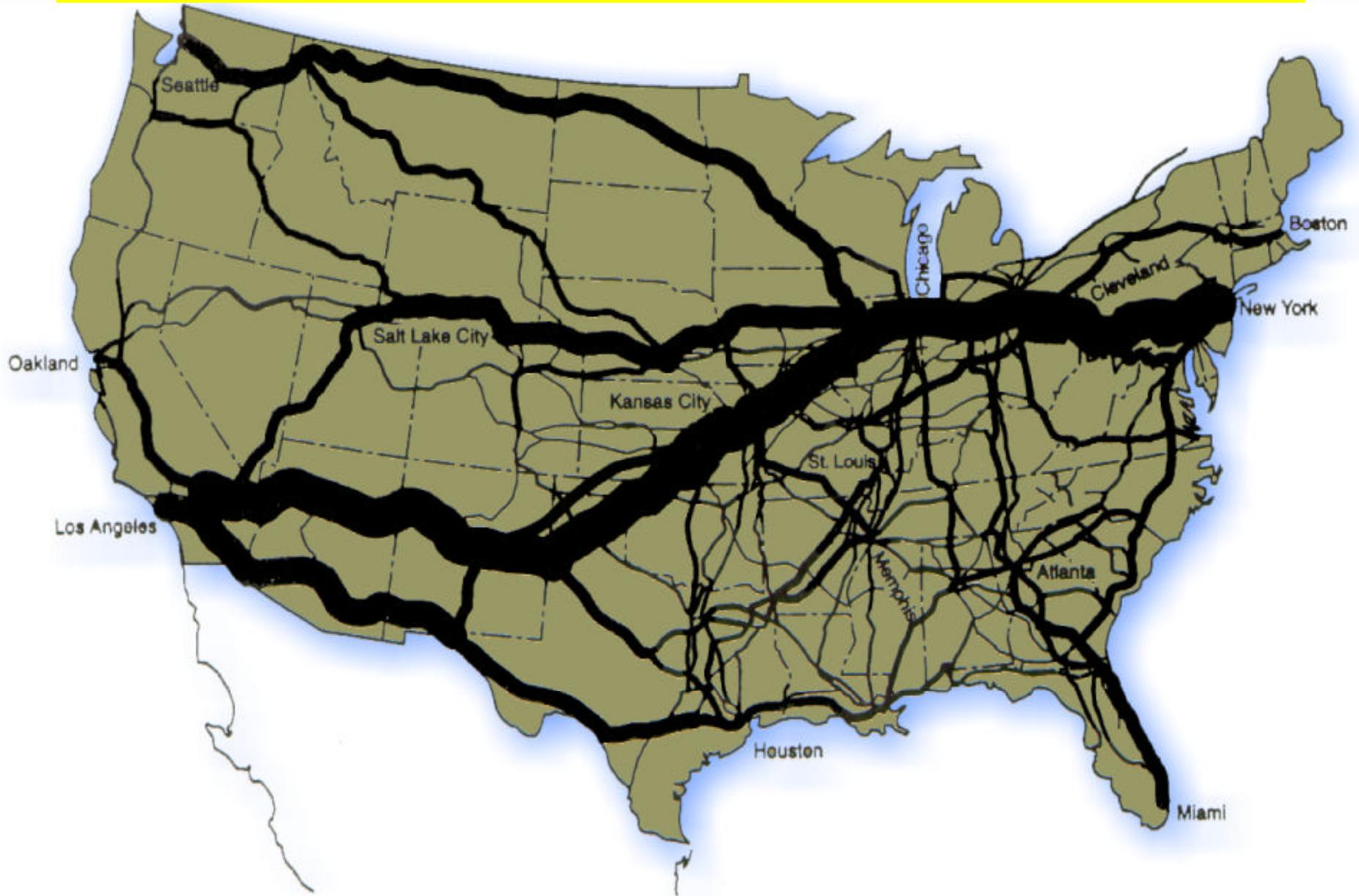
Discretionary Cargo Can and Does Shift to Best Routes...Quickly

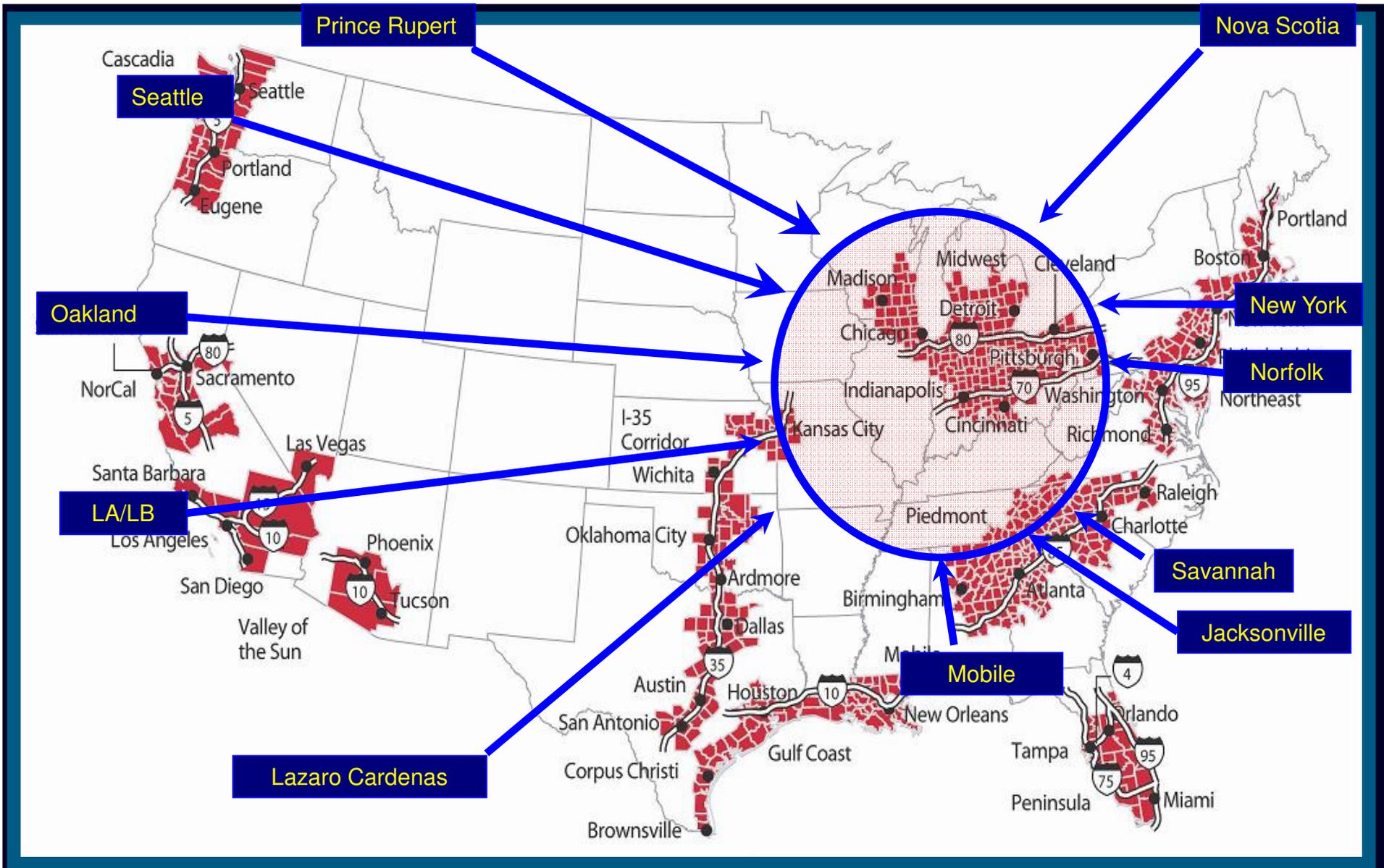
Container Trade *Competition*



**Container Lines Currently Losing Billions
Aggressively Seeking Best Ports to Use**

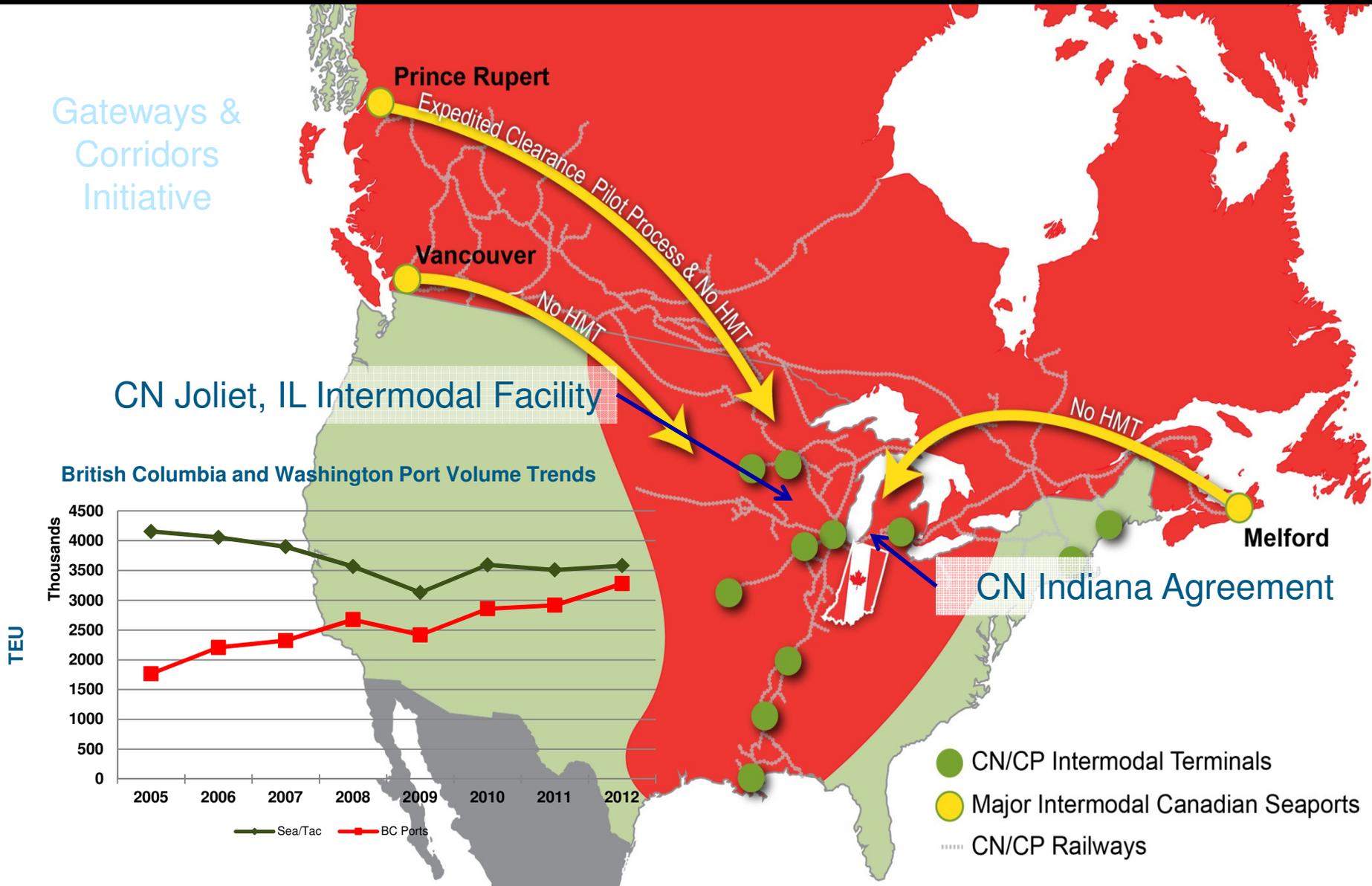
Container Cargo Routing





Midwest Battleground

Competition: Canada Pacific Gateway Example

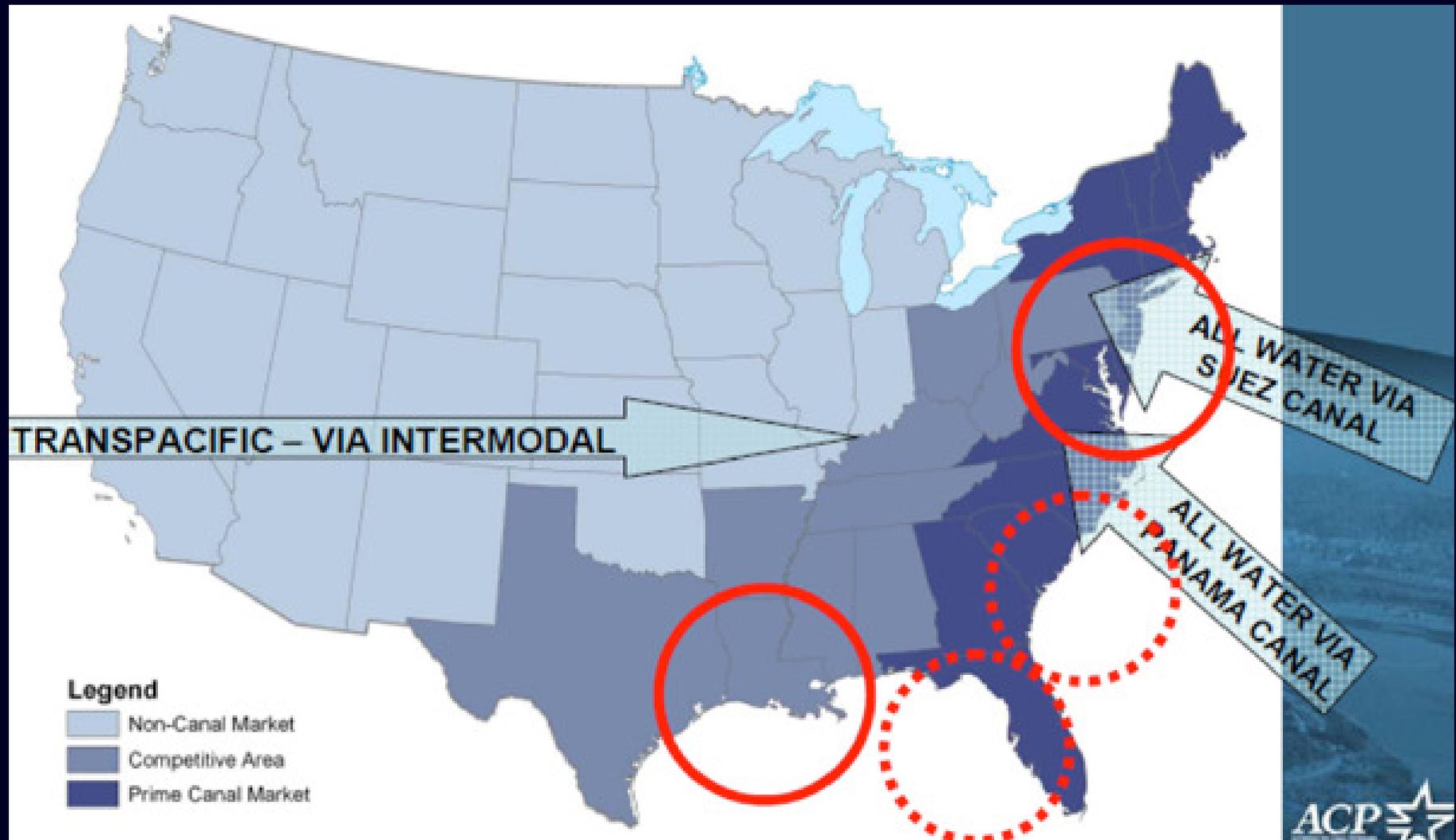


Competitor Ex: Prince Rupert

- ✓ Closer, Faster, Less Fuel
- ✓ 58 hour advantage vs LA/LB
- ✓ Rail to U.S. Heartland
- ✓ No Harbor Maintenance Tax

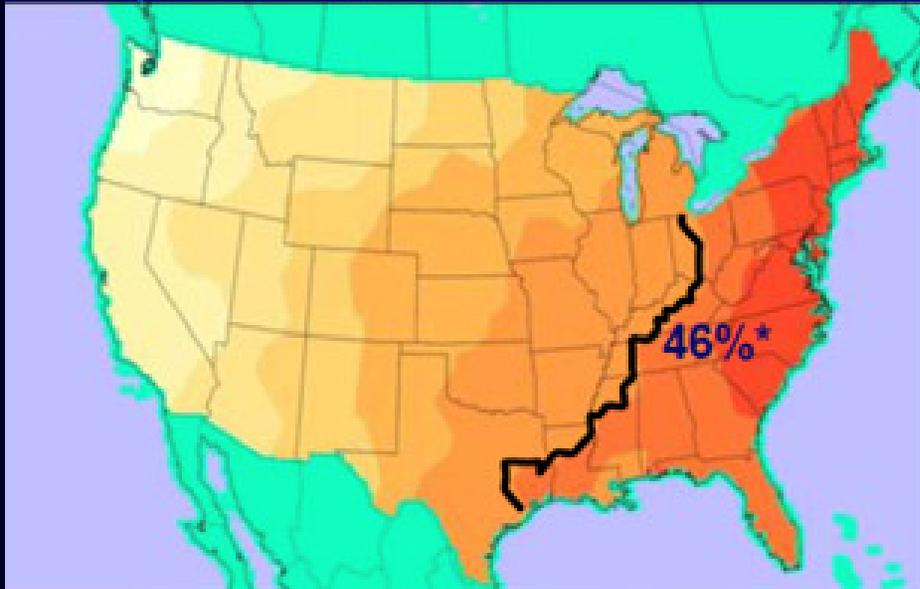


Transpacific vs Suez vs Panama

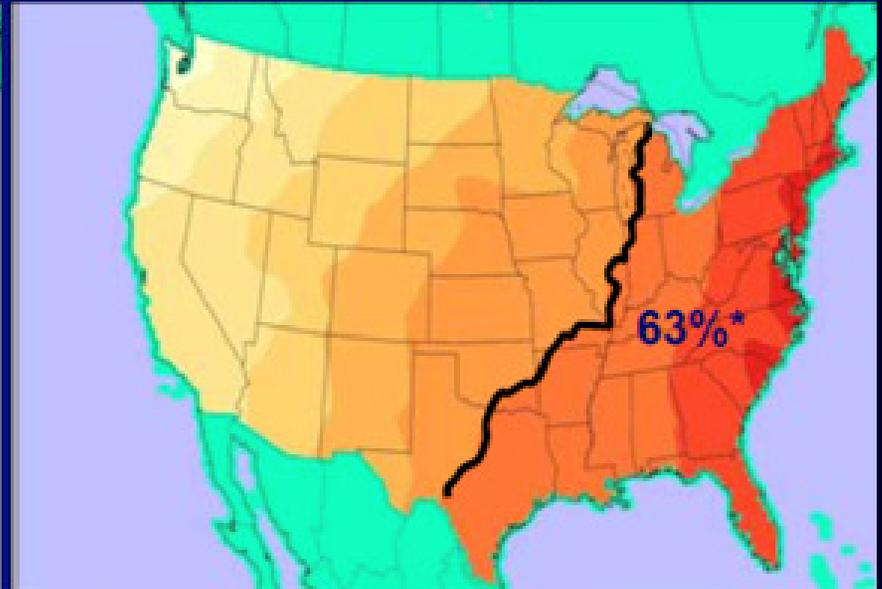


Coast to Coast Cost Comparison One Analysis – True? We'll see

4000 TEU ship



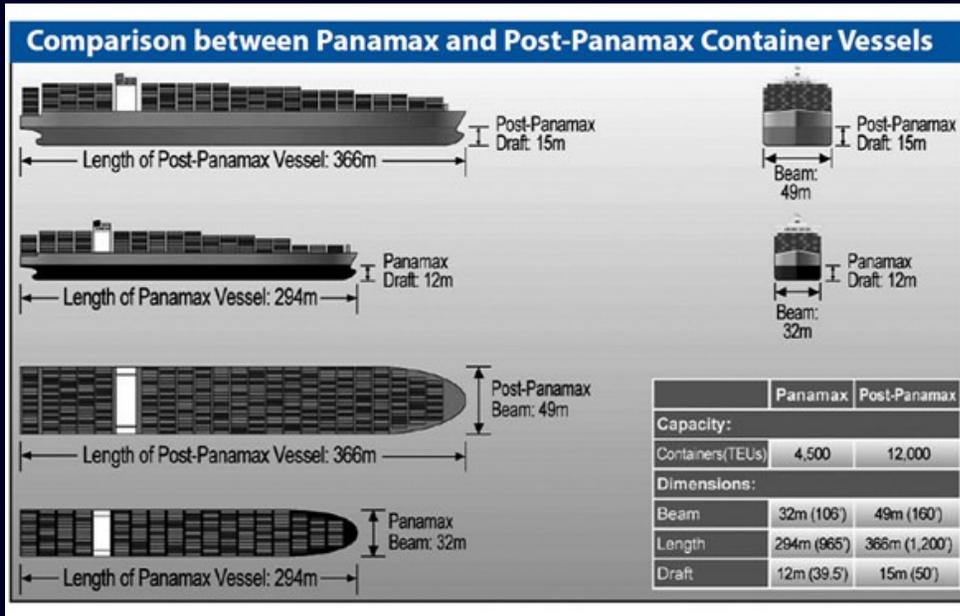
8000 TEU ship



- Left of the black line = West Coast has the cost advantage
- Right of the black line = East Coast has the cost advantage

Mega Population Centers are Cargo Magnets

Panama Canal Expansion



- ✓ Canal will be able to handle up to 13,000 TEU ships (MARAD)
- ✓ Fuel, time, cost all in play

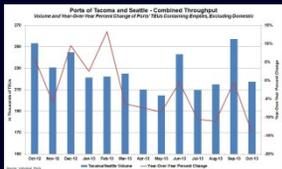
- ✓ Various Assessments of Impacts
- ✓ Don't Forget Suez in Play....Now Handling Mega Ships



Recent News



Rail Service Issues in the PNW



PNW Losing Market Share; 15% in 2000 to 9% in 2013



Terminal 5 in Seattle shifts cargo to other terminals



No ILWU Contract Since July 1st



Seaport Alliance Announcement

Conclusions

- Huge Economic Job Engine at Stake
- Provide Regulatory/Cost Certainty
- Keep Costs Low
- Ensure Infrastructure Supports Efficient, Reliable Operations
- \$\$'s ??? Transportation Package

Compete!