

FREIGHT TRANSPORTATION FRAMEWORK STUDY

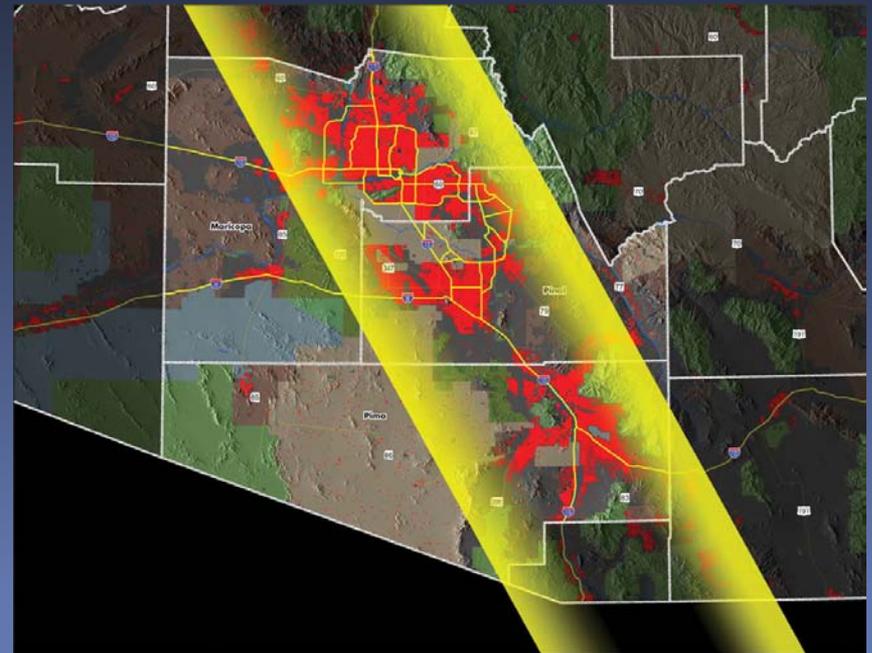
Examining Freight and Multimodal Opportunities in the Sun Corridor



MAG Regional Council
March 30, 2011

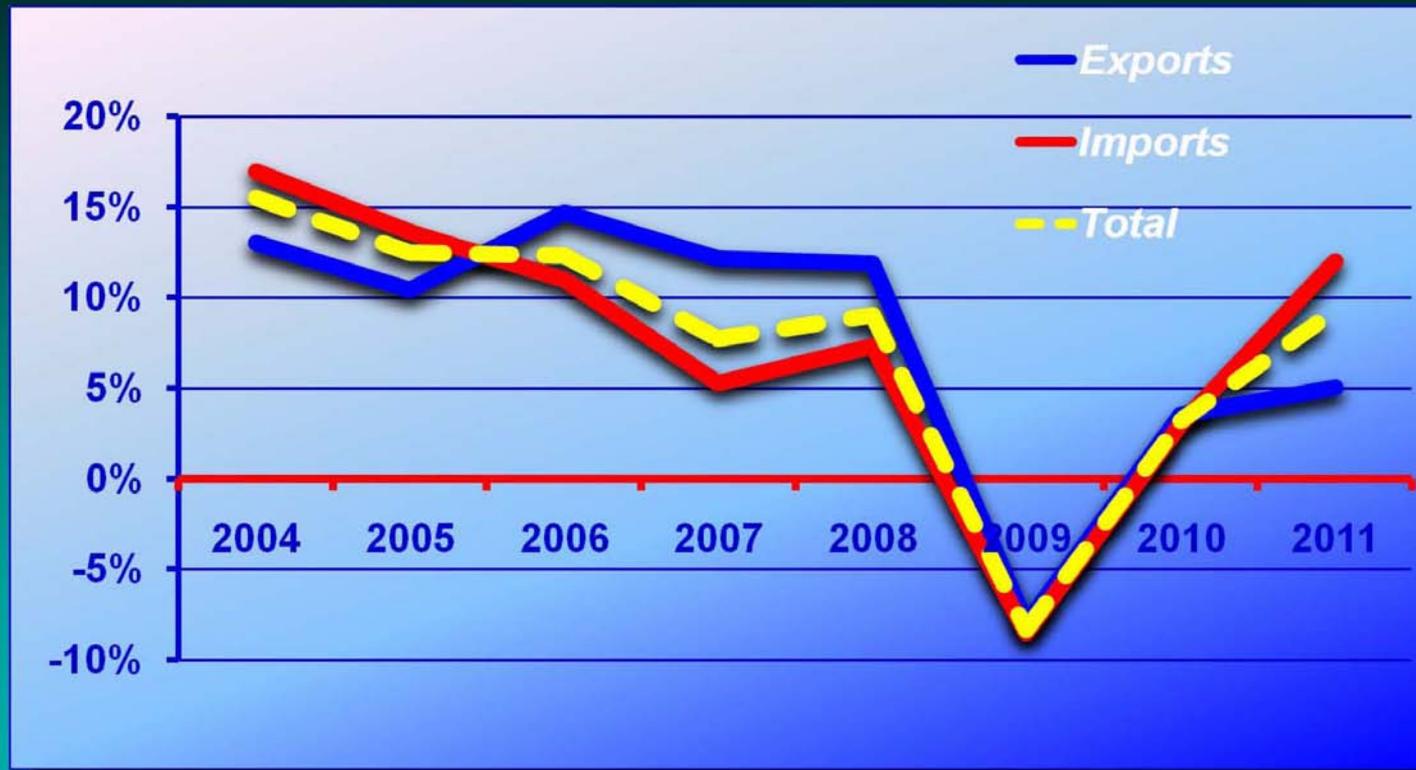
Freight Framework Study

- Project being managed by MAG with input from the Joint Planning Advisory Council (JPAC).
- JPAC – MAG, CAAG, PAG signed a resolution (2009) stating their desire to jointly coordinate planning efforts in the sun corridor.
- Study area includes Maricopa, Pinal and Pima counties.
- Parsons Brinckerhoff selected for project.



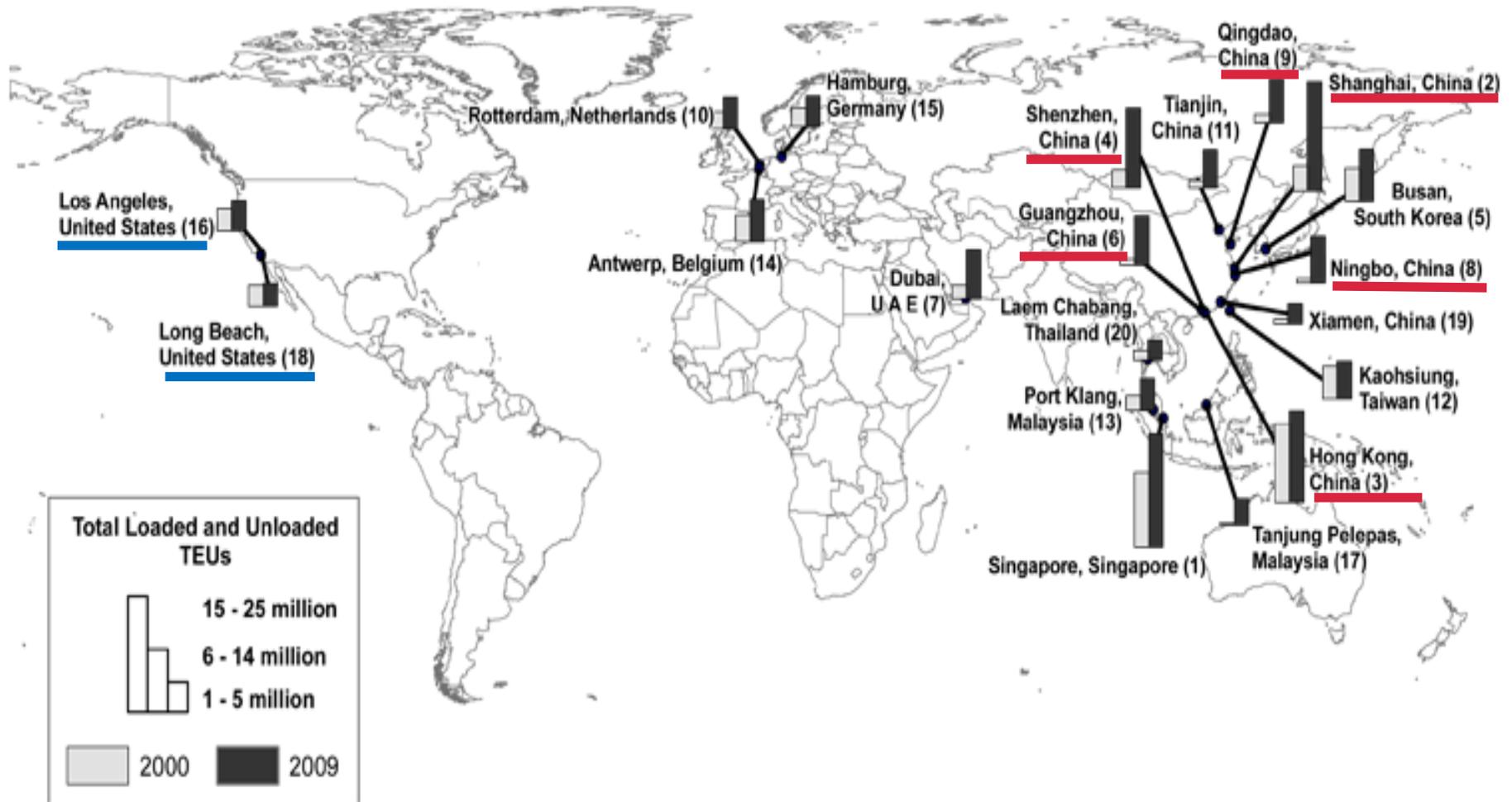
Trade Forecasts

Total US Trade - 2011 Forecast Annual Rate of Change

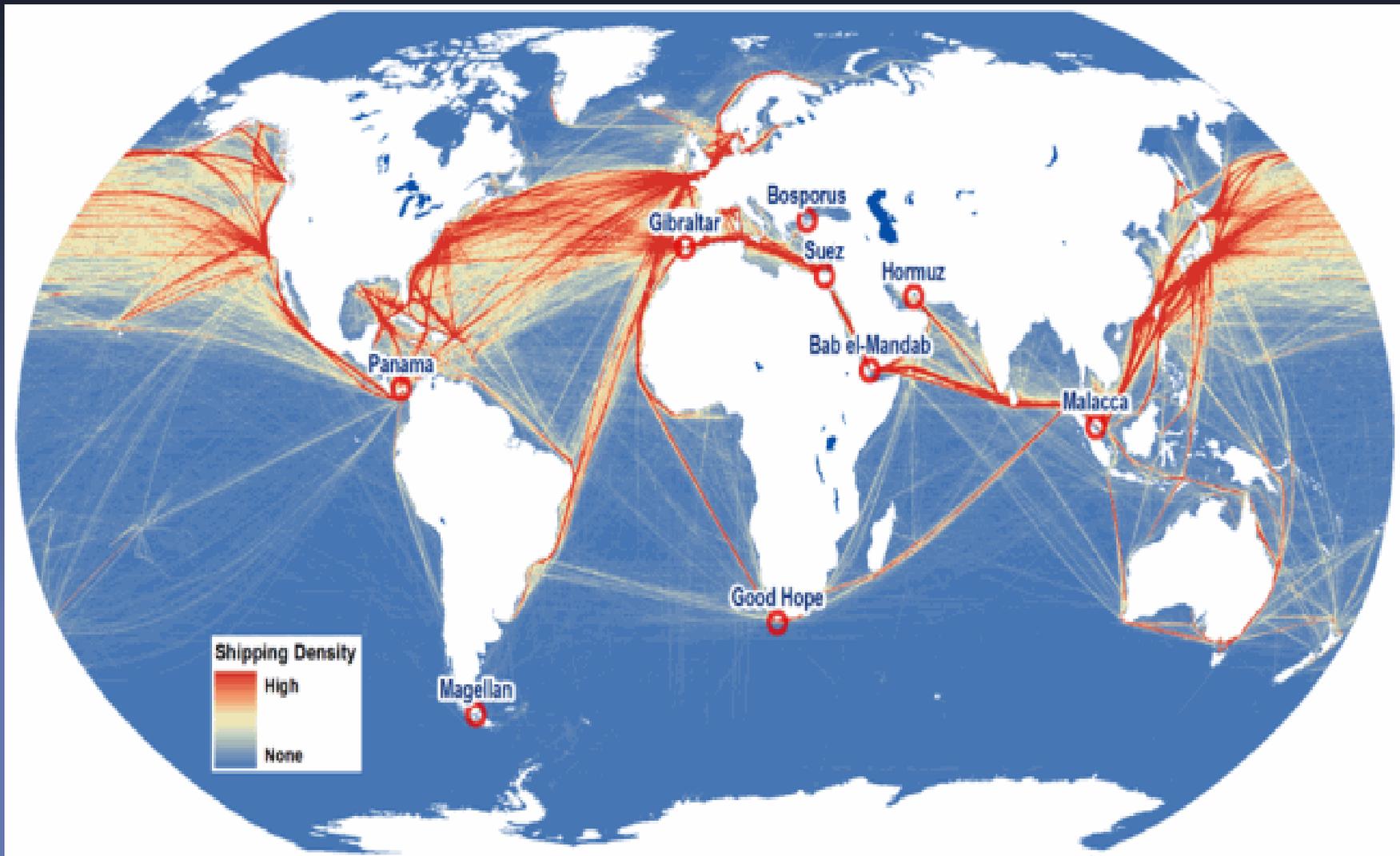


Source: US Census, Scotiabank, TD Economics, RBC, E-economics

Top 20 World Container Ports



Commodity Flows





Changing Transportation Networks



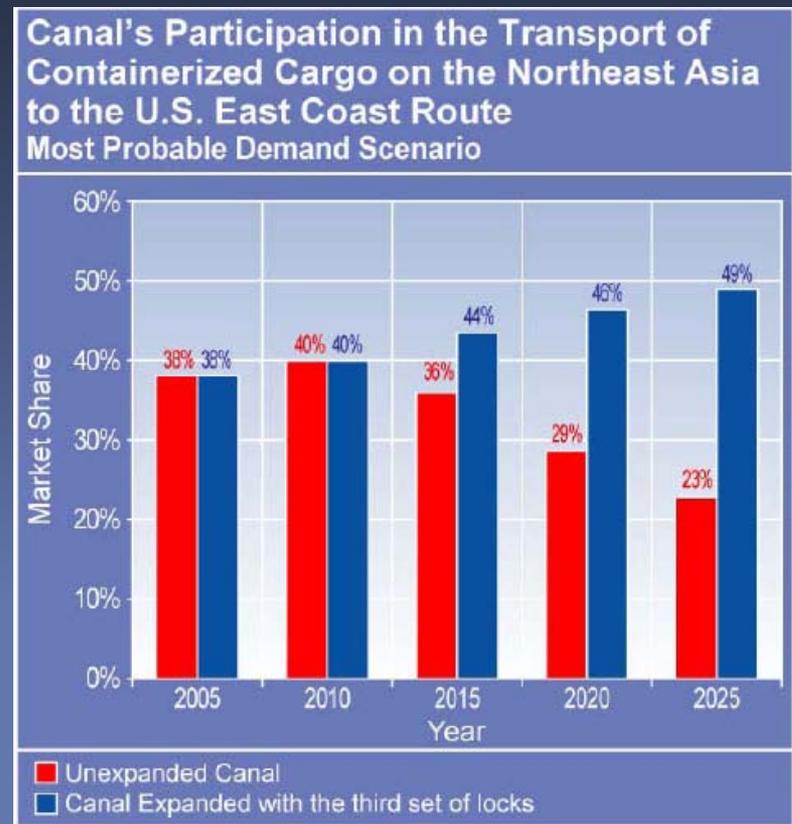
Panama Canal Expansion 2014

Panama Canal Expansion

Effects of Expansion

- **Bigger Ships**
- More Volume
 - According to ACP (2006), expansion would induce a net increase in total PC tonnage of nearly 200 million tons by 2025.
- **Will improve the economics of shipping to East Coast ports**
 - Suez share will increase, but PC Expansion will forestall a major shift to Suez

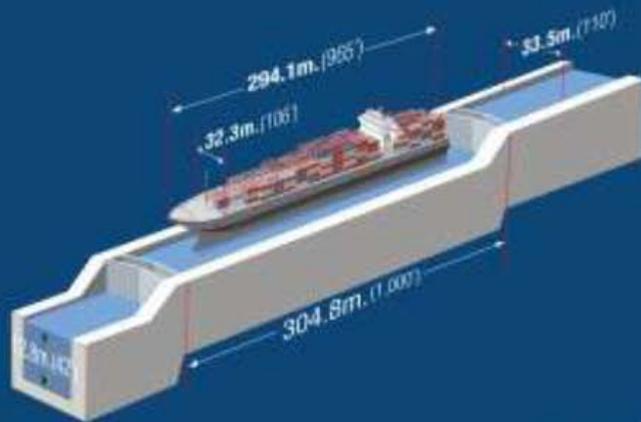
East Coast Impacts



Size of Locks and Vessels

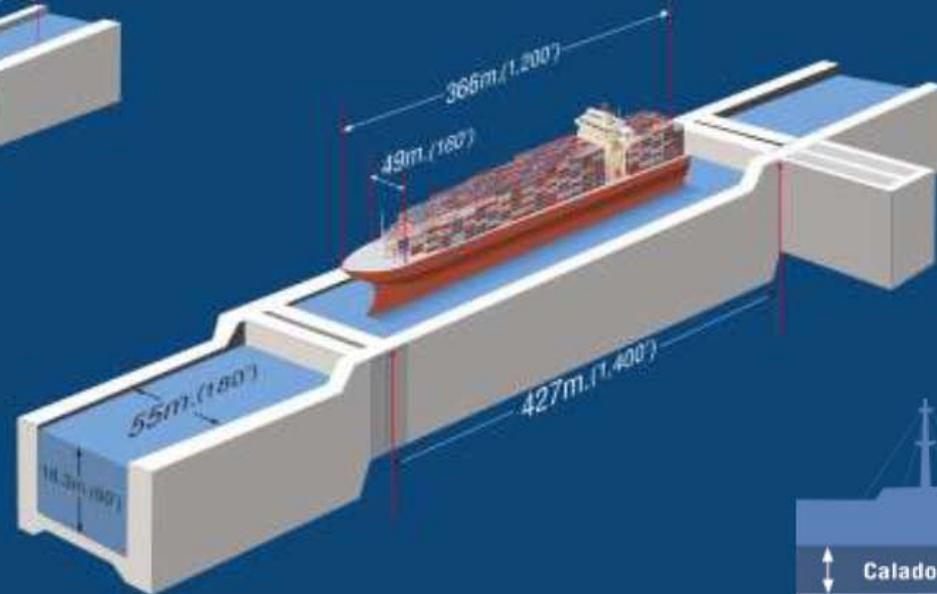
Existing locks' maximum vessel size:

4,400 TEU



New locks' maximum vessel size:

12,600 TEU



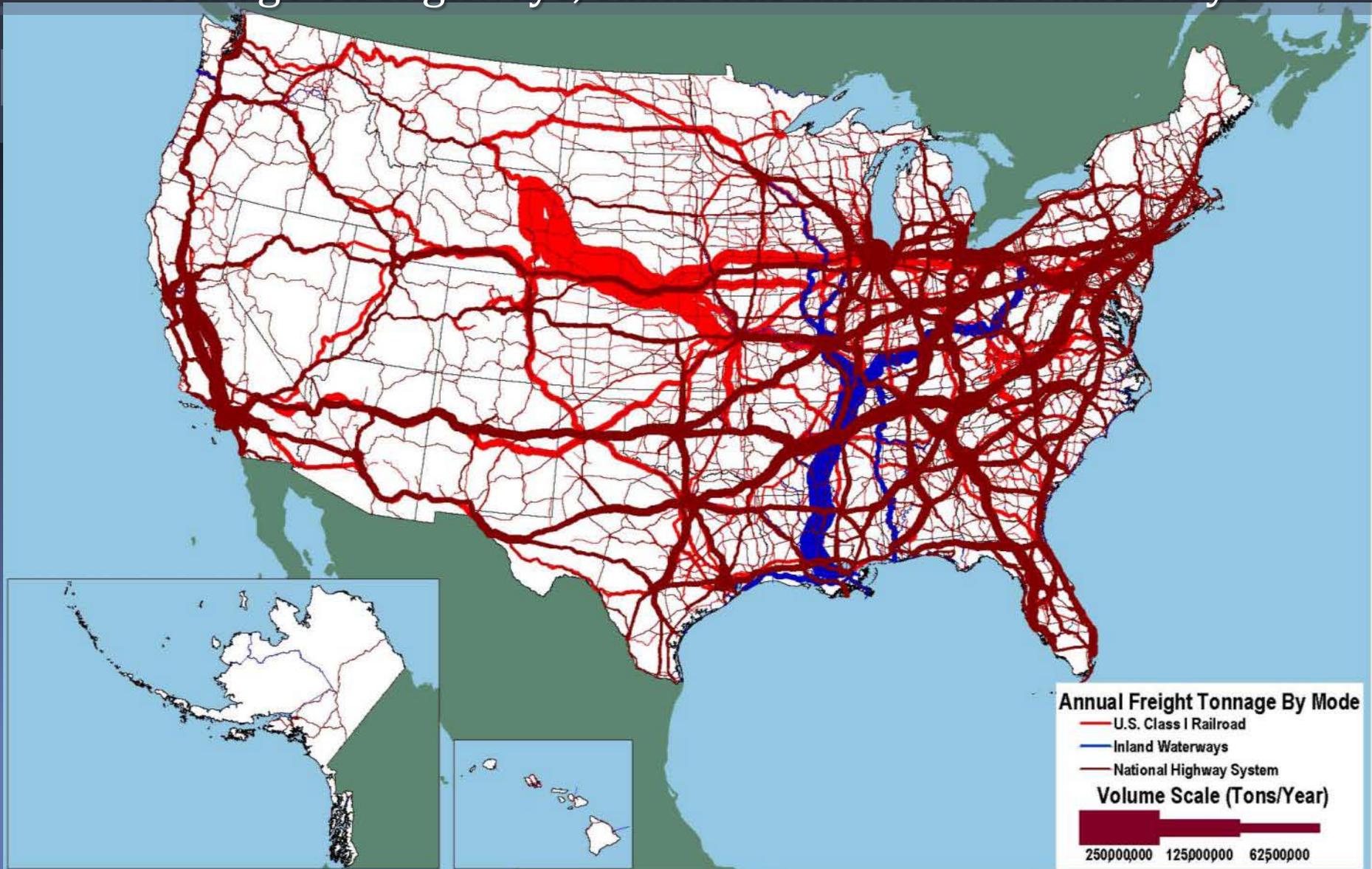
North American Gateways

Current North American Trade Corridors, Gateways and Inland Freight Clusters



Source: The Geography of Transport Systems 2nd Edition
Jean-Paul Rodrigue, Claude Comtois and Brian Slack (2009)

Tonnage on Highways, Railroads and Inland Waterways



Sources: Highways: U.S. Department of Transportation, Federal Highway Administration, Freight Analysis Framework, Version 2.2, 2007. Rail: Based on Surface Transportation Board, Annual Carload Waybill Sample and rail freight flow assignments done by Oak Ridge National Laboratory. Inland Waterways: U.S. Army Corps of Engineers (USACE), Annual Vessel Operating Activity and Lock Performance Monitoring System data, as processed for USACE by the Tennessee Valley Authority; and USACE, Institute for Water Resources, Waterborne Foreign Trade Data, Water flow assignments done by Oak Ridge National Laboratory.

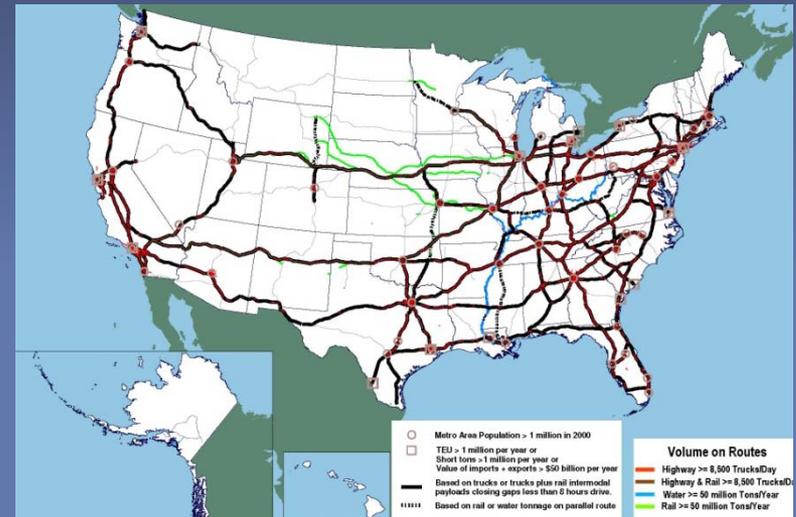
FHWA Designated Major Corridor Freight Coalitions

Domestic

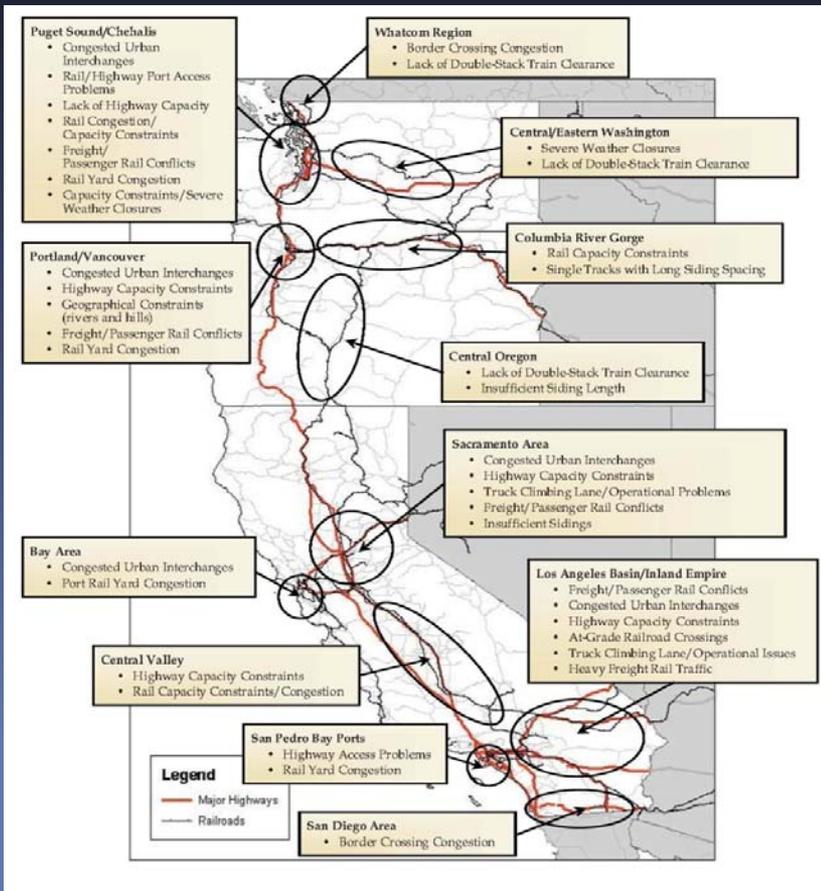
- Alameda Corridor Transportation Authority
- Central Corridors Freight Committee
- Eastern Border Transportation Coalition
- Fast Corridor
- I-5 Golden State Gateway Coalition
- I-10
- I-69 Mid-Continent Highway Coalition
- I-70 Coalition
- I-80 Coalition
- I-95 Corridor Coalition
- Lake Michigan Interstate Gateway Alliance
- Mid-America Freight Coalition (MAFC)
- Ports-to-Plains Trade Corridor
- River of Trade Corridor Coalition
- Southwest Rail Corridor Coalition
- **West Coast Corridor Coalition**

International

- Border Trade Alliance
- Can/Am Border Trade Alliance
- **Canamex**
- Central North American Trade Corridor
- North America's Super Corridor Coalition, Inc



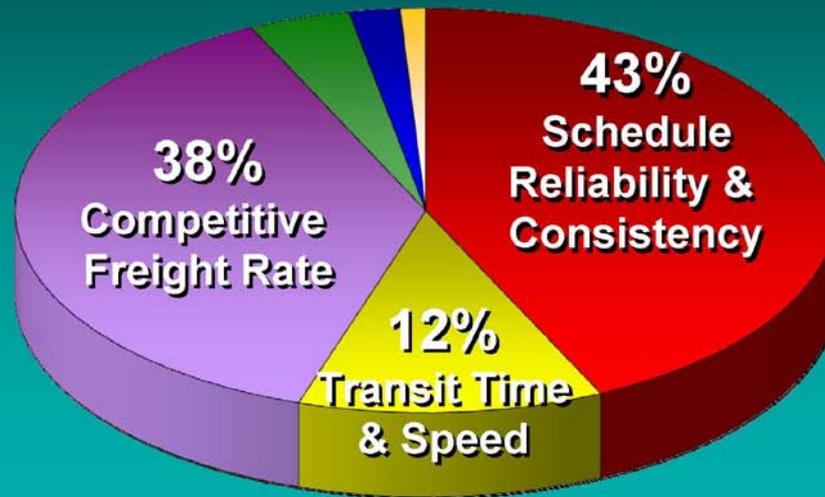
West Coast Corridor Coalition (WCCC)



WCCC encourages joint effort and effective cooperation among West Coast state, regional and local governments and the private sector.

Shippers Perspective

Poll of the Top 1000 “Blue Chip” Multinational Shipper Priorities



Freight Framework Study

Goal: Identify and develop freight related economic development opportunities.

Objectives:

- Increase mobility and freight access.
- Identify freight commodity profile.
- Identify border crossing opportunities.
- Identify Inland Port opportunities.
- Identify funding options and sources.
- Identify freight infrastructure improvements.



Freight Framework Study

- Evaluate existing freight operations.
- **Commodity flow analysis.**
 - Cargo and trade forecasts.
- **National and regional freight profile.**
 - Shipper perspectives.
 - Carrier perspectives.
- **Inland port market assessment.**
- Policy and regulatory issues.
- **Consult project stakeholders.**
- Identify funding opportunities and strategies.



Proposed Deep Sea Port of Punta Colonet



PORT FACTS:

- Located 150 miles south of Tijuana, Mexico.
- **Border Crossing Feasibility Study underway.**
- Infrastructure Issues.
- Economic feasibility.
- 1 million TEUs by opening year.
- 5 million TEUs by 2030.



Port of Guaymas



PORT FACTS:

- Rail Capacity to handle 14 trains per day – each direction.
- 4-Lane Highway No. 15 located 1-mile from port.
- Located 240 miles from Nogales and 420 miles from Phoenix.
- Port Activity: Grains, Minerals, Autos.
- Grain storage Capacity of 68K tons.
- Moved approximately 2-million tons last year.
- Indefinite waiver of Mexico's 16% value-added tax.

Interstate 11



FACTS:

- Accepted as an illustrative project in MAG RTP 2008.
- Business communities in Phoenix and Las Vegas have championed the Interstate 11 corridor with a private sector/public sector coalition seeking interstate designation.
- Hoover Dam Bypass Bridge opened to traffic in 2010.
- **Environmental Studies proposed for the Hassayampa Valley Segment.**

BENEFITS:

- Improve travel reliability for the Intermountain West.
- **Enhance economic benefit by linking trade between Mexico, Canada and the Intermountain West.**



Schedule

- Project Schedule 18 months.
- Continue with stakeholder outreach.
- Purchase commodity flow data.
- Existing conditions data collection.
- Stakeholder meeting.
- Continue to work with the Economic Development Committee and the Joint Planning Advisory Council.



Freight Framework Study

For more information.....

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