

THE DYNAMICS OF THE US CONTAINER MARKET AND IMPLICATIONS FOR THE US PORT INDUSTRY

**A PRESENTATION TO:
CHANGING TRADE PATTERNS
JANUARY 24, 2013**

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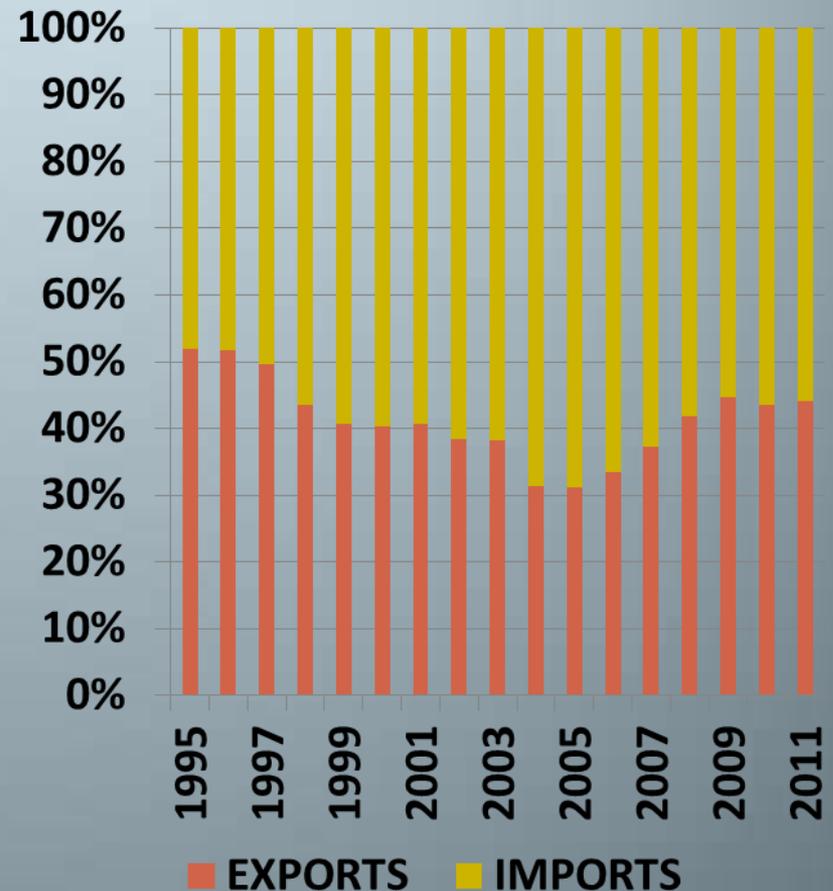
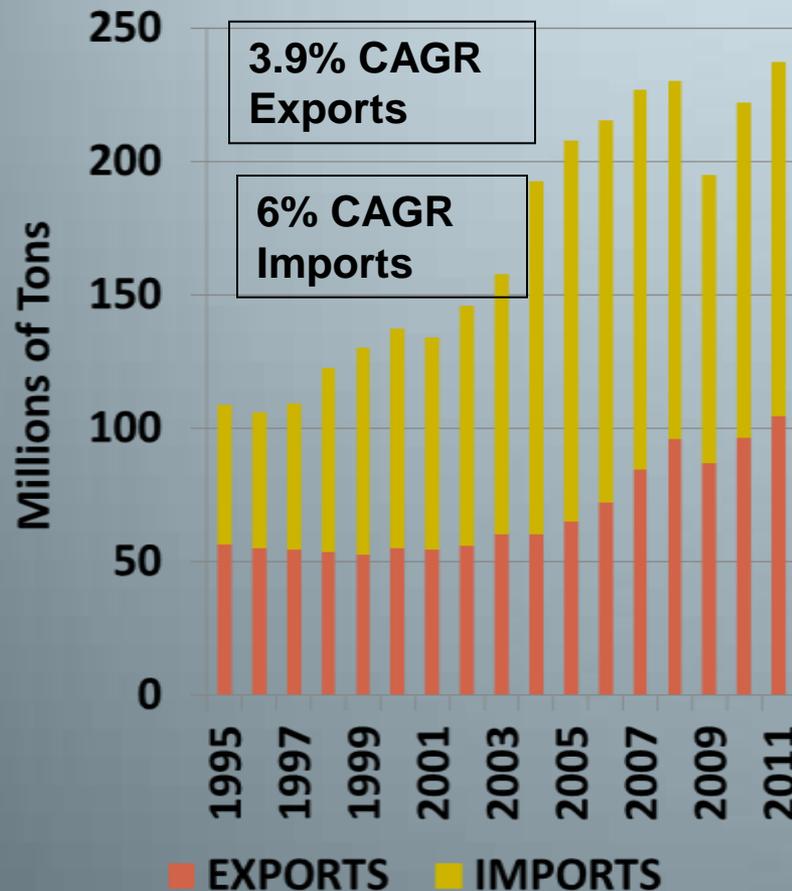
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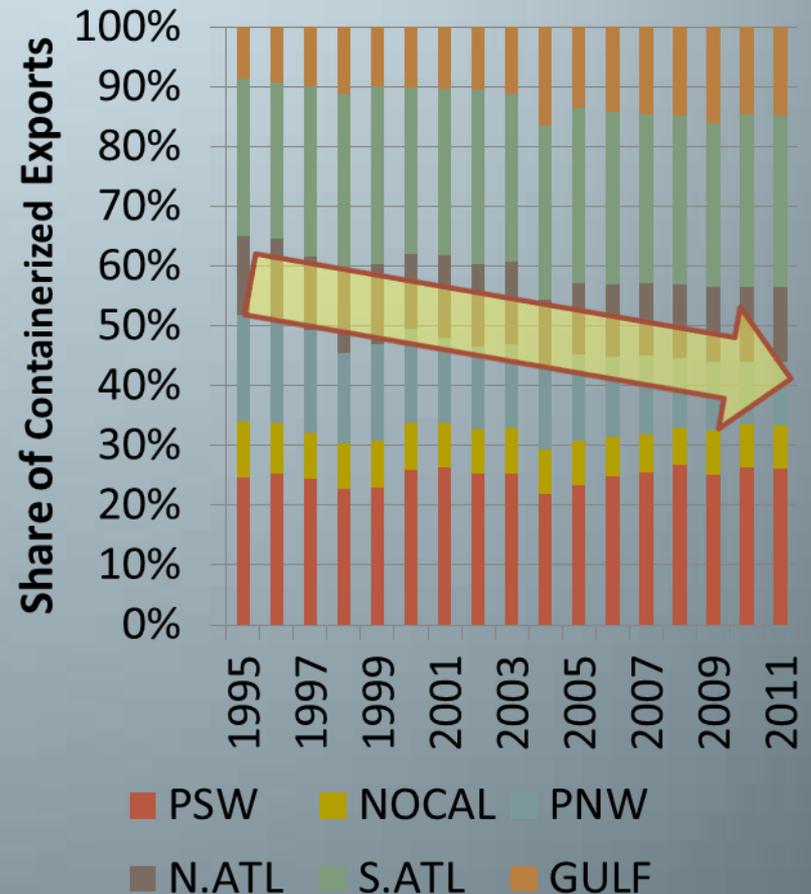
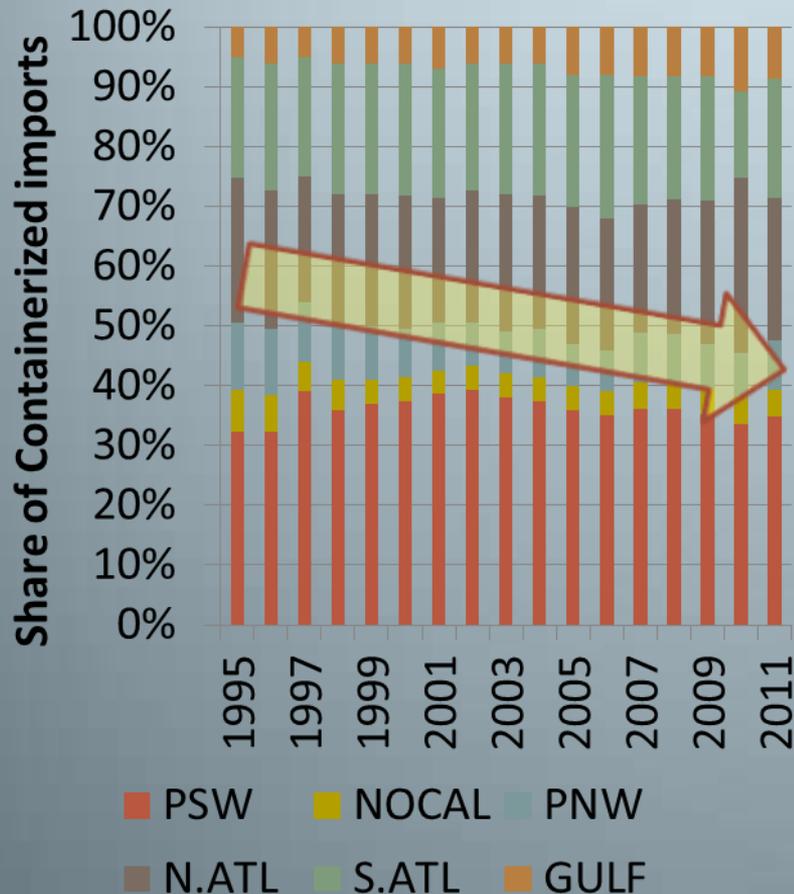
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Overview of Historical and Current Conditions

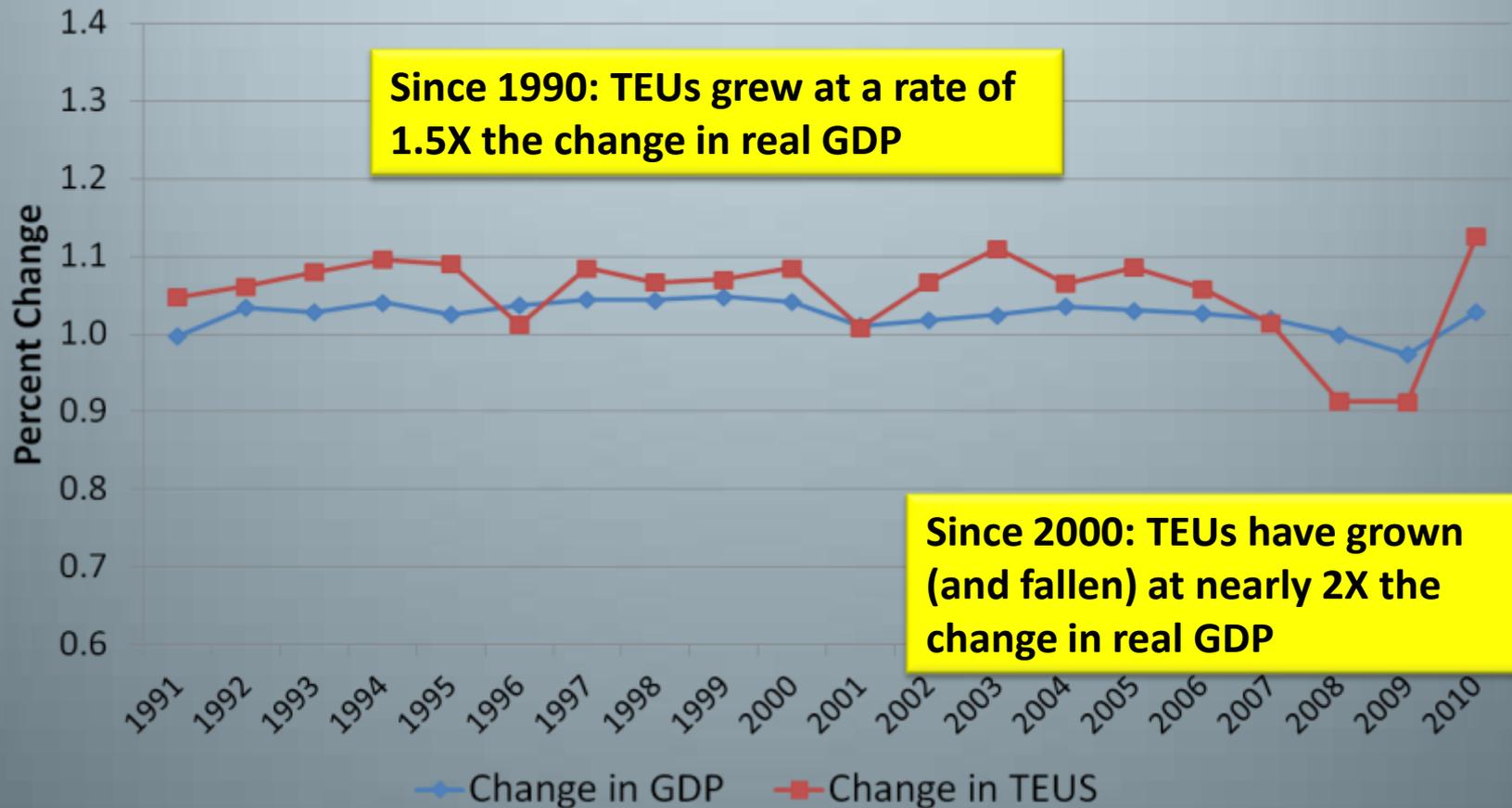
In terms of tonnage, containerized cargo reached a record year in 2011; Imported containerized cargo dominates, but exports have been increasing since 2005



West Coast ports handle about 45% of containerized imports, however share has been declining since 2001; Similarly, about 55% of containerized exports move over East and Gulf coast ports, primarily the South Atlantic

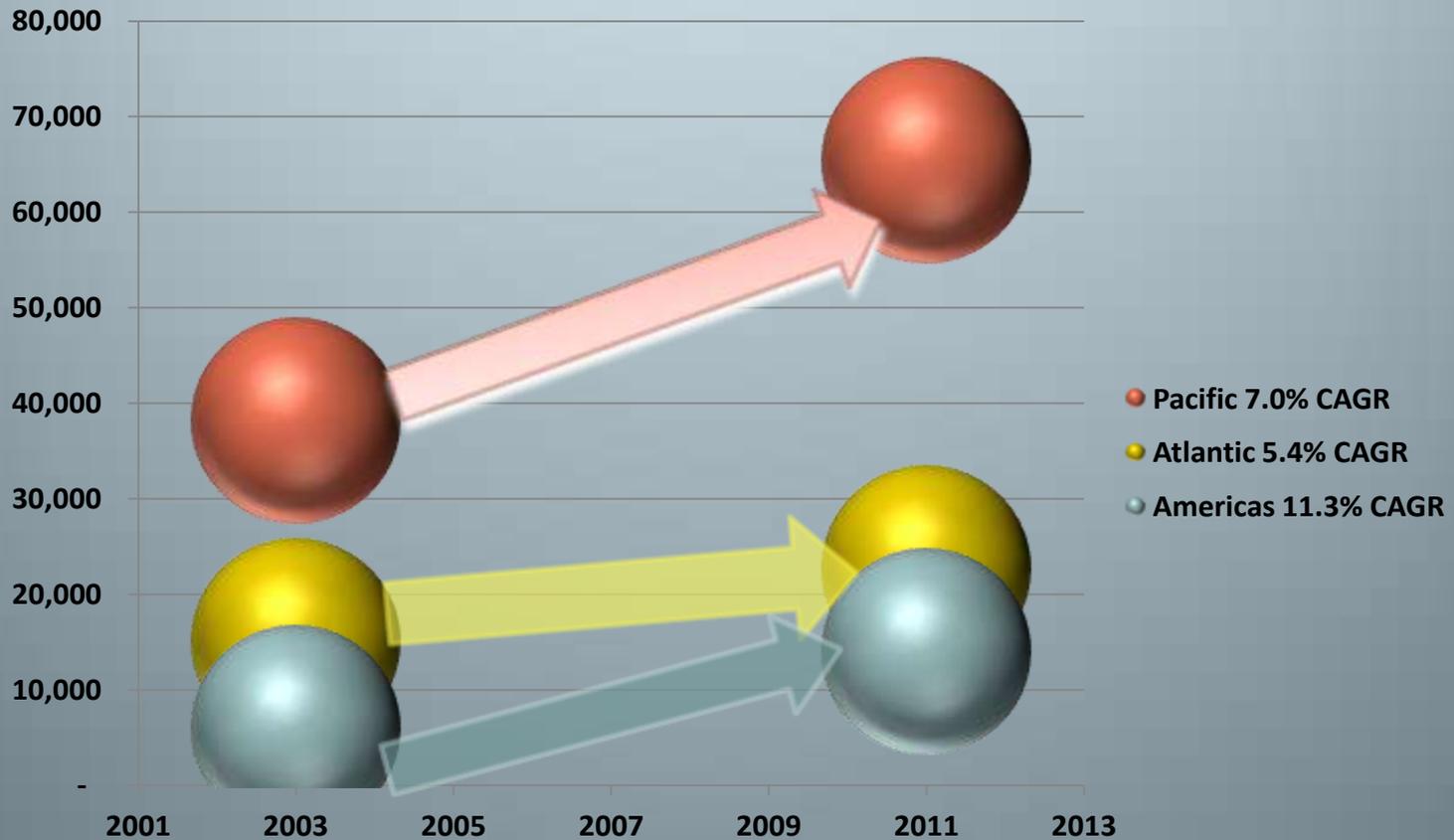


Historically, there is a strong relationship between the volume of containerized cargo & GDP



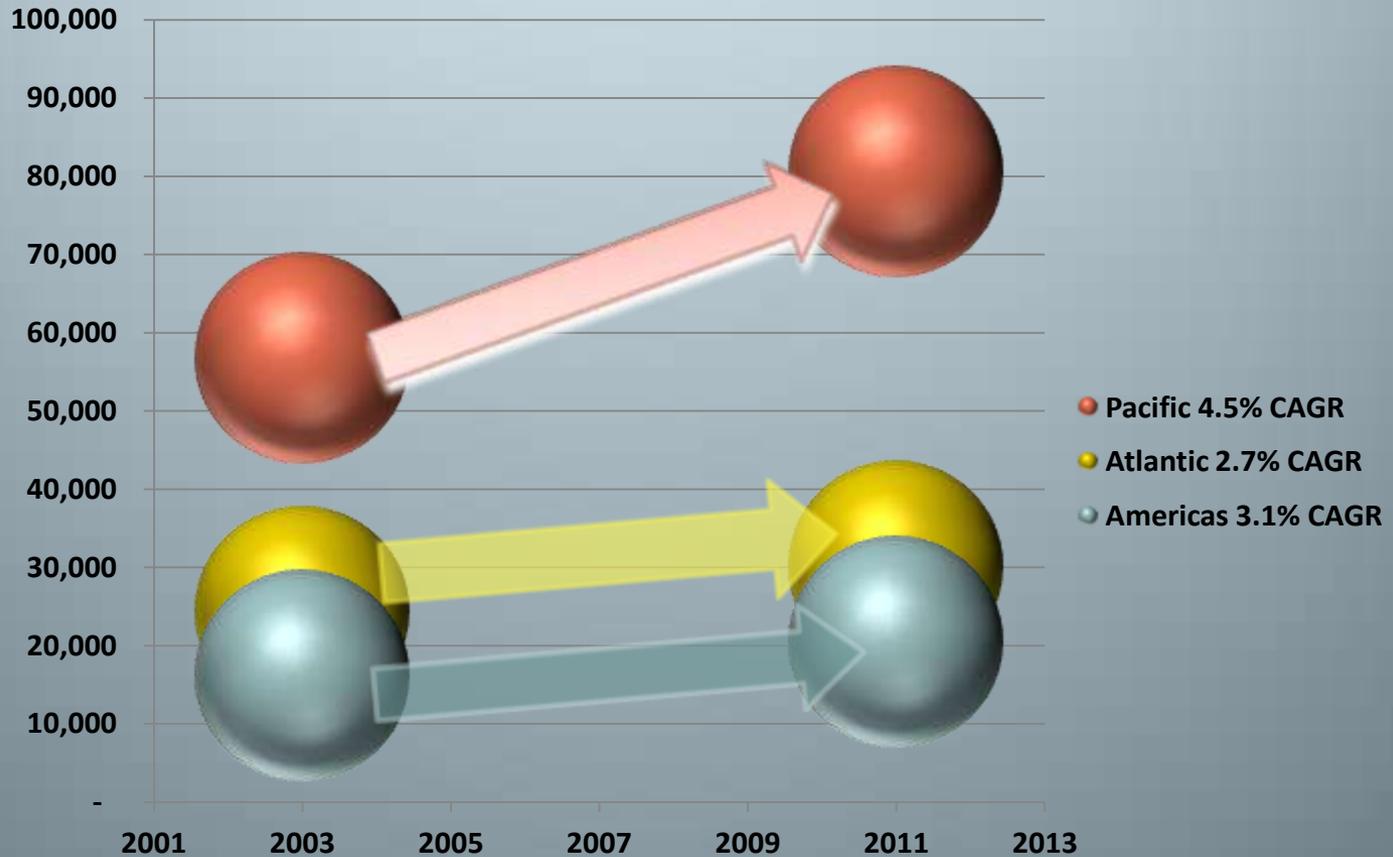
7.1% CAGR in Exports by 2003-2011

1,000 Export Containerized Tons



3.8% CAGR in Imports 2003-2011

1,000 Import Containerized Tons



Shocks have occurred in the existing logistics patterns of importers/BCOs and these changes primarily occurred between 2002 and 2007

- Consolidation of imports via San Pedro Bay (Los Angeles and Long Beach) Ports - mid 1990's:
 - Distribution Center (DC) growth
 - Cross-dock operations
 - Rail investments in LA/LB to Midwest routings
- But then...
 - 9/11
 - West Coast Shutdown (2002)
 - Capacity issues - land and labor shortages
 - Rail and truck shortages
 - High intermodal rates
 - Search for alternatives
- And more recently...
 - Shifting production centers
 - Economic crisis
- *Leads to growth in all-water services...*

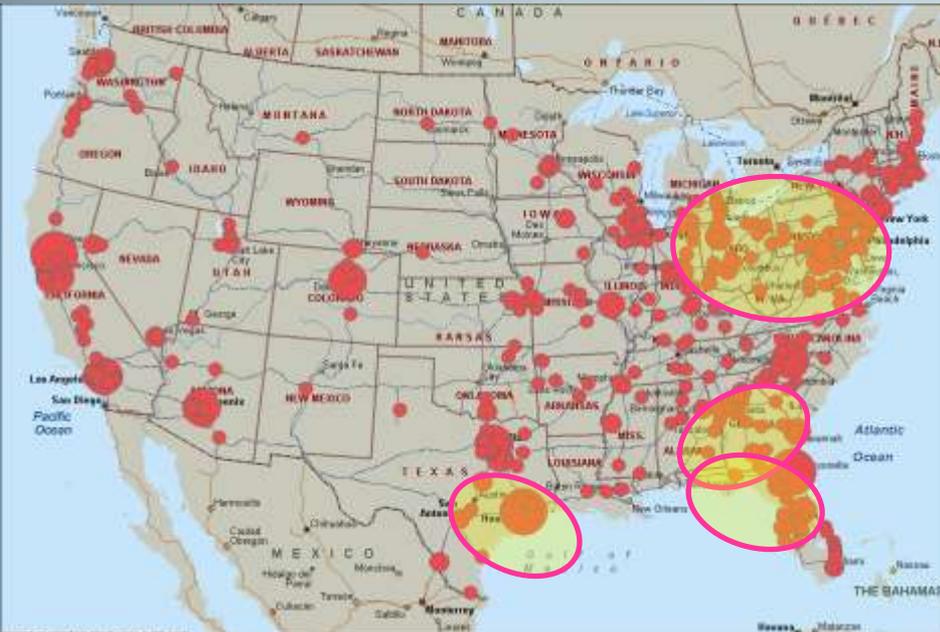
All-water services are growing...

- Significant growth in distribution centers in Gulf and Atlantic port ranges
- Proximity to Southern Asia/India is a positive for Suez Canal routings
- With direct services to East and Gulf Coast, transit time differentials are narrowing
- Port infrastructure investment on East and Gulf Coasts has responded:
 - Terminal development
 - Rail infrastructure



Significant growth in distribution centers in Gulf and Atlantic Port Ranges have driven growth in all water services.

Top 25 Retailers



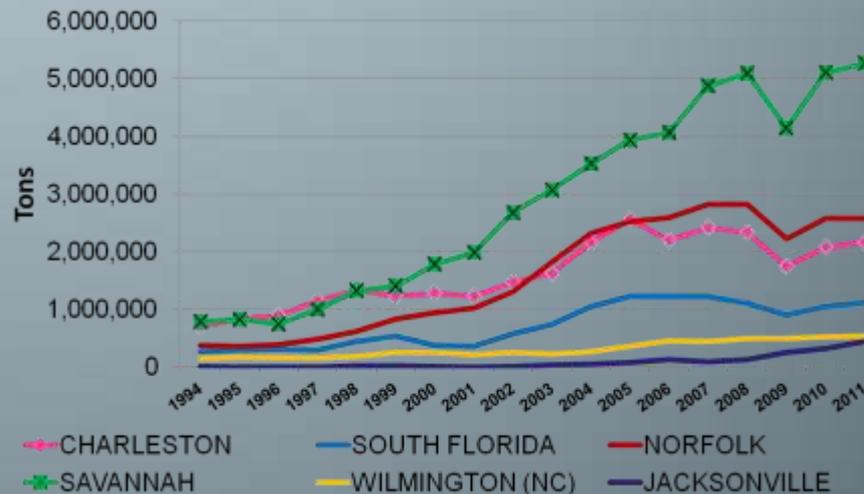
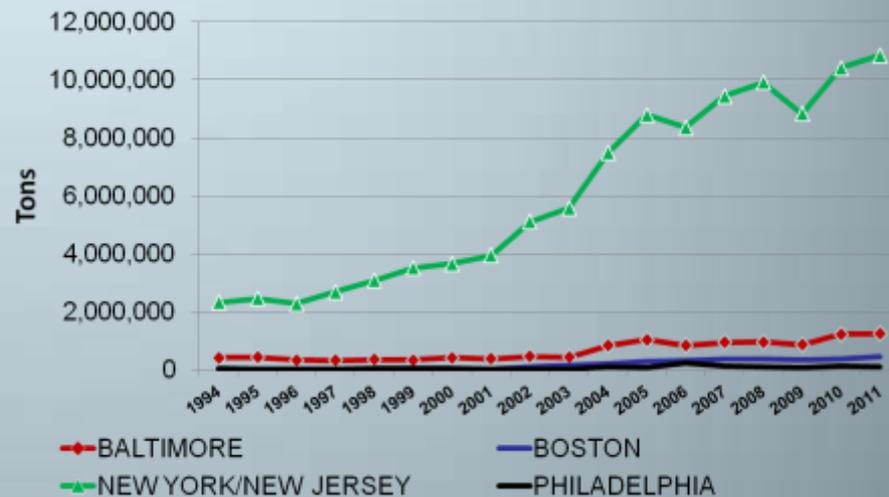
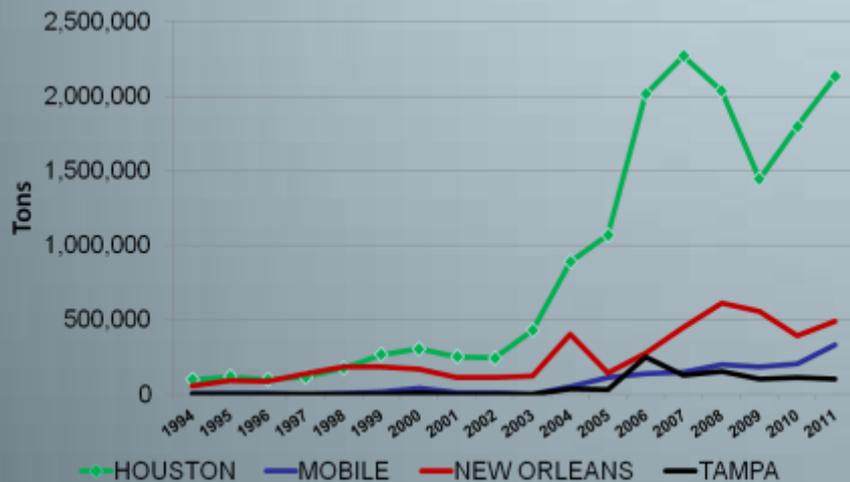
26-50 Retailers



Three areas experiencing declining vacancies: LA, Chicago and Central PA - Lehigh Valley and I-78 Corridor

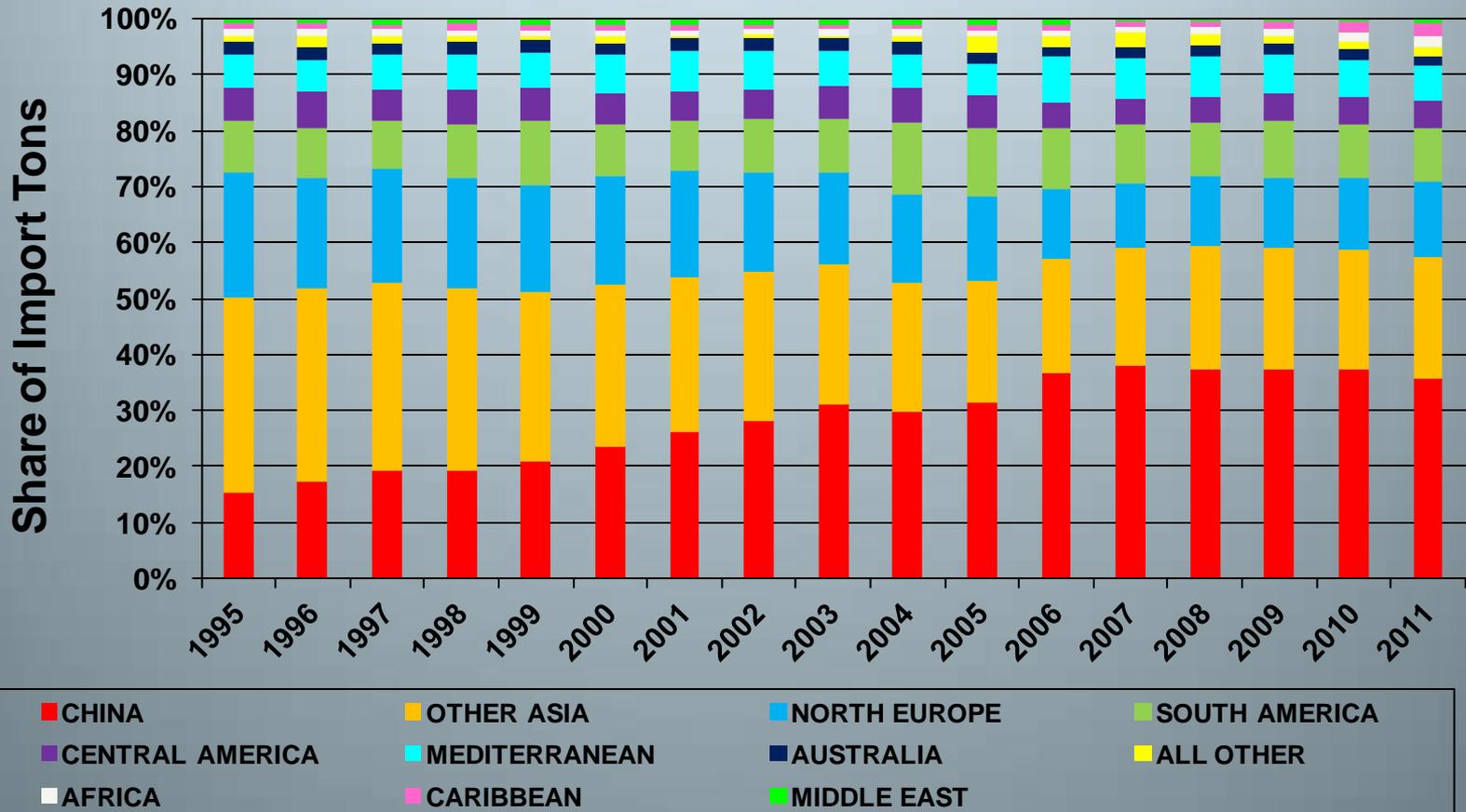
Source: Chain Store Guide, National Retail Federation

Growth in imported Asian container tonnage in the North Atlantic, South Atlantic and Gulf port ranges



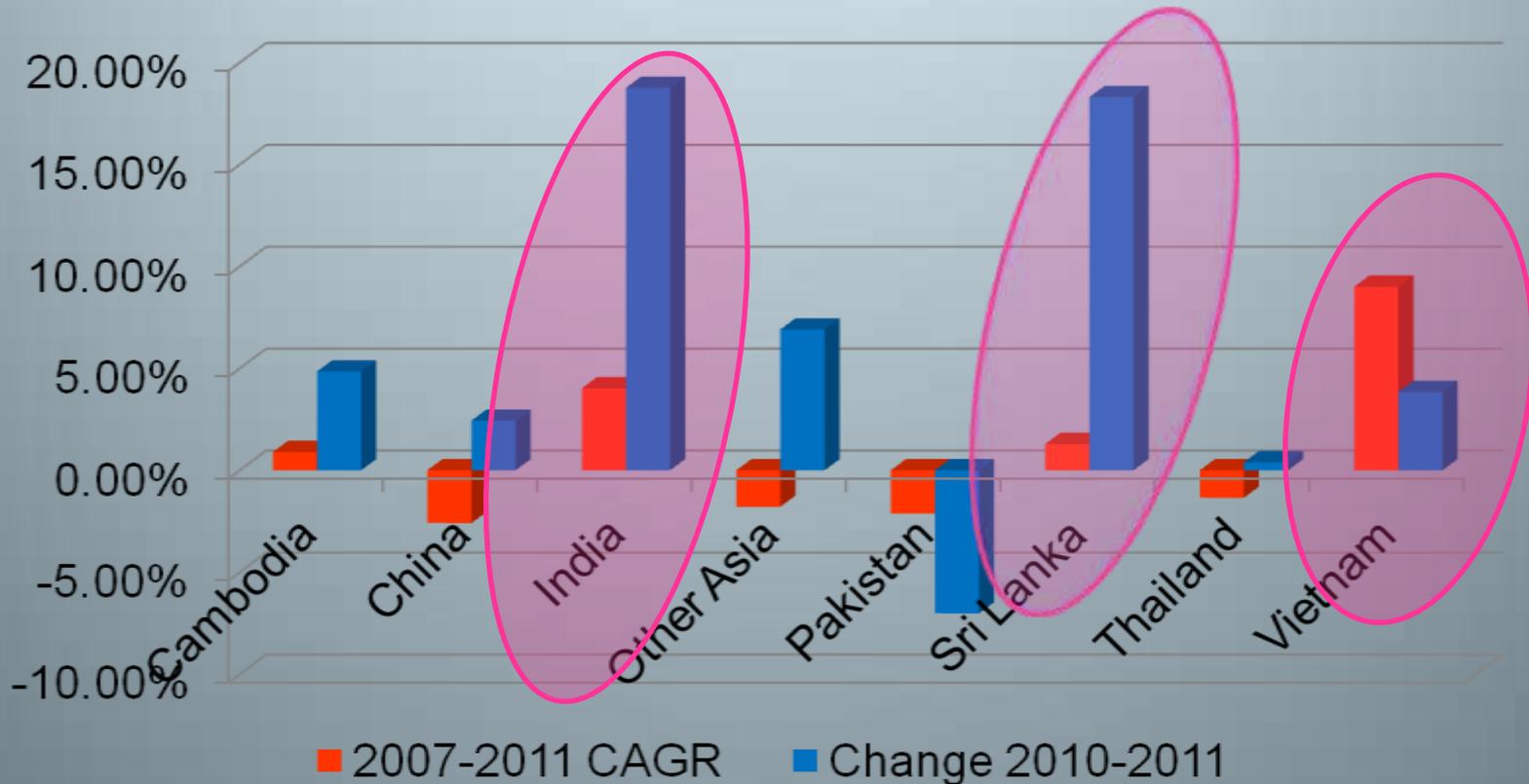
Source: US Bureau of Census, USA Trade Online

China sourced nearly 40% of imported containerized tonnage into the US, but the growth in share has stabilized and declined since 2006



Source: US Bureau of Census, USA Trade Online

Asian supply sources are shifting, favoring a Suez all-water routing; However, China remains the major trade source



Source: US Bureau of Census, USA Trade Online

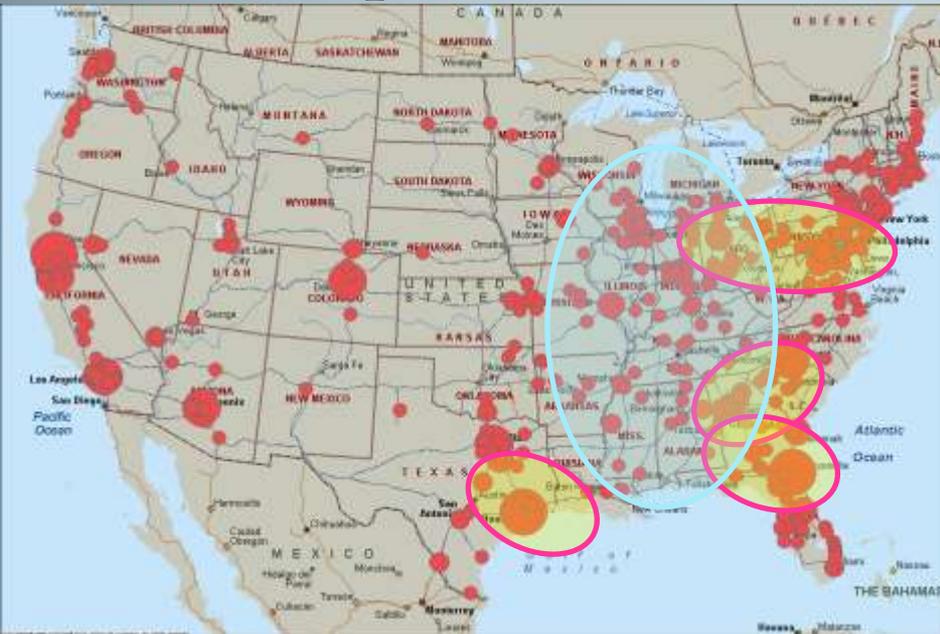
Southwest Asian supply sources favor a Suez all-water routing to the East Coast



Source: US Bureau of Census, USA Trade Online

The Midwest is the battleground for All-Water vs. Trans-Pacific Service

Top 25 Retailers



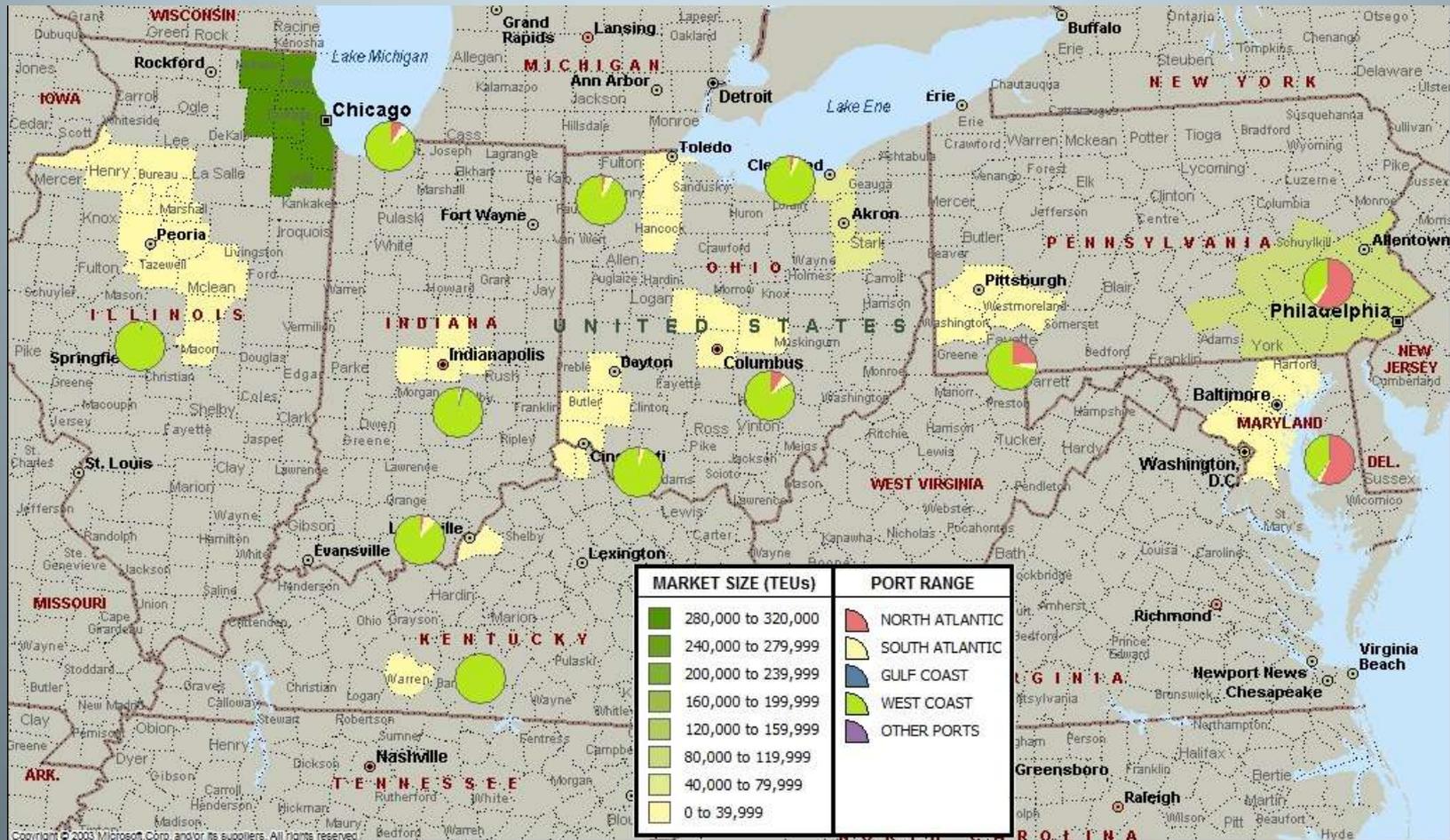
26-50 Retailers



**Three areas experiencing declining vacancies:
LA, Chicago and Central PA - Lehigh Valley and I-78 Corridor**

Source: Chain Store Guide, National Retail Federation

China imports by location and ports currently used



Implications of Panama Canal expansion and growth in Suez traffic on Atlantic and Gulf Coast ports:

- After 2015, the composition of the fleet will likely change, as 6,500+ TEU vessels will be deployed through Canal
- Actual volume increases through the Panama Canal into the US Atlantic and Gulf Coast may be less than anticipated:
 - Shifts to all-water services have been occurring since 2002
 - Significant growth in all-water service depends on total logistics costs
 - Growth in trade with areas more efficiently served via Suez Canal
 - Caribbean transshipment centers will likely compete with mainland for import DCs
 - Growth in near-market sourcing may reduce trade with China in longer run

Implications of Panama Canal expansion and growth in Suez traffic on Atlantic and Gulf Coast ports:

- East and Gulf Coasts will have to compete to handle the larger sized vessels that will be deployed:
 - Channel depth
 - Berth capacity
 - Crane outreach capability
 - *All require capital investment*
- East and Gulf Coast ports will need to compete for:
 - Local market
 - Access to discretionary cargo for both truck and rail
- Investment in port infrastructure becomes critical to compete with Caribbean transshipment hubs for development of logistics centers and off-shore distribution

Increased investment is necessary to compete with development of transshipment centers and logistics hubs in the Caribbean and Central America

- Key transshipment center development capitalizing on water depth and East-West and North-South trade lanes:
 - Panama
 - Bahamas
 - Jamaica
 - Dominican Republic
 - Costa Rica
 - Colombia
 - Cuba
- Natural progression is to logistics center development - Outsourcing of distribution center functions
 - Potential to develop competing Logistics/Distribution Centers to mainland locations
 - Lower cost labor
 - Lower cost land costs
 - Packaging, labeling, pre-racking
 - 53 ft domestics?
 - Support near market sourcing development in Central America

Growth in near market sourcing in the Caribbean and Central America

- Location decisions for off-shore production historically were driven by labor costs:
 - China became the dominant player
 - Transportation and logistics costs were outweighed by labor costs
 - Growth in domestic demand has resulted in growth in labor costs
 - Logistics costs have become more critical in total costs and location decisions:
 - Fuel surcharges
 - Vessel capacity restrictions, service disruptions
- Increasing development in Mexico, Central America and Caribbean

Growth of near market-sourcing will continue compete with Asian-sourced goods

- **Trade Policy:**
 - **Free Trade Agreements (FTA):**
 - Colombia and Panama
 - **NAFTA**
- **Textiles and apparel industry, and manufacturing:**
 - **Increased labor costs in China**
 - **Transportation costs becoming more critical (e.g. fuel)**
 - Slow Steaming
 - Capacity Restrictions
 - Increase in logistics costs
 - **Faster time to market, quick changes/flexibility**
 - **Lean supply chains - less inventory in chain**
 - **Opportunities for ports with limited water depth and berth length**

IMPLICATIONS FOR PORT STRATEGIES

Port strategies to respond to changing trade dynamics, and compete with transshipment hub development

- **Leverage deepwater, on-dock rail to attract first in-bound port call -- Asian Trade (Suez or Panama)**
 - **Serve local and regional**
 - **Serve discretionary markets**
 - **Attract distribution center/logistics center development**
 - **Provide economies to ocean carriers :**
 - **Improve transit times into key markets**
 - **Potential for carriers to reduce vessels on a specific rotation**
 - **Compete with Caribbean transshipment hubs -Florida ports**
 - **Maximize job creation**

Port strategies to respond to transshipment hub development

- **Leverage deepwater, on-dock rail to establish last outbound port call:**
 - **Focus on heavy weight exports:**
 - Maximize weight of container
 - Reduce truck traffic/emissions
 - **Fully utilize capacity of greater than Panamax ships**
 - Deepwater and on-dock rail
 - **Eliminate additional port calls**
 - **Maximize job creation**

Job creation potential of a first inbound port call

- A weekly first inbound/last outbound port call with an 8,500 TEU vessel generates significant economic activity to the local and regional economy:
 - Assume 75% of boxes discharged then reloaded
 - Assume 30% of inbound transshipped
 - Assume 70% of inbound goes to distribution center activity
- **Port Impacts:**
 - 7,900 direct, induced and indirect jobs from terminal operations and movement to DC's:
 - 2,700 direct jobs
 - 5,200 induced and indirect jobs
 - \$500 million total wages and salaries and local consumption activity
 - \$115 million Federal Taxes
- **Total logistics activity impact *less Port Impacts:***
 - 11,500 total jobs due to distribution/logistics center activity
 - \$660 million wages and salaries and local consumption
 - \$152 million Federal Taxes

Federal funding is required for deepening projects at Atlantic and Gulf Coast ports

State	Port Name	Current Depth	Planned Depth
Virginia	Norfolk/Hampton Roads	50	55
Maryland	Baltimore	50	50
South Carolina	Charleston	45	45+
New York	New York (Underway)	45-50	50
Massachusetts	Boston	40	48
Delaware River	DE, PA, NJ Ports Portions Underway	40	45
Texas	Sabine Naches	40-42	42-48
Texas	Corpus Christi (Authorized)	45	55
Alabama	Mobile	45	45
Texas	Freeport	45	55
Florida	Miami (Authorized and Funded)	45	45
Georgia	Savannah	42	48
Florida	Port Everglades	42	50
Texas	Houston-Galveston	45	45
Florida	Jacksonville	40	45+
Florida	Manatee	40	40
Louisiana	New Orleans	45	45
Florida	Tampa	43	43

After Miami is deepened, Port *MIAMI* will join New York, Baltimore and Norfolk as the only ports on the USEC to have 50 feet of water

Ability to attract ***first-inbound/last-outbound*** vessel call

More infrastructure funding in addition to deepwater ports' is necessary

- 12,000 miles of inland waterways :
 - 191 lock systems
 - 237 lock chambers
- Replacement cost estimated at \$125 billion in 1994
- 50% of the locks and dams over 60 years of age
- Efficient River Transportation System necessary for bulk exports
- Failure would be catastrophic in terms of:
 - Economic cost
 - Loss of life

The National Export Initiative (NEI) cannot be accomplished without infrastructure investment

- *Doubling exports over five years (2014)*
- Policy decision-making efforts:
 - ❑ Improving trade advocacy and export promotion efforts
 - ❑ Increasing access to credit
 - ❑ Removing barriers to the sale of US goods/services abroad
 - ❑ Pursuing policies at the global level to promote sustainable growth
- FTAs with Panama, Colombia and South Korea have been ratified
- Without adequately maintained shipping channels and port infrastructure, the US participation and benefits will not be maximized:
 - ❑ Heavy weight exports (agricultural products, forest products, chemicals)
 - ❑ Last port of call for exports – deep water critical

Infrastructure funding is the critical issue to Economic Growth

- Ports have lost funding for system preservation projects, let alone major infrastructure projects:
 - After 9/11 - security investments competing with system preservation investments
 - Downturn of trade reducing port revenues
 - Economic crisis reducing state/municipal public funding
 - USACE/Federal Government cannot fund the dredging/deepening projects and infrastructure projects
 - Aging locks and dams on nation's inland waterways
- \$64 billion over next five years
- *Private sector participation becomes necessary*

The Marine Transportation System is a key economic engine

- 16.2 million jobs supported cargo and passenger activity:
 - 13.2 million jobs supported by deepwater port activity
 - 2.5 million jobs supported by inland waterways
 - 354,000 jobs supported by US cruise activity
- More than \$3.2 trillion economic value - 25% of the US Gross Domestic Product
- What other sectors of the US /regional economy represent such a major catalyst for economic development and growth?
- *The Marine Transportation System represents a key market for future stimulus funding and cannot be ignored as the economic development dividends have been well documented*

THANK YOU!