THE DYNAMICS OF THE US CONTAINER MARKET AND SHIFTING TRADE PATTERNS – IMPLICATIONS FOR FUTURE INVESTMENT TO PROMOTE US EXPORT ACTIVITY AND ECONOMIC GROWTH

PREPARED FOR:
AMERICAN ASSOCIATION OF PORT AUTHORITIES
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In Terms of Tonnage, Containerized Cargo Has Reached a Record Year in 2011

Source: US Foreign Trade Statistics, USATrade On-Line
Imported Containerized Cargo Dominates, but Exports Have Been Increasing Since 2006

Source: US Foreign Trade Statistics, USATrade On-Line
About 45% of the Containerized Exports Move via the West Coast Ports
West Coast Ports Also Handle About 45% of Imports - 35% Moves via the PSW Ports, and this Share has Been Declining Since 2001

Source: US Maritime Administration
Shocks Have Occurred in the Existing Logistics Patterns of Importers and these Changes Occurred Between 2002 and 2007

- Consolidation of imports via San Pedro Bay (Los Angeles and Long Beach) Ports -- mid 1990’s:
  - Distribution center growth
  - Cross-dock operations
  - Rail investments in S. Cal to Midwest routings

- But then..........
  - 9/11
  - West Coast Shutdown
  - Capacity issues – land and labor shortages
  - Rail and truck shortages
  - High intermodal rates
  - Search for alternatives
  - Shifting production centers
  - Economic crisis
All Water Routings are Growing
All Water Services to the East and Gulf Coasts are Growing

- Panama Canal:
  - Current size limitations (-)
  - New, bigger canal (+)
  - Transit time issues (-)
  - Carriers can internalize rail revenue (+)

- Suez Canal:
  - Accommodates larger vessels (+)
  - Better transit to SE Asia/India (+)
  - Political instability/Piracy (-)
  - Transit time issue to Midwest (-)
  - Shifting production to India/SE Asia: (+)
    - New India-Med direct express services (+)
    - $500 billion infrastructure investment in India by Spring of 2012 and $1 trillion by 2017
    - Growth in terminal development in Vietnam
  - Transshipment operations in Med (+)
All Water Services are Growing

- Significant growth in distribution centers in Gulf and Atlantic Port Ranges

- Proximity to Southern Asia/India is a positive – Suez Canal:
  - Growth in Indian port infrastructure
  - Growth in production centers and port infrastructure in Vietnam and SE Asia

- With direct services to East and Gulf Coast, transit time differentials are narrowing

- Port infrastructure investment/distribution center development on East and Gulf Coasts
Impact of Development of All-water Service
Imported Asian Container Tonnage – North Atlantic Port Range

Source: US Bureau of Census, USA Trade Online
Imported Asian Container Tonnage – South Atlantic Port Range

Source: US Bureau of Census, USA Trade Online
Imported Asian Containerized Cargo – Gulf Coast Region
Imported Tons of Containerized Cargo

Source: US Bureau of Census, USA Trade Online
China Has Been Responsible for Nearly 40% of Imported Containerized Tonnage, but the Growth in Share Has Stabilized

2006 data reflects new data base by MARAD/US Bureau of Census
Asian Supply Sources are Shifting, Favoring Suez Routing. However, China Remains the Major Trade Source

Source: US Bureau of Census, USA Trade Online
Expansion of the Panama Canal and Growth in Suez Canal – Implications on Changing Trade Patterns

- After 2014, the composition of the fleet will likely change, as 6,500 TEU plus vessels will be deployed.
- Actual container volume increases through the Panama Canal into the US Atlantic and Gulf Coast may be less than anticipated:
  - Factors that have impacted growth in all water services are now in place.
  - Growth in trade with areas that are more efficiently served via Suez Canal.
  - Growth in investments in Central and South America to shorten supply chain.
  - Caribbean Transshipment Centers will likely compete with mainland for import distribution center locations.
**Expansion of the Panama Canal and Growth in Suez Canal – Implications on Changing Trade Patterns**

- East and Gulf Coasts will have to compete to handle the larger sized vessels that will be deployed on both Suez as well as Panama Canal based on infrastructure:
  - Channel depth to accommodate larger vessels (both Suez as well as enlarged Panama Canal)
  - Berth capacity to handle 1,000 ft. plus vessels
  - Crane outreach capability
  - Intermodal capacity for discretionary markets
  - *All require capital investment*

- Investment in Port Infrastructure becomes critical to compete with Caribbean transshipment hubs for development of logistics centers and off-shore distribution activity

- Investment in Port Infrastructure is necessary to grow US exports, and increase competitive position of US:
  - Deepwater ports
  - Inland River Ports
Federal Funding is Required for Deepening Projects at Atlantic and Gulf Coast Ports

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<th>State</th>
<th>Port Name</th>
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<th>Planned Depth</th>
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More Infrastructure Funding Needed in Addition to Deepwater Ports’ Needs

• **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
Implications - Infrastructure Funding is the Critical Issue

- Ports have lost funding for system preservation projects, none-the-less major infrastructure projects:
  - After 9/11 - security investments competing with system preservation investments
  - Downturn of trade drastically reducing port revenues
  - Economic crisis reduced state/municipal public funding
  - US Army Corps of Engineers/Federal Government cannot fund the dredging/deepening projects and infrastructure projects necessary to keep US competitive
  - Private sector participation becomes necessary
The National Export Initiative Cannot be Accomplished Without Infrastructure Investment

- Improving trade advocacy and export promotion efforts
- Increasing access to credit, especially for small and medium-sized businesses
- Removing barriers to the sale of US goods and services abroad
- Robustly enforcing trade rules
- Pursuing policies at the global level to promote strong, sustainable and balanced growth
- *Doubling exports over the next five years*
The National Export Initiatives Cannot be Accomplished Without Infrastructure Funding

- Free Trade Agreements (FTAs) with Panama, Colombia and South Korea have been ratified:
  - Details differ by agreement, but in general, tariffs will be eliminated on about 80% of bilateral trade between the US and these countries once the agreements enacted
  - Most remaining tariffs will be gradually phased out over the next five to 15 years
- Without adequately maintained shipping channels and port infrastructure, the US participation and benefits will not be maximized
Increased Exports Will Have an Immediate Impact on Job Creation

- Nearly 950,000 TEUs of export cargo now produced in Florida
- Double containerized exports produced in Florida and move the exports via the Florida Port System
- 95,443 total jobs annually:
  - 2,636 direct port jobs, including:
    - 200 rail jobs in Florida
    - 1,300 jobs with Florida truckers
    - 400 jobs with warehousing
    - 500 jobs with longshoremen
  - 2,793 induced jobs from port operations
  - 1,430 indirect jobs from port operations
  - 88,584 new jobs with Florida exporters
- $469.8 million of state and local taxes annually
- $14.9 billion of total economic value to the state
Increased Investment is Further 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
Impact of Transshipment Hub/Logistics Center Development

- Investment required to compete with potential outsourcing of logistics centers to Caribbean:
  - Channel depth
  - Maintenance Dredging
  - Berth Length
  - Turning basin dimensions
  - Crane outreach capability

- Necessary to provide North/South and East/West trade lane service
The Opportunity Cost to the US Economy to Not Participate in Transshipment Operations is Significant

- Transshipment Cargo at South Florida Ports has declined from 20-30% in late 1990’s to essentially 0% currently:
  - Security issues after 9/11
  - Terminal costs
  - Limited water depth

- A weekly transshipment service to a US Port with an 8,500 TEU vessel generates significant economic activity to the local and regional economy:
  - Assume 75% of boxes discharged and reloaded
  - Assume 30% of inbound transshipped
  - Assume 70% of inbound goes to distribution center activity
Opportunity Cost of Losing Transshipment Center Activity – 8,500 TEU Vessel Weekly Call

- **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 billion wages and salaries and local consumption
  - $152 million Federal Taxes
Implications
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
Implications

- The Global Economy is here!
  - Trade restrictions must be avoided

- The port system has become integral in the world’s logistics systems:
  - Ports must provide dependable service:
    - Labor/management issues must be minimized
    - Efficient terminal transfer of cargo from ship to inland points:
      - Terminal automation
      - Surface Transportation
    - Long term sustainable development of Port facilities, including dredge disposal sites to support dredging needs

- Infrastructure funding needs are reaching critical shortfalls and private sector funding has become a substitute for Federal Investment:
  - Port sector received less than 15% of the last round of Tiger II Grants
  - Deeper channels, bigger berths are needed to increase the competitiveness of US exports

- What other sectors of the US 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