NATIONAL ECONOMIC IMPACT OF THE U.S. COASTAL PORTS AND CHALLENGES FACING U.S. SEAPORTS

AAPA Spring Conference, 2015





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April 21, 2015



Why Measure the Economic Impact of the Nation's Seaports



- Demonstration of the value of the nation's coastal seaports to the overall
 U.S. economy federal, state and local policy makers
- Infrastructure investment decisions:
 - Navigational projects
 - Integration of ports into national transportation policies
- Federal transportation policy decisions:
 - Jones Act
 - ECA regulations
 - Harbor Maintenance Tax
 - Cargo Preference
 - Export Initiatives
 - Trade policies Section 201 Steel Import Quotas
- Assessment of the impact of port closures:
 - Security issues
 - Natural disasters and resulting funding decisions
 - Labor-management contract negotiations

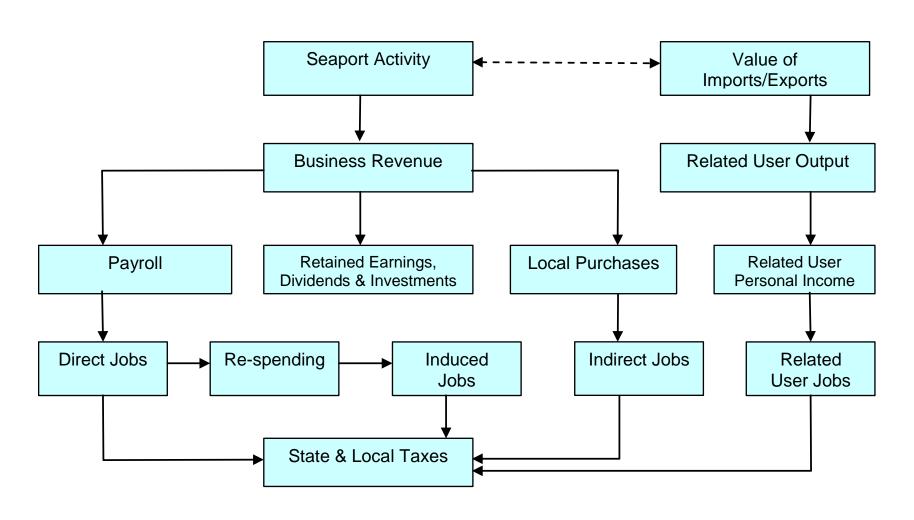
The Importance of the U.S. Coastal Seaports to the National Economy - Methodology



- Martin Associates conducted more than 500 seaport impact studies since 1986
- Current analysis is based on 57 seaport-specific models Martin Associates developed in since 2012, including:
 - West Coast ports models developed as part of the PMA/ILWU contract negotiations
 - Florida state-wide models used by FSTED and Florida Ports Council project funding decisions
 - State of Texas seaport impact models to be used by Texas DOT in port funding decisions
 - U.S. Great Lakes/St. Lawrence Seaway Transportation System models used for policy analysis 16 specific U.S. Great Lakes ports
- Individual seaport impact models developed since 2012
- More than 12,000 interviews with service providers at nation's seaports
- Models recalibrated for U.S. rather than local and state impacts
- Prototype models for rest of U.S. Coastal ports developed
- USA Trade Online and individual port statistics used to calibrate for 2014 for non-port specific models

Flow of Economic Impacts





Results



23,116,847 jobs generated by Port activity

Direct Jobs: 541,946Induced Jobs: 822,884Indirect Jobs: 372,017

•Importers/Exports direct, induced and indirect: 21,380,000

\$4.6 trillion of total economic value - accounts for 26% of U.S. GDP in 2014

- •\$124.5 billion direct revenue received by firms providing direct services to cargo and vessels
- •\$99.9 billion of re-spending of personal income and consumption expenditures
- •\$4.3 trillion of economic output by importers and exporters

\$1.1 trillion total personal income and local consumption

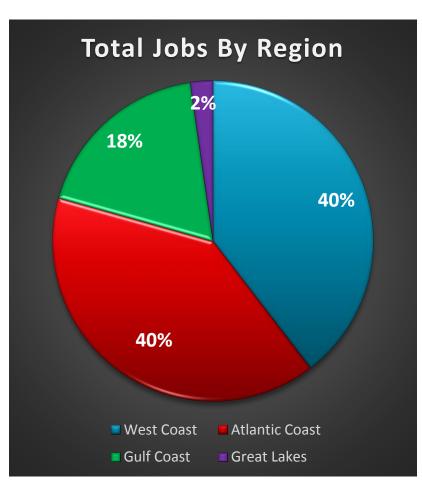
•\$53,723: Average salary for direct employees

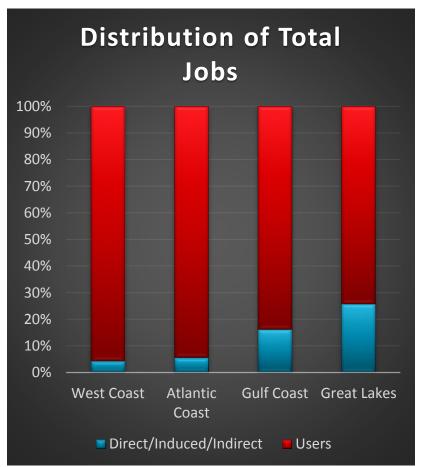
\$321.1 billion of federal, state, and local taxes

- Generated by activity at marine terminals
- •\$41.0 billion genereated by port sector revenue
- •\$280.1 billion generated by importer and exporter revenue

Economic Impacts By Region

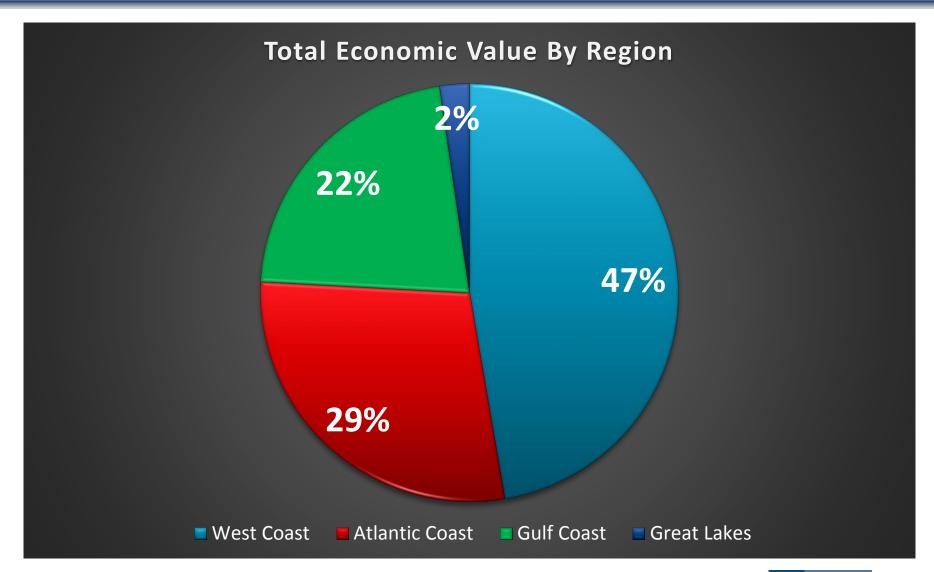






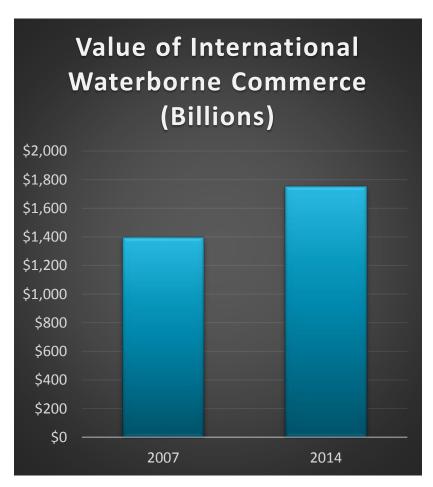
Distribution of Total Economic Value

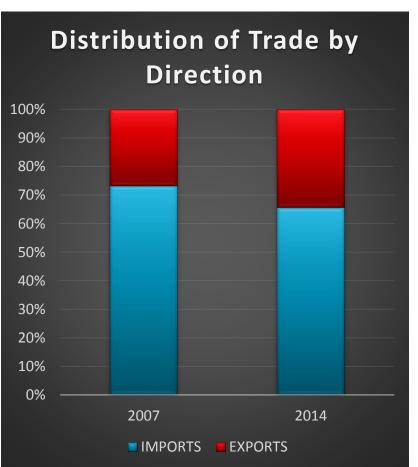




Changes Since 2014 -\$400 Billion Growth in Trade, Driven by Exports







Growth Since 2007



9.8 million job growth supported by seaport activity

2014: 23.1 million jobs

2007: 13.3 million jobs

\$1.4 trillion growth in economic value

2014: \$4.6 trillion

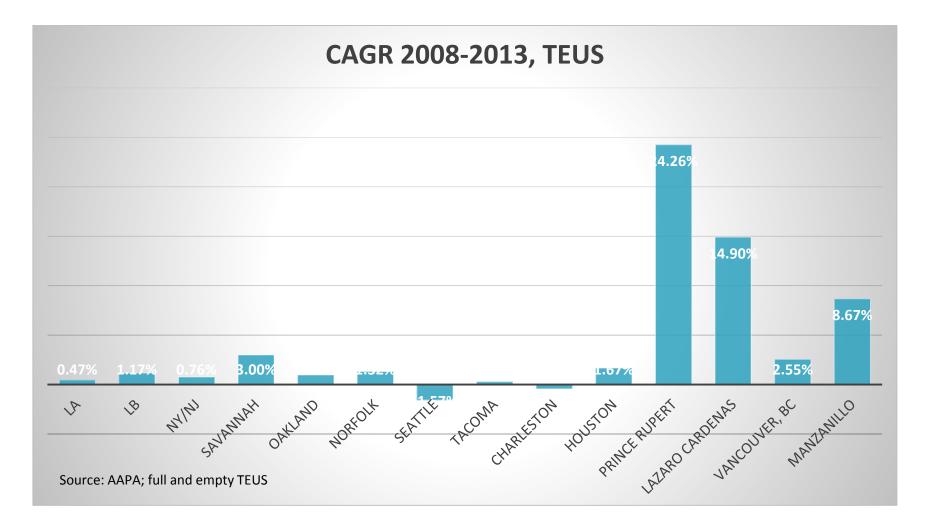
2007: \$3.2 trillion



CHALLENGES FACING THE U.S. PORT INDUSTRY

Comparison of CAGR 2008-2013 for Top 10 U.S. Container **Ports and Key Canadian and Mexican Ports**





Comparison of Productivity at the World's Leading Container Ports (Journal of Commerce)



Port	Country	Berth Productivity
Qingdao	China	96
Ningbo	China	88
Dalian	China	86
Shanghai	China	86
Tianjin	China	86
Yokohama	Japan	85
Jebel Ali	United Arab Emirates	81
Busan	South Korea	80
Nhava Sheva (Jawaharlal Nehru)	India	79
Yantian	China	78
Taipei	Taiwan	77
Xiamen	China	76
Long Beach	U.S.	74
Khor al Fakkan	United Arab Emirates	74
Elizabeth	U.S.	74
Nansha	China	73
Kaohsiung	Taiwan	72
Salalah	Oman	72
Mawan	China	71
Southampton	U.K.	71

Federal Funding is Required for Deepening Projects at Atlantic and Gulf Coast Ports



		Current	Planned
State	Port Name	Depth	Depth
Maryland	Baltimore	50	50
Massachusetts	Boston	40	48
South Carolina	Charleston (Authorized)	45	52
Texas	Corpus Christi (Authorized)	45	55
Delaware River	DE, PA, NJ Ports Portions Underway	40	45
Texas	Freeport (Authorized)	45	55
Texas	Houston-Galveston	45	45
Florida	Jacksonville (Authorized)	40	47
Florida	Manatee	40	40
Florida	Miami (Under Way)	42	50
Alabama	Mobile	45	45
Louisiana	New Orleans	45	45
New York	New York (Underway)	45-50	50
Virginia	Norfolk/Hampton Roads	50	55
Florida	Palm Beach	33	33
Florida	Port Everglades	42	47+
Florida	Port Canaveral	41	50+
Texas	Sabine Naches	40-42	42-48
Georgia	Savannah (Authorized)	42	47+
Florida	Tampa	43	43

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

Ability to attract *first-in-bound/last-out-bound* vessel call

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
- \$64 billion over next five years is needed (Mexican government investing \$54 billion in next 6 years)
- Need for highly productive automated terminals to serve the largest container vessels
- Need for efficient rail and highway access

More Infrastructure Funding in Addition to Coastal 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 U.S. 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 U.S. participation and benefits will not be maximized:
 - Heavy weight exports (agricultural products, forest products, chemicals)
 - Last port of call for exports deep water critical

Possible Solutions to Federal Funding Crisis



- Deepening and maintenance projects impact ports on all coasts, as well as inland river ports
- Fiscal 2016 budget reduces money for port infrastructure and navigation projects:
 - Planned for 100% of Harbor Maintenance Fund Money to be returned to ports by 2025
 - New budget targets 30% return
- To date, there is a very limited understanding at the federal level of:
 - Importance of the U.S. port industry
 - Impact of the delays in navigational projects
 - Overall bureaucratic process and often "changing rules" of the USACE
 - To date, the port industry has not been unified in its message to the federal government, focusing on individual/state issues

Possible Solutions to Federal Funding Crisis



- Undertake navigational solutions at local level:
 - State investments
 - Private sector investment
- Focus efforts at a national maritime system level, rather than the Port/State level
- Direct communications to "highest level" of federal government, with a bi-partisan effort:
 - Cabinet level focus
 - Transportation and Infrastructure Committee focus



PORT-SPECIFIC INFRASTRUCTURE FUNDING – IS PRIVATE SECTOR THE ANSWER?

Private Sector Investment



- Private sector participation reached a peak in 2006-2007 period:
 - Multiples on EBITDA were over 25
 - Expectations of a continued 6-10% annual growth
 - Anticipated returns 12-15%
- Most funds are now looking at emerging markets where returns can be made:
 - Caribbean
 - Africa
 - South America
 - Vietnam
- High level of perceived risk in U.S. port investment:
 - Labor
 - Navigational projects uncertainty
- There is a current resurgent of interest in the U.S.

Private Sector Investment



- Conduit financing of projects where port provides access to municipal bonds:
 - However, bonding capacity becomes issue
 - Lease specifications are critical
- U.S. Ports need to refocus on participation by the terminal operators:
 - Reduced lease payments but increased lease length in response to terminal operator investment in capital projects:
 - Baltimore (Ports America Chesapeake)
 - New York (GLOBAL)
 - Los Angeles (MOL)
 - Port Canaveral (Gulftainer)
 - Outright purchase of ports by private sector
 - SSA Sacramento agreement
- State's take on larger role in direct investment:
 - Florida is key example

A National Port Plan???



- Possible solution to port funding issues
- Could result in optimization of resources:
 - Consolidation of ports in same geographical region
 - Winners and losers with respect to navigational and funding issues
- Levels the playing field with other modes of transportation, even the private railroads with federal support on key regional/national projects/corridors
- Potentially result in greater investment in infrastructure to improve competitive position of U.S. economy
- Can it be removed from politics -- the Slippery Slope!!



THANK YOU