

American Association of Port Authorities

U.S. Infrastructure Needs and Investment Plans

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Changing Market Dynamics

Key Highlights

- The global container shipping industry is on the verge of potentially unprecedented change, driven by:
 - Larger container ships
 - Evolving alliance structures
 - Expansion of the Panama Canal
- Mergers, recapitalizations, debt restructuring and asset disposals are being implemented across the board in effort to shore up balance sheets and preserve capital for core business functions.
- Carriers, through their participation in powerful alliances, are pressuring terminal operators to upgrade their facilities and provide improved cargo-handling services
- Shippers/BCO facility decisions are being driven in part by carrier vessel capacity.
- U.S. Port Authorities are reviewing their asset bases and exploring alternative structures to remain viable in the new era of Super Post-Panamax vessels, mega terminals and the expanding carrier alliances.

U.S. Seaports:

A Vital Part of the International Supply Chain



- U.S. global competitiveness depends on America's seaports
- Long term investments in our nation's transportation infrastructure are a critical component to its economic vitality, and essential to compete internationally
- Significant barriers of entry (operational capabilities, relationships, regulatory, labor complexity)
- In order to truly succeed, infrastructure and port related projects garner bipartisan support along with a comprehensive roadmap, connected with the ports: rail, bridges, highways etc.

U.S. Infrastructure

Current State & The Prominence of Investment

- In 2013, the American Society of Civil Engineers gave the U.S. an overall grade of “D+” for infrastructure.
- Based on current investment trends, ASCE forecasts by 2020 the nation will have a \$1.6 trillion shortfall between the amount needed to bring all types of infrastructure to an acceptable level for safety and efficient function.
- The newly formed mega-carrier alliances require large-scale infrastructure investments ranging from the widening of the Panama Canal, improvements to U.S. national and regional rail systems and improvements to U.S. harbors.
- The U.S. port industry is highly fragmented from a financial markets perspective with a need for fully vetted financing alternatives; whether “public” or involving public-private-partnerships “P3.”

Consequences of Inaction:

- Flexibility for state and local governments and opportunities for private sector involvement remains limited.
- Other countries continue to modernize their infrastructure and increase their ability to attract private sector job-creators and investment, leaving the U.S. behind on global trade.

Significant infrastructure investment, in addition to what U.S. ports and their private partners are forecasted to spend, will be required to close the funding gap, and ensure American economic growth and jobs

Source: ASCE 2013 Infrastructure Report Card

U.S. Port Challenges

- Investment in new ships, over capacity and consolidation all put pressure on the shipping lines, which translates into pressure on the ports and terminal operators
- At the same time, pressure to invest in equipment and technology is required to efficiently handle the larger vessels
- The combination of high wages and contractually required manning leads to the U.S. port system as having the highest labor costs in the world; therefore
 - “Maximizing labor efficiency” is the focus at U.S. ports vs. equipment efficiency or turn time as in global markets
- As a result, a recent JOC Port Productivity study found only two U.S. ports are in the top 20 worldwide

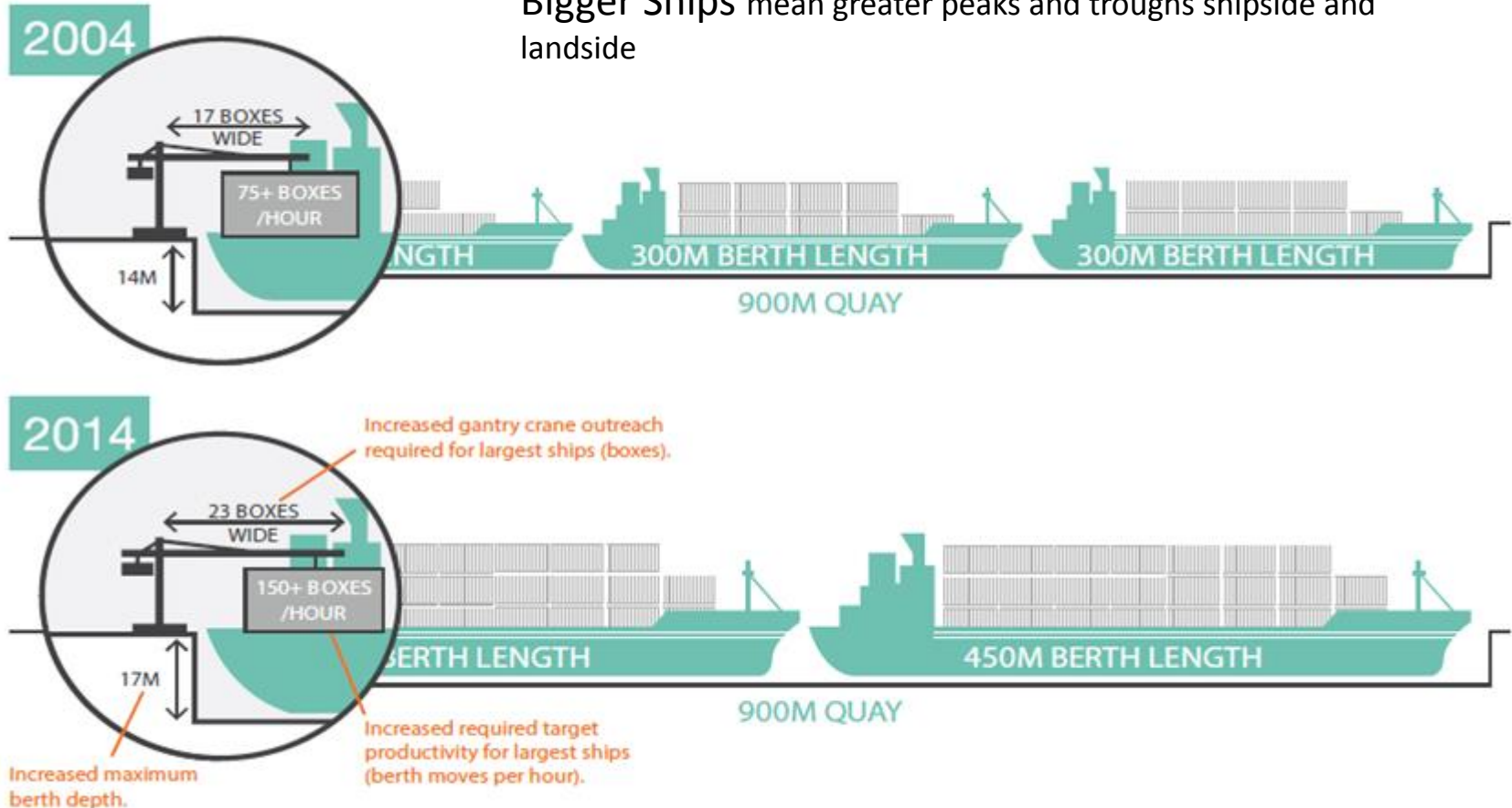
TOP PORTS: WORLDWIDE		
PORT	COUNTRY	BERTH PRODUCTIVITY
Qingdao	China	96
Ningbo	China	88
Dalian	China	86
Shanghai	China	86
Tianjin	China	86
Yokohama	Japan	85
Jebel Ali	United Arab Emirates	81
Busan	South Korea	80
Nhava Sheva (<i>Jawaharlal Nehru</i>)	India	79
Yantian	China	78
Taipei	Taiwan	77
Xiamen	China	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

Source: JoC Magazine July 22, 2013

Port and Terminal Operators

The Effect on Port Requirements

Bigger Ships mean greater peaks and troughs shipside and landside



The key question facing ports is how vessel rotations will be influenced by the combination of mega-alliances and larger ships. If you build it, will they come?

Trending Now

- U.S. Port authorities - Public Private Partnerships
- Shipping Lines divestitures of terminal assets
- Growing (and/or expanding) Joint Ventures and strategic partnerships – terminal operators, steamship lines, landside development companies, investment interests
- Infrastructure fund disposition (and acquisition) of terminal assets

Compelling Industry Privatization Dynamics

- State and local governments in the U.S. are under considerable financial stress:
 - Several critical transportation projects do not have available funding
 - In many cases, the private sector is a viable and attractive source of capital
 - Historical tradition to 3Ps: toll roads, water systems
- **Ports America's Oakland and Baltimore Public-Private Partnerships (PPP) are a model for the industry:**
 - Upfront payments, revenue sharing and capital project delivery is attractive to government decision makers
 - Seagirt Marine Terminal: Muni bonds
- Incumbent port operators are best positioned to capitalize on the PPP trend:
 - Site knowledge and existing operations can be used to achieve incremental returns
 - Private sector participation can provide needed capital investment, management expertise, and key relationships (with carriers, partners, labor)
- There are multiple opportunities to replicate this success across other locations:
 - Every deal is unique, risks and rewards are all exceptional
 - Financing, although tighter in recent years, is available for good projects that make sense.



Attractive Port Project Characteristics

- High growth market potential
- Large distribution and warehousing (current or future) prospects
- Core strategic fit (qualitative and quantitative)
- Infrastructure connectivity
- Strategic customer relationships
- Stable, long-term cash flow
- Long term concession/agreements
- Acceptable IRR



Preparing for the Future:

Examples of U.S. Port Related Projects

Los Angeles and Long Beach:

The two ports will invest more than \$5 Bn over the next decade to modernize its facilities, some of the projects:

- Middle Harbor Terminal
- Gerald Desmond Bridge
- Automation
- West Basin Container Terminal infrastructure investments

New York and New Jersey:

Major infrastructure projects:

- Bayonne Bridge
- Kill Van Kull / Newark Bay Channels Deepening
- Global Container Terminal
- **Port Newark Container Terminal (PNCT):**
 - PNCT's planned \$114-million investment in the additional deep-water berth infrastructure will increase capacity to handle larger ships, support cargo volume growth, and enable more efficient movement of vessels.



Preparing for the Future:

Examples of U.S. Port Related Projects

Savannah:

Received approval for its 10 year capital harbor expansion project which will also see the port deepened to accommodate larger ships

Houston:

The port will spend \$1 Bn over the next decade to complete the Bayport Container Terminal, \$700 Mn to upgrade the aging Barbour's Cut Terminal and another \$700 Mn on the Turning Basin and new wharves

Miami:

To prepare for the widening of the Panama Canal, PortMiami has invested over \$2Bln in infrastructure improvements, including: the Deep Dredge project, rail network enhancements , and the PortMiami Tunnel Project

Ports America

New Investment and Business Development

Ports America has initiated a targeted growth plan aimed at extending its footprint and commitment to U.S. Ports and to expand its platform into specific international markets. This includes a “beyond the waterfront” strategy for our domestic growth and a customer driven approach to international pursuits.

2014-2015 Business Development Focus At A Glance:

Domestic terminals

- › PPP (Public Private Partnerships)
- › Extension of existing terminal commitments
- › New mergers & acquisitions

Beyond the waterfront

- › Short rail
- › Drayage
- › Intermodal
- › Dry ports (inland ports)

International

- › Strategic entry markets; South and Central America, Panama, Mexico
- › Open tenders/RFP's
 - Greenfields
 - Existing terminals
- › Follow the customer
- › JV's and terminal alliance partners

