

# U.S. Port and Inland Waterway Modernization Strategy: Options for the Future

*Inland Waterways Users Board  
Meeting 66, Pittsburgh*

**Jim Walker**  
Navigation Branch  
HQ, USACE



**6 June 2012**

US Army Corps of Engineers  
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# US Ports and Inland Waterways Modernization Strategy

“Within the funds provided, the Institute for Water Resources is directed to submit to the Senate and House Committees on Appropriations within 180 days of enactment of this Act, a report on how the Congress should address critical need for additional port and inland waterway modernization to accommodate post-Panamax vessels. This study will not impede or delay port or inland waterway projects already authorized by Congress. Factors for consideration should include costs associated with deepening and widening deep draft harbors; the ability of waterways and ports to enhance export initiatives benefitting the agricultural and manufacturing sectors; the current and projected population trends that distinguish regional ports and ports that are immediately adjacent to population centers; the availability of inland intermodal access; and the environmental impacts resulting from modernization of inland waterways and deep-draft ports.”



# U.S. Port & Inland Waterways Modernization Strategy

## Schedule

- 23 Dec 2011: Legislation enacted
- Jan – Apr 2012: Report Drafted
- May – Jun 2012: Report Reviewed
- 20 June 2012: Congress delivery date



# Report Organization

- **Chapter 1 – Demand for Future Capacity**
- **Chapter 2 – Existing U.S. Port & Inland Waterways Infrastructure**
- **Chapter 3 – Evaluating the Critical Need for Capacity Maintenance and Expansion**
- **Chapter 4 – Environmental Impacts of Modernization**
- **Chapter 5 – Historical Review and Vision for the Future**
- **Chapter 6 – Financing Options**
- **Chapter 7 – Future Federal Role in Navigation**
- **Chapter 8 – Considerations in a Modernization Strategy**



# The U.S. Navigation System

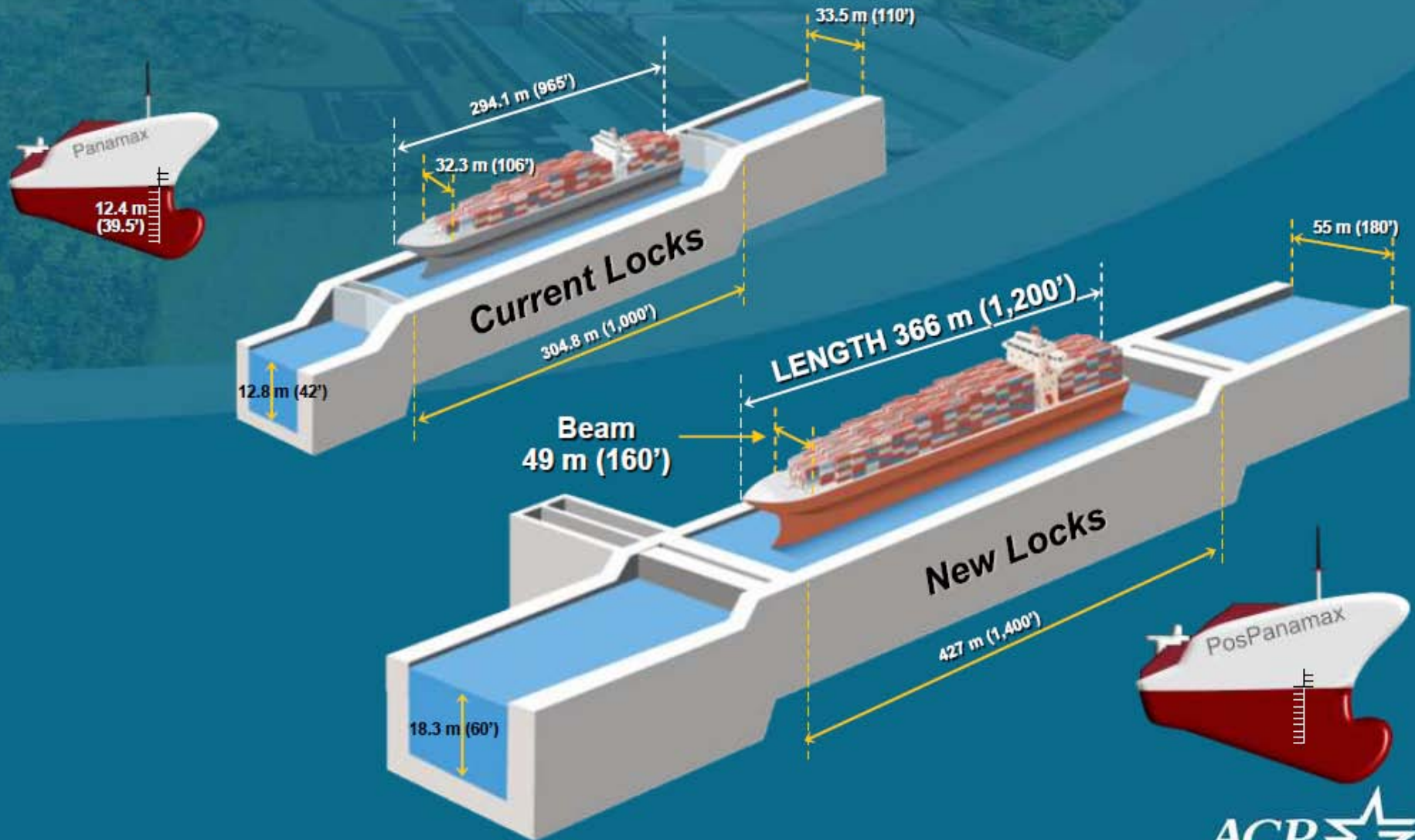




# Dimension of Locks and New-Panamax vessels

Source: Panama Canal Authority (ACP)

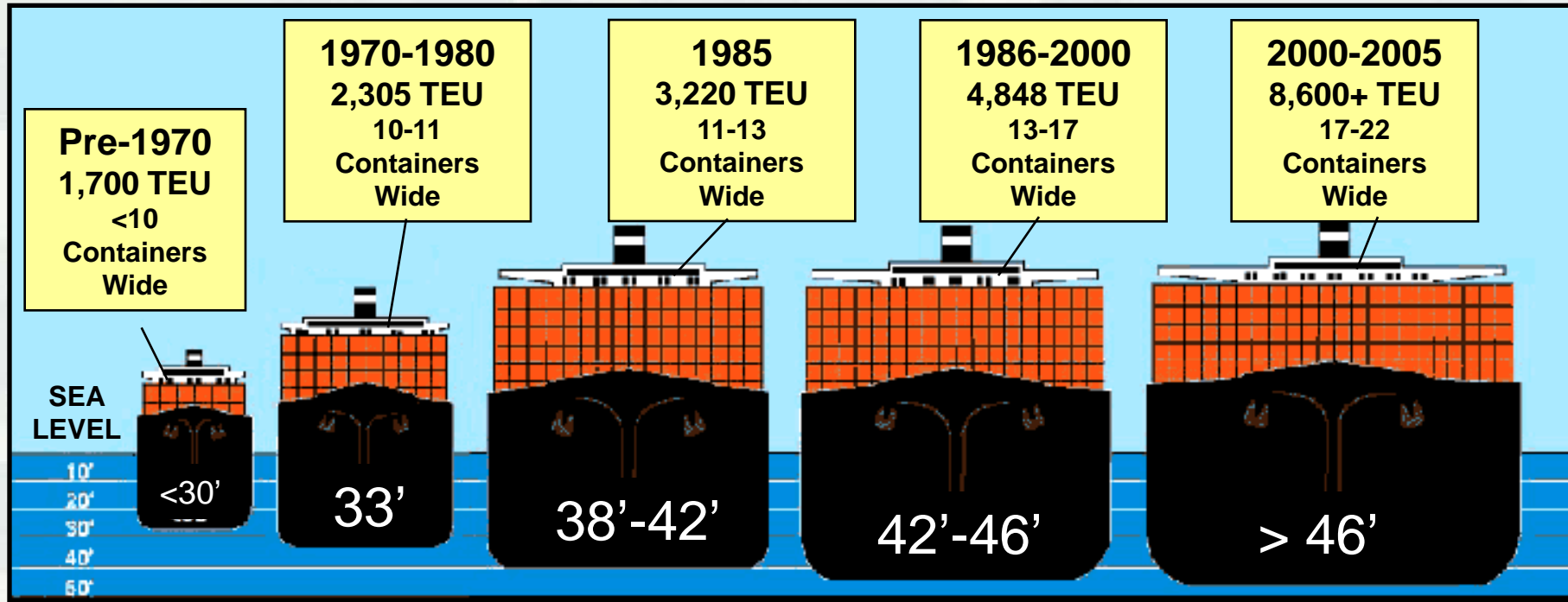
Existing Locks Max Vessel: **4,400 TEU's**



New Locks Max Vessel: **12,600 TEU's**

# Ever Larger Containerships

## *Driving Need for Ever Larger Channels*



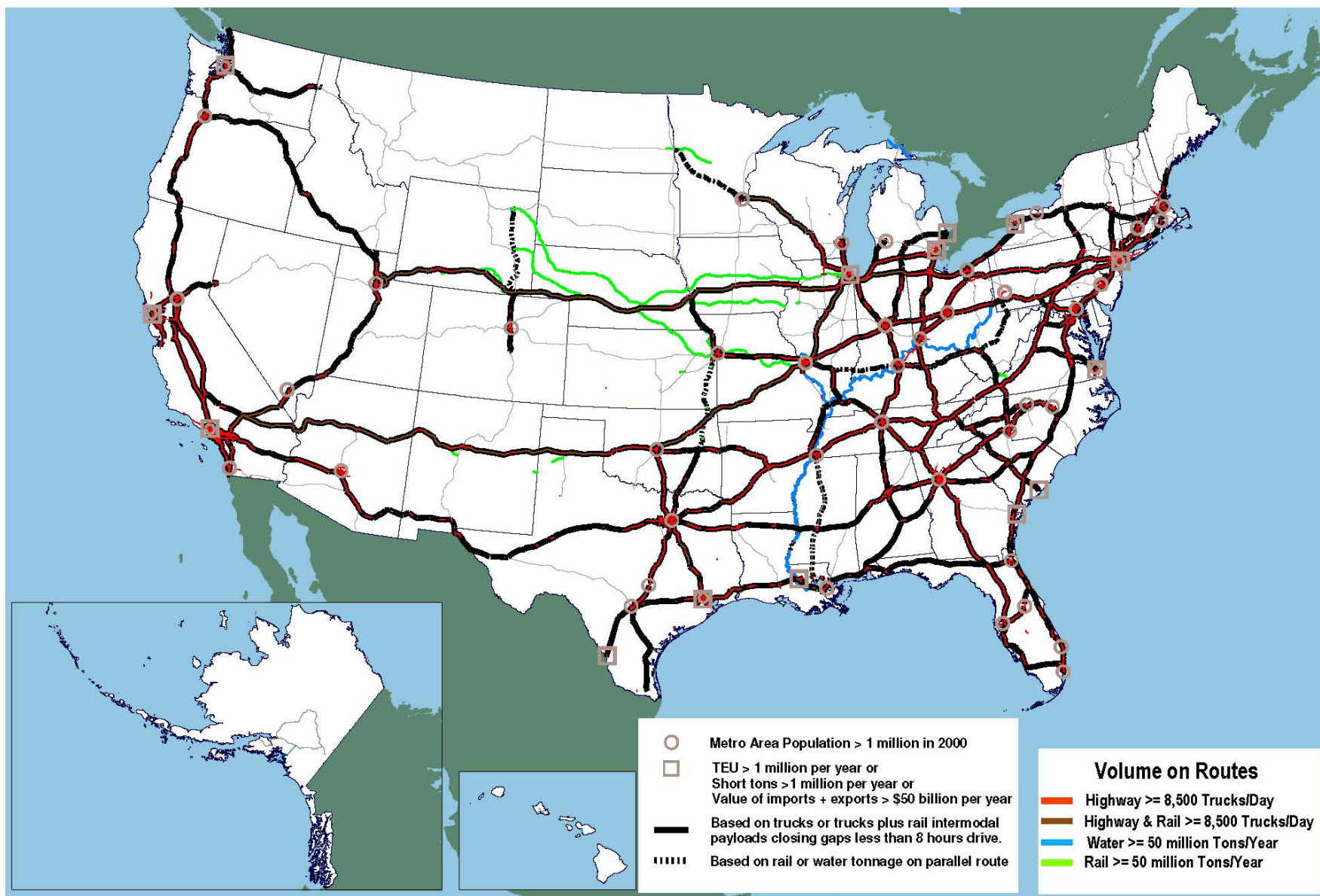
Trend is larger, not deeper, ships.

The Maersk E3 will have 18,000 TEU capacity with a design draft of 47.5 feet.



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## Major Freight Corridors

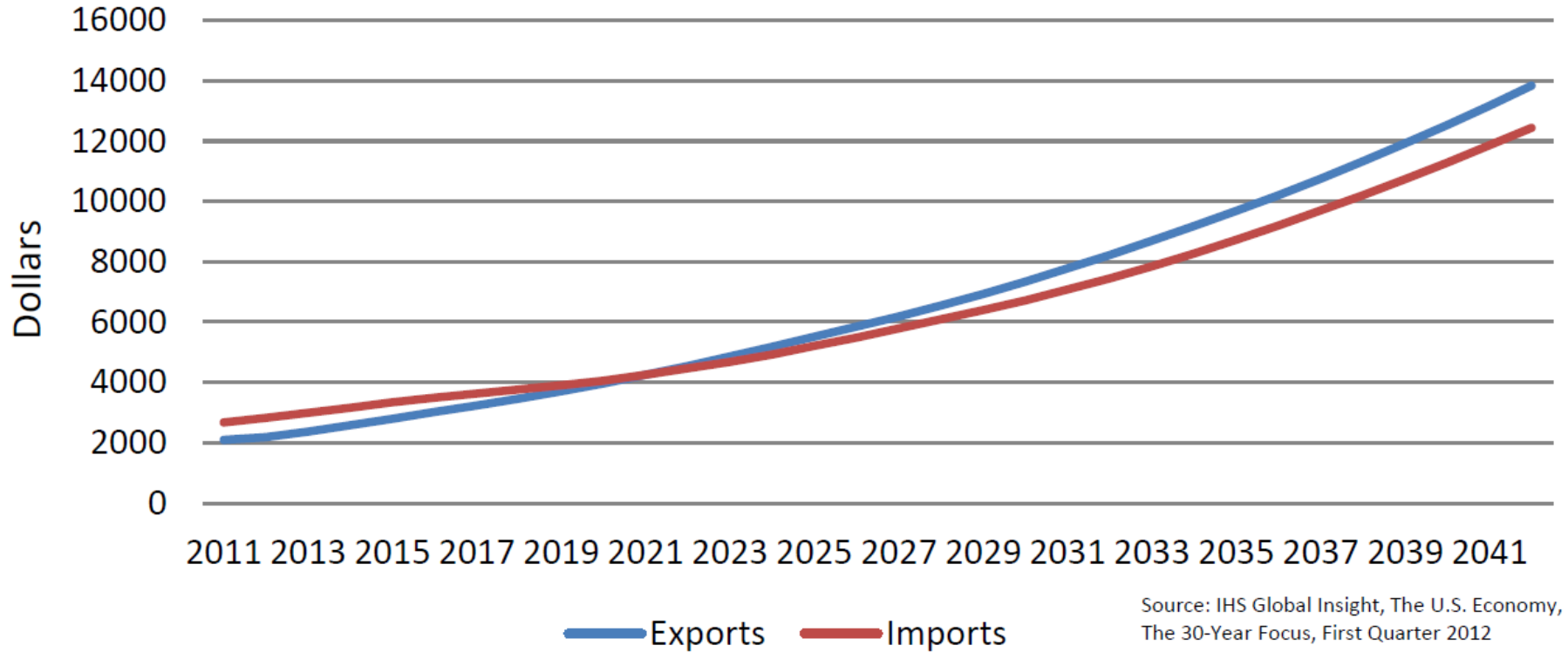


Note: Highway & Rail is additional highway mileage with daily truck payload equivalents based on annual average daily truck traffic plus average daily intermodal service on parallel railroads. Average daily intermodal service is the annual tonnage moved by container-on-flatcar and trailer-on-flatcar service divided by 365 days per year and 16 tons per average truck payload.

Source: U.S. Department of Transportation, Federal Highway Administration, Office of Freight Management and Operations, 2008.

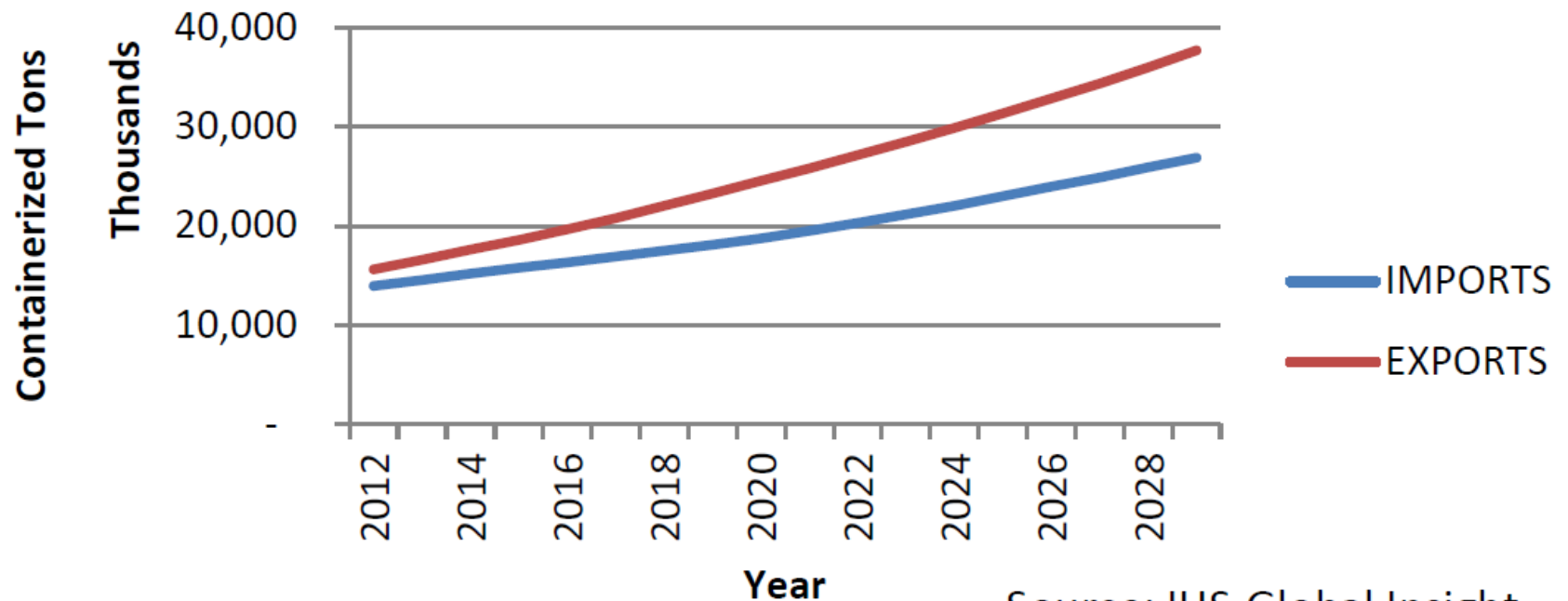


# Forecast of U.S. Exports and Imports 2011-2042



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# Gulf Coast Containerized Imports & Exports



Source: IHS-Global Insight



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# Why should farmers care about transportation?

Because our international competitiveness depends on it.

## Costs of transporting soybeans: U.S. vs. Brazil (per metric ton; 4<sup>th</sup> quarter, 2010)

	Davenport to Shanghai	Sioux Falls to Shanghai	N. Mato Grosso to Shanghai
Land: Truck	\$8.94	\$8.94	\$120.12
Land: Barge/Rail	\$31.85 (Barge)	\$50.31 (Rail)	-----
Ocean	\$55.46	\$29.25	\$31.67
Total Transport	\$96.25	\$88.50	\$151.79
Farm Value	\$399.16	\$385.56	\$413.46
Landed Cost	\$495.41	\$474.06	\$566.25
Transport as % of Landed Cost	19.4%	18.7%	26.9%

**Source: USDA**



# Status

- Report drafted
- Initial draft posted to the Web
  - ▶ [www.iwr.usace.army.mil/portsandwaterways](http://www.iwr.usace.army.mil/portsandwaterways)
- Comments incorporated
- 2<sup>nd</sup> draft Administration review underway
- Post to web (time permitting)
- Deliver to Congress – 20 Jun 2012





# Outcomes

- How should Congress address the critical need for additional port and inland waterway modernization?
- Asking the question indicates a willingness to consider alternative approaches to the project by project historical method.
- Coupled with White House Navigation Task Force and National Exports Initiative
- Possible National Freight Policy?
  - ▶ Coastal and Inland navigation
  - ▶ Intermodal considerations
  - ▶ Urgency of resolving the IWTF



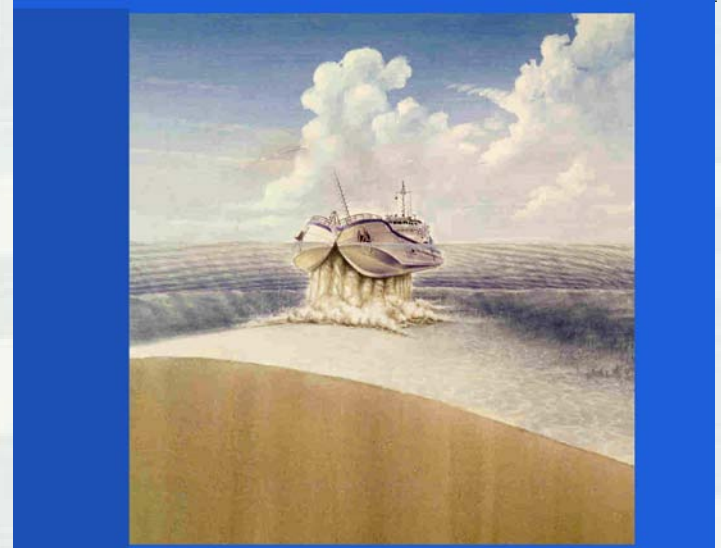
# Closing

## What do we do?

Provide Navigation infrastructure that is Reliable, Efficient, Resilient and Environmentally Sustainable.

## Why is it important?

This infrastructure enables American goods to compete in the Global marketplace



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