

An aerial photograph of the Panama Canal locks, showing the three parallel lock chambers and the surrounding green landscape. A large cargo ship is visible in the water to the right of the locks. The text "U.S. CONTAINER TRADE OUTLOOK" is overlaid in white capital letters.

# U.S. CONTAINER TRADE OUTLOOK

LAEDC International Trade  
Outlook Conference  
June 5, 2014

Scudder Smith  
Parsons Brinckerhoff

Source: [www.pancanal.com](http://www.pancanal.com)

# Agenda

2

- U.S. Container Trade:

Why the Fundamentals are Important

- Panama Canal Expansion Impacts:

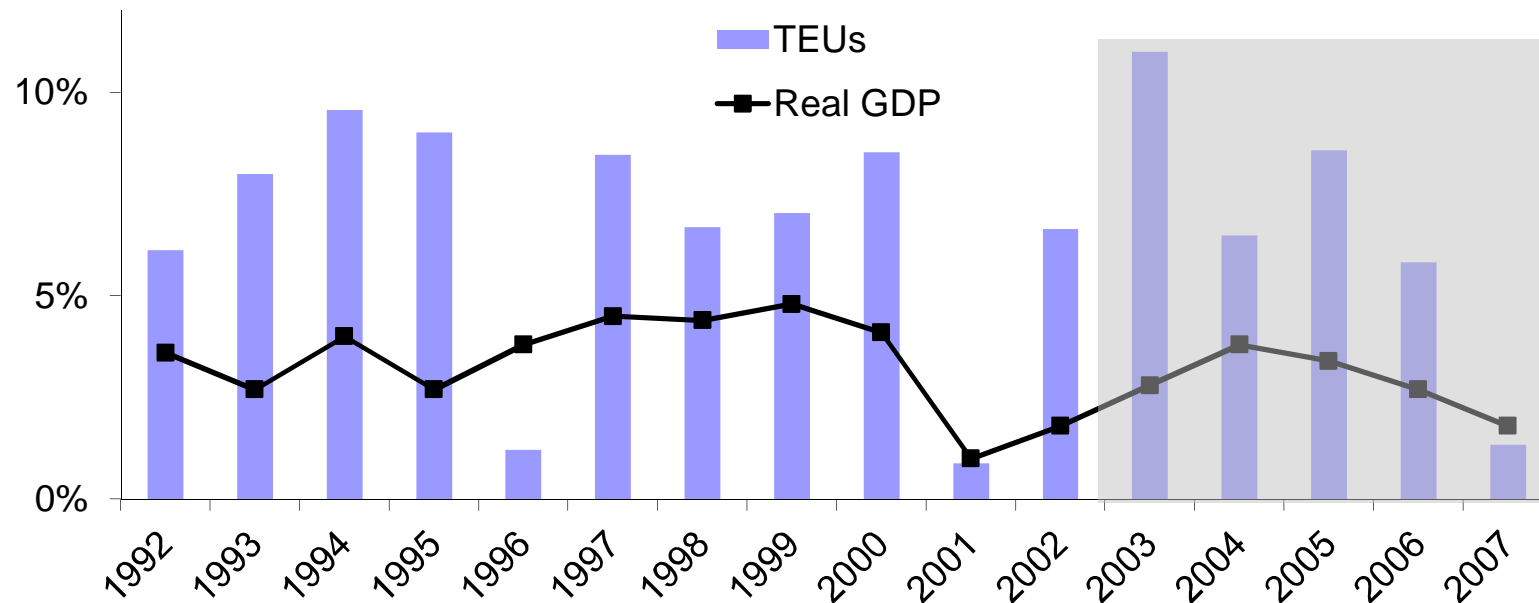
Myths vs. Reality

- Implications for Southern California

# U.S. Container Trade Fundamentals - History

3

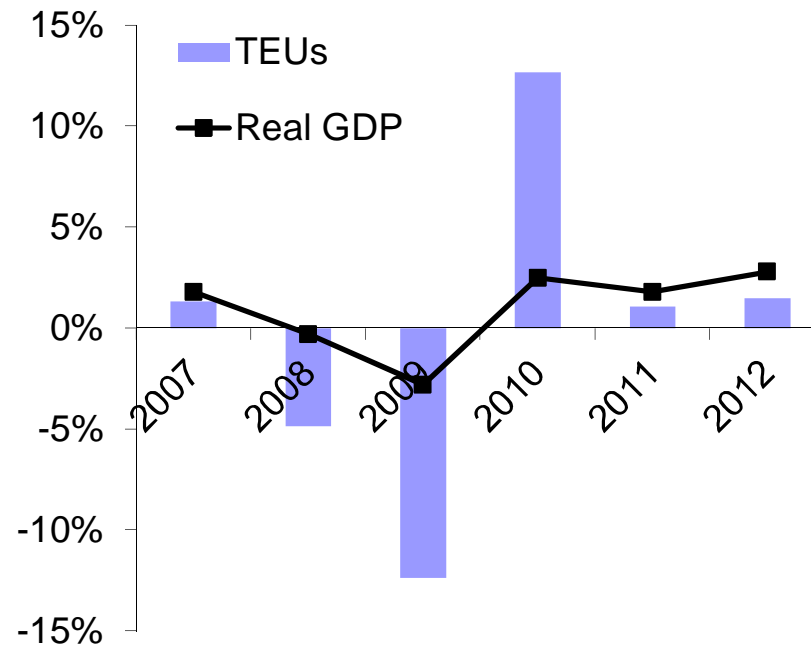
- 2003-2007
- Five Years of High Growth
- Container Trade = Multiple of GDP ?



# U.S. Container Trade Fundamentals

4

- 2008-2012
- Historic Downturn in the Economy
- Unprecedented Drops in Container Trade



# U.S. Container Trade Fundamentals

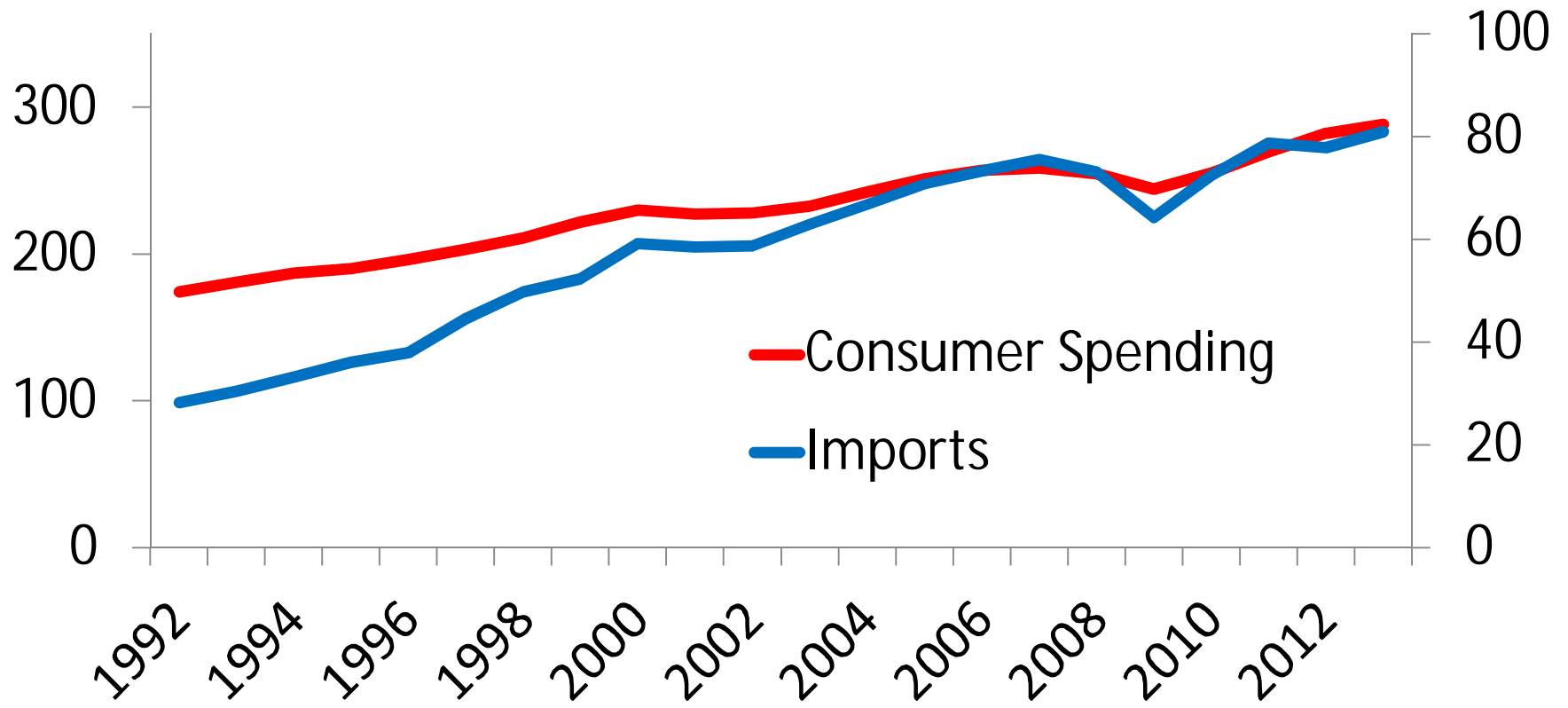
5

- Fundamental Drivers of U.S. Container Demand
  - Real U.S. economic sectors
    - Import/export imbalance
  - Containerization
  - U.S. import propensity (outsourcing)
  - Sourcing/Routing
  - Product-specific factors

# U.S. Container Trade Fundamentals

6

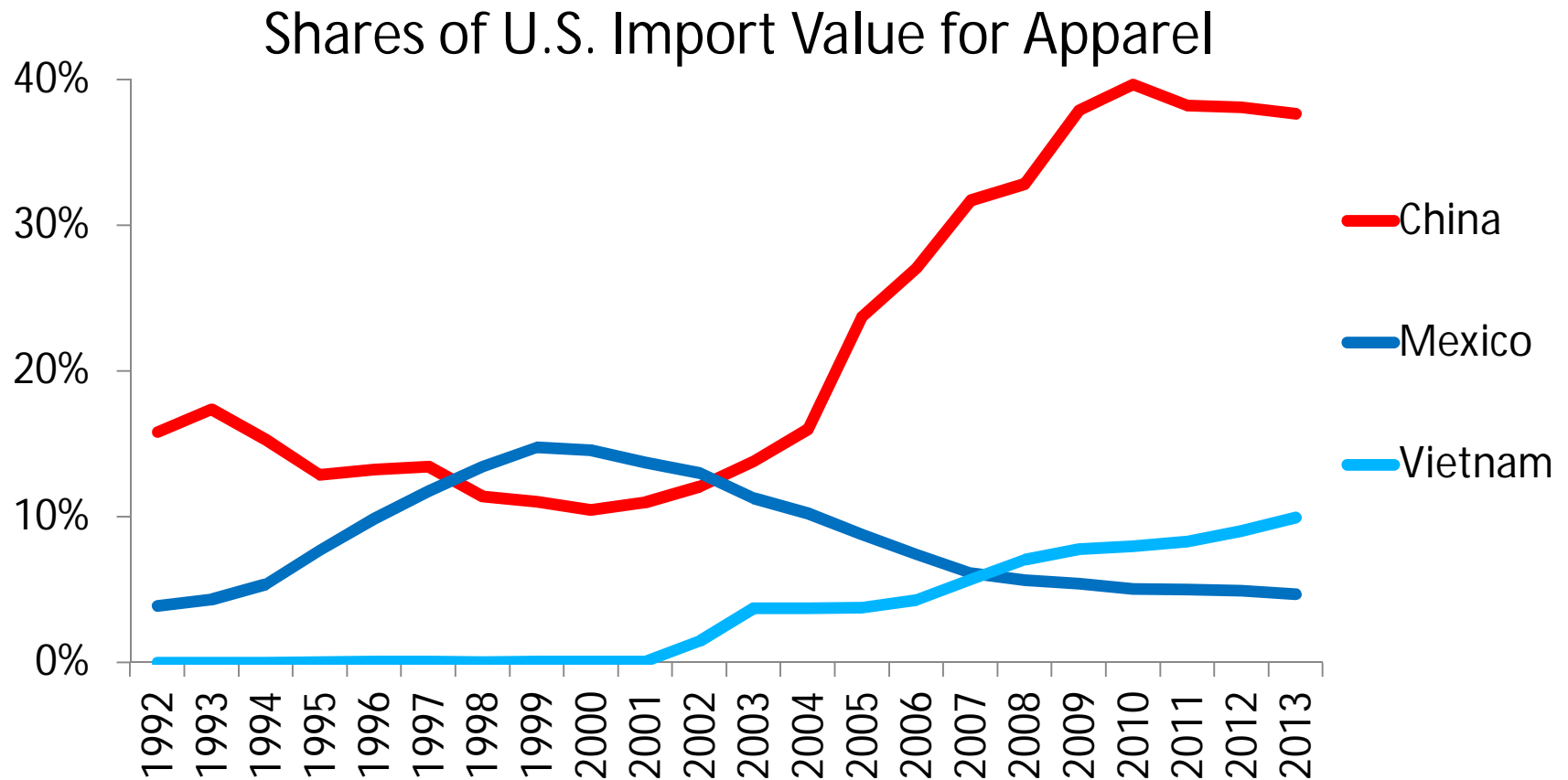
- U.S. import propensity (outsourcing) – Apparel (\$Billions)



# U.S. Container Trade Fundamentals

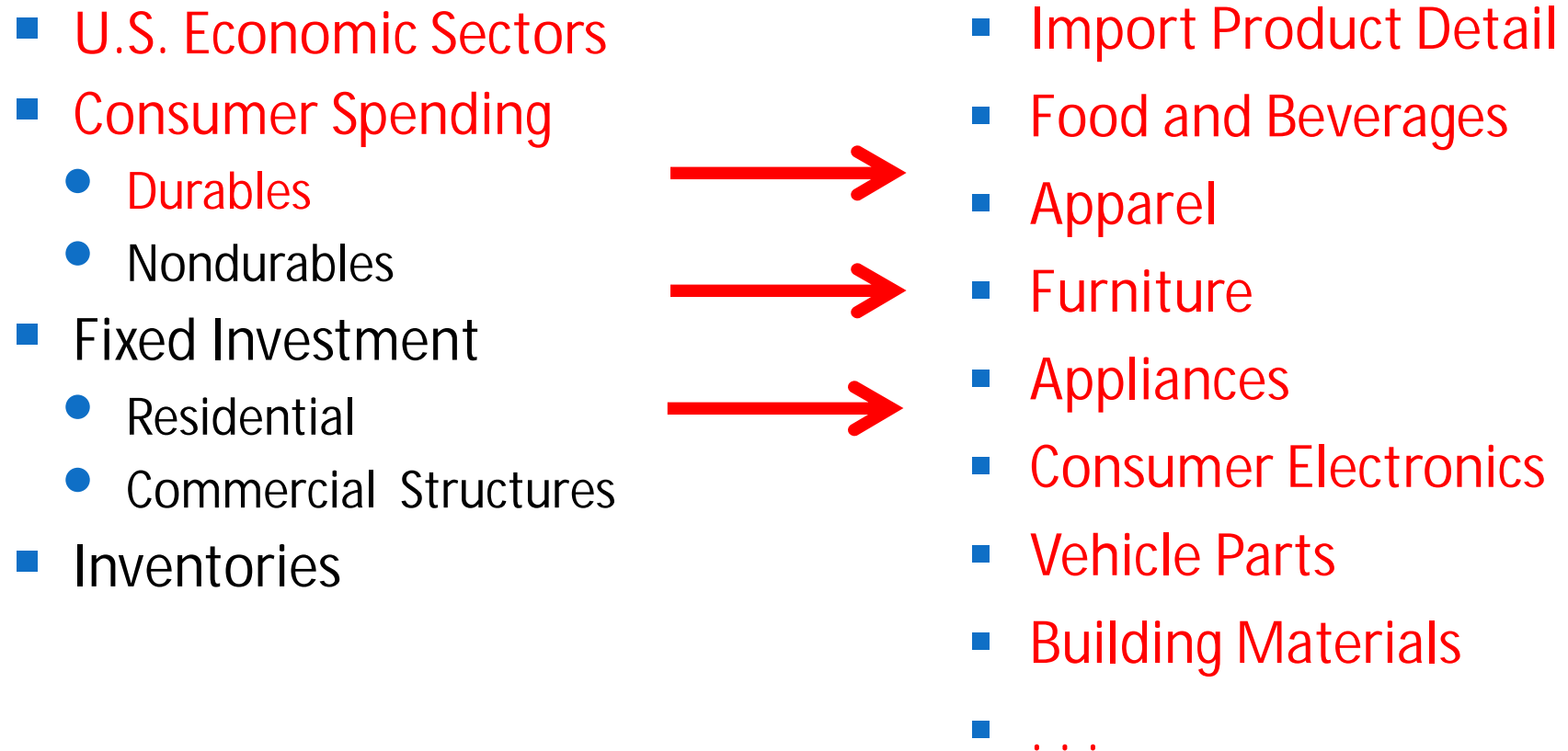
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## ■ Sourcing/Routing



# U.S. Container Trade Fundamentals

8

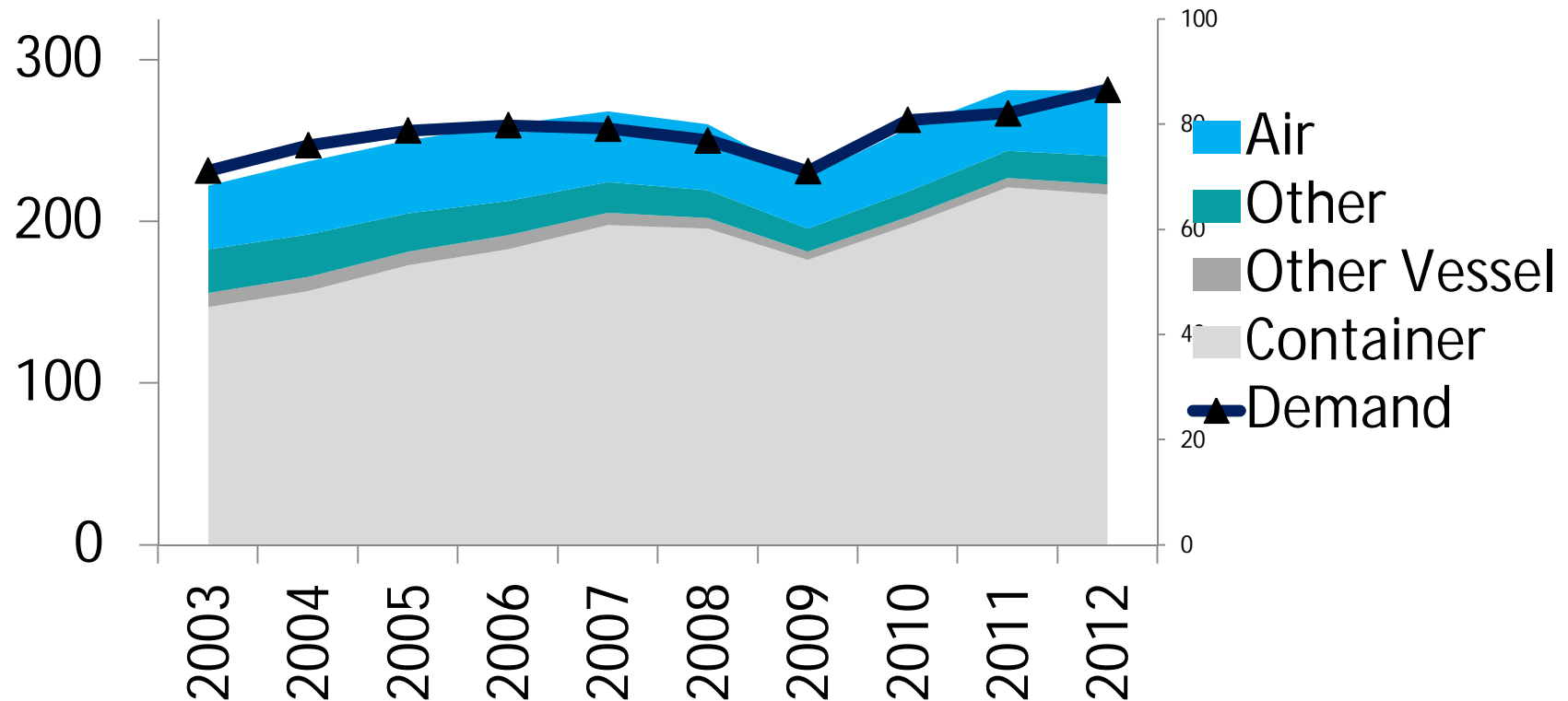




# U.S. Container Trade Fundamentals

9

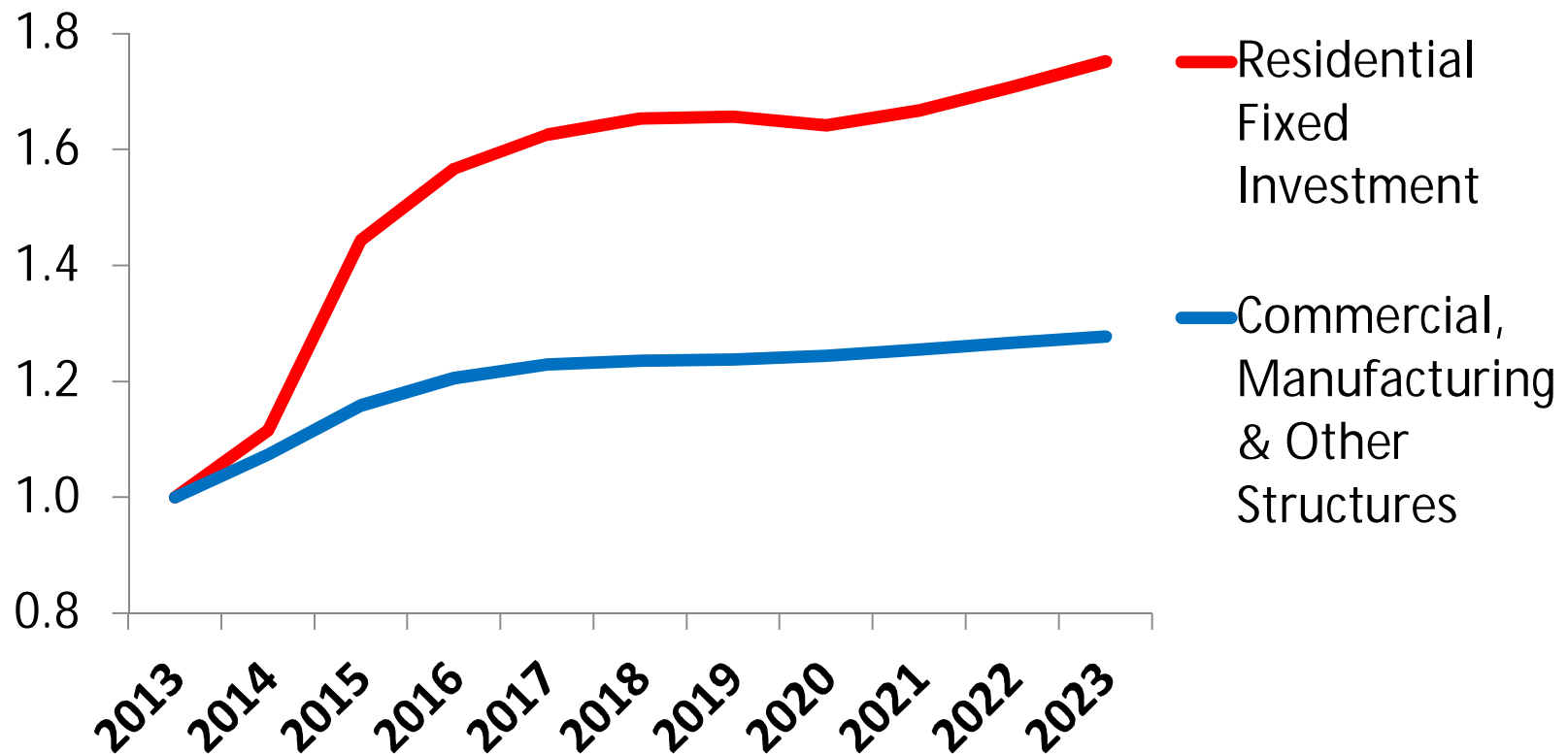
## ■ Apparel Modal Detail (\$Billions)



# U.S. Container Trade Fundamentals

10

## ■ U.S. Fixed Investment –Indexed (2013=1.0)

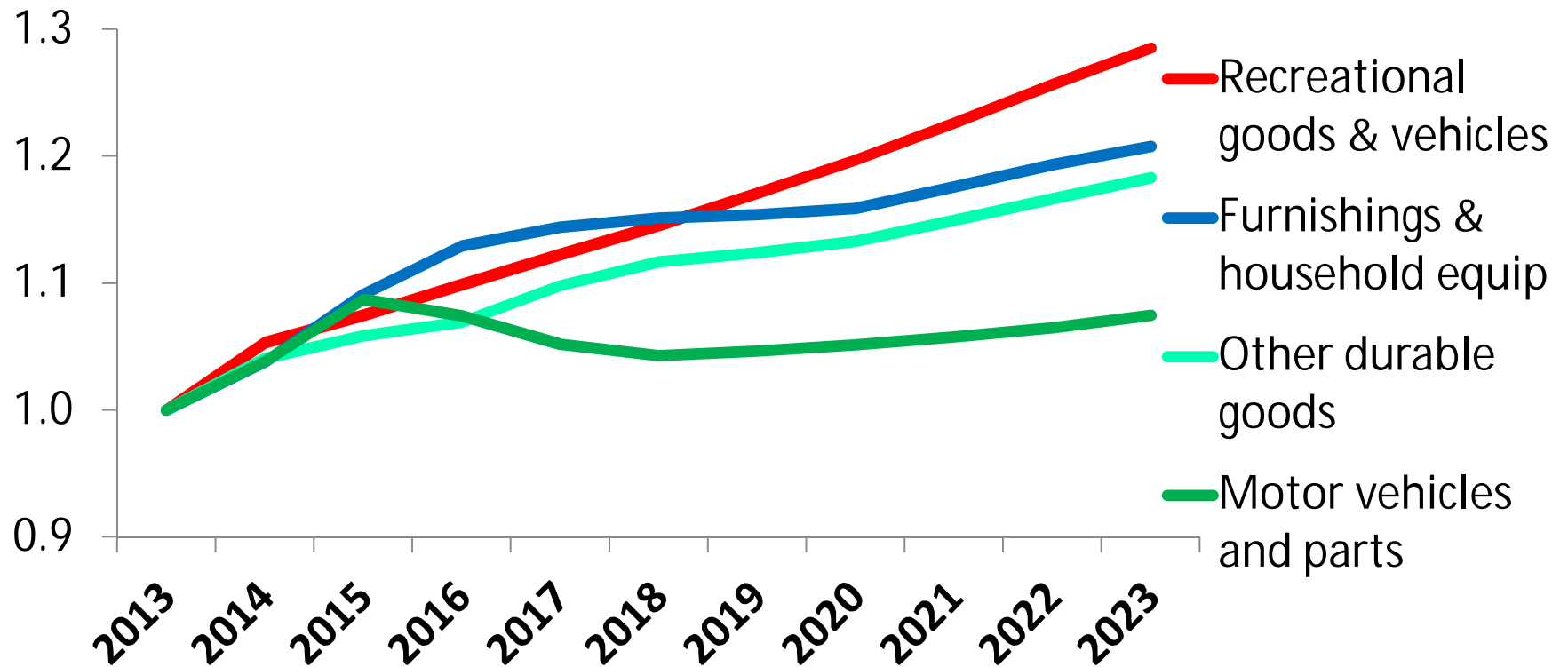


Source: Moody's Analytics

# U.S. Container Trade Fundamentals

11

## ■ U.S. Consumer Spending – Durable Goods (2013=1.0)

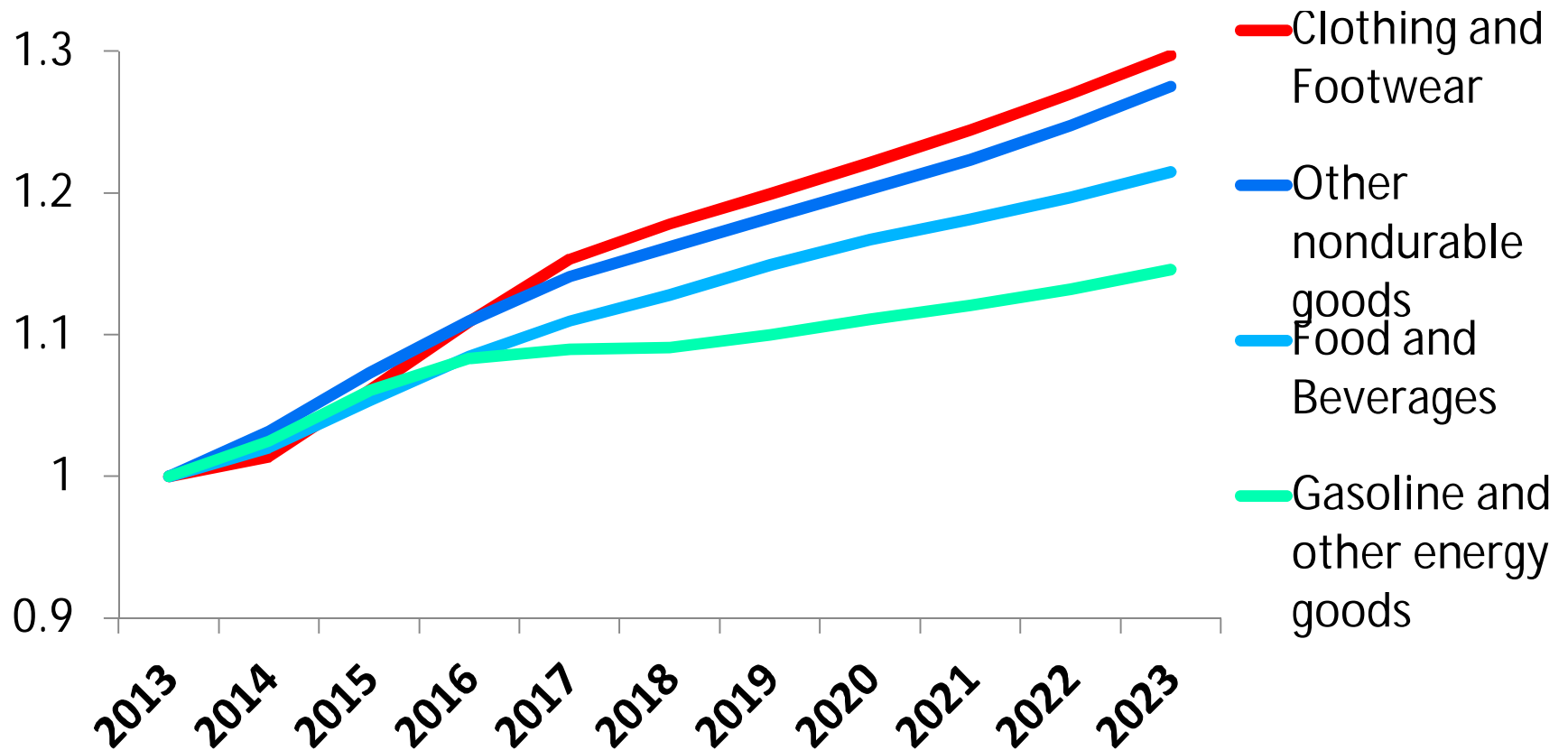


Source: Moody's Analytics

# U.S. Container Trade Fundamentals

12

## ■ U.S. Consumer Spending – Nondurable Goods (2013=1.0)

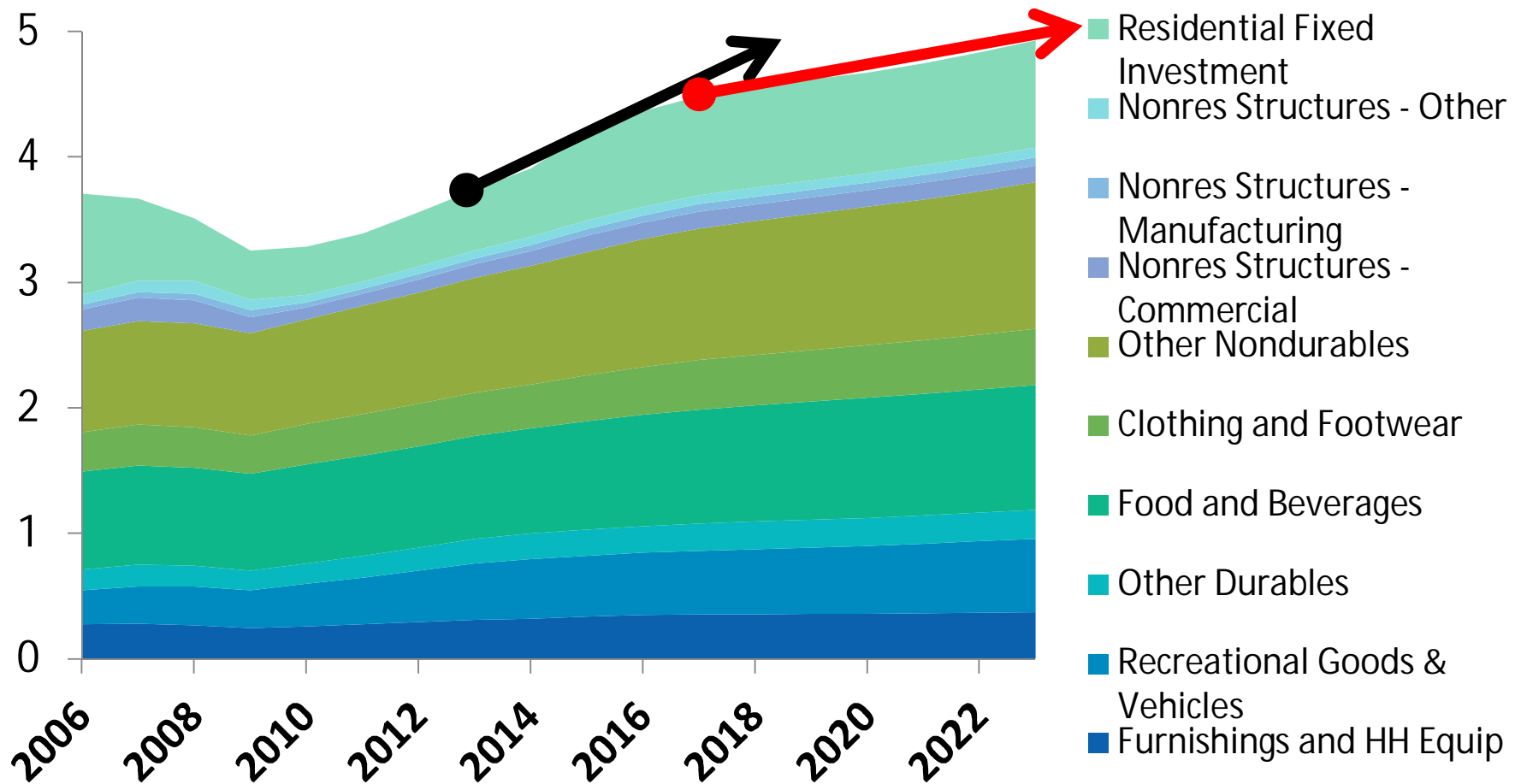


Source: Moody's Analytics

# U.S. Container Trade Fundamentals

13

## ■ Total of Real GDP Components (\$Trillions)

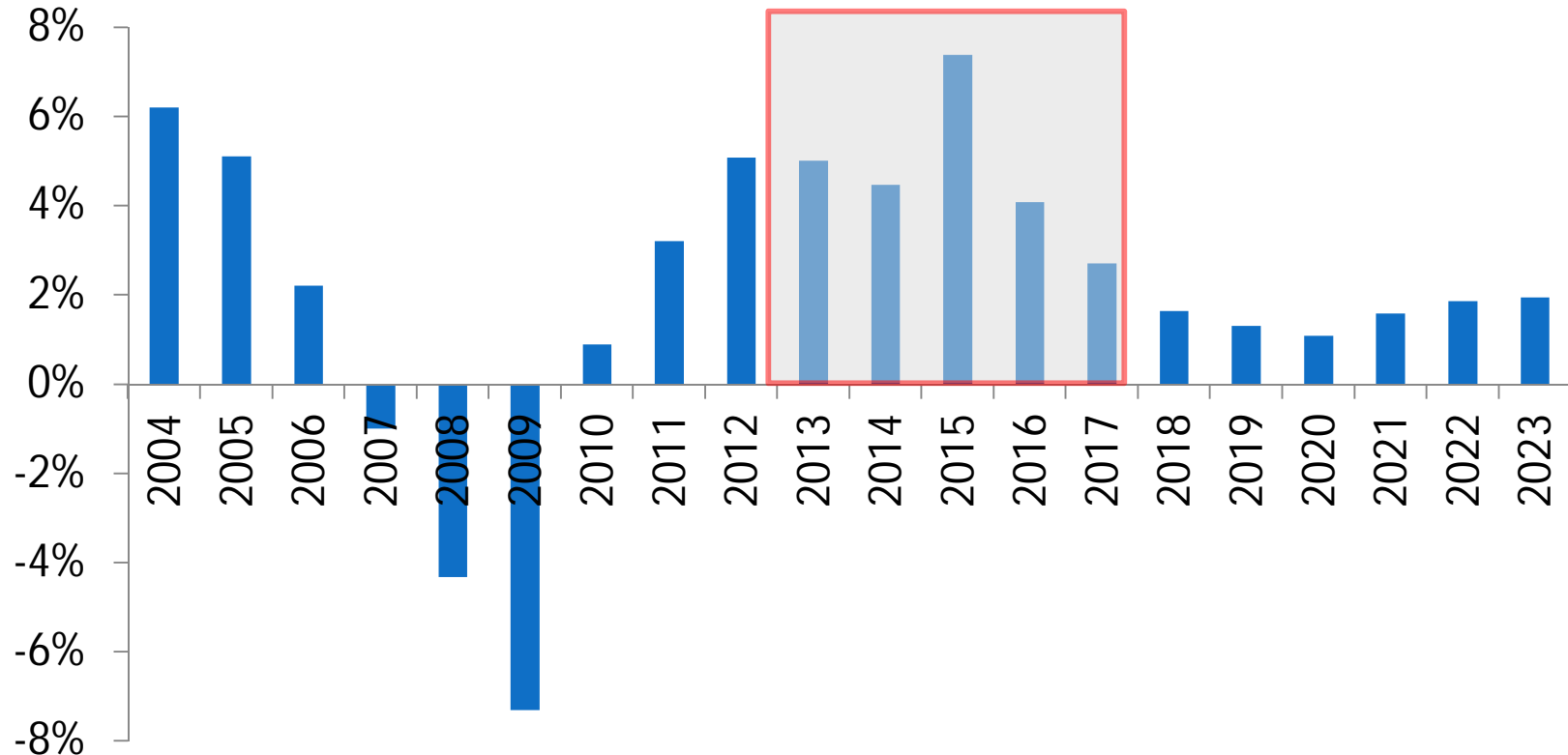


Source: Moody's Analytics

# U.S. Container Trade Fundamentals

14

## ■ Percentage Growth in Total Real GDP Components



Source: Moody's Analytics

# U.S. Container Trade Fundamentals

15

- Real GDP Components Summary
  - Residential fixed investment growth 3X GDP, highest growth in first four years.
  - High growth in furnishings and household equipment through 2016.
  - Slightly outpacing GDP:
    - Nonresidential structures
    - Consumer spending on recreational goods
    - Non-durable goods, excluding gasoline
  - Growth slower than GDP: Other durable goods

# U.S. Container Trade Fundamentals

16

- Early growth in U.S. container import volumes in 2014 to 2017, led by housing related goods, should not be taken as an indicator of a return to high long term growth rates.

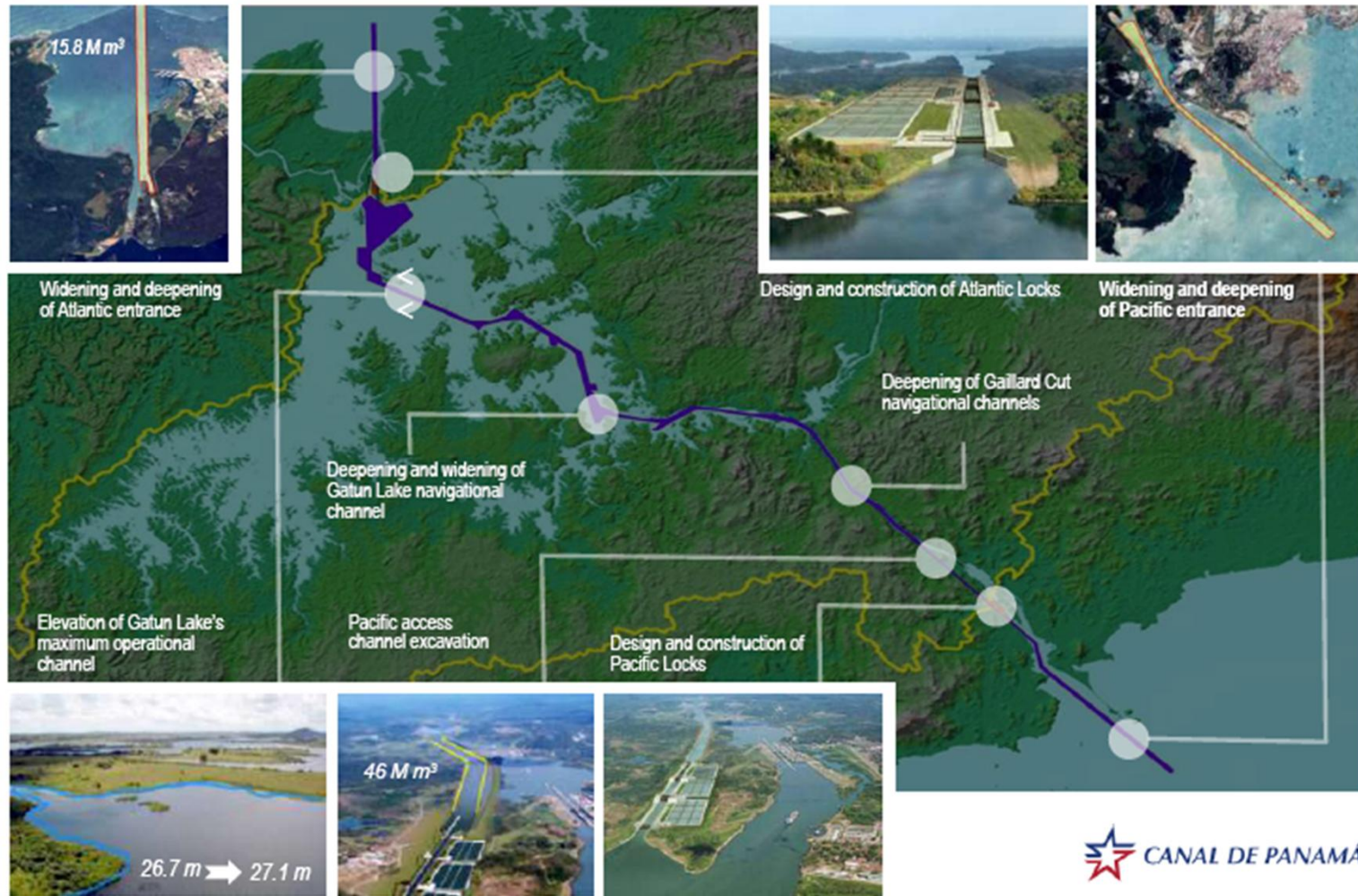


# Fundamental Drivers of Volume are Changing

17

- Other fundamental drivers of historic growth have reached limits and/or may reverse course:
  - Containerization (of imports)
  - Increased import propensity due to re-shoring
  - International sourcing from China moving to Mexico
  - International routing through Mexico or Canada

# Panama Canal Expansion: Program Elements



# Panama Canal Expansion: Locks

19



Source: [www.pancanal.com](http://www.pancanal.com)



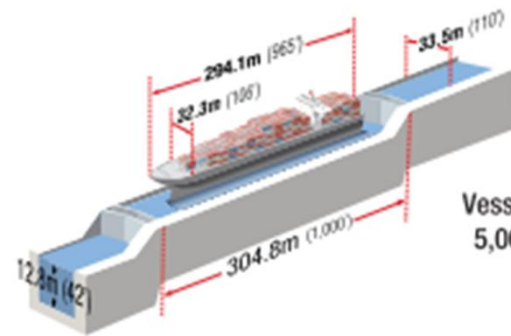
# Panama Canal Expansion: New Locks

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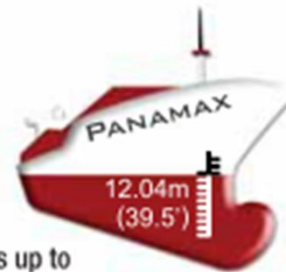


# Panama Canal Expansion: Larger Ships

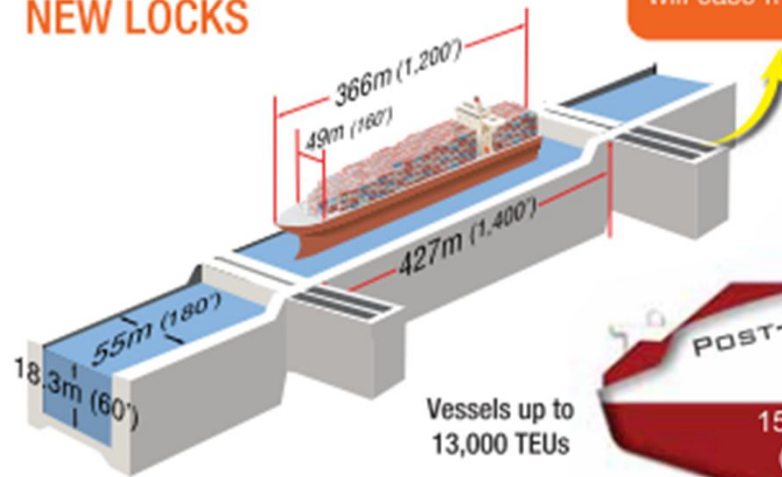
## EXISTING LOCKS



Vessels up to 5,000 TEUs

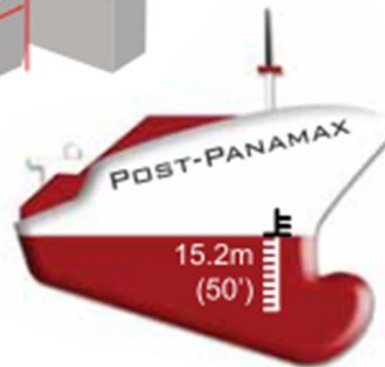


## NEW LOCKS



Vessels up to 13,000 TEUs

The use of rolling gates will ease maintenance



# Panama Canal Expansion: U.S. Trade Lanes

22

- Panama Canal trade is concentrated in U.S. routes
- Largest trade lane is Northeast Asia – U.S. East Coast



# Expansion Effects: Coastal Shifts

23

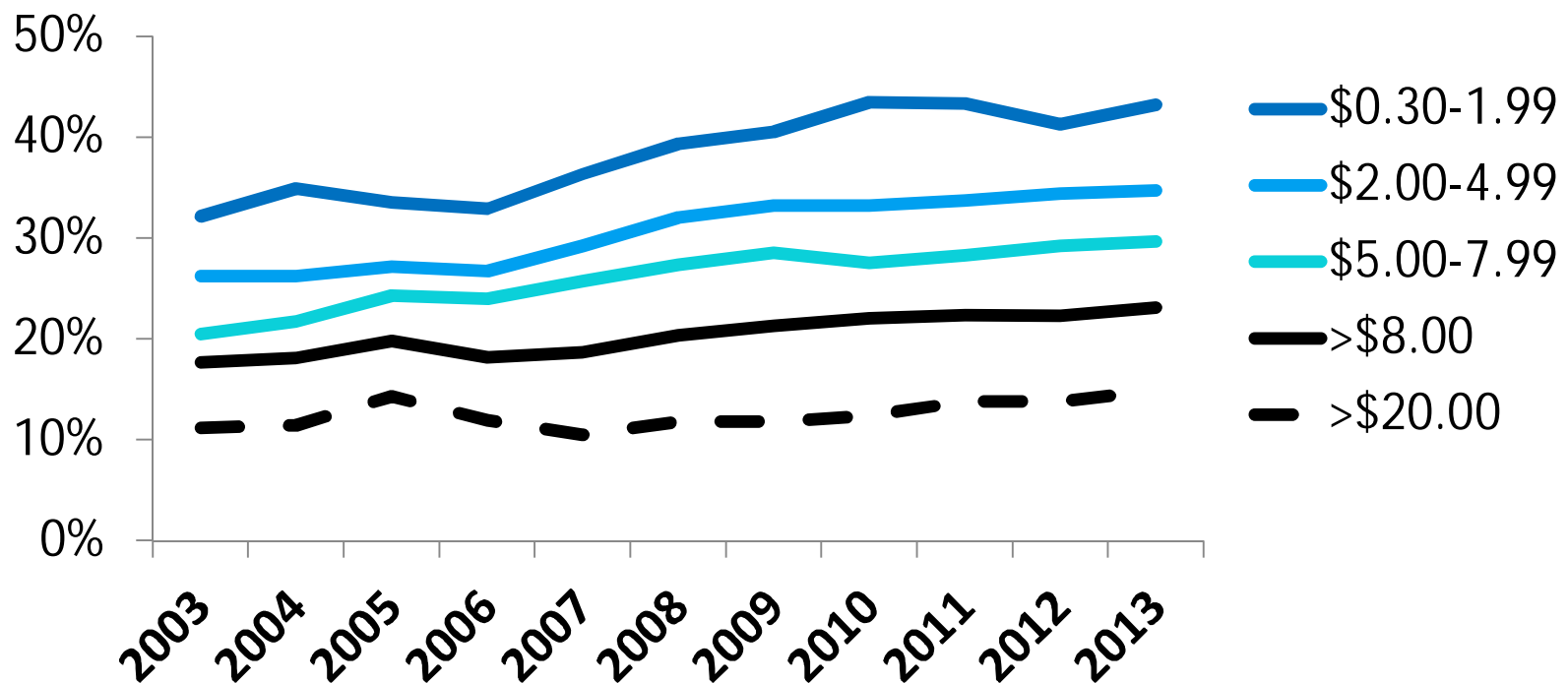
- Three interrelated factors will affect potential shifts:
  - History of shifts and remaining potential
    - Supply chain network development
  - Market segments and drivers
    - Competitive dynamics
  - Transportation cost reductions
    - Port readiness and inland infrastructure

# Expansion Effects: Coastal Shifts – Recent History

24

- Significant shifts have already occurred over the past decade
- This trend may continue apart from expansion impacts

East and Gulf Coast Share of NE Asia Container Volume Tonnage by 2013 \$/kg



Sources: US Census Bureau and Parsons Brinckerhoff analysis



# Expansion Effects: Coastal Shifts – Supply Chains

25

## ■ Flexibility and redundancy / closeness to end markets



### Container Port (CP)

- Gateway for goods
- Intermodal transfer
- Often land constrained



### Import Distribution Center (IDC)

- Unloads containers, redirects goods
- Preferably near port



### Inland Port (IP)

- More land for intermodal transfer and import DCs



### Mixing Center (MC)

- Mixes domestic & import goods for distribution
- Stores, consolidates, redirects goods
- Uses, not keyed to intermodal service



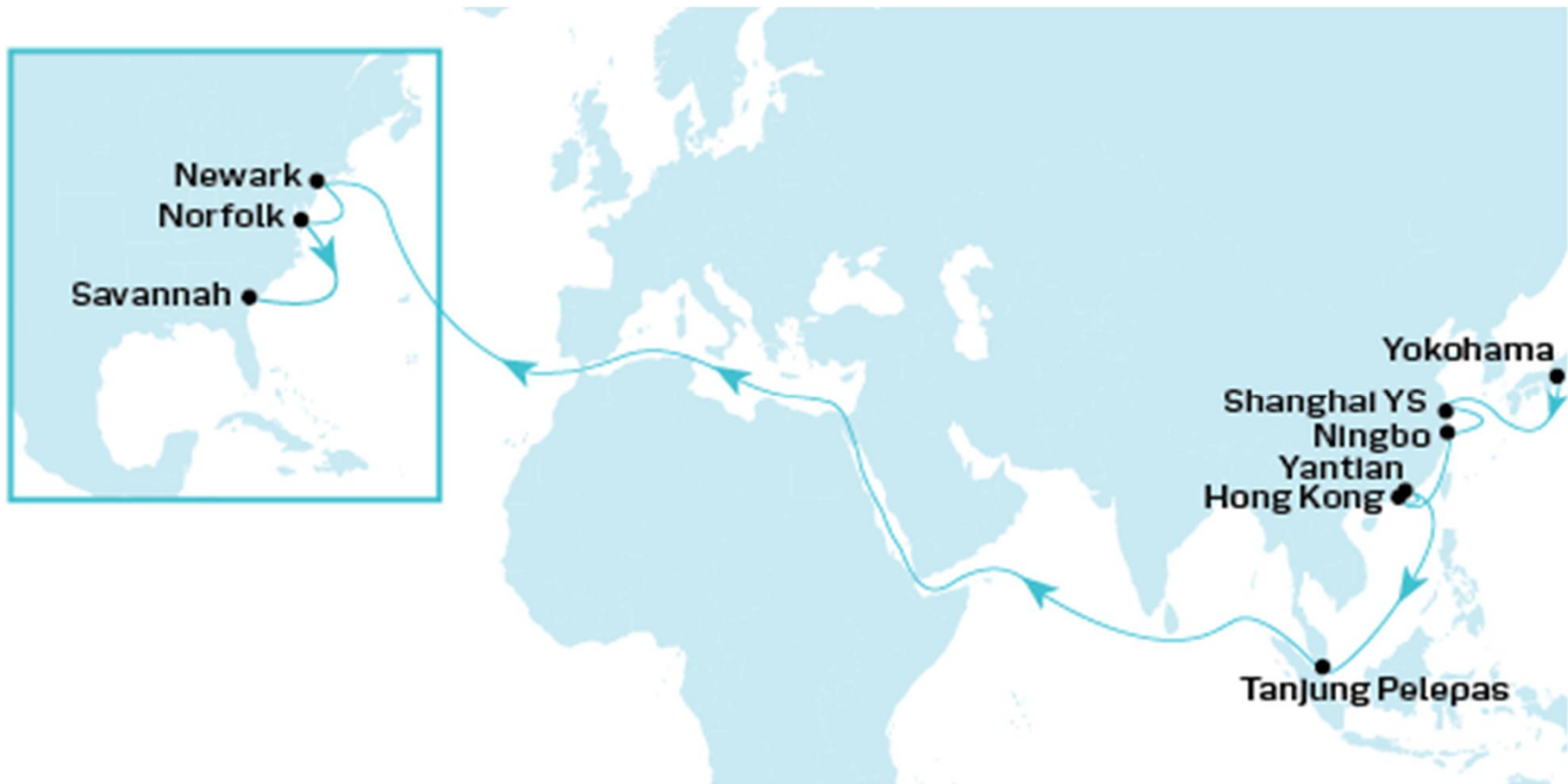
### Intermodal Logistics Center (ILC)

- Container transfer hub (rail ⇌ truck)
- Distribution keyed to intermodal service

# Global Shipping Alliances: G6 and P3

26

## Maersk Transpacific 3 Eastbound Service



# Expansion Effects: Coastal Shifts – Market Segments

27

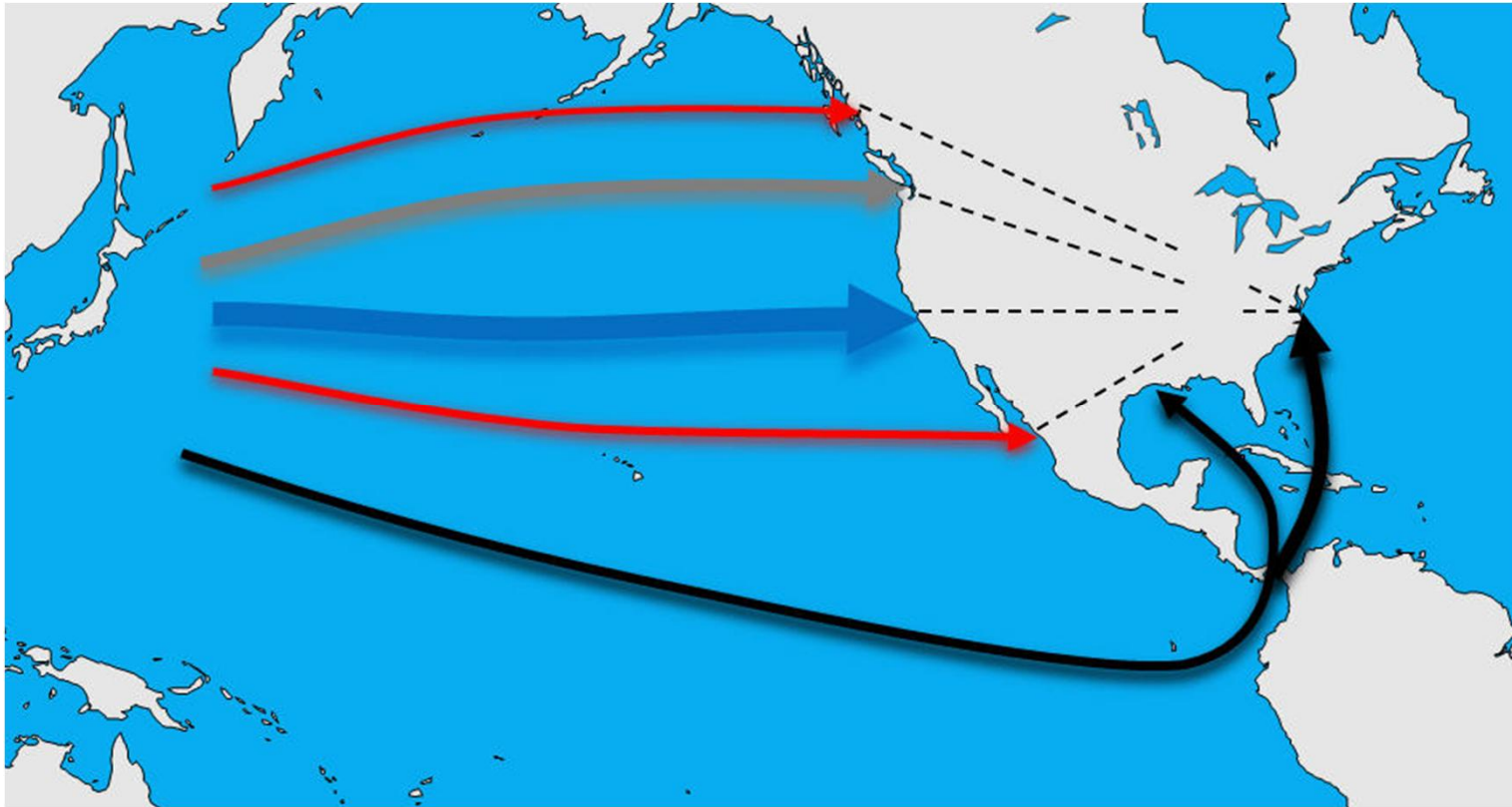
- All containers are not created equal
  - Container volumes are too often thought of as homogeneous and destined for a general U.S. inland destination
  - Distinct market segments have significantly different drivers:
    - Sources/destinations
    - Product type and end uses
    - Product value
    - Mode of transport (air, truck, rail, barge)



# Expansion Effects: Coastal Shifts - Competition

28

- Who are competitors for serving U.S. markets?  
West Coast vs. Canal? West Coast vs. East Coast railroads?



# Expansion Effects: Coastal Shifts - Competition

29

- “Competitors” have:
  - Different capabilities to segment the market and price services:
    - Premium versus slower and less frequent services
    - Origin/destination pricing vs. Canal tolls

# Expansion Effects: Coastal Shifts - Competition

30

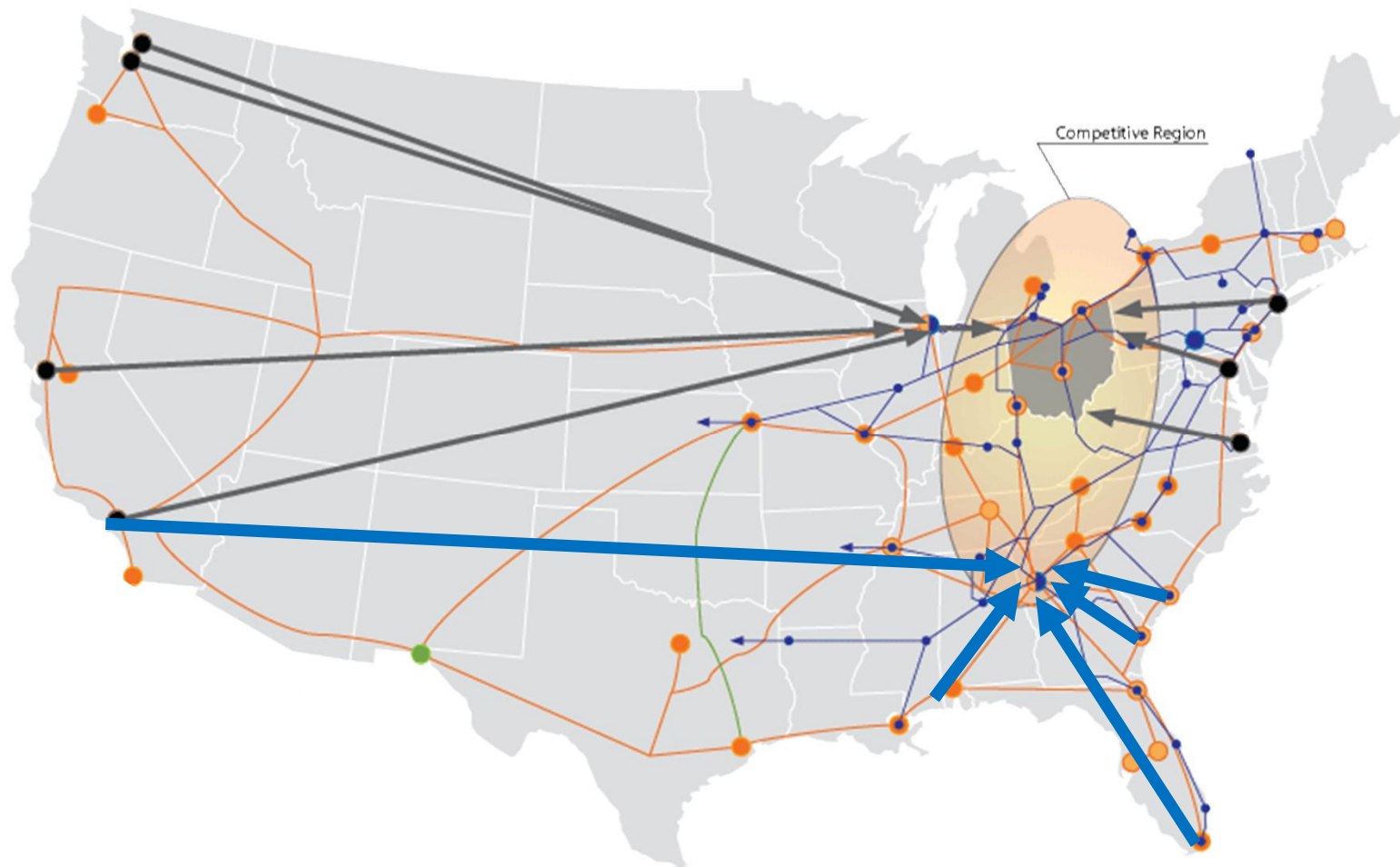
Most Competitive Region





# Expansion Impacts: Coastal Shifts – Southeast

31



# Expansion Effects: Coastal Shifts – Cost Reductions

32

- A variety of cost factors are likely to affect potential shifts

- Per TEU cost reduction to the US East Coast -  
13,000 TEU vessel rather than a 5,000 TEU Panamax vessel \$400
- Cost reductions must be *realized by shippers* to affect shifts ↓
  - Carriers, US and transshipment ports and the Panama Canal will likely retain a portion of East Coast cost reduction savings
  - Net savings passed on to shippers could be: \$200
- Cost reductions are *relative* to those on the West Coast leaving a comparative per TEU cost reduction of: ↓  
\$100



# Expansion Effects: Port Readiness

33

- US ports capable of handling much larger ships:
  - US East Coast ports
    - New York/New Jersey, Baltimore, Virginia, Miami
  - Other major ports are less certain
    - Charleston, Savannah
- Multiple ports of call are desired by liner companies to fully utilize larger ships, i.e. 2-3 calls on US East Coast

# Panama Canal Expansion Impacts - Summary

34

- The historic frenzy about coastal shifts is overblown
- There will be shifts, but not explosive
  - Major factor is the development of supply chain networks
  - Net cost reductions are likely less than expected
  - Competition between the West Coast and Panama Canal will be less than imagined
  - Shifts are likely focused on the Ohio Valley and Atlanta regions
  - Shifts could evolve slowly depending on Southeast port development and use of transshipment
  - Local impacts could be significant

## Implications for Southern California

35

- Five-year U.S. container volume growth appears positive
- Long term volume growth is likely modest
- Beware a “return to normal” view of U.S. volume growth
- Direct Panama Canal expansion impacts on coastal trade are likely to be minimal and gradual
- Pay attention to fundamentals (product detail, economic sectors, sourcing, ...) for U.S. as well as coastal trade
- Examine upside potential/downside risk

# LAEDC International Trade Outlook Conference

36

- Thank You
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