

# Global Freight Trends and Private Sector Responses

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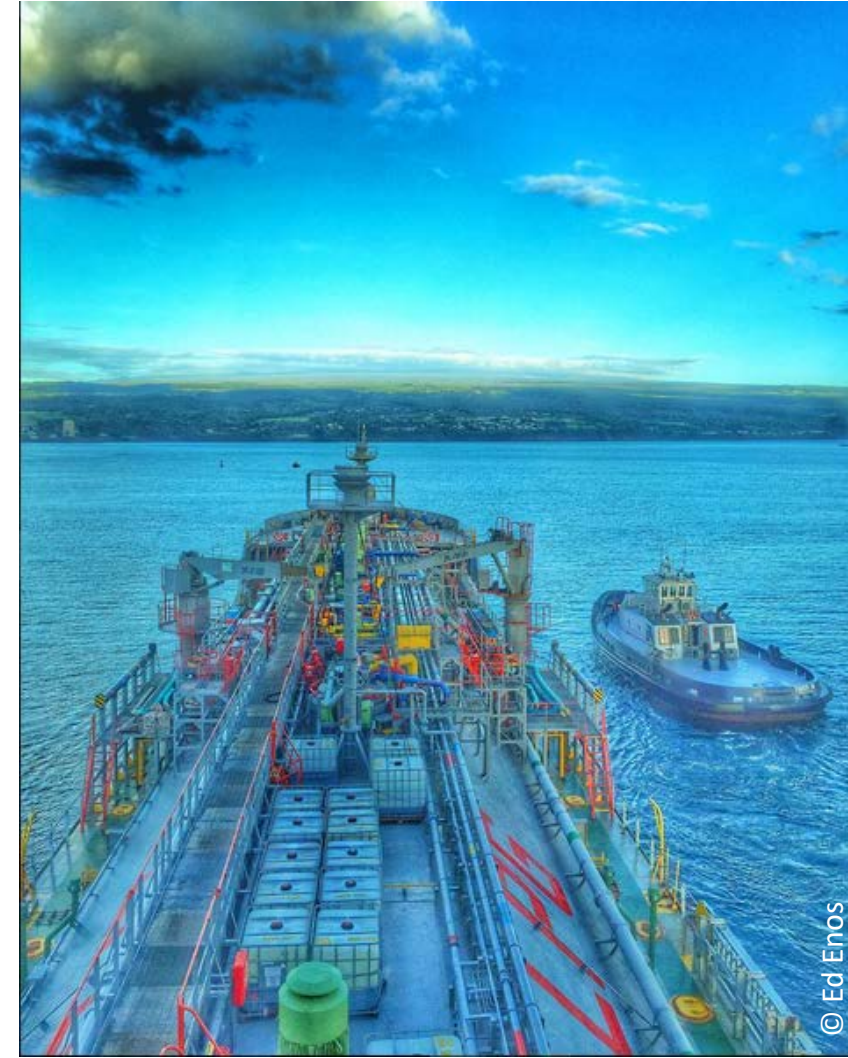
13 December 2016

# Global freight trends: *“Doing freight right”*

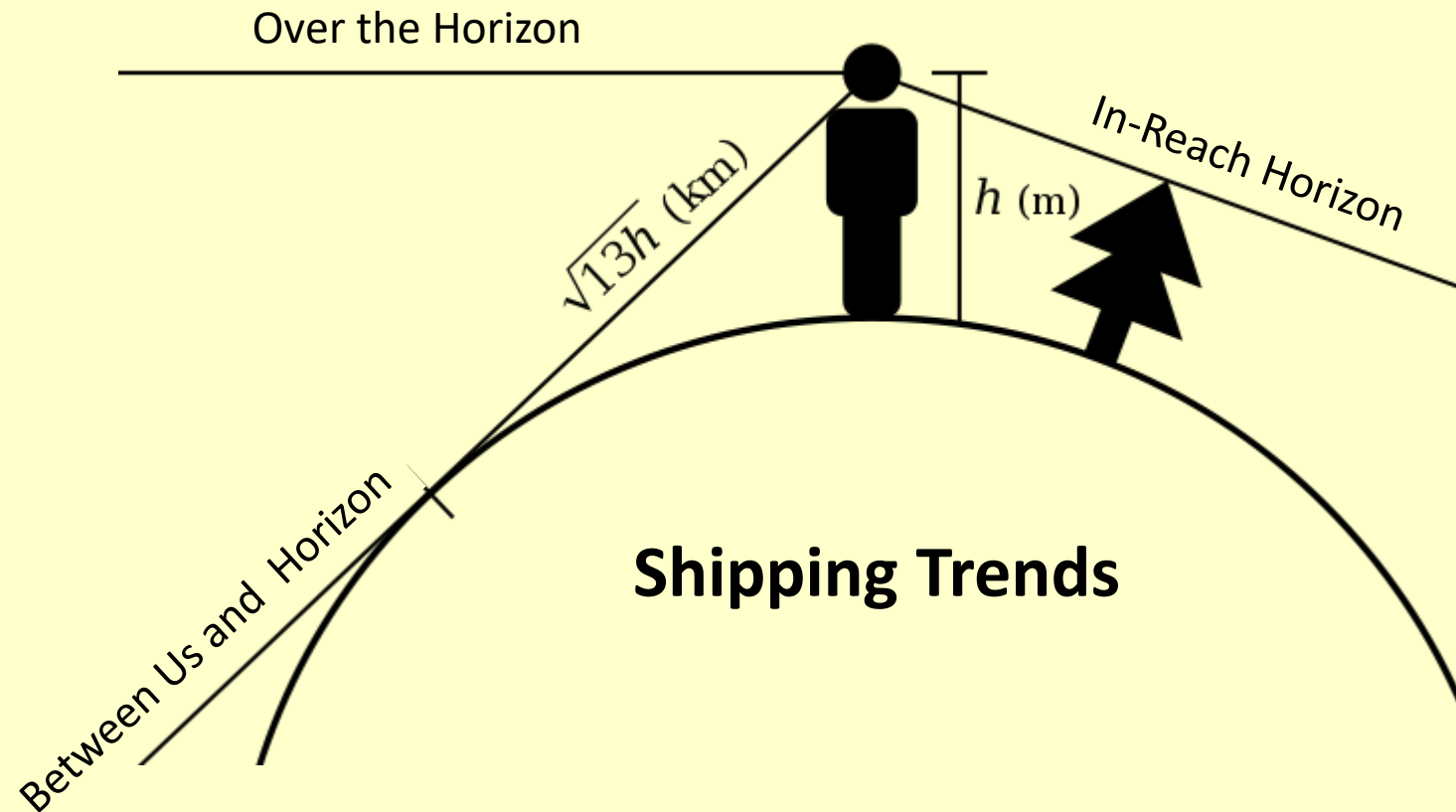
- Continued economic recovery  $\propto$  freight work?
- Question 1: What is between here and horizon?
- Question 2: What might be over the horizon?

## Three scales for perspective

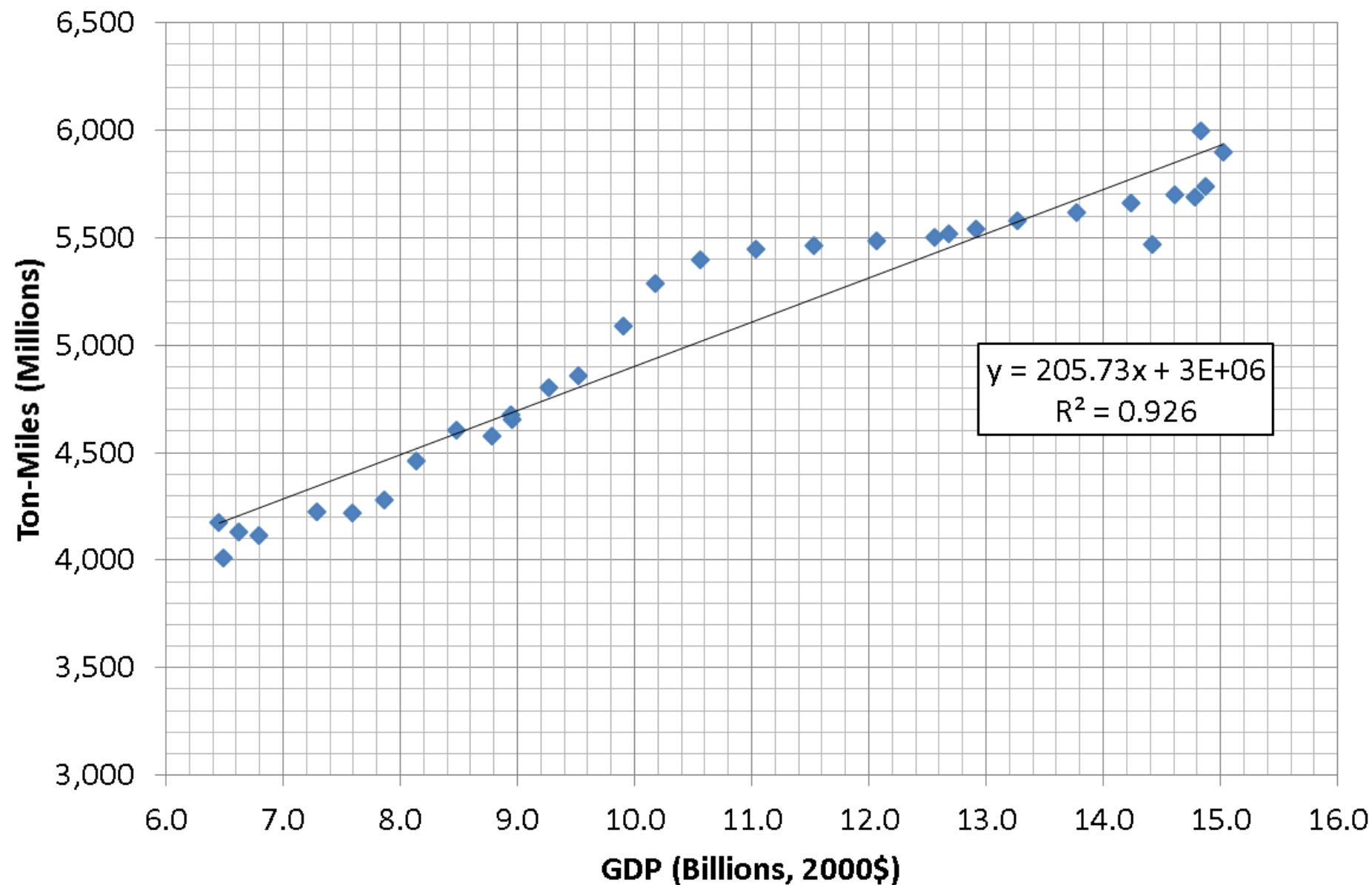
- Local
- National (State and multi-state levels)
- Global



# Don't confuse the next decade with the freight response horizon

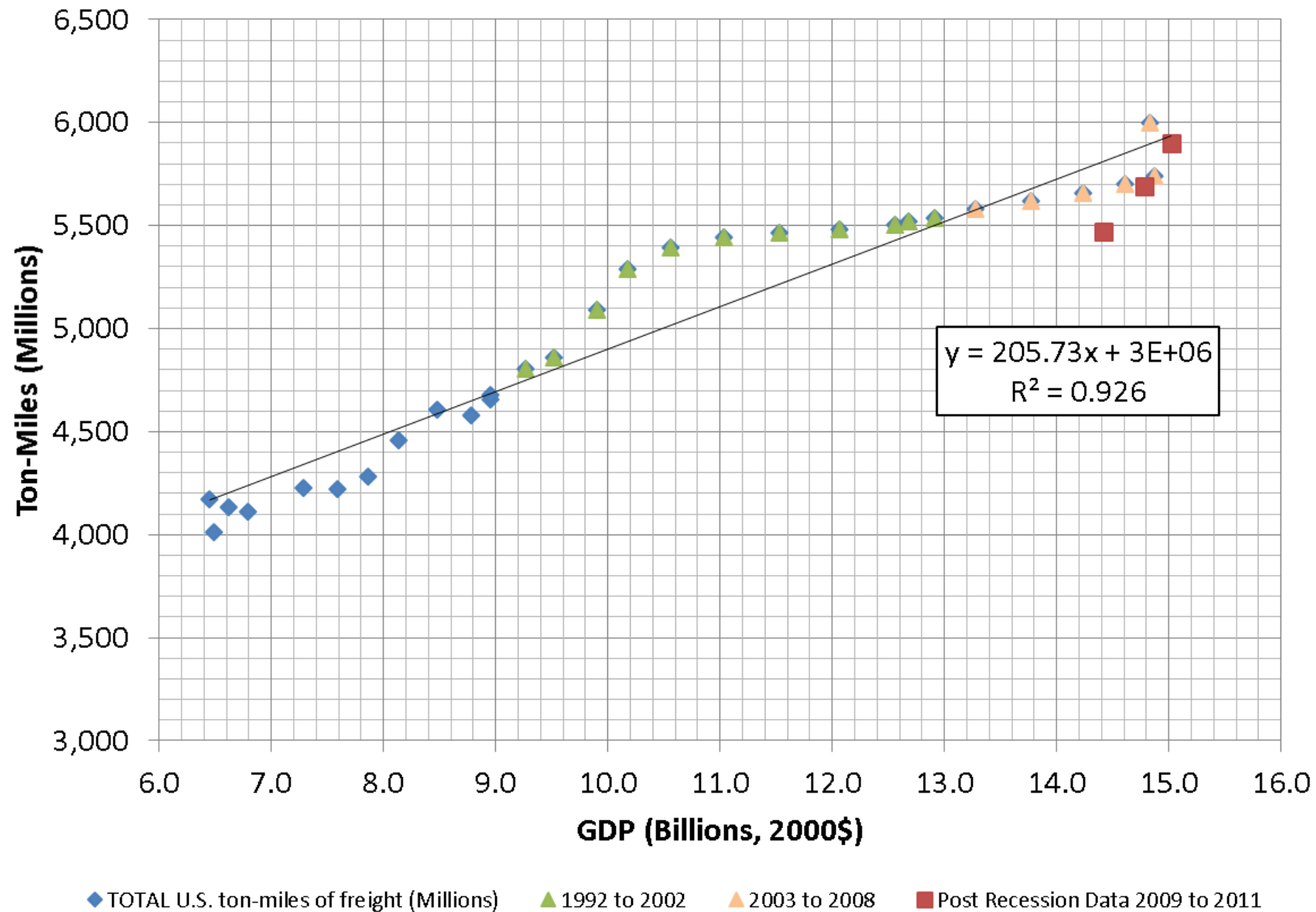


# Crossplot of GDP and US Freight Ton-miles



◆ TOTAL U.S. ton-miles of freight (Millions)

## Crossplot of GDP and US Freight Ton-miles



# What does it mean to be *doing freight right*?

Public and private attention on more than one lever at a time?

Examples

- Port gateways – hubs of change?
- Energy, efficiency, economics – invest for profits?
- First-hand vs. second-hand fleets – green growth and brown bubbles
- Rules of the road – policy signals as push or pull?























# What is happening to supply chain now?

- **Container shipments have grown by 290% since 2000**
- **Vessel overcapacity, “right-steaming”**
- **Supply chain is more intermodal**
- **Distribution Centers now twice the size from a decade ago**
- **Alternative ports are on the rise**



# The IF-TOLD Mitigation Framework: A Context for New LOS Discussions

## The IF-TOLD Six degrees of freedom

- Intermodalism/mode-shifting – efficient modes
  - Fuels – advanced, low-emission, low-carbon fuels
  - Technology – efficient technologies
  - Operations – best practices in operator behavior
  - Logistics – supply chain management
  - Demand – how much STUFF we transport and consume
-

# Doing freight right – what is changing?

## Key trends changing this decade(s)

- Right-shoring
- Right-steaming
- Right-routing
- Right-timing
- Right-bundling
- Right-mode mixing

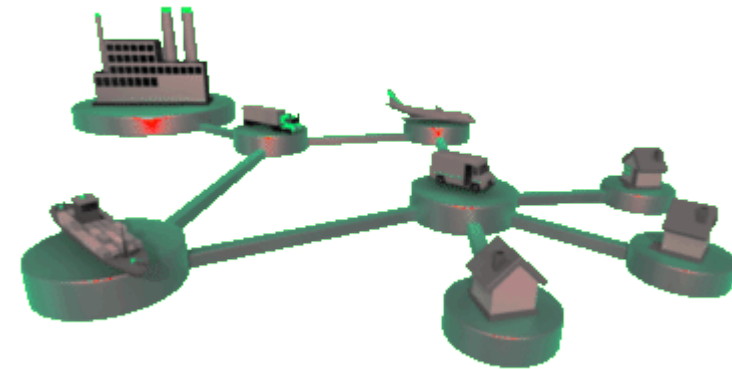




# Doing freight right – what is changing?

## Key trends changing this decade(s)

- Right-shoring
- Locate the best combinations of enterprise components for cost and efficiency



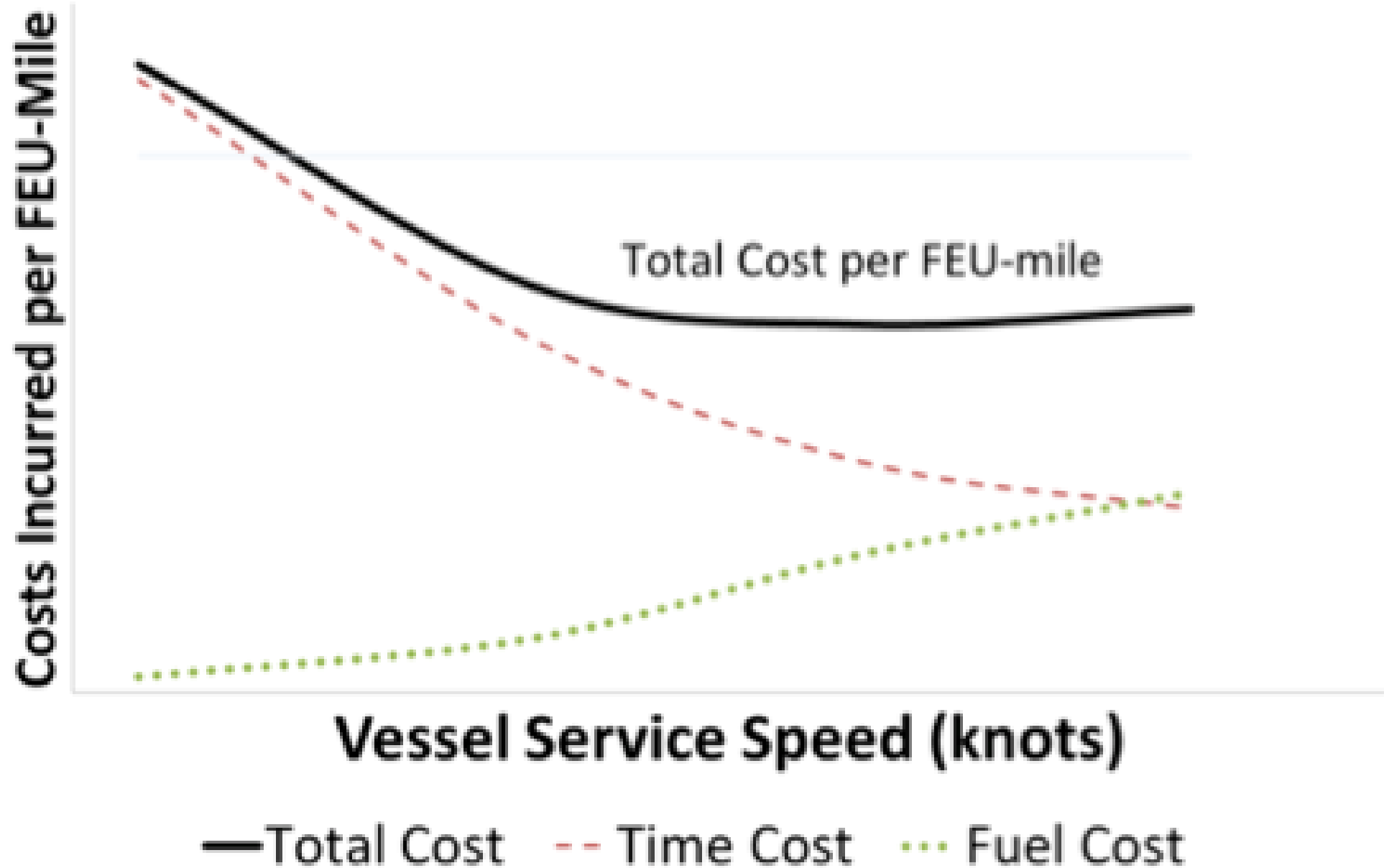
# Doing freight right – what is changing?

## Key trends changing this decade(s)

- Right-steaming
- Energy price shocks and recession slowed ships; supply chain flexibility emerged



# 2020 Optimistic: ~\$400/ton fuel

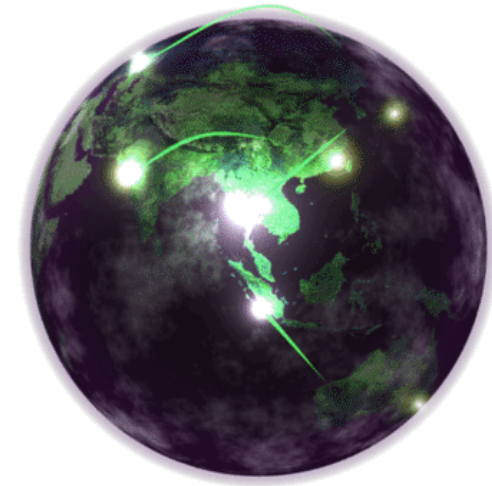




# Doing freight right – what is changing?

## Key trends changing this decade(s)

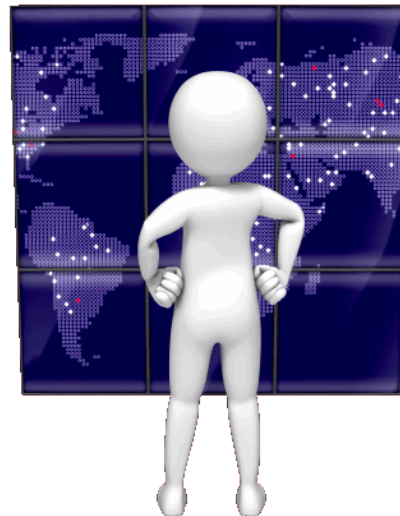
- Right-routing
- Routes are made not found; markets can result in circuits, pendulums, or empty backhauls



# Doing freight right – what is changing?

## Key trends changing this decade(s)

- Liner (scheduled) transport
  - Spot (unscheduled) transport
  - Daily, weekly, biweekly flexibility
- Right-timing



# Doing freight right – what is changing?

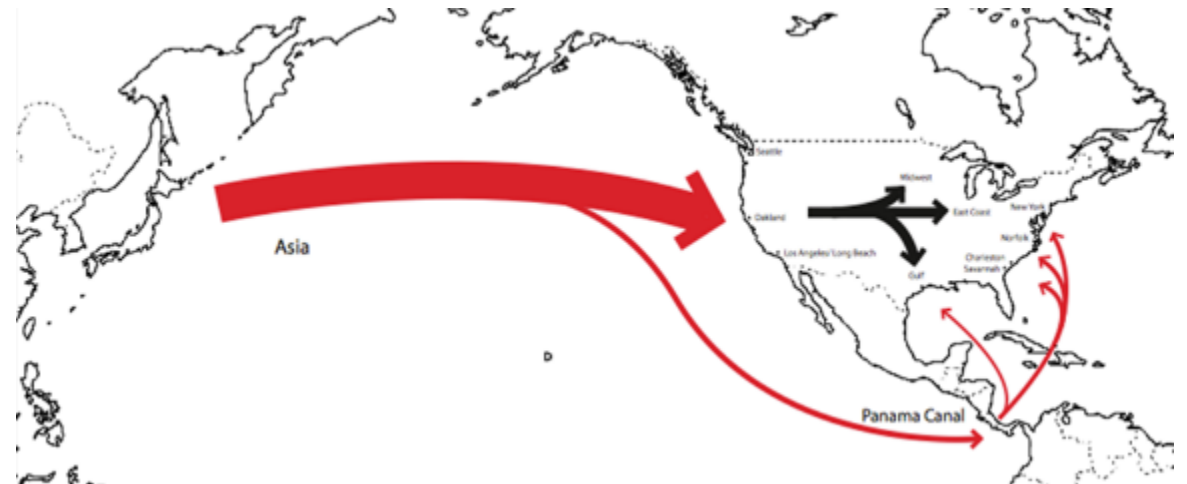
## **Key trends changing this decade(s)**

- Better bundling and backhauls reduce annual miles, moves more goods, saves \$ and energy, serves flexibly supply chain
- Right-bundling

# Doing freight right – what is changing?

## Key trends changing this decade(s)

- Right-mode mixing
- Locate the best combinations of enterprise components for cost and efficiency







# Doing freight right – what is changing?

## Key trends changing this decade(s)

- When some fleets modernize quickly, others benefit (?) from younger second-hand stock

- Right-investing



- Containership Liner Majors
- Class I Rail
- Big Fleet Trucking
- Major Courier Services
- Airlines (freight)

Scheduled  
Market,  
Owner  
operator

- Major Oil Brands
- Major Courier Services
- Regional Bulk Trades
- Airlines (pass-freight)

Spot  
Market,  
Owner  
operator

Scheduled  
Market,  
Second  
Hand

- Does not specify design
- May manage crews
- Holds assets until salvage

Spot  
Market,  
Charterer

- Does not specify design
- May not manage crews
- Service may exclude fuel price
- Transfers assets frequently



# What might be over the horizon? Questions and Discussion

... and another thank you