

AMERICAN ASSOCIATION OF PORT AUTHORITIES SAVANNAH, GA JUNE 21, 2011

Public Private Partnerships

Darrell Wilson, AVP Government Relations – Norfolk Southern



THE NORFOLK SOUTHERN NETWORK

- NS operates approximately 21,000 route miles throughout 22 states and the District of Columbia
- Engaged in the rail transportation of raw materials, intermediate products, and finished goods
- Operates the most extensive intermodal network in the East and is a major transporter of coal and industrial products.
- NYSE: NSC

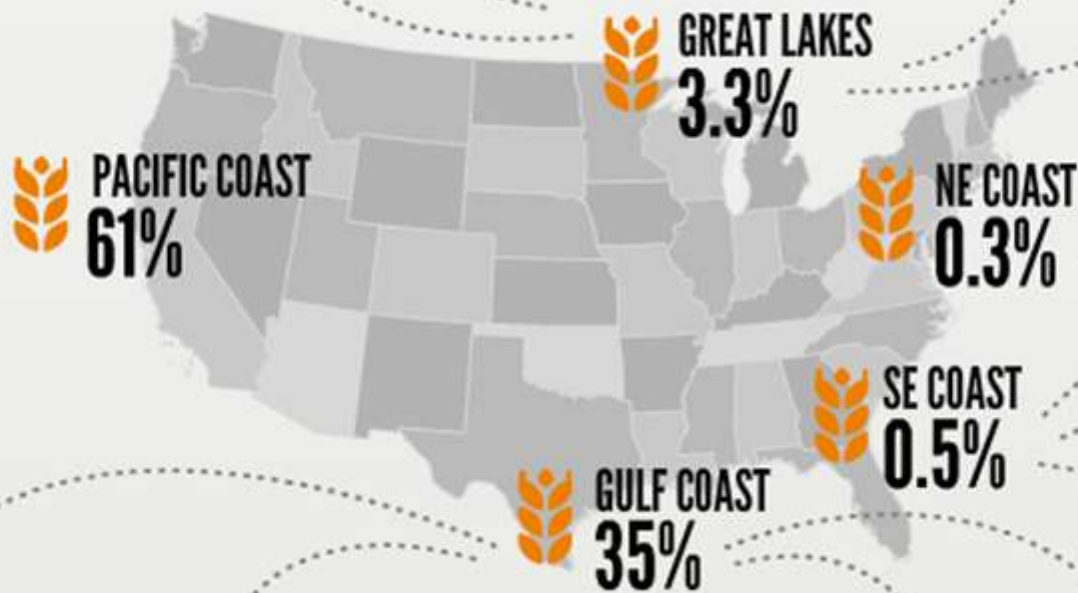


Network of Key Corridors and Port Access



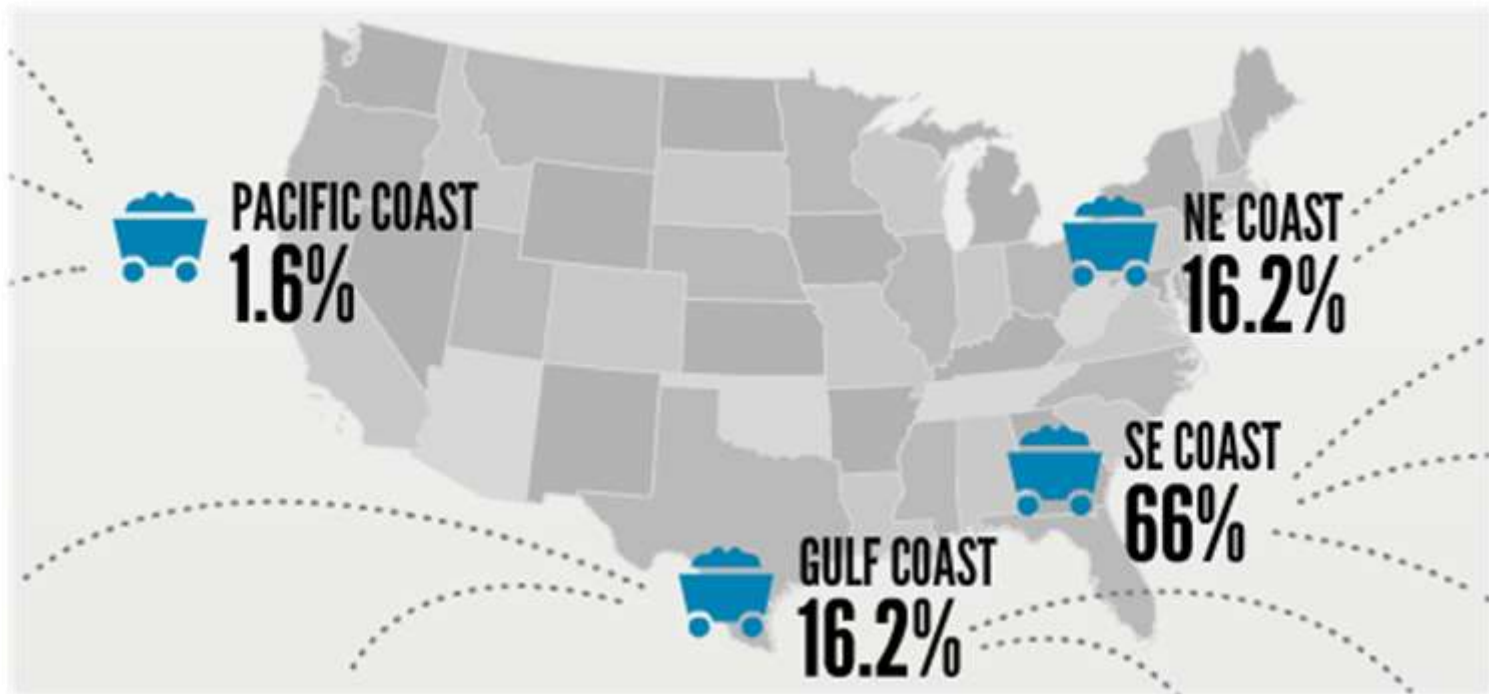
Grain Exports via Rail

- Over 74 million tons of grain were exported in 2008, representing 40% of total exports moved by rail



Coal Exports via Rail

- Over 68 million tons of coal were exported in 2008, representing 30% of total exports moved by rail
- Forecasts predict coal exports to surpass 15 year highs



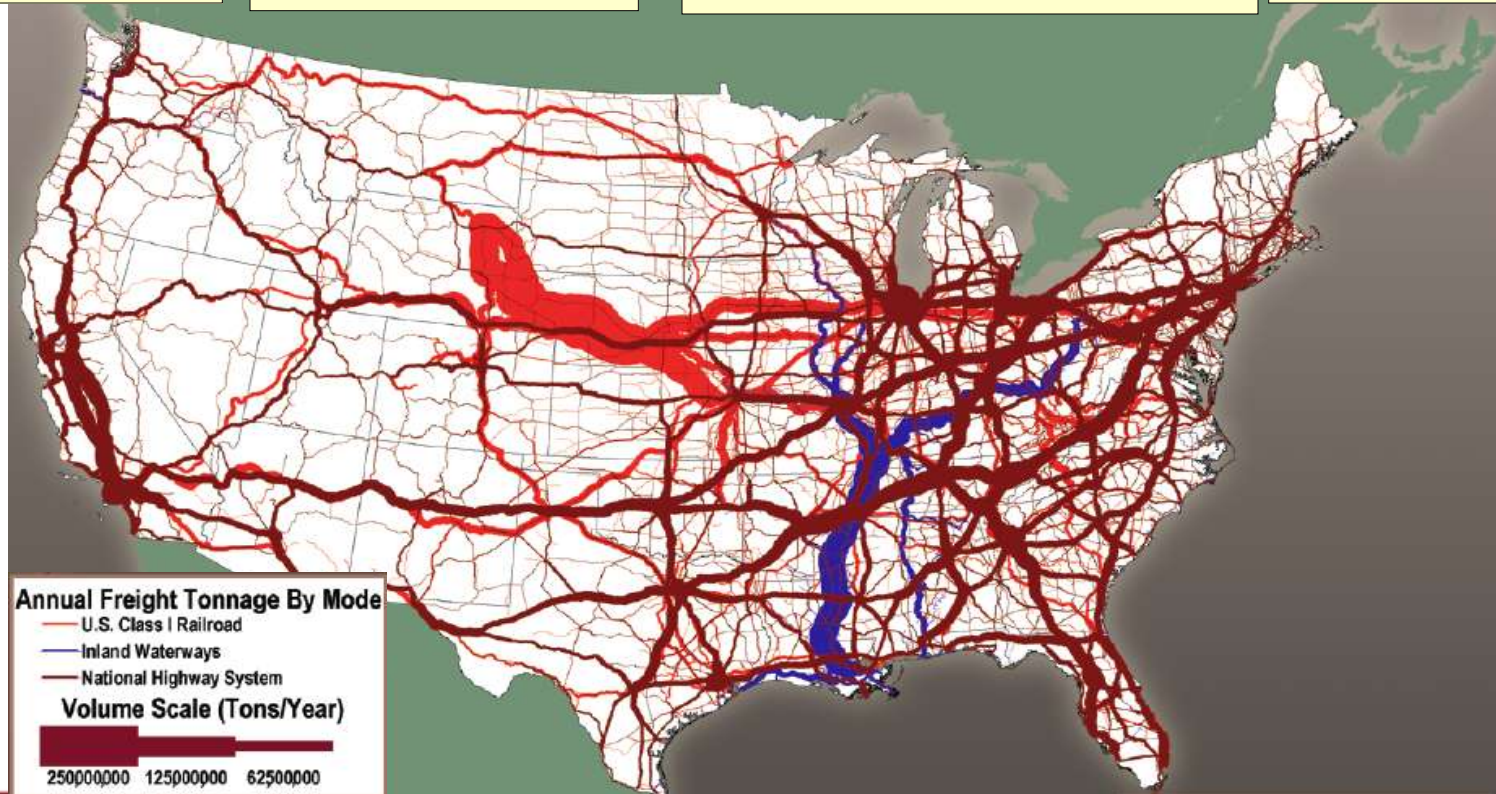
Economic Importance of the US Supply Chain

Key to global competitiveness
10% of US GDP
(China – 22%)

8 million jobs involved in moving and handling freight

The supply chain represents \$1.4 trillion in goods and economic activity

A 1% change in supply chain costs = \$14 billion



Supply chain costs are increasing

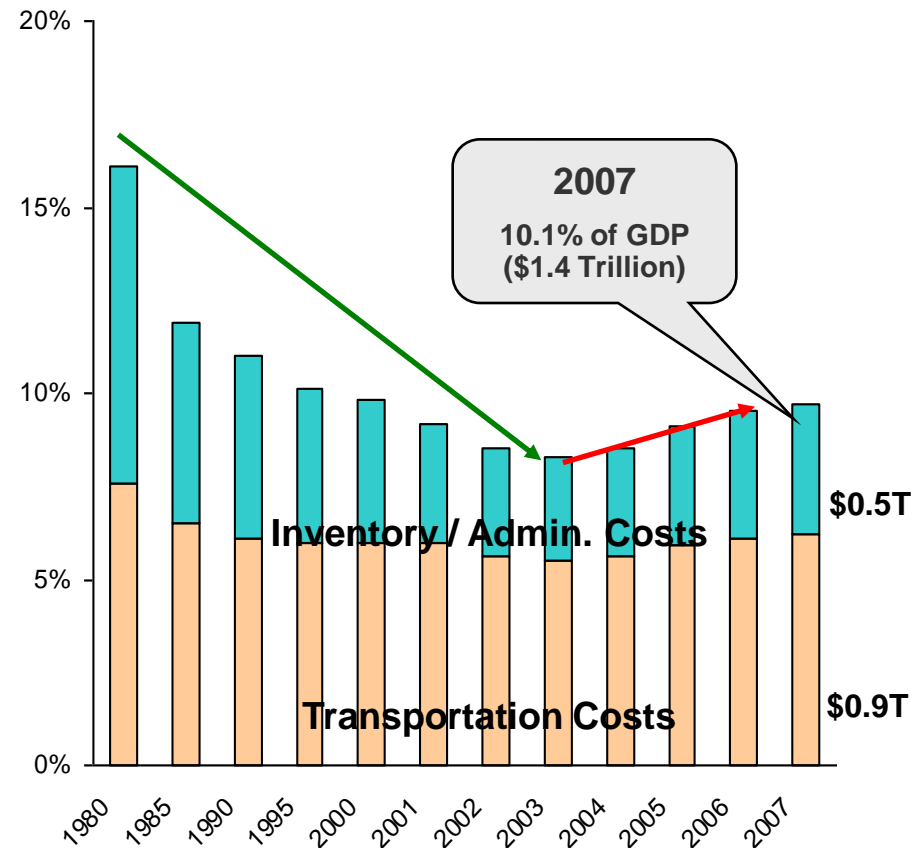
What Drove Logistics Costs Down from 1980 to 2004?

- ✓ Transportation deregulation
- ✓ Excess capacity
- ✓ Low fuel costs

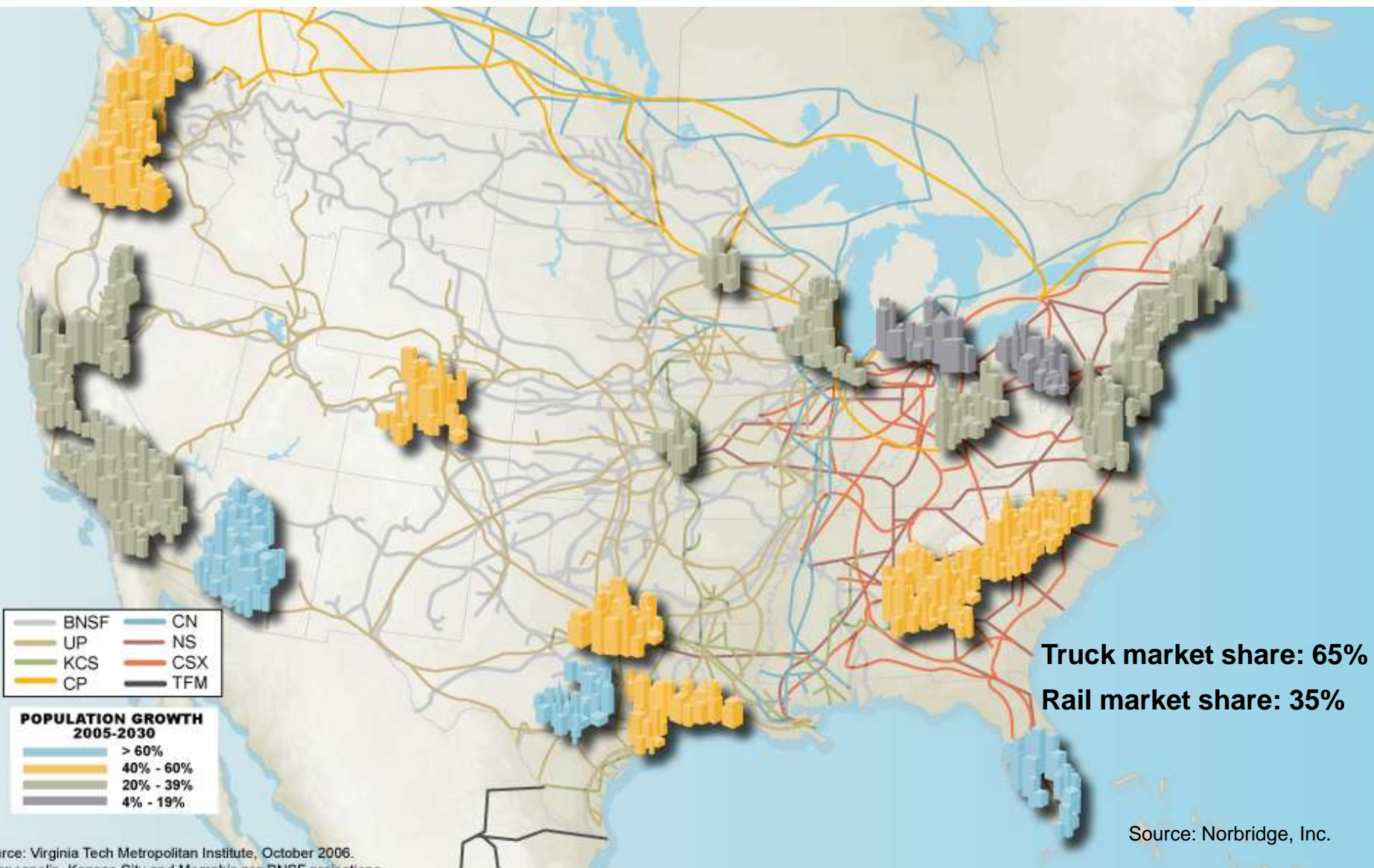
What's Driving Recent Supply Chain Cost Trends?

- ✓ Higher fuel costs
- ✓ Congestion
- ✓ Aging infrastructure
- ✓ Public policy
- ✓ Increasing U.S. labor costs

U.S. Logistics Costs as a Percent of GDP



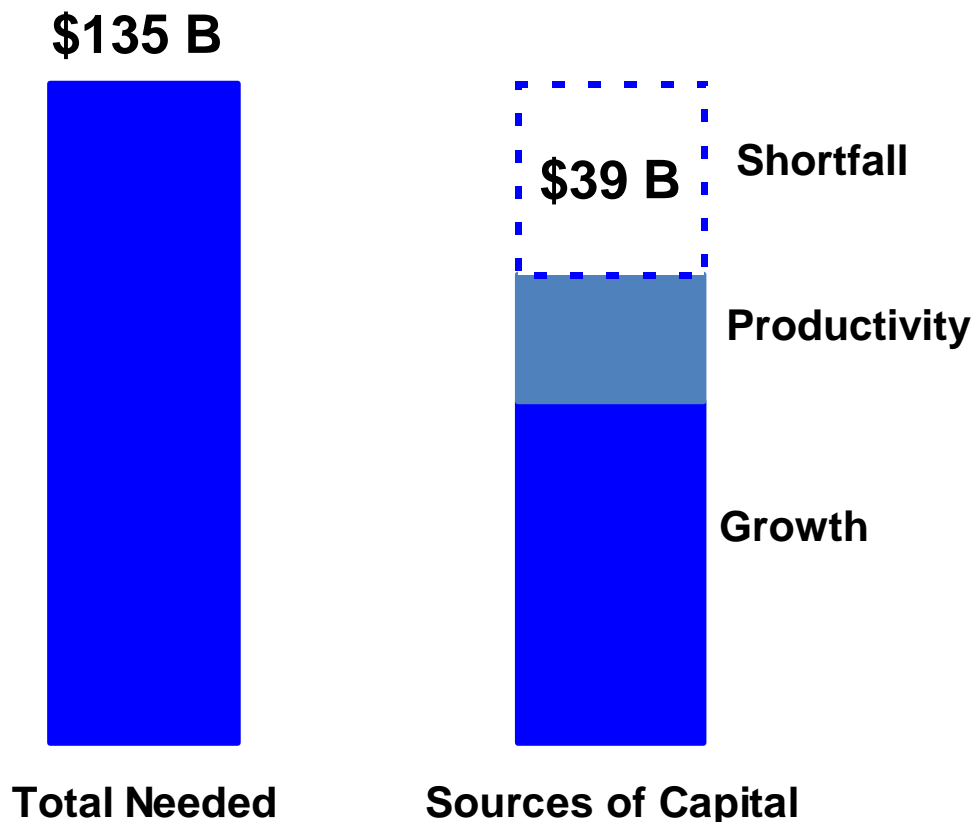
Connecting markets: Appox. 2 trillion intercity ton miles (500-1000+) can be shipped on truck or train



Capacity investment: Supporting and Growing Freight Rail Market Share

- If rr's maintain their current expansion investment levels, then the Class I's will invest cumulatively about \$70b over the next 28 years.
- \$39b shortfall will occur without some incentive to bring investments up sooner in their cycle
- If mode optimization, then add' investment is required.

Class 1 capital investments needed to meet 2035 volume demand

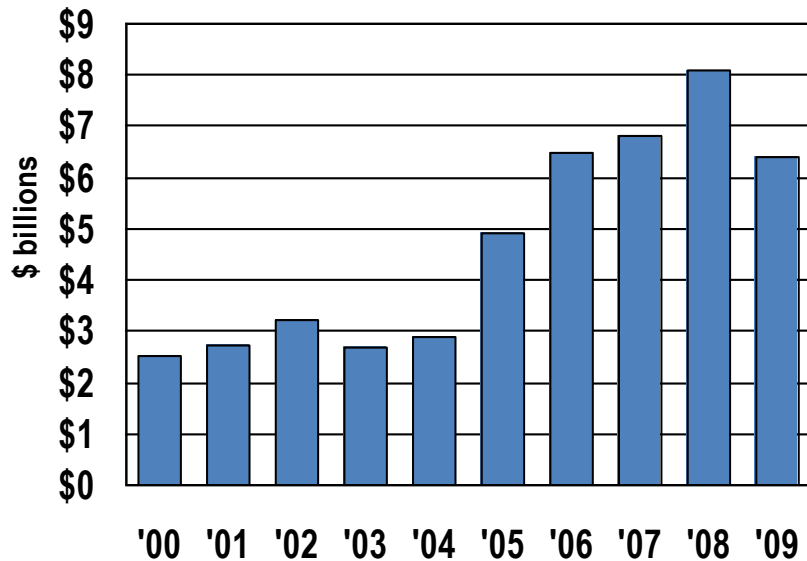


Source: National Rail Freight Infrastructure Capacity and Investment Study September 2007

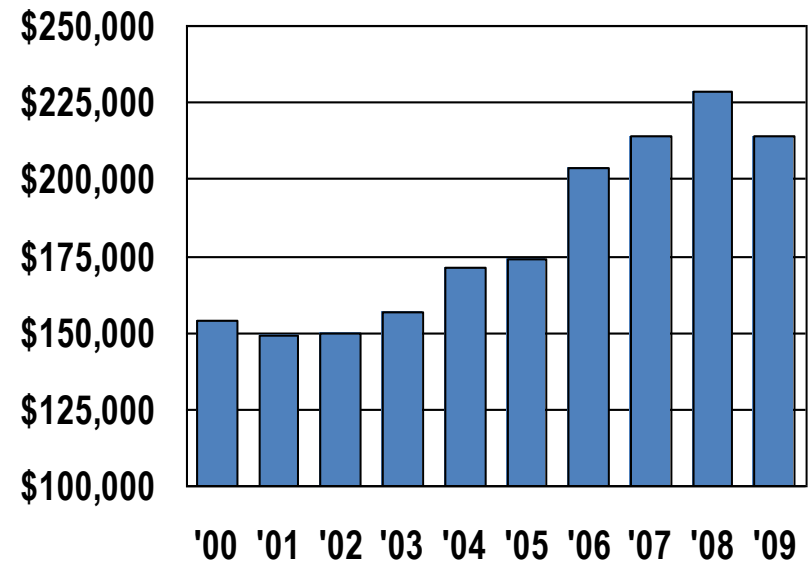
ASSET UTILIZATION AND CORRIDOR DEVELOPMENT

NEED FOR INCREASES IN RR SPENDING PER MILE

Net Income*



RR Spending Per Mile



Source: AAR

*Net Income for Class One Railroads

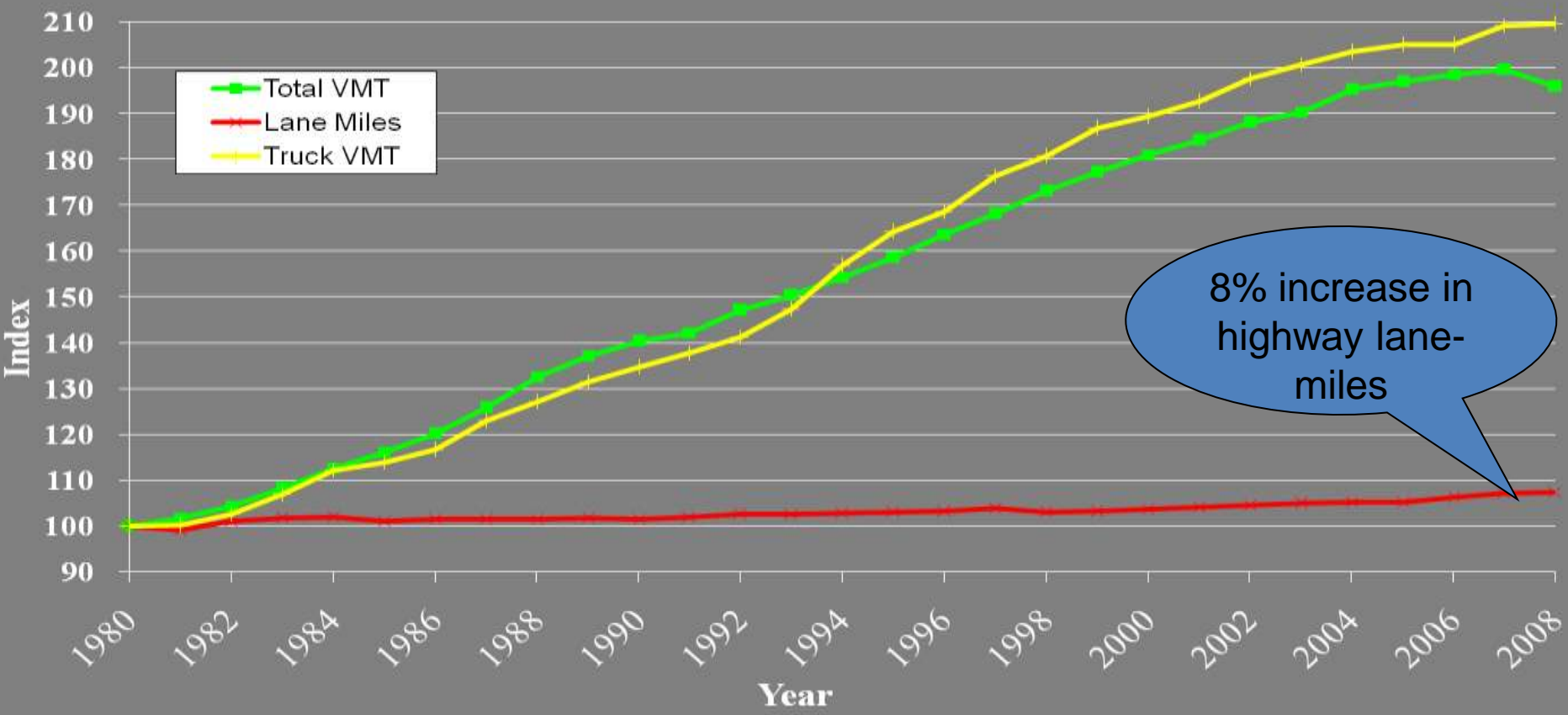
ASSOCIATION OF AMERICAN RAILROADS



Highway Capacity Consumption

110% increase in Truck VMT

Vehicle-Miles Traveled (VMT) and Lane-Miles: 1998-2008



8% increase in highway lane-miles

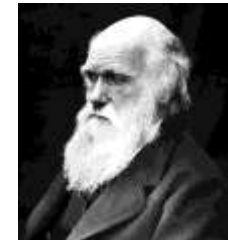
Source: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics* (Washington, DC: Various years).
* Updated with data current as of February 2011

INNOVATION AND PARTNERSHIP

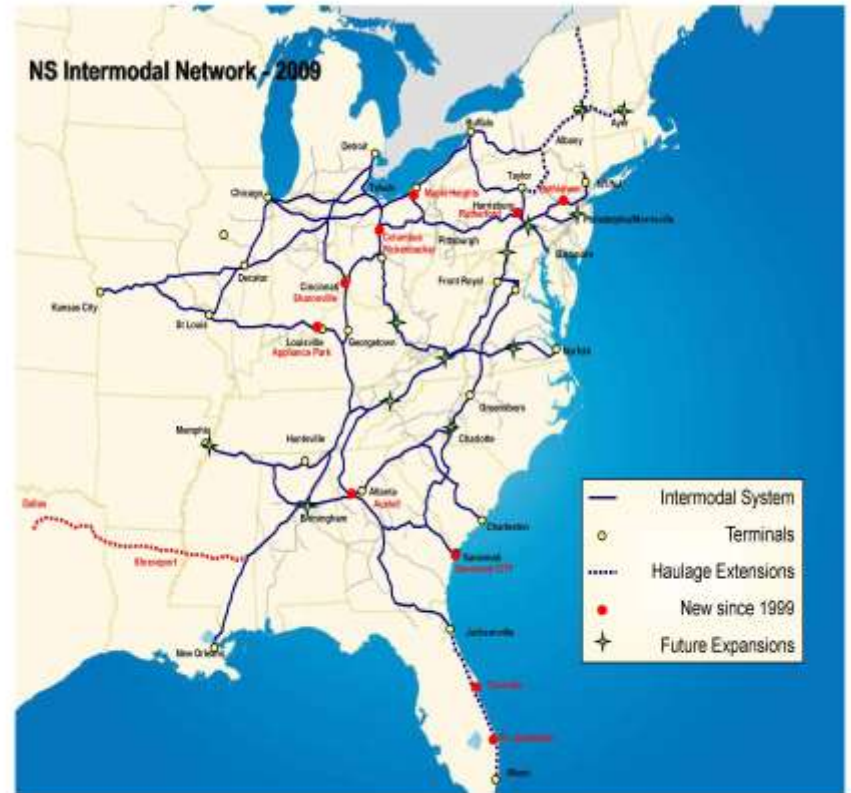


“It is not the strongest of the species that survives, nor the most intelligent that survives. It is the one that is the most adaptable to change.”

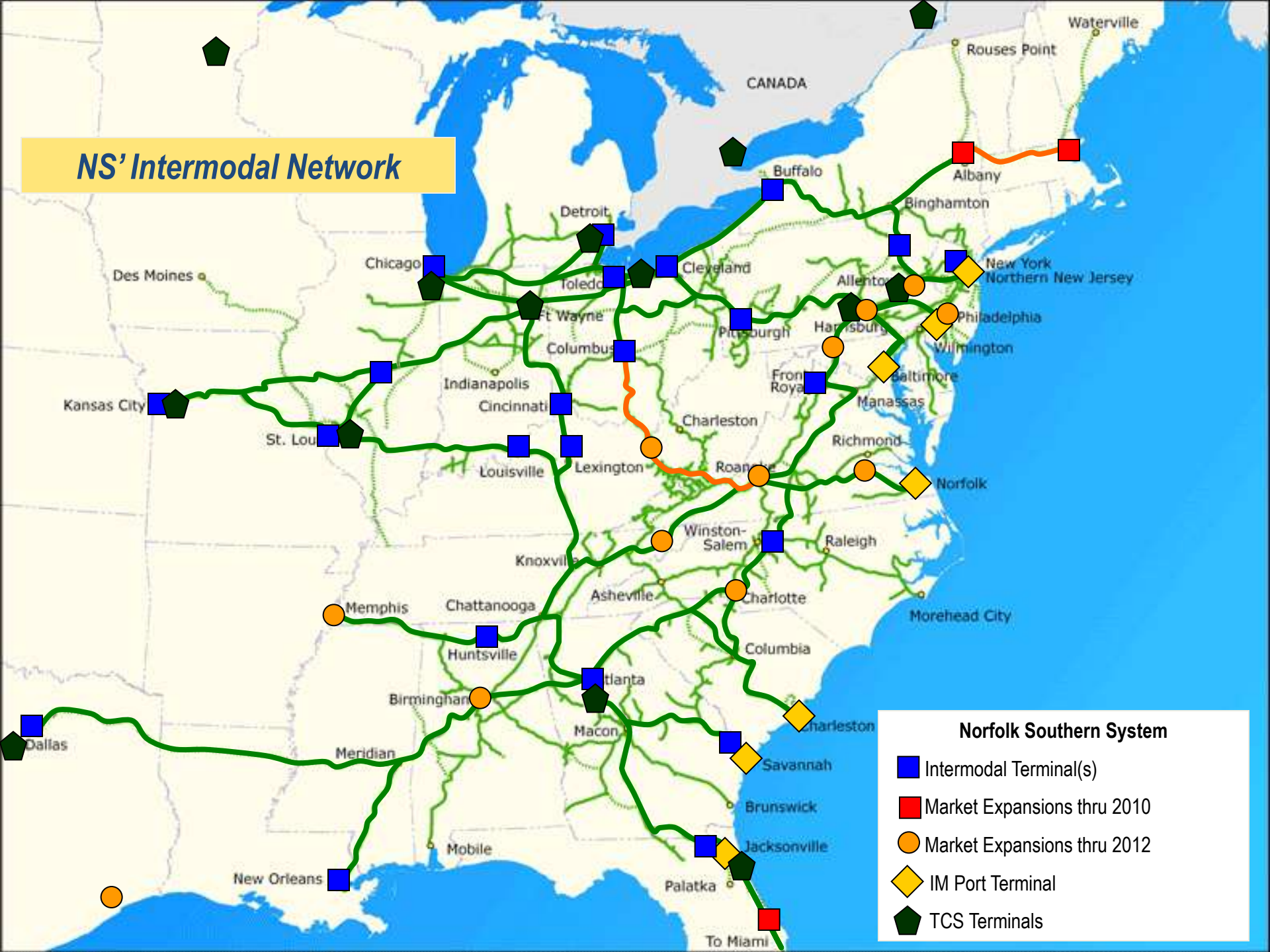
- Charles Darwin



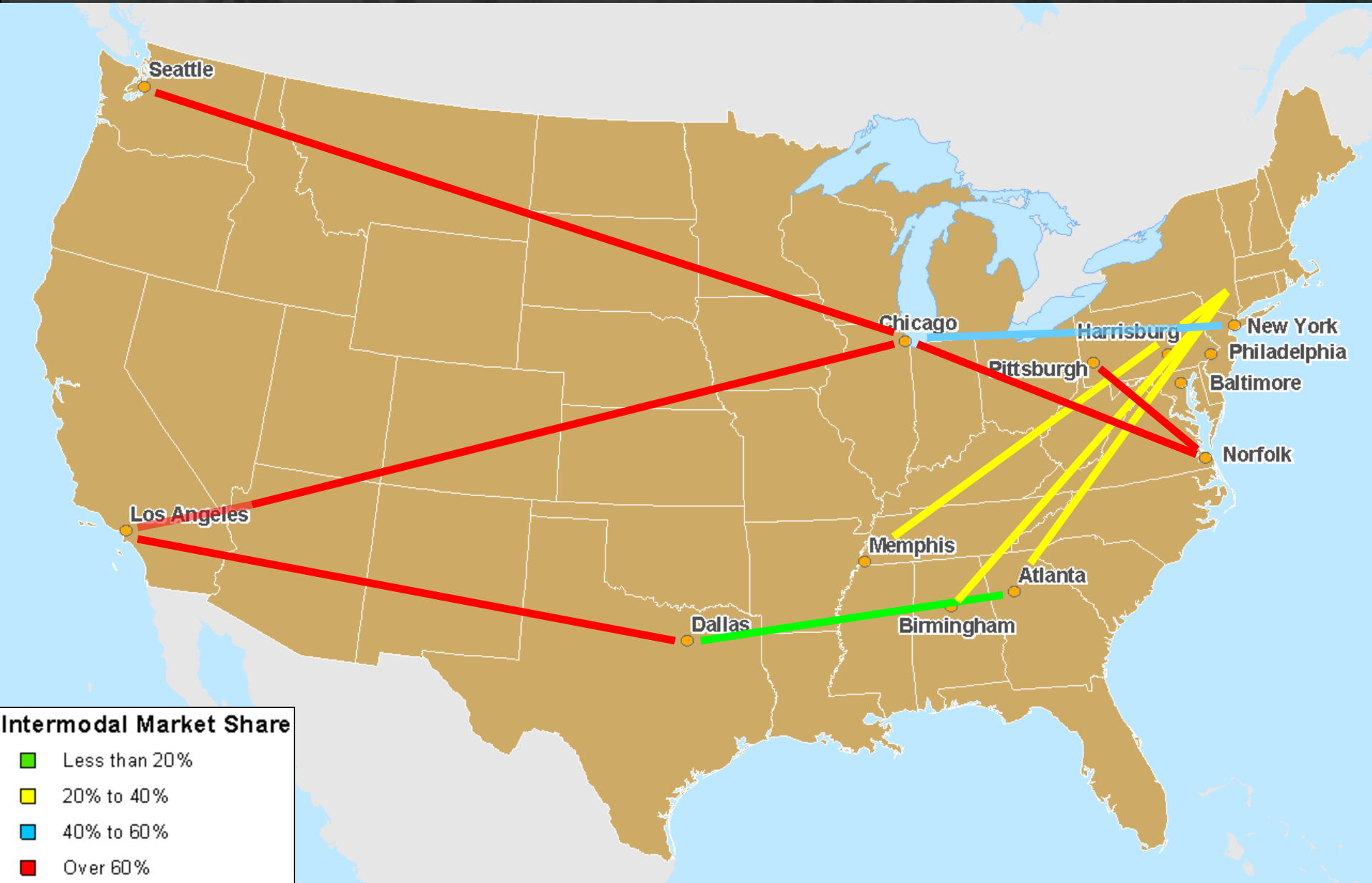
NS Intermodal Network Growth 1990-2011



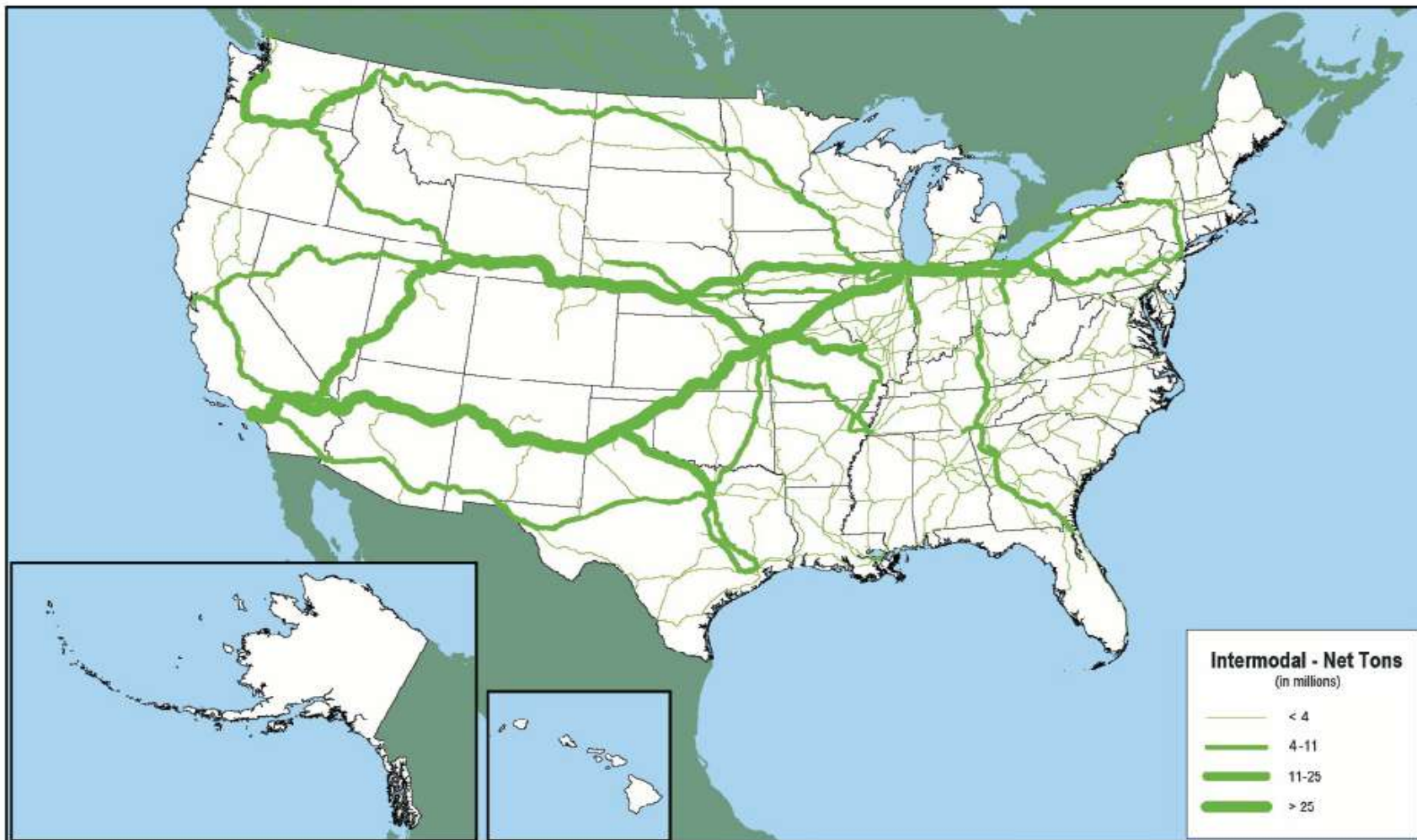
NS' Intermodal Network



Rail Intermodal vs. Truck Market Share

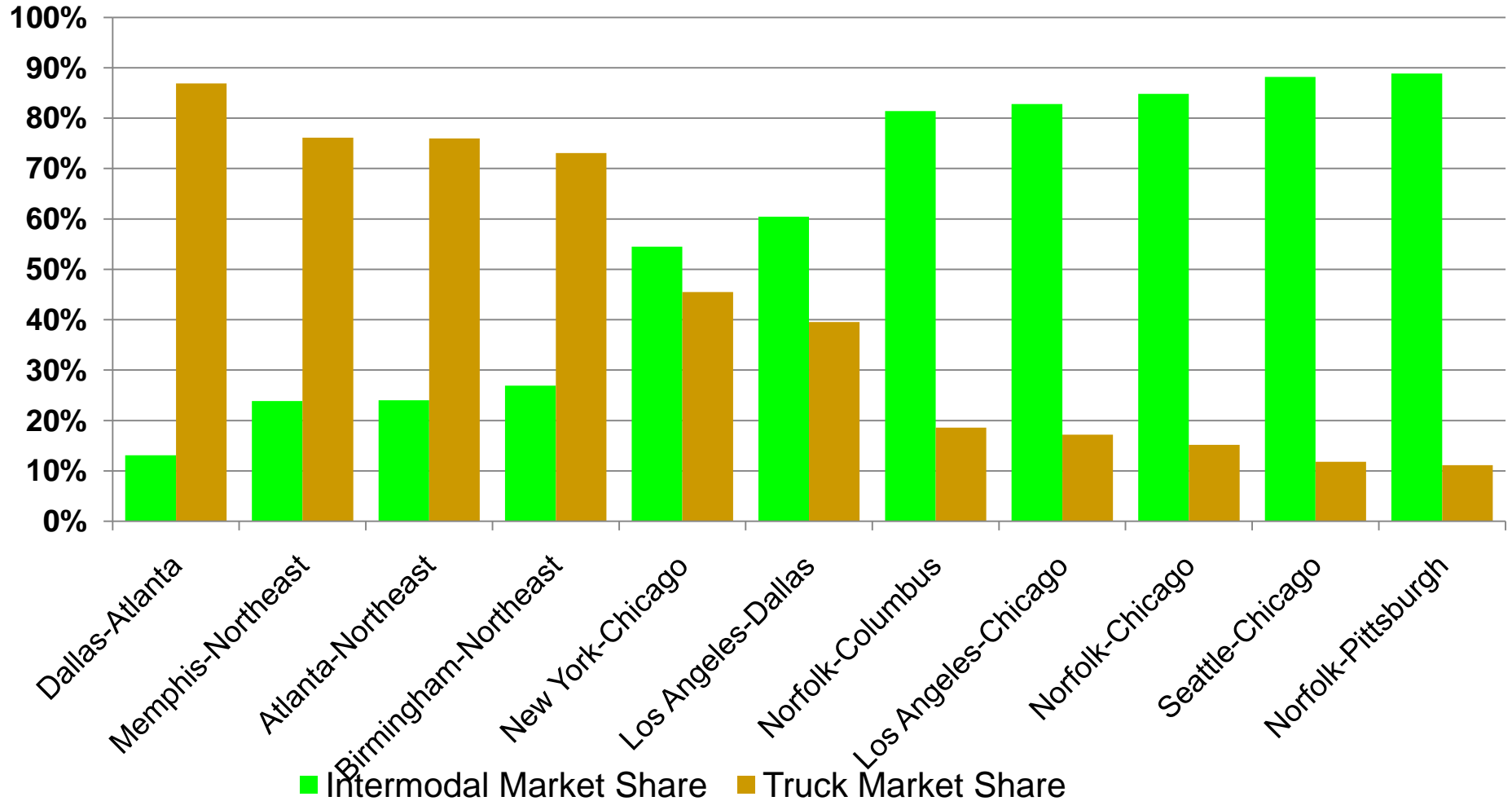


Tonnage of Trailer-on-Flatcar and Container-on-Flatcar Rail Intermodal Moves: 2006



Source: U.S. Department of Transportation, Federal Railroad Administration, November, 2008.

The Crescent Corridor has High Truck Diversion Potential





PanAm Southern Corridor

Heartland Corridor

MidAmerica Corridor

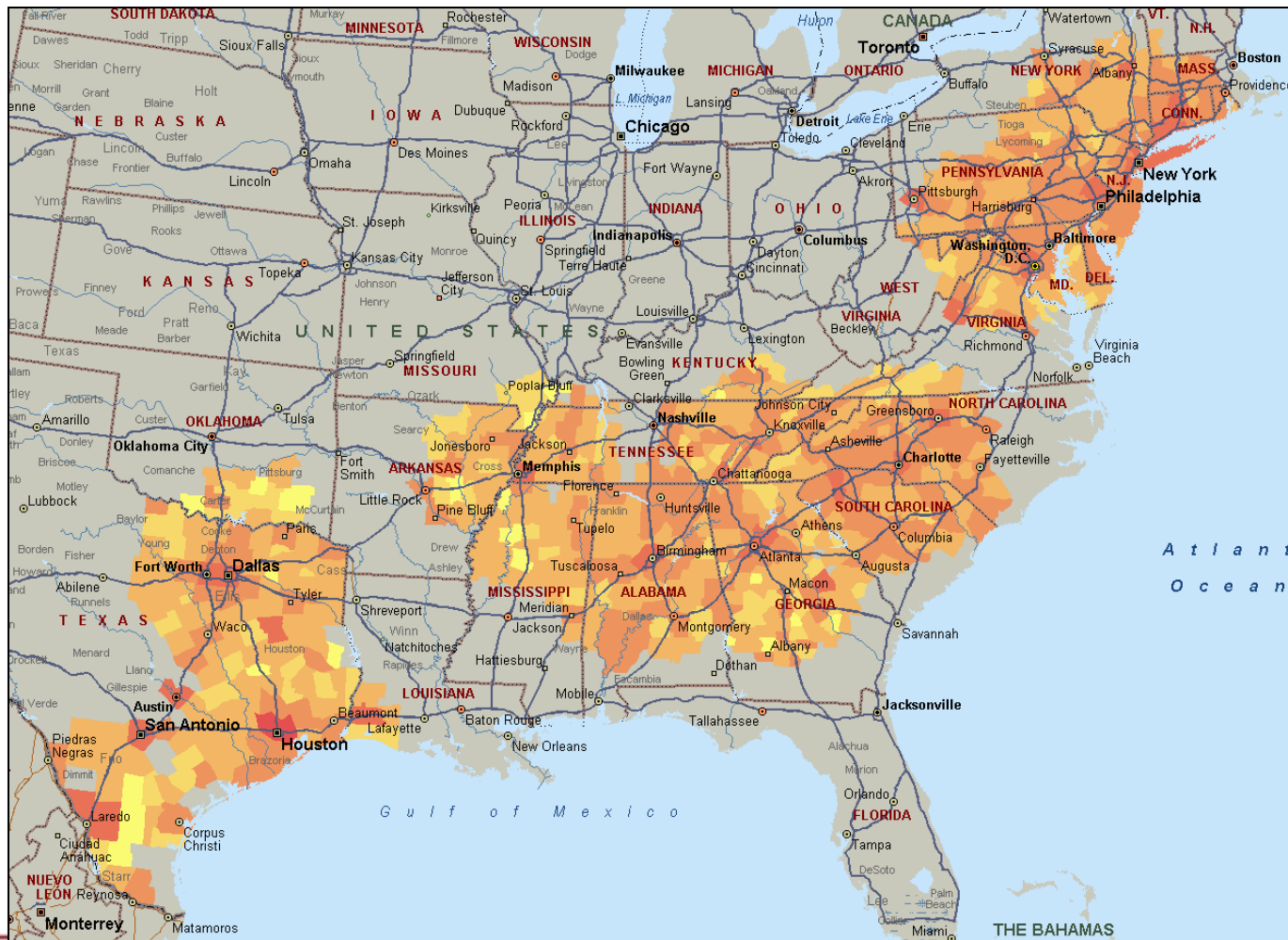
Crescent Corridor

Meridian Speedway

Titusville

NS' 6 Corridor Strategy
Includes joint ventures with other carriers

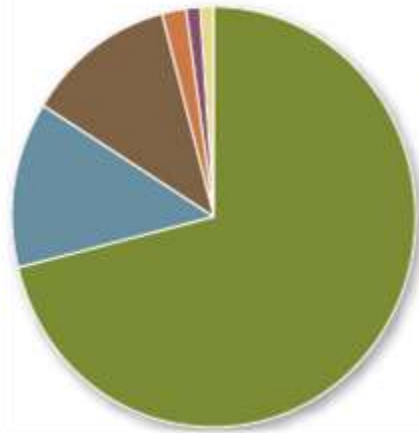
MARKET ASSESSMENT OF FREIGHT VOLUMES



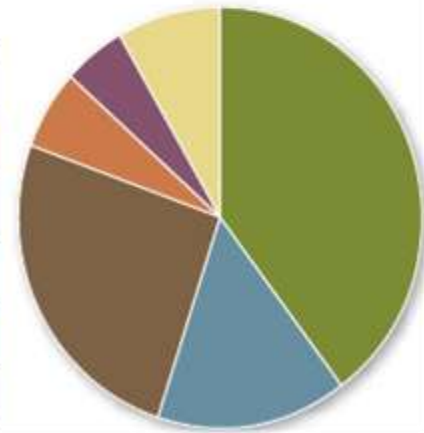
SIX CORRIDOR STRATEGY

CURRENT LENGTHS OF HAUL ON LONG-DISTANCE TRUCKS

2008 Transearch Dry-Vans in AL, GA, MD, NC, NJ, PA, TN, and TX



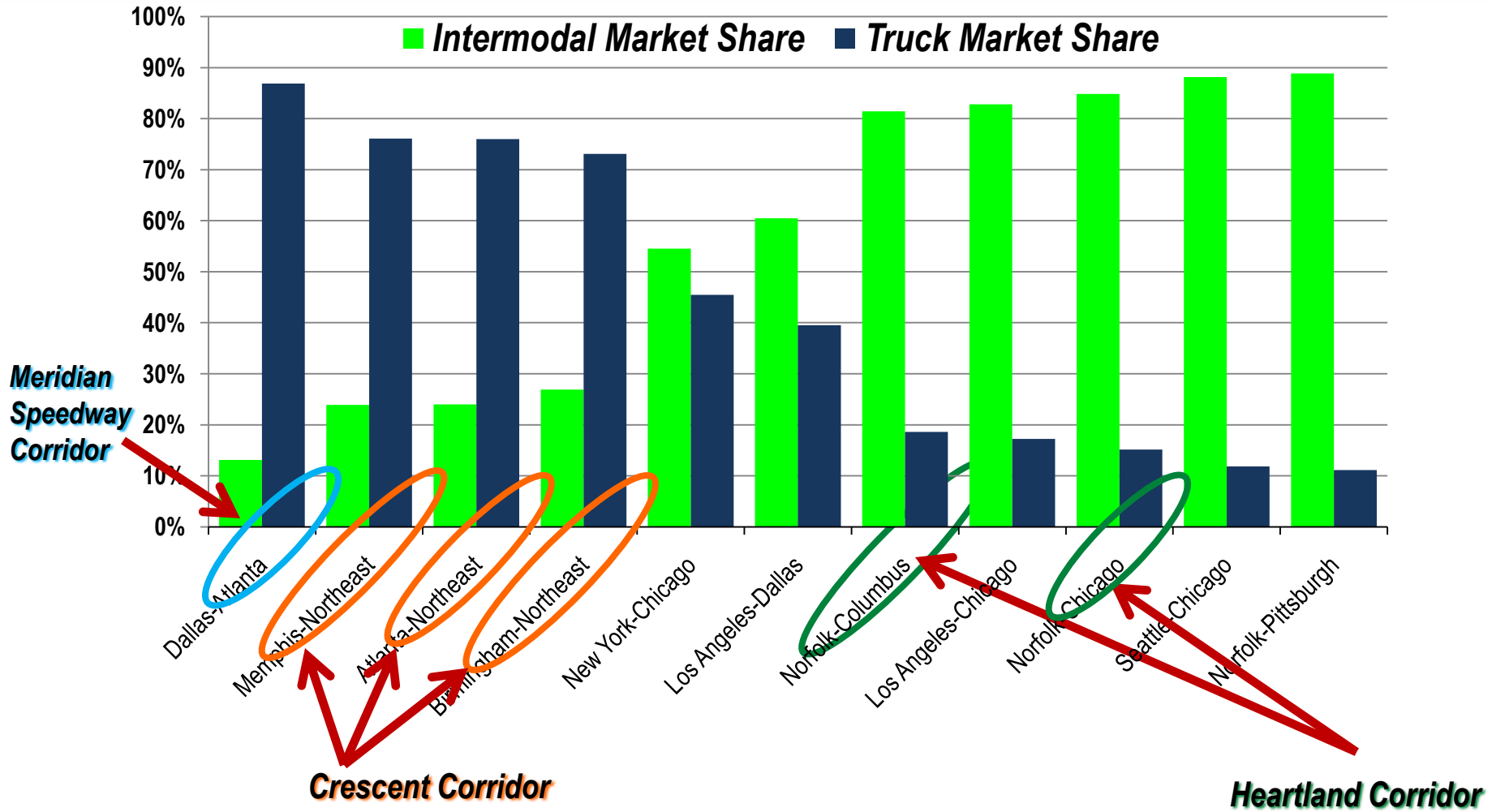
LOH	Dry-van loads	Percent of total	Weighted by VMT
0 to 100 miles	102,307,182	72%	39%
100 to 200 miles	18,926,475	13%	15%
200 to 400 miles	17,149,078	12%	25%
400 to 600 miles	2,312,247	2%	6%
600 to 800 miles	1,355,705	1%	5%
Over 800 miles	1,240,863	1%	8%



4% of all hauls are over 500 miles in length

Hauls over 500 miles represent 20% of total vehicle miles traveled

SIX CORRIDOR STRATEGY



BENEFITS V. COSTS OF PARTNERSHIP ALONG THE CRESCENT

- Cambridge Systematics (CS) – Benefit-Cost Analysis of the Crescent Corridor
 - At full operation, the Crescent Corridor will ANNUALLY deliver:
 - **\$543 Million** in Shipping Savings
 - **\$566 Million** in Congestion Savings (approx. 22 million hours of travel time)
 - **\$146 Million** in Safety Savings (over 1,250 fewer truck crashes)
 - **\$261 Million** in Highway Maintenance Savings (1.263 billion truck VMT reduced)

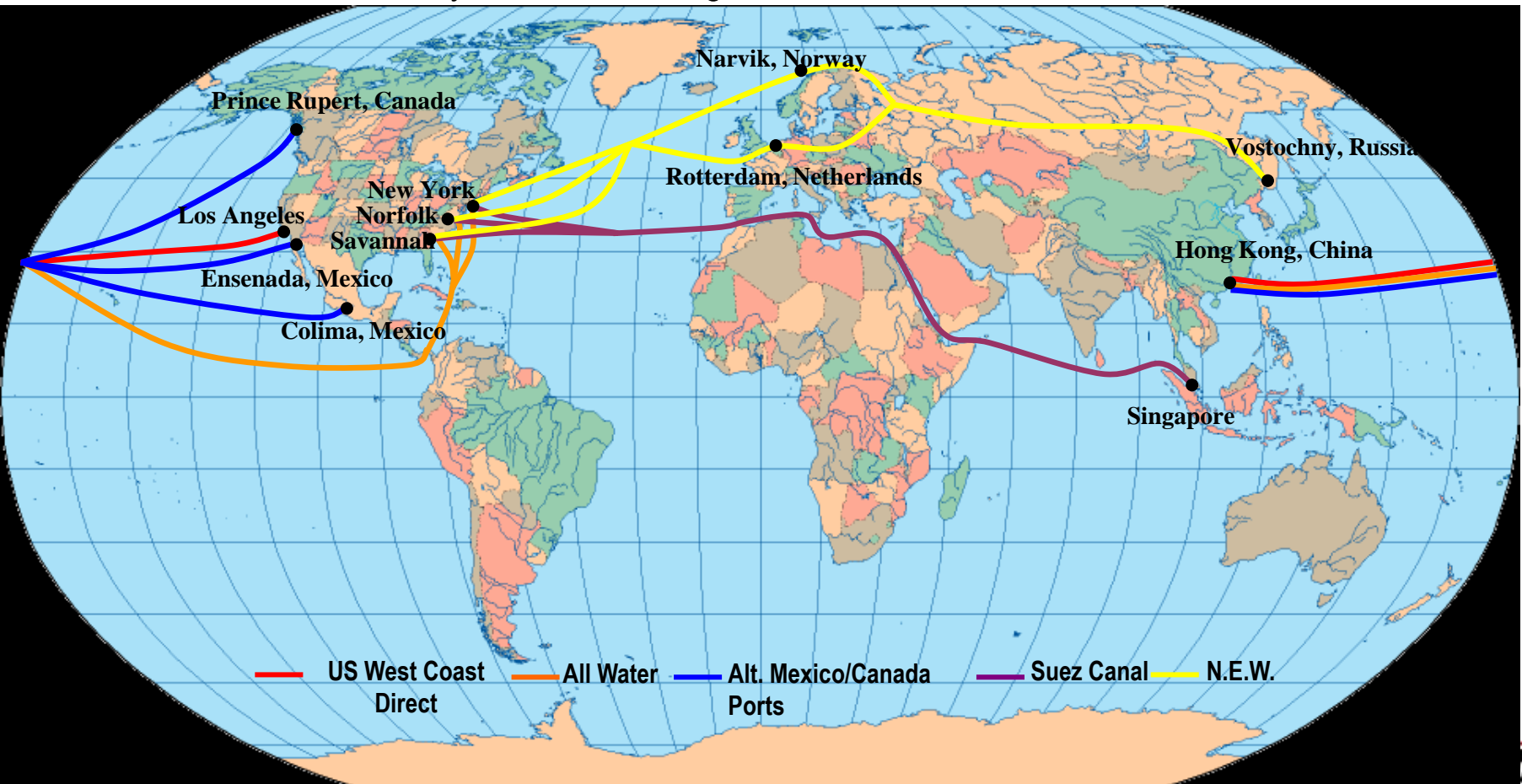
TRANSIT TIMES AT OPTIMAL SCHEDULES

- **Average speed for network: 28 mph**
- **Min speed for network: 20.6 mph**
- **Max speed for network: 36.1 mph**



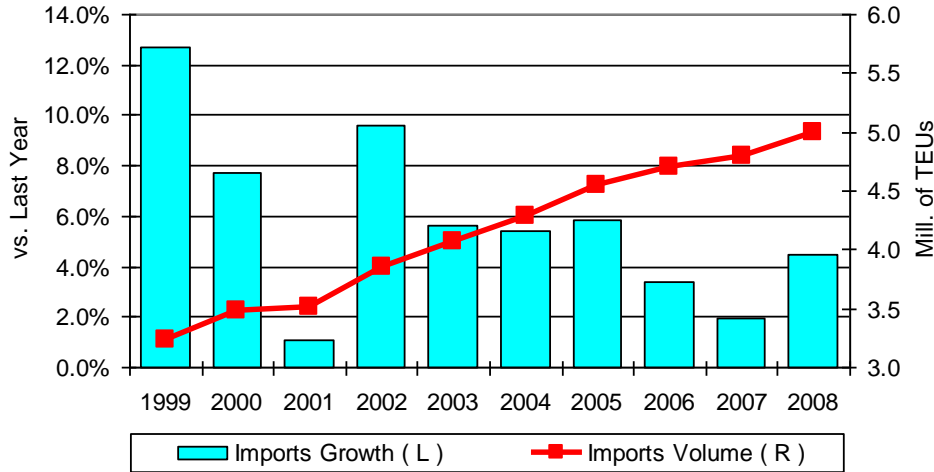
KEY DRIVERS – EAST COAST GROWTH

- The Expansion of “All Water” services through the Panama Canal can be a primary driver of East Coast port expansion
- Suez services will likely drive elevated growth rates



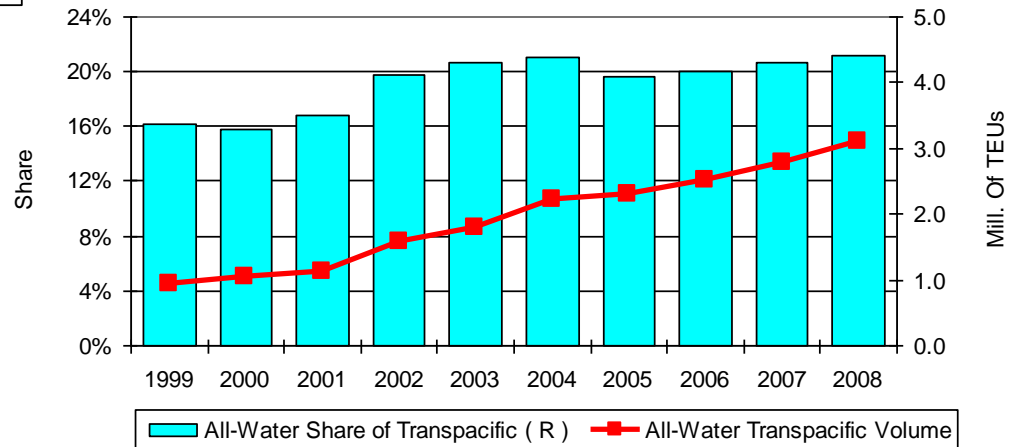
EAST COAST PORT PROJECTIONS FUELED BY EUROPEAN, S. AMERICAN AND ASIAN TRADE

U.S. East Coast Imports Excluding All-Water



Source: TTX / JOC Piers / Manalytics

All-Water Transpacific Imports through East Coast



Source: TTX / JOC Piers / Manalytics

MANAGING EXTERNAL VARIABLES AT NORFOLK SOUTHERN

- Balance is key in the implementation of successful partnerships

Passenger Rail

Competition from Other Modes

Domestic Political Dynamics

Cost of Transportation

Environmental Awareness

Operational/Infrastructural Capabilities

Willingness of Project Partners

Maximization of Public Assets

Economic Forces/Trends

Domestic/Global Trade Demands

Speed, Safety, Security

Population Growth and Migration



Local Impacts vs. Global Freight Demand



Crescent - A Five State Coalition

Freight Transportation Infrastructure for Economic Development



•On September 15, 2009, a joint TIGER application (Transportation Investment Generating Economic Recovery) was filed on behalf of the Crescent Corridor by the Governors of Pennsylvania, Alabama, Mississippi, Tennessee, and Virginia.

•TIGER project components include intermodal terminal development in Greencastle, Harrisburg, Philadelphia, Birmingham, and Memphis as well rail route enhancements in each of the five states including replacing rail and ties, straightening curves, adding passing and double tracks, and new signals in order to support truck competitive transit times.

*The Commonwealth of Pennsylvania has committed \$45 million over three years.

*The Commonwealth of Virginia has invested \$43 million since 2007 and has pledged an additional \$60 million.

*Norfolk Southern has outlined a \$264 million commitment by 2013.

\$25 in public benefits for every \$1 of public funds invested from 2011-2040*

\$16 in public benefits for every \$1 of public funds invested from 2011-2030*

*Monetized public benefits at a 3% discount rate, derived from Cambridge Systematics analysis

Intermodal Terminal Expansion Update

Facility Location	Groundbreaking Date	Completion Date	Annual Volume Capacity (Lifts)
Mechanicville, NY	July 2010	Spring 2012	70,000
Greencastle, PA	October 2010	Fall 2012	85,000
Memphis, TN	April 2011	Fall 2012	200,000
Birmingham, AL	June 2011	Fall 2012	100,000
Harrisburg, PA	Fall 2011	Spring 2012	65,000
Charlotte, NC	Fall 2011	Summer 2013	200,000

FOR MORE INFORMATION – WWW.THEFUTURENEEDSUS.COM



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HEARTLAND CORRIDOR




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THE CHALLENGE



The Future Needs Us.
It needs green jobs, a competitive economy, clear roads, clean air.

That's why Norfolk Southern and its partners are thinking ahead.

The Crescent Corridor is part of a better future.

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\$16
estimated return for every \$1 invested in the Crescent Corridor by 2020

QUESTIONS?

