



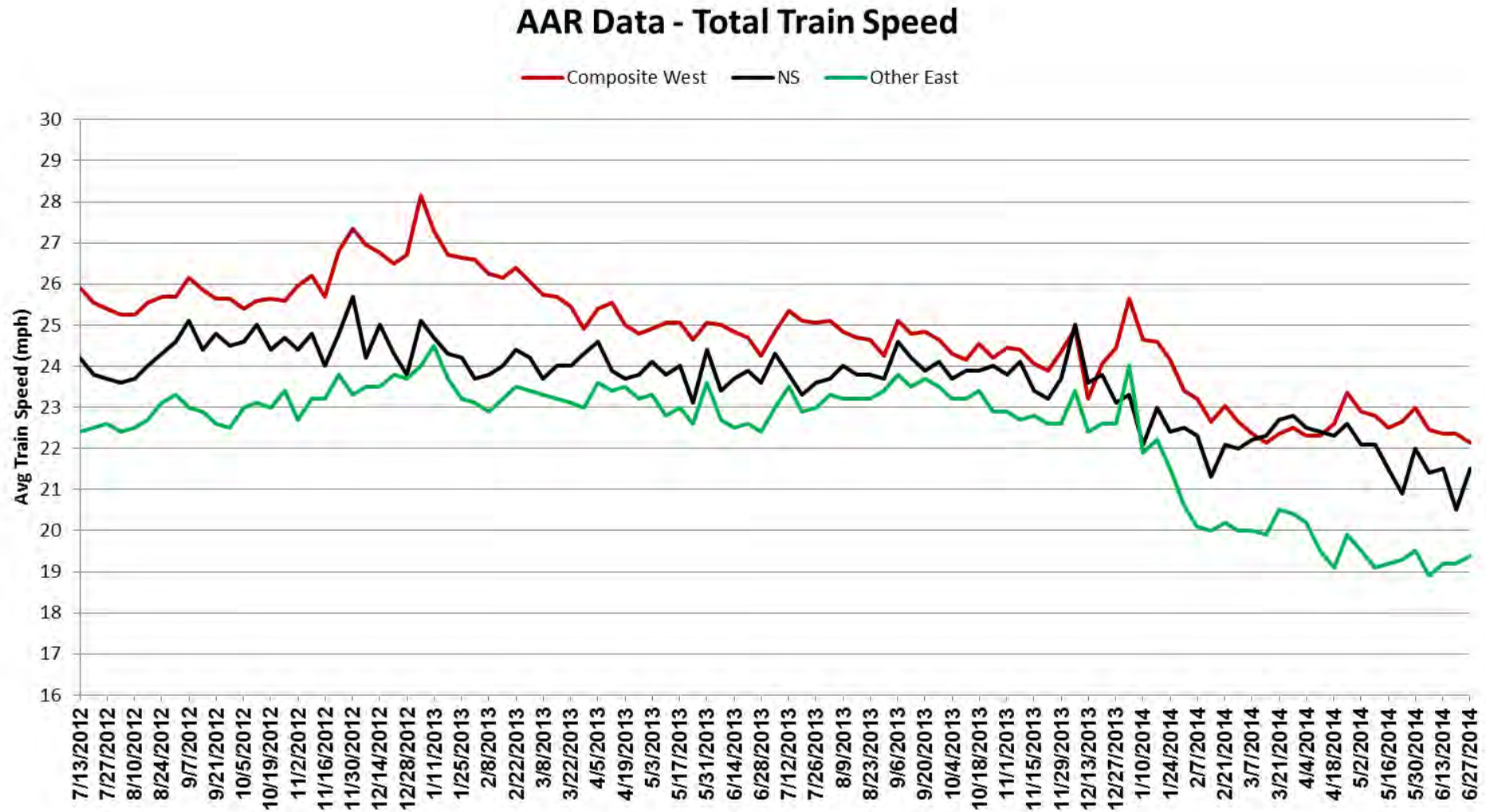
Trends in the U.S. Rail Network

Mike McClellan
Vice President – Industrial Products
Midwest Association of Rail Shippers
July 15, 2014
Lake Geneva, WI

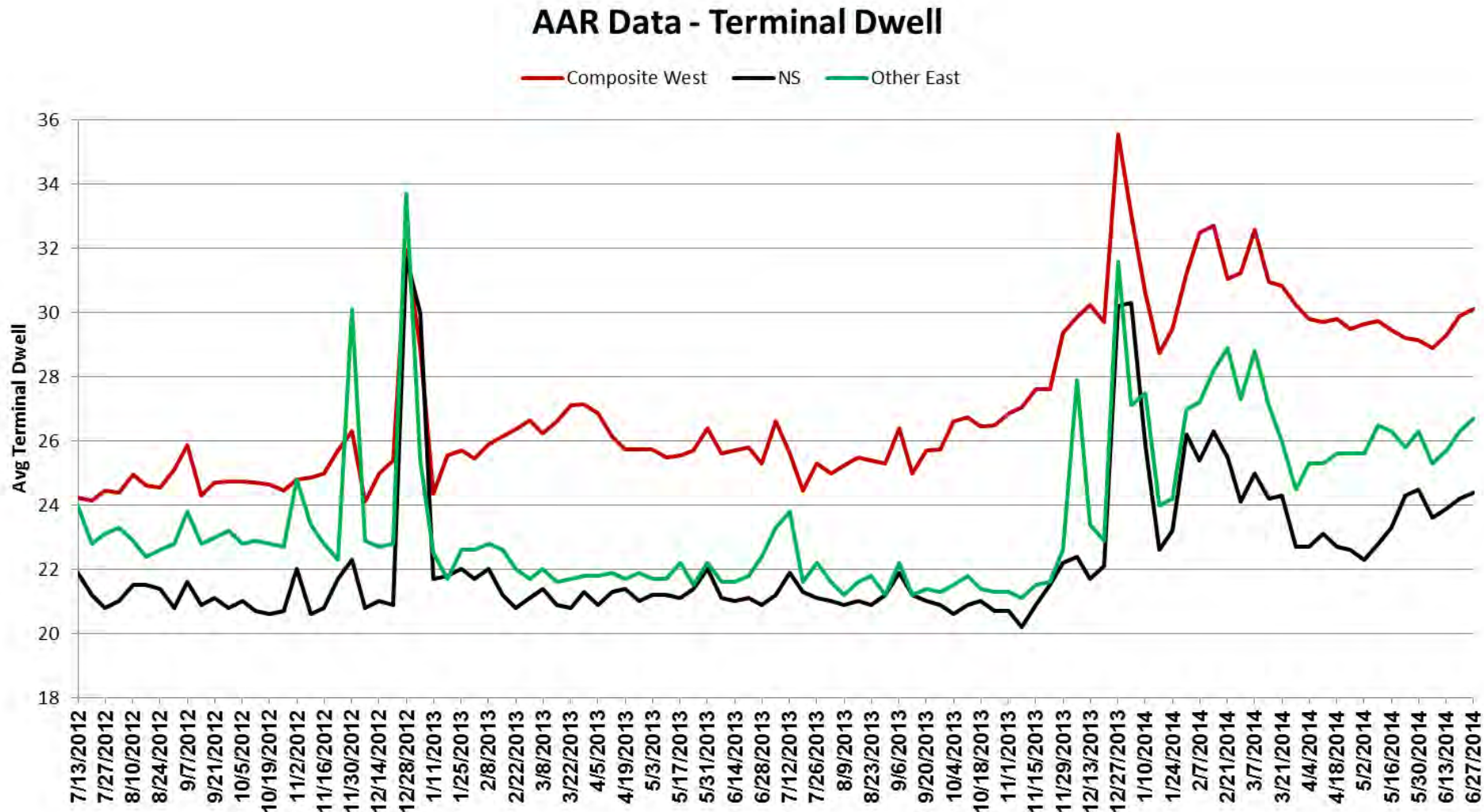
- *The Dynamics in US Rail Freight Traffic*
- *The (Growing) Importance of Chicago and Solutions*
- *Update on NS Efforts to Improve Velocity and Capacity*



AAR Data – Total Train Speed



AAR Data – Dwell



So What's Going On Here?

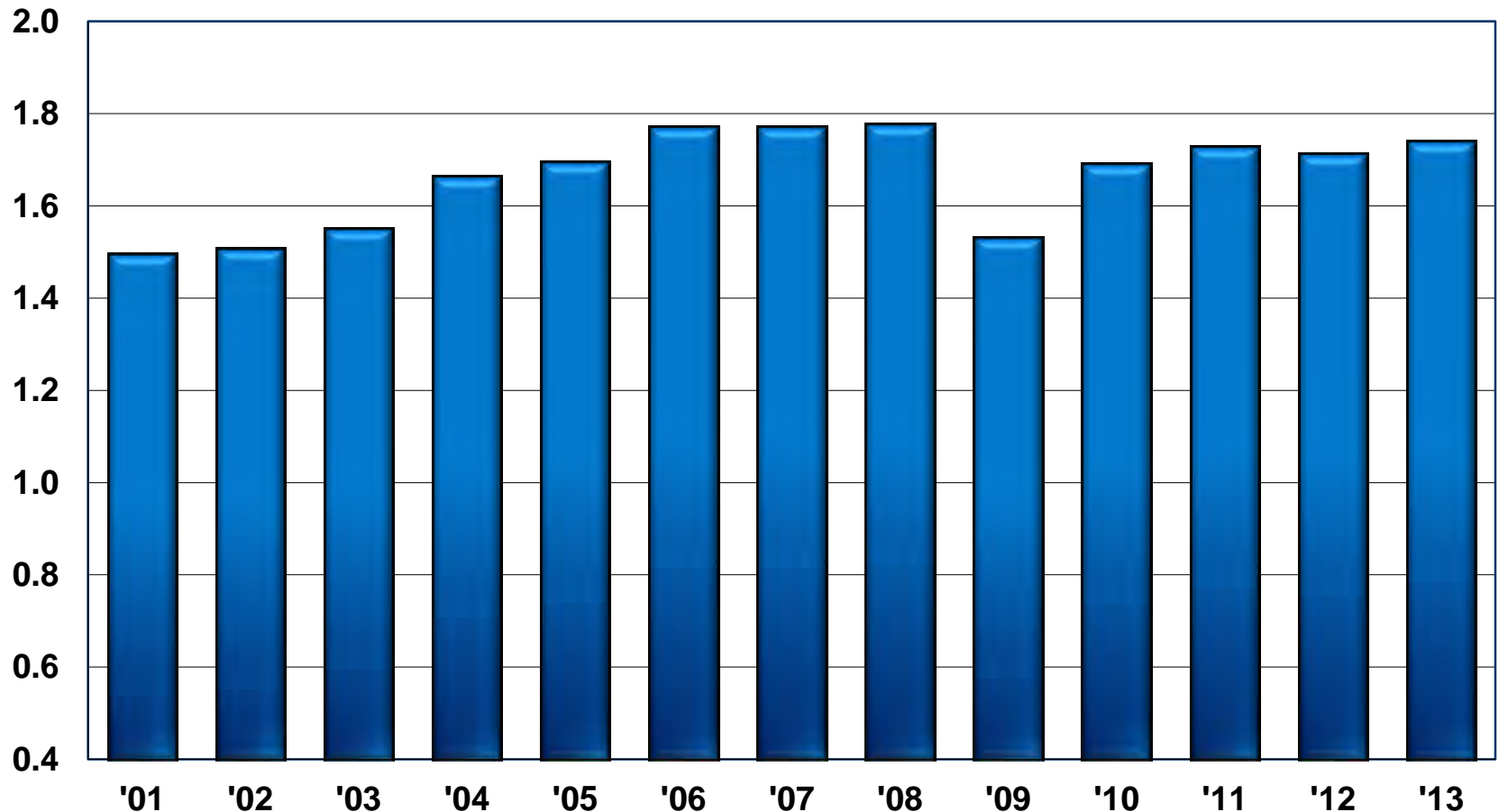
- Weather?
- Volume Growth?
- Conveyance Shifts?
- Commodity Shifts?
- Geographical Shifts?
- Regulation?
- All of the Above?



Volume Trends

Class I Ton Miles (Trillions)

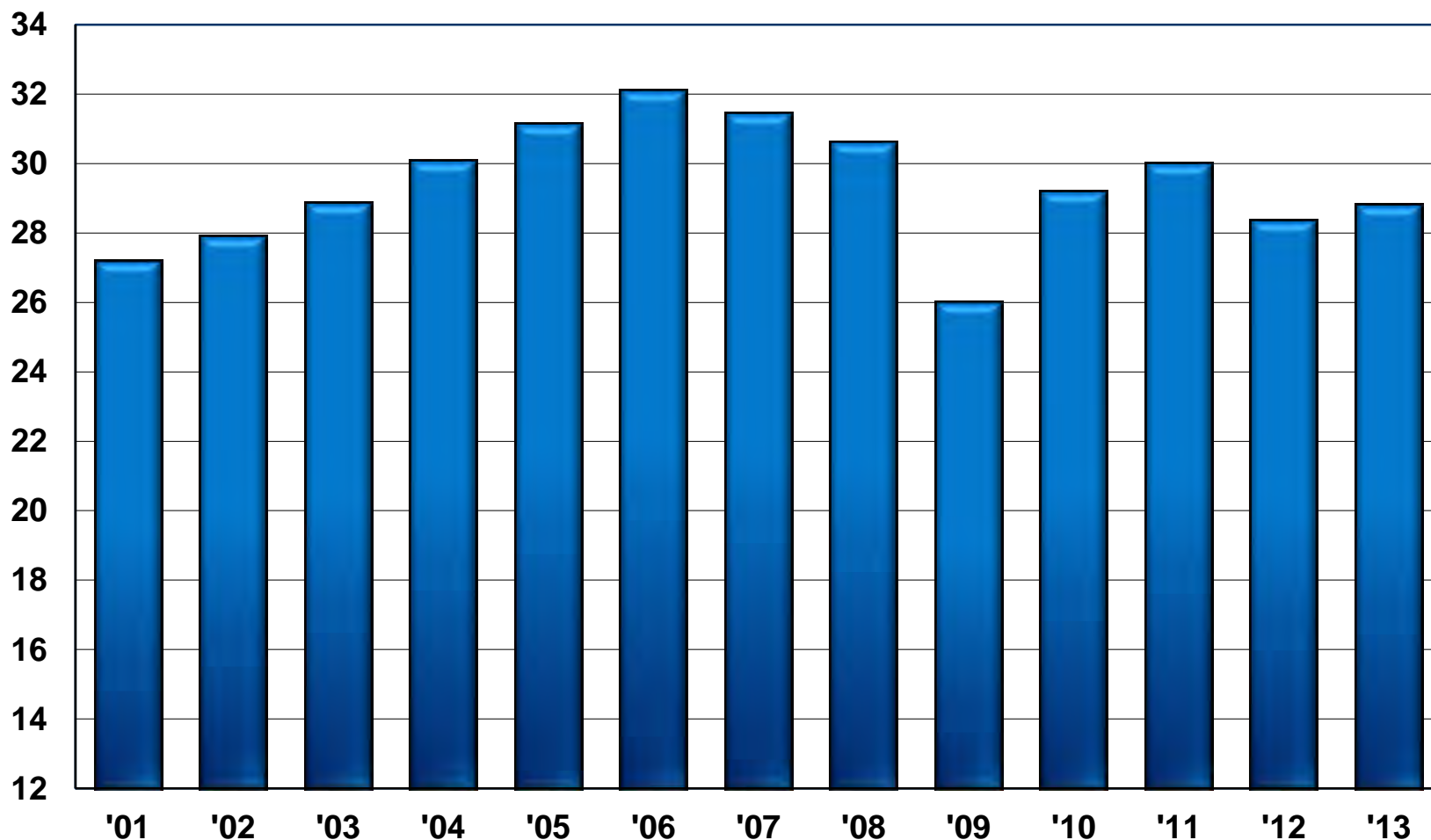
Total Class I ton-miles are up 16% so far this century, less than 1% CAGR. Tonnage remains below the peak.



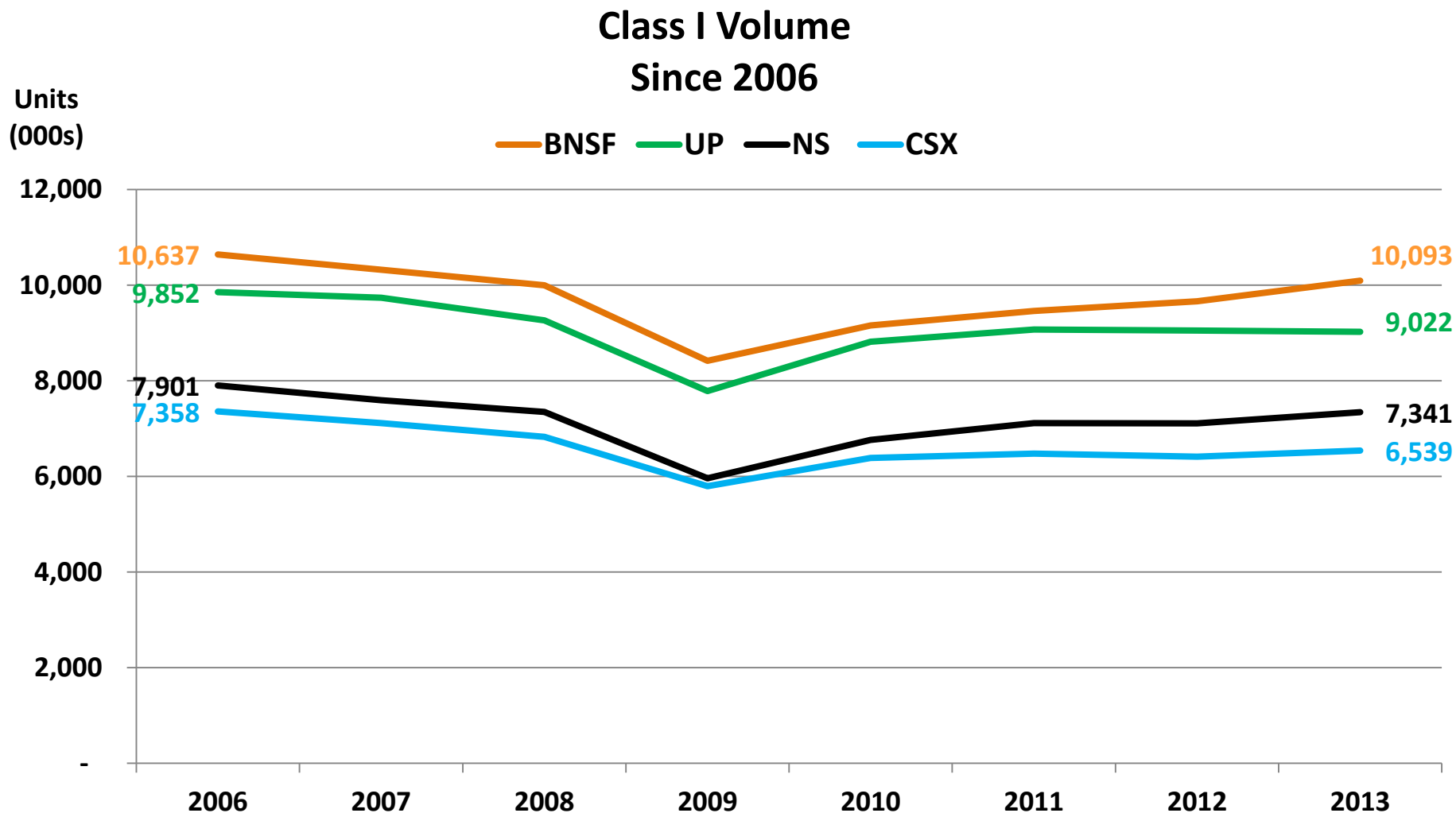
Volume Trends –

Carloads – Originated (in millions)

Similarly, Class I carload originations are up less than 6% in the same period.



Volume Performance By Big 4 US Railroads



Class 1 Traffic – First 2 Quarters of 2014

	Traffic Type	1Q 2014 vs. 1Q 2013	2Q 2014 vs. 2Q 2013	YTD 2014 vs. YTD 2013
Eastern RRs	IM	4%	9%	7%
	Carload	(2%)	7%	2%
	Total	1%	8%	4%
Western RRs	IM	2%	7%	5%
	Carload	3%	6%	5%
	Total	3%	6%	5%

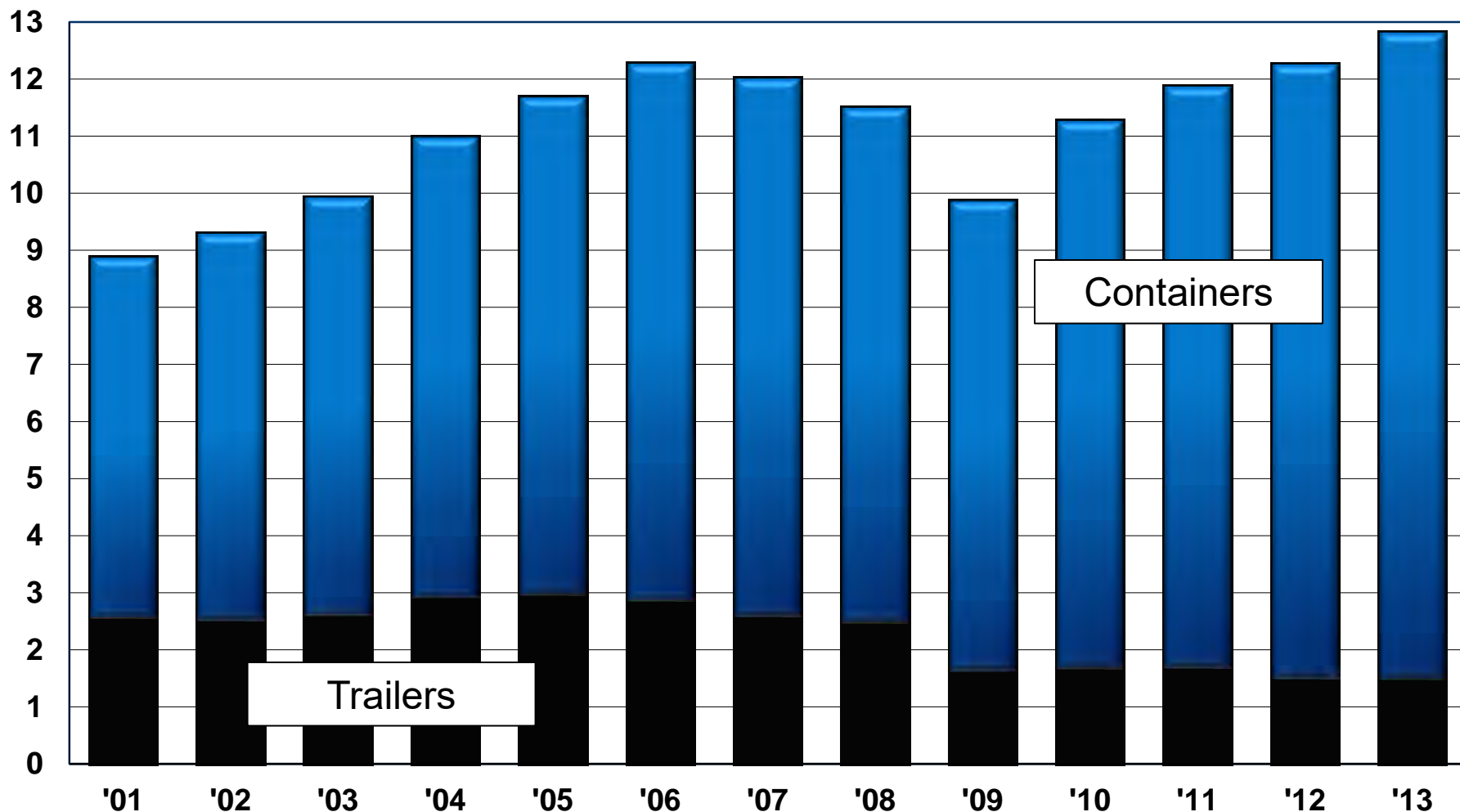


Geographic and Commodity Shifts in the U.S. Rail Network

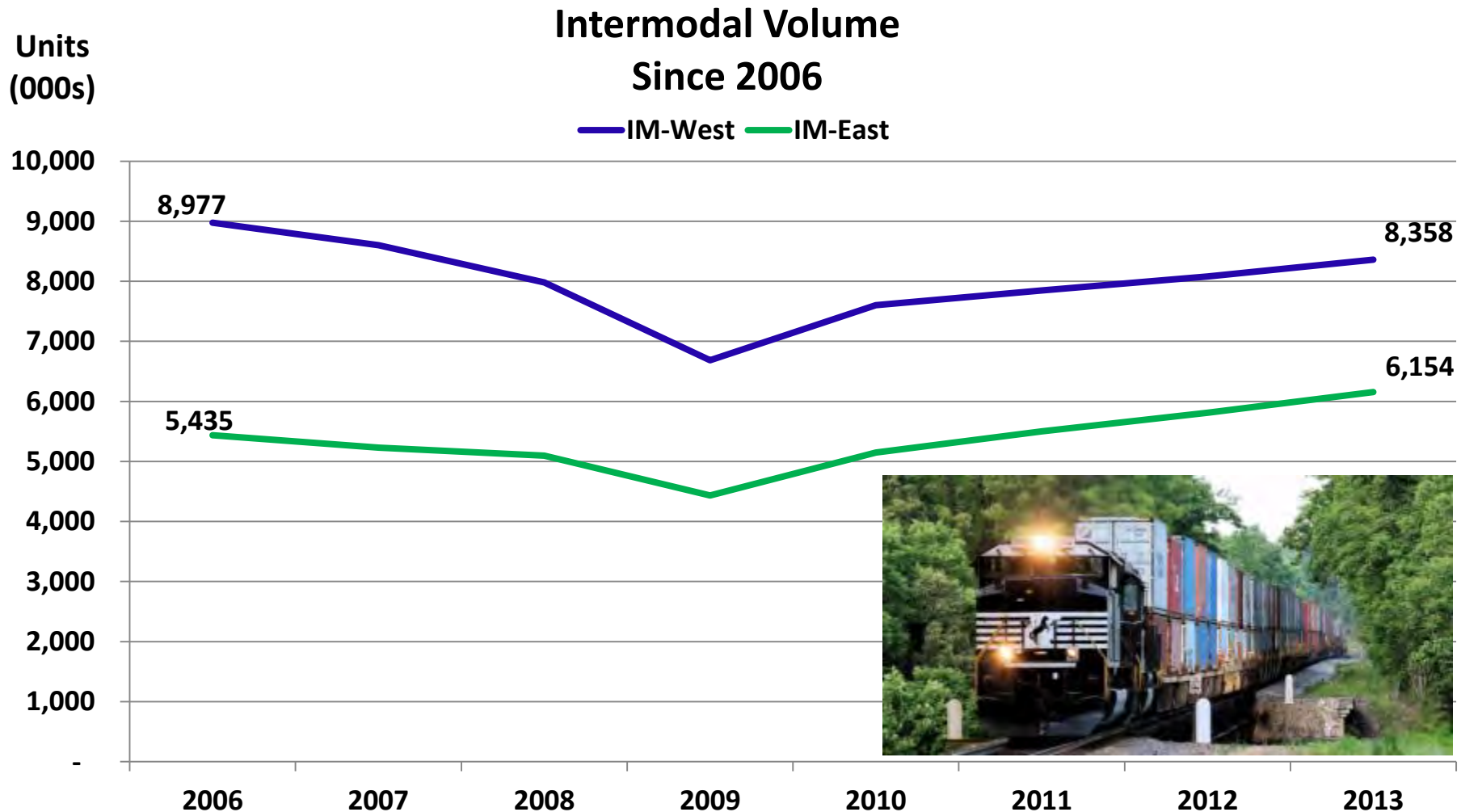
Intermodal Volume This Century

Shipments originated (in Millions)

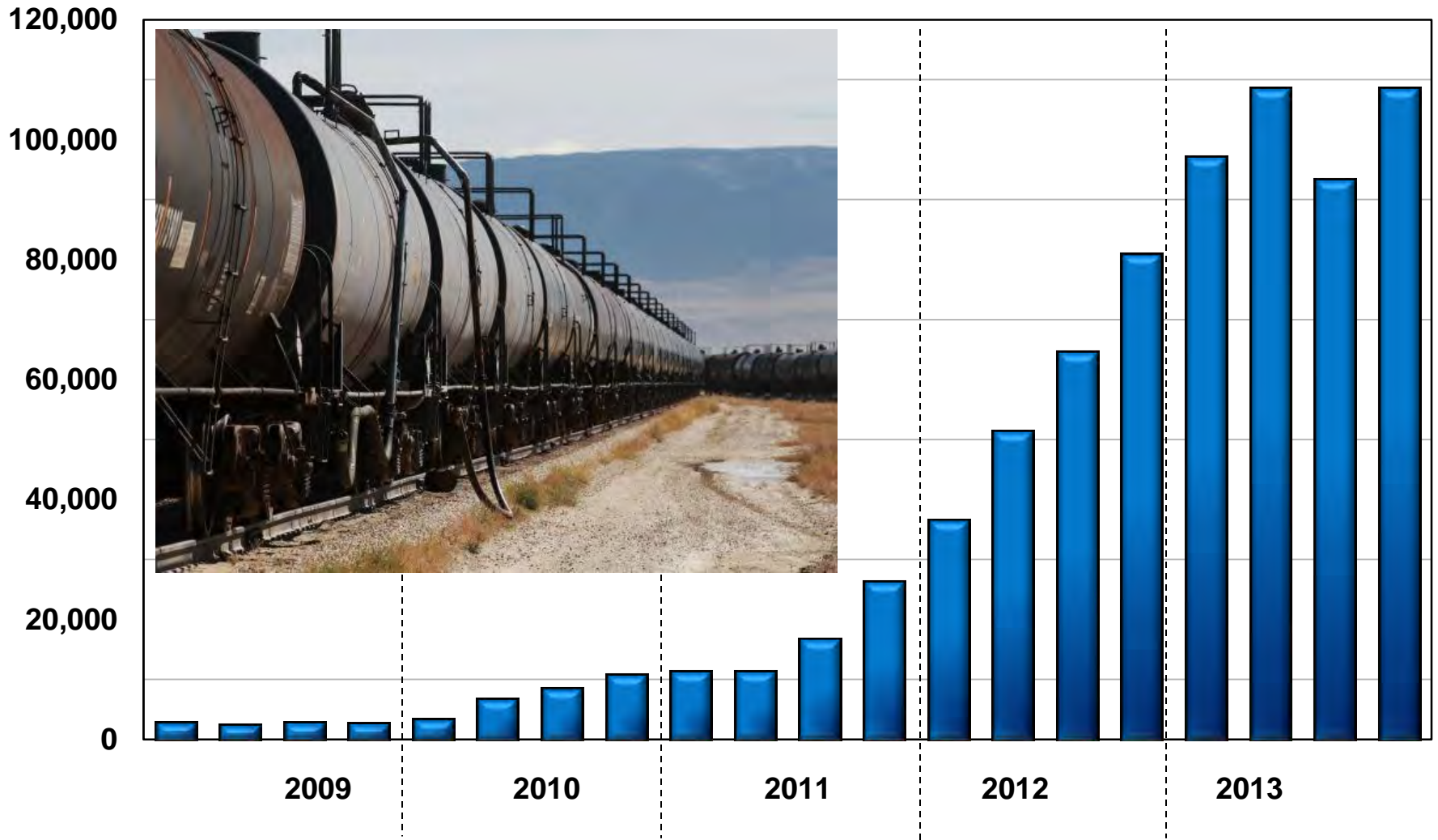
Intermodal volumes are up 45% since 2001, but only 500,000 loads since peak



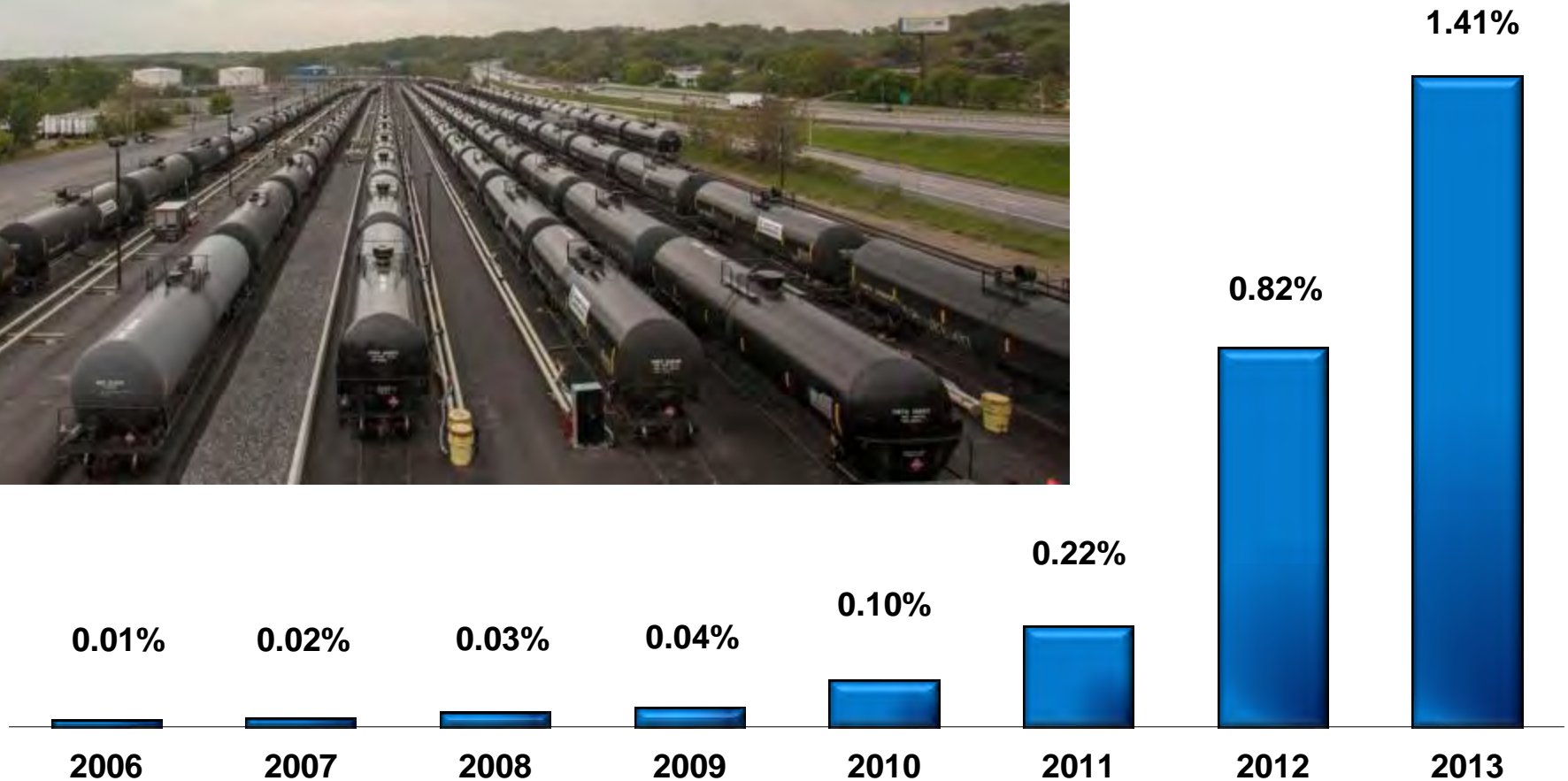
Intermodal Volumes – East vs West



Originated Carloads of Crude Oil on US Class I Railroads

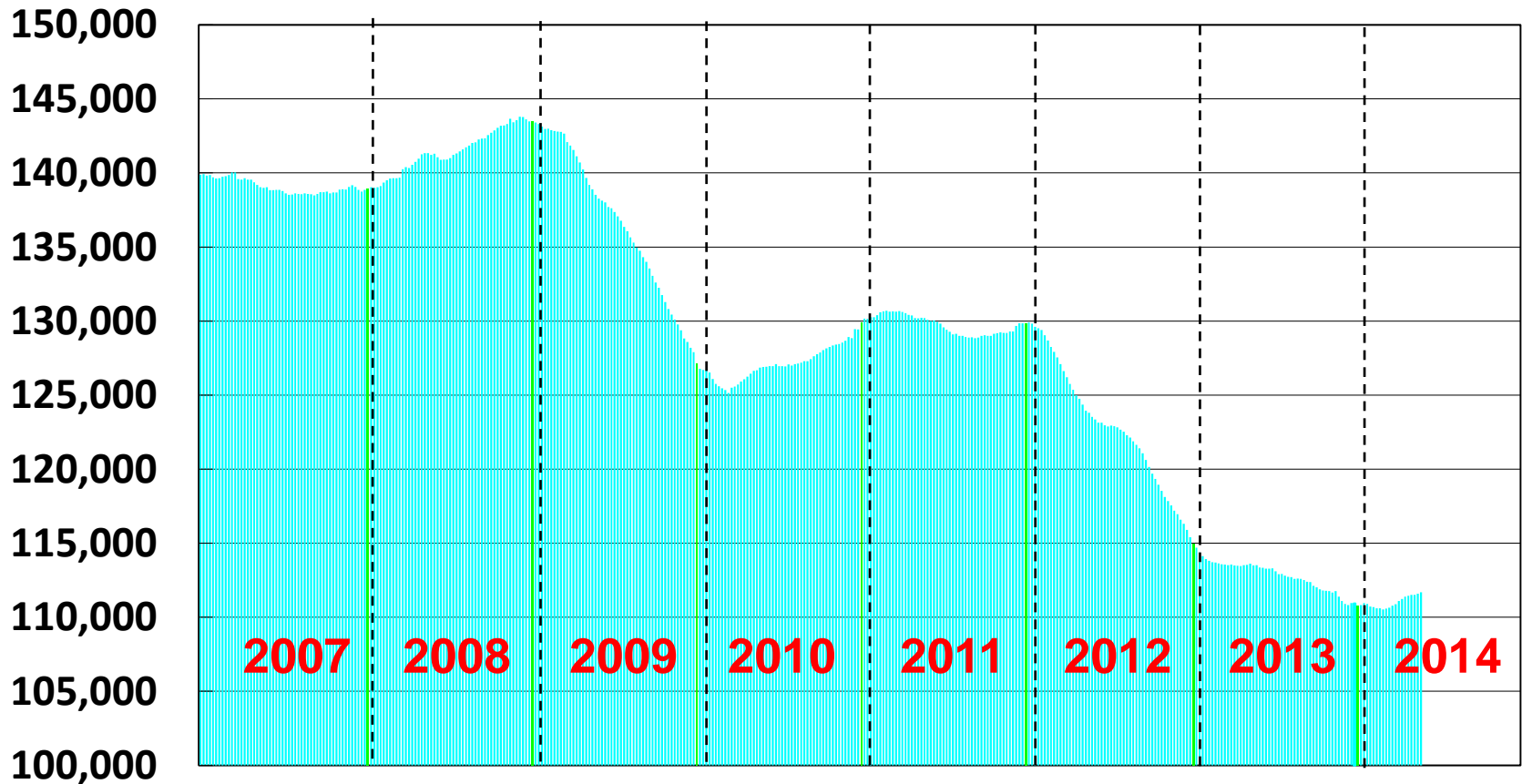


Crude Oil as a % of Total Originated



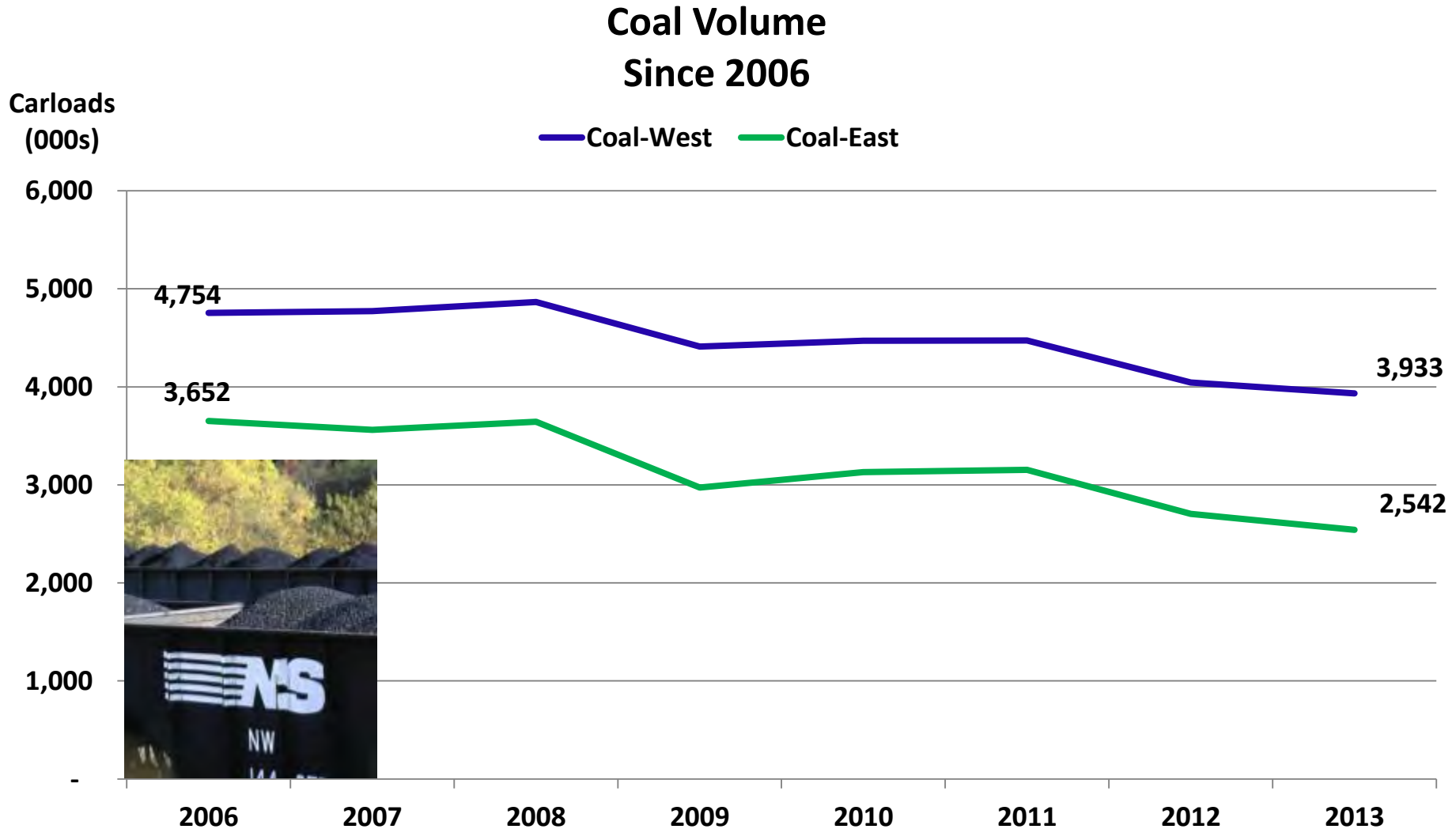
U.S. Rail Coal Traffic

(weekly carloads originated, 52-week moving average)



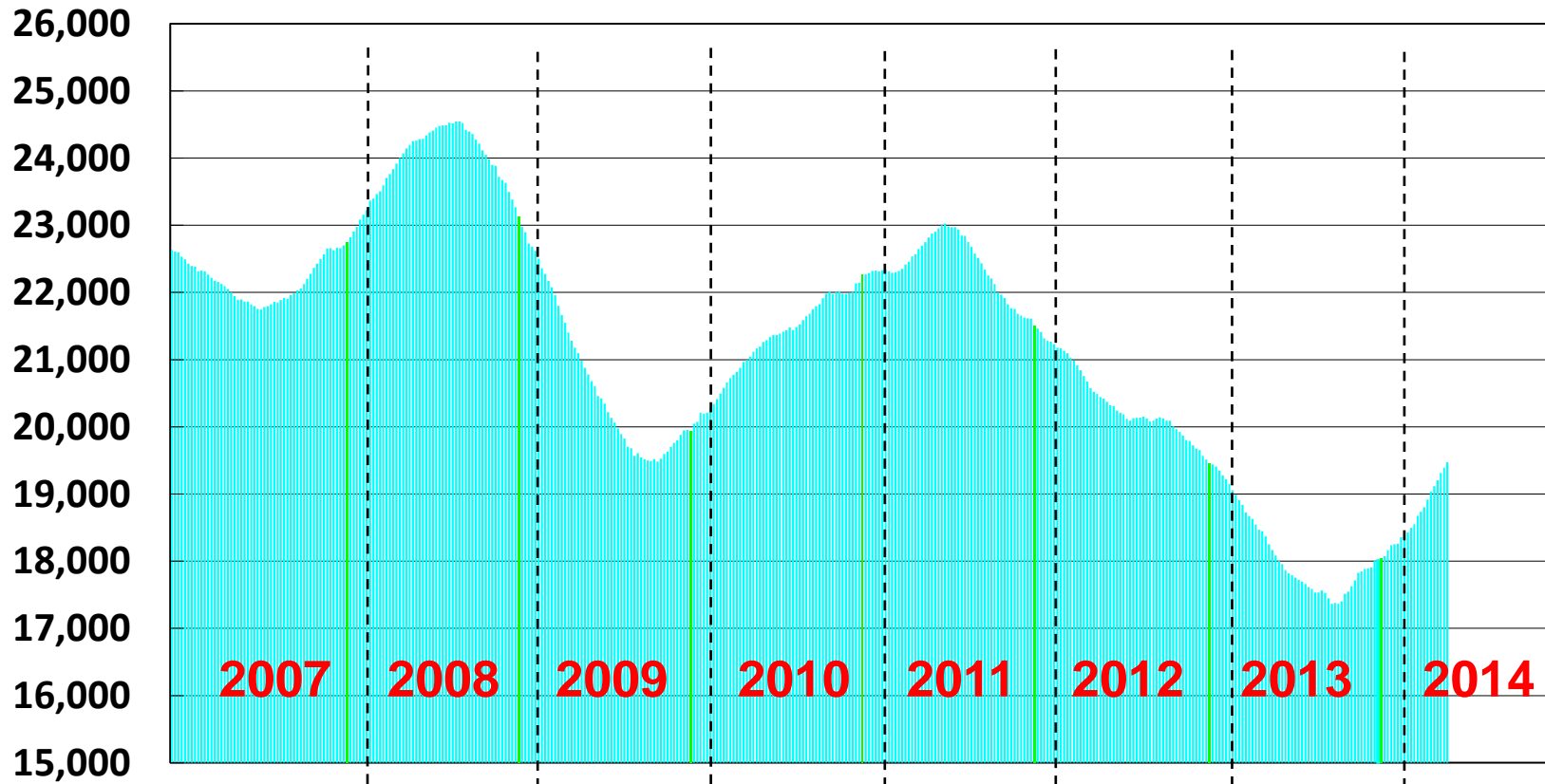
Excludes U.S. operations of Canadian railroads. Source: AAR Weekly Railroad Traffic

Shifts in Eastern and Western Coal Traffic



U.S. Rail Grain Traffic

(weekly carloads originated, 52-week moving average)



Excludes U.S. operations of Canadian railroads. Source: AAR Weekly Railroad Traffic

Other Commodity & Geographic Shifts

- Declines in Forest Product Volumes
- Declines in Automotive Traffic
- Declines in Steel and Metals Businesses
- Flat Chemical Volumes
- Increases in Shale Related Volumes



Other Dynamics in the U.S. Rail Network

Regulation

Could have a meaningful service impact in the future

- PTC
- Tank Car and Hazardous Material Regulations

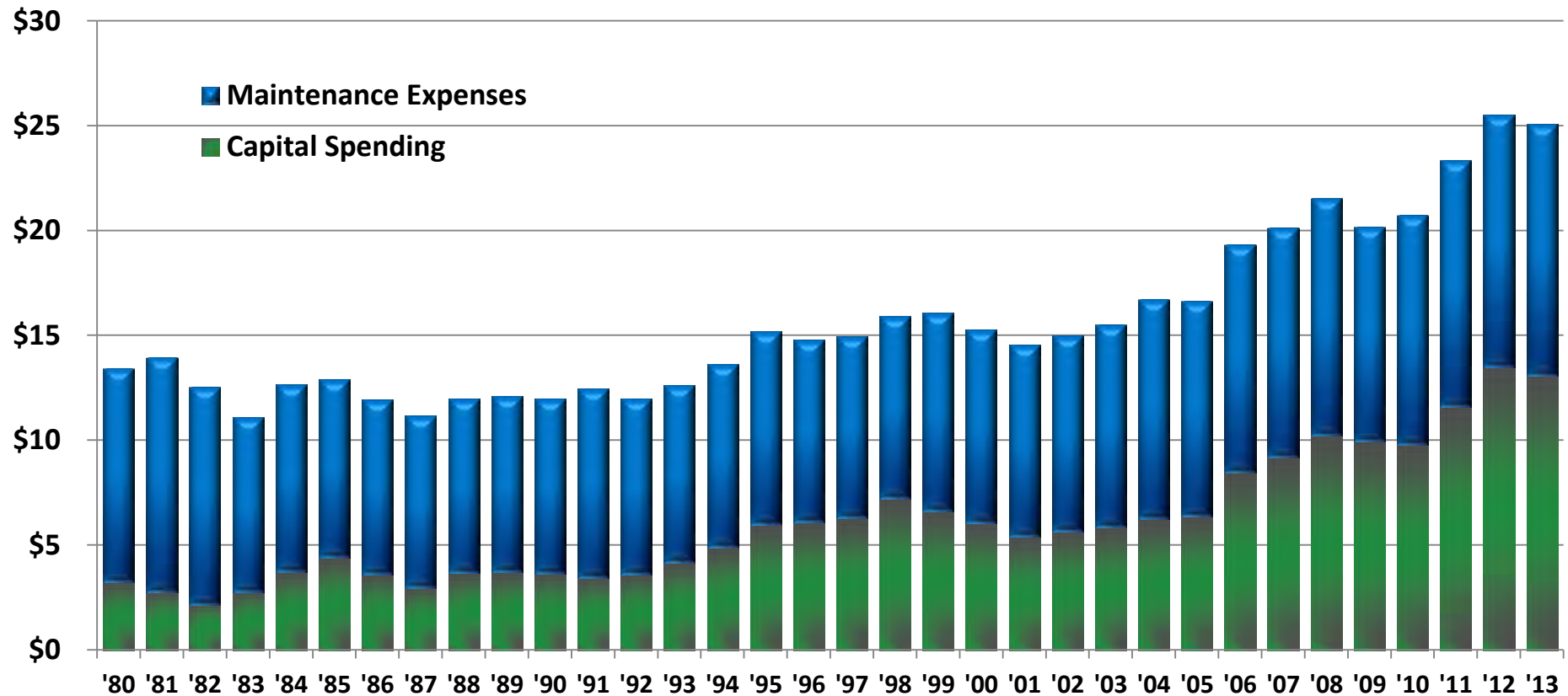


So what are the railroads doing about all of this?



\$550 Billion Back Into the Network Since 1980

Railroad Spending on Infrastructure and Equipment*
(\$ billions, current dollars)





Despite fundamental shifts in the composition of rail traffic, Chicago's role continues to grow

Terminal	Classification of Movement	Originated	Terminated	Interchanged	Other*	Total
CHICAGO	Loaded Freight Cars	493,274	546,983	1,475,239	395,848	2,911,344
	Empty Freight Cars	105,033	61,385	1,137,423	362,060	1,665,901
	Total Freight Cars	598,307	608,368	2,612,662	757,908	4,577,245
	Loaded Intermodal Units	1,854,250	1,683,448	713,350	37,130	4,288,178
	Empty Intermodal Units	107,387	387,139	57,197	41,039	592,762
	Total Intermodal Units	1,961,637	2,070,587	770,547	78,169	4,880,940

*Includes traffic which had more than one event in Chicago

CREATE Program Partnership –

\$3.8 Billion to fix the Chicago rail network - \$1.3 pledged so far



**U.S. Department of Transportation
Federal Highway Administration**



**U.S. Department of Transportation
Federal Railroad Administration**

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CREATE Corridors

\$570 M for Freight Rail Projects (excluding EW2 / 75th St CIP)

- Passenger** 7 Projects
 - Amtrak on NS Chicago Line
 - Metra Southwest Service
 - Metra/Amtrak on CN Heritage Corridor
- Beltway** 11 Projects
 - Metra B12 Interlocking to Thornton Jct.
 - Blue Island Jct. to Dolton Interlocking
- Western Ave.** 8 Projects
 - Ogden Jct. to Blue Island Jct.
 - Blue Island Jct. to Thornton Jct.
 - Thornton Jct. to 80th Street
 - 80th Street to 75th Street
 - Brighton Park to CP518
 - Brighton Park to Corwith Interlocking
- East-West** 4 Projects
 - NS Chicago Line to Beltway Corridor



So What is NS Doing About This?

- Crews
- Locomotives
- Strategic Investments



NS' Chicago Line Corridor Improvements

Over \$400 million is being invested to increase the capacity of this critical NS Corridor



Chicago 47th Street Expansion

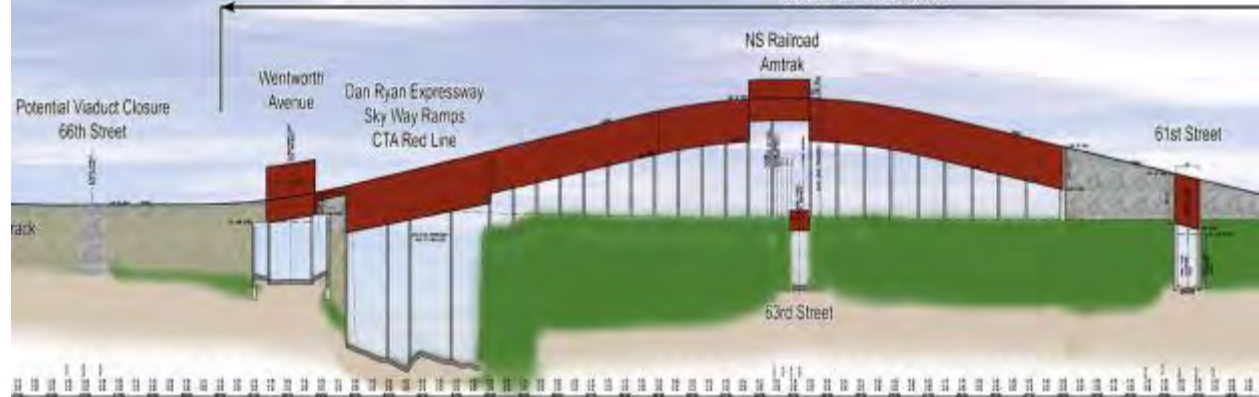


Englewood Flyover



Englewood Flyover

- Metra flyover operation **target November 2014**
- Crossing diamond removal for NS mains
- CP515 control transfer to NS Dearborn Dispatcher
- Project completion in 2015 for second bridge
- Total Project Cost \$140 M



P1 – Englewood Flyover



P1 – Englewood Flyover



P1 – Englewood Flyover



**South
approach
including
Dan Ryan
Bridge Span**

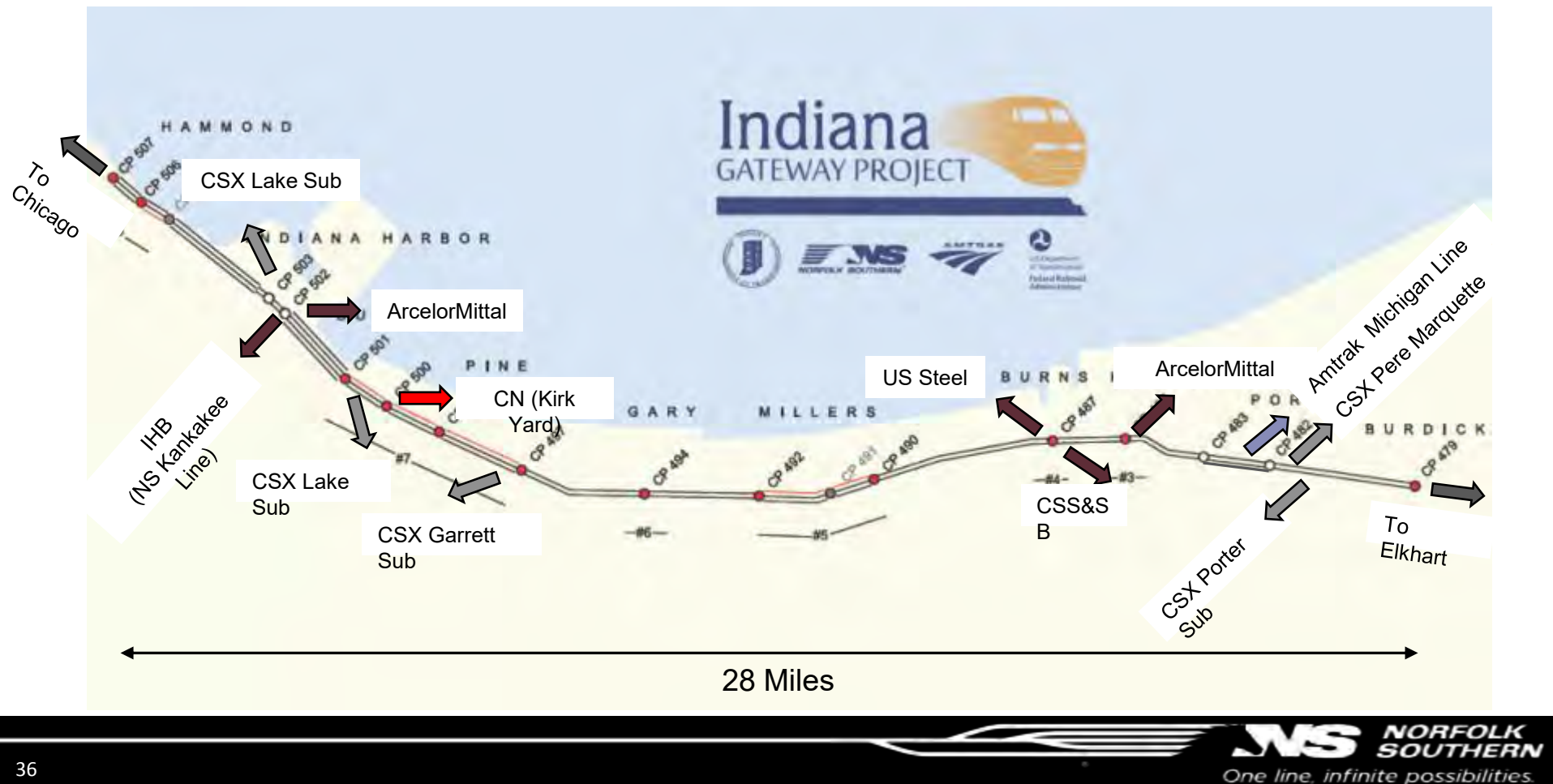
P1 – Englewood Flyover



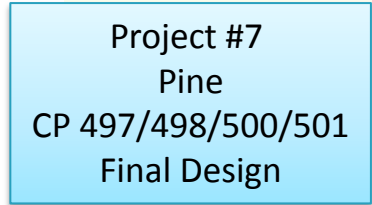
**Victory
is in
sight!**

The Indiana Gateway Project

With the State of Indiana, NS is eliminating key bottlenecks along this very busy 28 mile corridor. Investments will positively impact NS, Amtrak and other railroads along the route



Primary focus on interlocking improvements and track extensions



Indiana Gateway Groundbreaking –

May 29, 2014



Bellevue Yard Expansion

Bellevue Yard in Ohio is at the crossroads of NS' key Northern route structure. Merchandise traffic moving between Chicago, St. Louis, KC and points east of Bellevue move through this critical yard.

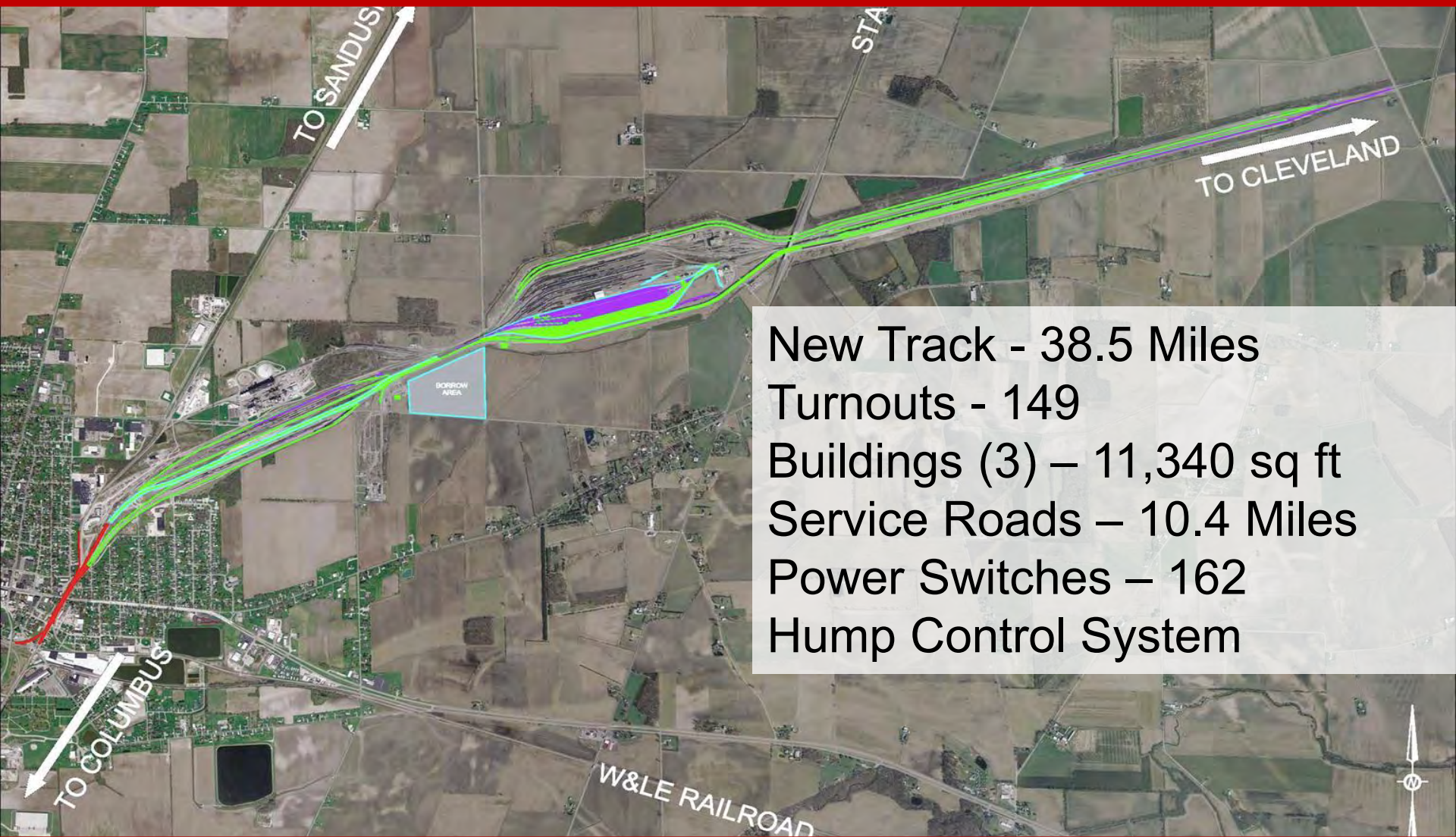


Bellevue Yard Expansion

Key benefits of the project include over-heading freight away from Elkhart, reducing the number of handlings of merchandise freight, and creating capacity for growth in NS' Northern network.



Bellevue is Massive \$162 Million Project



New Track - 38.5 Miles

Turnouts - 149

Buildings (3) – 11,340 sq ft

Service Roads – 10.4 Miles

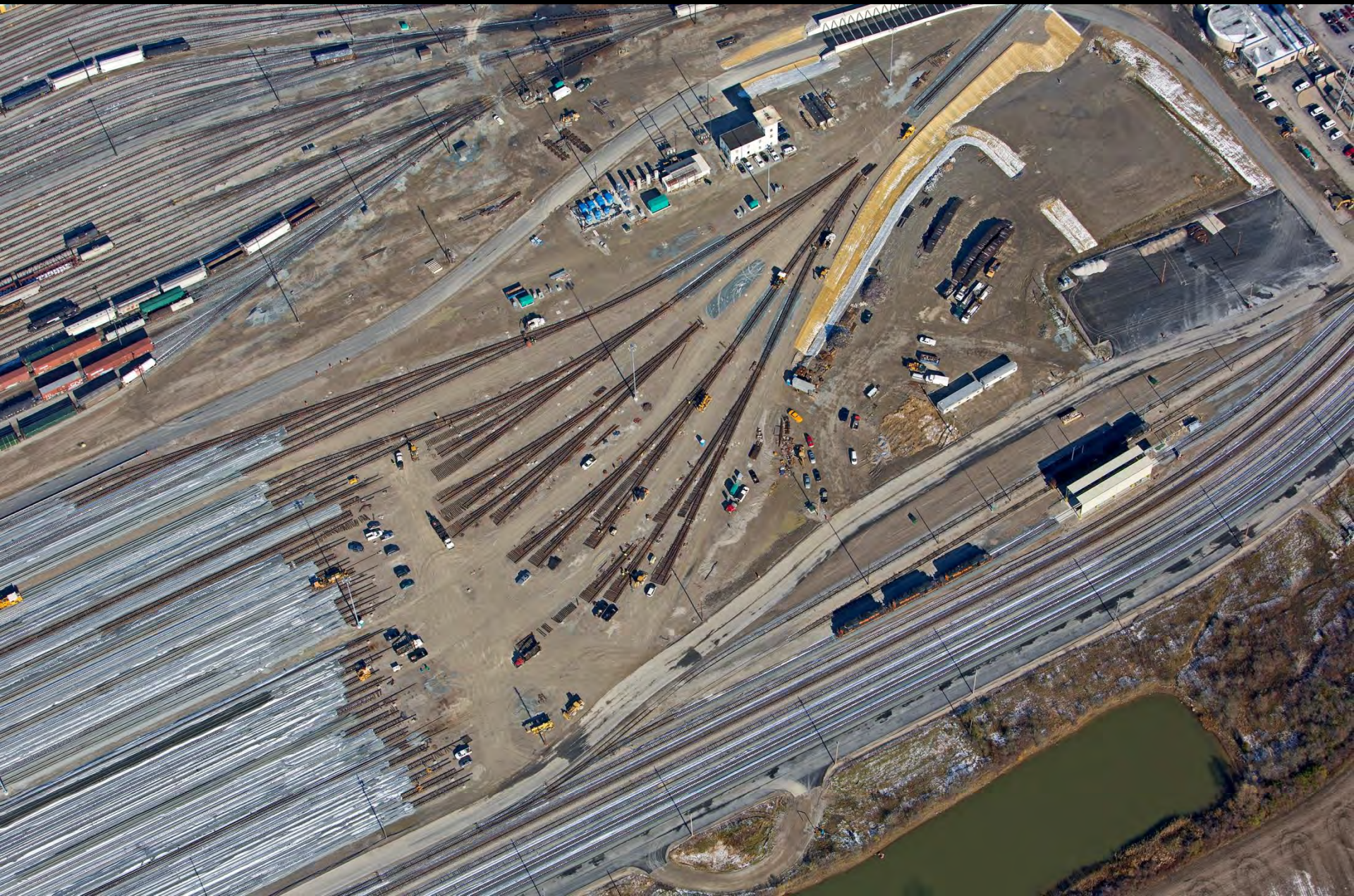
Power Switches – 162

Hump Control System

The Project Will Be Completed in Dec 2015



Work Is Progressing Well



Closing Thoughts

- The U.S. rail network is strained right now.
- Tactical causes include the weather and a recent surge in volumes
 - Regulatory impacts could exacerbate service issues
- Structural changes in the commodity and geographic composition of rail freight are imposing additional stress on some parts of the rail network
- All the railroads have demonstrated their commitment to providing the tactical resources and strategic investments to address these shifts in freight.
 - The issue is more one of timing
- NS is making tactical and infrastructure investments that will begin to improve service in the near term

Thank You!

