



United States Department of Agriculture



# Agricultural Marketing Service

**Bruce Blanton**

Director, Transportation Services Division

## USDA's Perspective on Agricultural Transportation Priorities

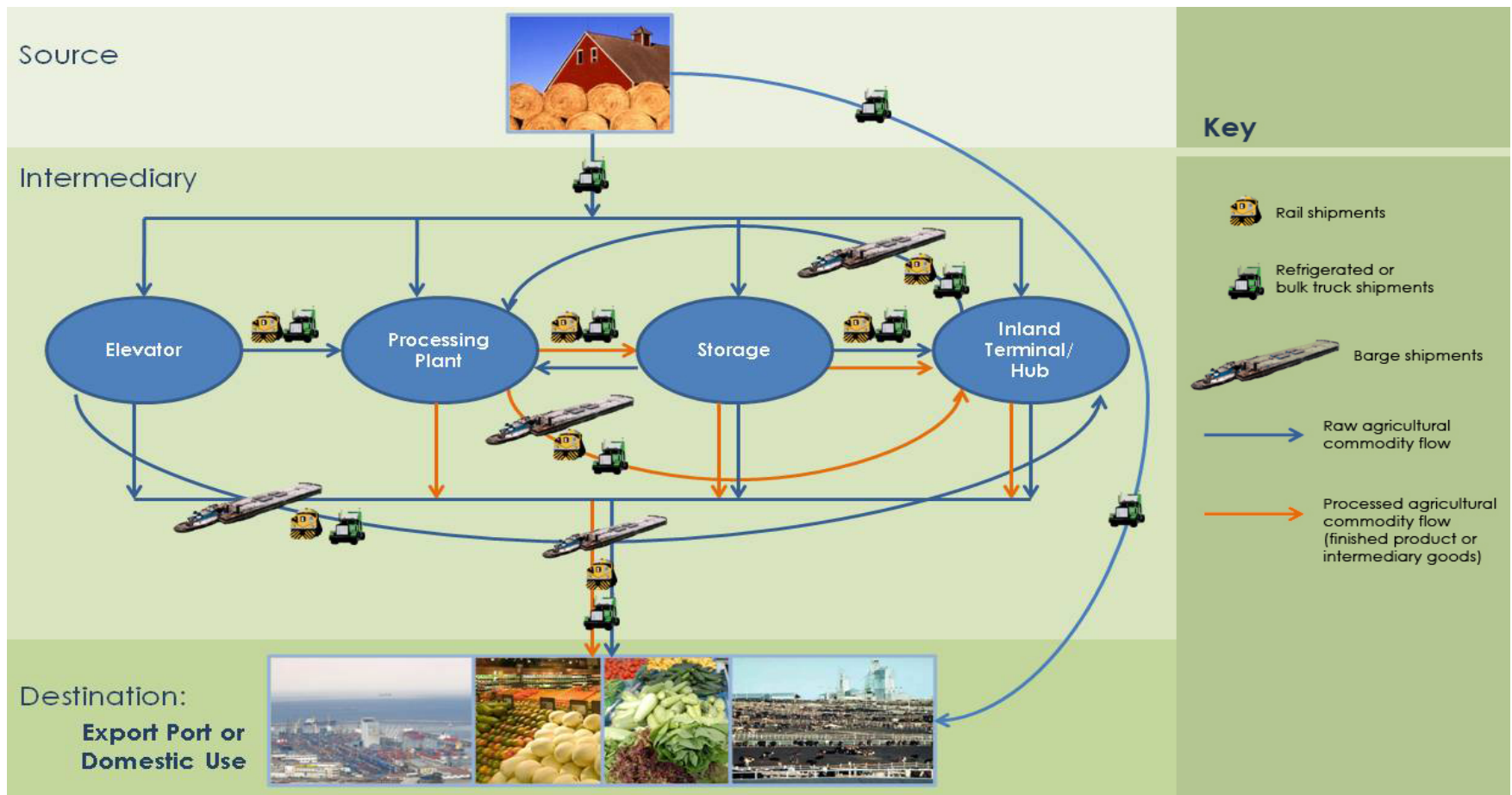
Ag Transportation Summit

August 4, 2015

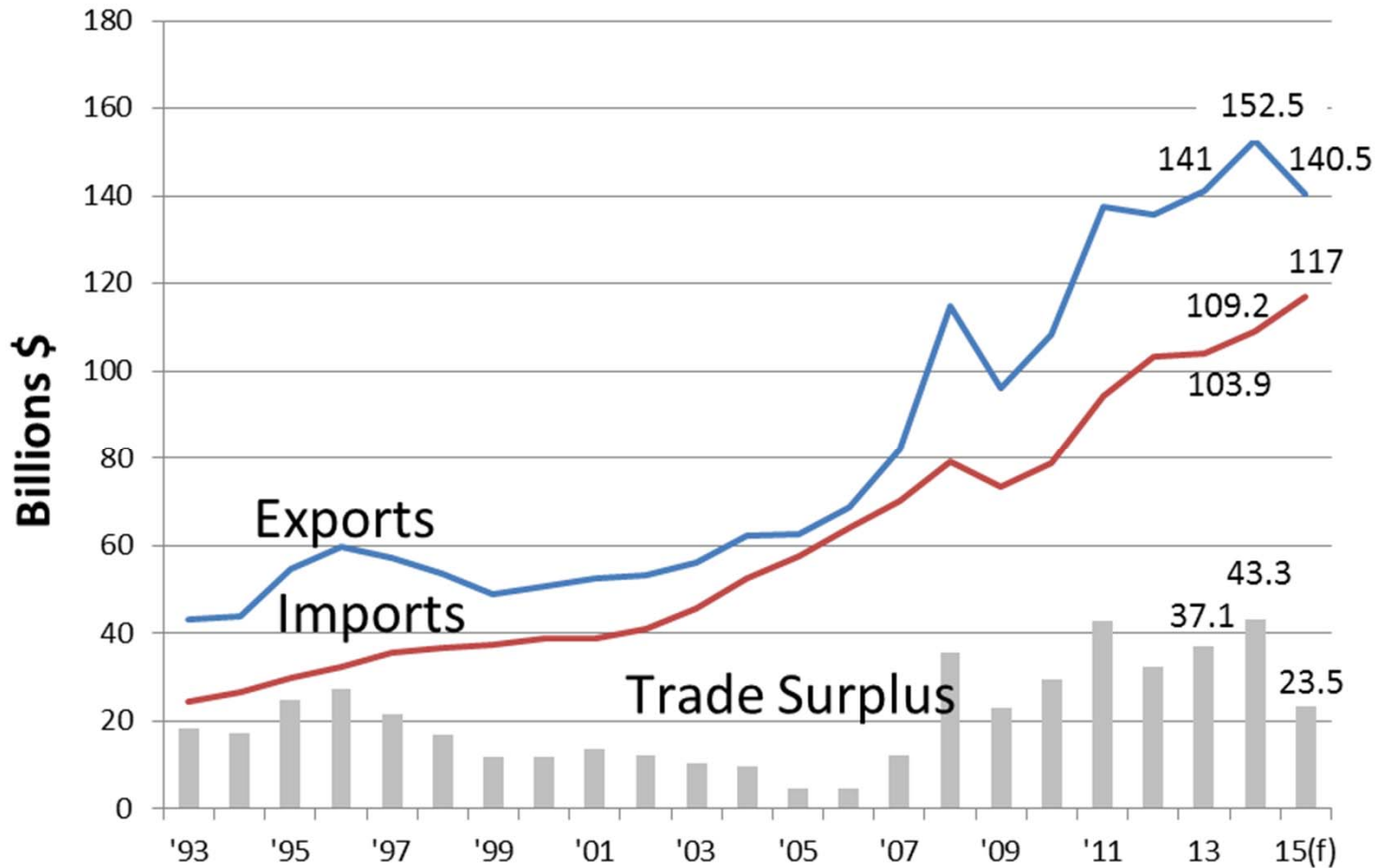
Rosemont, IL

# Why Are We At This Summit?

## Transportation is Critical for Agriculture



# U.S. Agricultural Trade



Source: AMS Analysis of USDA Economic Research Service and Foreign Agricultural Service data

## Top 10 U.S. Agricultural Exports, 2014

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	Millions \$
<b>Soybeans</b>	<b>24,201</b>
<b>Corn</b>	<b>10,621</b>
<b>Horticultural Products</b>	<b>10,311</b>
<b>Tree Nuts And Preparations</b>	<b>8,096</b>
<b>Fruits and Preparations</b>	<b>7,903</b>
<b>Wheat</b>	<b>7,687</b>
<b>Feed and Feed Ingredients</b>	<b>7,562</b>
<b>Vegetables and Preparations</b>	<b>7,016</b>
<b>Beef &amp; Veal</b>	<b>6,013</b>
<b>Soybean Cake &amp; Meal</b>	<b>5,493</b>

# Transportation Services Division

The screenshot shows the USDA Agricultural Marketing Service website. At the top, there is a navigation bar with links for Home, About AMS, Newsroom, Opportunities, Online Forms, Help, and Contact Us. Below this is a search bar and a 'Go' button. A sidebar on the left contains a 'Search AMS' section and a 'Browse by Subject' menu with categories like Market News, Commodity Areas, and Agricultural Transportation. The main content area features a 'Spotlight on: Wheat Transportation Profile' article, which includes a thumbnail image of a wheat field and a detailed text summary of the report. At the bottom of the page, there is a 'What's New' section with a list of links to various reports and information centers.

## Transportation Analysis and Market Reports:

- U.S. Grain
- Other Ag. Commodities
- Brazil and Mexico grain and soybean
- Modal Share Analysis
- Commodity Profiles
- Rail studies
- Study of Rural Transportation Issues
- Surface Transportation Board filings
- Data

[www.ams.usda.gov/AgTransportation](http://www.ams.usda.gov/AgTransportation)

# Grain Transportation Report



## Grain Transportation Report

A weekly publication of the Agricultural Marketing Service  
www.ams.usda.gov/GTR

Contact Us

July 2, 2015

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The next  
release is  
July 9, 2015

### WEEKLY HIGHLIGHTS

#### Flood Conditions Continue to Hamper Barge Traffic

Extreme rainfall events have caused flooding on much of the inland waterways and hampered barge traffic. During June, the flooding caused several lock closures on the Mississippi, Illinois, and Arkansas Rivers. During the week ending July 1, Mississippi River Locks 20, 21, 22, 24, and 25 (Clayton, MO, to Grafton, IL) were closed for a few days due to high water. St. Louis Harbor has reopened to daylight only traffic for barges greater than 600 feet. On July 1, Mississippi River levels at St. Louis rose to slightly over 38 feet (a level which procedurally prompts the Coast Guard to close the river), but a complete closure was not implemented as flood levels are forecast to recede during the upcoming weekend.

#### Grain Inspections Increase Slightly

For the week ending June 25, total inspections of grain (corn, wheat, soybeans) from all major export regions reached 1.65 million metric tons (mmt), up 3 percent from the past week, 28 percent above last year, and 19 percent above the 3-year average. Soybean inspections jumped 69 percent, wheat inspections increased 3 percent, and corn inspections decreased 8 percent from the past week. Mississippi Gulf grain inspections jumped 41 percent from the previous week as shipments to Latin America and Africa rebounded. Pacific Northwest grain inspections dropped 45 percent during the same period. Outstanding (unshipped) exports sales of wheat continued to increase from week to week, while corn and soybean sales decreased.

#### EPA Proposal Could Boost Ethanol Use

The U.S. Environmental Protection Agency is hoping to put more ethanol in gasoline despite reducing the consumption target established in a 2007 energy law. On May 29, EPA proposed requiring the use of 13.4 billion gallons of corn-based ethanol this year and 14 billion in 2016, down from the 15 billion target for both years established in 2007. EPA will finalize the targets by November 30. (Bloomberg News)

#### Daniel Elliott Confirmed as STB Chairman

On June 22, the Senate confirmed the nomination of Daniel Elliott for a reappointment as the Chairman of the Surface Transportation Board (STB). Elliott had been Chairman since 2009 until his term expired in December 2014. Deb Miller has been the acting Chairwoman in the meantime, and Ann Beggsman has continued to serve as Vice Chairwoman. Currently, the STB has only three members, but recent legislation passed by the Senate would expand the membership to five if the legislation is also approved by the House.

### Snapshots by Sector

#### Export Sales

During the week ending June 18, unshipped balances of wheat, corn, and soybeans totaled 17.8 mmt, unchanged from the same time last year. Net weekly wheat export sales of 0.434 mmt were up 38 percent from the prior week. Corn export sales of 0.497 mmt were down 21 percent, and soybean export sales of 0.119 mmt were down 11 percent from the prior week.

#### Rail

U.S. Class I railroads originated 18,271 carloads of grain during the week ending June 20, down 10 percent from last week, up 3 percent from last year, and up 4 percent from the 3-year average.

During the week ending June 25, average July shuttle secondary railcar bids/offers per car were \$199 below tariff, up \$17 from last week and \$1,149 lower than last year. Non-shuttle secondary railcar bids/offers were \$25 below tariff, up \$13 from last week and \$363 lower than last year.

#### Barge

During the week ending June 27, barge grain movements totaled 723,133 tons—about 7 percent higher than the previous week and 3 percent lower than the same period last year.

During the week ending June 20, 473 grain barges moved down river, up 6 percent from last week; 564 grain barges were unloaded in New Orleans, down 5 percent from the previous week.

#### Ocean

During the week ending June 25, 31 ocean-going grain vessels were loaded in the Gulf, 29 percent more than the same period last year. Forty vessels are expected to be loaded within the next 10 days, 23 percent less than the same period last year.

During the week ending June 19, the ocean freight rate for shipping bulk grain from the Gulf to Japan was \$32 per metric ton (mt), down 2 percent from the previous week. The cost of shipping from the PNW to Japan was \$18 per mt, down 3 percent from the previous week.

#### Fuel

During the week ending June 29, U.S. average diesel fuel prices decreased 2 cents from the previous week to \$2.84 per gallon—down \$1.08 from the same week last year.

- Weekly publication
- Detailed overview of grain transportation market
- Rail, Barge, Truck, Ocean, and Grain Exports
- Historical data available online

[www.ams.usda.gov/gtr](http://www.ams.usda.gov/gtr)

# Ocean Shipping Container Availability Report



USDA United States Department of Agriculture

## Ocean Shipping Container Availability Report

A weekly publication of the Agricultural Marketing Service

[www.ams.usda.gov/oscar](http://www.ams.usda.gov/oscar)

December 31, 2014

National Overview Maps P. 2-4

Container Availability by Location:

- Charleston, SC P.5
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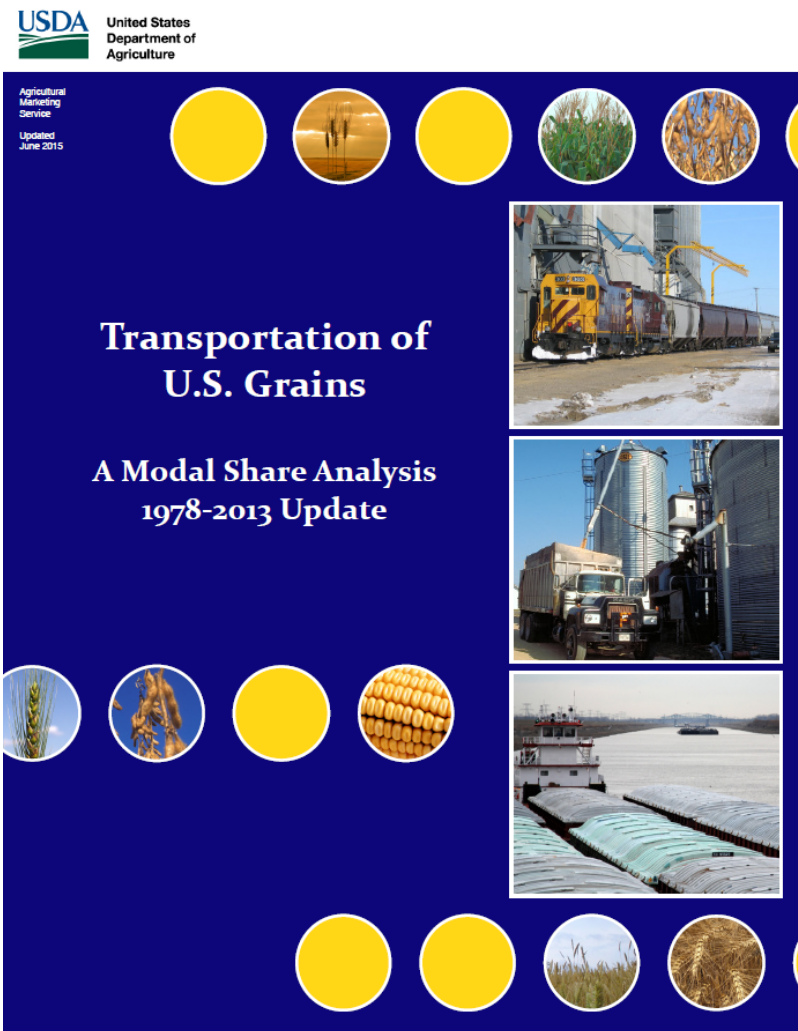
Understanding this Report P.23

To subscribe to OSCAR, e-mail:  
[April.Taylor@ams.usda.gov](mailto:April.Taylor@ams.usda.gov)

Photo credit: ©Port of Los Angeles

- Weekly publication
- Assists with market intelligence
- Helps U.S. ag exporters locate empty containers
- 18 intermodal locations
- 5 container types
- [www.ams.usda.gov/oscar](http://www.ams.usda.gov/oscar)

# Transportation of U.S. Grains: A Modal Share Analysis 1978-2013 Update

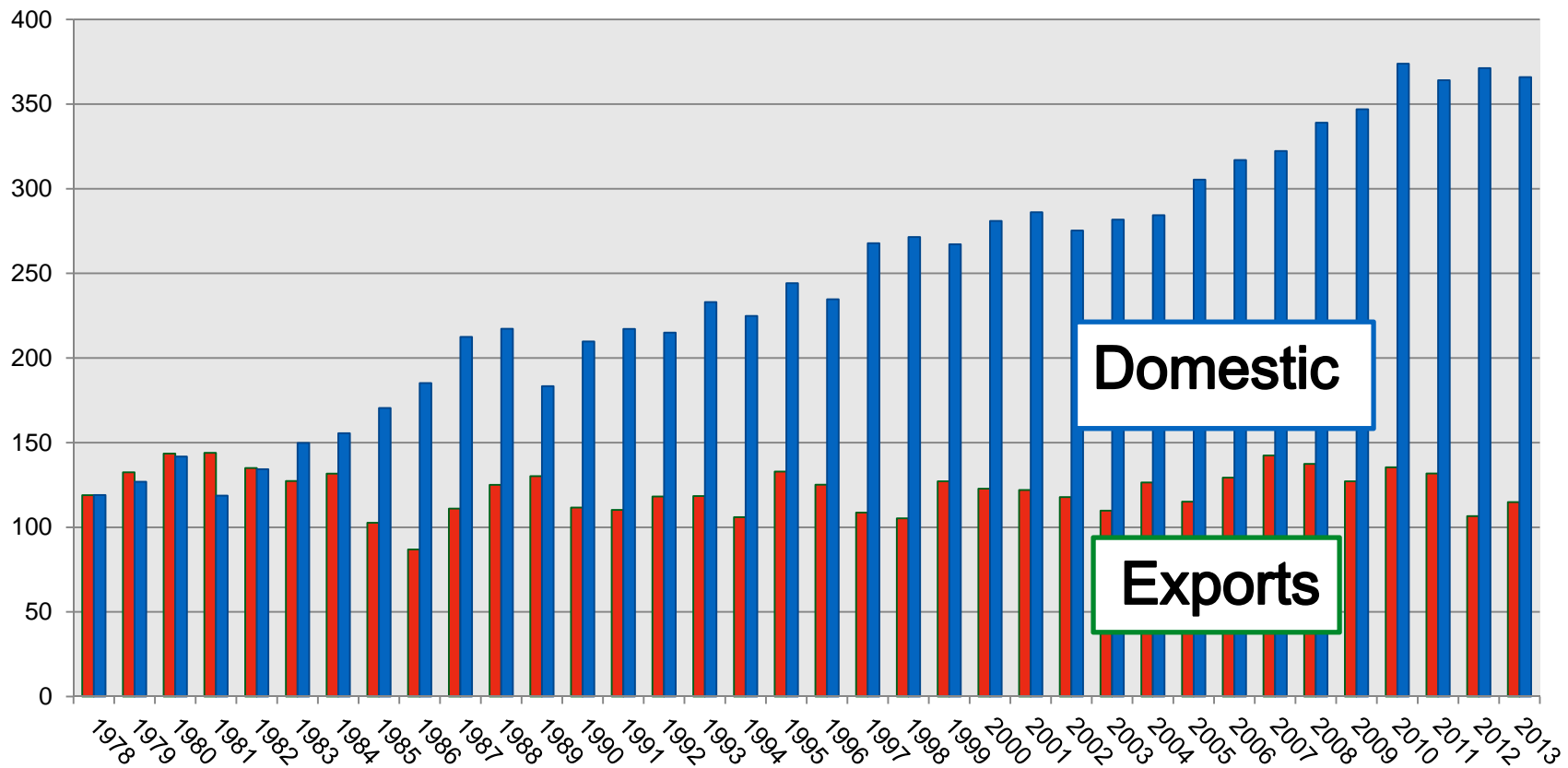


- Updated every 1 to 2 years
- Examines trends in modal usage
  - For Rail, Barge & Truck
- Domestic and Export Movements
  - For Corn, Wheat, Soybean, Sorghum & Barley



# U.S. Grains and Oilseeds Transported

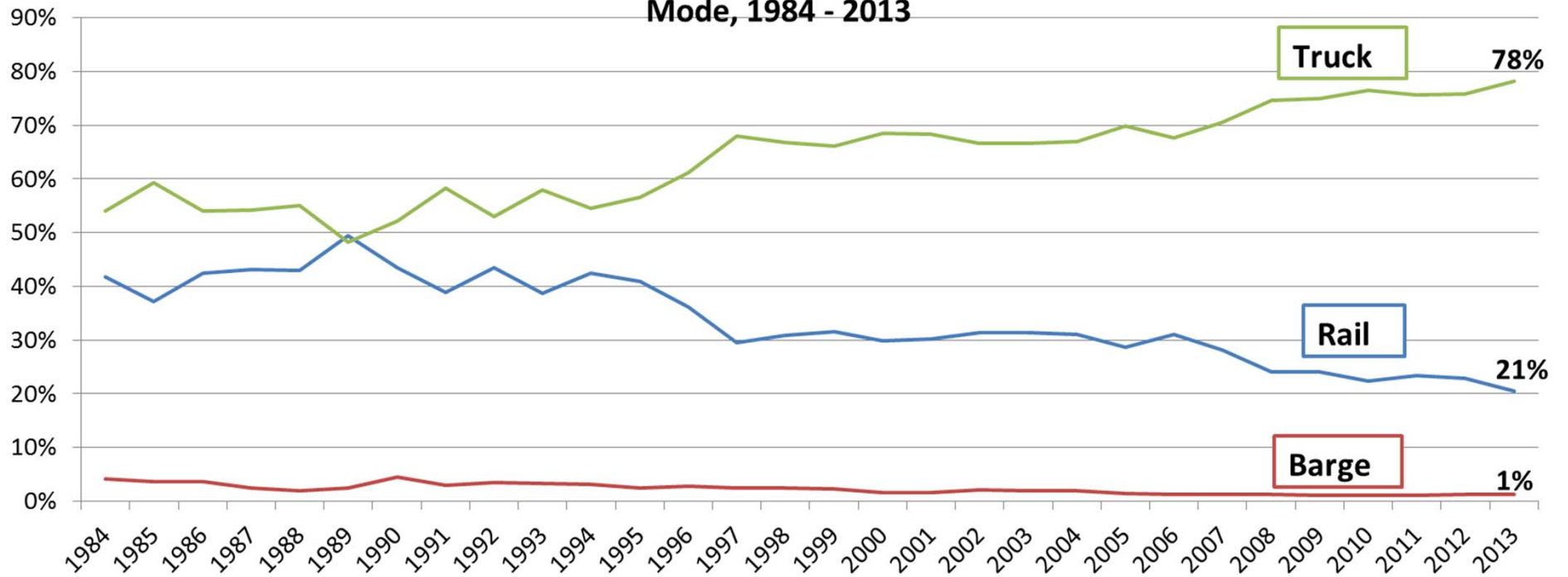
Million Tons



Source: *Transportation of U.S. Grains: A Modal Share Analysis*. USDA, AMS.

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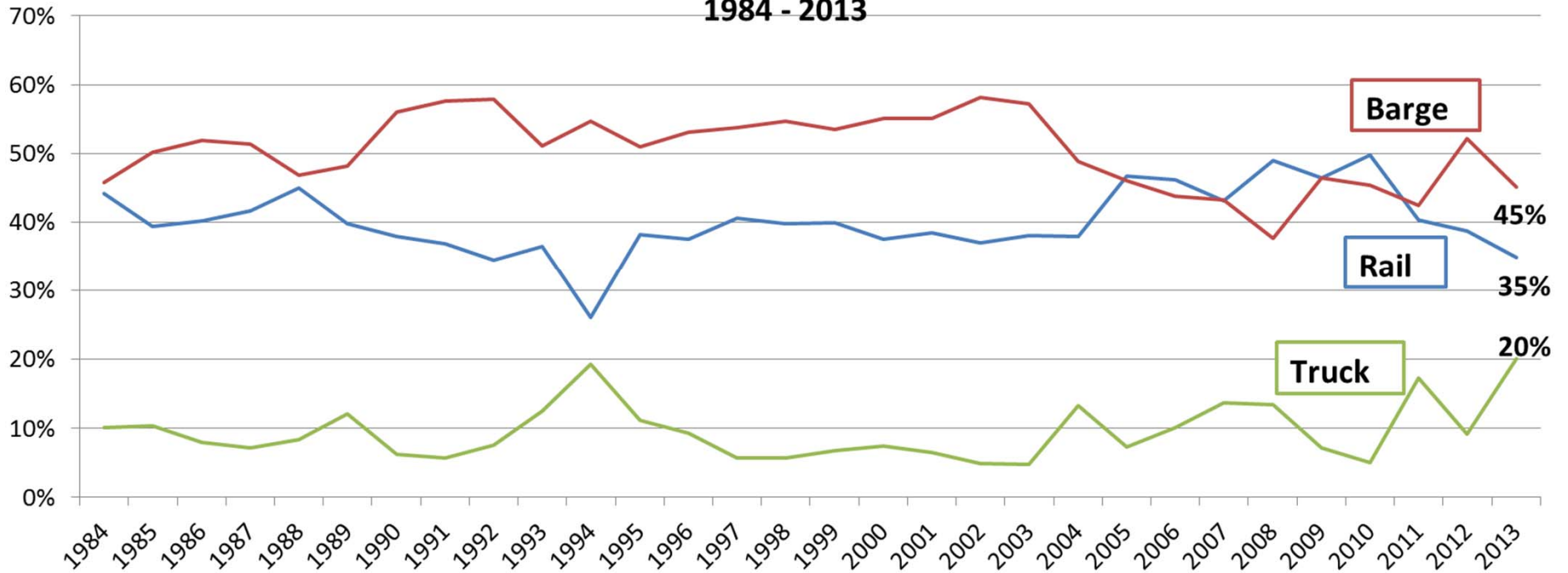
## Domestic Use: Percentage of U.S. Grain and Oilseed Movements by Transportation Mode, 1984 - 2013



Source: Transportation of U.S. Grains: A Modal Share Analysis. USDA, AMS.

# Agricultural Marketing Service

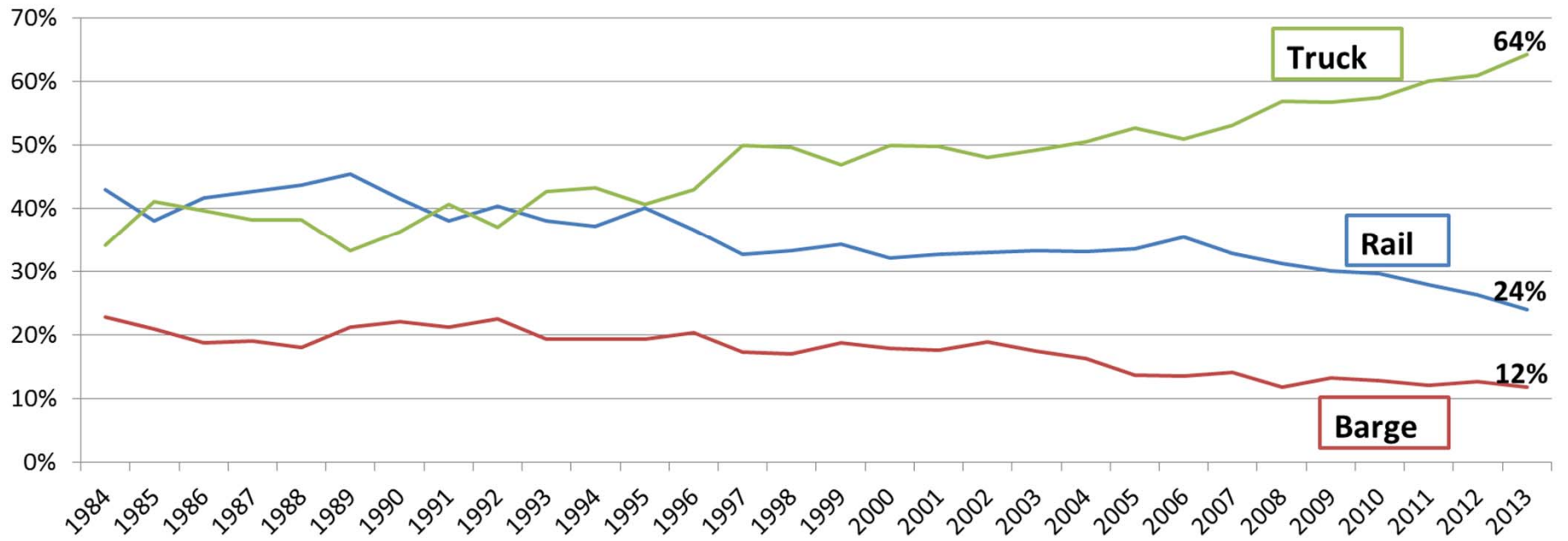
## Exports: Percentage of U.S. Grain and Oilseed Movements by Transportation Mode, 1984 - 2013



Source: Transportation of U.S. Grains: A Modal Share Analysis. USDA, AMS.

# Agricultural Marketing Service

## Total: Percentage of U.S. Grain and Oilseed Movements by Transportation Mode, 1984 - 2013



Source: Transportation of U.S. Grains: A Modal Share Analysis. USDA, AMS.

# Other AMS Reports of Interest

- Grain Truck and Ocean Rate (GTOR) Advisory (quarterly)
- Brazil Quarterly Indicators & Annual Guide
- Mexico Cost Indicators Report (quarterly)
- Transportation Profiles
- Profiles of Top Ag Ports
- Waterways Fact Sheet
- Study of Rural Transportation Issues

# U.S.-South America Ocean Grain Freight Spreads



Agricultural  
Marketing  
Service

May 2015

## United States–South America Ocean Grain Freight Spreads (Summary)

Delmy Salin



This paper is a summary of: *U.S.–South America Ocean Grain Freight Spreads*, by Jay O’Neil, International Grains Program Institute (IGP), Kansas State University (KSU). The full paper is available at <http://hdl.handle.net/2097/18876>.

In recent years, the United States—the world’s leading producer and exporter of soybeans—has lost market share to Argentina and Brazil. At the farm level, the 2013 per-bushel production costs in the main producing areas of the U.S. Midwest averaged \$9.62 per bushel, compared with \$7.14 per bushel in Argentina, \$8.15 per bushel in the Brazilian State of Mato Grosso, and \$7.68 per bushel in Brazil’s Paraná. Even though U.S. production costs are higher, the total transportation costs from point of production to the destination in Asia are generally lower than for South American soybeans, allowing U.S. soybeans to compete.

Relatively small differences in seaborne transportation costs can make South America soybean exports more competitive than those of the United States, diverting trade from the United States to Brazil or Argentina, or the reverse. Ocean freight spread is the cost difference between two vessel routes to the same destination, such as the U.S. Gulf and the Pacific Northwest (PNW) versus South America to Asia (China and Japan), or the U.S. Gulf versus South America to Europe and China.<sup>1</sup>

A researcher with the International Grains Program Institute at Kansas State University found that the ocean freight rates for grain cargos from South America to Asia are often less expensive than from the U.S. Gulf because of dry-bulk vessel route patterns, lower cost port charges, higher Panama Canal tolls, and less burdensome navigation restrictions. South America shipments provide some natural competitive advantages for Brazilian and Argentinean grains and oilseeds by sailing around Cape Horn and avoiding the Panama Canal when the need exists. South American shippers can load vessels too large to fit through the Canal, gaining economies of scale and avoiding Canal fees and delays. Brazilian ports also provide less expensive berthing (dockage) costs for vessels.

<sup>1</sup> The U.S.–South American ocean freight spread competitiveness occurs in the Atlantic route (U.S. Gulf) to China and not in the U.S. Pacific Northwest (PNW) because of the Panama Canal and the Canal transit costs limitations.

- Cooperative study with Kansas State University
- Examined cost structures and competitiveness for shipping grains/oilseeds via ocean from:
  - Argentina
  - Brazil
  - United States



## Agricultural Marketing Service

### Vessel costs from U.S. Gulf versus Argentina and Brazil to Shanghai, August 2014

Cargo Mean Quantity	U.S. Gulf	Argentina	Brazil
	56,000 mt <sup>1</sup>	60,000 mt	66,000 mt
Nautical miles (nm)	9,977	11,186	11,031
Voyage days	39	42.5	42
Panama Canal	1		
Laytime both ends	20	24	23
Total voyage duration days	60	66.5	65
Port and Canal fees	\$550,000	\$430,000	\$180,000
Percentage of total costs	16.2	13.0	6.0
Total costs	\$3,400,000	\$3,303,500	\$3,015,000
<b>Freight rate:</b>	<b>\$56.67</b>	<b>\$55.06</b>	<b>\$45.68</b>

<sup>1</sup>Metric tons

Source: O'Neil Commodity Consulting

## Marketing U.S. Grain and Oilseed by Container

MARKETING U.S. GRAIN AND OILSEED BY CONTAINER



Prepared by:

Kimberly Vachal, PhD  
Upper Great Plains Transportation Institute  
North Dakota State University, Fargo

UGPTI Department Publication No. 272

September 2014

- Cooperative study with North Dakota State University
- Analysis of rail and port container traffic activity
- Insight into marketing activities, trends, and opportunities via container



# Other Coop Research Reports

## Texas A&M

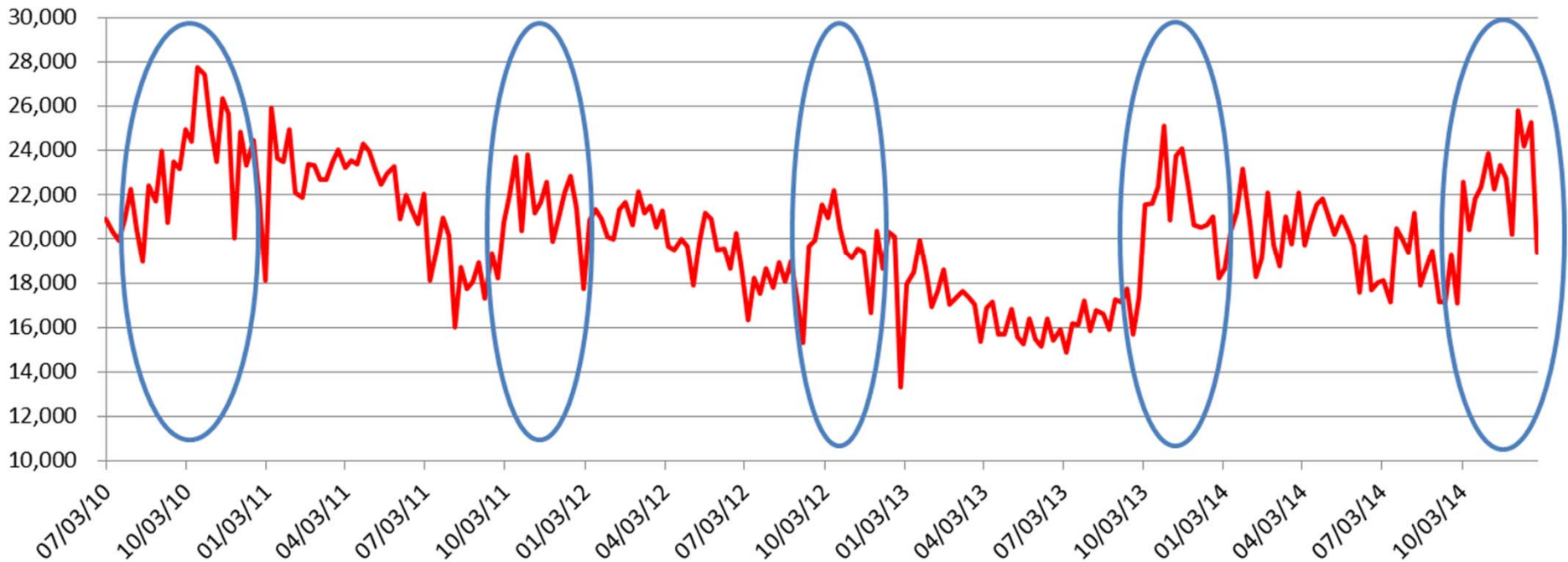
- Tracking U.S. Grain, Oilseed and Related Product Exports in Mexico
- Impacts of Transportation Infrastructure on the U.S. Cotton Industry

## Stakeholder Collaboration

- Rail Market Share of Grain and Oilseed Transportation
- Rail Rate Mediation and Arbitration for Grain Shippers

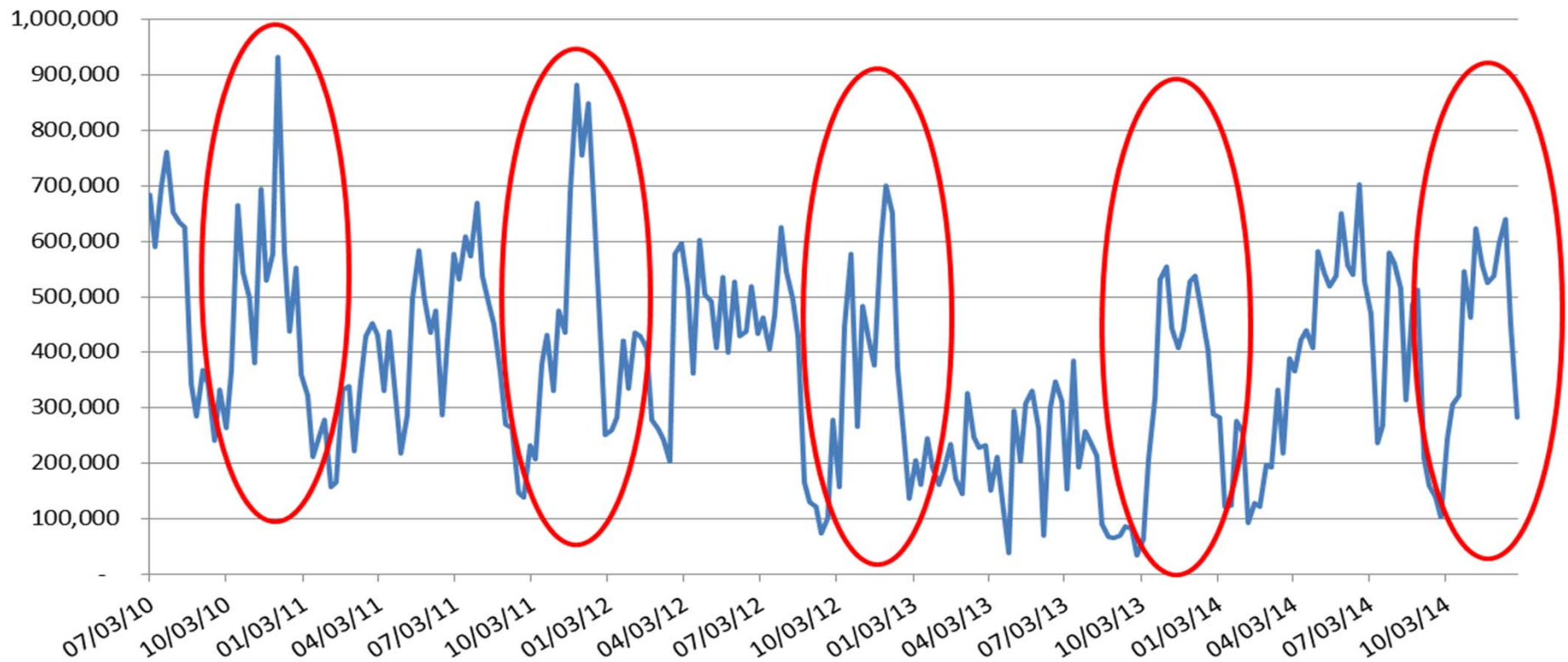
# Seasonality of Grain Shipments and Peak Demand

## Class I Railroad Weekly Grain Carloadings



Source: AMS Analysis of Association of American Railroads, *Weekly Railroad Traffic*

# Weekly Barge Grain Movements through Mississippi River Locks 27 (tons)



Source: U.S. Army Corps of Engineers

## Grain Export Inspections by Port Region, Sep. 1 - April 30

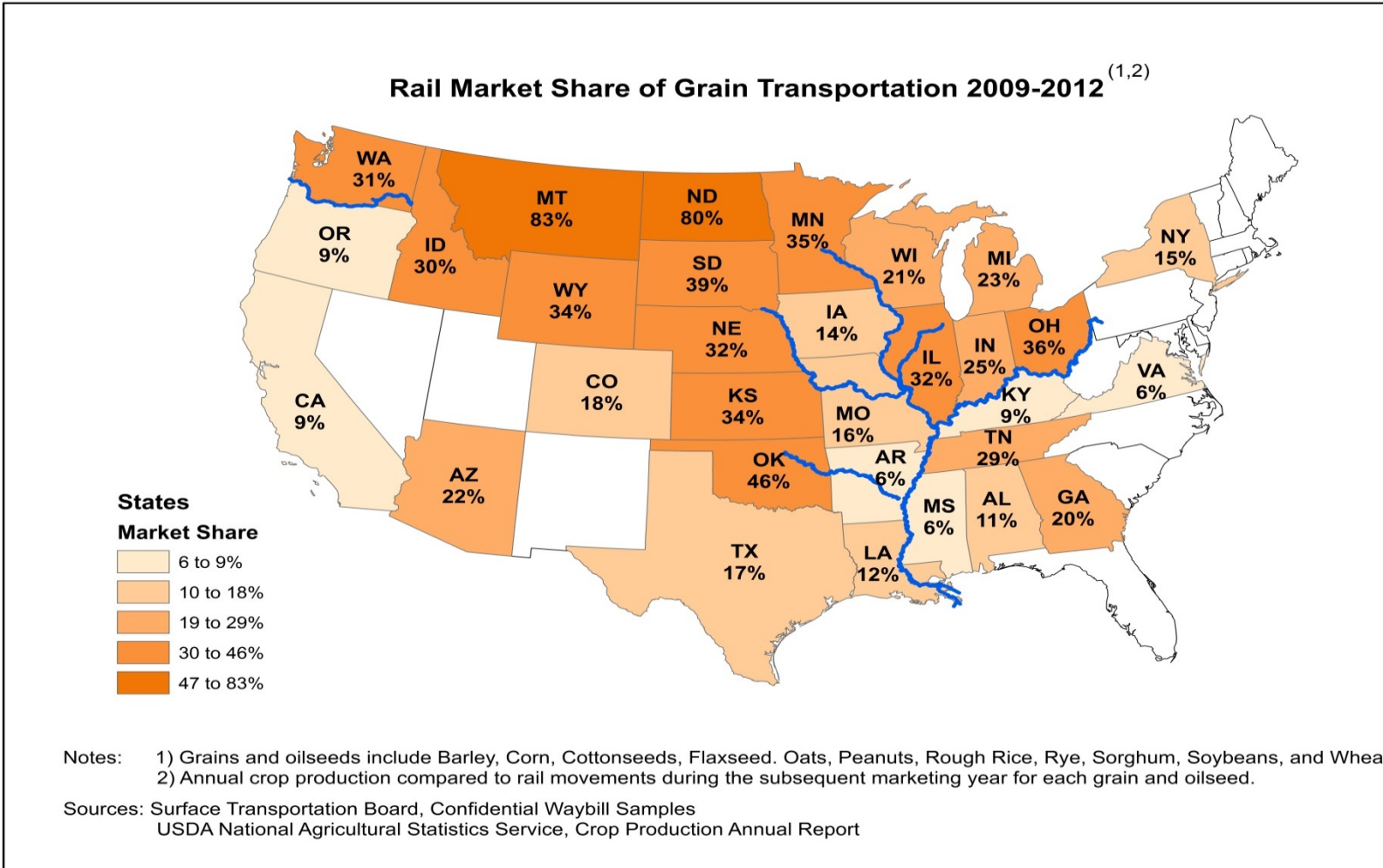
	2013/14	2014/15	2010-2012 Average	2013/14	2014/15	2010-2012 Average
	- million bushels -			- market share (%) -		
<b>Mississippi Gulf</b>	1,759	1,829	1,411	59%	60%	55%
<b>Texas Gulf</b>	240	152	266	8%	5%	10%
<b>Pacific Northwest</b>	839	922	763	28%	30%	30%
<b>Great Lakes</b>	42	66	50	1%	2%	2%
<b>Atlantic</b>	95	97	64	3%	3%	3%
<b>Total</b>	<b>2,976</b>	<b>3,067</b>	<b>2,555</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Source: AMS Analysis of USDA Federal Grain Inspection Service Data

# Rail is Important for Agriculture

- Railroads move 24 percent of U.S. grain and 35 percent of export grain movements
- Ag shippers are concerned with many issues, such as:
  - inconsistent service
  - high rates
  - switching limitations/restricted interchange
  - fuel surcharge calculations
  - effectiveness of the rate challenge process
- Record Investments by Rail - \$28 billion in 2014 & projected \$29 billion in 2015

# Dependency on Rail



# Railcar Backlog Improvement

## Outstanding Railcar Orders for Grain

	7/11/2015	10/17/2014	6/25/2014	
<b>CN</b>	159	341	N/A	
<b>CP</b>	0	2,489	16,615	*
<b>UP</b>	1,126	6,984	N/A	
<b>BNSF</b>	131	6,166	8,462	
<b>TOTAL</b>	1,416	15,980	25,077	

Source: Class I Railroad Status Updates filed with STB

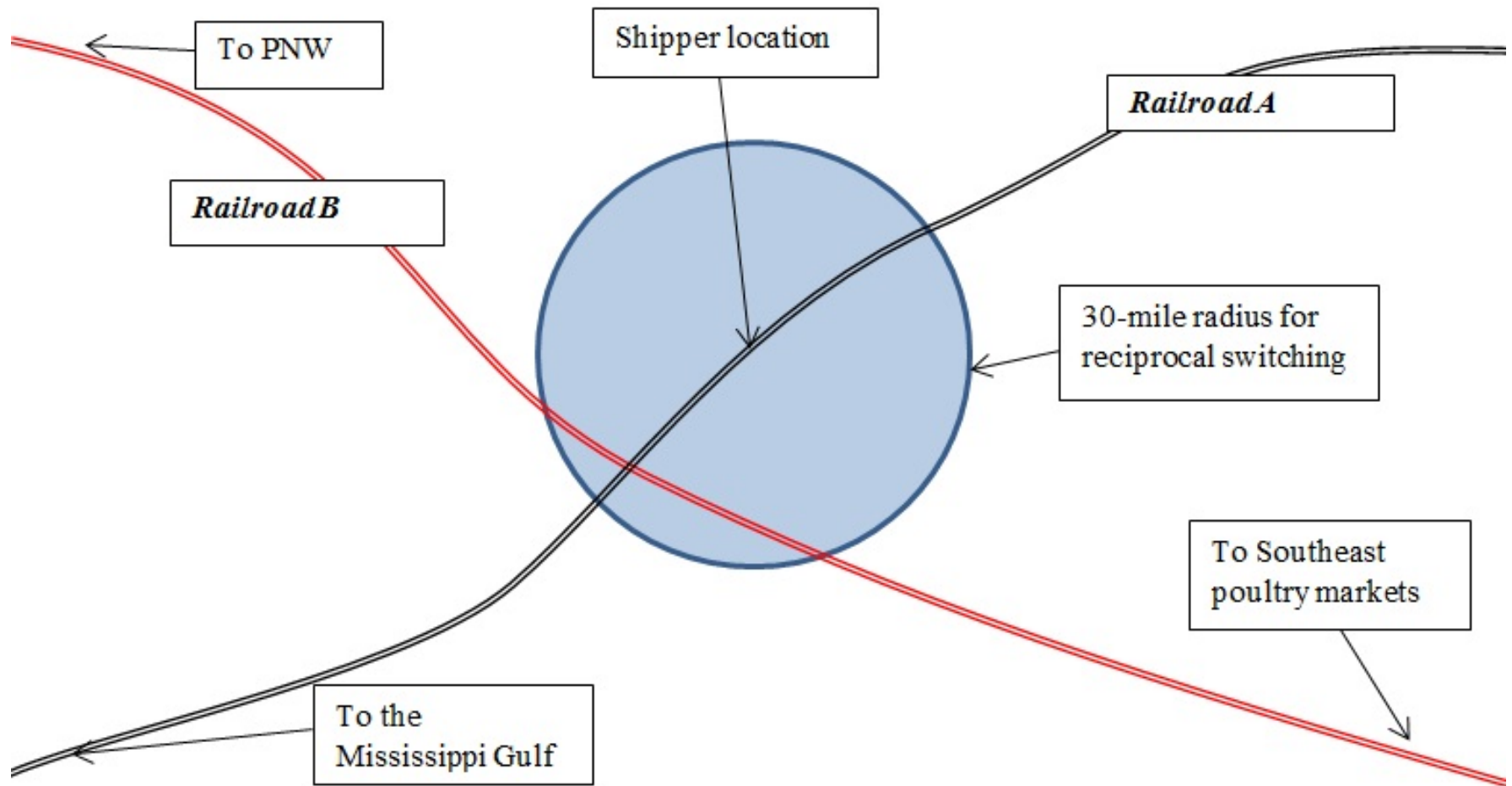
\* The actual number reported by CP under its old order system was 33,229. However, in a filing to STB on its new order system, CP indicated the true amount was roughly half of the amount reported under the old system.

# Current STB Proceedings

- **EP 665**: Rail Transport of Grain, Rate Reg. Review
- **EP 724**: U.S. Rail Service Issues
- **EP 722**: Railroad Revenue Adequacy
- **EP 661**: Rail Fuel Surcharges (Safe Harbor)
- **EP 711**: Competitive Switching



# EP 711 Competitive Switching



# Trucking is Critical for Agriculture

- Trucks carry 70 percent of the tonnage of agricultural, food, forest, alcohols, and fertilizer products
- Trucks link farmers/ranchers to end markets, both domestic and foreign
- Ag's needs are seasonal, requiring frequent trips during planting and harvest seasons
- Many products are perishable and time sensitive, requiring the services best provided by trucks

# Truck Issues

- **2012:** Expanded Ag Exemption and exemptions for certain farm vehicles and their drivers from the hours of service (HOS) rules
- **2015:** 2-year exemption from the 30-minute rest break provision of the HOS regulations for hauling of livestock and bees on interstate highways
- **Ongoing Issue:** Truck size and weight
  - Ag & other industries w/ heavy products want 97,000 limit with 6<sup>th</sup> axle
  - OOIDA, rail & safety advocates oppose
  - DOT studying per Congressional mandate

## Ocean Shipping Needed to Serve Ag's Global Customers

- **U.S. Ag Exports:** About 75% are shipped by ocean, 28% in containers
- **U.S Grain Exports:** About 10% are in containers
- **Gulf Ports:** Over 60% of export grain, or over 78 million metric tons
- **Pacific Northwest (PNW):** 25% of export grain, or over 32 million metric tons

# Ocean Shipping Issues

- Port congestion increasing
- Investment needed
- Chassis management needs improvement
- Driver turn times need improvement
- Legislation on port performance data, labor disputes
- Upcoming negotiations on all coasts

# Barge & Inland Waterways

- In 2013, Barges moved to PNW and Gulf Ports:
  - 61 percent of our corn exports
  - 42 percent of our soybean exports
  - 40 percent of our wheat exports
- For shippers near the inland waterways, barges offer a low-cost transportation alternative
- Critics argue the O&M costs and capital costs of the inland waterways should be fully covered by industry
- Industry says the waterways have multiple uses and public funding is needed

# Inland Waterway Issues

- Fuel tax for commercial users of the inland waterways was raised by 9 cents per gallon in 2015
- Expected to raise construction and rehabilitation revenues by \$30-36 million per year
- Funding for new projects will be limited, as construction funds are needed to finish on-going projects
- Funding issues are outside USDA's jurisdiction
- Funding decisions are made by others, such as the White House, OMB, the U.S. Army Corps of Engineers, and Congress

# Take Away?

- ✓ Agriculture is Important to our Country's Economy
- ✓ Transportation is Important for Ag's Success
- ✓ Many Complex Issues Are Pending that Will Affect Agriculture, such as:
  - Rail, Truck, Barge, and Ocean Shipping
- ✓ AMS is a Resource for Info on Ag Transportation



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