USDA United States Department of Agriculture

Grain Transportation Report

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

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March 19, 2015

Contents

The next release is March 26, 2015

WEEKLY HIGHLIGHTS

Rain and Melting Snow Significantly Constrain Ohio River Navigation

Rain and snow melt has caused high water conditions that have slowed grain barge movements on the Ohio River. For the week ending March 14, downbound grain barge shipments at Ohio River Locks and Dam 52 dropped to 95 thousand tons, a significant drop from the previous week's total of 251 thousand tons. The Ohio River at Cairo, IL, crested on March 18 at 48.4 feet, 8.4 feet above flood stage. Based upon the 3-year average for the first half of March, the Ohio River typically ships 240 thousand tons of downbound grain per week. Mississippi River Locks 27 typically ships 227 thousand tons per week during the first half of March. For the week ending March 14, Locks 27 tonnages were 222 thousand tons.

Wheat Inspections Increase; Total Inspections Lowest Since September

For the week ending March 12, total inspections of wheat reached 0.547 million metric tons (mmt), up 36 percent from the past week and 26 percent above last year. Wheat inspections increased in the Mississippi and Texas Gulf, with shipments increasing to Latin America and the Caribbean. Higher wheat inspections did not offset a 37 percent drop in corn inspections (0.722 mmt) and the drop in **total inspections of grain** (corn, wheat, and soybeans) from all major export regions, which decreased 15 percent to 1.88 mmt. Inspections decreased 23 percent below last year and 11 percent below the 3-year average. Total inspections of grain were also the lowest since early September 2014. Outstanding (unshipped) export sales continued to drop for corn, wheat, and soybeans.

West Coast Vessel Backlog Slowly Decreasing

According to data tabulated by the Office of Policy and Plans at the U.S. Department of Transportation's Maritime Administration, as of the morning on March 19, a total of 61 container ships were either awaiting dock service, anchored, or offshore at the four major West Coast port regions of Southern California, Northern California, Seattle/Tacoma, and Portland. The number of vessels at the West Coast ports has gradually been decreasing since reaching a peak of 131 ships on February 17, the day the tentative agreement was signed by the Pacific Maritime Association (PMA) and the International Longshore and Warehouse Union (ILWU). For more information on the importance of West Coast ports to agriculture, please see the **March 12 GTR** feature article.

Snapshots by Sector

Export Sales

During the week ending March 5, **unshipped balances** of wheat, corn, and soybeans totaled 26.8 mmt, 13 percent lower than at the same time last year. **Corn export sales** reached 0.418 mmt, down 50 percent from the previous week. **Wheat export sales** of 0.445 mmt were down 5 percent, and **soybean export sales** of 0.168 mmt were down 66 percent from the previous week.

Rail

U.S. railroads originated 20,840 **carloads of grain** during the week ending March 7, up 2 percent from last week, 11 percent from last year, and 7 percent from the 3-year average.

During the week ending March 12, average March shuttle **secondary railcar bids/offers per car** were $200 above tariff, up $325 from last week and $3,638 lower than last year. Non-shuttle secondary railcar bids/offers were $75 below tariff, up $7 from last week and $1,575 lower than last year.

Barge

During the week ending March 14, **barge grain movements** totaled 361,675 tons—30 percent lower than the previous week and 52 percent lower than the same period last year.

During the week ending March 14, 240 grain barges **moved down river**, down 25 percent from last week; 537 grain barges were **unloaded in New Orleans**, up 31 percent from the previous week.

Ocean

During the week ending March 12, 33 **ocean-going grain vessels** were loaded in the Gulf, 18 percent less than the same period last year. Fifty-four vessels are expected to be loaded within the next 10 days, 2 percent less than the same period last year.

During the week ending March 13, the ocean freight rate for shipping bulk grain from the Gulf to Japan was $32 per mt, unchanged from the previous week. The cost of shipping from the PNW to Japan was $18 per mt, unchanged from the previous week.

Fuel

During the week March 16, U.S. **diesel fuel prices** averaged $2.92 per gallon, 2 cents lower than the previous week. They were down $1.09 from the same week last year.

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Feature Article/Calendar

USDA Analysis: 2013/14 Rail Service Challenges in the Upper Midwest

On March 2, USDA's Office of the Chief Economist and Agricultural Marketing Service released Rail Service Challenges in the Upper Midwest – Preliminary Analysis of the 2013-2014 Situation. The analysis was prepared in response to a request by Senators Thune and Klobuchar for USDA to examine how rail service challenges were affecting producers and agricultural end users in the Upper Midwest.

Summary

Transportation costs are important in explaining why local prices received by producers and shippers in the Upper Midwest may be higher or lower than nearby futures prices or spot prices at export destinations in the Pacific Northwest or Gulf of Mexico. The analysis found that extra shipping costs incurred by grain and oilseed producers in the Upper Midwest from January 1 to November 30—and holding all else constant—were about 3 percent of cash receipts. However, the analysis was unable to determine if producers would have chosen to market their crop at the depressed prices given that some may have sold under a forward contract, stored the crop for a later date of sale, or used an alternative mode of transportation. Although rail performance has improved following the 2014/15 harvest, the data indicate railroads are operating near full capacity and are more susceptible to performance problems from transportation disruptions such as adverse weather, track maintenance, or sudden surges in demand. Nevertheless, grain exports during the 2013/14 grain marketing year were consistently higher than average, as some rail traffic switched to railroads with better operating performance or to barges in order to meet the strong export demand from China, other Asian destinations, and Mexico.

Background

During the fall harvest season of 2013/14, increased demand to ship coal, oil, intermodal containers, sand, gravel, and a record harvest of corn, soybeans, and wheat in the United States put added demands on the rail network. Consequently, rail service delays occurred in the Upper Midwest across a number of States—particularly Minnesota, Montana, North Dakota, and South Dakota. Rail service in those States lagged behind shippers' demand to move the record grain harvest, forcing new-crop grain into storage or onto the ground. Crop prices in those States were driven lower due to the extra costs of transportation and storage. In addition, track maintenance work and a particularly harsh winter in 2014 reduced rail capacity. Those events had a particularly acute effect on producers and shippers in the Upper Midwest because of their higher reliance on rail transportation, lower access to barge and other transportation modes, limited local markets for their crops, and insufficient storage because of the recent expansion in corn production.

Contributing Factors

Some of the factors identified as having an impact on rail performance in 2013/14 were:

- The seasonality of grain shipments. Unlike industries that produce year round, agriculture has a few windows each year when crops are harvested and need either to be stored or shipped. Adequate transportation and storage are needed during the fall peak of the grain and oilseed harvest in order to accommodate the additional demand placed on the transportation network. This was especially true with the record 2013/14 harvest when combined with other factors.
- Rail capacity limitations. Recognizing the need to expand network capacity to keep up with growing demand for rail service, railroads undertook track maintenance work in 2013 and 2014. Despite the long-term benefits of such projects, they had the immediate effect of reducing network capacity.
- Increase and changing mixture of rail traffic. The steady increase in annual rail traffic volume since 2009 had taken out much of the excess capacity from the rail network by 2014, leaving it with little flexibility to handle demand surges or changes in traffic patterns. New traffic such as petroleum and industrial sand experienced large growth, as did intermodal and ethanol. Grains and coal also had resurgences in 2013. As traffic volumes increased, average train speeds declined, indicating increasing congestion on the network into 2014.
- Severe winter. The extremely harsh winter of 2013/14 affected railroad performance, especially around Chicago where almost a quarter of rail traffic is routed through and interchanged. Railroads were forced to run shorter trains because of operational effects from the cold, requiring more crews and locomotives to move the same amount of traffic.

Effects of Rail Service Problems

Rail service problems manifested in different forms, such as those identified below:

Grain car backlogs. Backlogs for grain cars typically occur each year to some degree as a result of weather conditions, unusually high grain and oilseed exports, and/or above-average harvests. However, the level of the backlog in 2014 was much greater than normal and continued to lag behind demand until October of

- 2014. This resulted in missed shipments, delays in transit, and fully loaded grain cars sidelined waiting for service.
- Storage constraints. On September 1, 2014, remaining grain and oilseed stocks in storage were up to 40 percent higher than previous years in some States most impacted by rail problems. As a result, more temporary storage was needed to handle the new crop, which involves on-ground storage and incurs a higher risk of loss.
- Primary and secondary railcar markets. Many shippers found it necessary to pay premiums in either the primary or secondary railcar market to secure empty grain cars as they were unable to obtain service at regular tariff rates. This type of activity is normal following a fall harvest, with premiums representing only a small fraction of the overall cost of shipping grain by rail. However, primary and secondary market premiums were unusually persistent and reached unprecedented levels throughout the 2013/14 grain marketing year, with premiums comprising almost half the cost of shipping grain by rail for some shipments.

Results of Economic Analysis

The analysis relied on econometric regressions, examining the relationships between grain and oilseed prices at several origin locations, the transportation costs to destination locations, and prices at those locations to establish the impact of rail service problems on grain and oilseed producers in the Upper Midwest (North Dakota, South Dakota, Minnesota, and Montana) between January 1 and November 30, 2014. The regression analysis suggests that for every $1 per bushel increase in transportation costs, the local basis was depressed by $0.262 per bushel. To estimate the basis impact, that relationship was applied to three representative movements:

(1) The average increase in transportation costs for soybeans shipped by rail to the Gulf of Mexico from Council Bluffs, IA, relative to the prior 3 to 4 years was about $0.40 per bushel. Based on the estimated transportation impact ($0.262), this translates into a roughly $0.11 per bushel decrease on local soybean prices in the Upper Midwest.
(2) The average increase in transportation costs for wheat shipped by rail from Grand Forks, ND, to Portland, OR, relative to the prior 3 to 4 years was about $0.69 per bushel. Based on the estimated transportation impact, this translates into a roughly $0.18 per bushel decrease on local wheat prices in the Upper Midwest.
(3) The average increase in transportation costs for corn shipped by rail from Minneapolis, MN, to Portland, OR, relative to the past 3 to 4 years was about $0.63 per bushel. Based on the estimated transportation impact, this translates into a roughly $0.17 per bushel decrease on local corn prices in the Upper Midwest.

Using the representative values from the examples above, the estimated impact on Minnesota, Montana, North Dakota and South Dakota, above what would be expected from regular seasonal transport cost increases, and holding all else constant, was about 3 percent of cash receipts, or about $570 million, based on the amount of grain and oilseeds marketed from those States during the January 1 to November 30 time period. However, due to data limitations, the increase in transportation costs was not directly allocated to any specific factor such as increased demand from a large crop, increased demand for rail services, poor rail performance, or adverse weather. Furthermore, the estimated impact was only a rough estimate because some of the impacts may have been mitigated and additional data on other representative rail movements, movements on other transportation modes, storage costs, and contract movements were not available for the analysis.

Current Conditions

Railroads have been able to handle the 2014/15 harvest much better than the previous year due to several factors. Sections of track that were closed for maintenance last year have been reopened this year, including double tracks and new sidings, which have increased network capacity compared to last year. The 2014 harvest occurred over a longer-than-usual time period, allowing railroads to better adjust to the volumes of grain that needed to be moved. Due to the retreat in commodity prices this year because of record U.S. and world grain and soybean crops, many farmers elected to store more of their grain and soybeans. More modest harvest volumes than anticipated in some regions also mitigated the pressure to move the grain by rail. In addition, although there have been some periods of significant snowfall and cold temperatures over the past couple of months, the weather overall has been more favorable this winter for transporting soybeans and grain. Railroads have also developed winter protocols, which include routing around Chicago. Those and other factors have resulted in improved rail performance, increased volumes, and lower transportation costs. Adam.Sparger@ams.usda.gov

Grain Transportation Indicators

Table 1

Grain Transport Cost Indicators[1]

	Truck	Rail		Barge	Ocean	
Week ending		Unit Train	Shuttle		Gulf	Pacific
03/18/15	196	243	214	221	143	128
03/11/15	198	243	200	203	143	128

[1]Indicator: Base year 2000 = 100; Weekly updates include truck = diesel ($/gallon); rail = near-month secondary rail market bid and monthly tariff ra with fuel surcharge ($/car); barge = Illinois River barge rate (index = percent of tariff rate); and ocean = routes to Japan ($/metric ton)

Source: Transportation & Marketing Programs/AMS/USDA

Table 2

Market Update: U.S. Origins to Export Position Price Spreads ($/bushel)

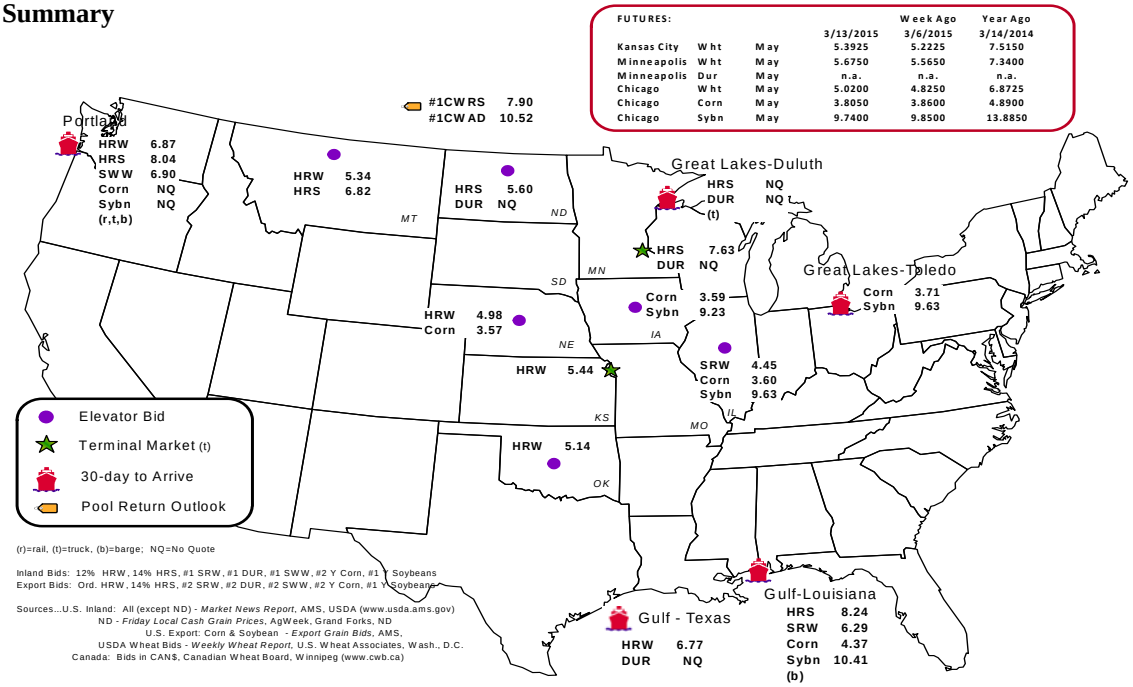
Commodity	Origin--Destination	3/13/2015	3/6/2015
Corn	IL--Gulf	-0.77	-0.72
Corn	NE--Gulf	-0.80	-0.75
Soybean	IA--Gulf	-1.18	-1.15
HRW	KS--Gulf	-1.33	-1.29
HRS	ND--Portland	-2.44	-2.14

Note: nq = no quote
Source: Transportation & Marketing Programs/AMS/USDA

The **grain bid summary** illustrates the market relationships for commodities. Positive and negative adjustments in differential between terminal and futures markets, and the relationship to inland market points, are indicators of changes in fundamental market supply and demand. The map may be used to monitor market and time differentials.

Figure 1

Grain bid Summary



Rail Transportation

Table 3

Rail Deliveries to Port (carloads)[1]

Week ending	Mississippi Gulf	Texas Gulf	Pacific Northwest	Atlantic & East Gulf	Total	Week ending	Cross-Border Mexico[3]
3/11/2015[p]	432	2,007	4,983	417	7,839	3/7/2015	1,838
3/04/2015[r]	412	1,165	5,522	578	7,677	2/28/2015	1,363
2015 YTD[r]	7,780	11,909	54,486	8,139	82,314	2015 YTD	15,660
2014 YTD[r]	12,503	15,551	52,618	8,718	89,390	2014 YTD	16,716
2015 YTD as % of 2014 YTD	62	77	104	93	92	% change YTD	94
Last 4 weeks as % of 2014[2]	41	90	109	56	90	Last 4wks % 2014	96
Last 4 weeks as % of 4-year avg.[2]	80	98	122	85	110	Last 4wks % 4 yr	104
Total 2014	44,621	83,674	256,670	32,107	417,072	Total 2014	96,467
Total 2013	31,646	71,388	168,826	25,176	297,036	Total 2013	71,397

[1] Data is incomplete as it is voluntarily provided

[2] Compared with same 4-weeks in 2013 and prior 4-year average.

[3] Cross- border weekly data is aproximately 15 percent below the Association of American Railroads reported weekly carloads received by Mexican railroads to reflect switching between KCSM and FerroMex.

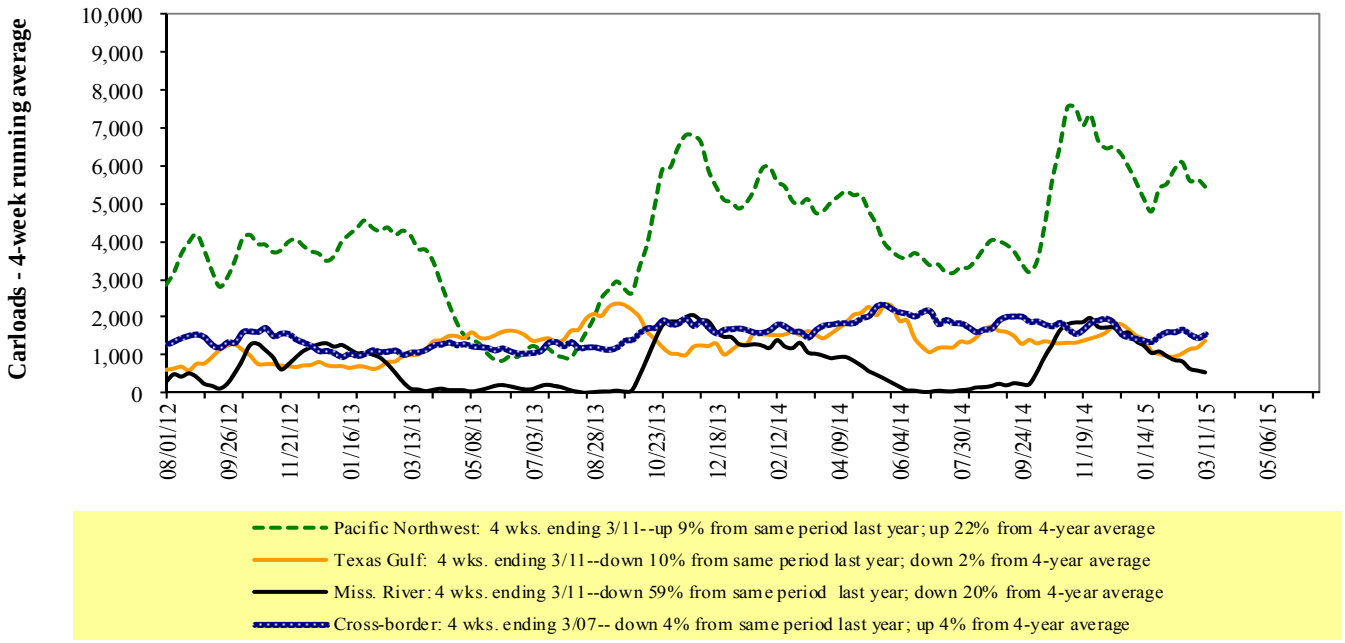
YTD = year-to-date; p = preliminary data; r = revised data; n/a = not available

Source: Transportation & Marketing Programs/AMS/USDA

Railroads originate approximately 29 percent of U.S. grain shipments. Trends in these loadings are indicative of market conditions and expectations.

Figure 2

Rail Deliveries to Port



Source: Transportation & Marketing Programs/AMS/USDA

Table 4

Class I Rail Carrier Grain Car Bulletin (grain carloads originated)

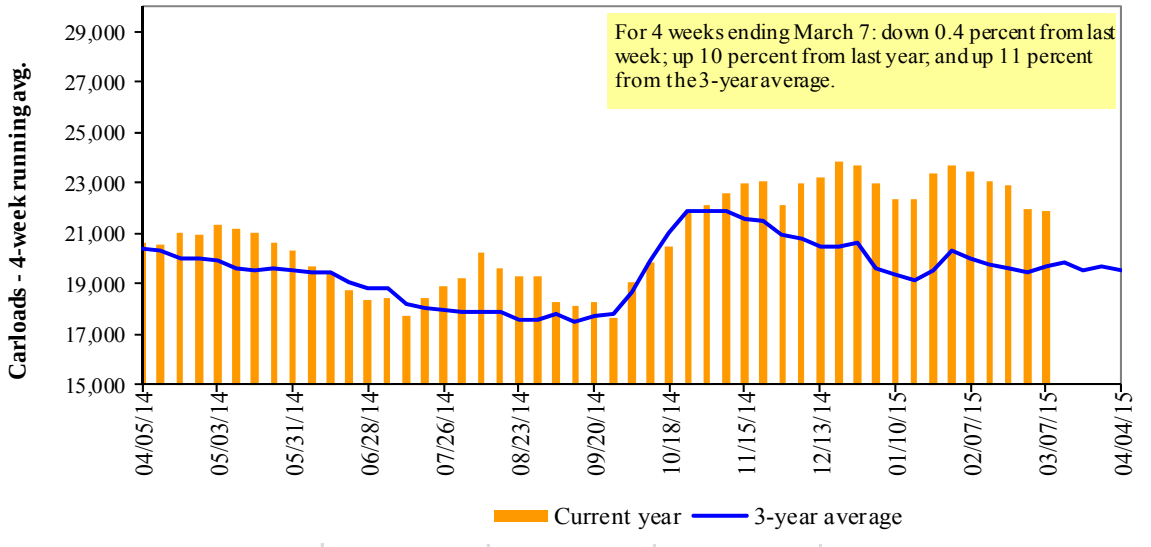
Week ending	East		West			U.S. total	Canada	
	CSXT	NS	BNSF	KCS	UP		CN	CP
03/07/15	1,907	3,022	9,944	997	4,970	20,840	4,585	4,615
This week last year	1,554	3,107	7,635	817	5,652	18,765	3,706	3,410
2015 YTD	19,848	27,507	97,048	7,542	51,400	203,345	37,505	39,606
2014 YTD	17,630	26,696	77,725	8,951	52,520	183,522	34,159	41,815
2015 YTD as % of 2014 YTD	113	103	125	84	98	111	110	95
Last 4 weeks as % of 2014[1]	102	100	126	84	100	110	110	88
Last 4 weeks as % of 3-yr avg.[2]	102	100	114	135	115	111	112	85
Total 2014	103,331	153,771	482,431	47,510	297,969	1,085,012	242,616	276,322

[1]The past 4 weeks of this year as a percent of the same 4 weeks last year.

[2]The past 4 weeks as a percent of the same period from the prior 3-year average. YTD = year-to-date.

Figure 3

Total Weekly U.S. Class I Railroad Grain Car Loadings



Source: Association of American Railroads

Table 5

Railcar Auction Offerings[1] ($/car)[2]

Week ending	Delivery period							
3/12/2015	Mar-15	Mar-14	Apr-15	Apr-14	May-15	May-14	Jun-15	Jun-14
BNSF[3]								
COT grain units	no offer	no offer	0	no offer	1	no offer	1	no offer
COT grain single-car[5]	no offer	no offer	0 . . 6	no offer	0 . . 6	no offer	0 . . 6	no offer
UP[4]								
GCAS/Region 1	no offer	no offer	no bids	no offer	no bids	79	n/a	n/a
GCAS/Region 2	no offer	no offer	no bids	no offer	no bids	162	n/a	n/a

[1]Auction offerings are for single-car and unit train shipments only.

[2]Average premium/discount to tariff, last auction

[3]BNSF - COT = Certificate of Transportation; north grain and south grain bids were combined effective the week ending 6/24/06.

[4]UP - GCAS = Grain Car Allocation System

Region 1 includes: AR, IL, LA, MO, NM, OK, TX, WI, and Duluth, MN.

Region 2 includes: CO, IA, KS, MN, NE, WY, and Kansas City and St. Joseph, MO.

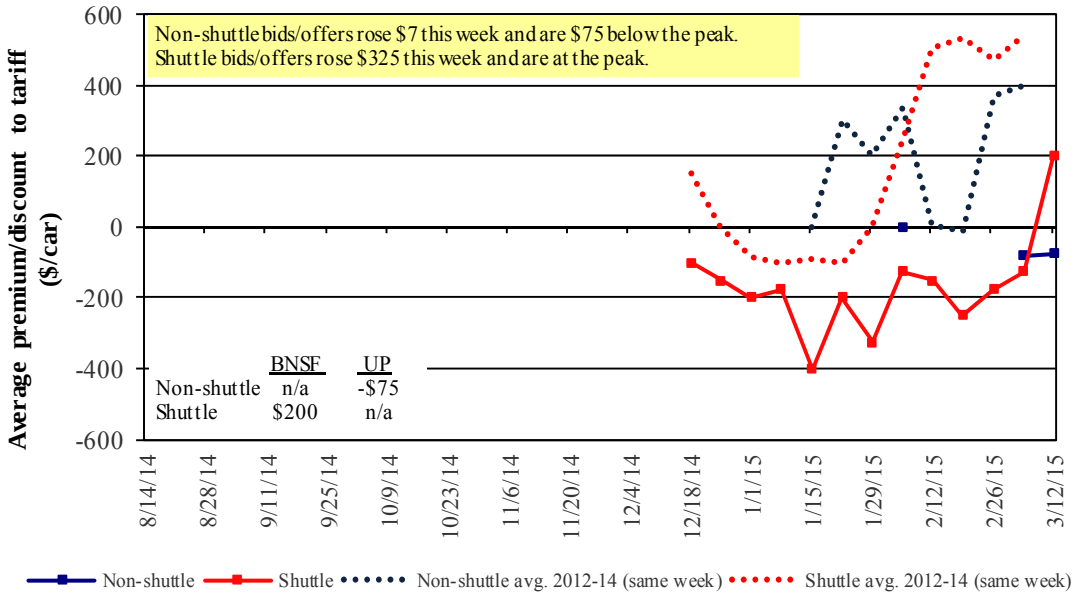
[5]Range is shown because average is not available. Not available = n/a.

Source: Transportation & Marketing Programs/AMS/USDA.

The **secondary rail market** information reflects trade values for service that was originally purchased from the railroad carrier as some form of guaranteed freight. The **auction and secondary rail** values are indicators of rail service quality and demand/ supply.

Figure 4

Bids/Offers for Railcars to be Delivered in March 2015, Secondary Market

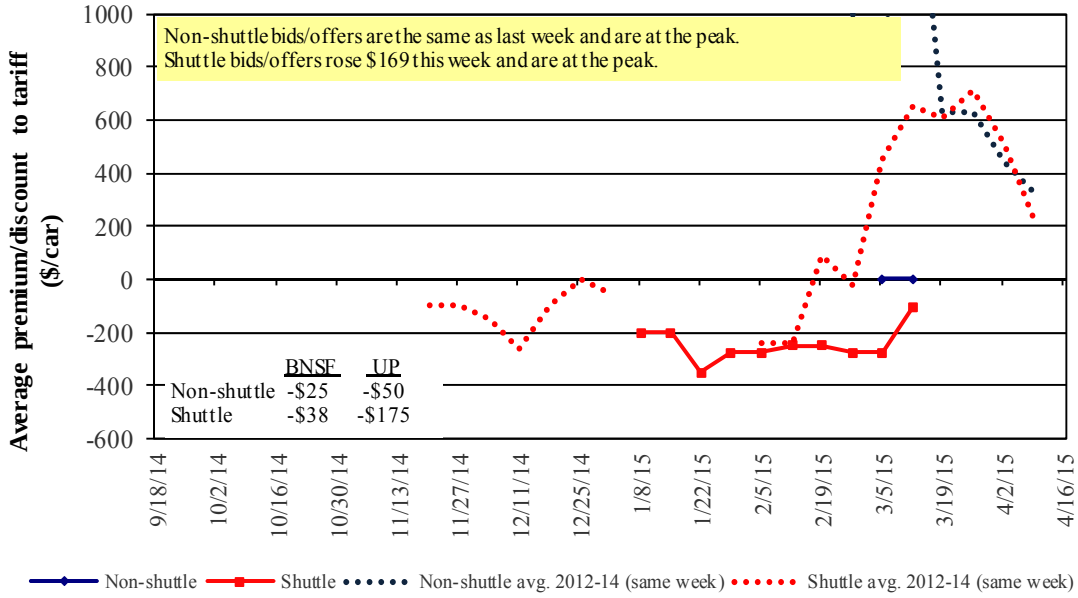


Non-shuttle bids include unit-train and single-car bids. n/a = not available.

Source: Transportation & Marketing Programs/AMS/USDA

Figure 5

Bids/Offers for Railcars to be Delivered in April 2015, Secondary Market

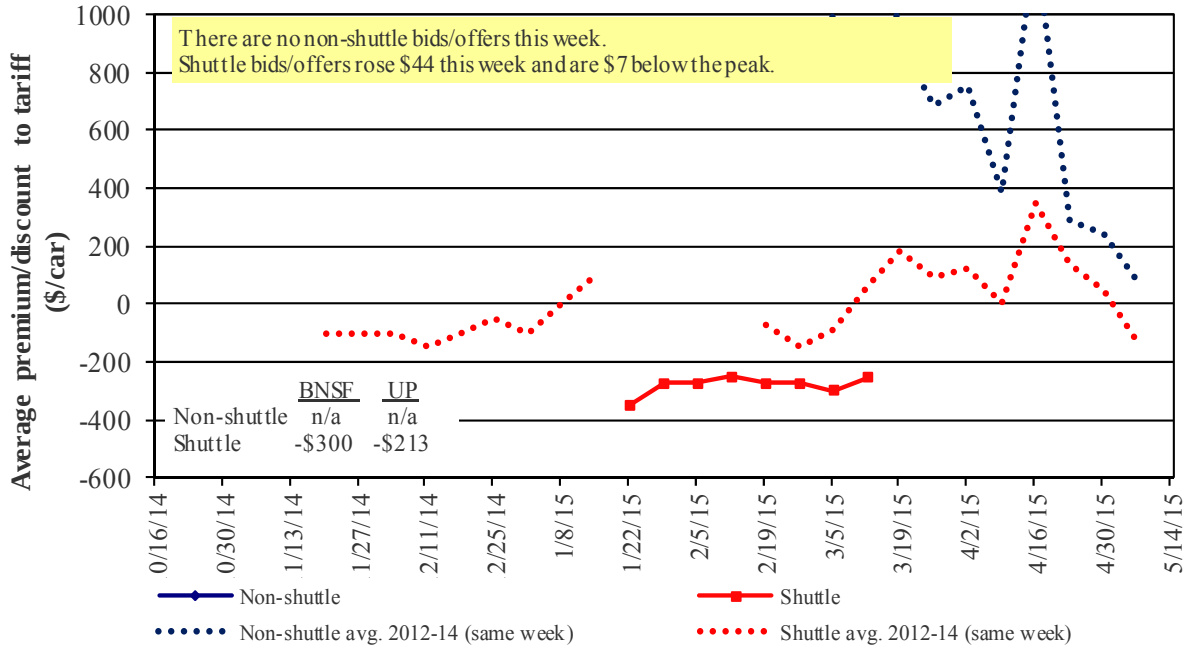


Non-shuttle bids include unit-train and single-car bids. n/a = not available.

Source: Transportation & Marketing Programs/AMS/USDA

Figure 6

Bids/Offers for Railcars to be Delivered in May 2015, Secondary Market



Non-shuttle bids include unit-train and single-car bids. n/a = not available.

Source: Transportation & Marketing Programs/AMS/USDA

Table 6

Weekly Secondary Railcar Market ($/car)[1]

Week ending	Delivery period					
3/12/2015	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15
Non-shuttle						
BNSF-GF	n/a	(25)	n/a	n/a	n/a	n/a
Change from last week	n/a	n/a	n/a	n/a	n/a	n/a
Change from same week 2014	n/a	(2,525)	n/a	n/a	n/a	n/a
UP-Pool	(75)	(50)	n/a	n/a	n/a	n/a
Change from last week	(12)	(50)	n/a	n/a	n/a	n/a
Change from same week 2014	(1,275)	(1,050)	n/a	n/a	n/a	n/a
Shuttle[2]						
BNSF-GF	200	(38)	(300)	n/a	n/a	n/a
Change from last week	200	n/a	n/a	n/a	n/a	n/a
Change from same week 2014	(5,675)	(3,538)	n/a	n/a	n/a	n/a
UP-Pool	n/a	(175)	(213)	(213)	(200)	(200)
Change from last week	n/a	100	87	87	75	75
Change from same week 2014	n/a	(1,175)	(813)	n/a	n/a	n/a

[1]Average premium/discount to tariff, $/car-last week

[2]Shuttle bids are a new data series; prior to this we provided only non-shuttle rates.

Note: Bids listed are market INDICATORS only & are NOT guaranteed prices,
n/a = not available; GF = guaranteed freight; Pool = guaranteed pool

Sources: Transportation and Marketing Programs/AMS/USDA

Data from James B. Joiner Co., Tradewest Brokerage Co.

The **tariff rail rate** is the base price of freight rail service, and together with **fuel surcharges** and any **auction and secondary rail** values constitute the full cost of shipping by rail. Typically, auction and secondary rail values are a small fraction of the full cost of shipping by rail relative to the tariff rate. High auction and secondary rail values, during times of high rail demand or short supply, can exceed the cost of the tariff rate plus fuel surcharge.

Table 7

Tariff Rail Rates for Unit and Shuttle Train Shipments[1]

Effective date:							Percent
			Tariff	Fuel surcharge	Tariff plus surcharge per:		change
3/1/2015	Origin region*	Destination region*	rate/car	per car	metric ton	bushel[2]	Y/Y[3]
Unit train							
Wheat	Wichita, KS	St. Louis, MO	$3,387	$91	$34.54	$0.94	3
	Grand Forks, ND	Duluth-Superior, MN	$3,596	$39	$36.09	$0.98	-2
	Wichita, KS	Los Angeles, CA	$6,244	$199	$63.98	$1.74	-5
	Wichita, KS	New Orleans, LA	$4,026	$160	$41.57	$1.13	1
	Sioux Falls, SD	Galveston-Houston, TX	$5,824	$163	$59.46	$1.62	-4
	Northwest KS	Galveston-Houston, TX	$4,293	$176	$44.37	$1.21	1
	Amarillo, TX	Los Angeles, CA	$4,492	$244	$47.03	$1.28	-1
Corn	Champaign-Urbana, IL	New Orleans, LA	$3,328	$181	$34.85	$0.89	-1
	Toledo, OH	Raleigh, NC	$5,555	$217	$57.31	$1.46	13
	Des Moines, IA	Davenport, IA	$2,168	$38	$21.91	$0.56	2
	Indianapolis, IN	Atlanta, GA	$4,761	$163	$48.89	$1.24	13
	Indianapolis, IN	Knoxville, TN	$4,104	$104	$41.79	$1.06	15
	Des Moines, IA	Little Rock, AR	$3,308	$113	$33.97	$0.86	-1
	Des Moines, IA	Los Angeles, CA	$4,852	$328	$51.44	$1.31	-12
Soybeans	Minneapolis, MN	New Orleans, LA	$3,769	$179	$39.20	$1.07	0
	Toledo, OH	Huntsville, AL	$4,676	$154	$47.96	$1.31	21
	Indianapolis, IN	Raleigh, NC	$5,625	$218	$58.02	$1.58	13
	Indianapolis, IN	Huntsville, AL	$4,368	$104	$44.41	$1.21	25
	Champaign-Urbana, IL	New Orleans, LA	$3,974	$181	$41.26	$1.12	1
Shuttle Train							
Wheat	Great Falls, MT	Portland, OR	$3,678	$114	$37.66	$1.02	-5
	Wichita, KS	Galveston-Houston, TX	$3,471	$89	$35.35	$0.96	-12
	Chicago, IL	Albany, NY	$4,723	$203	$48.92	$1.33	14
	Grand Forks, ND	Portland, OR	$5,159	$198	$53.19	$1.45	-6
	Grand Forks, ND	Galveston-Houston, TX	$6,084	$206	$62.46	$1.70	-5
	Northwest KS	Portland, OR	$5,260	$288	$55.09	$1.50	-1
Corn	Minneapolis, MN	Portland, OR	$5,000	$241	$52.04	$1.32	-7
	Sioux Falls, SD	Tacoma, WA	$4,960	$220	$51.44	$1.31	-7
	Champaign-Urbana, IL	New Orleans, LA	$3,147	$181	$33.05	$0.84	-1
	Lincoln, NE	Galveston-Houston, TX	$3,510	$128	$36.13	$0.92	-6
	Des Moines, IA	Amarillo, TX	$3,690	$142	$38.05	$0.97	-1
	Minneapolis, MN	Tacoma, WA	$5,000	$239	$52.02	$1.32	-7
	Council Bluffs, IA	Stockton, CA	$4,400	$247	$46.15	$1.17	-8
Soybeans	Sioux Falls, SD	Tacoma, WA	$5,520	$220	$57.00	$1.55	-6
	Minneapolis, MN	Portland, OR	$5,530	$241	$57.31	$1.56	-7
	Fargo, ND	Tacoma, WA	$5,430	$196	$55.87	$1.52	-6
	Council Bluffs, IA	New Orleans, LA	$3,800	$209	$39.81	$1.08	-13
	Toledo, OH	Huntsville, AL	$3,851	$154	$39.77	$1.08	27
	Grand Island, NE	Portland, OR	$5,100	$295	$53.57	$1.46	-5

[1]A unit train refers to shipments of at least 25 cars. Shuttle train rates are available for qualified shipments of 75-120 cars that meet railroad efficiency requirements.

[2]Approximate load per car = 111 short tons (100.7 metric tons): corn 56 lbs./bu., wheat & soybeans 60 lbs./bu.

[3]Percentage change year over year calculated using tariff rate plus fuel surchage

Sources: www.bnsf.com, www.cpr.ca, www.csx.com, www.uprr.com

*Regional economic areas defined by the Bureau of Economic Analysis (BEA)

Table 8

Tariff Rail Rates for U.S. Bulk Grain Shipments to Mexico

Effective date: 3/1/2015							
				Fuel			Percent
	Origin		Tariff	surcharge	Tariff plus surcharge per:		change
Commodity	state	Destination region	rate/car[1]	per car[2]	metric ton[3]	bushel[3]	Y/Y[4]
Wheat	MT	Chihuahua, CI	$6,960	$209	$73.25	$1.99	4
	OK	Cuautitlan, EM	$6,565	$254	$69.67	$1.89	0
	KS	Guadalajara, JA	$7,010	$245	$74.13	$2.02	0
	TX	Salinas Victoria, NL	$3,885	$96	$40.68	$1.11	26
Corn	IA	Guadalajara, JA	$8,349	$288	$88.25	$2.24	-1
	SD	Celaya, GJ	$7,656	$274	$81.02	$2.06	-6
	NE	Queretaro, QA	$7,535	$256	$79.61	$2.02	-3
	SD	Salinas Victoria, NL	$5,880	$208	$62.20	$1.58	-5
	MO	Tlalnepantla, EM	$6,887	$249	$72.91	$1.85	-4
	SD	Torreon, CU	$6,922	$229	$73.07	$1.85	-3
Soybeans	MO	Bojay (Tula), HG	$8,261	$243	$86.89	$2.36	0
	NE	Guadalajara, JA	$8,872	$278	$93.49	$2.54	-1
	IA	El Castillo, JA	$9,155	$272	$96.32	$2.62	-2
	KS	Torreon, CU	$7,189	$173	$75.21	$2.04	0
Sorghum	TX	Guadalajara, JA	$7,253	$178	$75.93	$1.93	0
	NE	Celaya, GJ	$7,287	$248	$76.99	$1.95	-4
	KS	Queretaro, QA	$6,795	$156	$71.02	$1.80	-2
	NE	Salinas Victoria, NL	$5,500	$183	$58.06	$1.47	-3
	NE	Torreon, CU	$6,518	$204	$68.68	$1.74	-1

[1]Rates are based upon published tariff rates for high-capacity shuttle trains. Shuttle trains are available for qualified shipments of 75--110 cars that meet railroad efficiency requirements.

[2]Fuel surcharge adjusted to reflect the change in Ferrocarril Mexicano, S.A. de C.V railroad fuel surcharge policy as of 10/01/2009

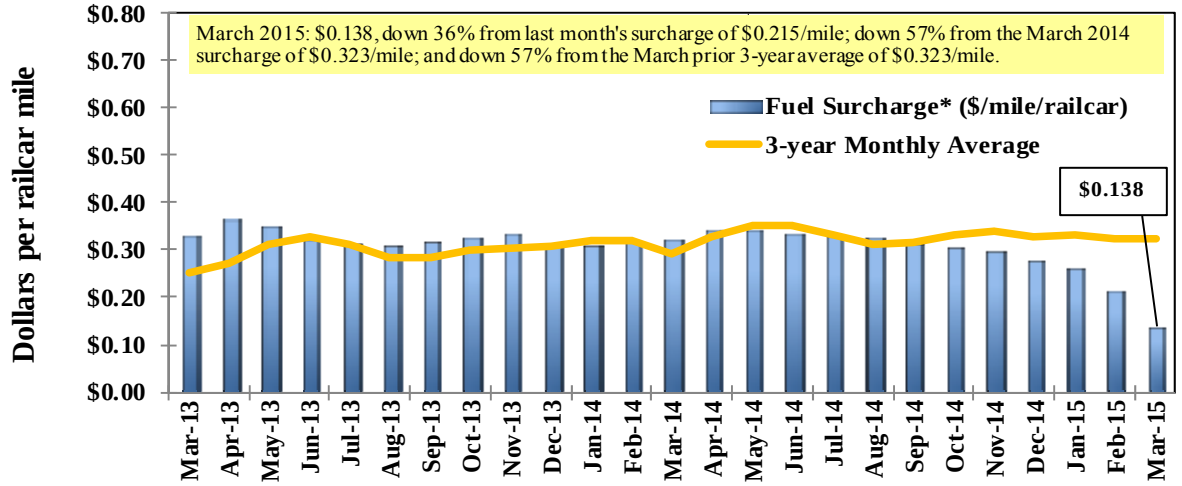
[3]Approximate load per car = 97.87 metric tons: Corn & Sorghum 56 lbs/bu, Wheat & Soybeans 60 lbs/bu

[4]Percentage change year over year calculated using tariff rate plus fuel surchage

Sources: www.bnsf.com, www.uprr.com, www.kcsouthern.com

Figure 7

Railroad Fuel Surcharges, North American Weighted Average[1]



[1] Weighted by each Class I railroad's proportion of grain traffic for the prior year.

* Mileage-based fuel surcharges for March and April 2007 are estimated. Beginning January 2009, the Canadian Pacific fuel surcharge is computed by a monthly average of the bi-weekly fuel surcharge.

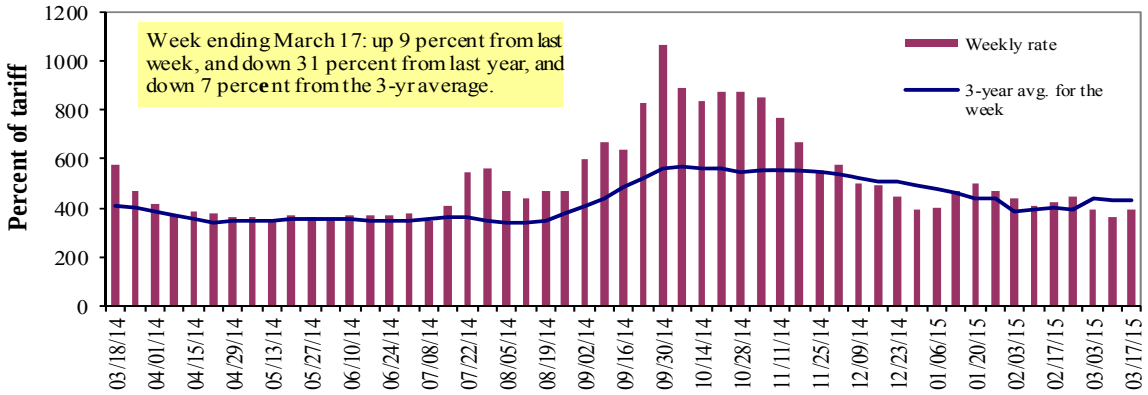
** BNSF strike price (diesel price when fuel surcharges begin) changed from $1.25/gal. to $2.50/gal starting March 1, 2011. As a result, the weighted average fuel surcharge for March 2011 was $0.227/mile instead of $0.331/mile.

Sources: www.bnsf.com, www.cn.ca, www.cpr.ca, www.csx.com, www.kcsi.com, www.nscorp.com, www.uprr.com

Barge Transportation

Figure 8

Illinois River Barge Freight Rate[1,2]



[1]Rate = percent of 1976 tariff benchmark index (1976 = 100 percent); [2]4-week moving average of the 3-year average.
Source: Transportation & Marketing Programs/AMS/USDA

Table 9

Weekly Barge Freight Rates: Southbound Only

		Twin Cities	Mid-Mississippi	Lower Illinois River	St. Louis	Cincinnati	Lower Ohio	Cairo-Memphis
Rate[1]	3/17/2015	-	-	397	312	260	260	250
	3/10/2015	-	-	365	250	255	255	198
$/ton	3/17/2015	-	-	18.42	12.45	12.19	10.50	7.85
	3/10/2015	-	-	16.94	9.98	11.96	10.30	6.22
Current week % change from the same week:								
	Last year	-	-	-31	-33	-46	-46	-34
	3-year avg.[2]	-	-	-7	-11	-28	-28	-12
Rate[1]	April	410	363	357	258	240	240	210
	June	400	350	342	243	235	235	208

[1]Rate = percent of 1976 tariff benchmark index (1976 = 100 percent); [2]4-week moving average; ton = 2,000 pounds
Source: Transportation & Marketing Programs/AMS/USDA

Figure 9
Benchmark tariff rates

Calculating barge rate per ton:
(Rate * 1976 tariff benchmark rate per ton)/100

Select applicable index from market quotes included in tables on this page. The 1976 benchmark rates per ton are provided in map.

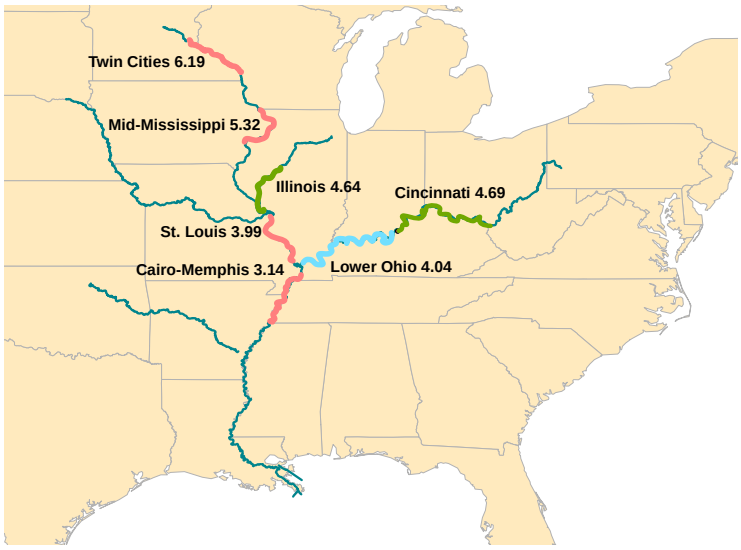
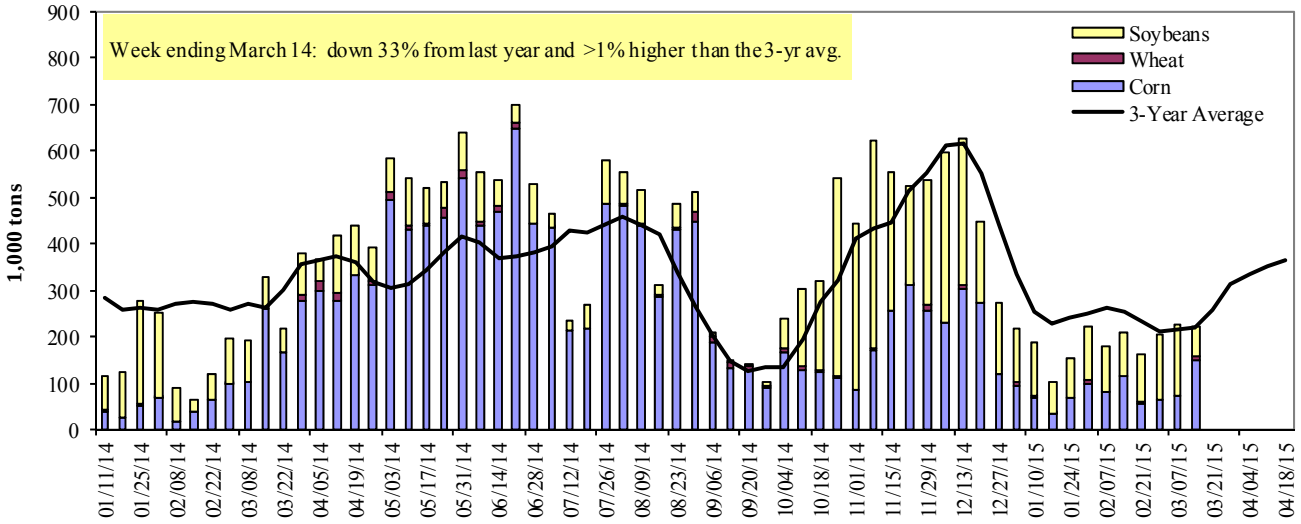


Figure 10

Barge Movements on the Mississippi River[1] (Locks 27 - Granite City, IL)



[1] The 3-year average is a 4-week moving average.

Source: U.S. Army Corps of Engineers

Table 10

Barge Grain Movements (1,000 tons)

Week ending 03/14/2015	Corn	Wheat	Soybeans	Other	Total
Mississippi River					
Rock Island, IL (L15)	0	0	0	0	0
Winfield, MO (L25)	8	0	0	0	8
Alton, IL (L26)	160	5	57	0	222
Granite City, IL (L27)	152	5	65	0	222
Illinois River (L8)	53	0	71	0	124
Ohio River (L52)	45	4	46	0	95
Arkansas River (L1)	0	15	28	1	45
Weekly total - 2015	197	24	139	1	362
Weekly total - 2014	535	47	174	1	757
2015 YTD[1]	2,490	204	2,688	44	5,425
2014 YTD	2,835	233	2,814	36	5,918
2015 as % of 2014 YTD	88	87	96	124	92
Last 4 weeks as % of 2014[2]	59	56	119	110	78
Total 2014	20,693	2,181	11,813	258	34,946

[1] Weekly total, YTD (year-to-date) and calendar year total includes Miss/27, Ohio/52, and Ark/1; "Other" refers to oats, barley, sorghum, and rye.

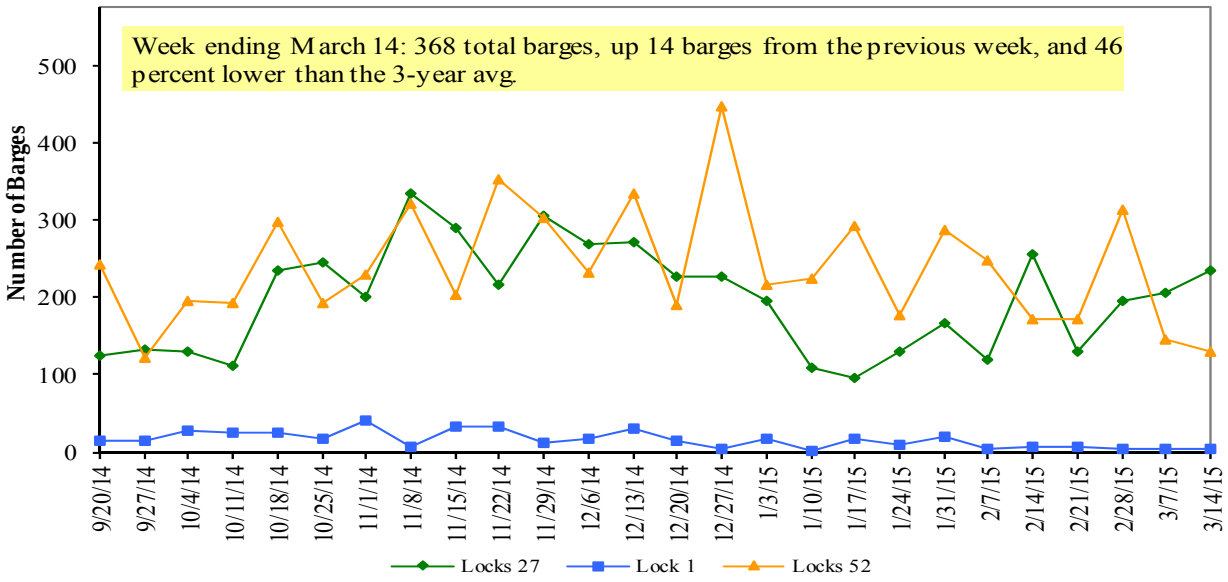
[2] As a percent of same period in 2014.

Note: Total may not add exactly, due to rounding

Source: U.S. Army Corps of Engineers

Figure 11

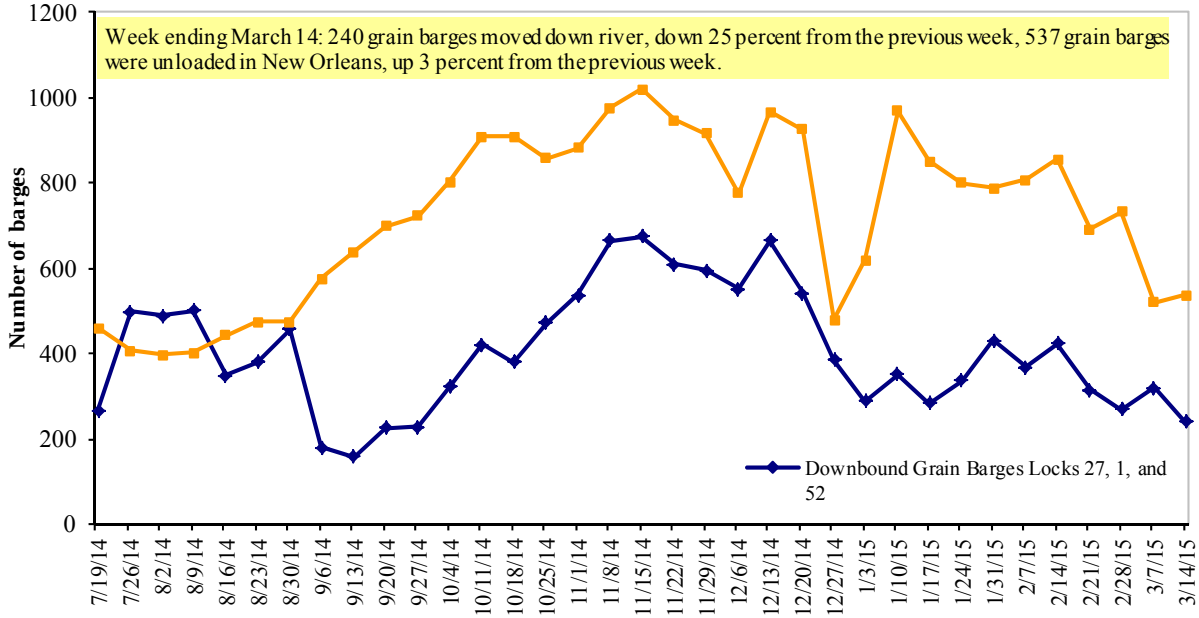
Upbound Empty Barges Transiting Mississippi River Locks 27, Arkansas River Lock and Dam 1, and Ohio River Locks and Dam 52



Source: U.S. Army Corps of Engineers

Figure 12

Grain Barges for Export in New Orleans Region



Source: U.S. Army Corps of Engineers and GIPSA

Truck Transportation

The **weekly diesel price** provides a proxy for trends in U.S. truck rates as diesel fuel is a significant expense for truck grain movements.

Table 11

Retail on-Highway Diesel Prices[1], Week Ending 03/16/2014 (US $/gallon)

Region	Location	Price	Change from Week ago	Change from Year ago
I	East Coast	3.082	-0.023	-1.056
	New England	3.270	-0.062	-1.043
	Central Atlantic	3.311	-0.022	-1.003
	Lower Atlantic	2.870	-0.014	-1.103
II	Midwest[2]	2.820	-0.032	-1.174
III	Gulf Coast[3]	2.763	-0.032	-1.040
IV	Rocky Mountain	2.812	0.011	-1.179
V	West Coast	3.064	-0.032	-0.956
	West Coast less California	2.894	-0.032	-1.048
	California	3.202	-0.031	-0.885
Total	U.S.	2.917	-0.027	-1.086

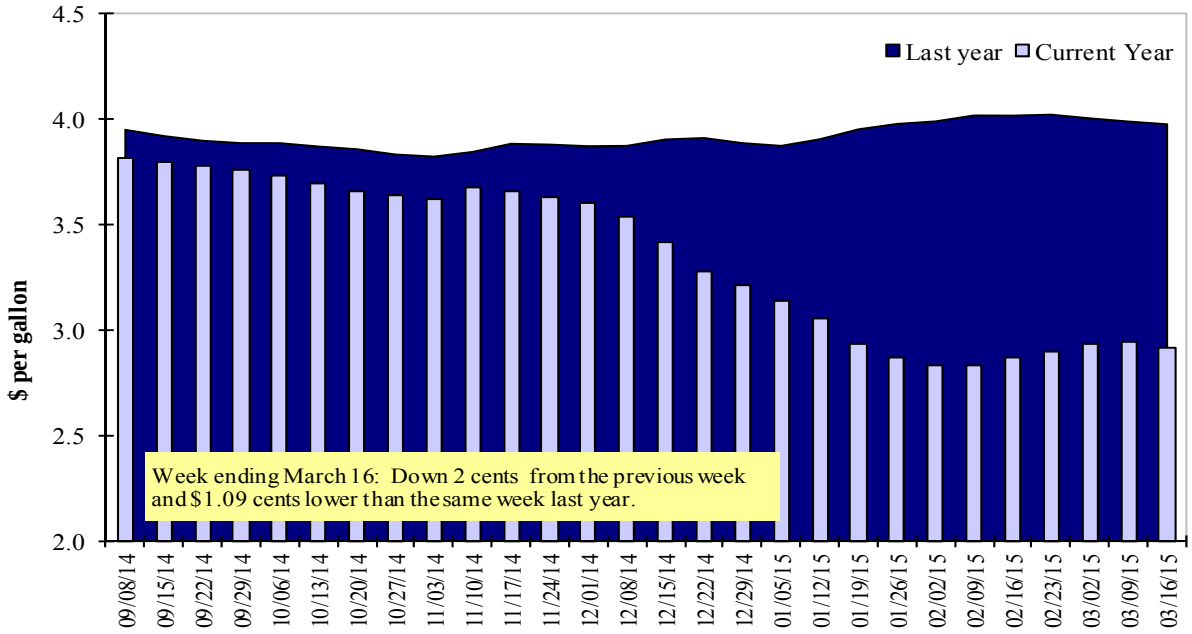
[1]Diesel fuel prices include all taxes. Prices represent an average of all types of diesel fuel.

[2]Same as North Central [3]Same as South Central

Source: Energy Information Administration/U.S. Department of Energy (www.eia.doe.gov)

Figure 13

Weekly Diesel Fuel Prices, U.S. Average



Source: Retail On-Highway Diesel Prices, Energy Information Administration, Dept. of Energy

Grain Exports

Table 12

U.S. Export Balances and Cumulative Exports (1,000 metric tons)

	Wheat						Corn	Soybeans	Total
Week ending	HRW	SRW	HRS	SWW	DUR	All wheat			
Export Balances[1]									
3/5/2015	1,699	712	1,745	734	132	5,021	15,997	5,794	26,812
This week year ago	1,716	980	1,649	1,121	163	5,629	18,977	6,234	30,840
Cumulative exports-marketing year[2]									
2014/15 YTD	5,237	2,834	5,611	3,035	516	17,233	18,883	41,994	78,110
2013/14 YTD	9,192	6,280	4,604	3,087	322	23,485	20,048	37,996	81,529
YTD 2014/15 as % of 2013/14	57	45	122	98	160	73	94	111	96
Last 4 wks as % of same period 2013/14	95	75	105	74	82	90	89	103	92
2013/14 Total	11,465	7,307	6,338	4,367	486	29,963	46,868	44,478	121,309
2012/13 Total	10,019	5,039	5,825	4,619	591	26,093	17,980	36,220	80,293

[1] Current unshipped export sales to date

[2] Shipped export sales to date; new marketing year in effect for corn and soybeans

Note: YTD = year-to-date. Marketing Year: wheat = 6/01-5/31, corn & soybeans = 9/01-8/31

Source: Foreign Agricultural Service/USDA (www.fas.usda.gov)

Table 13

Top 5 Importers[1] of U.S. Corn

Week ending 03/05/2015	Total Commitments[2] 2014/15 Current MY	2013/14 Last MY	% change current MY from last MY	Exports[3] 3-year avg 2011-2013
	- 1,000 mt -			- 1,000 mt -
Japan	7,540	8,381	(10)	10,079
Mexico	8,641	8,926	(3)	8,145
Korea	2,379	2,160	10	2,965
Colombia	3,001	1,930	56	3,461
Taiwan	1,083	1,187	(9)	1,238
Top 5 Importers	**22,644**	**22,584**	**0**	**25,887**
Total US corn export sales	**36,045**	**38,165**	**(6)**	**34,445**
% of Projected	79%	78%		
Change from prior week	418	634		
Top 5 importers' share of U.S. corn export sales	63%	59%		75%
USDA forecast, March 2015	**45,720**	**48,700**	**(6)**	
Corn Use for Ethanol USDA forecast, March 2015	**132,080**	**130,404**	**1**	

(n) indicates negative number.

[1]Based on FAS Marketing Year Ranking Reports - www.fas.usda.gov; Marketing year (MY) = Sep 1 - Aug 31.

[2]Cumulative Exports (shipped) + Outstanding Sales (unshipped), FAS Weekly Export Sales Report, or Export Sales Query--http://www.fas.usda.gov/esrquery/

[3]FAS Marketing Year Ranking Reports - http://apps.fas.usda.gov/export-sales/myrkaug.htm; 3-yr average

Table 14

Top 5 Importers[1] of U.S. Soybeans

Week Ending 03/05/2015	Total Commitments[2] 2014/15 Current MY	2013/14 Last MY	% change current MY from last MY	Exports[3] 3-yr avg. 2011-13
	- 1,000 mt -			- 1,000 mt -
China	29,827	27,702	8	24,211
Mexico	2,648	2,829	(6)	2,971
Indonesia	1,347	1,780	(24)	1,895
Japan	1,497	1,558	(4)	1,750
Taiwan	1,110	978	14	1,055
Top 5 importers	**36,430**	**34,846**	**5**	**31,882**
Total US soybean export sales	**47,789**	**44,230**	**8**	**39,169**
% of Projected	98%	99%		
Change from prior week*	168	838		
Top 5 importers' share of U.S. soybean export sales	76%	79%		**81%**
USDA forecast, March 2015	**48,720**	**44,820**	**9**	

(n) indicates negative number.

[1]Based on FAS Marketing Year Ranking Reports - www.fas.usda.gov; Marketing year (MY) = Sep 1 - Aug 31.

[2]Cumulative Exports (shipped) + Outstanding Sales (unshipped), FAS Weekly Export Sales Report, or Export Sales Query--http://www.fas.usda.gov/esrquery/

[3] FAS Marketing Year Final Reports - www.fas.usda.gov/export-sales/myfi_rpt.htm. (Carryover plus Accumulated Exports)

* Includes revisions to previous week's data.

Table 15

Top 10 Importers[1] of All U.S. Wheat

Week Ending 03/05/2015	Total Commitments[2] 2014/15 Current MY	2013/14 Last MY	% change current MY from last MY	Exports[3] 3-yr avg 2011-2013
	- 1,000 mt -			- 1,000 mt -
Japan	2,908	2,638	10	3,243
Mexico	2,609	2,831	(8)	3,066
Nigeria	1,907	2,486	(23)	2,960
Philippines	2,193	1,776	23	2,006
China	378	4,259	(91)	1,830
Brazil	1,508	3,882	(61)	1,617
Korea	1,200	1,179	2	1,552
Taiwan	905	950	(5)	969
Indonesia	566	827	(32)	813
Colombia	559	721	(23)	610
Top 10 importers	**14,734**	**21,549**	(32)	**18,665**
Total US wheat export sales	**22,254**	**29,114**	**(24)**	**27,696**
% of Projected	91%	91%		
Change from prior week*	445	477		
Top 10 importers' share of U.S. wheat export sales	66%	74%		67%
USDA forecast, March 2015	**24,490**	**32,010**	**(23)**	

(n) indicates negative number.

[1] Based on FAS Marketing Year Ranking Reports - www.fas.usda.gov; Marketing year = Jun 1 - May 31.

[2] Cumulative Exports (shipped) + Outstanding Sales (unshipped), FAS Weekly Export Sales Report, or Export Sales Query--http://www.fas.usda.gov/esrquery/

[3] FAS Marketing Year Final Reports - www.fas.usda.gov/export-sales/myfi_rpt.htm.

Table 16

Grain Inspections for Export by U.S. Port Region (1,000 metric tons)

Port regions	Week ending 03/12/15	Previous Week[1]	Current Week as % of Previous	2015 YTD[1]	2014 YTD[1]	2015 YTD as % of 2014 YTD	Last 4-weeks as % of 2014	Last 4-weeks as % of 3-yr. avg.	Total[1] 2014
Pacific Northwest									
Wheat	256	257	99	2,518	2,023	124	133	112	12,436
Corn	131	445	30	1,546	946	163	213	269	7,781
Soybeans	224	69	323	3,131	3,524	89	61	69	12,887
Total	**612**	**772**	**79**	**7,195**	**6,492**	**111**	**115**	**119**	**33,104**
Mississippi Gulf									
Wheat	102	40	252	712	729	98	120	50	4,495
Corn	463	589	79	5,440	4,857	112	95	136	30,912
Soybeans	319	440	72	7,777	7,747	100	58	96	29,087
Total	**884**	**1,070**	**83**	**13,929**	**13,333**	**104**	**77**	**107**	**64,495**
Texas Gulf									
Wheat	102	74	137	585	1,184	49	54	63	6,120
Corn	0	0	n/a	121	143	84	0	0	580
Soybeans	0	0	n/a	182	254	72	0	0	949
Total	**102**	**74**	**137**	**888**	**1,581**	**56**	**47**	**58**	**7,649**
Interior									
Wheat	87	24	358	300	218	137	61	192	1,400
Corn	128	121	105	1,085	947	115	108	97	5,677
Soybeans	52	62	85	881	930	95	113	79	4,312
Total	**267**	**207**	**129**	**2,266**	**2,096**	**108**	**171**	**98**	**11,389**
Great Lakes									
Wheat	0	0	n/a	12	0	n/a	n/a	603	935
Corn	0	0	n/a	0	0	n/a	n/a	0	288
Soybeans	0	0	n/a	0	0	n/a	n/a	0	988
Total	**0**	**0**	**n/a**	**12**	**0**	**n/a**	**n/a**	**489**	**2,211**
Atlantic									
Wheat	1	5	21	65	31	208	112	62	553
Corn	0	0	n/a	0	18	1	2	2	816
Soybeans	16	79	20	700	758	92	58	110	2,119
Total	**17**	**84**	**20**	**765**	**807**	**95**	**61**	**97**	**3,487**
U.S. total from ports[2]									
Wheat	547	401	136	4,191	4,185	100	108	87	25,939
Corn	722	1,155	63	8,191	6,911	119	113	146	46,054
Soybeans	611	650	94	12,671	13,213	96	60	86	50,342
Total	**1,881**	**2,207**	**85**	**25,054**	**24,309**	**103**	**87**	**106**	**122,335**

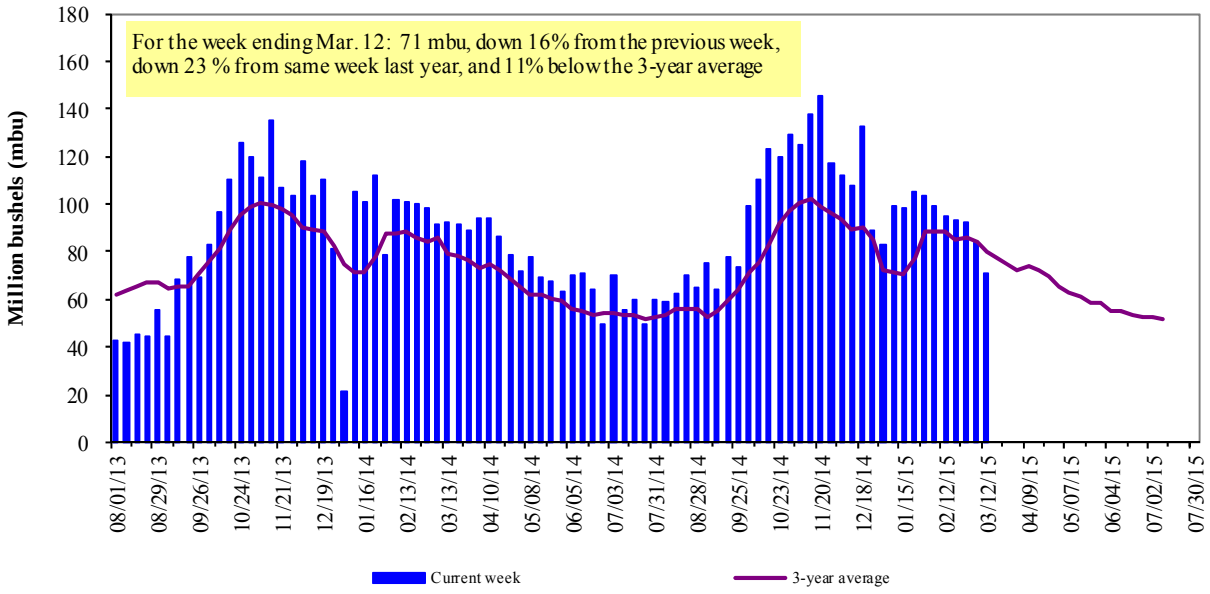
[1] Data includes revisions from prior weeks; some regional totals may not add exactly due to rounding.

Source: Grain Inspection, Packers and Stockyards Administration/USDA (www.gipsa.usda.gov); YTD= year-to-date; n/a = not applicable

The United States exports approximately one-quarter of the grain it produces. On average, this includes nearly 45 percent of U.S.-grown wheat, 35 percent of U.S.-grown soybeans, and 20 percent of the U.S.-grown corn. Approximately 59 percent of the U.S. export grain shipments departed through the U.S. Gulf region in 2014.

Figure 14

U.S. grain inspected for export (wheat, corn, and soybeans)

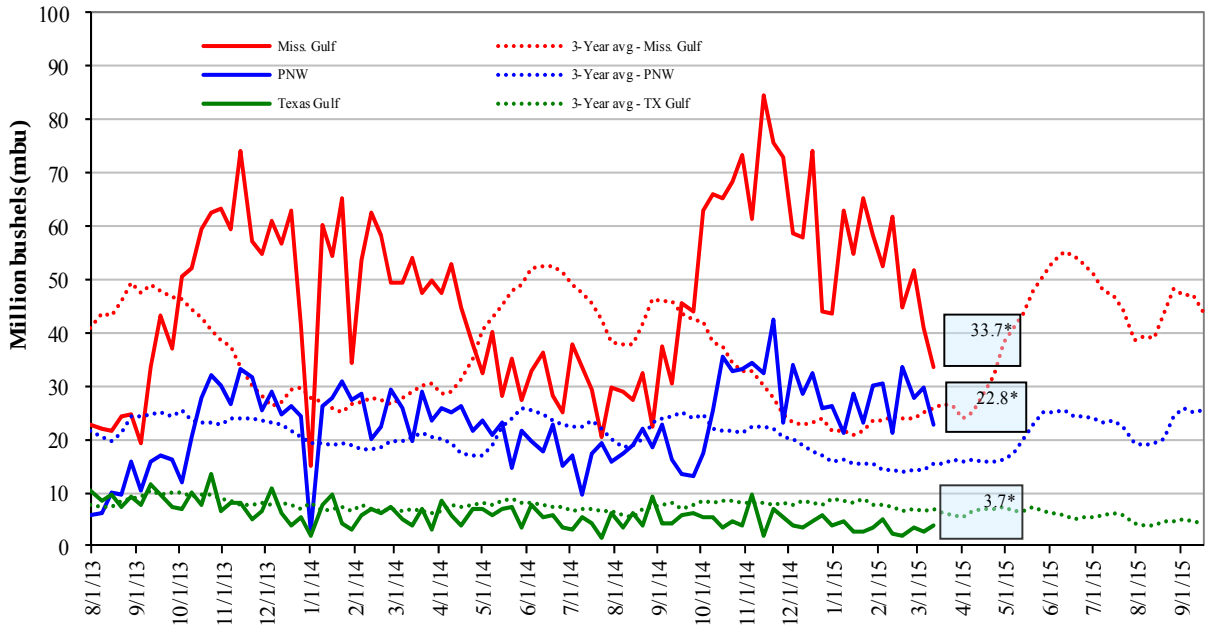


Source: Grain Inspection, Packers and Stockyards Administration/USDA (www.gipsa.usda.gov)

Note: 3-year average consists of 4-week running average

Figure 15

U.S. Grain Inspections: U.S. Gulf and PNW[1] (wheat, corn, and soybeans)



Source: Grain Inspection, Packers and Stockyards Administration/USDA (www.gipsa.usda.gov); *mbu, this week.

Mar. 12: % change from:	MS Gulf	TX Gulf	U.S. Gulf	PNW
Last week	down 18	up 37	down 14	down 23
Last year (same week)	down 38	down 8	down 36	up 16
3-yr avg. (4-wk mov. avg.	down 15	down 28	down 17	up 24

Ocean Transportation

Table 17

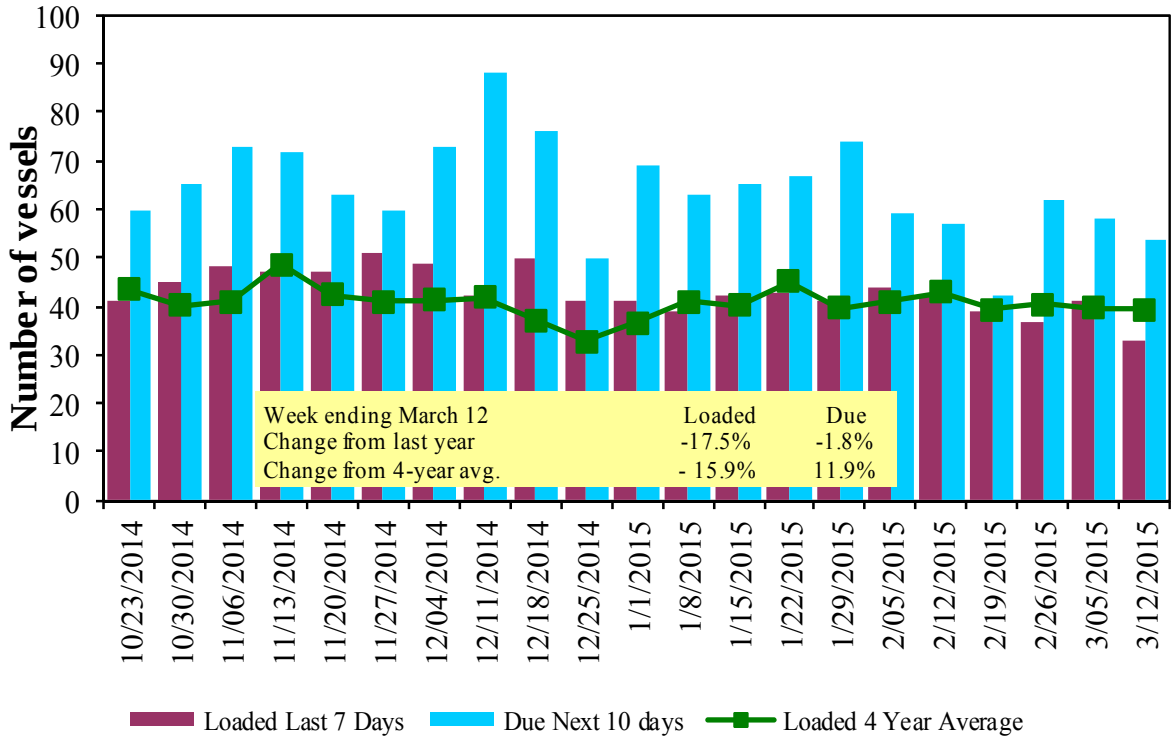
Weekly Port Region Grain Ocean Vessel Activity (number of vessels)

	Gulf			Pacific Northwest	Vancouver B.C.
Date	In port	Loaded 7-days	Due next 10-days	In port	In port
3/12/2015	39	33	54	14	n/a
3/5/2015	33	41	58	20	n/a
2014 range	(18..88)	(24..52)	(27..97)	(6..26)	n/a
2014 avg.	46	39	59	15	n/a

Source: Transportation & Marketing Programs/AMS/USDA

Figure 16

U.S. Gulf[1] Vessel Loading Activity

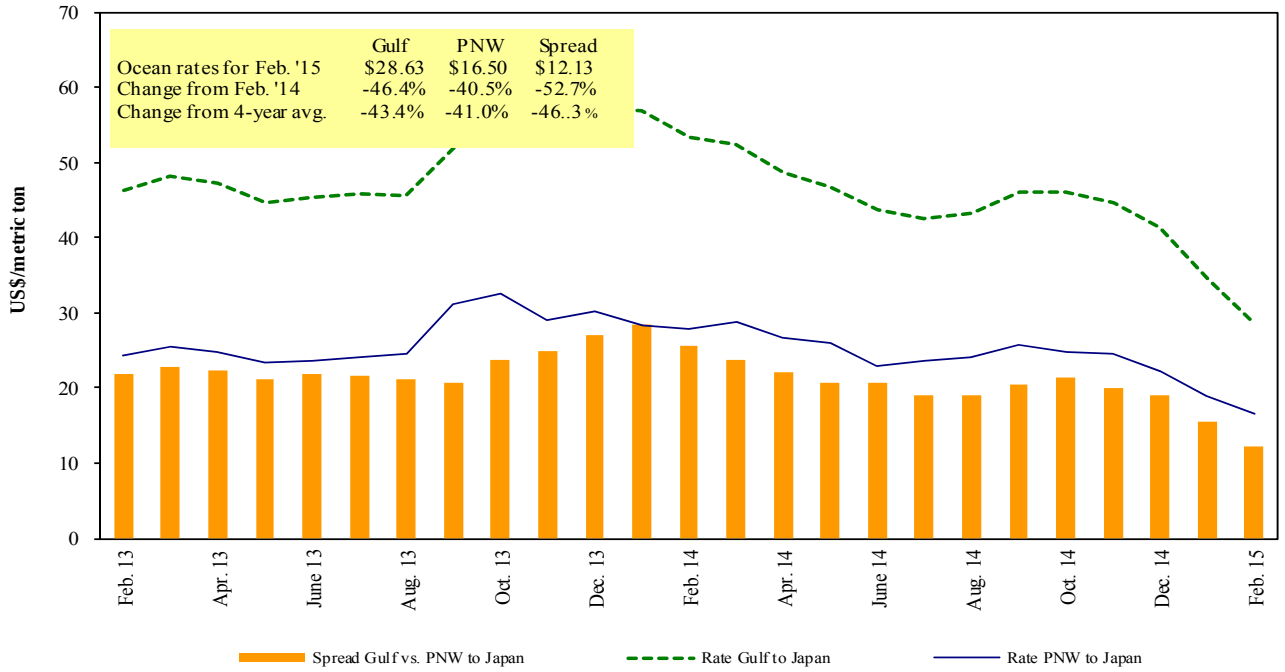


Source: Transportation & Marketing Programs/AMS/USDA

[1]U.S. Gulf includes Mississippi, Texas, and East Gulf.

Figure 17

Grain Vessel Rates, U.S. to Japan



Data Source: O'Neil Commodity Consulting

Table 18

Ocean Freight Rates For Selected Shipments, Week Ending 3/14/2015

Export region	Import region	Grain types	Loading date	Volume loads (metric tons)	Freight rate (US$/metric ton)
U.S. Gulf	China	Heavy Grain	Mar 5/14	58,000	30.75
U.S. Gu;f	China	Heavy Grain	Feb 13/22	60,000	28.00
U.S. Gulf	China	Heavy Grain	Feb 15/20	55,000	25.50
U.S. Gulf	China	Heavy Grain	Feb 10/20	55,000	25.50
U.S. Gulf	Cameroon[1]	Sorghum	Mar 16/26	7,960	136.16
U.S. Gulf	S. Africa[1]	Sorghum	Mar 16/26	5,000	136.16
U.S. Gulf	Tanzania[1]	Wheat	Mar 16/26	12,000	136.16
PNW	China	Grain	Mar 16/25	60,000	15.25
Brazil	China	Heavy Grain	Jun 1/30	60,000	22.75
Brazil	China	Grain	Apr 15/May 31	60,000	24.50
Brazil	China	Heavy Grain	Mar 25/Apr 4	60,000	21.50
Brazil	China	Heavy Grain	Mar 17/26	60,000	21.00
Brazil	China	Heavy Grain	Mar 13/22	60,000	21.00
Brazil	China	Heavy Grain	Mar 10/15	60,000	21.50
Brazil	China	Heavy Grain	Mar 3/8	60,000	20.50
Brazil	China	Heavy Grain	Feb 25/ Mar 5	60,000	23.25
Brazil	China	Heavy Grain	Feb 25/ Mar 5	60,000	21.25
Brazil	China	Heavy Grain	Feb 25/ Mar 5	60,000	21.75
River Plate	Egypt	Soybeans	Feb 15/20	25,000	21.50
River Plate	Mexico	Soybeans	Mar 10/15	31,000	22.25
River Plate	South Africa	Soybean Meal	Feb 20/24	25,000	18.75
Russia	Saudi Arabia	Barley	Ma5 5/12	70,000	16.50

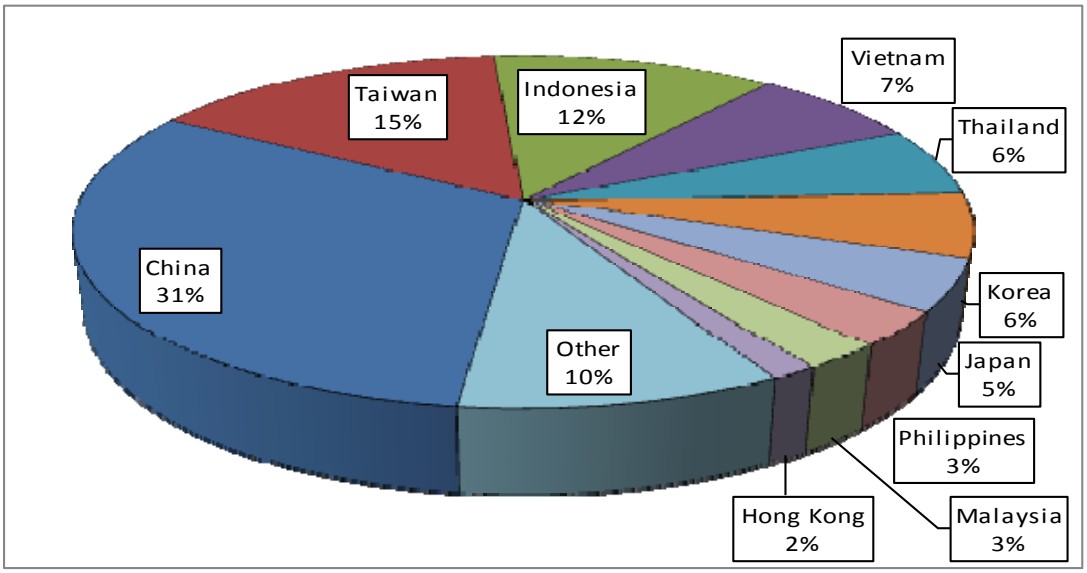
Rates shown are for metric ton (2,204.62 lbs. = 1 metric ton), F.O.B., except where otherwise indicates; op = option

[1]50 percent of food aid from the United States is required to be shipped on U.S.-flag vessels.

Source: Maritime Research Inc. (www.maritime-research.com)

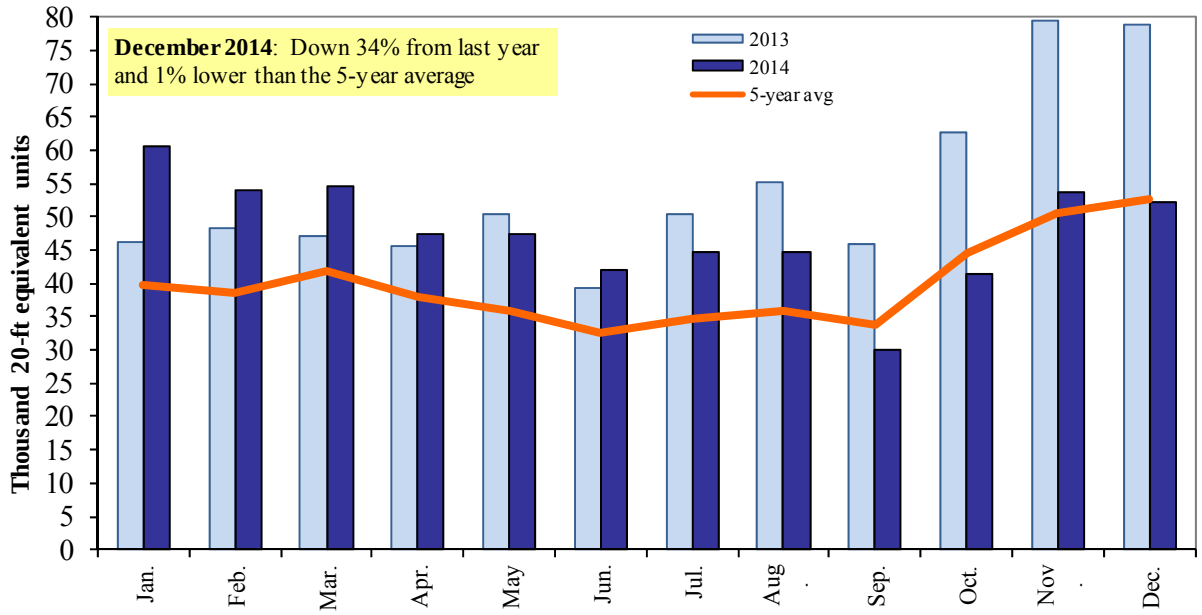
In 2013, containers were used to transport 10 percent of total U.S. waterborne grain exports, up 2 percentage points from 2012. Approximately 61 percent of U.S. waterborne grain exports in 2013 went to Asia, of which 16 percent were moved in containers. Asia is the top destination for U.S. containerized grain exports—97 percent in 2013.

Figure 18
Top 10 Destination Markets for U.S. Containerized Grain Exports, January-December 2014



Source: USDA/Agricultural Marketing Service/Transportation Services Division analysis of Port Import Export Reporting Service (PIERS) data
Note: The following Harmonized Tariff Codes are used to calculate containerized grains movements: 100190, 100200, 100300, 100400, 100590, 100700, 110100, 230310, 110220, 110290, 120100, 230210, 230990, 230330, and 120810.

Figure 19
Monthly Shipments of Containerized Grain to Asia



Source: USDA/Agricultural Marketing Service/Transportation Services Division analysis of Port Import Export Reporting Service (PIERS) data.

Note: The following Harmonized Tariff Codes are used to calculate containerized grains movements: 100190, 100200, 100300, 100400, 100590, 100700, 110100, 230310, 110220, 110290, 120100, 230210, 230990, 230330, and 120810.

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