



Grain Transportation Report

A weekly publication of the Transportation and Marketing Programs/Transportation Services Division
www.ams.usda.gov/GTR

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WEEKLY HIGHLIGHTS

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Grain Inspections Highest Since February

For the week ending October 2, **total inspections of grain** (corn, wheat, soybeans) from all major export regions reached 2.56 million metric tons (mmt), up 32 percent from the past week, 16 percent from last year, and 35 percent above the 3-year average. Grain inspections were also the highest since February 27. Inspections increased for each of the three major grains, with inspections of soybeans reaching 1mmt, the highest since March 6. Soybean inspections increased 39 percent from the past week and were destined primarily to Asia. China accounted for over 61 percent of total soybean shipments. Week-to-week grain inspections were up 32 percent in the Pacific Northwest (PNW) and up 39 percent in the Mississippi Gulf. During the week ending September 25, **outstanding export sales** (unshipped) were up for each of the major grains.

Senators Request USDA Economic Analysis of Rail Service Problems

On October 1, Senator Thune (SD), the ranking member of the Senate Commerce, Science, and Transportation Committee, and Senator Klobuchar (MN) sent a letter to Agriculture Secretary Vilsack requesting USDA perform a detailed economic analysis of the ongoing transportation challenges facing producers and agricultural end users in the Midwest. They state previous studies of rail service challenges have not been performed at the regional or national level. The study is requested to take into account commodity prices, food prices, and changes in agricultural exports.

Widespread Rains Cause Barge Rate Decrease

As of October 7, widespread rains delayed harvest in the Midwest and caused barge rates for export grain to drop 10 to 19 percent at principle inland origins. Lower Illinois River barge rates (**fig 8**) dropped 16 percent from the previous week, but rates are still 57 percent above the 3-year average. Barge grain movements of the locking portion of the river system were up 41 percent compared to last week, while shipments on the Lower Mississippi River (no locks) continue to be significant. During September, barge rates on the Mississippi, Illinois, and Ohio Rivers increased 47 percent compared to the 5-year average, with the largest increases at St. Louis, MO, and the lowest increases at Minneapolis-St. Paul, MN. Meanwhile, **grain loading** activity in the U.S. Gulf continued to pick up. As of the week ending October 2, 61 vessels are expected to be loaded within the next 10 days.

Diesel Fuel Prices Have Fallen for 14 Consecutive Weeks

Diesel fuel prices continue to fall in response to a fall in crude oil prices and increased output at diesel refineries (see **GTR, dated 9/25/14**). Diesel fuel prices have fallen for 14 consecutive weeks since the end of June. Since June 30, the average diesel price has declined 19 cents to \$3.73 per gallon, a 5-percent decrease. The last time the average diesel price was this low was July 16, 2012.

US-Mexico Cross-Border Trucking Pilot Program Ending; FMCSA Advisory Committee to Meet End of October

In October 2011, the Federal Motor Carrier Safety Administration (FMCSA) began the 3-year United States-Mexico cross-border long-haul trucking **pilot program** as part of its implementation of the North American Free Trade Agreement. This program was designed to test and demonstrate the ability of Mexico-based motor carriers to operate safely in the United States beyond the municipalities and commercial zones along the United States-Mexico border. The FMCSA Advisory Committee has held meetings that express a diversity of opinions regarding the pilot program. The next Advisory Committee meeting is scheduled for October 27-28. Past meeting agendas and notes are available at: <http://mcsac.fmcsa.dot.gov/meeting.htm>.

Snapshots by Sector

Rail

U.S. railroads originated 17,093 **carloads of grain** during the week ending September 27, down 12 percent from last week, 2 percent from last year, and 8 percent from the 3-year average.

During the week ending October 2, average October non-shuttle **secondary railcar bids/offers per car** were \$2,625 above tariff, down \$375 from last week and \$2,200 higher than last year. Average shuttle secondary railcar bids/offers per car were \$4,000 above tariff, down \$625 from last week and \$2,988 higher than last year.

Barge

During the week ending October 4 **barge grain movements** totaled 510,450 tons—41 percent higher than the previous week and 38 percent higher than the same period last year.

During the week ending October 4, 321 grain barges **moved down river**, up 41.4 percent from last week; 803 grain barges were **unloaded in New Orleans**, up 11.2 percent from the previous week.

Ocean

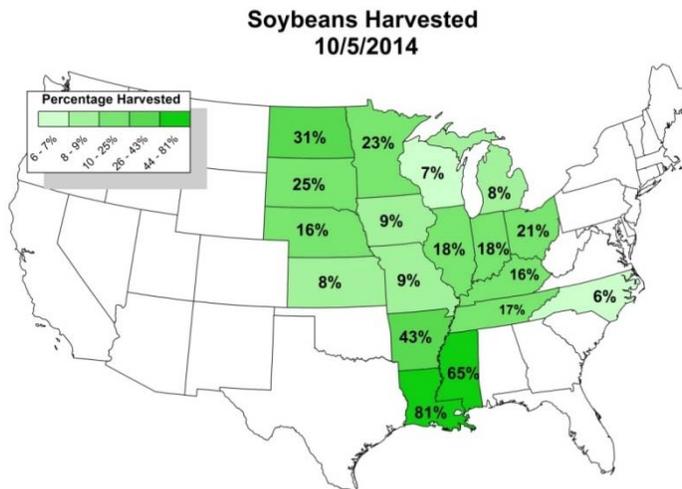
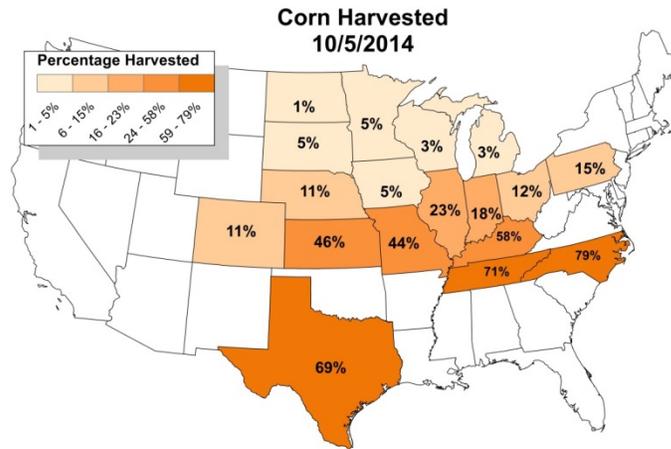
During the week ending October 3, the ocean freight rate for shipping bulk grain from the Gulf to Japan was \$47 per mt, up 2 percent from the previous week. The cost of shipping from the PNW to Japan was \$24.50 per mt, down 4 percent from the previous week.

HARVEST PROGRESS

Rains Delay Harvest, With More Rain Expected

For the week ending October 5, the corn and soybean harvest has been delayed by above-average rains in the Corn Belt. Illinois and Missouri had rain events that produced more than 4 inches for the week. The National Weather Service has issued forecasts for showers and thunderstorms across the southern Plains and Mississippi River Valley over the next several days. This will likely further delay the harvest progress and lessen the demand for barge services. The excessive rainfall has not caused significant delays for barge traffic. River levels are above average, but have been well below flood stage.

In Iowa, the corn harvest was 5 percent complete, 3 weeks behind the 5-year average. Nationwide, producers had harvested 17 percent of the corn by October 5, 15 percentage points behind the 5-year average. In Iowa, Minnesota, Nebraska, South Dakota, and Wisconsin, the soybean harvest was 20 percentage points or more behind the 5-year average harvest pace. Nationally, 20 percent of the soybean crop has been harvested, 15 percentage points behind the 5-year average.



Feature Article/Calendar

Dry Bulk and Container Vessels Orderbook: Implication on Fleet Sizes and Ocean Freight Rates

Ocean freight rates for bulk and containerized grain shipments have been relatively low, partly due to excess shipping capacity in both markets. Despite lower freight rates and a surplus vessel supply, new vessels are continually added to the fleet, especially in the bulk market. Rate fluctuations in both markets affect the competitiveness of grain shipments between the two markets. As the spread between the two rates shrinks, the two shipping options become more competitive with one another for shippers who have the option of using either bulk or containerized shipping methods.

Bulk Market

Bulk ocean freight rates reached record levels between the third quarter 2007 and the second quarter 2008, just prior to the 2008 Summer Olympics in Beijing, China. The increase in rates was fueled in part by the massive infrastructure projects undertaken by China in preparation for the Olympics. Following the onset of the global economic downturn during the third quarter of 2008, ocean freight rates plunged to some of the lowest levels in recent history during the fourth quarter of 2008. The increase in the bulk vessel fleet since the period of high ocean freight rates resulted in excess vessel supply when the global economic downturn began in 2008.

Since then, ocean freight rates have fluctuated, but have remained low. As of August 2014, the global dry bulk fleet consisted of 10,225 vessels, representing 749.3 million deadweight tons (mdwt) (table 1). The Panamax segment, usually used to transport grains, consisted of 2,006 vessels, representing about 154 mdwt, or approximately 20 percent of the dry bulk fleet.

Table 1: Global dry bulk operating fleet, August 2014

Type of vessel	Size (dwt)	No. of vessels	Capacity (mdwt)
Handysize	10,000-40,000	3,096	88.0
Handymax	40,000-65,000	3,091	164.2
Panamax	65,000-85,000	2,006	153.6
Post-Panamax	85,000-120,000	527	51.2
Capesize	120,000-220,000	1,298	231.5
Vloc	220,000+	207	60.8
Total		10,225	749.3

Source: Drewry Shipping Consultants.

Despite the excess vessel supply and depressed ocean freight rates, more vessels are scheduled for delivery, driven in part by moderate costs for newbuildings and owners' continued optimism of bulk market recovery. Table 2 shows the global dry bulk orderbook¹ from 2014 to 2017. About 173 mdwt of dry bulk vessel capacity are

Table 2: Global dry bulk orderbook, 2014-2017

Type of vessel	Size (dwt)	No. of vessels	Capacity (mdwt)	% of existing fleet
Handysize	10,000-40,000	477	16.767	19.0%
Handymax	40,000-65,000	775	48.807	29.0%
Panamax	65,000-85,000	415	33.204	22.0%
Post-Panamax	85,000-120,000	39	3.781	8.0%
Capesize	120,000-220,000	306	57.849	25.0%
Vloc	220,000+	53	14.241	25.0%
Total		2,065	172.649	23.2%

Source: Drewry Shipping Consultants.

scheduled for delivery between now and 2017, representing 23 percent of the existing vessel capacity. About 33 mdwt capacity of Panamax vessels are scheduled for delivery, representing 22 percent of the existing fleet capacity. A large portion of the vessels in the dry bulk orderbook is scheduled for delivery in 2015 and 2016.

Container Market

Much like the bulk market, the container freight rate market has been limited by the global oversupply of vessels since the start of the global recession, which limited the demand. This imbalance has put downward pressure on rates, keeping carriers from gaining proposed rate increases. In an effort to absorb some of the excess capacity, carriers have implemented practices such as slow-steaming and blank sailing. Slow-steaming reduces the overall

¹ Represents the numbers and deadweight tonnage capacity of newly built bulk vessels or twenty-foot equivalent units capacity of newly built container vessels scheduled for delivery.

speed of the voyage making it take longer, but be more fuel efficient. Blank sailing is the practice of omitting a particular sailing from a carrier's regular schedule to control capacity when cargo volumes are low.

Additionally, the introduction of very large container vessels has captivated the ocean carrier community, providing a competitive advantage and cost savings on a per-container basis. Maersk currently operates the largest container vessel in the world; it is capable of handling more than 18,000 twenty-foot equivalent units (teu). However, these ships take longer to load and unload, and have caused some port delays due to the increased number of containers being delivered per voyage. Currently, these very large vessels account for 14 percent of the operating fleet (see table 3). However, according to Drewry's most recent orderbook numbers, by 2018 this category of vessel will account for nearly 60 percent of the operating fleet capacity (see table 4). The Journal of Commerce recently reported that the cost advantage of operating these larger vessels is too great to ignore, so most major carriers are jumping on the bandwagon to build and operate the larger vessels.

Table 3: Global Container operating fleet, August 2014

Type of Vessel	Size (teu)	No. of Vessels	Capacity ('000 teu)	Capacity Share
Feeder	<1,000	1,091	675	4%
Handysize	1,000-2,000	1,219	1,715	10%
Intermediate	2,000-3,000	647	1,643	9%
Panamax	3,000-5,000	900	3,717	21%
Post-Panamax	5,000-8,000	610	3,651	20%
Large	8,000-10,000	385	3,329	19%
Very Large	10000-12,000	57	603	3%
	12,000+	181	2,491	14%
Total		5,090	17,823	100%

Source: Drewry Shipping Consultants.

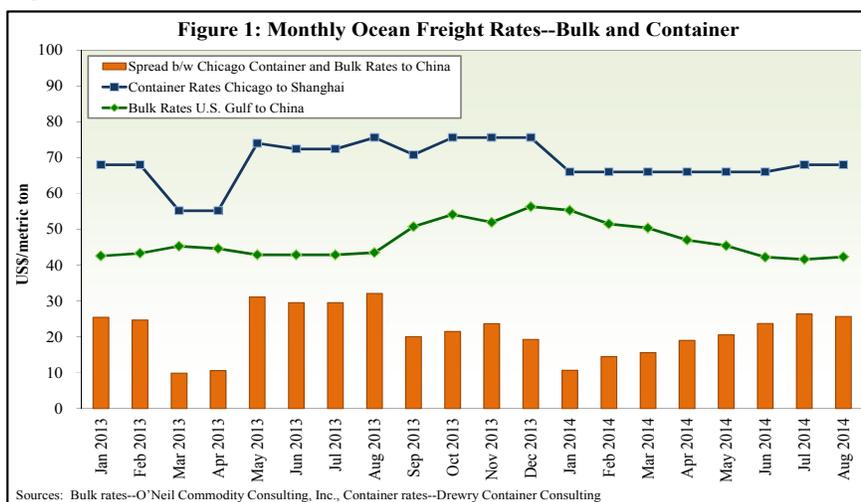
Table 4: Global container orderbook, 2014-2018

Type of Vessel	Size (teu)	No. of Vessels	Capacity ('000 teu)	% of existing fleet
Feeder	<1,000	5	4	0.6%
Handysize	1,000-2,000	71	103	6.0%
Intermediate	2,000-3,000	69	162	9.9%
Panamax	3,000-5,000	36	146	3.9%
Post-Panamax	5,000-8,000	32	179	4.9%
Large	8,000-10,000	105	952	28.6%
Very Large	10000-12,000	31	318	52.7%
	12,000+	94	1,458	58.5%
Total		443	3,322	18.6%

Source: Drewry Shipping Consultants.

Ocean Freight Rate Comparison

The decline in bulk ocean freight rates over the first 8 months of the year has increased the spread between container and bulk ocean transportation (figure 1) allowing bulk transportation to be cost advantageous for grain exporters that have the choice between the 2 modes. Profit/loss mitigation strategies by the ocean container carriers have managed to keep rates relatively flat since the beginning of the year, while bulk ocean freight rates have continued to fall under pressure from overcapacity in the market.



Sources: Bulk rates--O'Neil Commodity Consulting, Inc., Container rates--Drewry Container Consulting

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Grain Transportation Indicators

Table 1

Grain Transport Cost Indicators¹

Week ending	Truck	Rail		Barge	Ocean	
		Unit Train	Shuttle		Gulf	Pacific
10/08/14	251	390	386	496	210	174
10/01/14	252	411	413	593	206	181

¹Indicator: Base year 2000 = 100; Weekly updates include truck = diesel (\$/gallon); rail = near-month secondary rail market bid and monthly tariff rate 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)

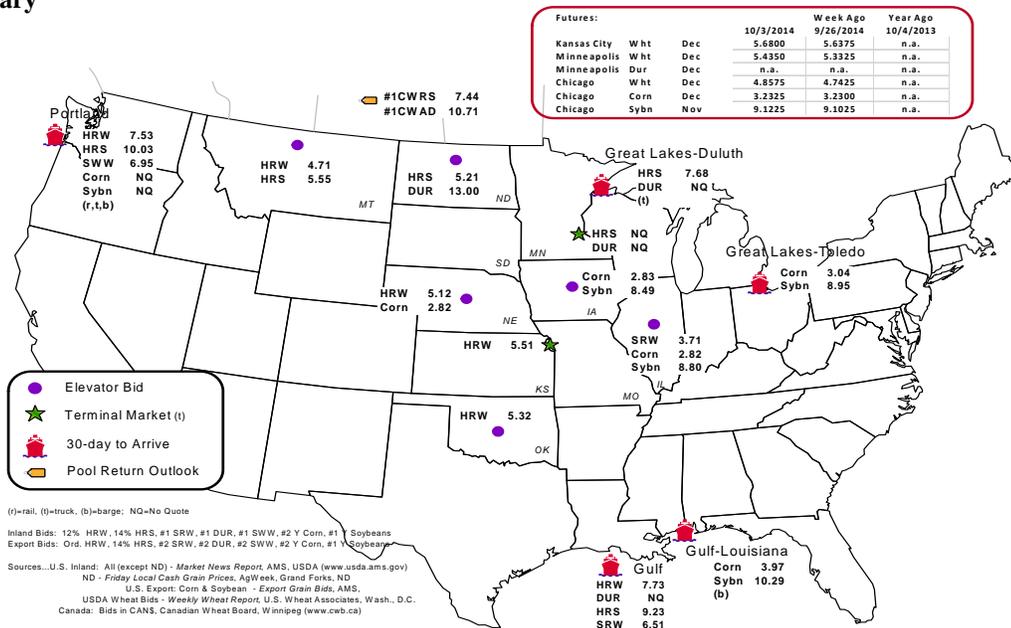
Commodity	Origin--Destination	10/3/2014	9/26/2014
Corn	IL--Gulf	-1.15	-1.19
Corn	NE--Gulf	-1.15	-1.08
Soybean	IA--Gulf	-1.80	-1.90
HRW	KS--Gulf	-2.22	-2.05
HRS	ND--Portland	-4.82	-4.81

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		Pacific	Atlantic &	Total	Week ending	Cross-Border
	Gulf	Texas Gulf	Northwest	East Gulf			Mexico ³
10/01/2014 ^p	54	1,511	2,699	170	4,434	9/27/2014	1,485
9/24/2014 ^r	342	1,016	2,995	71	4,424	9/20/2014	1,814
2014 YTD ^r	22,255	64,261	171,323	19,148	276,987	2014 YTD	75,570
2013 YTD ^r	10,322	57,632	97,573	10,543	176,070	2013 YTD	48,491
2014 YTD as % of 2013 YTD	216	112	176	182	157	% change YTD	156
Last 4 weeks as % of 2013 ²	169	64	120	315	99	Last 4wks % 2013	133
Last 4 weeks as % of 4-year avg. ²	27	79	127	115	100	Last 4wks % 4 yr	127
Total 2013	31,646	71,388	168,826	25,176	297,036	Total 2013	70,298
Total 2012	22,604	40,780	199,419	24,659	287,462	Total 2012	92,008

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 approximately 15 percent below the Association of American Railroads reported weekly carloads received by Mexican railroads to reflect switching between KCSM and FerroMex.

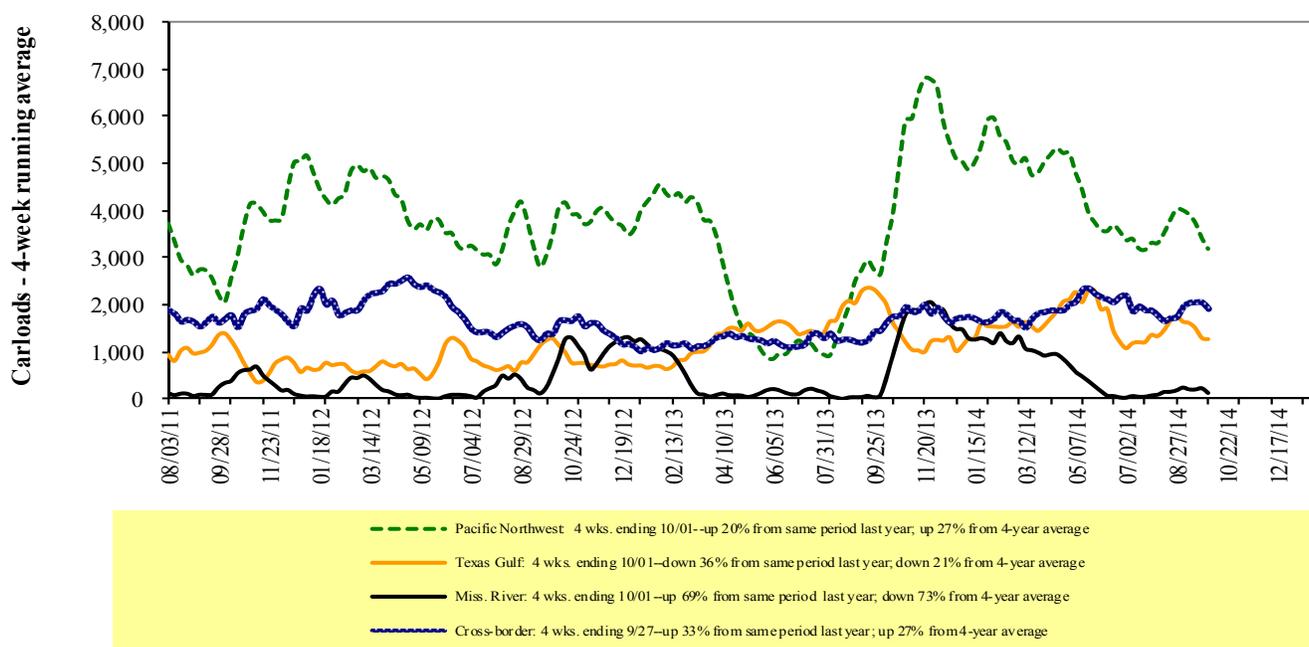
YTD = year-to-date; p = preliminary data; r = revised data; n/a = not available

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

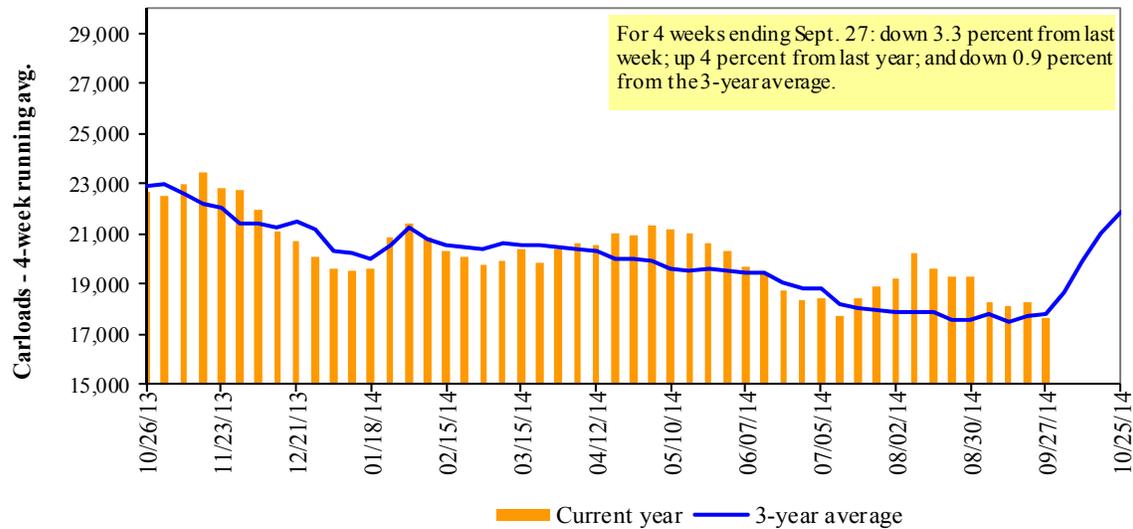
Table 4

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
09/27/14	1,428	2,216	7,585	1,346	4,518	17,093	3,560	4,413
This week last year	1,928	2,076	8,203	966	4,172	17,345	4,255	6,360
2014 YTD	69,686	109,255	338,302	33,352	217,149	767,744	170,462	203,930
2013 YTD	54,545	90,488	334,825	21,861	150,666	652,385	126,565	198,947
2014 YTD as % of 2013 YTD	128	121	101	153	144	118	135	103
Last 4 weeks as % of 2013	82	133	97	104	117	104	99	95
Last 4 weeks as % of 3-yr avg. ¹	113	97	87	117	108	96	104	94
Total 2013	86,466	137,915	454,262	34,412	222,258	935,313	190,125	272,753

¹As a percent of the same period in 2009 and the prior 3-year average. YTD = year-to-date.

Source: Association of American Railroads (www.aar.org)

Figure 3**Total Weekly U.S. Class I Railroad Grain Car Loadings**

Source: Association of American Railroads

Table 5

Railcar Auction Offerings¹ (\$/car)²

Week ending	Delivery period								
	10/2/2014	Oct-14	Oct-13	Nov-14	Nov-13	Dec-14	Dec-13	Jan-15	Jan-14
BNSF ³									
COT grain units		no offer	no offer	2877	no offer	2553	no offer	2184	28
COT grain single-car ⁵		no offer	no offer	1550 . . 2600	no offer	1311 . . 2115	no offer	1400 . . 2051	0 . . 32
UP ⁴									
GCAS/Region 1		no offer	32	no offer	1	no offer	no bids	n/a	n/a
GCAS/Region 2		no offer	56	no offer	1	no offer	no bids	n/a	n/a

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

²Average premium/discount to tariff, last auction

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

⁴UP - 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.

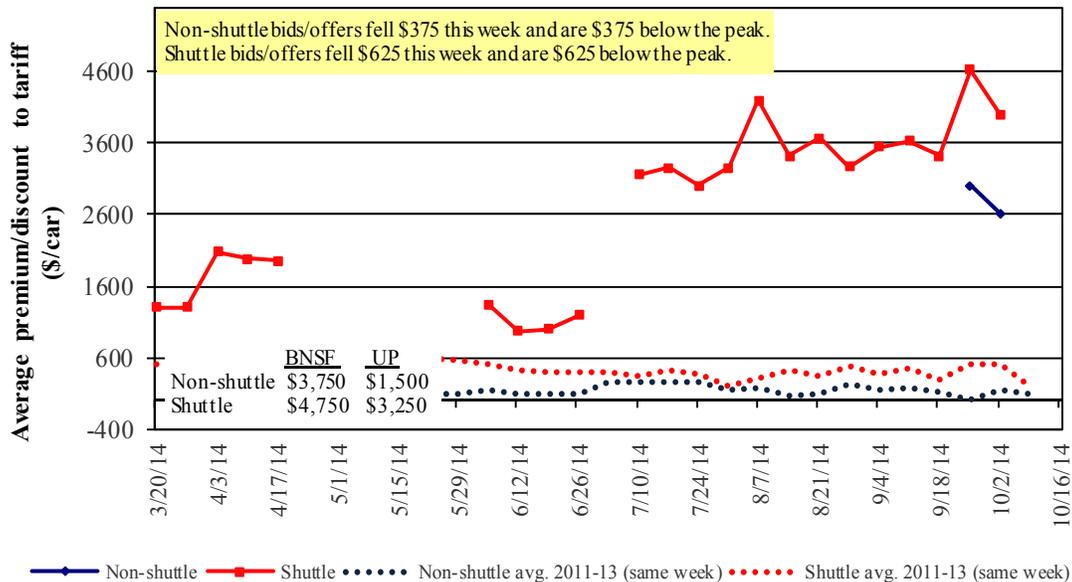
⁵Range is shown because average is not available. Not available = n/a.

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 October 2014, Secondary Market

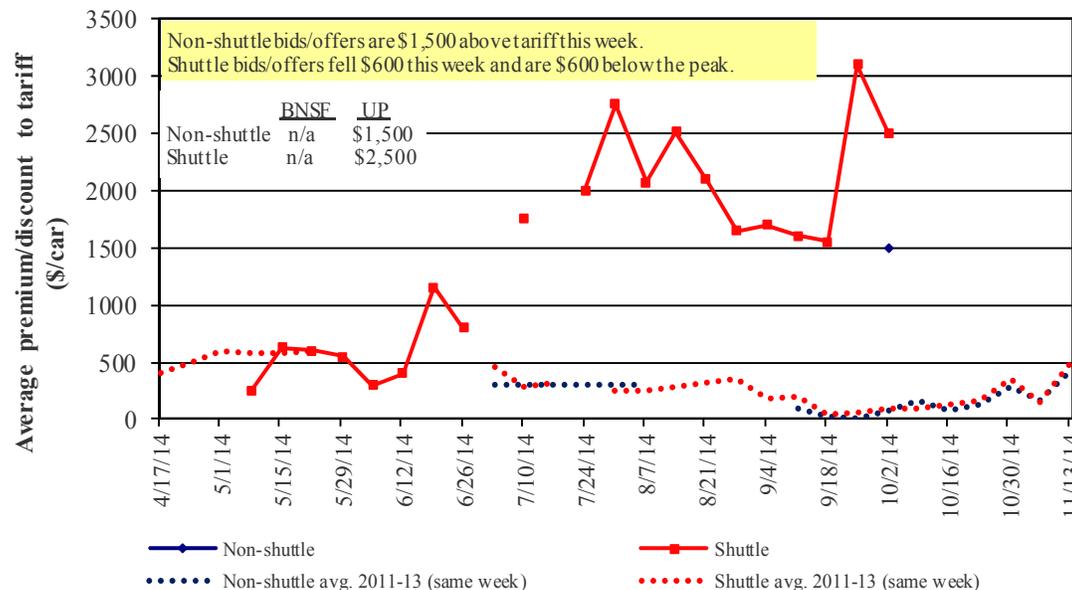


Non-shuttle bids include unit-train and single-car bids. n/a = not available.

Source: Transportation & Marketing Programs/AMS/USDA

Figure 5

Bids/Offers for Railcars to be Delivered in November 2014, Secondary Market

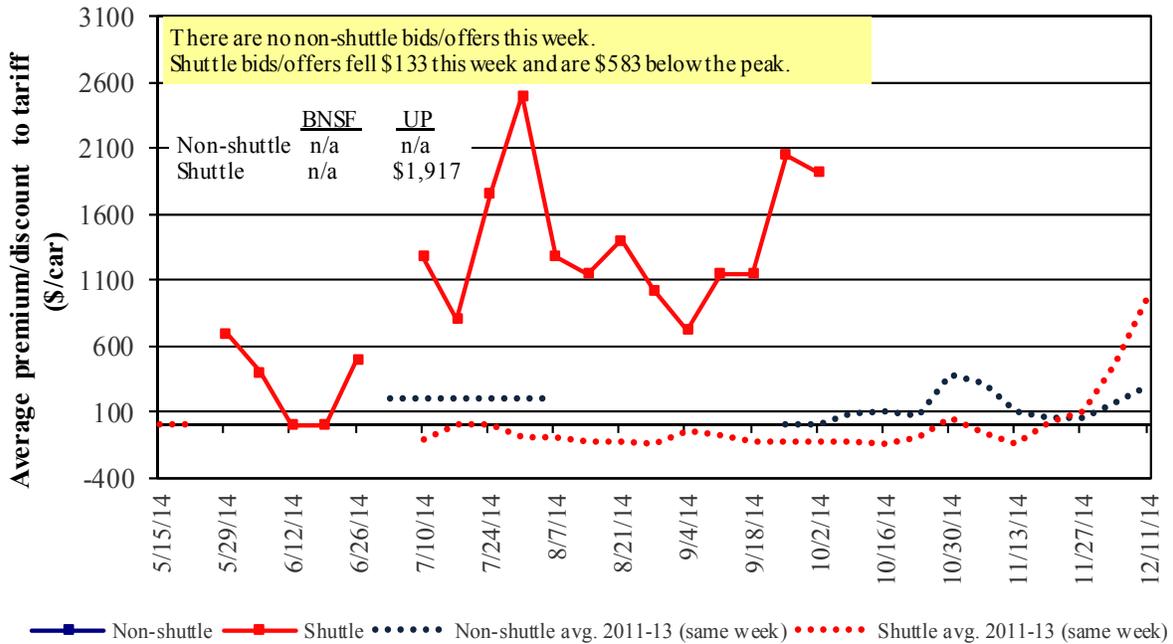


Non-shuttle bids include unit-train and single-car bids. n/a = not available.

Source: Transportation & Marketing Programs/AMS/USDA

Figure 6

Bids/Offers for Railcars to be Delivered in December 2014, 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					
	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15
Non-shuttle						
BNSF-GF	3,750	n/a	n/a	n/a	n/a	n/a
Change from last week	250	n/a	n/a	n/a	n/a	n/a
Change from same week 2013	3,000	n/a	n/a	n/a	n/a	n/a
UP-Pool	1,500	1,500	n/a	n/a	n/a	n/a
Change from last week	(1,000)	n/a	n/a	n/a	n/a	n/a
Change from same week 2013	1,400	n/a	n/a	n/a	n/a	n/a
Shuttle²						
BNSF-GF	4,750	n/a	n/a	n/a	n/a	n/a
Change from last week	(1,000)	n/a	n/a	n/a	n/a	n/a
Change from same week 2013	3,475	n/a	n/a	n/a	n/a	n/a
UP-Pool	3,250	2,500	1,917	n/a	n/a	n/a
Change from last week	(250)	50	(133)	n/a	n/a	n/a
Change from same week 2013	2,500	2,150	1,942	n/a	n/a	n/a

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

²Shuttle 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.

Table 7

Tariff Rail Rates for Unit and Shuttle Train Shipments¹

Effective date:					Fuel		Percent
10/1/2014	Origin region*	Destination region*	Tariff rate/car	surchage per car	Tariff plus surcharge per:		change Y/Y ³
					metric ton	bushel ²	
Unit train							
Wheat	Wichita, KS	St. Louis, MO	\$3,387	\$177	\$35.39	\$0.96	6
	Grand Forks, ND	Duluth-Superior, MN	\$3,596	\$101	\$36.72	\$1.00	0
	Wichita, KS	Los Angeles, CA	\$6,244	\$520	\$67.17	\$1.83	0
	Wichita, KS	New Orleans, LA	\$4,026	\$312	\$43.07	\$1.17	5
	Sioux Falls, SD	Galveston-Houston, TX	\$5,824	\$427	\$62.08	\$1.69	0
	Northwest KS	Galveston-Houston, TX	\$4,293	\$341	\$46.02	\$1.25	4
	Amarillo, TX	Los Angeles, CA	\$4,492	\$475	\$49.32	\$1.34	4
Corn	Champaign-Urbana, IL	New Orleans, LA	\$3,328	\$352	\$36.55	\$0.93	3
	Toledo, OH	Raleigh, NC	\$4,875	\$398	\$52.37	\$1.33	3
	Des Moines, IA	Davenport, IA	\$2,168	\$75	\$22.27	\$0.57	4
	Indianapolis, IN	Atlanta, GA	\$4,211	\$299	\$44.79	\$1.14	3
	Indianapolis, IN	Knoxville, TN	\$3,593	\$192	\$37.59	\$0.95	3
	Des Moines, IA	Little Rock, AR	\$3,308	\$219	\$35.03	\$0.89	2
	Des Moines, IA	Los Angeles, CA	\$5,365	\$638	\$59.61	\$1.51	2
Soybeans	Minneapolis, MN	New Orleans, LA	\$3,649	\$387	\$40.08	\$1.09	3
	Toledo, OH	Huntsville, AL	\$3,807	\$283	\$40.61	\$1.11	3
	Indianapolis, IN	Raleigh, NC	\$4,946	\$401	\$53.10	\$1.45	3
	Indianapolis, IN	Huntsville, AL	\$3,499	\$192	\$36.65	\$1.00	3
	Champaign-Urbana, IL	New Orleans, LA	\$3,974	\$352	\$42.96	\$1.17	5
Shuttle Train							
Wheat	Great Falls, MT	Portland, OR	\$3,678	\$299	\$39.50	\$1.07	0
	Wichita, KS	Galveston-Houston, TX	\$3,471	\$233	\$36.78	\$1.00	-8
	Chicago, IL	Albany, NY	\$4,140	\$374	\$44.82	\$1.22	4
	Grand Forks, ND	Portland, OR	\$5,159	\$517	\$56.36	\$1.53	-1
	Grand Forks, ND	Galveston-Houston, TX	\$6,084	\$538	\$65.76	\$1.79	0
	Northwest KS	Portland, OR	\$5,260	\$560	\$57.79	\$1.57	3
Corn	Minneapolis, MN	Portland, OR	\$5,000	\$629	\$55.90	\$1.42	-1
	Sioux Falls, SD	Tacoma, WA	\$4,960	\$576	\$54.98	\$1.40	-1
	Champaign-Urbana, IL	New Orleans, LA	\$3,147	\$352	\$34.75	\$0.88	3
	Lincoln, NE	Galveston-Houston, TX	\$3,510	\$336	\$38.19	\$0.97	-1
	Des Moines, IA	Amarillo, TX	\$3,690	\$275	\$39.38	\$1.00	2
	Minneapolis, MN	Tacoma, WA	\$5,000	\$624	\$55.85	\$1.42	-1
Soybeans	Council Bluffs, IA	Stockton, CA	\$4,400	\$646	\$50.11	\$1.27	-1
	Sioux Falls, SD	Tacoma, WA	\$5,520	\$576	\$60.54	\$1.65	-1
	Minneapolis, MN	Portland, OR	\$5,530	\$629	\$61.17	\$1.66	-1
	Fargo, ND	Tacoma, WA	\$5,430	\$512	\$59.01	\$1.61	-1
	Council Bluffs, IA	New Orleans, LA	\$4,425	\$406	\$47.97	\$1.31	5
	Toledo, OH	Huntsville, AL	\$2,982	\$283	\$32.42	\$0.88	3
	Grand Island, NE	Portland, OR	\$5,360	\$573	\$58.92	\$1.60	4

¹A 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.

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

³Percentage change year over year calculated using tariff rate plus fuel surcharge

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

Commodity	Origin state	Destination region	Tariff rate/car ¹	Fuel		Percent change Y/Y ⁴	
				surchage per car ²	Tariff plus surcharge per: metric ton ³ bushel ³		
Wheat	MT	Chihuahua, CI	\$6,460	\$547	\$71.59	\$1.95	1
	OK	Cuautitlan, EM	\$6,565	\$664	\$73.86	\$2.01	2
	KS	Guadalajara, JA	\$7,149	\$642	\$79.60	\$2.16	-13
	TX	Salinas Victoria, NL	\$3,852	\$250	\$41.92	\$1.14	30
Corn	IA	Guadalajara, JA	\$8,049	\$754	\$89.95	\$2.28	0
	SD	Celaya, GJ	\$7,656	\$715	\$85.54	\$2.17	-1
	NE	Queretaro, QA	\$7,535	\$670	\$83.84	\$2.13	2
	SD	Salinas Victoria, NL	\$5,880	\$544	\$65.63	\$1.67	0
	MO	Tlalnepantla, EM	\$6,887	\$651	\$77.02	\$1.95	1
	SD	Torreon, CU	\$6,722	\$599	\$74.80	\$1.90	0
Soybeans	MO	Bojay (Tula), HG	\$8,111	\$636	\$89.38	\$2.43	2
	NE	Guadalajara, JA	\$8,572	\$728	\$95.02	\$2.58	1
	IA	El Castillo, JA	\$8,855	\$711	\$97.74	\$2.66	0
	KS	Torreon, CU	\$6,989	\$452	\$76.02	\$2.07	1
Sorghum	TX	Guadalajara, JA	\$6,953	\$465	\$75.80	\$1.92	2
	NE	Celaya, GJ	\$7,287	\$649	\$81.09	\$2.06	0
	KS	Queretaro, QA	\$6,795	\$408	\$73.59	\$1.87	-3
	NE	Salinas Victoria, NL	\$5,500	\$478	\$61.08	\$1.55	-3
	NE	Torreon, CU	\$6,318	\$533	\$70.00	\$1.78	-1

¹Rates 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.

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

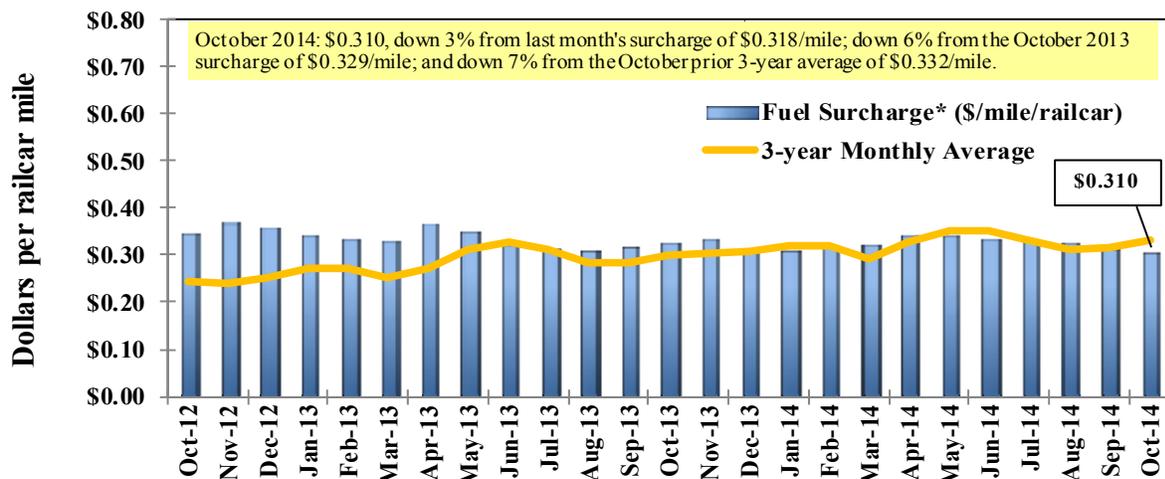
³Approximate load per car = 97.87 metric tons: Corn & Sorghum 56 lbs/bu, Wheat & Soybeans 60 lbs/bu

⁴Percentage change year over year calculated using tariff rate plus fuel surcharge

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

Figure 7

Railroad Fuel Surcharges, North American Weighted Average¹



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}



¹Rate = percent of 1976 tariff benchmark index (1976 = 100 percent); ²4-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
Rate¹	10/7/2014	792	900	892	833	933	933	827
	9/30/2014	883	1,017	1,067	1,033	1,100	1,100	1,067
\$/ton	10/7/2014	49.02	47.88	41.39	33.24	43.76	37.69	25.97
	9/30/2014	54.66	54.10	49.51	41.22	51.59	44.44	33.50
Current week % change from the same week:								
	Last year	38	58	62	59	58	58	74
	3-year avg. ²	37	58	57	57	58	58	57
Rate¹	November	792	767	733	633	767	767	583
	January	-	-	625	508	575	575	482

¹Rate = percent of 1976 tariff benchmark index (1976 = 100 percent); ²4-week moving average; ton = 2,000 pounds;

Source: Transportation & Marketing Programs/AMS/USDA

Figure 9

Benchmark tariff rates

Calculating barge rate per ton:

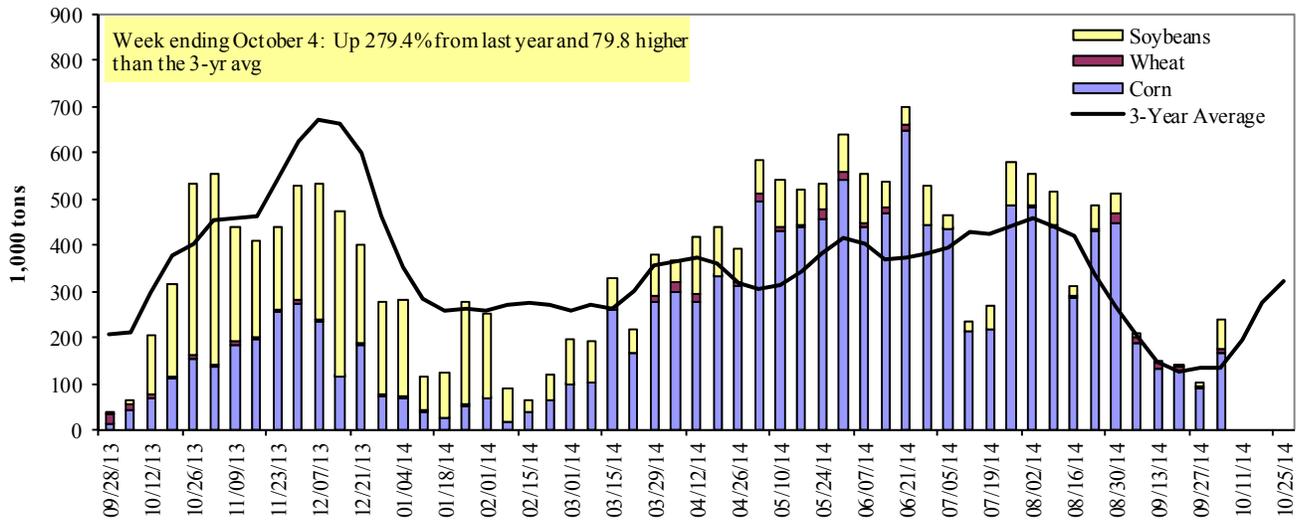
(Rate * 1976 tariff benchmark rate per ton)/100

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 River¹ (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 10/04/2014	Corn	Wheat	Soybeans	Other	Total
Mississippi River					
Rock Island, IL (L15)	37	11	20	0	68
Winfield, MO (L25)	83	6	37	5	131
Alton, IL (L26)	156	5	58	5	224
Granite City, IL (L27)	166	8	65	5	244
Illinois River (L8)	46	0	8	0	54
Ohio River (L52)	165	2	23	0	190
Arkansas River (L1)	3	22	45	7	77
Weekly total - 2014	334	32	133	12	510
Weekly total - 2013	233	65	70	1	276
2014 YTD ¹	17,166	2,053	5,470	186	24,875
2013 YTD	5,971	3,845	4,739	144	14,699
2014 as % of 2013 YTD	288	53	115	129	169
Last 4 weeks as % of 2013 ²	167	37	145	857	128
Total 2013	9,504	4,111	10,065	255	23,935

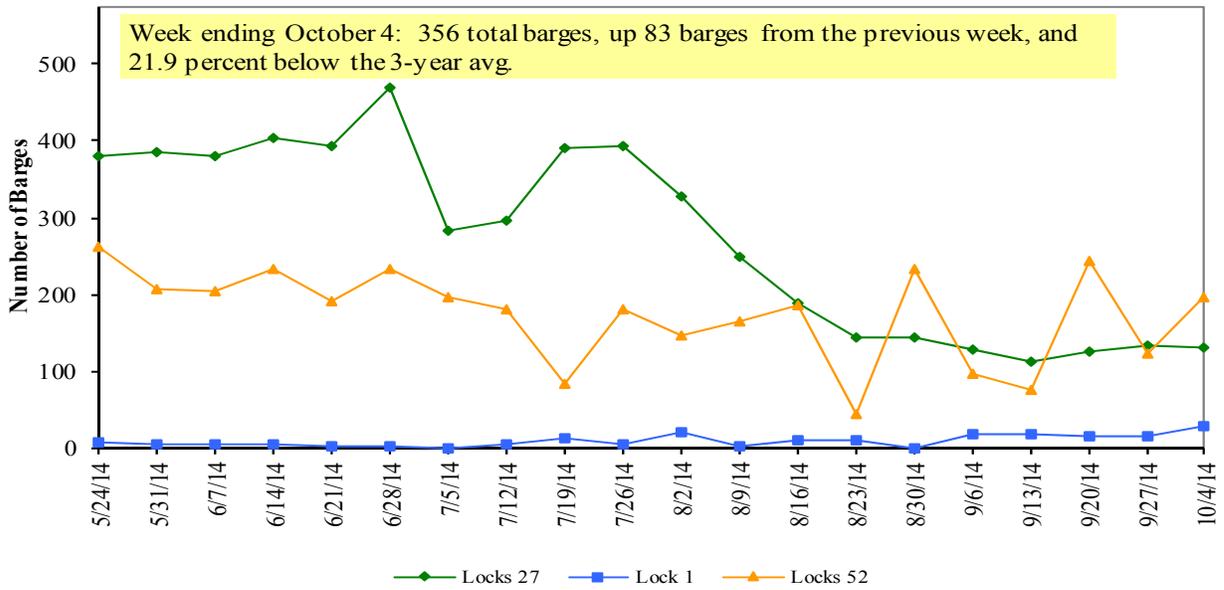
¹ Weekly total, YTD (year-to-date) and calendar year total includes Miss/27, Ohio/52, and Ark/1; "Other" refers to oats, barley, sorghum, and rye.

² As a percent of same period in 2013.

Note: Total may not add exactly, due to rounding

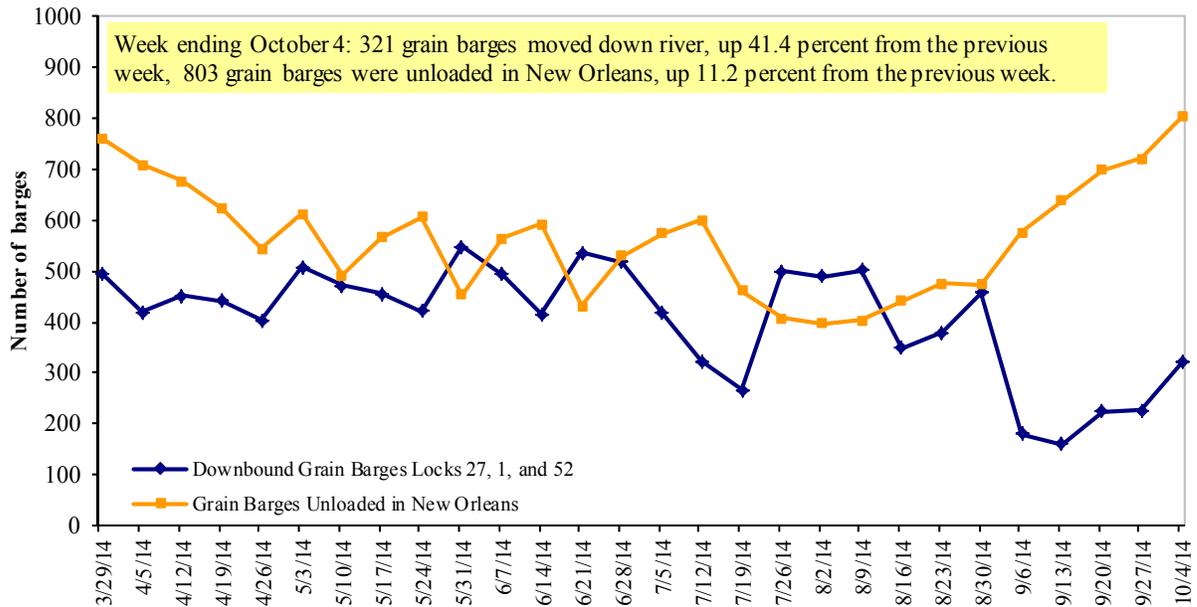
Source: U.S. Army Corps of Engineers

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 Prices¹, Week Ending 10/06/2013 (US \$/gallon)

Region	Location	Price	Change from	
			Week ago	Year ago
I	East Coast	3.755	-0.023	-0.153
	New England	3.848	-0.032	-0.192
	Central Atlantic	3.830	-0.027	-0.137
	Lower Atlantic	3.678	-0.016	-0.160
II	Midwest ²	3.670	-0.024	-0.206
III	Gulf Coast ³	3.662	-0.023	-0.143
IV	Rocky Mountain	3.787	-0.019	-0.128
	West Coast	3.933	-0.015	-0.119
V	West Coast less California	3.855	-0.021	-0.081
	California	3.998	-0.009	-0.152
Total	U.S.	3.733	-0.022	-0.164

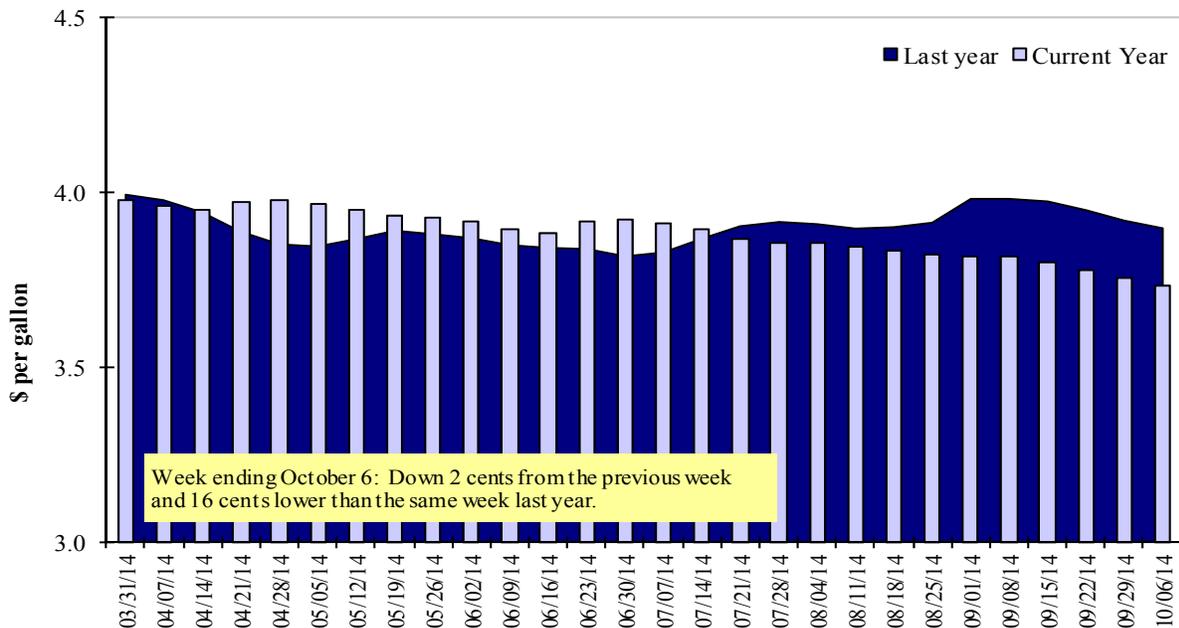
¹Diesel fuel prices include all taxes. Prices represent an average of all types of diesel fuel.

²Same as North Central ³Same 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)

Week ending	Wheat					All wheat	Corn	Soybeans	Total
	HRW	SRW	HRS	SWW	DUR				
Export Balances¹									
9/25/2014	1,560	955	1,604	782	103	5,004	11,437	27,455	43,896
This week year ago	1,520	1,782	1,315	924	73	5,615	12,921	25,590	44,126
Cumulative exports-marketing year²									
2014/15 YTD	2,803	1,576	2,636	1,380	167	8,563	3,077	1,445	13,085
2013/14 YTD	5,256	4,060	2,073	1,393	132	12,914	1,715	967	15,596
YTD 2014/15 as % of 2013/14	53	39	127	99	127	66	179	149	84
Last 4 wks as % of same period 2013/14	96	56	127	89	104	89	89	102	96
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 Importers¹ of U.S. Corn

Week ending 09/25/2014	Total Commitments ²		% change current MY from last MY	Exports ³ 3-year avg 2011-2013
	2014/15 Current MY	2013/14 Last MY		
- 1,000 mt -				
Japan	2,652	2,033	30	10,079
Mexico	3,799	4,044	(6)	8,145
Korea	352	8	4,301	2,965
China	72	3,433	(98)	3,461
Taiwan	254	196	30	1,238
Top 5 Importers	7,129	9,714	(27)	25,887
Total US corn export sales	14,514	14,636	(0.8)	34,445
% of Projected	33%	30%		
Change from prior week	638	775		
Top 5 importers' share of U.S. corn export sales	49%	66%		75%
USDA forecast, September 2014	44,450	48,900	(9)	
Corn Use for Ethanol USDA forecast, September 2014	130,175	130,175	0	

(n) indicates negative number.

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

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

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

Table 14

Top 5 Importers¹ of U.S. Soybeans

Week Ending 09/25/2014	Total Commitments ²		% change current MY from last MY	Exports ³ 3-yr avg. 2011-13
	2014/15 Current MY	2013/14 Last MY		
	- 1,000 mt -			- 1,000 mt -
China	16,997	17,735	(4)	24,211
Mexico	1,014	746	36	2,971
Indonesia	583	417	40	1,895
Japan	512	433	18	1,750
Taiwan	577	516	12	1,055
Top 5 importers	19,684	19,848	(1)	31,882
Total US soybean export sales	28,900	26,557	9	39,169
% of Projected	62%	59%		
Change from prior week	869	861		
Top 5 importers' share of U.S. soybean export sales	68%	75%		81%
USDA forecast, September 2014	46,270	44,770	3	

(n) indicates negative number.

¹Based on FAS Marketing Year Ranking Reports - www.fas.usda.gov; Marketing year (MY) = Sep 1 - Aug 31.²Cumulative 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)

Table 15

Top 10 Importers¹ of All U.S. Wheat

Week Ending 09/25/2014	Total Commitments ²		% change current MY from last MY	Exports ³ 3-yr avg 2011-2013
	2014/15 Current MY	2013/14 Last MY		
	- 1,000 mt -			- 1,000 mt -
Japan	1,443	1,332	8	3,243
Mexico	1,575	1,809	(13)	3,066
Nigeria	1,507	1,345	12	2,960
Philippines	1,021	927	10	2,006
China	202	3,932	(95)	1,830
Brazil	1,347	2,536	(47)	1,617
Korea	749	578	30	1,552
Taiwan	523	458	14	969
Indonesia	301	424	(29)	813
Colombia	342	427	(20)	610
Top 10 importers	9,009	13,767	(35)	18,665
Total US wheat export sales	13,567	18,529	(27)	27,696
% of Projected	55%	58%		
Change from prior week	731	838		
Top 10 importers' share of U.S. wheat export sales	66%	74%		67%
USDA forecast, September 2014	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 10/02/14	Previous Week ¹	Current Week as % of Previous	2014 YTD ¹	2013 YTD ¹	2014 YTD as % of 2013 YTD	Last 4-weeks as % of		Total ¹ 2013
							2013	3-yr. avg.	
Pacific Northwest									
Wheat	369	219	168	10,193	9,489	107	77	90	11,585
Corn	86	125	69	7,404	1,380	537	4,949	485	2,973
Soybeans	0	0	n/a	4,507	3,834	118	0	0	9,090
Total	455	344	132	22,104	14,703	150	97	92	23,647
Mississippi Gulf									
Wheat	86	158	55	3,985	8,355	48	33	62	9,711
Corn	595	313	190	24,784	9,516	260	123	102	14,828
Soybeans	959	705	136	13,198	9,271	142	161	168	21,462
Total	1,641	1,177	139	41,966	27,142	155	110	119	46,002
Texas Gulf									
Wheat	135	139	97	5,257	7,418	71	53	66	9,039
Corn	0	24	0	510	163	313	1,015	1,368	255
Soybeans	0	0	n/a	265	122	217	n/a	33	908
Total	135	163	83	6,032	7,703	78	59	72	10,203
Interior									
Wheat	16	50	32	1,138	887	128	249	119	1,244
Corn	133	94	141	4,504	2,214	203	62	133	3,943
Soybeans	62	29	211	2,447	1,999	122	150	44	3,212
Total	211	174	121	8,090	5,100	159	91	99	8,399
Great Lakes									
Wheat	32	64	50	518	660	79	107	147	884
Corn	0	17	0	226	0	n/a	n/a	593	0
Soybeans	0	0	n/a	51	42	121	0	0	699
Total	32	81	40	795	701	113	126	143	1,583
Atlantic									
Wheat	46	6	779	513	641	80	379	463	645
Corn	41	3	1,324	719	81	884	181	381	242
Soybeans	2	1	176	1,004	698	144	n/a	50	1,652
Total	90	10	879	2,236	1,420	157	249	365	2,540
U.S. total from ports²									
Wheat	685	636	108	21,605	27,449	79	62	85	33,108
Corn	855	577	148	38,147	13,354	286	150	127	22,241
Soybeans	1,023	736	139	21,472	15,967	134	144	121	37,024
Total	2,563	1,949	132	81,223	56,770	143	104	109	92,373

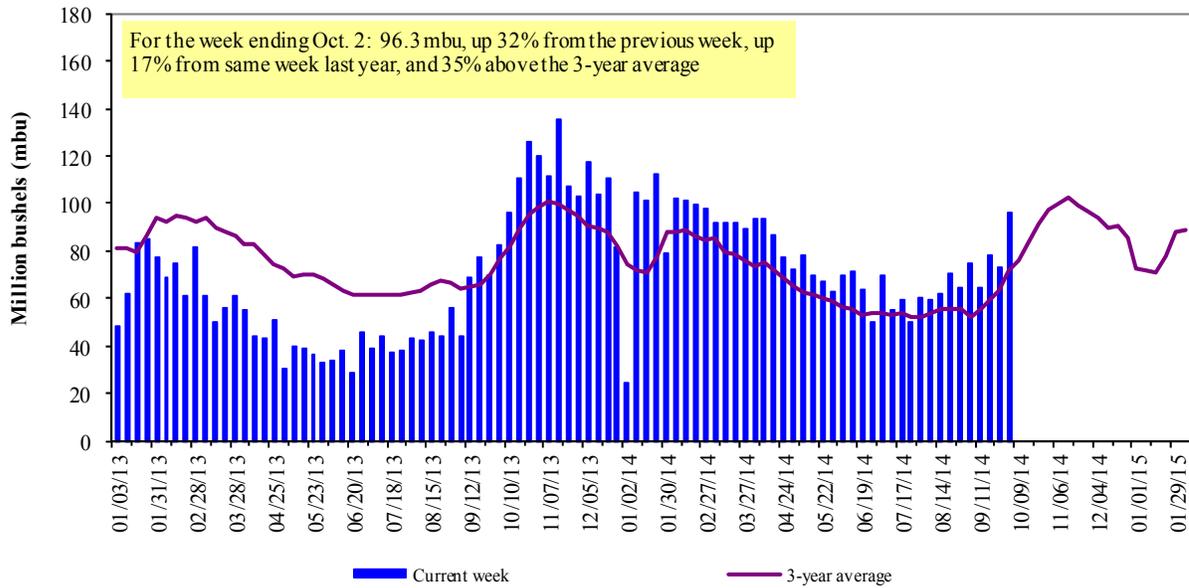
¹ Data includes revisions from prior weeks; some regional totals may not add exactly due to rounding.

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 61 percent of the U.S. export grain shipments departed through the U.S. Gulf region in 2013.

Figure 14

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

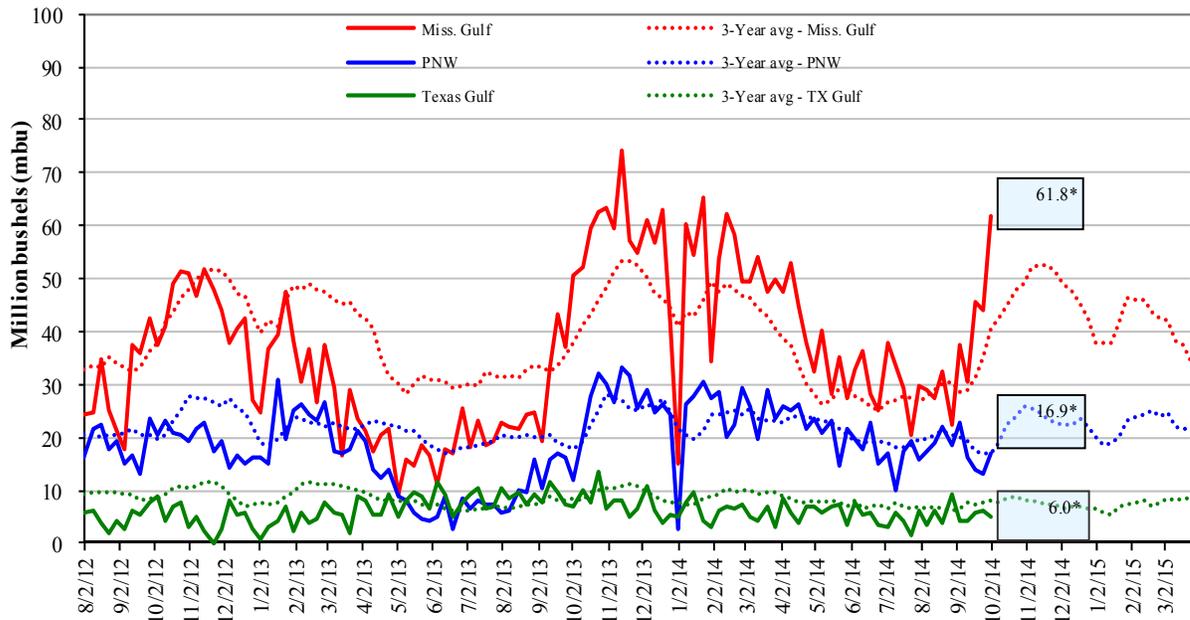


Source: Grain Inspection, Packers and Stockyards Administration/USDA (www.gipsa.usda.gov)

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

Figure 15

U.S. Grain Inspections: U.S. Gulf and PNW¹ (wheat, corn, and soybeans)



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

<u>Oct 2 : % change from:</u>	<u>MS Gulf</u>	<u>TX Gulf</u>	<u>U.S. Gulf</u>	<u>PNW</u>
Last week	up 40	down 18	up 33	up 31
Last year (same week)	up 22	down 29	up 16	up 42
3-yr avg. (4-wk mov. avg.)	up 61	down 32	up 46	up 15

Ocean Transportation

Table 17

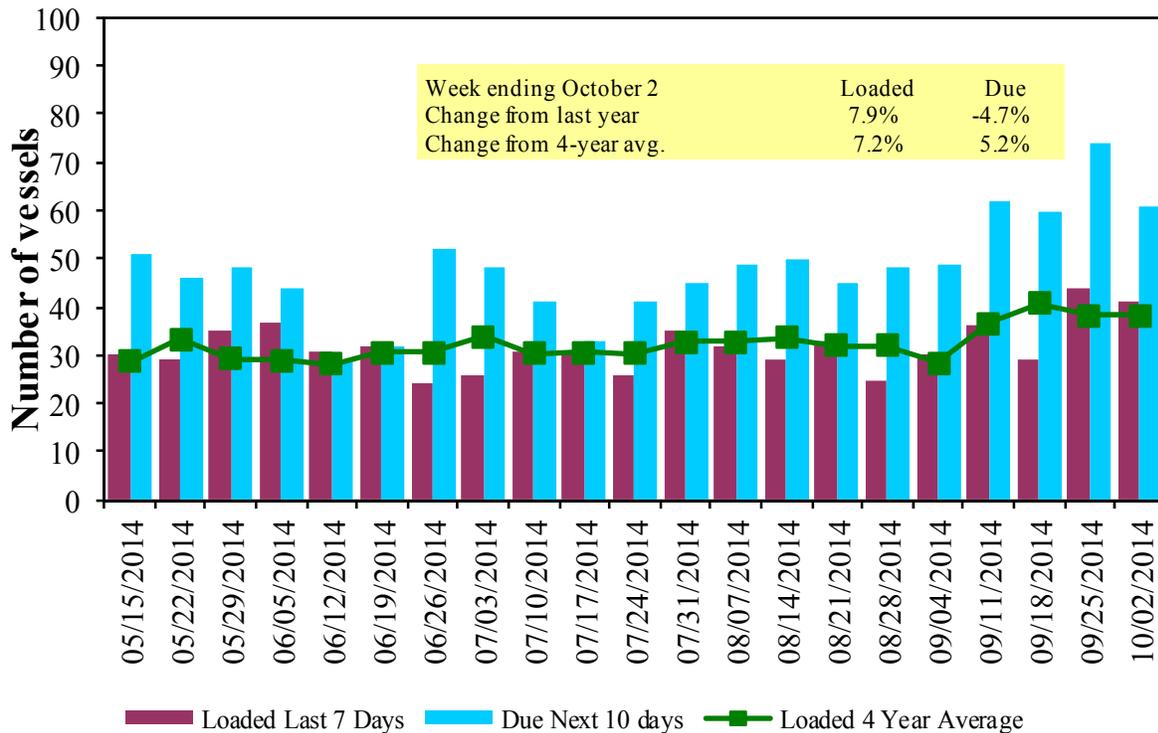
Weekly Port Region Grain Ocean Vessel Activity (number of vessels)

Date	Gulf			Pacific Northwest	Vancouver B.C.
	In port	Loaded 7-days	Due next 10-days	In port	In port
10/2/2014	45	41	61	14	n/a
9/25/2014	36	44	74	15	n/a
2013 range	(16..60)	(20..56)	(31..81)	(0..24)	n/a
2013 avg	32	33	51	12	n/a

Source: Transportation & Marketing Programs/AMS/USDA

Figure 16

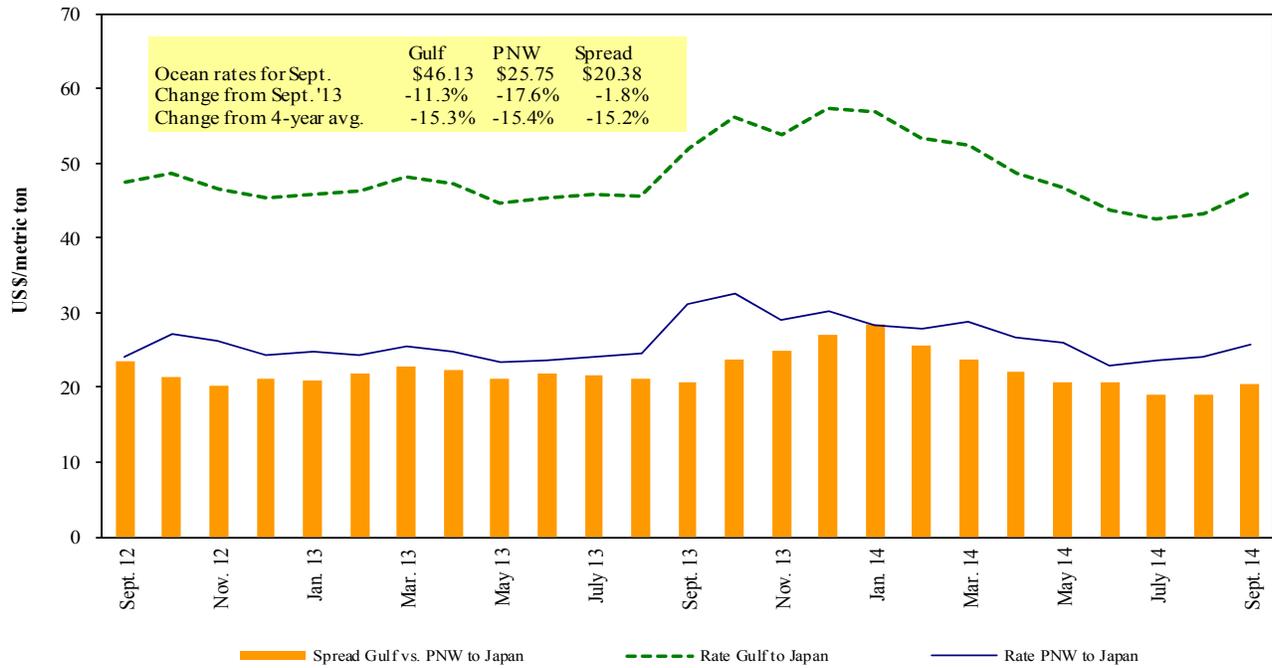
U.S. Gulf¹ Vessel Loading Activity



Source: Transportation & Marketing Programs/AMS/USDA
¹U.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 10/04/2014

Export region	Import region	Grain types	Loading date	Volume loads (metric tons)	Freight rate (US\$/metric ton)
U.S. Gulf	China	Heavy Grain	Nov 5/15	60,000	45.25
U.S. Gulf	China	Heavy Grain	Nov 1/8	58,000	46.00
U.S. Gulf	China	Heavy Grain	Oct 10/20	60,000	45.00
U.S. Gulf	China	Heavy Grain	Oct 1/10	57,000	45.50
U.S. Gulf	China	Heavy Grain	Oct 1/10	60,000	45.50
U.S. Gulf	China	Heavy Grain	Oct 1/10	60,000	44.00
U.S. Gulf	China	Heavy Grain	Oct 1/5	60,000	44.50
U.S. Gulf	China	Heavy Grain	Sep 20/ Oct 10	55,000	45.25
U.S. Gulf	Sudan ¹	Sorghum	Nov 20/30	43,440	103.44
PNW	China	Heavy Grain	Nov 1/30	60,000	26.50
PNW	China	Grain	Oct 20/30	60,000	23.00
Brazil	China	Heavy Grain	Sep 1/10	60,000	34.00
Germany	Iran	Wheat	Aug 20/Sep 8	65,000	35.00
River Plate	Philippines	Soybeanmeal	Sep 20/27	40,000	40.00

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

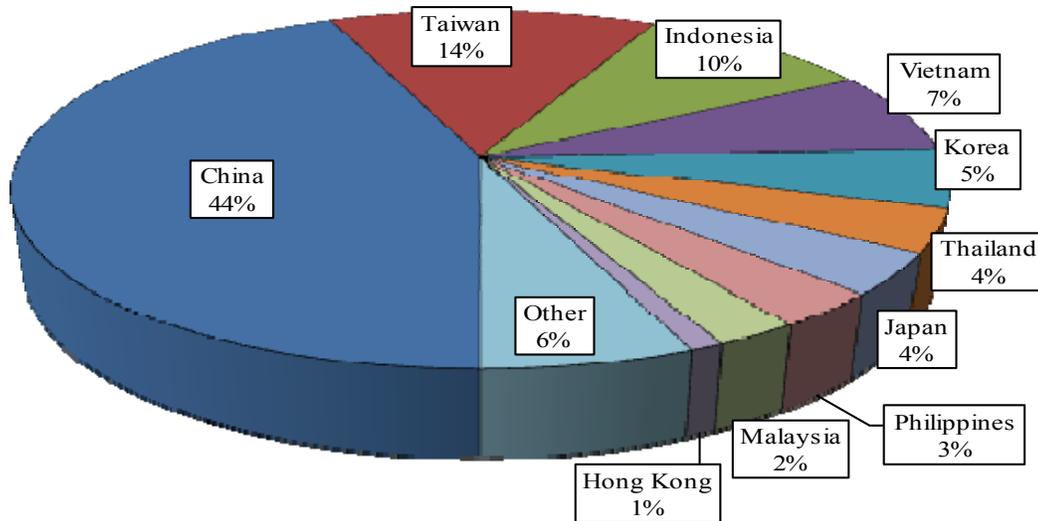
¹50 percent of food aid from the United States is required to be shipped on U.S.-flag vessels.

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—96 percent in 2012.

Figure 18

Top 10 Destination Markets for U.S. Containerized Grain Exports, 2013

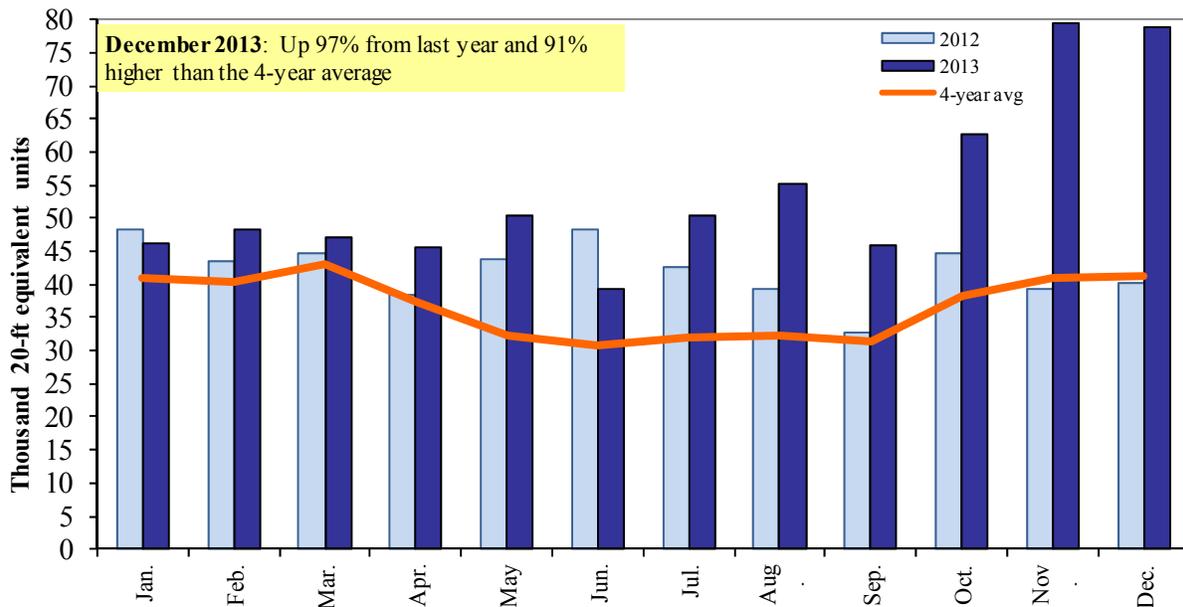


Source: USDA/Agricultural Marketing Service/Transportation Services Division analysis of Port Import Export Reporting Service (PIERS) data

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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