



Grain Transportation Report

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

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May 5, 2016

WEEKLY HIGHLIGHTS

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Federal Grant Program Announced for Marine Transportation

U.S. Department of Transportation's Maritime Administration (MARAD) has announced the availability of \$5 million in Federal funds to expand Marine Highway service by creating new or expanding existing services along designated Marine Highway routes. Marine Highway projects provide new modal choices to shippers of cargo, reduces transportation costs, and provide public benefits including reduced air emissions, reduced road maintenance costs, and improved safety and resiliency. A current project already funded is the Illinois Intrastate Shuttle project, aiming to shift about 5,500 containers in its first year of operation to reduce the congestion of north-south interstate 55 to the Mississippi River by providing soybean and grain shippers a new routing option (see 04/21/16 [Grain Transportation Report](#)). Additional information on eligibility and application requirements can be found in the Federal Register at <https://federalregister.gov/a/2016-09563>.

Grain Inspections Recede

For the week ending April 28, total inspections of grain (corn, wheat, soybeans) for export from all major export regions reached 1.67 million metric tons (mmt), down 11 percent from the past week, down 10 percent from last year, and up 8 percent from the 3-year average. Inspections of wheat and soybeans decreased 18 and 47 percent from the previous week, but corn inspections increased slightly. Pacific Northwest (PNW) inspections decreased 34 percent from the previous week, and Mississippi Gulf grain inspections dropped 11 percent from the past week. During the last 4 weeks, grain inspections are 2 percent below last year but 3 percent above the 3-year average. Outstanding export sales (unshipped) of grain were up slightly for wheat and corn, but down for soybeans.

Diesel Fuel Price Inched Up

Although still relatively low, the U.S. average retail **diesel fuel price** as of May 2 increased by 28 cents over the past 11 weeks and is now \$2.27 per gallon. The average diesel price also increased 7 cents from the previous week, but was down \$0.59 from the same week last year. The price increase was caused by rising demand and the increase in the price of crude oils. The Energy Information Agency (EIA) reported the recent rising demand for crude oils has been mainly caused by near term supply concerns and a more positive economic outlook. The EIA also reported supply concerns began after disruptions occurred as a result of decreasing non-OPEC production and narrowing of OPEC surplus production capacity. Additionally, since mid January, U.S. crude oil production has [consistently decreased](#) for the last 16 weeks, from 9,221 thousands barrels a day to 8,938.

Snapshots by Sector

Export Sales

During the week ending April 21, **unshipped balances** of wheat, corn, and soybeans totaled 20 mmt, unchanged from the same time last year. Net weekly **wheat export sales**, at .352 mmt, were up 16 percent from the previous week. Net **corn export sales** were 2.2 mmt, up 80 percent from the previous week, and net **soybean export sales** were .226 mmt, down 45 percent from the past week.

Rail

U.S. Class I railroads originated 18,340 **grain carloads** for the week ending April 23, down 12 percent from the previous week, down 8 percent from last year, and down 5 percent from the 3-year average.

Average May shuttle **secondary railcar bids/offers** per car were \$178 below tariff for the week ending April 28, up \$11 from last week, and \$22 higher than last year. Non-shuttle secondary railcar bids/offers were \$88 below tariff, down \$38 from last week, and \$38 higher than last year.

Barge

For the week ending April 30, **barge grain movements** totaled 885,648 tons, 11 percent higher than last week, and up 4 percent from the same period last year.

For the week ending April 30, 573 grain barges **moved down river**, up 12 percent from last week; 598 grain barges were **unloaded in New Orleans**, down 13 percent from the previous week.

Ocean

For the week ending April 28, 36 **ocean-going grain vessels** were loaded in the Gulf, 24 percent more than the same period last year. Fifty vessels are expected to be loaded within the next 10 days, 2 percent more than the same period last year.

For the week ending April 28, the ocean freight rate for shipping bulk grain from the Gulf to Japan was \$25.00 per metric ton, unchanged from the previous week. The cost of shipping from the PNW to Japan was \$15.00 per metric ton, unchanged from the previous week.

Feature Article/Calendar

Overcapacity Dominates Container Market

Since 2009, ocean carriers have battled slow demand and excess vessel supply, but nevertheless carriers have continued to add new vessel capacity to the marketplace despite the slow recovery of demand from the recession. Some of the new capacity was deployed with the intention of cutting costs through economies of scale and reduced operational costs. However, the global fleet capacity has outpaced global container demand, which led to persist overcapacity that put downward pressure on freight rates. This brings cost relief to U.S. importers and exporters, but reduces profits for ocean carriers.

The container industry is celebrating its 60th anniversary this year. In 1956, the first container ship carried 58 reinforced highway trailers on the deck of an old World War II tanker vessel. The latest generation of container ships can carry nearly 19,000 twenty-foot equivalent units (TEUs) and there are plans for building larger vessels with capacities approaching 24,000 TEUs. These large ships allow shipping lines to create greater economies of scale with large amounts of cargo per voyage and further exacerbate the overcapacity condition of the ocean shipping market. However, utilization rates of these vessels must remain high in order for carriers to realize cost efficiencies.

Ocean carriers have struggled with profitability since the global recession hit. Persistent slow demand recovery and the expanding fleet of vessels have created a chronic overcapacity situation. The current global vessel fleet has grown to more than 5,200 vessels with a capacity total of more than 19.6 million TEUs. Table 1 below shows the current vessel fleet and how it has grown since 2009.

Table 1: Global container ship fleet, December 2009-2015

Type of Vessel	Size (TEUs)	2009		2010		2011		2012		2013		2014		2015		% change since 2010
		No. of Vessels	Capacity (thousand TEUs)													
Feeder	<1,000	1,131	687	1,080	648	1,213	734	1,179	720	1,152	703	1,083	669	1,056	645	-6.1%
Handsize	1,000-1,999	1,253	1,775	1,207	1,736	1,281	1,814	1,258	1,771	1,230	1,730	1,220	1,717	1,236	1,739	-2.0%
Intermediate	2,000-2,999	718	1,822	719	1,824	716	1,818	674	1,714	663	1,683	645	1,638	648	1,639	-10.0%
Panamax	3,000-4,999	852	3,416	912	3,716	929	3,755	950	3,873	930	3,831	909	3,757	904	3,743	9.6%
Post-Panamax	5,000-7,999	519	3,135	523	3,128	568	3,383	584	3,490	603	3,608	613	3,671	624	3,740	19.3%
Large	8,000-9,999	182	1,558	248	2,121	278	2,384	304	2,610	352	3,032	393	3,399	452	3,944	153.1%
Very Large	10,000-13,999	34	397	60	753	105	1,329	161	2,046	195	2,524	62	653	215	2,633	563.2%
	14,000-17,999											188	2,610	65	961	
ULCV	18,000+													34	633	
Total		4,689	12,791	4,749	13,925	5,090	15,217	5,110	16,224	5,125	17,111	5,113	18,114	5,234	19,677	54%
% change year-over-year				1%	9%	7%	9%	0.4%	7%	0.3%	5%	-0.2%	6%	2%	9%	

Source: Drewry Maritime Research

The larger capacity ships are the fastest growing segment of the fleet. Since 2009, the total number of ships has increased 12 percent while the fleet capacity has increased 54 percent. When comparing the yearly change of the number of ships and the capacity of the fleet one can clearly see the number of ships has gone up each year but the capacity of the fleet has increased much more (see table 1 above). The largest increase to the fleet was in 2011 when the number of ships increased 7 percent while the fleet capacity increased 9 percent. Another significant increase occurred in 2015 when the number of ships climbed 2 percent while capacity increased 9 percent. If estimates are correct, 2016 is also expected to be a year of strong increases—a 4 percent increase in the number of container ships and a 7 percent increase in fleet capacity. The greatest year-over-year increases in 2016 are expected in the Very Large and Ultra Large Container Vessel (ULCV) categories. Table 2 below presents the current orderbook for container ships through 2019. These data show the number of new vessels currently on order and expected to be delivered in the corresponding years; and their capacity. After 2016, the rate of growth of the fleet is projected to slow each year through 2019 (see table 2 below) when the total global fleet capacity is estimated to reach 23.4 million TEUs.

Table 2: Global container ship orderbook, 2016-2019

Type of Vessel	Size (TEUs)	2016		2017		2018		2019		Total		% of the current fleet size
		No. of vessels	Capacity (thousand TEUs)									
Feeder	<1,000	2	1	0	0	0	0	0	0	2	1	0.20%
Handsize	1,000-1,999	50	77	31	47	9	14	0	0	90	138	7.90%
Intermediate	2,000-2,999	53	127	24	61	16	43	4	11	97	242	14.80%
Panamax	3,000-4,999	8	31	16	55	6	22	0	0	30	108	2.90%
Post-Panamax	5,000-7,999	2	12	4	21	0	0	0	0	6	33	0.90%
Large	8,000-9,999	37	345	6	58	0	0	0	0	43	402	10.20%
Very Large	10,000-13,999	24	254	18	193	15	201	0	0	57	648	24.60%
	14,000-17,999	23	333	25	352	7	99	3	42	58	825	85.80%
ULCV	18,000+	14	269	22	444	28	547	5	90	69	1,351	213.50%
Total		213	1449	146	1231	81	926	12	143	452	4,872	37.70%

Source: Drewry Maritime Research

Overcapacity brings rate relief for importers and exporters, but the market is unbalanced and actions by the carriers to rebalance it bring service challenges and volatility to the trade community. The use of bigger ships and reduced profits for carriers lends itself to more widespread use of vessel sharing agreements (VSA) among the container ocean carriers. VSAs allow carriers to share space on vessels, which distributes the cost per voyage and often helps keep vessel utilization rates higher. Some carriers have sought to mitigate the situation by consolidating through mergers and acquisitions. While importers and exporters have benefited in the short term from overcapacity through lower rates, the resulting actions of growing VSAs and consolidation could reduce competition in the future, which could impact service levels for the trade community shipping by ocean vessel. While consolidation and VSAs may help reduce costs for carriers and help them rebalance the ocean shipping market, they may also present volatility for the importer and exporter; and require frequent and sometimes costly supply chain adjustments.

Over the last six decades, the container has brought innumerable opportunities for expanding international trade. For agricultural products, containerized movements have reached as high as 28 percent of the market by tonnage and over 60 percent by value, moving everything from grains to meats and fruits and vegetables to oils. For more than a decade, grain products and soybeans have been the top containerized agricultural products. In 2013, containerized grain reached a record 10 percent of total U.S. grain exports. Top destinations for U.S. containerized grain exports include China, Taiwan, Indonesia, Vietnam, Thailand, Korea, and others (see [Figure 18 inside the Grain Transportation Report](#)). april.taylor@ams.usda.gov

Grain Transportation Indicators

Table 1

Grain Transport Cost Indicators¹

For the week ending	Truck	Rail		Barge	Ocean		
		Unit	Train	Shuttle	Gulf	Pacific	
05/04/16	152	251		193	146	112	106
04/27/16	148	250		192	149	112	106

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	4/29/2016	4/22/2016
Corn	IL--Gulf	-0.63	-0.60
Corn	NE--Gulf	-0.89	-0.86
Soybean	IA--Gulf	-1.12	-1.17
HRW	KS--Gulf	-1.07	-1.05
HRS	ND--Portland	-1.66	-1.73

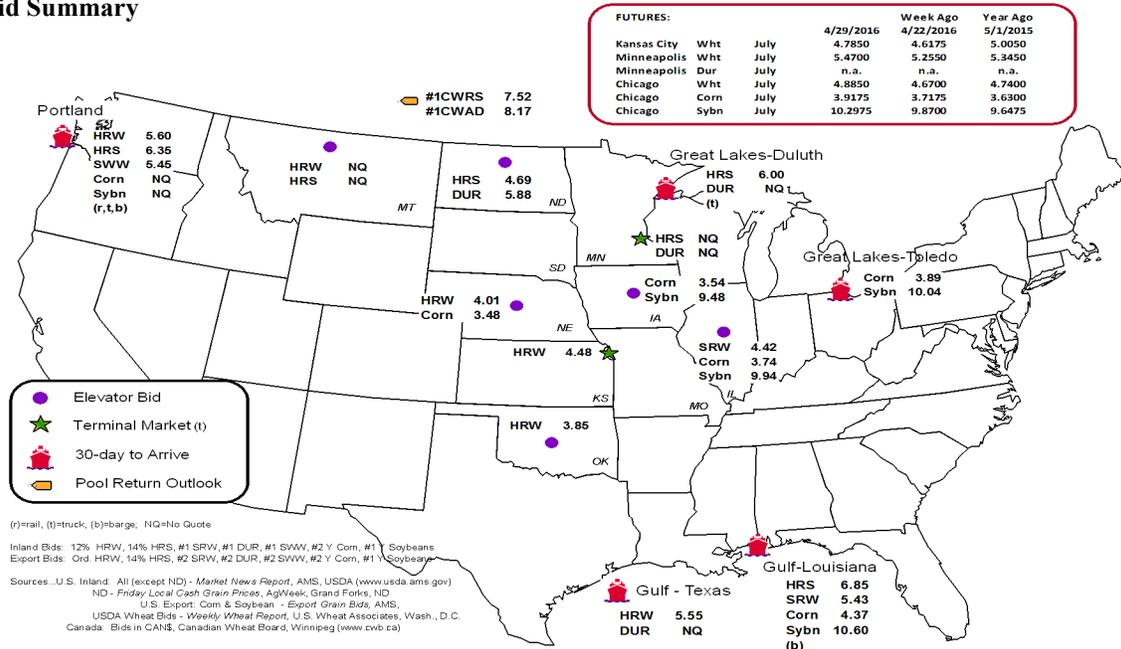
Note: nq = no quote

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

For the Week Ending	Mississippi		Pacific	Atlantic &	Total	Week ending	Cross-Border Mexico ³
	Gulf	Texas Gulf	Northwest	East Gulf			
4/27/2016 ^p	118	1,573	3,067	120	4,878	4/23/2016	2,316
4/20/2016 ^r	137	1,520	4,489	288	6,434	4/16/2016	2,943
2016 YTD ^r	5,510	26,192	92,377	8,577	132,656	2016 YTD	33,951
2015 YTD ^r	10,012	24,412	91,200	11,003	136,627	2015 YTD	28,559
2016 YTD as % of 2015 YTD	55	107	101	78	97	% change YTD	119
Last 4 weeks as % of 2015 ²	46	72	99	66	88	Last 4wks % 2015	127
Last 4 weeks as % of 4-year avg. ²	38	94	112	62	95	Last 4wks % 4 yr	125
Total 2015	29,054	60,819	239,029	26,730	355,632	Total 2015	97,736
Total 2014	44,617	83,674	256,670	32,107	417,068	Total 2014	98,422

¹ Data is incomplete as it is voluntarily provided

² Compared with same 4-weeks in 2015 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.

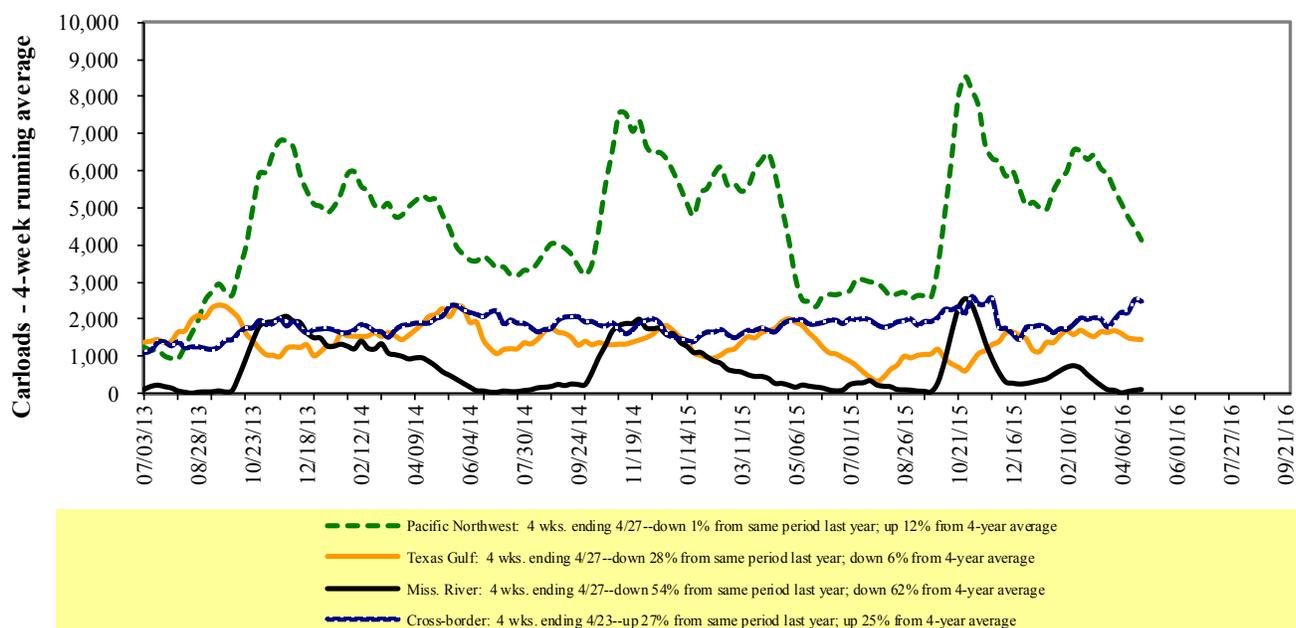
YTD = year-to-date; p = preliminary data; r = revised data; n/a = not available

Source: Transportation & Marketing Programs/AMS/USDA

Railroads originate approximately 24 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

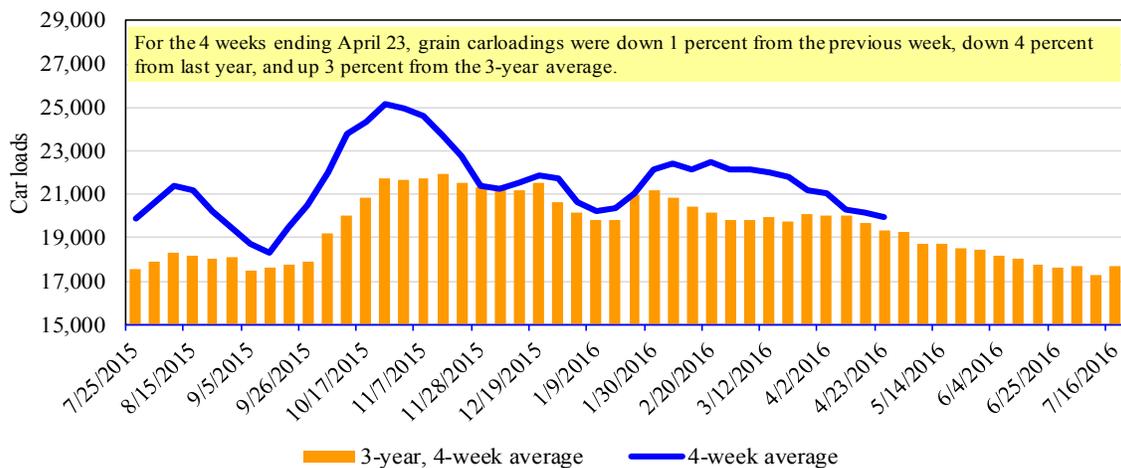
Class I Rail Carrier Grain Car Bulletin (grain carloads originated)

For the week ending:	East		West			U.S. total	Canada	
	CSXT	NS	BNSF	KCS	UP		CN	CP
4/23/2016								
This week	1,917	2,407	8,036	1,028	4,952	18,340	3,386	3,378
This week last year	2,152	3,324	8,776	395	5,262	19,909	4,192	3,658
2016 YTD	30,329	44,095	169,395	13,942	83,776	341,537	55,032	72,080
2015 YTD	33,697	49,085	172,269	13,273	87,339	355,663	65,772	69,011
2016 YTD as % of 2015 YTD	90	90	98	105	96	96	84	104
Last 4 weeks as % of 2015*	93	89	94	120	103	96	85	116
Last 4 weeks as % of 3-yr avg.**	104	97	102	126	105	103	85	94
Total 2015	104,039	149,043	536,173	45,445	267,720	1,102,420	211,868	236,263

*The past 4 weeks of this year as a percent of the same 4 weeks last year.

**The past 4 weeks as a percent of the same period from 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

For the week ending:		<u>Delivery period</u>							
4/28/2016		May-16	May-15	Jun-16	Jun-15	Jul-16	Jul-15	Aug-16	Aug-15
BNSF ³	COT grain units	no bids	0	no bids	0	no bids	0	no bids	111
	COT grain single-car ⁵	0..1	0..19	0	0..55	0	19..55	0	6..105
UP ⁴	GCAS/Region 1	no bids	no bids	no bids	no bids	no bids	no bids	n/a	n/a
	GCAS/Region 2	no bids	no bids	no bids	no bids	no bids	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.

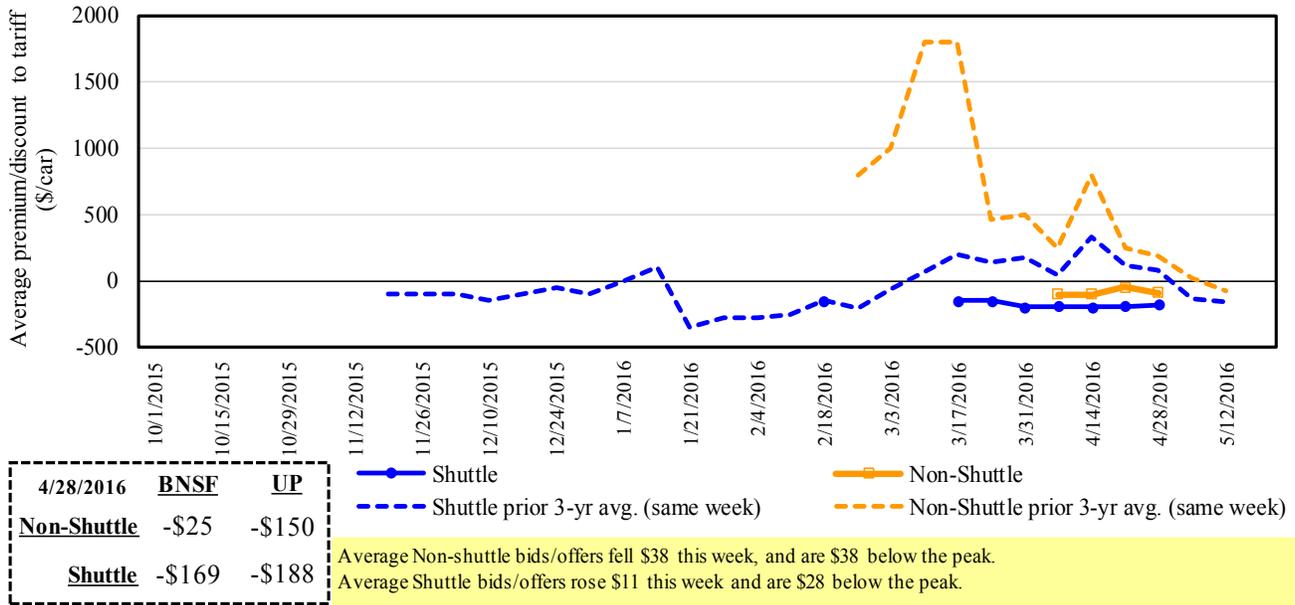
Region 2 includes: CO, IA, KS, MN, NE, WY, and Kansas City and St. Joseph, MO.

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

Source: Transportation & Marketing Programs/AMS/USDA.

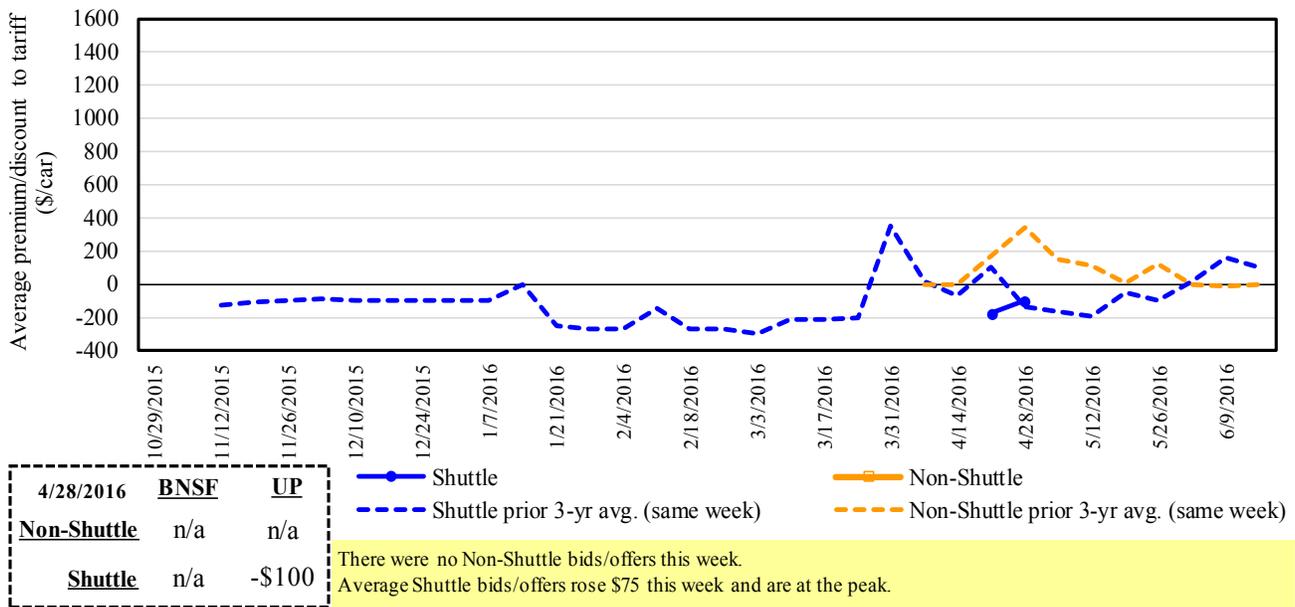
The **secondary rail market** information reflects trade values for service that was originally purchased from the railroad carrier as some form of guaranteed freight. The **auction and secondary rail** values are indicators of rail service quality and demand/supply.

Figure 4
Bids/Offers for Railcars to be Delivered in May 2016, Secondary Market



Non-shuttle bids include unit-train and single-car bids. n/a = not available.
 Source: Transportation & Marketing Programs/AMS/USDA

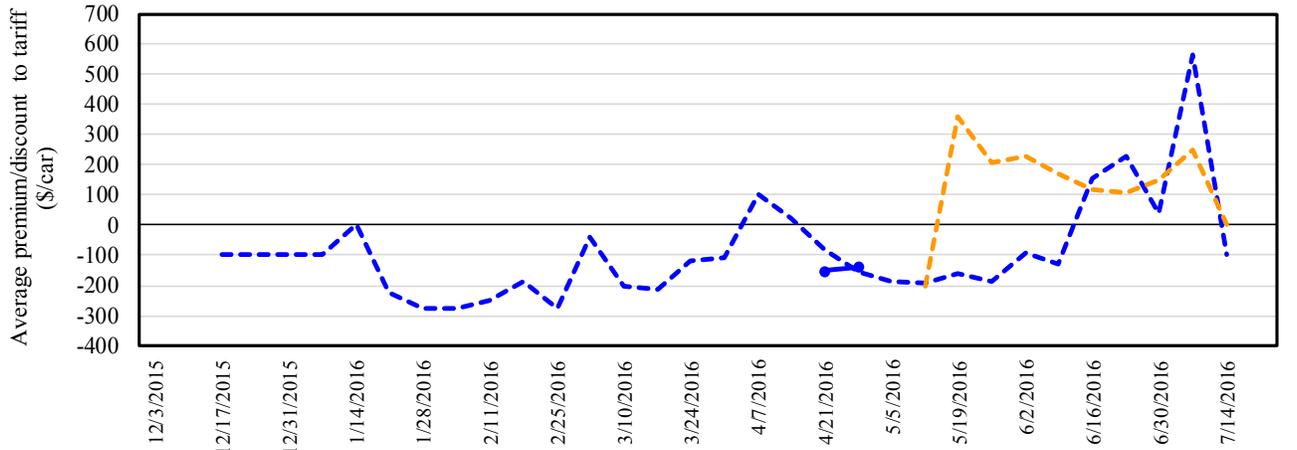
Figure 5
Bids/Offers for Railcars to be Delivered in June 2016, Secondary Market



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 July 2016, Secondary Market



4/28/2016	BNSF	UP
Non-Shuttle	n/a	n/a
Shuttle	n/a	-\$138

—●— Shuttle
- - - Shuttle prior 3-yr avg. (same week)
—■— Non-Shuttle
- - - Non-Shuttle prior 3-yr avg. (same week)

There were no Non-Shuttle bids/offers this week.
 Average Shuttle bids/offers rose \$13 this week and are at the peak.

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

For the week ending:		Delivery period					
		4/28/2016	May-16	Jun-16	Jul-16	Aug-16	Sep-16
Non-shuttle	BNSF-GF	(25)	n/a	n/a	n/a	n/a	n/a
	Change from last week	(25)	n/a	n/a	n/a	n/a	n/a
	Change from same week 2015	75	n/a	n/a	n/a	n/a	n/a
	UP-Pool	(150)	n/a	n/a	n/a	n/a	n/a
	Change from last week	(50)	n/a	n/a	n/a	n/a	n/a
	Change from same week 2015	0	n/a	n/a	n/a	n/a	n/a
Shuttle	BNSF-GF	(169)	n/a	n/a	n/a	n/a	n/a
	Change from last week	22	n/a	n/a	n/a	n/a	n/a
	Change from same week 2015	n/a	n/a	n/a	n/a	n/a	n/a
	UP-Pool	(188)	(100)	(138)	(100)	n/a	n/a
	Change from last week	0	50	13	n/a	n/a	n/a
	Change from same week 2015	13	100	113	150	n/a	n/a

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

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 Shipments¹

Effective date:		Origin region*	Destination region*	Tariff rate/car	Fuel surcharge per car	Tariff plus surcharge per:		Percent change Y/Y ³
5/1/2016	metric ton					bushel ²		
Unit train								
Wheat	Wichita, KS	St. Louis, MO	\$3,605	\$0	\$35.80	\$0.97	4	
	Grand Forks, ND	Duluth-Superior, MN	\$3,463	-\$30	\$34.09	\$0.93	-18	
	Wichita, KS	Los Angeles, CA	\$6,950	-\$153	\$67.50	\$1.84	-4	
	Wichita, KS	New Orleans, LA	\$4,243	\$0	\$42.14	\$1.15	2	
	Sioux Falls, SD	Galveston-Houston, TX	\$6,486	-\$126	\$63.16	\$1.72	-4	
	Northwest KS	Galveston-Houston, TX	\$4,511	\$0	\$44.80	\$1.22	1	
	Amarillo, TX	Los Angeles, CA	\$4,710	\$0	\$46.77	\$1.27	0	
Corn	Champaign-Urbana, IL	New Orleans, LA	\$3,681	\$0	\$36.55	\$0.93	6	
	Toledo, OH	Raleigh, NC	\$6,061	\$0	\$60.19	\$1.53	5	
	Des Moines, IA	Davenport, IA	\$2,168	\$0	\$21.53	\$0.55	-2	
	Indianapolis, IN	Atlanta, GA	\$5,004	\$0	\$49.69	\$1.26	2	
	Indianapolis, IN	Knoxville, TN	\$4,311	\$0	\$42.81	\$1.09	3	
	Des Moines, IA	Little Rock, AR	\$3,444	\$0	\$34.20	\$0.87	1	
Soybeans	Des Moines, IA	Los Angeles, CA	\$5,052	\$0	\$50.17	\$1.27	-2	
	Minneapolis, MN	New Orleans, LA	\$3,699	\$0	\$36.73	\$1.00	-4	
	Toledo, OH	Huntsville, AL	\$5,051	\$0	\$50.16	\$1.37	5	
	Indianapolis, IN	Raleigh, NC	\$6,178	\$0	\$61.35	\$1.67	6	
	Indianapolis, IN	Huntsville, AL	\$4,529	\$0	\$44.98	\$1.22	1	
Champaign-Urbana, IL	New Orleans, LA	\$4,395	\$0	\$43.64	\$1.19	6		
Shuttle Train								
Wheat	Great Falls, MT	Portland, OR	\$3,853	-\$88	\$37.39	\$1.02	-7	
	Wichita, KS	Galveston-Houston, TX	\$3,871	-\$69	\$37.76	\$1.03	-5	
	Chicago, IL	Albany, NY	\$5,492	\$0	\$54.54	\$1.48	12	
	Grand Forks, ND	Portland, OR	\$5,511	-\$152	\$53.22	\$1.45	-7	
	Grand Forks, ND	Galveston-Houston, TX	\$5,831	-\$158	\$56.33	\$1.53	-15	
	Northwest KS	Portland, OR	\$5,478	\$0	\$54.40	\$1.48	-1	
	Corn	Minneapolis, MN	Portland, OR	\$5,000	-\$185	\$47.81	\$1.21	-10
Sioux Falls, SD		Tacoma, WA	\$4,960	-\$170	\$47.57	\$1.21	-10	
Champaign-Urbana, IL		New Orleans, LA	\$3,481	\$0	\$34.57	\$0.88	5	
Lincoln, NE		Galveston-Houston, TX	\$3,600	-\$99	\$34.77	\$0.88	-6	
Des Moines, IA		Amarillo, TX	\$3,795	\$0	\$37.69	\$0.96	-1	
Minneapolis, MN		Tacoma, WA	\$5,000	-\$184	\$47.83	\$1.21	-10	
Council Bluffs, IA		Stockton, CA	\$4,640	-\$190	\$44.19	\$1.12	-7	
Soybeans		Sioux Falls, SD	Tacoma, WA	\$5,490	-\$170	\$52.84	\$1.44	-9
		Minneapolis, MN	Portland, OR	\$5,510	-\$185	\$52.88	\$1.44	-10
		Fargo, ND	Tacoma, WA	\$5,380	-\$151	\$51.93	\$1.41	-9
	Council Bluffs, IA	New Orleans, LA	\$4,425	\$0	\$43.94	\$1.20	-4	
	Toledo, OH	Huntsville, AL	\$4,226	\$0	\$41.97	\$1.14	6	
Grand Island, NE	Portland, OR	\$5,360	\$0	\$53.23	\$1.45	-5		

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 surcharge per car ²	Tariff plus surcharge per:		Percent change ⁴ Y/Y
					metric ton ³	bushel ³	
Wheat	MT	Chihuahua, CI	\$7,459	\$0	\$76.21	\$2.07	-4
	OK	Cuautitlan, EM	\$6,514	\$0	\$66.55	\$1.81	-4
	KS	Guadalajara, JA	\$6,995	\$70	\$72.19	\$1.96	-3
	TX	Salinas Victoria, NL	\$4,142	\$0	\$42.32	\$1.15	1
Corn	IA	Guadalajara, JA	\$8,397	\$49	\$86.30	\$2.19	-3
	SD	Celaya, GJ	\$7,840	\$0	\$80.11	\$2.03	-2
	NE	Queretaro, QA	\$7,879	\$0	\$80.50	\$2.04	0
	SD	Salinas Victoria, NL	\$6,545	\$0	\$66.87	\$1.70	6
	MO	Tlalhepantla, EM	\$7,238	\$0	\$73.96	\$1.88	0
	SD	Torreon, CU	\$7,240	\$0	\$73.98	\$1.88	0
Soybeans	MO	Bojay (Tula), HG	\$8,652	\$54	\$88.95	\$2.42	1
	NE	Guadalajara, JA	\$9,142	\$52	\$93.93	\$2.55	0
	IA	El Castillo, JA	\$9,470	\$0	\$96.76	\$2.63	0
	KS	Torreon, CU	\$7,439	\$30	\$76.31	\$2.07	1
Sorghum	NE	Celaya, GJ	\$7,344	\$41	\$75.45	\$1.91	-3
	KS	Queretaro, QA	\$7,563	\$0	\$77.27	\$1.96	1
	NE	Salinas Victoria, NL	\$6,168	\$0	\$63.02	\$1.60	2
	NE	Torreon, CU	\$6,672	\$25	\$68.42	\$1.74	-3

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.

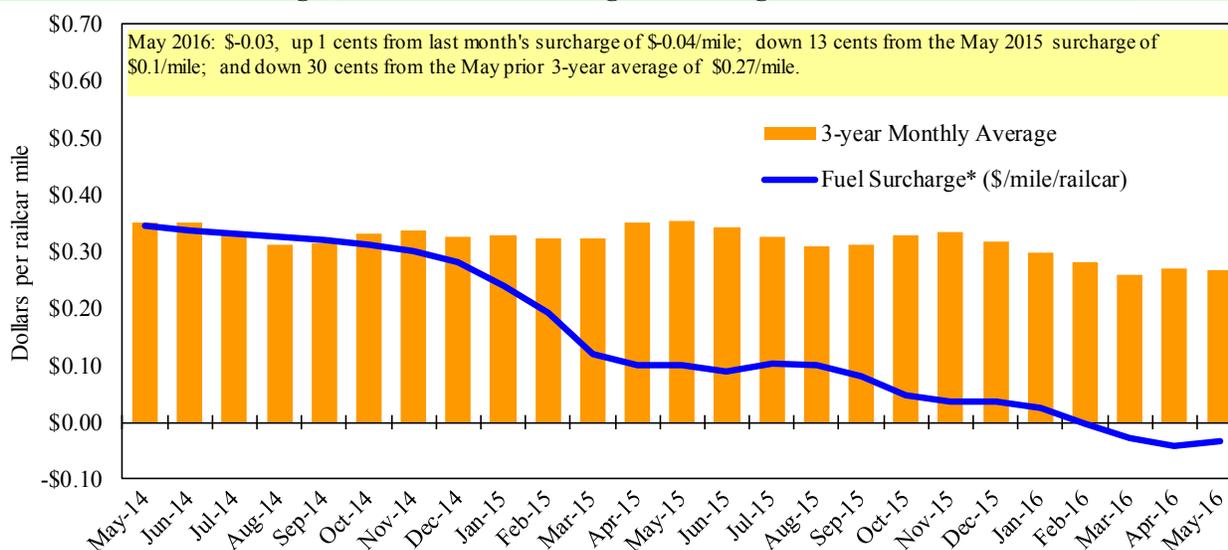
²Fuel surcharge adjusted to reflect the change in Ferrocarril Mexicano, S.A. de C.V railroad fuel surcharge policy as of 10/01/2009

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

⁴Percentage change 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.

* Beginning January 2009, the Canadian Pacific fuel surcharge is computed by a monthly average of the bi-weekly fuel surcharge.

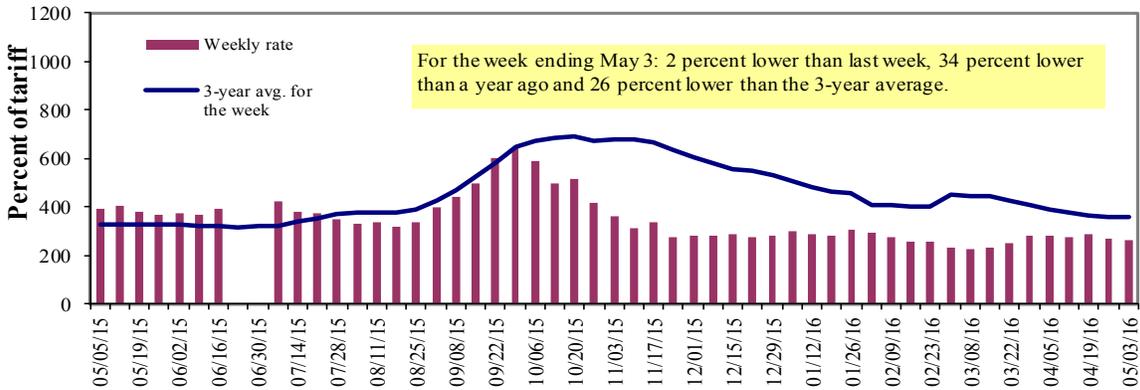
**CSX strike price changed from \$2.00/gal. to \$3.75/gal. starting January 1, 2015.

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	5/3/2016	325	278	263	193	190	190	183
	4/26/2016	340	293	268	198	200	200	190
\$/ton	5/3/2016	20.12	14.79	12.20	7.70	8.91	7.68	5.75
	4/26/2016	21.05	15.59	12.44	7.90	9.38	8.08	5.97
Current week % change from the same week:								
	Last year	-18	-28	-34	-29	-30	-30	-32
	3-year avg. ²	-24	-25	-26	-27	-27	-27	-18
Rate¹	June	338	288	268	193	198	198	193
	August	370	333	313	263	313	313	263

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:

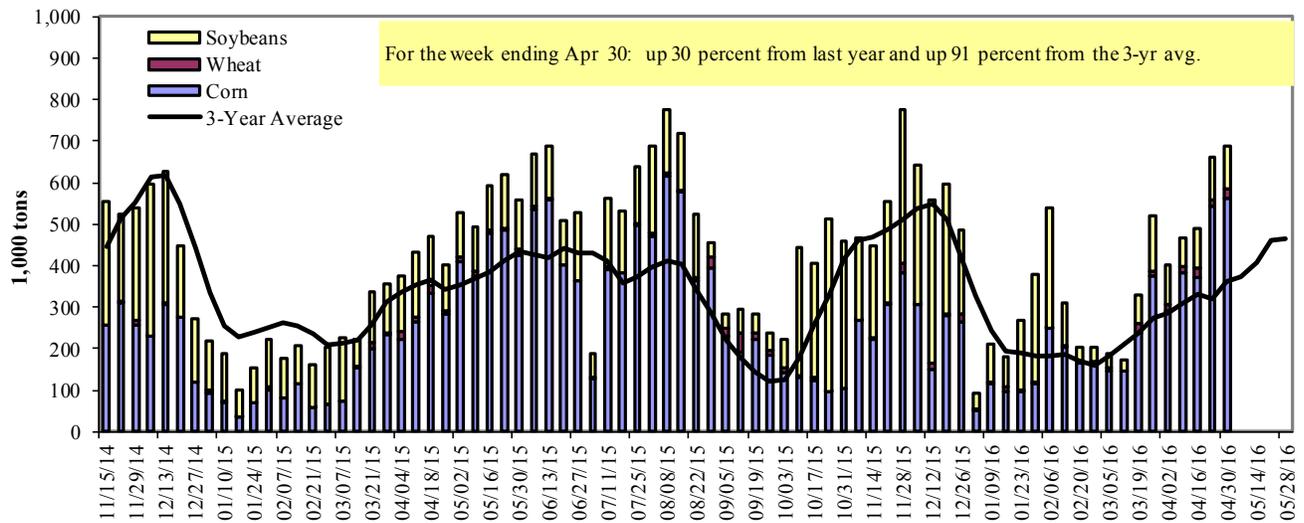
(Rate * 1976 tariff benchmark rate per ton)/100

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)

For the week ending 4/30/2016	Corn	Wheat	Soybeans	Other	Total
Mississippi River					
Rock Island, IL (L15)	202	28	94	5	330
Winfield, MO (L25)	365	18	76	8	467
Alton, IL (L26)	586	22	80	8	696
Granite City, IL (L27)	563	22	102	8	694
Illinois River (L8)	150	0	3	0	154
Ohio River (L52)	117	5	17	0	140
Arkansas River (L1)	1	35	15	0	52
Weekly total - 2016	681	63	135	8	886
Weekly total - 2015	602	70	173	5	850
2016 YTD ¹	6,482	527	3,729	59	10,798
2015 YTD	5,708	505	3,954	87	10,253
2016 as % of 2015 YTD	114	105	94	68	105
Last 4 weeks as % of 2015 ²	114	84	79	57	104
Total 2015	19,215	1,686	14,191	359	35,451

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.

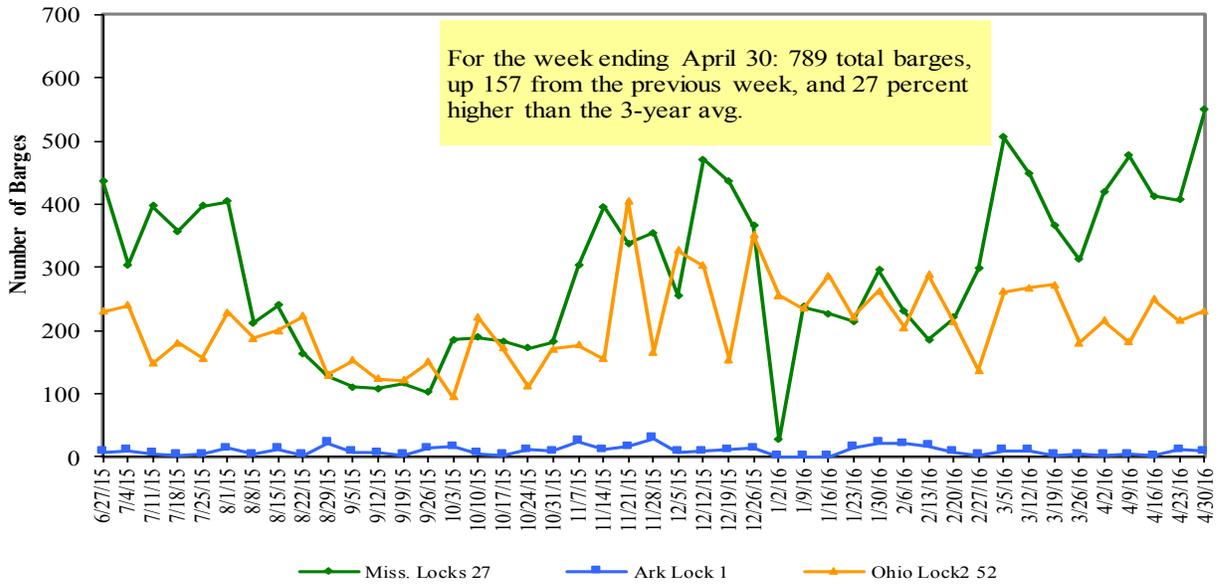
² As a percent of same period in 2015.

Note: Total may not add exactly, due to rounding

Source: U.S. Army Corps of Engineers

Figure 11

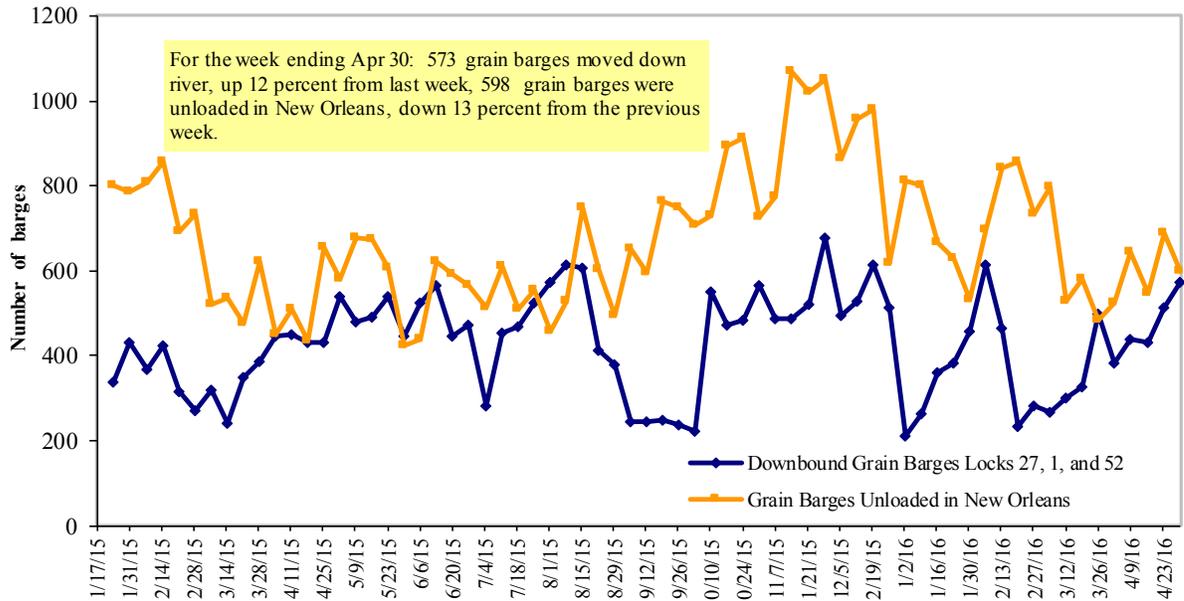
Upbound Empty Barges Transiting Mississippi River Locks 27, Arkansas River Lock and Dam 1, and Ohio River Locks and Dam 52



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 5/02/2016 (US \$/gallon)

Region	Location	Price	Change from	
			Week ago	Year ago
I	East Coast	2.306	0.062	-0.672
	New England	2.334	0.043	-0.732
	Central Atlantic	2.396	0.053	-0.737
	Lower Atlantic	2.232	0.073	-0.612
II	Midwest ²	2.232	0.076	-0.483
III	Gulf Coast ³	2.137	0.063	-0.614
IV	Rocky Mountain	2.255	0.053	-0.509
V	West Coast	2.481	0.075	-0.631
	West Coast less California	2.357	-0.148	-0.614
	California	2.579	0.297	-0.648
Total	U.S.	2.266	0.068	-0.588

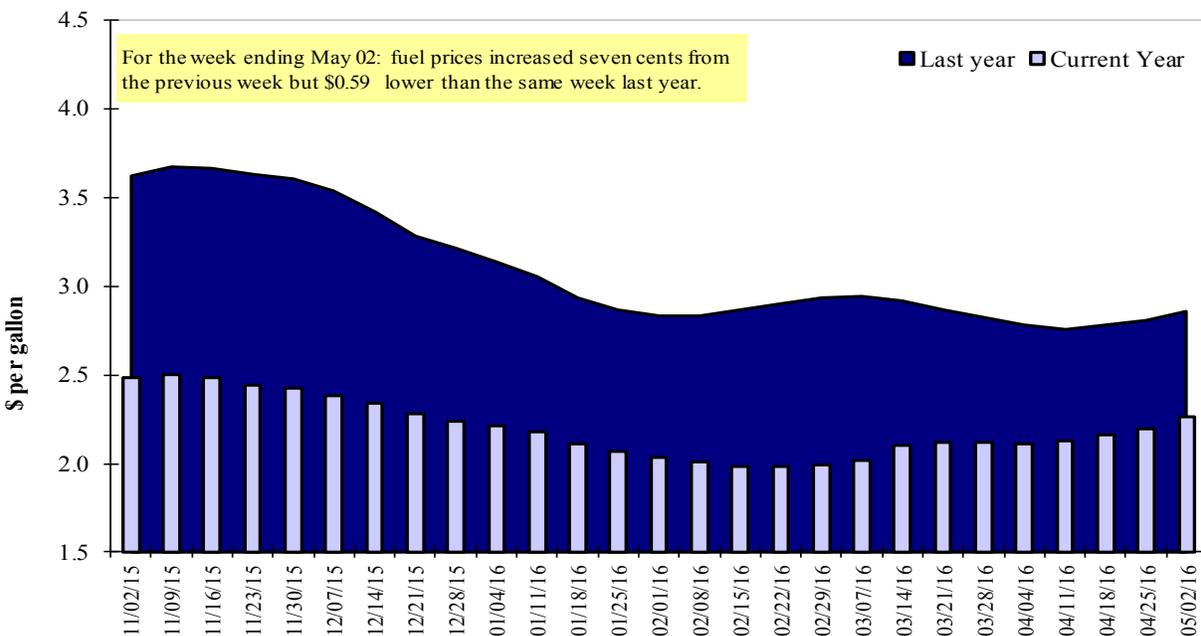
¹Diesel fuel prices include all taxes. Prices represent an average of all types of diesel fuel.

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)

For the week ending	Wheat						Corn	Soybeans	Total
	HRW	SRW	HRS	SWW	DUR	All wheat			
Export Balances¹									
4/21/2016	787	309	934	646	81	2,757	13,733	3,425	19,914
This week year ago	887	420	908	473	58	2,745	13,475	3,668	19,888
Cumulative exports-marketing year²									
2015/16 YTD	4,924	2,849	5,646	3,174	619	17,212	23,355	42,044	82,611
2014/15 YTD	6,458	3,300	6,669	3,447	607	20,481	26,842	45,378	92,701
YTD 2015/16 as % of 2014/15	76	86	85	92	102	84	87	93	89
Last 4 wks as % of same period 2014/15	84	83	122	141	157	108	96	93	97
2014/15 Total	7,009	3,654	7,250	3,758	665	22,336	45,205	49,614	117,155
2013/14 Total	11,465	7,307	6,338	4,367	486	29,963	46,868	44,478	121,309

¹ Current unshipped (outstanding) export sales to date

² Shipped export sales to date; new marketing year now 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

For the week ending 4/21/2016	Commitments ²		% change current MY from last MY	Exports ³ 3-year avg 2011-2013
	2015/16 Current MY	2014/15 Last MY		
	- 1,000 mt -			- 1,000 mt -
Japan	6,144	9,114	(33)	10,079
Mexico	11,428	9,534	20	8,145
Korea	1,541	2,827	(45)	2,965
Colombia	4,109	3,496	18	3,461
Taiwan	1,317	1,410	(7)	1,238
Top 5 Importers	24,539	26,381	(7)	25,887
Total US corn export sales	37,088	40,317	(8)	34,445
% of Projected	88%	85%		
Change from prior week	2,161	832		
Top 5 importers' share of U.S. corn export sales	66%	65%		75%
USDA forecast, April 2016	41,985	47,430	(11)	
Corn Use for Ethanol USDA forecast, April 2016	133,350	132,080	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 Importers¹ of U.S. Soybeans

For the week ending 4/21/2016	Total Commitments ²		% change current MY from last MY	Exports ³ 3-yr avg. 2011-13
	2015/16 Current MY	2014/15 Last MY		
	- 1,000 mt -			- 1,000 mt -
China	27,033	29,896	(10)	24,211
Mexico	3,108	2,970	5	2,971
Indonesia	1,477	1,576	(6)	1,895
Japan	1,947	1,653	18	1,750
Taiwan	1,139	1,165	(2)	1,055
Top 5 importers	34,703	37,260	(7)	31,882
Total US soybean export sales	45,469	49,046	(7)	39,169
% of Projected	98%	98%		
Change from prior week	226	433		
Top 5 importers' share of U.S. soybean export sales	76%	76%		81%
USDA forecast, April 2016	46,458	50,218	(7)	

(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 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

For the week ending 4/21/2016	Total Commitments ²		% change current MY from last MY	Exports ³ 3-yr avg 2012-2014
	2015/16 Current MY	2014/15 Last MY		
	- 1,000 mt -			- 1,000 mt -
Japan	2,458	3,072	(20)	3,113
Mexico	2,344	2,718	(14)	2,807
Nigeria	1,455	1,967	(26)	2,512
Philippines	2,147	2,417	(11)	2,105
Brazil	450	1,534	(71)	2,091
Korea	1,134	1,172	(3)	1,273
Taiwan	1,088	988	10	1,007
Indonesia	538	635	(15)	751
Colombia	649	575	13	662
Thailand	556	672		618
Top 10 importers	12,263	15,077	(19)	16,939
Total US wheat export sales	19,969	23,226	(14)	26,361
% of Projected	95%	100%		
Change from prior week	352	(449)		
Top 10 importers' share of U.S. wheat export sales	61%	65%		64%
USDA forecast, April 2016	21,117	23,270	(9)	

(n) indicates negative number.

¹Based on FAS Marketing Year Ranking Reports - www.fas.usda.gov; Marketing year = Jun 1 - May 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 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	For the Week Ending 04/28/16	Previous Week ¹	Current Week as % of Previous	2016 YTD*	2015 YTD*	2016 YTD as % of 2015 YTD	Last 4-weeks as % of:		2015 Total*
							Last Year	Prior 3-yr. avg.	
Pacific Northwest									
Wheat	158	297	53	3,856	4,093	94	98	81	10,985
Corn	154	184	84	2,665	3,458	77	97	131	7,232
Soybeans	12	11	111	4,414	4,034	109	15	18	11,809
Total	324	491	66	10,935	11,584	94	89	92	30,027
Mississippi Gulf									
Wheat	123	89	139	1,211	1,327	91	143	71	4,504
Corn	713	782	91	9,224	9,489	97	101	113	26,701
Soybeans	80	162	50	8,840	9,285	95	129	165	29,593
Total	916	1,033	89	19,274	20,101	96	108	114	60,797
Texas Gulf									
Wheat	46	0	n/a	873	1,324	66	31	23	3,724
Corn	62	0	n/a	313	178	176	326	285	596
Soybeans	0	0	n/a	92	210	44	n/a	0	864
Total	108	0	n/a	1,278	1,712	75	49	37	5,184
Interior									
Wheat	17	18	94	420	462	91	88	106	1,388
Corn	210	136	154	2,137	1,922	111	140	181	6,201
Soybeans	58	111	52	1,387	1,288	108	132	128	3,518
Total	284	265	107	3,945	3,672	107	130	152	11,106
Great Lakes									
Wheat	31	29	105	70	97	73	83	83	997
Corn	0	21	0	21	85	24	24	58	485
Soybeans	0	0	n/a	0	6	0	0	0	733
Total	31	50	61	91	188	48	52	69	2,216
Atlantic									
Wheat	0	25	0	151	244	62	26	76	520
Corn	0	0	n/a	14	49	28	0	0	277
Soybeans	8	12	67	831	871	95	73	90	2,053
Total	8	37	23	995	1,164	85	38	52	2,850
U.S. total from ports²									
Wheat	375	457	82	6,581	7,547	87	84	66	22,118
Corn	1,138	1,123	101	14,373	15,180	95	104	124	41,492
Soybeans	159	297	53	15,564	15,695	99	102	121	48,570
Total	1,671	1,876	89	36,518	38,422	95	98	103	112,180

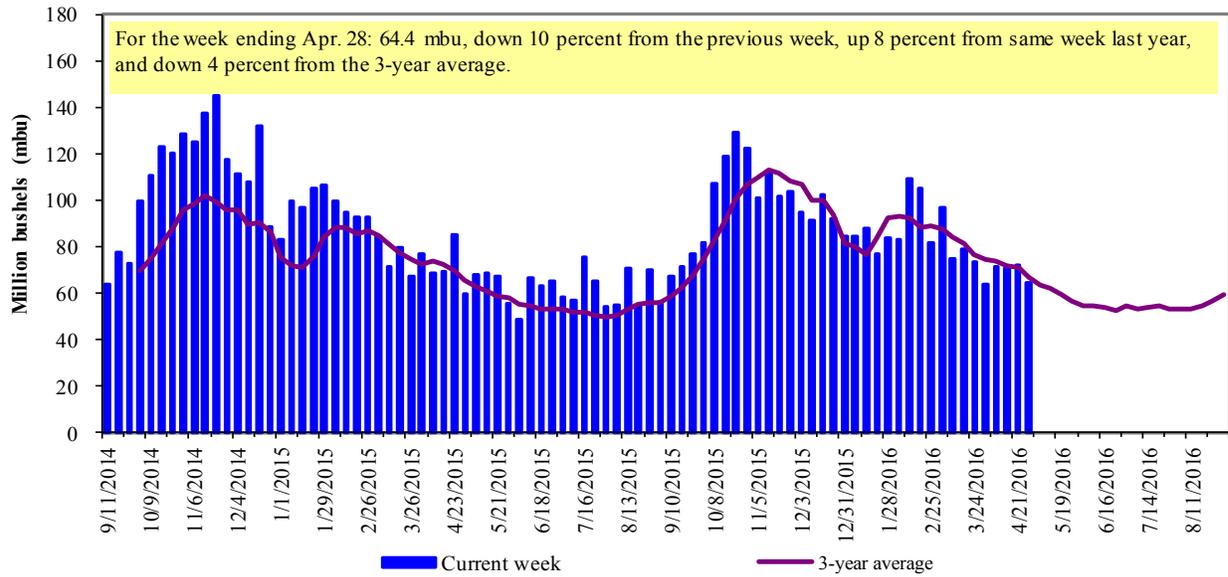
¹ Data includes revisions from prior weeks; some regional totals may not add exactly due to rounding.

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 2015.

Figure 14

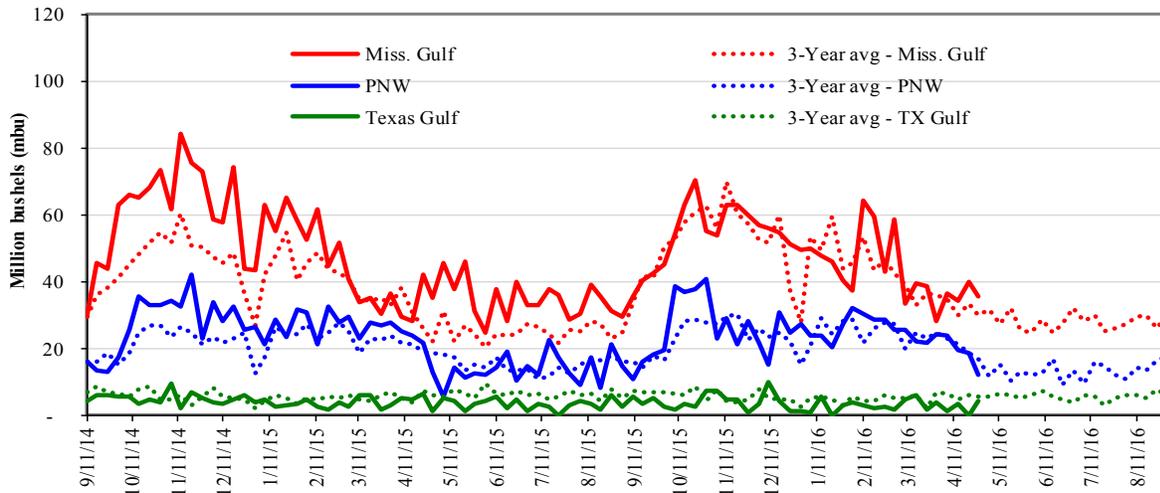
U.S. grain inspected for export (wheat, corn, and soybeans)



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)



Week ending 04/28/16 inspections (mbu):		Percent change from:			
Mississippi Gulf:	35.5	Last Week:	MS Gulf down 11	TX Gulf n/a	U.S. Gulf unchanged
PNW:	12.3	Last Year (same week):	unchanged	up 254	down 4
Texas Gulf:	4.1	3-yr avg. (4-wk. mov. Avg):	up 11	down 29	up 5
					down 38

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

Ocean Transportation

Table 17

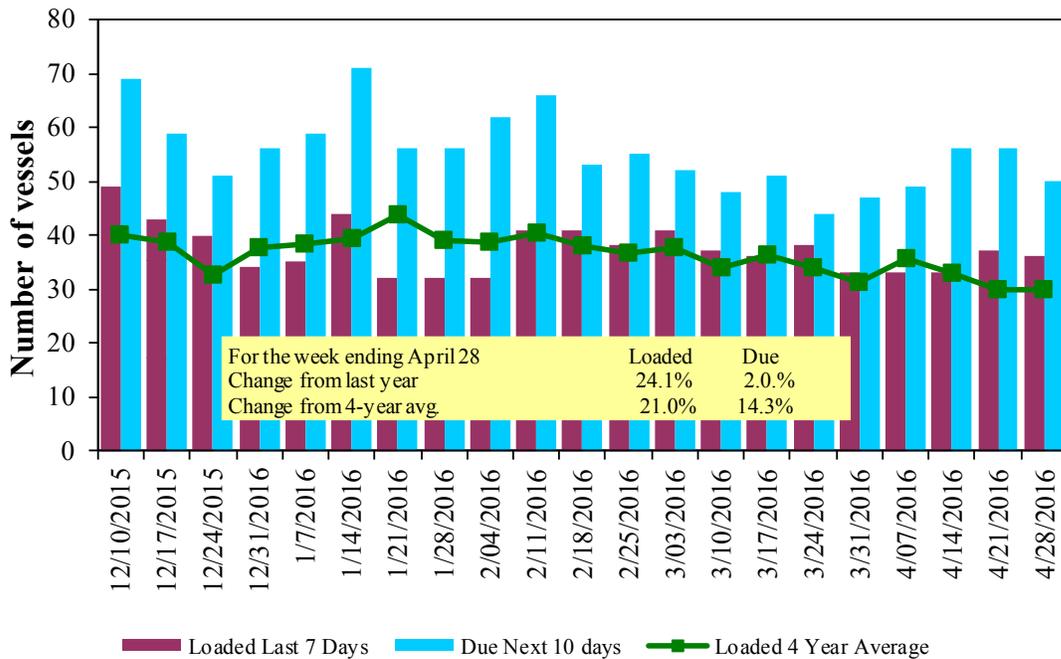
Weekly Port Region Grain Ocean Vessel Activity (number of vessels)

Date	Gulf			Pacific Northwest	Vancouver B.C.
	In port	Loaded 7-days	Due next 10-days	In port	In port
4/28/2016	33	36	50	9	n/a
4/21/2016	33	37	56	10	n/a
2015 range	(25..54)	(28..54)	(36..80)	(3..26)	n/a
2015 avg.	42	38	56	11	n/a

Source: Transportation & Marketing Programs/AMS/USDA

Figure 16

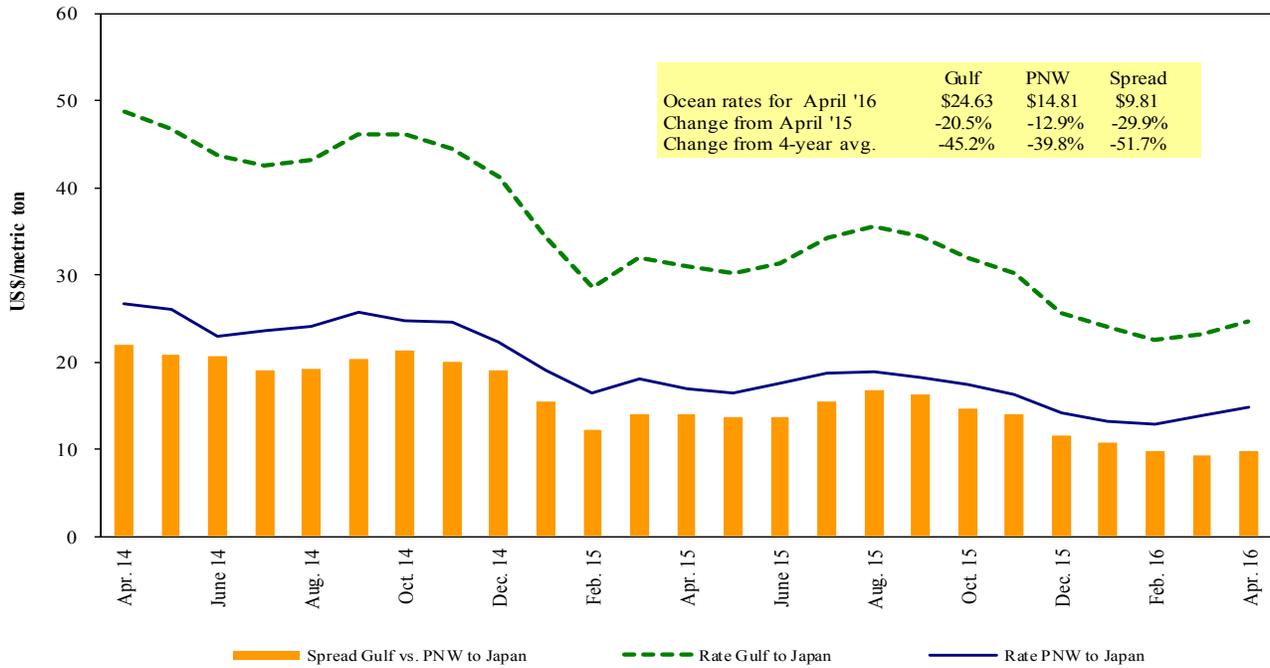
U.S. Gulf¹ Vessel Loading Activity



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 04/30/2016

Export region	Import region	Grain types	Loading date	Volume loads (metric tons)	Freight rate (US\$/metric ton)
U.S. Gulf	Japan	Heavy Grain	Apr 5/18	52,000	21.25
U.S. Gulf	Djibouti	Wheat ¹	Apr 4/14	34,000	128.76
U.S. Gulf	Djibouti	Sorghum	Apr 18/28	15,000	64.63
Brazil	China	Heavy Grain	May 5/15	60,000	17.75
Brazil	China	Heavy Grain	May 1/20	60,000	15.50
Brazil	China	Heavy Grain	May 1/16	66,000	15.25
Brazil	China	Heavy Grain	May 1/15	66,000	15.50
Brazil	China	Heavy Grain	May 1/10	60,000	16.65
Brazil	China	Heavy Grain	May 1/6	60,000	14.75
Brazil	China	Heavy Grain	April 20/30	60,000	17.50
Brazil	China	Heavy Grain	Apr 15/24	60,000	14.50
Dominca Republic	Belgium	Heavy Grain	May 11/15	62,000	8.50
EC S America	China	Heavy Grain	May/June	60,000	14.75
France	Algeria	Wheat	May 1/5	30,000	15.75
Uruguay	Portugal	Soybeans	Apr 15/20	30,000	17.50

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

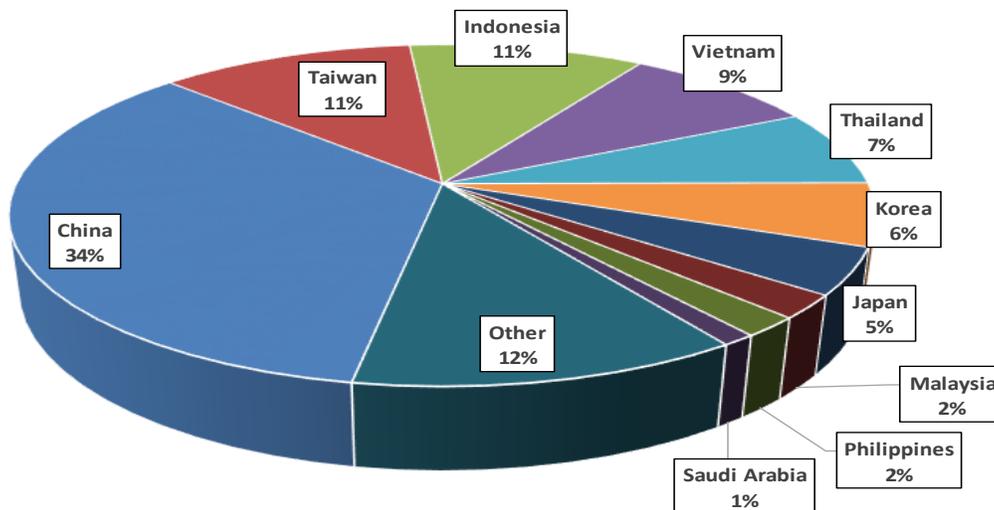
¹ 50 percent of food aid from the United States is required to be shipped on U.S.-flag vessels.

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

In 2014, containers were used to transport 7 percent of total U.S. waterborne grain exports. Approximately 63 percent of U.S. waterborne grain exports in 2014 went to Asia, of which 11 percent were moved in containers. Approximately 95 percent of U.S. waterborne containerized grain exports were destined for Asia.

Figure 18

Top 10 Destination Markets for U.S. Containerized Grain Exports, January–December 2015

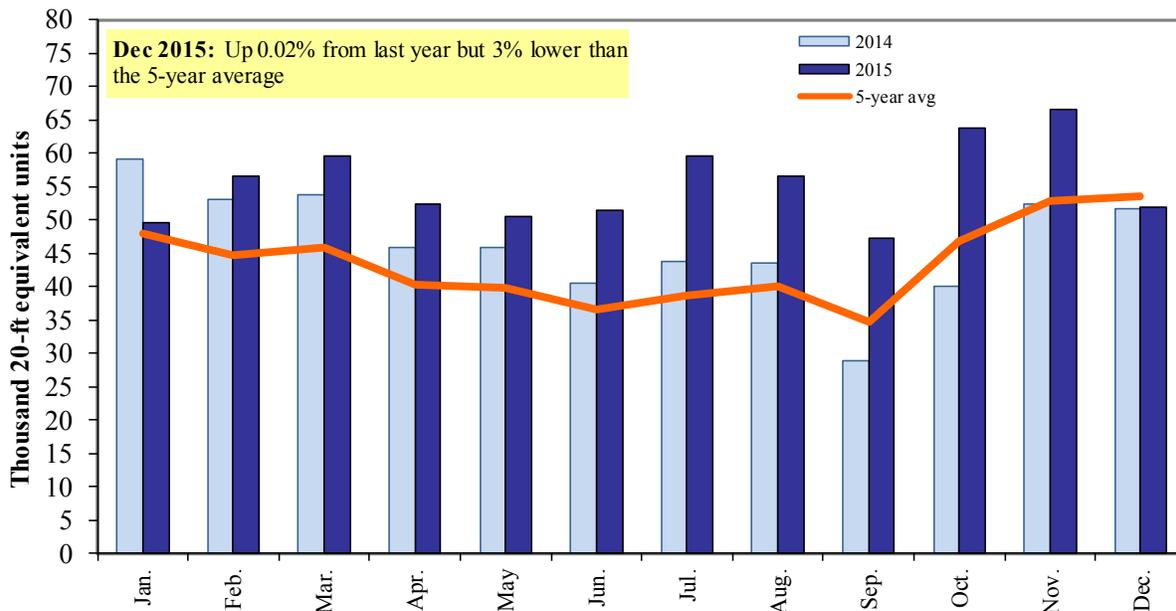


Source: USDA/Agricultural Marketing Service/Transportation Services Division analysis of Port Import Export Reporting Service (PIERS) data

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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