



Grain Transportation Report

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

Contact Us

September 14, 2017

WEEKLY HIGHLIGHTS

Contents

Article/
Calendar

Grain
Transportation
Indicators

Rail

Barge

Truck

Exports

Ocean

Brazil

Mexico

Grain Truck/Ocean
Rate Advisory

Datasets

Specialists

Subscription
Information

The next
release is
September 21, 2017

Ohio River Locks and Dam 52 Likely to Re-Open after Emergency Repairs

On September 8, Ohio River Locks and Dam (L&D) 52, near Brookport, IL, was closed to all traffic due to a component failure of the dam. The U.S. Army Corps of Engineers performed emergency repairs and the lock should be operational by late Thursday (September 14). Based on the 2003-2014 average, L&D 52 handles about 18 percent of all corn and 16 percent of all soybeans shipments delivered by barge to New Orleans for export.

Railroads Nearly Complete in Restoring Service in Texas after Hurricane Harvey

The railroads have made great strides in returning service to southeastern Texas following Hurricane Harvey. According to a [September 7](#) customer announcement from Union Pacific, "Thanks to the incredible work of countless teams, today the majority of service has been restored. At the height of the storm 1,750 miles of track were out of service and 2,440 route miles were affected. As of today, just 50 miles of track are out of service and 420 route miles have been affected." [BNSF](#) has restored service to all subdivisions impacted by Harvey and notes that customers may face delays as track and signal work continues and rail carriers fully normalize. Similarly, Kansas City Southern (KCS) has restored service to all subdivisions, since the Beaumont Subdivision reopened on [September 9](#). On September 13, KCS stated all embargoes have been lifted, although shippers may encounter delays due to speed restrictions and a backlog of orders.

Wheat and Soybeans Boost Total Grain Inspections

For the week ending September 7, **total inspections of grain** (corn, wheat, and soybeans) for export from major U.S. export regions reached 2.28 million metric tons (mmt), up 24 percent from the previous week, down 27 percent from the same time last year, and 4 percent above the 3-year average. The increase was driven by a significant jump in week-to-week inspections of wheat and soybeans. Pacific Northwest (PNW) grain inspections were unchanged from the previous week, while inspections in the Mississippi Gulf jumped 44 percent. Texas Gulf grain inspections recovered slightly due to the passing of the hurricane, but were still the lowest since early May 2016. Outstanding (unshipped) export sales were up from the previous week for corn, wheat, and soybeans.

Snapshots by Sector

Export Sales

For the week ending August 31, **unshipped balances** of wheat, corn, and soybeans totaled 30 mmt, down 32 percent from the same time last year. Net weekly **wheat export sales** were .375 mmt, down 30 percent from the previous week. For the end of the 2016/17 marketing year, net **corn export sales** were negative .359 mmt from the previous week, and net **soybean export sales** were negative .366 mmt for the same period.

Rail

U.S. Class I railroads originated 18,206 **grain carloads** for the week ending September 2, down 8 percent from the previous week, down 26 percent from last year, and down 13 percent from the 3-year average.

Average September shuttle **secondary railcar** bids/offers per car were \$129 above tariff for the week ending September 7, down \$153 from last week, and \$4 higher than last year. There were no non-shuttle bids/offers this week.

Barge

For the week ending September 9, **barge grain movements** totaled 968,150 tons, 62 percent higher than the last week, and up 83 percent from the same period last year.

For the week ending September 9, 613 grain barges **moved down river**, up 59 percent from last week, 851 grain barges were **unloaded in New Orleans**, up 33 percent from the previous week.

Ocean

For the week ending September 7, 31 **ocean-going grain vessels** were loaded in the Gulf, 35 percent less than the same period last year. Forty-six vessels are expected to be loaded within the next 10 days, 27 percent less than the same period last year.

For the week ending September 7, the ocean freight rate for shipping bulk grain from the Gulf to Japan was \$40.00 per metric ton, 3 percent higher than the previous week. The cost of shipping from the PNW to Japan was \$21.50 per metric ton, 8 percent higher than the previous week.

Fuel

During the week ending September 11, average **diesel fuel prices** increased 4 cents from the previous week at \$2.80 per gallon, 40 cents above the same week last year.

Feature Article/Calendar

Grain Transportation Update

Year-to-date (YTD) transportation shipments have been above last year's level. Weather conditions have hampered rail and barge, but both have had YTD tonnage increases compared to the previous year. As of September 9, year-to-date grain barge tonnages totaled 29.0 million tons, 16 percent higher than the 5-year average. YTD ocean-going grain vessel loading activity in the U.S. Gulf and Pacific Northwest (PNW) are above the same period last year. The ocean freight rates for shipping bulk grains have increased lately but are still lower than the YTD peaks attained during April. Average diesel fuel prices have been fluctuating and are so far above the U.S. Energy Information Administration (EIA) forecast for the year. However, demand for grain transportation may decline in the coming months relative to previous years, as USDA forecasts a drop in corn and wheat production and exports.

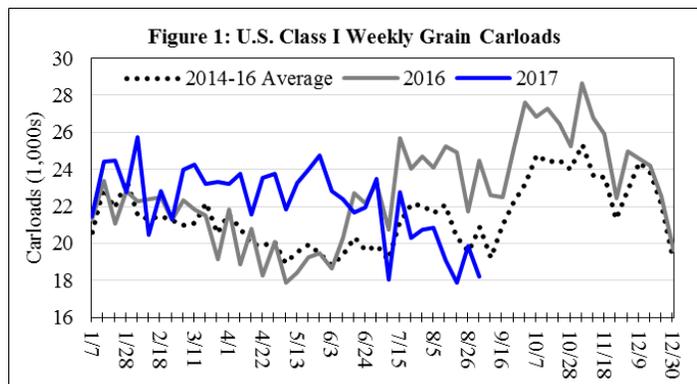
Total Grain Production and Export Projections Down, Despite Record Soybean Production

According to the [September World Agricultural Supply and Demand Estimates \(WASDE\)](#) report, USDA forecasts 2017/18 crop production to reach 20.4 billion bushels (bbu) for corn, soybeans, and wheat, down 7 percent from the past year (Table 1). USDA expects another record crop for soybeans. USDA projects total grain exports to reach 5.1 bbu for the 2017/18 marketing year, down 8 percent from last year. USDA projects exports of corn and wheat to decrease by 19 and 8 percent, respectively, from last year, USDA forecasts soybean exports to increase by 5 percent. As of August 31, outstanding (unshipped) export sales for the three major grains are down 32 percent from last year.

	Corn	Soybeans	Wheat	Total	Y/Y
United States 2017/18 (Projected)					
Production	14,184	4,431	1,739	20,354	-6.5%
Exports	1,850	2,250	975	5,075	-7.7%
Domestic Use	12,400	2,076	2,141	16,617	7.3%
Ending Stocks/Use	16.4%	11.0%	43.6%		
United States 2016/17 (Estimated)					
Production	15,148	4,307	2,310	21,765	11.1%
Exports	2,295	2,150	1,055	5,500	19.0%
Domestic Use	12,295	2,033	1,164	15,492	3.7%
Ending Stocks/Use	16.1%	8.2%	55.3%		
2015/16					
Production	13,602	3,926	2,062	19,590	
Exports	1,901	1,942	778	4,621	
Domestic Use	11,763	2,002	1,174	14,939	
Ending Stocks/Use	12.7%	5.0%	50.0%		

Grain Carloads Remain Strong in 2017, Despite Recent Declines

According to the Association of American Railroads (AAR), U.S. Class I railroads originated almost 3 percent more grain carloads year to date this year over 2016. Throughout much of the spring and early summer, grain carloadings have remained well above average, before falling in late July (Figure 1). Even with severe weather events earlier in the first quarter and in recent weeks, total carloads and intermodal units (containers and trailers) for U.S. Class I railroads are also up in 2017 compared to the same period last year.



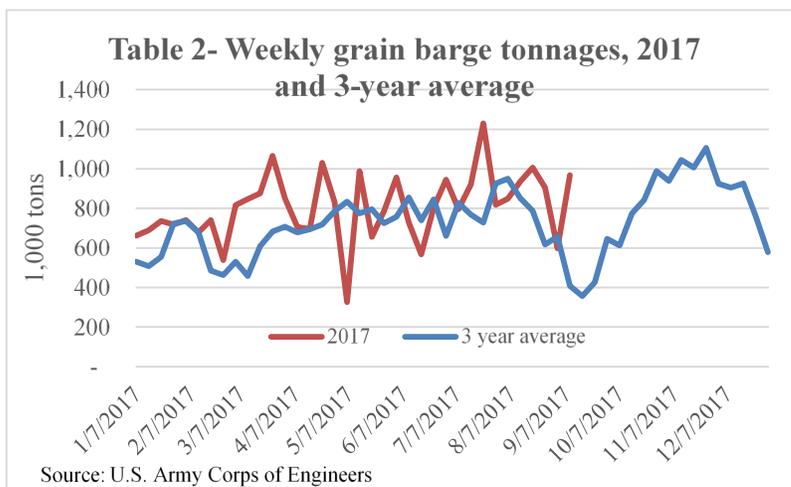
Prices in the secondary auction market for shuttle service were generally above-average January through March, as railroads dealt with bouts of severe winter weather. Prices were near the prior-3-year average through July, and have generally been well-below average in August. As of the week ending September 7, average bids/offers for shuttle service in September and October were trading at

\$129 and \$663 per car above the tariff rate, both below average, indicating adequate grain car supply relative to expected demand.

2017 YTD Grain Barges Tonnages Above Average Despite Fluctuations

As of September 9, year-to-date grain barge tonnages were 29.0 million tons, 16 percent higher than the 5-year average. Throughout 2017, significant weekly fluctuations of grain shipments occurred due to lock repairs or high water conditions that delayed traffic, followed by increases in traffic after the disruption event (see figure 1). As an example, during the week ending September 2, lock repair work at Melvin Price Locks and Dam (L&D), also known as Mississippi River L&D 26, stalled traffic for several days, and weekly traffic was down 34 percent

compared to the previous week. However, by the week ending September 9, barge tonnages were up 62 percent compared to the week with the Melvin Price delays. During 2017, there were also lock delays at L&D 52 on the Ohio River and LaGrange L&D on the Illinois River. Most recently on September 6, the U.S. Army Corps of Engineers closed Ohio River L&D 52 for over a week for emergency repairs.



Dry-Bulk Ocean Freight Rates Up

Ocean freight rates for shipping bulk grain continued to increase, but are slightly below the peak levels reached during the early part of the year. As of September 7, 2017, the ocean freight rate for shipping bulk grains from the U.S. Gulf to Japan was \$40.00 per metric ton (mt)—31 percent higher than last year, but 1 percent below the YTD peak of \$40.50 per mt on April 20. The rate for shipping bulk grains from the PNW to Japan was \$21.50 per mt—30 percent above last year, but 3 percent decline from the year-to-date peak of \$22.25 per mt on April 13. The rate increase was partly due to strong grain movements and grain vessel loading activity. YTD grain (wheat, corn, and soybeans) inspected for exports from all major U.S. ports reached 87 million metric tons—8 percent above last year and 29 percent above the 5-year average. YTD, 1,597 ocean-going grain vessels were loaded or waiting to be loaded in the U.S. Gulf. This compares to 1,464 vessels during the same period last year. In the PNW, 814 ocean-going vessels were loaded or waiting to be loaded, compared to 466 vessels last year. The bulk shipping market could not sustain the rally that occurred during the early part of the year, as excess vessel supply persists amid lagging demand for moving bulk materials. However, the rate of new vessel deliveries is shrinking and the North America grain harvest season is approaching.

Diesel Prices Rise Because of Hurricanes Harvey and Irma

Hurricanes Harvey and Irma slowed the supply and distribution of fuel for much for the country, but especially the Gulf Coast and Southeast regions. Flooded roads, impacted pipelines, refinery shutdowns, and large-scale resident evacuations all contributed to the supply chain disruptions. As a result, U.S. average diesel fuel prices increased 8 percent over the past 4 weeks from \$2.60 to \$2.80. Impacts from these storms resulted in prices increasing for the Gulf Coast and Lower Atlantic regions.

GTRContactUs@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
09/13/17	188	271	215	179	152
09/06/17	185	280	222	173	142

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)

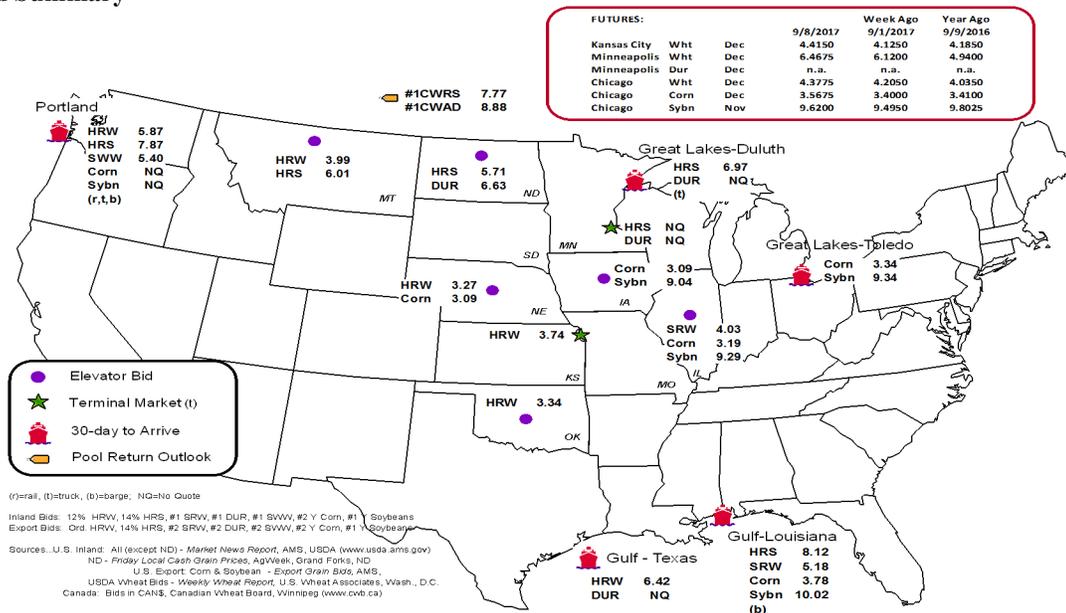
Commodity	Origin--Destination	9/8/2017	9/1/2017
Corn	IL--Gulf	-0.59	-0.55
Corn	NE--Gulf	-0.69	-0.67
Soybean	IA--Gulf	-0.98	-1.05
HRW	KS--Gulf	-2.68	-2.47
HRS	ND--Portland	-2.16	-1.92

Note: nq = no quote; n/a = not available

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
	Gulf	Texas Gulf	Northwest	East Gulf			Mexico ³
09/06/2017 ^p	321	751	2,986	229	4,287	9/2/2017	1,448
08/30/2017 ^r	536	137	2,863	174	3,710	8/26/2017	2,443
2017 YTD ^f	17,707	58,523	198,778	13,241	288,249	2017 YTD	81,688
2016 YTD ^f	15,101	53,897	186,813	12,424	268,235	2016 YTD	72,495
2017 YTD as % of 2016 YTD	117	109	106	107	107	% change YTD	113
Last 4 weeks as % of 2016 ²	33	42	46	50	44	Last 4wks % 2016	127
Last 4 weeks as % of 4-year avg. ²	106	54	82	74	75	Last 4wks % 4 yr	123
Total 2016	36,925	86,992	299,932	28,728	452,577	Total 2016	92,982
Total 2015	29,054	60,819	239,029	26,730	355,632	Total 2015	97,736

¹ Data is incomplete as it is voluntarily provided

² Compared with same 4-weeks in 2016 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.

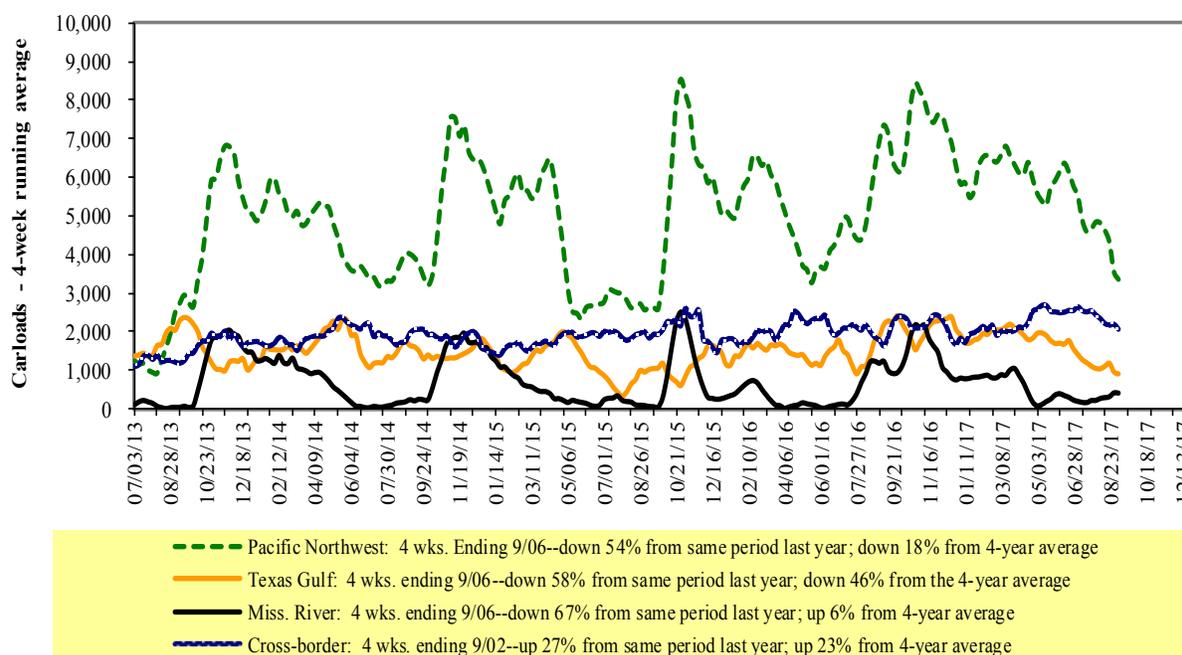
YTD = year-to-date; p = preliminary data; r = revised data; n/a = not available

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)

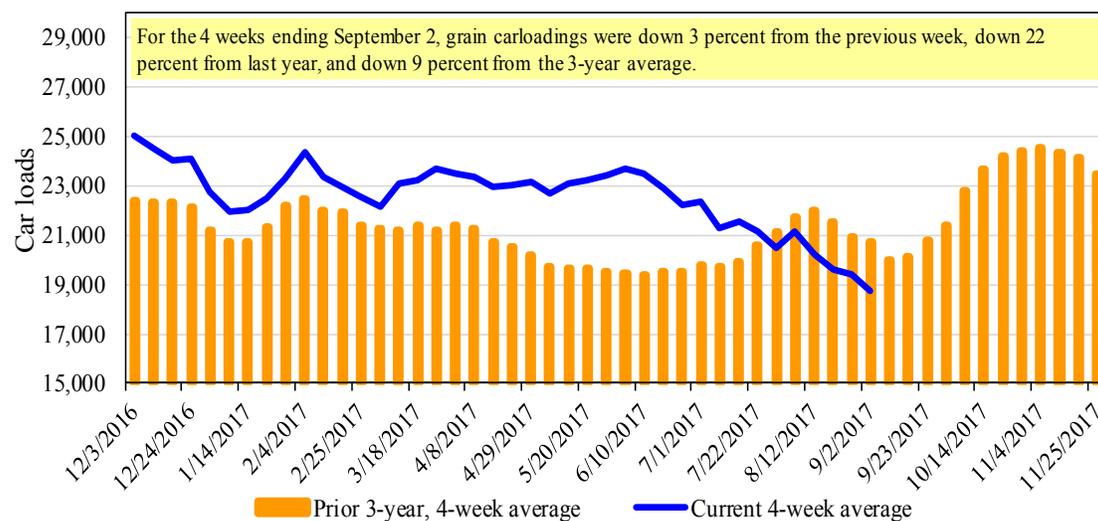
For the week ending: 9/2/2017	East		West			U.S. total	Canada	
	CSXT	NS	BNSF	KCS	UP		CN	CP
This week	1,148	2,454	8,727	804	5,073	18,206	3,555	4,668
This week last year	1,210	2,418	13,468	796	6,563	24,455	3,468	3,993
2017 YTD	58,151	96,618	389,671	32,553	201,153	778,146	131,990	158,954
2016 YTD	59,180	97,225	383,643	29,501	189,937	759,486	115,917	149,400
2017 YTD as % of 2016 YTD	98	99	102	110	106	102	114	106
Last 4 weeks as % of 2016*	87	97	72	118	77	78	103	111
Last 4 weeks as % of 3-yr avg.**	81	99	89	102	89	91	94	102
Total 2016	95,179	151,023	590,779	45,246	300,836	1,183,063	193,926	234,738

*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: 9/7/2017		Delivery period							
		Sep-17	Sep-16	Oct-17	Oct-16	Nov-17	Nov-16	Dec-17	Dec-16
BNSF ³	COT grain units	0	no offer	0	97	0	82	no bids	52
	COT grain single-car ⁵	0	no offer	0	177-450	0	0-350	no bids	0-200
UP ⁴	GCAS/Region 1	no offer	no offer	no bids	no offer	no bids	no offer	n/a	n/a
	GCAS/Region 2	no offer	no offer	13	no offer	no bids	no offer	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.

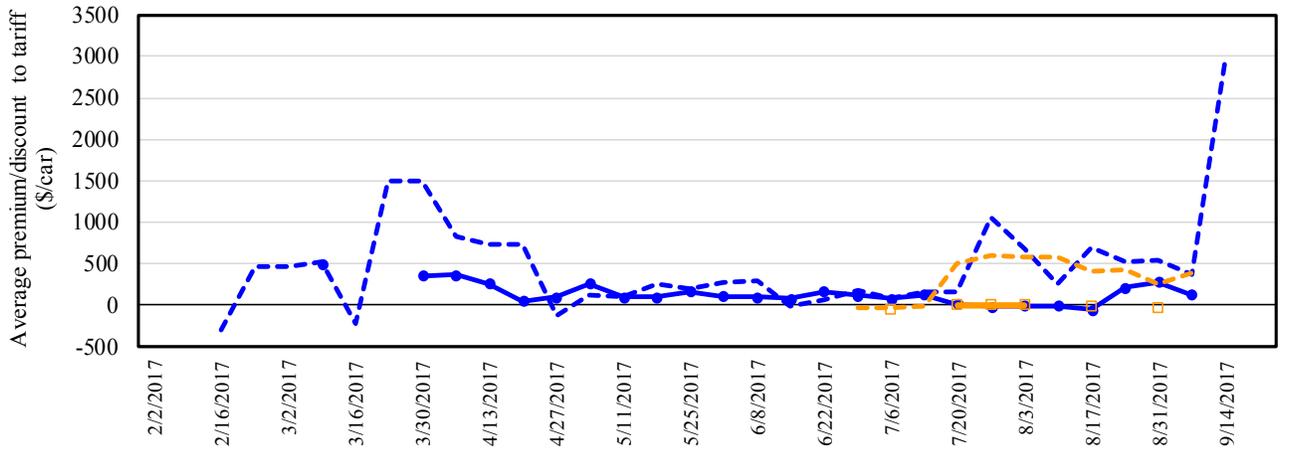
Region 2 includes: CO, IA, KS, MN, NE, WY, and Kansas City and St. Joseph, MO.

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 September 2017, Secondary Market



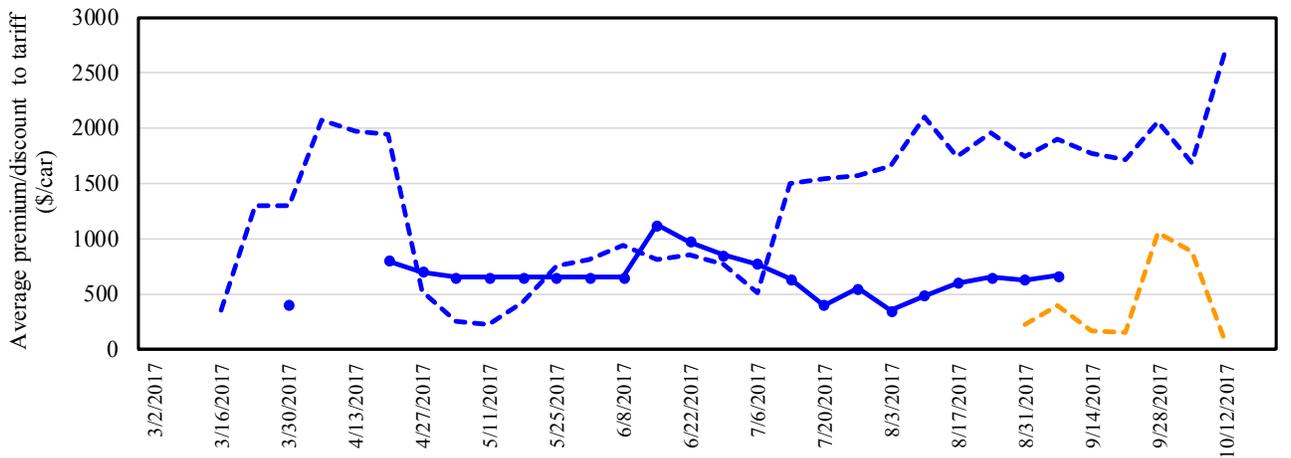
9/7/2017	BNSF	UP
Non-Shuttle	n/a	n/a
Shuttle	\$33	\$225

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

There were no Non-Shuttle bids/offers this week.
 Average Shuttle bids/offers fell \$153 this week and are \$371 below the peak.

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 October 2017, Secondary Market



9/7/2017	BNSF	UP
Non-Shuttle	n/a	n/a
Shuttle	\$975	\$350

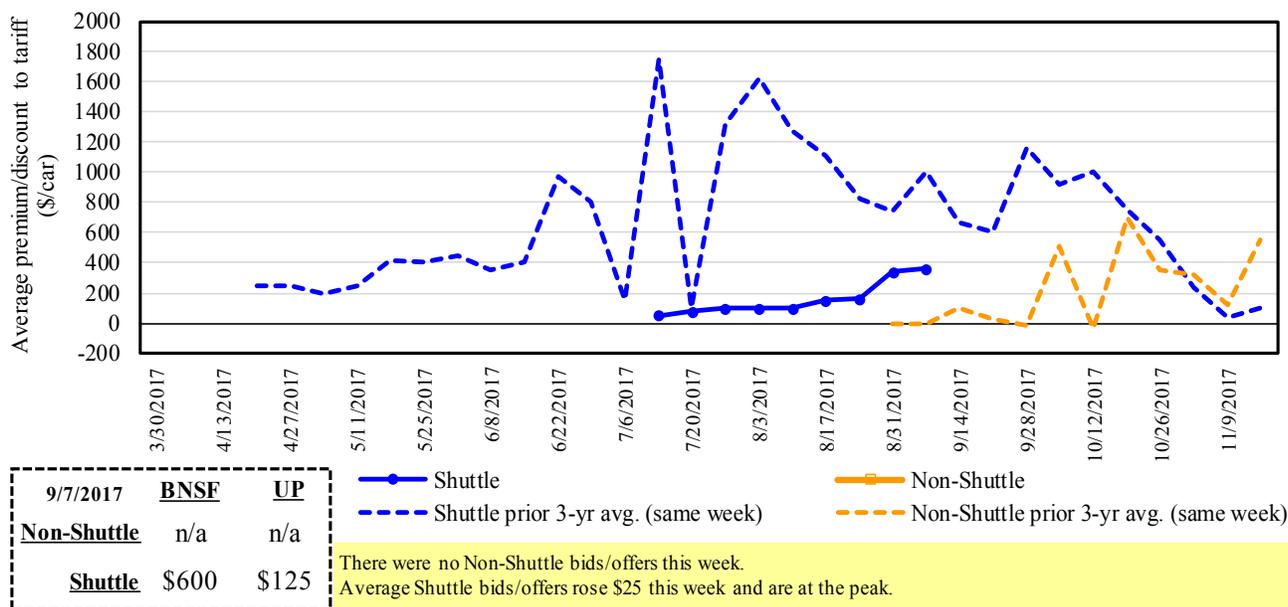
Shuttle prior 3-yr avg. (same week) Non-Shuttle prior 3-yr avg. (same week)

There were no Non-Shuttle bids/offers this week.
 Average Shuttle bids/offers rose \$38 this week and are \$463 below the peak.

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 November 2017, 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

For the week ending: 9/7/2017		Delivery period					
		Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18
Non-shuttle	BNSF-GF	n/a	n/a	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 2016	n/a	n/a	n/a	n/a	n/a	n/a
	UP-Pool	n/a	n/a	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 2016	n/a	n/a	n/a	n/a	n/a	n/a
Shuttle	BNSF-GF	33	975	600	(75)	n/a	n/a
	Change from last week	(376)	100	50	42	n/a	n/a
	Change from same week 2016	(67)	(1025)	n/a	n/a	n/a	n/a
	UP-Pool	225	350	125	(100)	n/a	n/a
	Change from last week	71	(25)	0	(33)	n/a	n/a
	Change from same week 2016	75	(1150)	(175)	(200)	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

September, 2017	Origin region ³	Destination region ³	Tariff rate/car	Fuel surcharge per car	Tariff plus surcharge per:		Percent change Y/Y ⁴
					metric ton	bushel ²	
Unit train							
Wheat	Wichita, KS	St. Louis, MO	\$3,883	\$40	\$38.96	\$1.06	8
	Grand Forks, ND	Duluth-Superior, MN	\$4,143	\$0	\$41.14	\$1.12	0
	Wichita, KS	Los Angeles, CA	\$7,050	\$0	\$70.01	\$1.91	1
	Wichita, KS	New Orleans, LA	\$4,540	\$71	\$45.79	\$1.25	7
	Sioux Falls, SD	Galveston-Houston, TX	\$6,786	\$0	\$67.39	\$1.83	5
	Northwest KS	Galveston-Houston, TX	\$4,816	\$78	\$48.60	\$1.32	7
	Amarillo, TX	Los Angeles, CA	\$5,021	\$109	\$50.94	\$1.39	7
Corn	Champaign-Urbana, IL	New Orleans, LA	\$3,681	\$80	\$37.35	\$0.95	0
	Toledo, OH	Raleigh, NC	\$6,061	\$0	\$60.19	\$1.53	0
	Des Moines, IA	Davenport, IA	\$2,258	\$17	\$22.59	\$0.57	4
	Indianapolis, IN	Atlanta, GA	\$5,191	\$0	\$51.55	\$1.31	4
	Indianapolis, IN	Knoxville, TN	\$4,311	\$0	\$42.81	\$1.09	0
	Des Moines, IA	Little Rock, AR	\$3,534	\$50	\$35.59	\$0.90	3
	Des Moines, IA	Los Angeles, CA	\$5,202	\$146	\$53.11	\$1.35	3
Soybeans	Minneapolis, MN	New Orleans, LA	\$3,634	\$52	\$36.61	\$1.00	-4
	Toledo, OH	Huntsville, AL	\$5,051	\$0	\$50.16	\$1.37	0
	Indianapolis, IN	Raleigh, NC	\$6,178	\$0	\$61.35	\$1.67	0
	Indianapolis, IN	Huntsville, AL	\$4,529	\$0	\$44.98	\$1.22	0
	Champaign-Urbana, IL	New Orleans, LA	\$4,495	\$80	\$45.44	\$1.24	2
Shuttle Train							
Wheat	Great Falls, MT	Portland, OR	\$3,953	\$0	\$39.26	\$1.07	0
	Wichita, KS	Galveston-Houston, TX	\$4,171	\$0	\$41.42	\$1.13	8
	Chicago, IL	Albany, NY	\$5,492	\$0	\$54.54	\$1.48	0
	Grand Forks, ND	Portland, OR	\$5,611	\$0	\$55.72	\$1.52	0
	Grand Forks, ND	Galveston-Houston, TX	\$5,931	\$0	\$58.90	\$1.60	0
	Northwest KS	Portland, OR	\$5,812	\$128	\$58.99	\$1.61	6
Corn	Minneapolis, MN	Portland, OR	\$5,000	\$0	\$49.65	\$1.26	0
	Sioux Falls, SD	Tacoma, WA	\$4,960	\$0	\$49.26	\$1.25	0
	Champaign-Urbana, IL	New Orleans, LA	\$3,481	\$80	\$35.37	\$0.90	0
	Lincoln, NE	Galveston-Houston, TX	\$3,700	\$0	\$36.74	\$0.93	3
	Des Moines, IA	Amarillo, TX	\$3,895	\$63	\$39.30	\$1.00	3
	Minneapolis, MN	Tacoma, WA	\$5,000	\$0	\$49.65	\$1.26	0
	Council Bluffs, IA	Stockton, CA	\$4,740	\$0	\$47.07	\$1.20	2
	Sioux Falls, SD	Tacoma, WA	\$5,600	\$0	\$55.61	\$1.51	2
Soybeans	Minneapolis, MN	Portland, OR	\$5,650	\$0	\$56.11	\$1.53	3
	Fargo, ND	Tacoma, WA	\$5,500	\$0	\$54.62	\$1.49	2
	Council Bluffs, IA	New Orleans, LA	\$4,525	\$93	\$45.86	\$1.25	2
	Toledo, OH	Huntsville, AL	\$4,226	\$0	\$41.97	\$1.14	0
	Grand Island, NE	Portland, OR	\$5,460	\$131	\$55.52	\$1.51	2

¹ A unit train refers to shipments of at least 25 cars. Shuttle train rates are generally 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 and soybeans 60 lbs./bu.

³ Regional economic areas are defined by the Bureau of Economic Analysis (BEA)

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

Sources: www.bnsf.com, www.cn.ca, www.csx.com, www.up.com

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	
Date: September, 2017							
Wheat	MT	Chihuahua, CI	\$7,459	\$0	\$76.21	\$2.07	0
	OK	Cuautitlan, EM	\$6,631	\$56	\$68.32	\$1.86	2
	KS	Guadalajara, JA	\$7,309	\$243	\$77.16	\$2.10	6
	TX	Salinas Victoria, NL	\$4,292	\$33	\$44.20	\$1.20	4
Corn	IA	Guadalajara, JA	\$8,187	\$193	\$85.62	\$2.17	2
	SD	Celaya, GJ	\$7,580	\$0	\$77.45	\$1.97	1
	NE	Queretaro, QA	\$7,909	\$112	\$81.96	\$2.08	1
	SD	Salinas Victoria, NL	\$6,635	\$0	\$67.79	\$1.72	1
	MO	Tlalnepantla, EM	\$7,268	\$109	\$75.38	\$1.91	1
	SD	Torreon, CU	\$7,180	\$0	\$73.36	\$1.86	1
Soybeans	MO	Bojay (Tula), HG	\$8,647	\$204	\$90.43	\$2.46	1
	NE	Guadalajara, JA	\$8,942	\$206	\$93.46	\$2.54	-1
	IA	El Castillo, JA	\$8,960	\$0	\$91.55	\$2.49	-5
	KS	Torreon, CU	\$7,489	\$136	\$77.90	\$2.12	1
Sorghum	NE	Celaya, GJ	\$7,164	\$171	\$74.94	\$1.90	-1
	KS	Queretaro, QA	\$7,608	\$70	\$78.44	\$1.99	1
	NE	Salinas Victoria, NL	\$6,213	\$56	\$64.05	\$1.63	1
	NE	Torreon, CU	\$6,607	\$123	\$68.77	\$1.75	0

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.

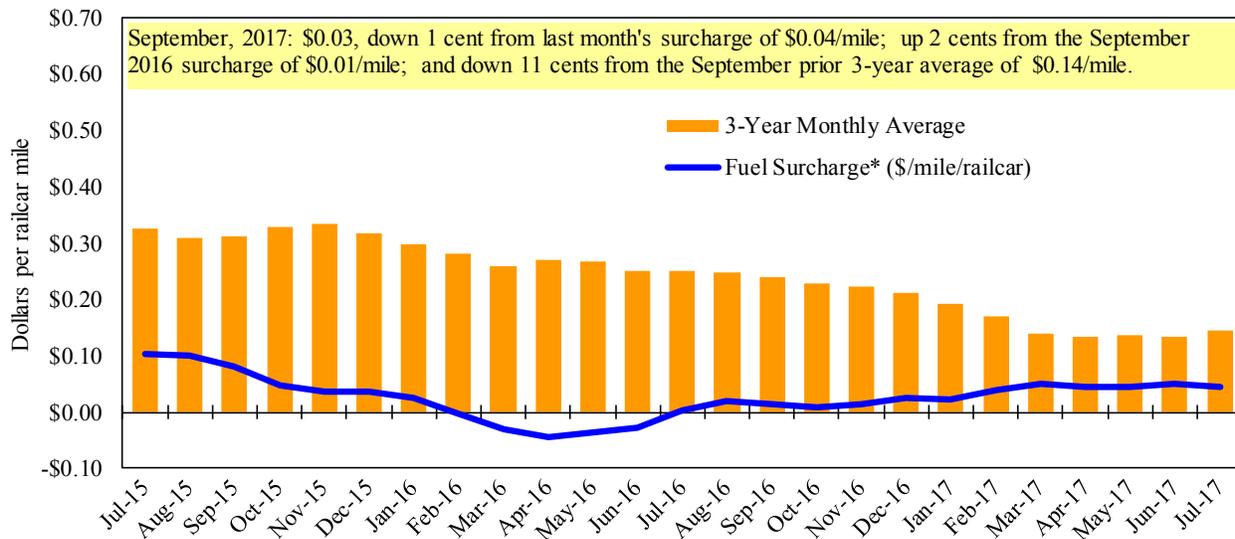
²Fuel surcharge adjusted to reflect the change in Ferrocarril Mexicano, S.A. de C.V. railroad fuel surcharge policy as of 10/01/2009

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.

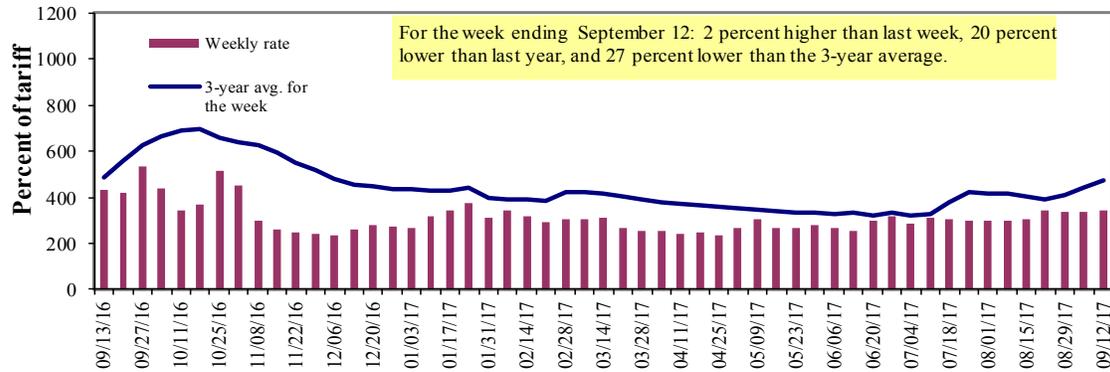
**CSX strike price changed from \$2.00/gal. to \$3.75/gal. starting January 1, 2015.

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	9/12/2017	393	345	345	258	-	-	250
	9/5/2017	375	340	338	220	295	295	210
\$/ton	9/12/2017	24.33	18.35	16.01	10.29	-	-	7.85
	9/5/2017	23.21	18.09	15.68	8.78	13.84	11.92	6.59
Current week % change from the same week:								
	Last year	-17	-22	-20	-23	-	-	-26
	3-year avg. ²	-19	-26	-27	-39	-	-	-40
Rate¹	October	468	425	425	325	425	425	305
	December	-	-	318	250	275	275	238

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

Source: Transportation & Marketing Programs/AMS/USDA

Figure 9

Benchmark tariff rates

Calculating barge rate per ton:

$$(\text{Rate} * 1976 \text{ tariff benchmark rate per ton})/100$$

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

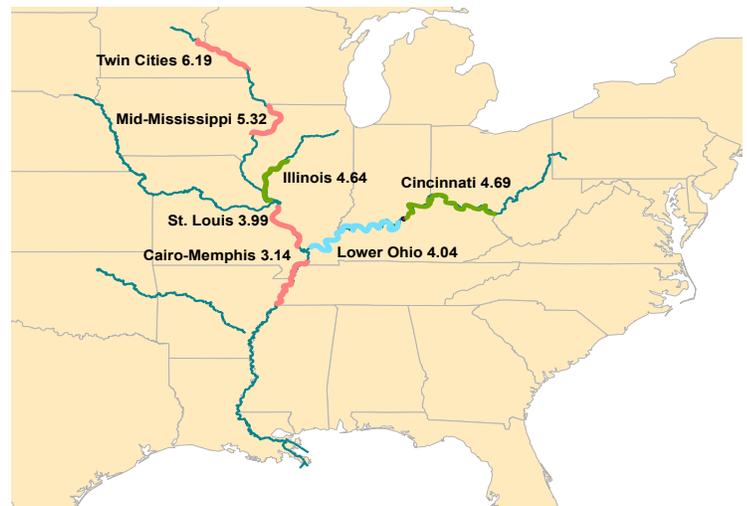
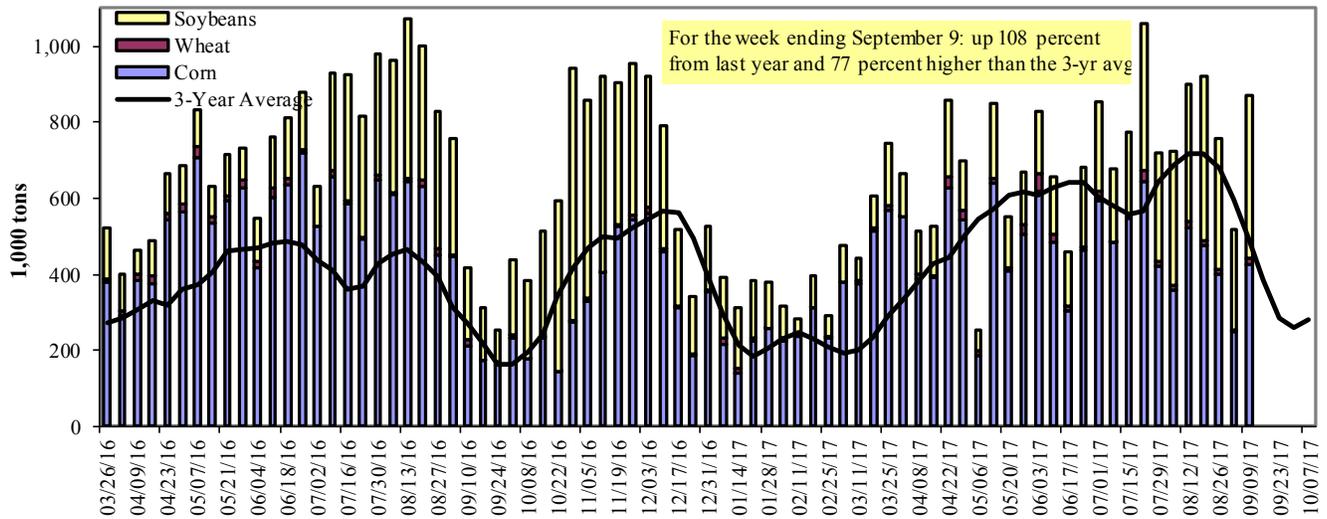


Figure 10

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 9/9/2017	Corn	Wheat	Soybeans	Other	Total
Mississippi River					
Rock Island, IL (L15)	141	8	137	2	287
Winfield, MO (L25)	277	11	240	3	532
Alton, IL (L26)	415	13	424	2	853
Granite City, IL (L27)	424	17	430	2	873
Illinois River (L8)	65	0	62	0	127
Ohio River (L52)	14	2	33	4	53
Arkansas River (L1)	0	30	13	0	43
Weekly total - 2017	438	49	477	5	968
Weekly total - 2016	248	28	234	19	529
2017 YTD ¹	17,214	1,813	9,761	221	29,010
2016 YTD	18,001	1,600	8,718	250	28,569
2017 as % of 2016 YTD	96	113	112	88	102
Last 4 weeks as % of 2016 ²	86	140	120	29	101
Total 2016	24,136	2,030	16,668	344	43,178

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.

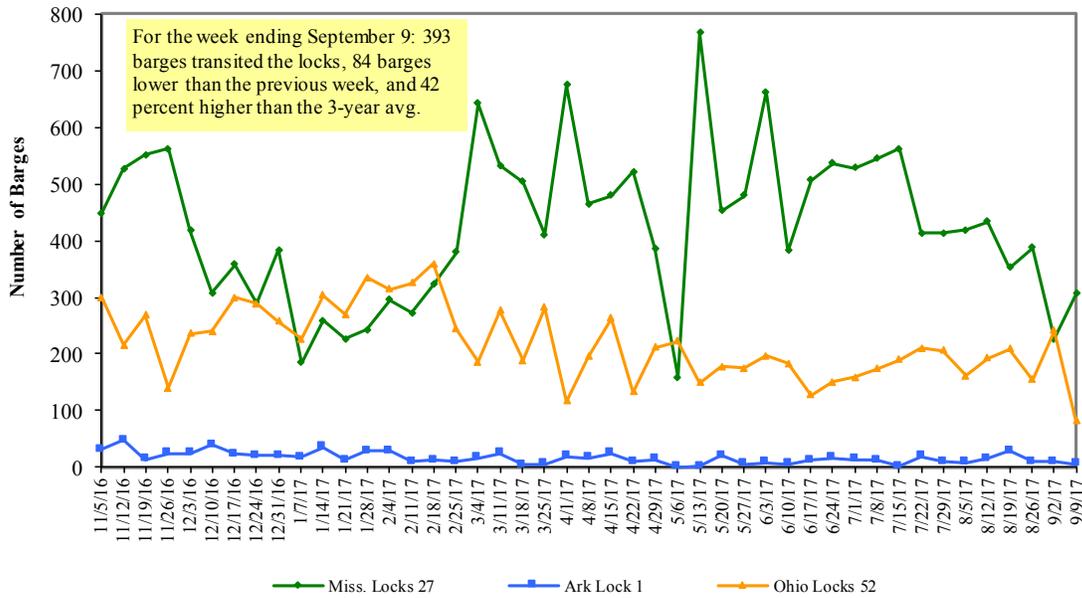
² As a percent of same period in 2016.

Note: Total may not add exactly, due to rounding

Source: U.S. Army Corps of Engineers

Figure 11

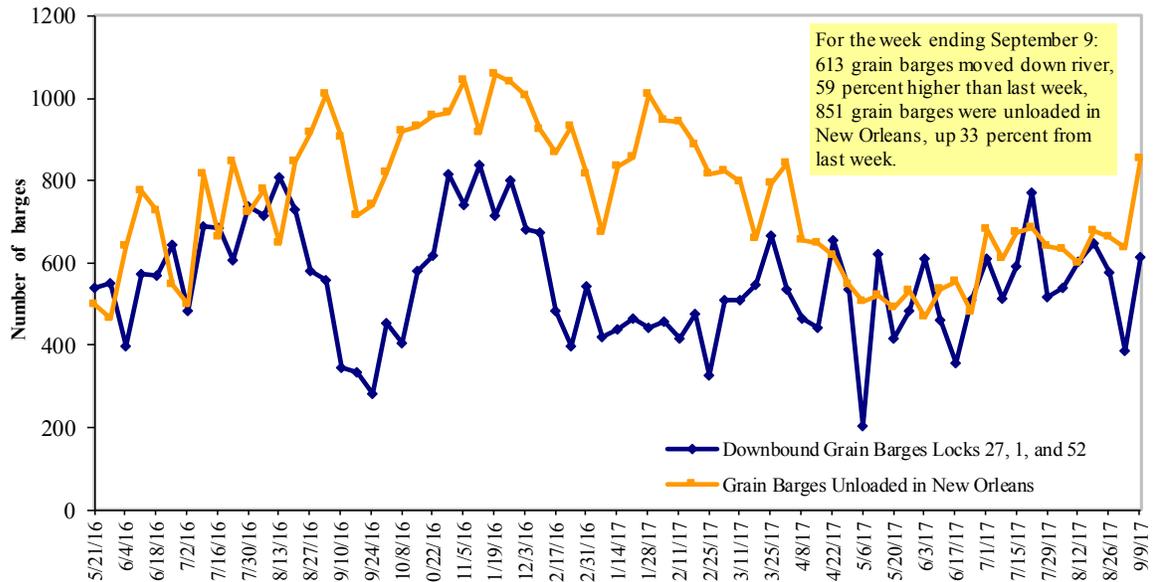
Upbound Empty Barges Transiting Mississippi River Locks 27, Arkansas River Lock and Dam 1, and Ohio River Locks and Dam 52



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 9/11/2017(US \$/gallon)

Region	Location	Price	Change from	
			Week ago	Year ago
I	East Coast	2.829	0.200	0.430
	New England	2.761	0.141	0.351
	Central Atlantic	2.922	0.162	0.427
	Lower Atlantic	2.776	0.239	0.453
II	Midwest ²	2.753	0.188	0.377
III	Gulf Coast ³	2.647	0.199	0.391
IV	Rocky Mountain	2.827	0.107	0.338
V	West Coast	3.102	0.165	0.436
	West Coast less California	3.007	0.181	0.454
	California	3.179	0.150	0.423
Total	U.S.	2.802	0.044	0.403

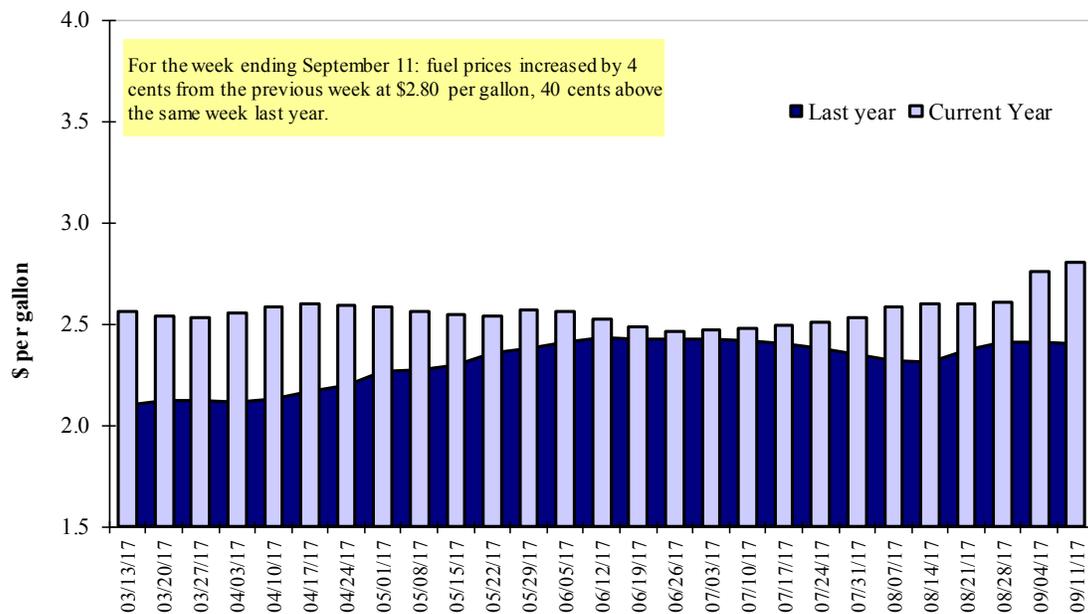
¹Diesel fuel prices include all taxes. Prices represent an average of all types of diesel fuel.

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									
8/31/2017	1,701	577	1,427	1,285	99	5,089	9,456	15,381	29,926
This week year ago	2,245	550	1,757	998	98	5,648	16,044	22,298	43,989
Cumulative exports-marketing year²									
2016/17 YTD	2,968	651	1,926	1,722	104	7,370	0	0	7,370
2015/16 YTD	2,949	577	2,171	1,059	103	6,859	299	228	7,386
YTD 2016/17 as % of 2015/16	101	113	89	163	101	107	0	0	100
Last 4 wks as % of same period 2015/16	73	105	82	135	104	90	28	31	38
2016/17 Total	11,096	2,285	7,923	4,254	484	26,042	41,864	51,156	119,062
2015/16 Total	5,538	3,057	6,285	3,551	670	19,101	45,564	49,821	114,486

¹ Current unshipped (outstanding) export sales to date

² Shipped export sales to date; new marketing year now in effect for wheat; 2016/17 marketing year ends 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 8/31/2017	Total Commitments ²			% change current MY from last MY	Exports ³ 3-year avg 2013-2015
	2017/18 Next MY	2016/17 Current MY	2015/16 Last MY		
	- 1,000 mt -				- 1,000 mt -
Mexico	4,455	14,039	12,829	9	11,204
Japan	1,068	12,097	11,006	10	11,284
Korea	6	5,590	3,416	64	3,931
Colombia	502	4,440	4,823	(8)	4,134
Peru	441	3,206	2,515	27	2,109
Top 5 Importers	6,472	39,372	34,589	14	32,662
Total US corn export sales	9,456	56,405	50,114	13	46,633
% of Projected	20%	97%	104%		
Change from prior week ²	3,294	(359)	24		
Top 5 importers' share of U.S. corn export sales	68%	70%	69%		70%
USDA forecast, September 2017	47,074	58,397	48,372	21	
Corn Use for Ethanol USDA forecast, September 2017	139,065	138,049	132,690	5	

¹ Based on FAS Marketing Year Ranking Reports for 2015/16 - 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/esquery/>. Total commitments change (net sales) from prior week could include revisions from previous week's outstanding sales or accumulated sales.

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 8/31/2017	Total Commitments ²			% change current MY from last MY	Exports ³ 3-yr avg. 2013-2015
	2017/18 Next MY	2016/17 Current MY	2015/16 Last MY		
		- 1,000 mt -			- 1,000 mt -
China	6,040	36,661	30,067	22	29,033
Mexico	773	3,765	3,321	13	3,295
Indonesia	278	2,473	2,147	15	2,065
Japan	537	2,261	2,320	(3)	1,994
Netherlands	0	2,045	2,038	0	1,644
Top 5 importers	7,628	47,206	39,892	18	38,032
Total US soybean export sales	15,381	60,477	52,829	14	48,389
% of Projected	25%	102%	100%		
Change from prior week ²	3,882	(366)	(20)		
Top 5 importers' share of U.S. soybean export sales	50%	78%	76%		79%
USDA forecast, September 2017	60,627	59,128	52,916	12	

(n) indicates negative number.

¹Based on FAS Marketing Year Ranking Reports for 2015/16 - 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/. The total commitments change (net sales) from prior week could include revisions from previous week's outstanding sales and/or accumulated sales³ 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

For the week ending 8/31/2017	Total Commitments ²		% change current MY from last MY	Exports ³ 3-yr avg 2014-2016
	2017/18 Current MY	2016/17 Last MY		
	- 1,000 mt -			- 1,000 mt -
Japan	1,190	1,022	16	2,620
Mexico	1,618	1,152	40	2,743
Philippines	1,464	1,277	15	2,395
Brazil	95	808	(88)	862
Nigeria	721	596	21	1,254
Korea	1,023	673	52	1,104
China	532	437	22	1,623
Taiwan	565	378	49	768
Indonesia	611	374	63	726
Colombia	301	390	(23)	635
Top 10 importers	8,120	7,107	14	14,729
Total US wheat export sales	12,459	12,507	(0)	24,485
% of Projected	47%	44%		
Change from prior week ²	375	661		
Top 10 importers' share of U.S. wheat export sales	65%	57%		60%
USDA forecast, September 2017	26,567	28,747	(8)	

(n) indicates negative number.

¹ Based on FAS Marketing Year Ranking Reports for 2015/16 - 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/. Total commitments change (net sales) from prior week could include revisions from the previous week's outstanding and/or accumulated sales³ 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	For the Week Ending 09/07/17	Previous Week ¹	Current Week as % of Previous	2017 YTD	2016 YTD	2017 YTD as % of 2016 YTD	Last 4-weeks as % of:		2016 Total
							Last Year	Prior 3-yr. avg.	
Pacific Northwest									
Wheat	290	255	114	11,169	8,883	126	112	119	12,325
Corn	53	104	50	9,988	9,254	108	20	32	12,009
Soybeans	138	119	116	5,548	5,263	105	n/a	n/a	14,447
Total	481	479	100	26,705	23,400	114	65	95	38,782
Mississippi Gulf									
Wheat	87	10	876	3,321	2,708	123	67	55	3,480
Corn	425	464	92	22,916	22,343	103	74	80	31,420
Soybeans	926	524	177	16,292	16,502	99	67	153	35,278
Total	1,438	998	144	42,529	41,552	102	70	103	70,178
Texas Gulf									
Wheat	53	0	n/a	4,839	3,525	137	54	69	6,019
Corn	0	0	n/a	548	1,071	51	9	19	1,669
Soybeans	0	0	n/a	0	92	0	n/a	n/a	1,105
Total	53	0	n/a	5,387	4,688	115	40	57	8,792
Interior									
Wheat	25	40	62	1,330	965	138	88	86	1,543
Corn	162	216	75	5,741	4,915	117	115	116	7,197
Soybeans	74	80	93	3,361	2,789	121	127	221	4,577
Total	262	336	78	10,432	8,669	120	114	128	13,317
Great Lakes									
Wheat	14	0	n/a	461	666	69	20	27	1,186
Corn	0	0	n/a	140	449	31	7	10	584
Soybeans	22	11	200	308	159	193	896	2687	910
Total	36	11	327	909	1,274	71	40	56	2,681
Atlantic									
Wheat	2	0	n/a	44	200	22	111	11	315
Corn	4	0	n/a	10	49	20	57	15	294
Soybeans	2	13	16	995	1,047	95	27	65	2,269
Total	8	13	65	1,048	1,295	81	34	27	2,878
U.S. total from ports²									
Wheat	470	306	154	21,163	16,948	125	81	86	24,867
Corn	644	784	82	39,342	38,079	103	54	68	53,173
Soybeans	1,163	746	156	26,504	25,852	103	79	181	58,587
Total	2,278	1,837	124	87,009	80,880	108	69	98	136,627

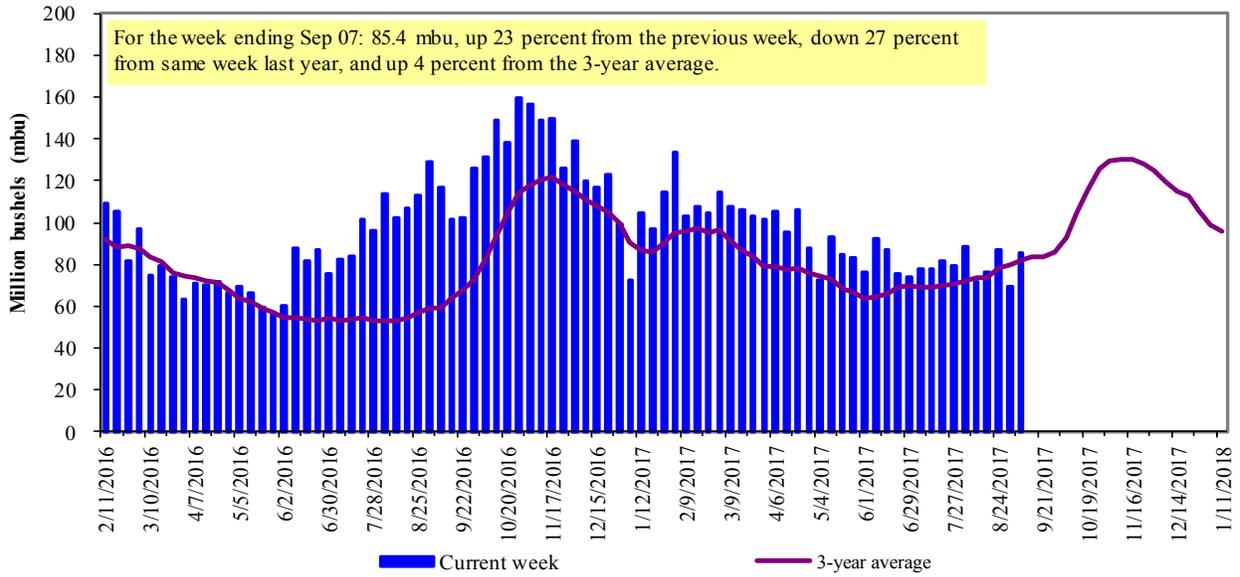
¹Data includes revisions from prior weeks; some regional totals may not add exactly due to rounding.

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 58 percent of the U.S. export grain shipments departed through the U.S. Gulf region in 2016.

Figure 14

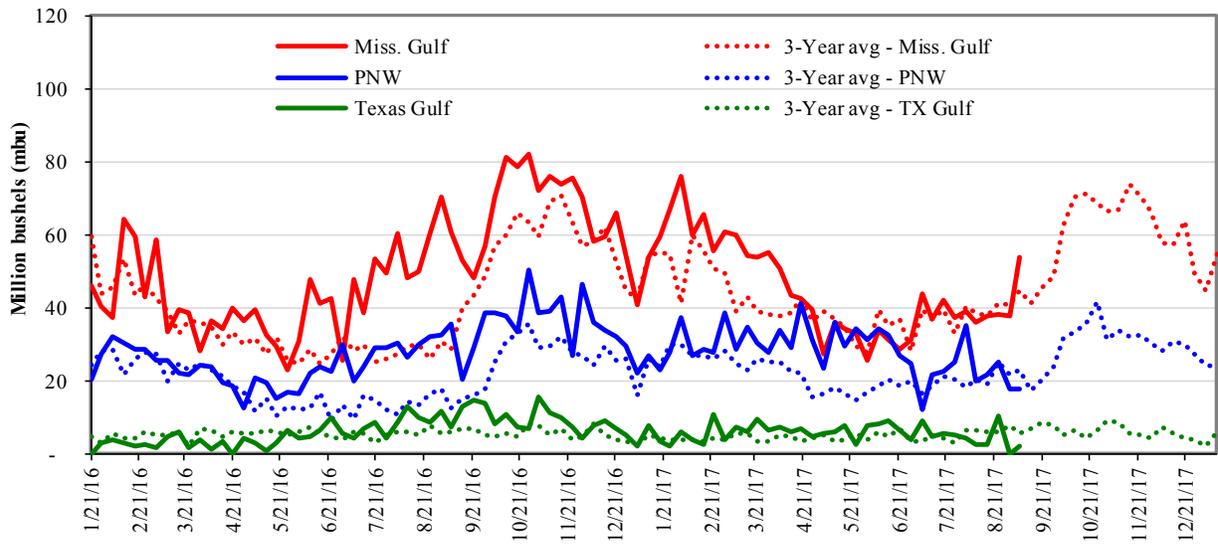
U.S. grain inspected for export (wheat, corn, and soybeans)



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 09/07/17 inspections (mbu):		Percent change from:				
Mississippi Gulf:	53.9	Last Week:	MS Gulf	TX Gulf	U.S. Gulf	PNW
PNW:	17.8	Last Year (same	up 42	n/a	up 47	unchanged
Texas Gulf:	1.9	3-yr avg. (4-wk. mov.	down 11	down 73	down 18	down 50
			up 31	down 70	up 18	down 20

Source: Grain Inspection, Packers and Stockyards Administration/USDA (www.gipsa.usda.gov)
¹The 3-year average is based on a 4-week running average

Ocean Transportation

Table 17

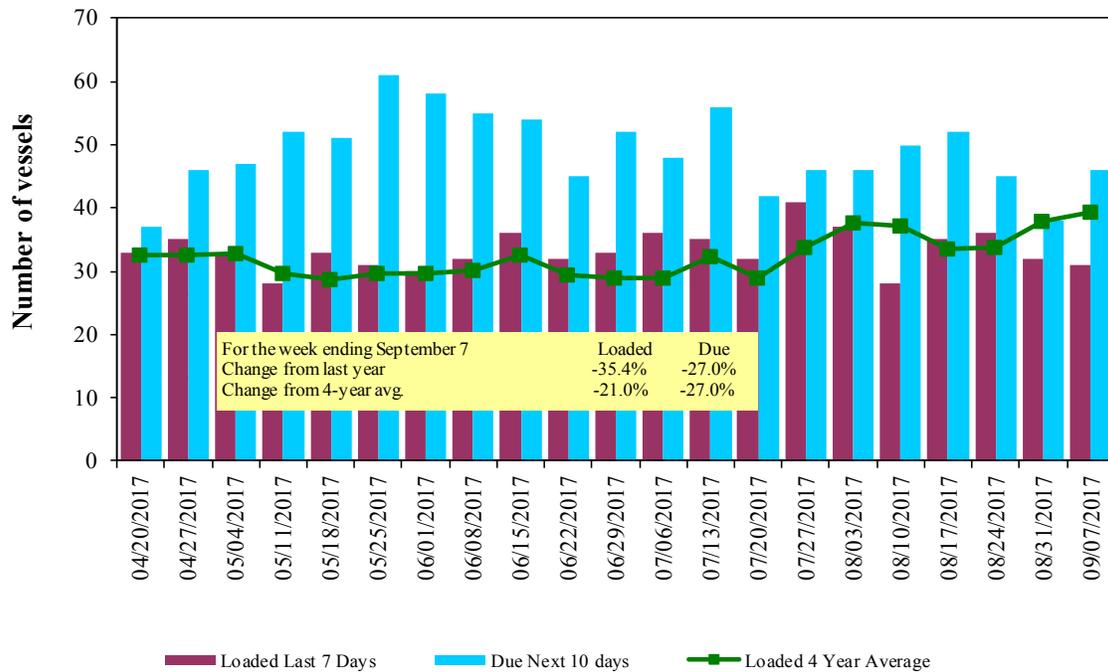
Weekly Port Region Grain Ocean Vessel Activity (number of vessels)

Date	Gulf			Pacific Northwest	Vancouver B.C.
	In port	Loaded 7-days	Due next 10-days	In port	In port
9/7/2017	39	31	46	5	n/a
8/31/2017	35	32	38	12	n/a
2016 range	(21..62)	(27..55)	(40..87)	(6..27)	n/a
2016 avg.	43	40	62	15	n/a

Source: Transportation & Marketing Programs/AMS/USDA

Figure 16

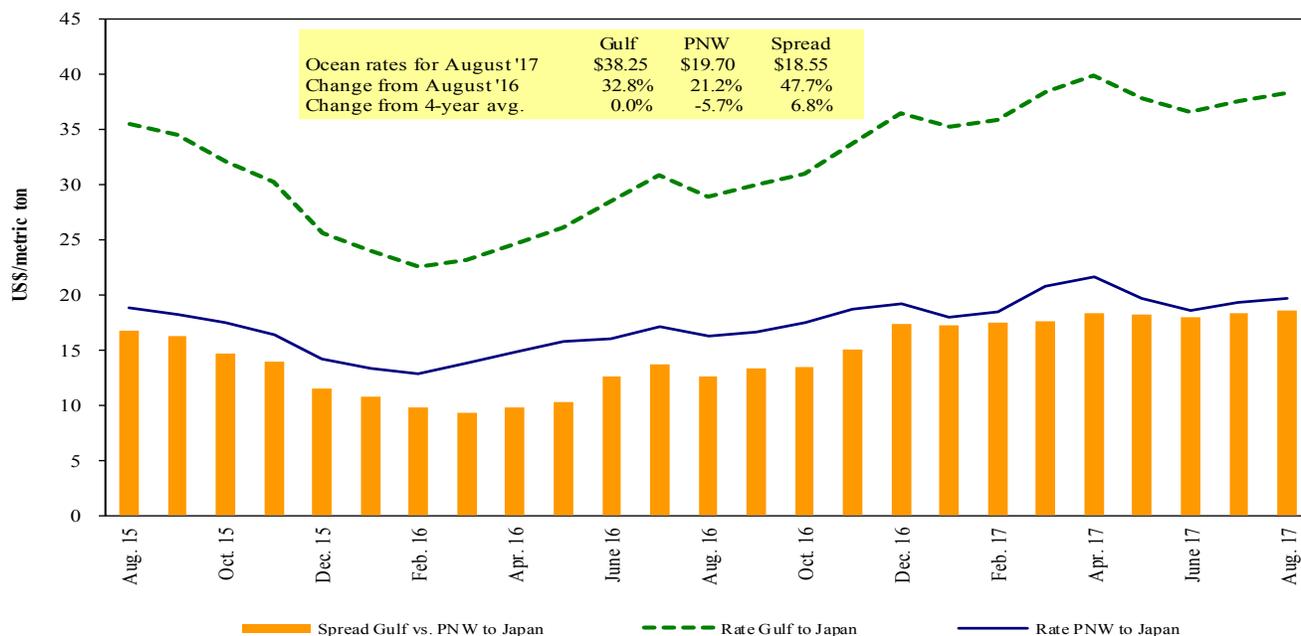
U.S. Gulf Vessel Loading Activity



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 09/09/2017

Export region	Import region	Grain types	Loading date	Volume loads (metric tons)	Freight rate (US\$/metric ton)
U.S. Gulf	China	Heavy Grain	Oct 1/10	66,000	38.75
U.S. Gulf	China	Heavy Grain	Sep 5/15	66,000	37.00
U.S. Gulf	China	Heavy Grain	Sep 5/15	66,000	39.00
U.S. Gulf	China	Heavy Grain	Sep 1/10	60,000	38.50
U.S. Gulf	China	Heavy Grain	Aug 25/30	66,000	37.75
U.S. Gulf	China	Heavy Grain	Aug 22/28	60,000	35.10
U.S. Gulf	China	Heavy Grain	Aug 10/20	60,000	34.50
U.S. Gulf	China	Heavy Grain	Aug 1/5	60,000	33.75
U.S. Gulf	China	Heavy Grain	Jul 20/30	60,000	32.95
U.S. Gulf	China	Heavy Grain	Jul 15/25	60,000	33.65
U.S. Gulf	Djibouti	Wheat	Sep 15/25	30,000	54.50*
PNW	Bangladesh	Wheat	Sep 29/Oct 9	13,620	58.00*
Brazil	China	Heavy Grain	Sep 28/Oct 10	60,000	30.25
Brazil	China	Heavy Grain	Aug 1/10	60,000	27.25
Brazil	China	Heavy Grain	Jul 15/30	60,000	22.75
Brazil	China	Heavy Grain	Jul 1/10	60,000	22.00
Brazil	China	Heavy Grain	Jul 1/5	60,000	22.25
Brazil	Malaysia	Heavy Grain	Aug 15/24	65,000	23.75

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

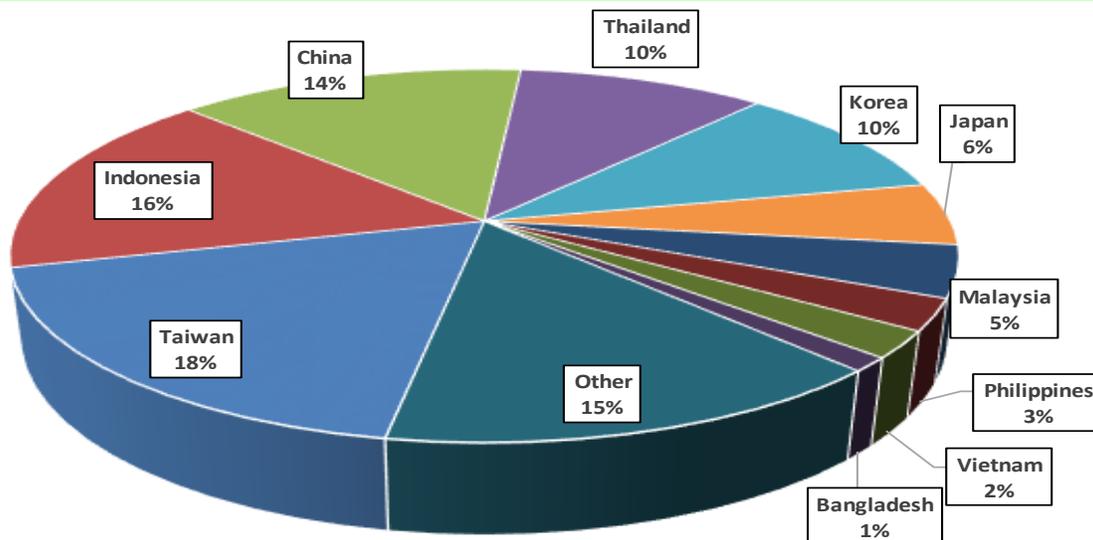
* 50 percent of food aid from the United States is required to be shipped on U.S.-flag vessels.

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

In 2015, containers were used to transport 8 percent of total U.S. waterborne grain exports. Approximately 64 percent of U.S. waterborne grain exports in 2015 went to Asia, of which 12 percent were moved in containers. Approximately 94 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-April 2017

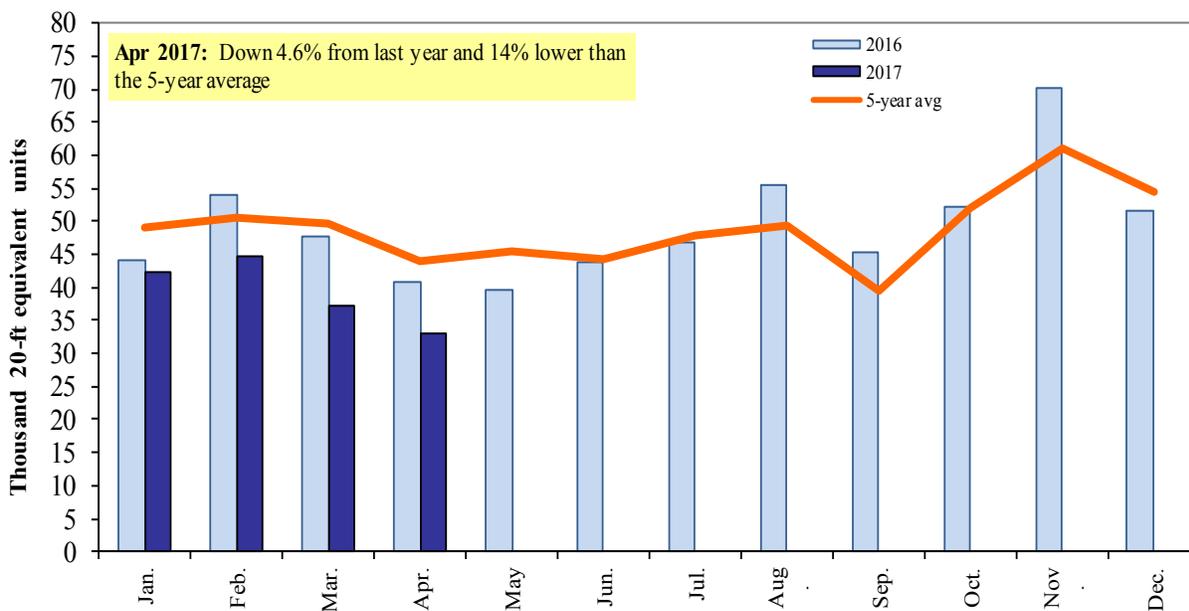


Source: USDA/Agricultural Marketing Service/Transportation Services Division analysis of Port Import Export Reporting Service (PIERS) data

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, 110220, 110290, 120100, 120810, 230210, 230310, 230330, and 230990.

Contacts and Links

Coordinators

Surajudeen (Deen) Olowolayemo surajudeen.olowolayemo@ams.usda.gov (202) 720 - 0119
Pierre Bahizi pierre.bahizi@ams.usda.gov (202) 690 - 0992

Weekly Highlight Editors

Surajudeen (Deen) Olowolayemo surajudeen.olowolayemo@ams.usda.gov (202) 720 - 0119
April Taylor april.taylor@ams.usda.gov (202) 720 - 7880
Nicholas Marathon nick.marathon@ams.usda.gov (202) 690 - 4430

Grain Transportation Indicators

Surajudeen (Deen) Olowolayemo surajudeen.olowolayemo@ams.usda.gov (202) 720 - 0119

Rail Transportation

Johnny Hill johnny.hill@ams.usda.gov (202) 690 - 3295
Jesse Gastelle jesse.gastelle@ams.usda.gov (202) 690 - 1144
Peter Caffarelli petera.caffarelli@ams.usda.gov (202) 690 - 3244

Barge Transportation

Nicholas Marathon nick.marathon@ams.usda.gov (202) 690 - 4430
April Taylor april.taylor@ams.usda.gov (202) 720 - 7880
Matt Chang matt.chang@ams.usda.gov (202) 720 - 0299

Truck Transportation

April Taylor april.taylor@ams.usda.gov (202) 720 - 7880
Sergio Sotelo sergioa.sotelo@ams.usda.gov (202) 756 - 2577

Grain Exports

Johnny Hill johnny.hill@ams.usda.gov (202) 690 - 3295

Ocean Transportation

Surajudeen (Deen) Olowolayemo surajudeen.olowolayemo@ams.usda.gov (202) 720 - 0119
(Freight rates and vessels)
April Taylor april.taylor@ams.usda.gov (202) 720 - 7880
(Container movements)

Subscription Information: Send relevant information to GTRContactUs@ams.usda.gov for an electronic copy (*printed copies are also available upon request*).

Preferred citation: U.S. Dept. of Agriculture, Agricultural Marketing Service. *Grain Transportation Report*. September 14, 2017. Web: <http://dx.doi.org/10.9752/TS056.09-14-2017>

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at How to File a Program Discrimination Complaint and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program.intake@usda.gov.

USDA is an equal opportunity provider, employer, and lender.