United States Department of Agriculture

Grain Transportation Report

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

Contact Us

October 26, 2017

Contents

The next release is November 2, 2017

WEEKLY HIGHLIGHTS

Soybean Harvest Behind in Some States as End of Upper Mississippi River Navigation Season Approaches

As of October 22, USDA's *Crop Progress* report showed the projected record soybean crop was 70 percent harvested, 21 points higher than last week, and slightly less than the 5-year average pace of 73 percent. Among the top three soybean producing States–Illinois, Iowa, and Minnesota–only Illinois is ahead of its average harvest pace with 77 percent of the soybean crop harvested compared to the average of 73 percent. Iowa soybeans are only 61 percent harvested compared to the average of 81 percent, and soybeans in Minnesota are 83 percent harvested compared to the average of 93 percent. Soybean shippers using the upper Mississippi River have a narrowing time frame for barging grain as the navigation season nears its winter closure (typically late November through late February). In preparation of the closing of the Upper Mississippi River, barges in the St. Paul, MN, area will begin their departure for southern destinations starting mid-November.

Corn and Soybeans Boost Total Grain Inspections

For the week ending October 19, **total inspections of grain** (corn, wheat, and soybeans) for export from major U.S. export regions reached 3.33 million metric tons (mmt), up 31 percent from the previous week, down 11 percent from the same time last year, but 7 percent above the 3-year average. The increase in total grain inspections was driven by an 87 percent increase in corn inspections and a 36 percent increase in soybeans inspections. Mississippi Gulf grain inspections jumped 60 percent from the past week, and Pacific Northwest (PNW) inspections increased 22 percent for the same period. Week-to-week rail deliveries of grain to the PNW and U.S Gulf ports also increased noticeably from the previous week. Outstanding (unshipped) export sales increased for wheat and corn but decreased for soybeans

Deadline Extended for Submitting Comments on Interim National Multimodal Freight Network

The Department of Transportation (DOT) released a Federal Register notice extending the original September 6, 2016 deadline for submitting comments regarding the Interim National Multimodal Freight Network (NMFN). The new deadline is **February 22, 2018** and all comments and State certifications must be received by this date for DOT consideration. The NMFN was established under the Fixing America's Surface Transportation Act and will assist States in utilizing resources to improve system performance for the efficient movement of freight; inform freight transportation planning; help prioritize Federal investment; and assess and support Federal investment to achieve national multimodal freight policy goals. The public can submit comments here on components of the Interim NMFN before it is made final. Additional information on the Interim NMFN is available at DOT's website. Agricultural stakeholders interested in providing input to DOT on these matters, are encouraged to do so by the new deadline, which is only about four months away.

Snapshots by Sector

Export Sales

For the week ending October 12, **unshipped balances** of wheat, corn, and soybeans totaled 34.9 mmt, down 21 percent from the same time last year. Net weekly **wheat export sales** were .616 mmt, up 252 percent from the previous week. Net **corn export sales** were 1.24 mmt, down 18 percent from the previous week, and net **soybean export sales** were 1.28 mmt for the same period, down 24 percent from the previous week.

Rail

U.S. Class I railroads originated 21,930 **grain carloads** for the week ending October 14, down 11 percent from the previous week, down 20 percent from last year, and down 10 percent from the 3-year average.

Average November shuttle **secondary railcar** bids/offers per car were $75 below tariff for the week ending October 19, down $25 from last week, and $331 lower than last year. There were no non-shuttle bids/offers this week.

Barge

For the week ending October 21, **barge grain movements** totaled 552,350 tons, 14 percent higher than the previous week, and down 42 percent from the same period last year.

For the week ending October 21, 349 grain barges **moved down river**, up 8 percent from last week. 1,022 grain barges were **unloaded in New Orleans**, up 43 percent from the previous week.

Ocean

For the week ending October 19, 35 **ocean-going grain vessels** were loaded in the Gulf, 31 percent less than the same period last year. Forty-six vessels are expected to be loaded within the next 10 days, 35 percent less than the same period last year.

For the week ending October 19, the ocean freight rate for shipping bulk grain from the Gulf to Japan was $44.00 per metric ton, 4 percent more than the previous week. The cost of shipping from the PNW to Japan was $25.50 per metric ton, 6 percent more than the previous week.

Fuel

During the week ending October 23, average **diesel fuel prices** increased 1 cent from the previous week to $2.80 per gallon, 32 cents above the same week last year.

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Web: **http://dx.doi.org/10.9752/TS056.10-26-2017**

Third Quarter Bulk Ocean Freight Rates Up As Iron Ore and Coal Shipments Increased

Ocean freight rates for shipping bulk commodities, including grains, increased during the third quarter due to strong iron ore, coal, and grain shipments during the quarter. Ocean freight rates for shipping a metric ton (mt) of grain from the U.S. Gulf to Japan averaged $39.23 during the quarter, 3 and 31 percent more than the previous quarter and same period a year ago, respectively, but unchanged from the 4-yr average (see table and figure below). The cost of shipping from the Pacific Northwest (PNW) to Japan averaged $20.71 per mt, 4 and 25 percent more than the previous quarter and same period a year ago, but 4 percent less than the 4-yr average. The cost of shipping from the U.S. Gulf to Europe, at $15.03 per mt, was 4 percent higher than the previous quarter, unchanged from a year earlier, and 20 percent less than the 4-yr average. The spread between Gulf-to-Japan and PNW-to-Japan rates was also higher than the previous quarter, same period a year ago, and the 4-yr average.

Ocean freight rates for grain routes during third quarter 2017

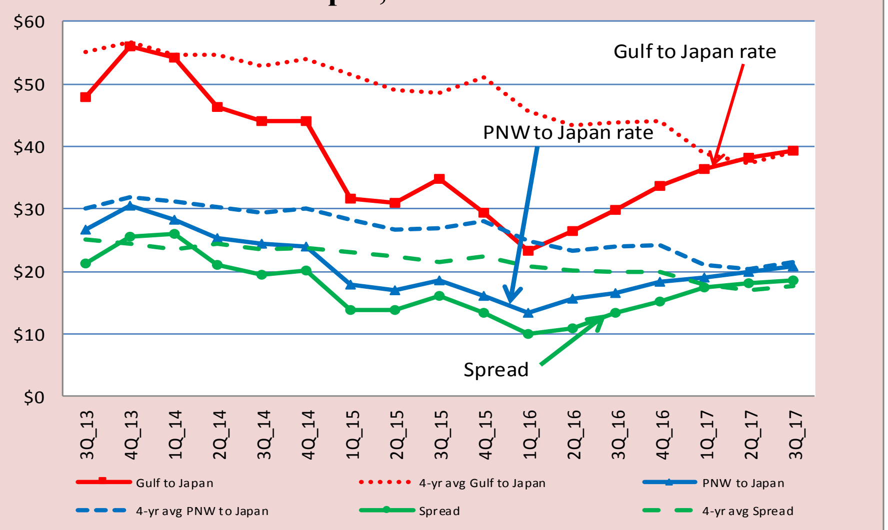
Route	July	Aug.	Sept.	3rd quarter 2017	Change from 2nd qtr '17	Change from 3rd qtr '16	Change from 4-yr avg
	--$/mt--			--$/mt--	Percent		
U.S. Gulf to Japan	37.56	38.25	41.88	39.23	3	31	0
PNW to Japan	19.31	19.70	23.13	20.71	4	25	-4
Spread	18.25	18.55	18.75	18.52	2	39	6
U.S. Gulf to Europe	13.44	14.95	16.69	15.03	4	0	-20

Source: O'Neil Commodity Consulting

Increasing construction activities in China have led to high steel production as steel prices reached their highest level in August since 2014. The increased steel production depleted the iron ore inventories at the ports to about 124 million tons at the end of August. This in turn has led to increased demand for iron ore and coking coal imports by China. Steel consumption also improved in India and Europe.

In addition to increased demand for iron and coking coal, there was also increasing demand for grains and other bulk products in Asia. There was strong demand for corn in Japan and South Korea. In addition, United States corn exports to the European Union (EU) almost doubled during the first-half of 2017 compared to the same period last year.

Grain vessel rates and spread (per mt), U.S. to Japan, 2013-2017



Source: O'Neil Commodity Consulting

Market Analysis and Outlook:

As of October 19, the ocean freight rate for shipping a metric ton of grain from the U.S. Gulf to Japan was $44.00 and the cost of shipping from the PNW to Japan was $25.50. Both rates were 39 and 42 percent

higher than the same period last year, respectively. However, it is difficult to predict if the rate will continue increasing, decrease, or stay relatively the same given certain factors operating in the market. While there is a waning demand for steam coal imports in China as the country moves to off-peak season, India's low domestic production and low stocks at power plants may keep the demand for thermal coal strong. Global grain trade is expected to remain strong despite a recent increase in the EU's import duty on corn, sorghum, and rye (*Drewry Maritime Research, Shipping Insight,* September 6, 2017 Edition). The demand for grain in China and other Asian countries, such as Japan and Korea, will remain strong. So far, the dry bulk fleet has remained relatively stable at 815 million deadweight tons in August due to lower deliveries of new vessels. However, while at a slower pace, owners keep placing orders for new vessels as the dry bulk market is recovering. At the same time, the scrapping of older vessels has only slightly increased. Consequently, the rate of growth for the dry bulk fleet may increase in the long run if the rate of scrapping does not pick up pace. This will keep ocean freight rates in check.
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Grain Transportation Indicators

Table 1

Grain Transport Cost Indicators[1]

	Truck	Rail		Barge	Ocean	
For the week ending		Unit Train	Shuttle		Gulf	Pacific
10/25/17	188	267	211	222	197	181
10/18/17	187	292	231	236	190	170

[1]Indicator: 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	10/20/2017	10/13/2017
Corn	IL--Gulf	-0.65	-0.61
Corn	NE--Gulf	-0.73	-0.71
Soybean	IA--Gulf	-1.10	-1.12
HRW	KS--Gulf	-2.68	-2.63
HRS	ND--Portland	-1.84	-1.92

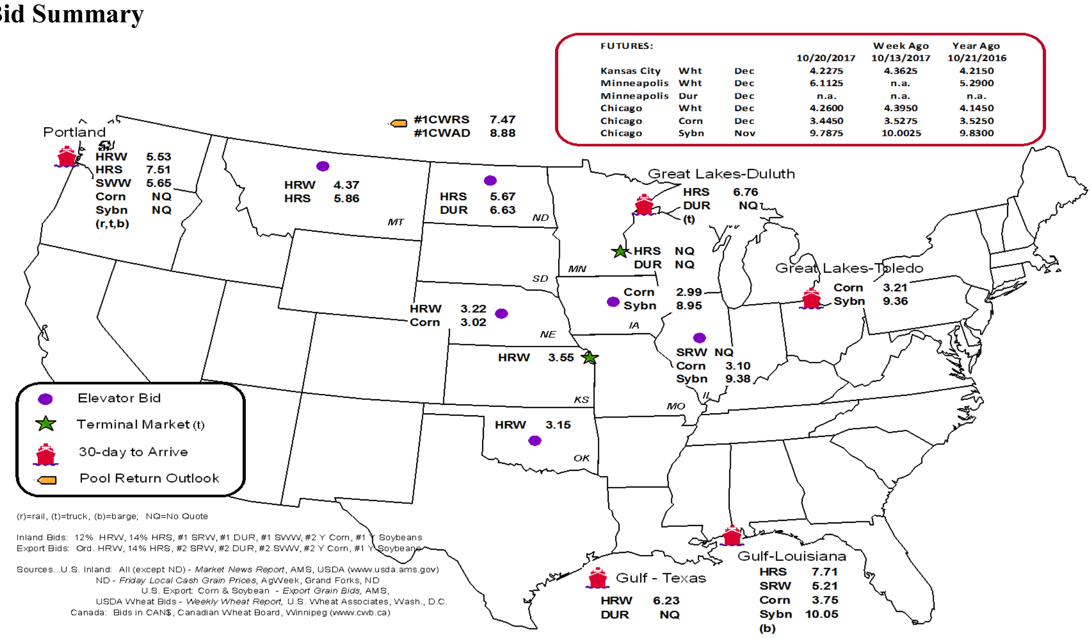
Note: nq = no quote; n/a = not available

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 Gulf	Texas Gulf	Pacific Northwest	Atlantic & East Gulf	Total	Week ending	Cross-Border Mexico[3]
10/18/2017[p]	1,283	688	8,081	1,200	11,252	10/14/2017	1,829
10/11/2017[r]	1,862	1,147	6,723	537	10,269	10/7/2017	2,528
2017 YTD[r]	23,121	65,916	225,943	16,010	330,990	2017 YTD	98,512
2016 YTD[r]	24,234	65,814	228,670	16,999	335,717	2016 YTD	86,234
2017 YTD as % of 2016 YTD	95	100	99	94	99	% change YTD	114
Last 4 weeks as % of 2016[2]	61	52	70	58	65	Last 4wks % 2016	118
Last 4 weeks as % of 4-year avg.[2]	73	69	88	75	82	Last 4wks % 4 yr	126
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.

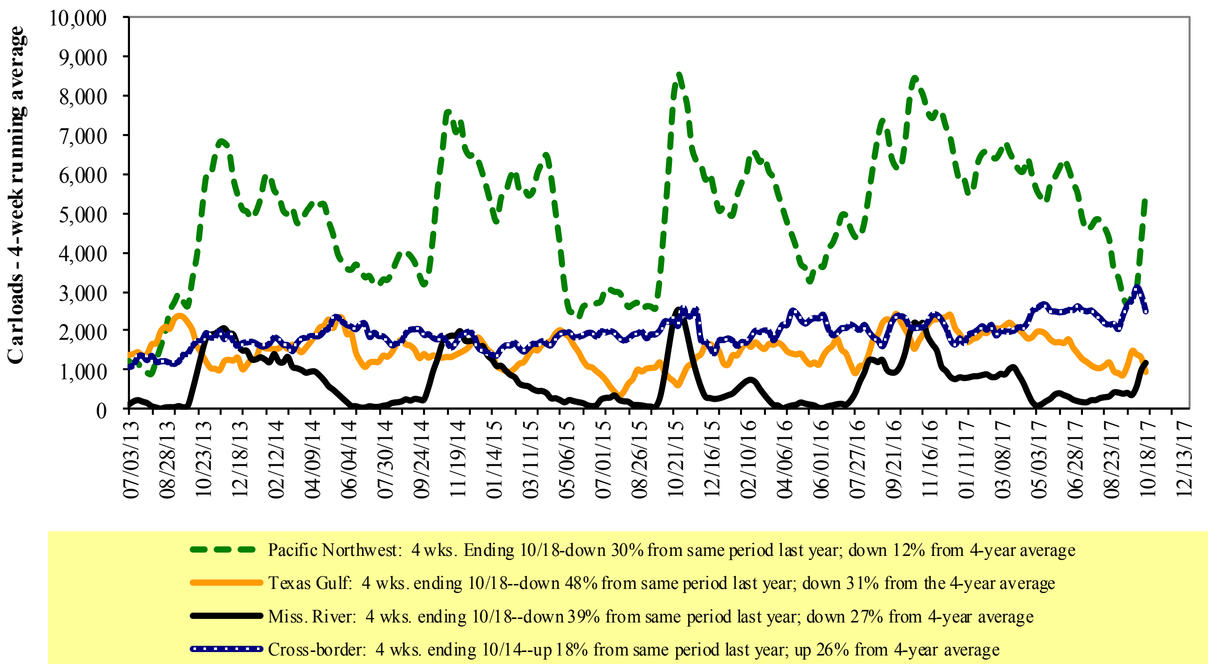
YTD = year-to-date; p = preliminary data; r = revised data; n/a = not available

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:	East		West			U.S. total	Canada	
10/14/2017	CSXT	NS	BNSF	KCS	UP		CN	CP
This week	2,116	2,503	11,544	1,013	4,754	21,930	4,524	5,448
This week last year	2,621	3,771	12,361	1,126	7,420	27,299	5,787	5,613
2017 YTD	67,788	112,071	454,051	39,314	233,136	906,360	154,477	189,382
2016 YTD	71,079	113,636	459,343	35,558	231,890	911,506	143,758	180,733
2017 YTD as % of 2016 YTD	95	99	99	111	101	99	107	105
Last 4 weeks as % of 2016*	77	85	86	97	80	84	73	96
Last 4 weeks as % of 3-yr avg.**	80	96	98	100	93	95	82	105
Total 2016	95,179	151,022	590,779	45,246	300,836	1,183,062	193,785	234,738

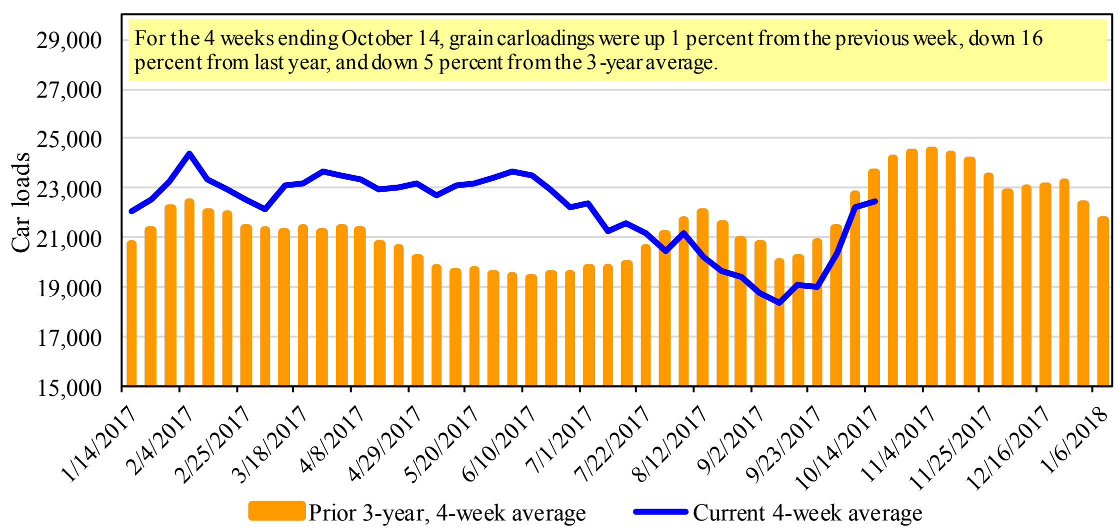
*The past 4 weeks of this year as a percent of the same 4 weeks last year.

**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 Offerings[1] ($/car)[2]

For the week ending: 10/19/2017		Nov-17	Nov-16	Dec-17	Dec-16	Jan-18	Jan-17	Feb-18	Feb-17
BNSF[3]	COT grain units	no bids	0	no bids	no bids	no bids	no bids	no bids	no bids
	COT grain single-car[5]	2	76	0	17	no bids	no bids	no bids	no bids
UP[4]	GCAS/Region 1	no bids	no offer	no bids	no bids	no offer	no offer	n/a	n/a
	GCAS/Region 2	no bids	no offer	no bids	no bids	no offer	no offer	n/a	n/a

(Columns Nov-17 through Feb-17: Delivery period)

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

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

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

[4]UP - GCAS = Grain Car Allocation System

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

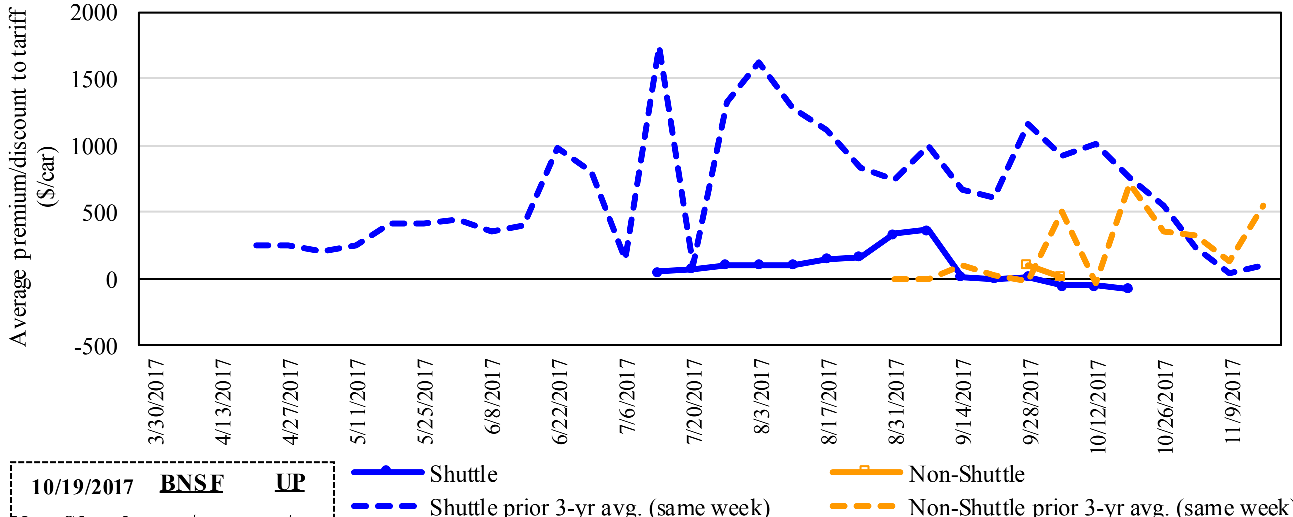
Region 2 includes: CO, IA, KS, MN, NE, WY, and Kansas City and St. Joseph, MO.

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

Source: Transportation & Marketing Programs/AMS/USDA.

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

Figure 4
Bids/Offers for Railcars to be Delivered in November 2017, Secondary Market

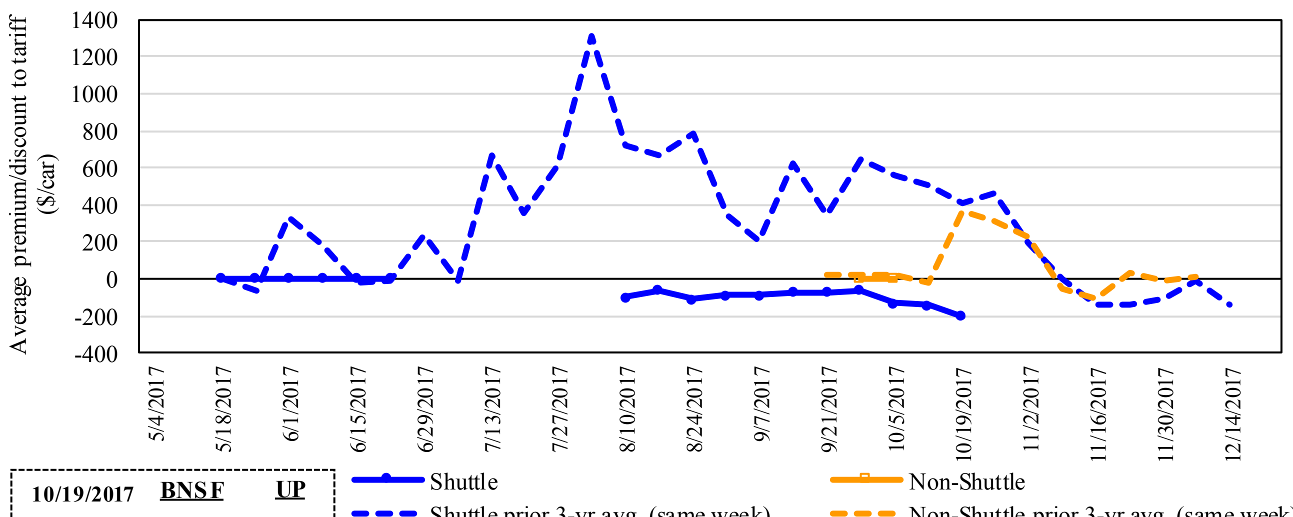


10/19/2017	BNSF	UP
Non-Shuttle	n/a	n/a
Shuttle	$50	-$200

There were no Non-Shuttle bids/offers this week.
Average Shuttle bids/offers fell $25 this week and are $438 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 December 2017, Secondary Market



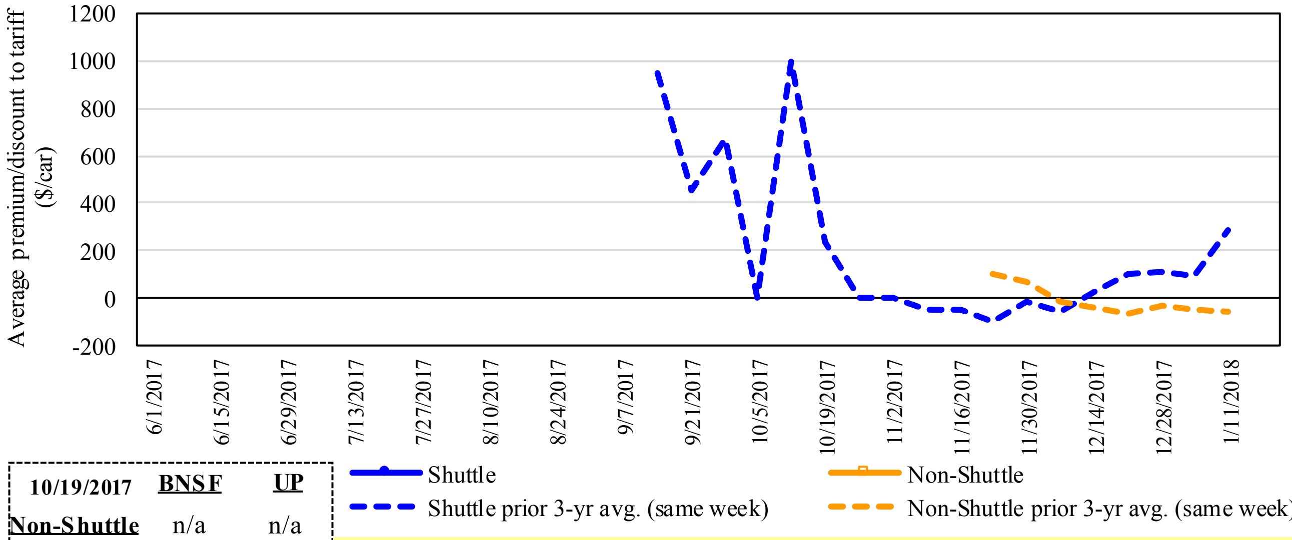
10/19/2017	BNSF	UP
Non-Shuttle	n/a	n/a
Shuttle	n/a	-$200

There were no Non-Shuttle bids/offers this week.
Average Shuttle bids/offers fell $58 this week and are $200 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 January 2018, Secondary Market



10/19/2017	BNSF	UP
Non-Shuttle	n/a	n/a
Shuttle	n/a	n/a

There were no Non-Shuttle bids/offers this week.
There were no Shuttle bids/offers this week.

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					
	10/19/2017	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-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**	**50**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**
	Change from last week	150	n/a	n/a	n/a	n/a	n/a
	Change from same week 2016	(563)	n/a	n/a	n/a	n/a	n/a
	UP-Pool	**(200)**	**(200)**	**n/a**	**n/a**	**n/a**	**n/a**
	Change from last week	(200)	0	n/a	n/a	n/a	n/a
	Change from same week 2016	(100)	(50)	n/a	n/a	n/a	n/a

[1]Average 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 Shipments[1]

October, 2017	Origin region[3]	Destination region[3]	Tariff rate/car	Fuel surcharge per car	Tariff plus surcharge per: metric ton	Tariff plus surcharge per: bushel[2]	Percent change Y/Y[4]
Unit train							
Wheat	Wichita, KS	St. Louis, MO	$3,883	$51	$39.06	$1.06	4
	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	$89	$45.97	$1.25	4
	Sioux Falls, SD	Galveston-Houston, TX	$6,786	$0	$67.39	$1.83	5
	Northwest KS	Galveston-Houston, TX	$4,816	$98	$48.79	$1.33	4
	Amarillo, TX	Los Angeles, CA	$5,021	$136	$51.21	$1.39	4
Corn	Champaign-Urbana, IL	New Orleans, LA	$3,931	$101	$40.04	$1.02	8
	Toledo, OH	Raleigh, NC	$6,344	$0	$63.00	$1.60	5
	Des Moines, IA	Davenport, IA	$2,258	$21	$22.63	$0.57	0
	Indianapolis, IN	Atlanta, GA	$5,446	$0	$54.08	$1.37	5
	Indianapolis, IN	Knoxville, TN	$4,540	$0	$45.08	$1.15	5
	Des Moines, IA	Little Rock, AR	$3,609	$63	$36.46	$0.93	3
	Des Moines, IA	Los Angeles, CA	$5,327	$182	$54.71	$1.39	4
Soybeans	Minneapolis, MN	New Orleans, LA	$3,634	$74	$36.83	$1.00	-6
	Toledo, OH	Huntsville, AL	$5,287	$0	$52.50	$1.43	5
	Indianapolis, IN	Raleigh, NC	$6,460	$0	$64.15	$1.75	5
	Indianapolis, IN	Huntsville, AL	$4,764	$0	$47.31	$1.29	5
	Champaign-Urbana, IL	New Orleans, LA	$4,745	$101	$48.12	$1.31	6
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	$5,663	$0	$56.24	$1.53	3
	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	$160	$59.30	$1.61	4
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	$3,731	$101	$38.05	$0.97	8
	Lincoln, NE	Galveston-Houston, TX	$3,700	$0	$36.74	$0.93	0
	Des Moines, IA	Amarillo, TX	$3,970	$79	$40.21	$1.02	3
	Minneapolis, MN	Tacoma, WA	$5,000	$0	$49.65	$1.26	0
	Council Bluffs, IA	Stockton, CA	$4,820	$0	$47.86	$1.22	2
Soybeans	Sioux Falls, SD	Tacoma, WA	$5,600	$0	$55.61	$1.51	0
	Minneapolis, MN	Portland, OR	$5,650	$0	$56.11	$1.53	0
	Fargo, ND	Tacoma, WA	$5,500	$0	$54.62	$1.49	0
	Council Bluffs, IA	New Orleans, LA	$4,775	$116	$48.57	$1.32	6
	Grand Island, NE	Portland, OR	$5,710	$164	$58.33	$1.59	6

[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

Date: October, 2017				Fuel			Percent
	Origin		Tariff	surcharge	Tariff plus surcharge per:		change[4]
Commodity	state	Destination region	rate/car[1]	per car[2]	metric ton[3]	bushel[3]	Y/Y
Wheat	MT	Chihuahua, CI	$7,459	$0	$76.21	$2.07	0
	OK	Cuautitlan, EM	$6,631	$70	$68.46	$1.86	1
	KS	Guadalajara, JA	$7,309	$261	$77.35	$2.10	5
	TX	Salinas Victoria, NL	$4,292	$43	$44.29	$1.20	3
Corn	IA	Guadalajara, JA	$8,293	$216	$86.94	$2.21	3
	SD	Celaya, GJ	$7,700	$0	$78.68	$2.00	2
	NE	Queretaro, QA	$8,013	$145	$83.36	$2.12	2
	SD	Salinas Victoria, NL	$6,743	$0	$68.90	$1.75	2
	MO	Tlalnepantla, EM	$7,379	$142	$76.85	$1.95	2
	SD	Torreon, CU	$7,300	$0	$74.59	$1.89	2
Soybeans	MO	Bojay (Tula), HG	$8,134	$203	$85.18	$2.32	-5
	NE	Guadalajara, JA	$8,692	$218	$91.03	$2.47	-2
	IA	El Castillo, JA	$8,960	$0	$91.55	$2.49	0
	KS	Torreon, CU	$7,489	$152	$78.07	$2.12	1
Sorghum	NE	Celaya, GJ	$7,345	$195	$77.03	$1.95	4
	KS	Queretaro, QA	$7,819	$87	$80.78	$2.05	3
	NE	Salinas Victoria, NL	$6,452	$70	$66.63	$1.69	4
	NE	Torreon, CU	$6,790	$143	$70.83	$1.80	4

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

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

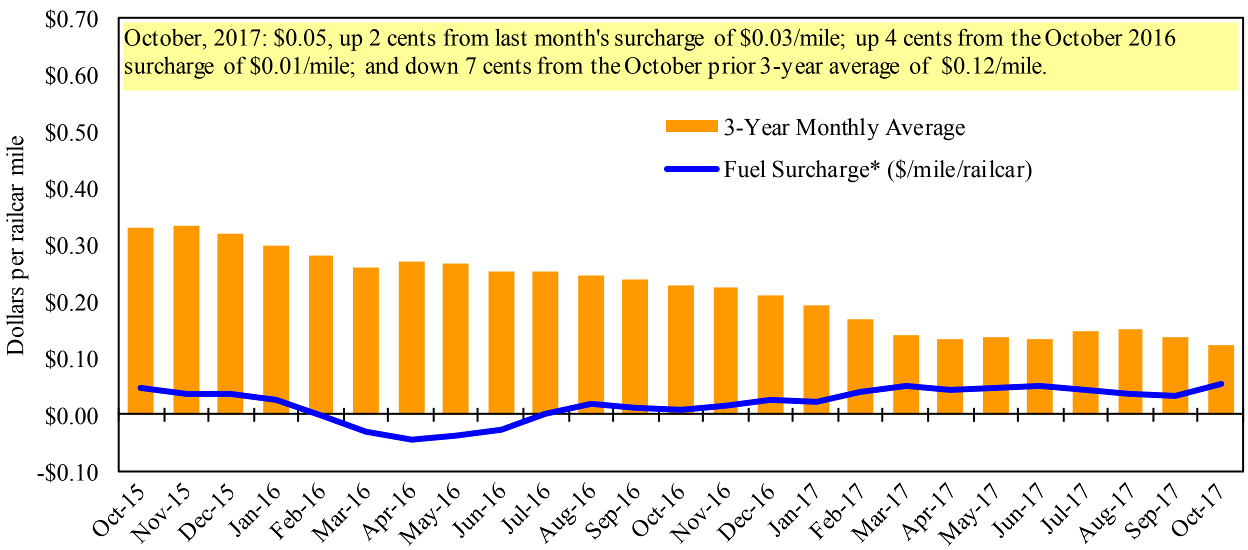
[3]Approximate load per car = 97.87 metric tons: Corn & Sorghum 56 lbs/bu, Wheat & Soybeans 60 lbs/bu

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

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

Figure 7

Railroad Fuel Surcharges, North American Weighted Average[1]

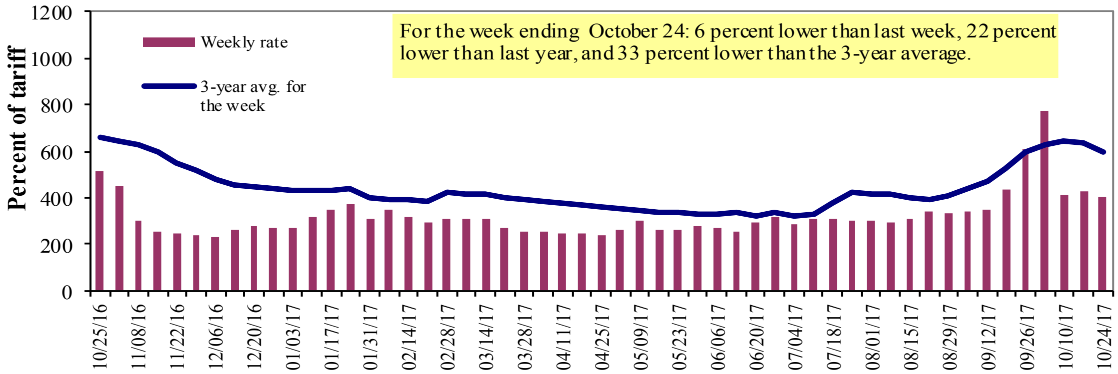


[1] Weighted by each Class I railroad's proportion of grain traffic for the prior year.
* Beginning January 2009, the Canadian Pacific fuel surcharge is computed by a monthly average of the bi-weekly fuel surcharge.
**CSX strike price changed from $2.00/gal. to $3.75/gal. starting January 1, 2015.
Sources: 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]



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

Table 9

Weekly Barge Freight Rates: Southbound Only

		Twin Cities	Mid-Mississippi	Lower Illinois River	St. Louis	Cincinnati	Lower Ohio	Cairo-Memphis
Rate[1]	10/24/2017	458	425	400	320	563	563	300
	10/17/2017	425	388	425	330	475	475	280
$/ton	10/24/2017	28.35	22.61	18.56	12.77	26.40	22.75	9.42
	10/17/2017	26.31	20.64	19.72	13.17	22.28	19.19	8.79
Current week % change from the same week:								
	Last year	-21	-21	-22	-17	45	45	-6
	3-year avg. [2]	-25	-32	-33	-38	-4	-3	-38
Rate[1]	November	433	345	363	263	345	345	250
	January	-	-	315	230	288	288	208

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

Figure 9
Benchmark tariff rates

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

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

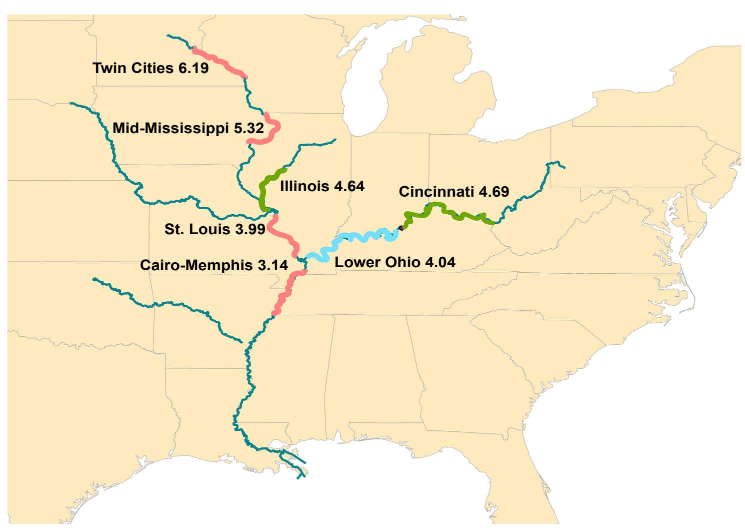
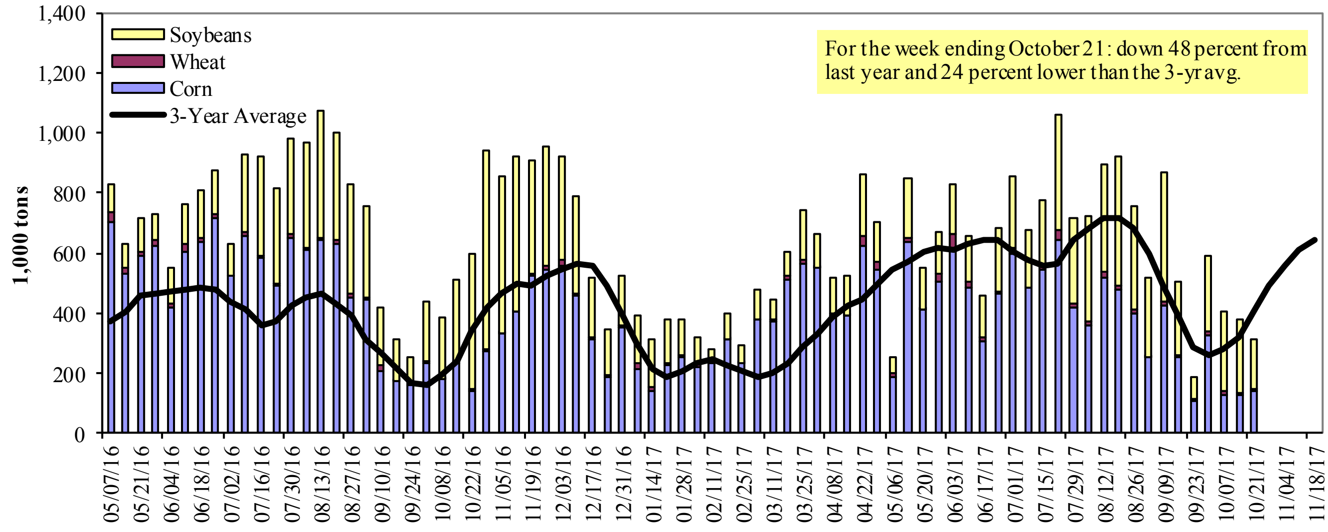


Figure 10

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



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

Source: U.S. Army Corps of Engineers

Table 10

Barge Grain Movements (1,000 tons)

For the week ending 10/21/2017	Corn	Wheat	Soybeans	Other	Total
Mississippi River					
Rock Island, IL (L15)	11	9	53	0	73
Winfield, MO (L25)	127	6	129	0	262
Alton, IL (L26)	149	6	146	2	303
Granite City, IL (L27)	141	6	165	3	316
Illinois River (L8)	50	0	22	2	73
Ohio River (L52)	35	5	135	7	182
Arkansas River (L1)	0	8	46	0	54
Weekly total - 2017	176	20	346	10	552
Weekly total - 2016	185	25	747	3	960
2017 YTD[1]	18,417	2,024	11,663	261	32,366
2016 YTD	19,716	1,794	10,923	297	32,731
2017 as % of 2016 YTD	93	113	107	88	99
Last 4 weeks as % of 2016[2]	70	153	77	104	77
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.

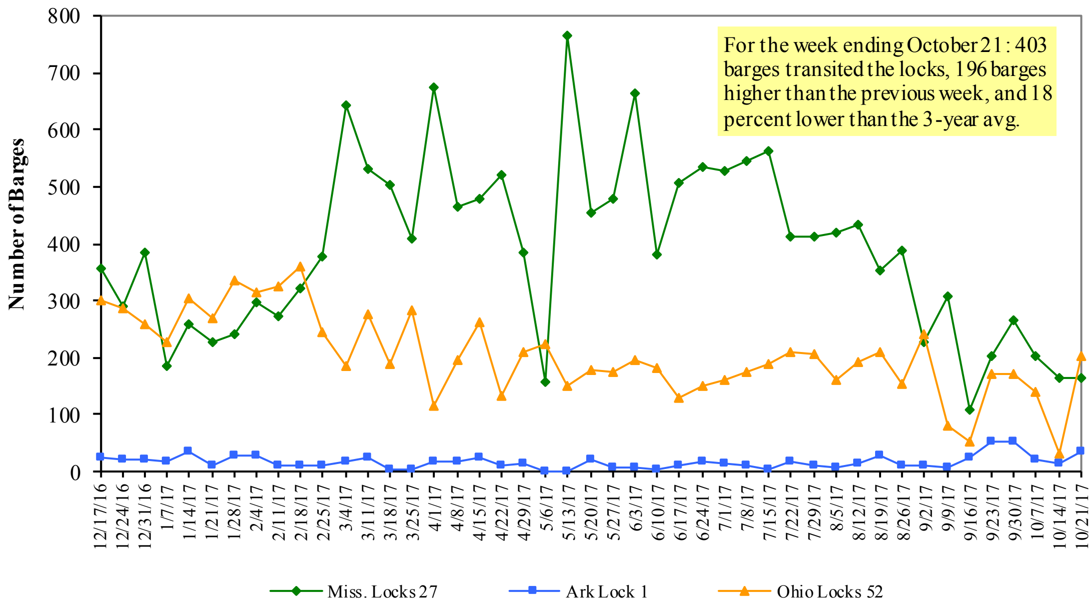
[2] As a percent of same period in 2016.

Note: Total may not add exactly, due to rounding

Source: U.S. Army Corps of Engineers

Figure 11

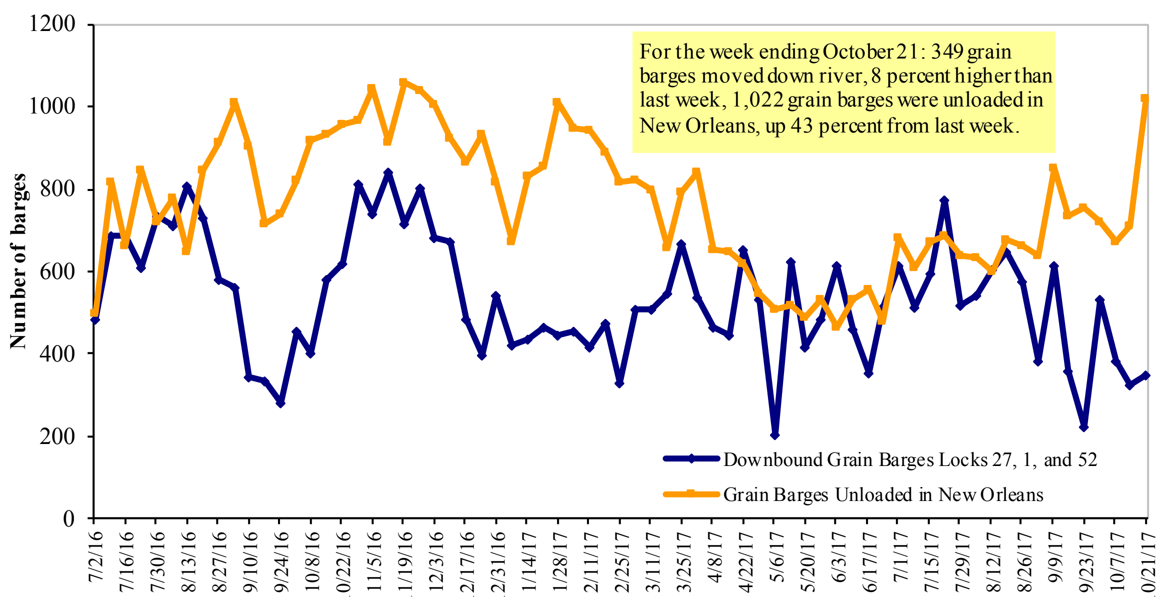
Upbound Empty Barges Transiting Mississippi River Locks 27, Arkansas River Lock and Dam 1, and Ohio River Locks and Dam 52



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 Prices[1], Week Ending 10/23/2017(US $/gallon)

Region	Location	Price	Change from Week ago	Change from Year ago
I	East Coast	2.797	0.010	0.319
	New England	2.752	0.005	0.319
	Central Atlantic	2.924	0.010	0.319
	Lower Atlantic	2.715	0.010	0.319
II	Midwest[2]	2.779	0.010	0.319
III	Gulf Coast[3]	2.614	0.010	0.319
IV	Rocky Mountain	2.917	0.010	0.319
V	West Coast	3.098	0.010	0.319
	West Coast less California	3.015	0.010	0.319
	California	3.166	0.010	0.319
Total	U.S.	2.797	0.010	0.319

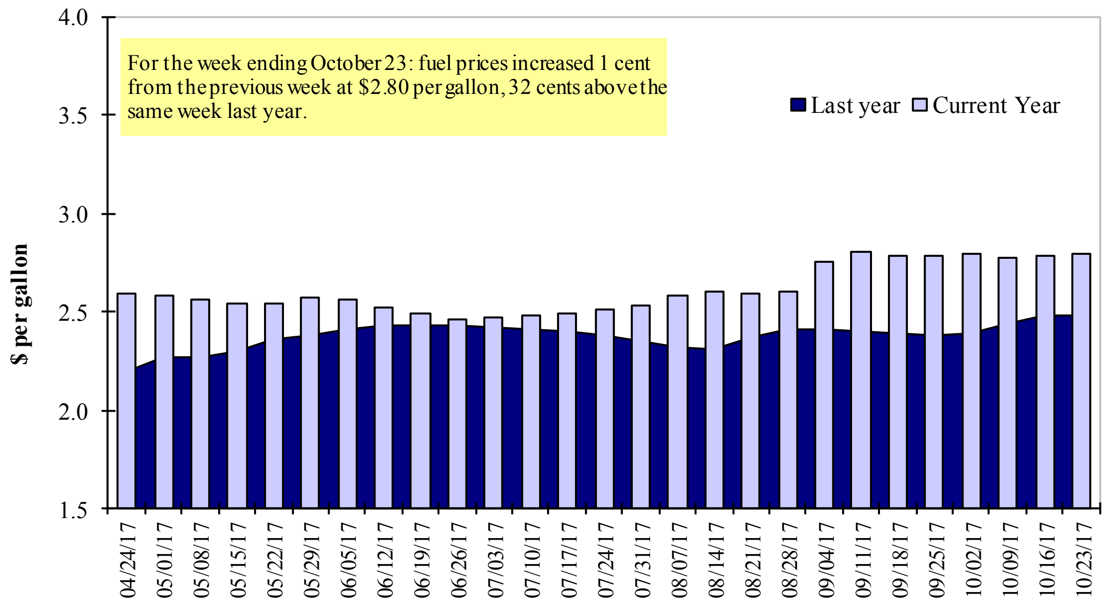
[1]Diesel fuel prices include all taxes. Prices represent an average of all types of diesel fuel.

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

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

Figure 13

Weekly Diesel Fuel Prices, U.S. Average



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

Grain Exports

Table 12

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

For the week ending	Wheat HRW	Wheat SRW	Wheat HRS	Wheat SWW	Wheat DUR	All wheat	Corn	Soybeans	Total
Export Balances[1]									
10/12/2017	1,439	606	1,494	1,160	83	4,782	10,892	19,245	34,919
This week year ago	1,825	527	1,554	941	73	4,919	14,964	24,049	43,932
Cumulative exports-marketing year[2]									
2017/18 YTD	4,066	865	2,676	2,236	176	10,019	4,037	7,041	21,098
2016/17 YTD	4,770	823	3,122	1,653	137	10,503	7,515	7,594	25,612
YTD 2017/18 as % of 2016/17	85	105	86	135	129	95	54	93	82
Last 4 wks as % of same period 2016/17	78	107	87	133	137	95	65	81	77
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, corn, and soybeans

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

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

Table 13

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

For the week ending 10/12/2017	2017/18 Current MY	2016/17 Last MY	% change current MY from last MY	Exports[3] 3-year avg 2014-2016
				- 1,000 mt -
Mexico	6,962	6,339	10	12,297
Japan	1,800	2,805	(36)	11,450
Korea	264	1,508	(82)	4,494
Colombia	1,074	1,396	(23)	4,179
Peru	803	781	3	2,693
Top 5 Importers	**10,903**	**12,829**	**(15)**	**35,113**
Total US corn export sales	**14,929**	**22,479**	**(34)**	**49,308**
% of Projected	32%	39%		
Change from prior week[2]	**1,241**	**1,002**		
Top 5 importers' share of U.S. corn export sales	73%	57%		71%
USDA forecast, October 2017	**47,074**	**58,346**	**(19)**	
Corn Use for Ethanol USDA forecast, October 2017	**139,065**	**138,125**	**1**	

[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/esrquery/. 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 Importers[1] of U.S. Soybeans

For the week ending 10/12/2017	Commitments[2] 2017/18 Current MY	2016/17 Last MY	% change current MY from last MY	Exports[3] 3-yr avg. 2014-2016
	- 1,000 mt -			- 1,000 mt -
China	12,862	15,541	(17)	31,881
Mexico	1,382	1,265	9	3,452
Indonesia	605	470	29	1,987
Japan	666	856	(22)	2,067
Netherlands	157	172	0	2,098
Top 5 importers	**15,671**	**18,303**	**(14)**	**41,486**
Total US soybean export sales	**26,287**	**31,643**	**(17)**	**52,919**
% of Projected	43%	53%		
Change from prior week[2]	**1,275**	**1,933**		
Top 5 importers' share of U.S. soybean export sales	60%	58%		**78%**
USDA forecast, October 2017	**61,308**	**59,237**	**103**	

(n) indicates negative number.

[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/esrquery/. The total commitments change (net sales) from prior week could include reivisions from previous week's outstanding sales and/or accumulated sales
[3] FAS Marketing Year Final Reports - www.fas.usda.gov/export-sales/myfi_rpt.htm. (Carryover plus Accumulated Exports)

Table 15

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

For the week ending 10/12/2017	Total Commitments[2] 2017/18 Current MY	2016/17 Last MY	% change current MY from last MY	Exports[3] 3-yr avg 2014-2016
	- 1,000 mt -			- 1,000 mt -
Japan	1,500	1,397	7	2,620
Mexico	1,899	1,540	23	2,743
Philippines	1,805	1,641	10	2,395
Brazil	95	995	(90)	862
Nigeria	743	697	7	1,254
Korea	1,038	840	24	1,104
China	721	495	45	1,623
Taiwan	655	512	28	768
Indonesia	690	478	44	726
Colombia	374	453	(17)	635
Top 10 importers	**9,519**	**9,047**	5	**14,729**
Total US wheat export sales	**14,801**	**15,422**	**(4)**	**22,804**
% of Projected	56%	54%		
Change from prior week[2]	**616**	**514**		
Top 10 importers' share of U.S. wheat export sales	64%	59%		65%
USDA forecast, October 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 outstanding and/or accumulated sales
[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	For the Week Ending 10/19/17	Previous Week[1]	Current Week as % of Previous	2017 YTD	2016 YTD	2017 YTD as % of 2016 YTD	Last 4-weeks as % of: Last Year	Prior 3-yr. avg.	2016 Total
Pacific Northwest									
Wheat	78	118	66	12,569	10,250	123	152	107	12,325
Corn	0	0	n/a	10,237	10,449	98	31	60	12,009
Soybeans	917	701	131	7,657	7,996	96	6	13	14,447
Total	**996**	**819**	**122**	**30,463**	**28,695**	**106**	**78**	**93**	**38,782**
Mississippi Gulf									
Wheat	68	35	195	3,701	3,000	123	104	76	3,480
Corn	465	207	225	25,166	26,301	96	56	71	31,420
Soybeans	1,355	941	144	22,138	22,521	98	85	92	35,278
Total	**1,888**	**1,183**	**160**	**51,006**	**51,823**	**98**	**76**	**86**	**70,178**
Texas Gulf									
Wheat	17	171	10	5,569	4,796	116	55	86	6,019
Corn	0	31	0	683	1,419	48	74	155	1,669
Soybeans	0	0	n/a	14	308	4	6	13	1,105
Total	**17**	**202**	**8**	**6,266**	**6,524**	**96**	**47**	**80**	**8,792**
Interior									
Wheat	5	7	70	1,476	1,264	117	30	44	1,543
Corn	128	82	155	6,789	5,812	117	102	122	7,197
Soybeans	133	164	81	4,047	3,307	122	110	114	4,577
Total	**266**	**253**	**105**	**12,313**	**10,383**	**119**	**95**	**109**	**13,317**
Great Lakes									
Wheat	10	10	102	550	881	62	22	25	1,186
Corn	0	0	n/a	173	463	37	0	0	584
Soybeans	76	61	124	529	351	151	98	92	910
Total	**86**	**72**	**121**	**1,252**	**1,695**	**74**	**62**	**60**	**2,681**
Atlantic									
Wheat	0	0	n/a	44	235	19	0	0	315
Corn	5	0	n/a	24	226	11	8	8	294
Soybeans	71	12	595	1,171	1,189	98	96	205	2,269
Total	**77**	**12**	**638**	**1,239**	**1,651**	**75**	**41**	**51**	**2,878**
U.S. total from ports[2]									
Wheat	179	342	52	23,909	20,427	117	86	86	24,867
Corn	598	320	187	43,074	44,671	96	57	76	53,173
Soybeans	2,553	1,879	136	35,556	35,672	100	81	93	58,587
Total	**3,329**	**2,541**	**131**	**102,539**	**100,770**	**102**	**75**	**88**	**136,627**

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

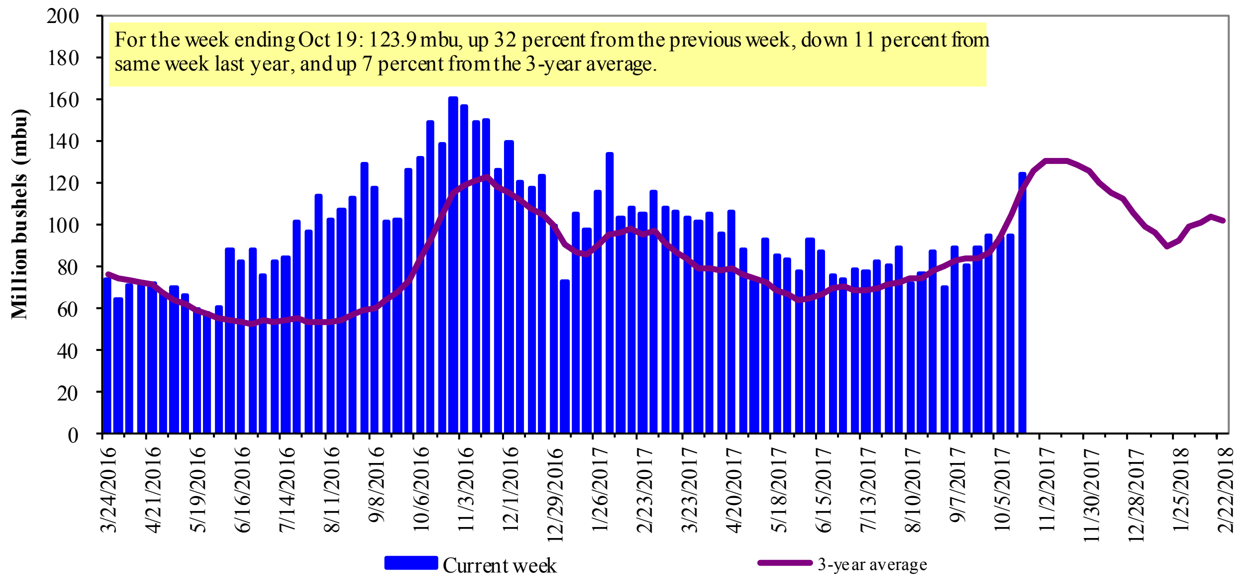
Source: Grain Inspection, Packers and Stockyards Administration/USDA (www.gipsa.usda.gov); YTD= year-to-date; n/a = not applicable

[2] Total only includes regions shown above.

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

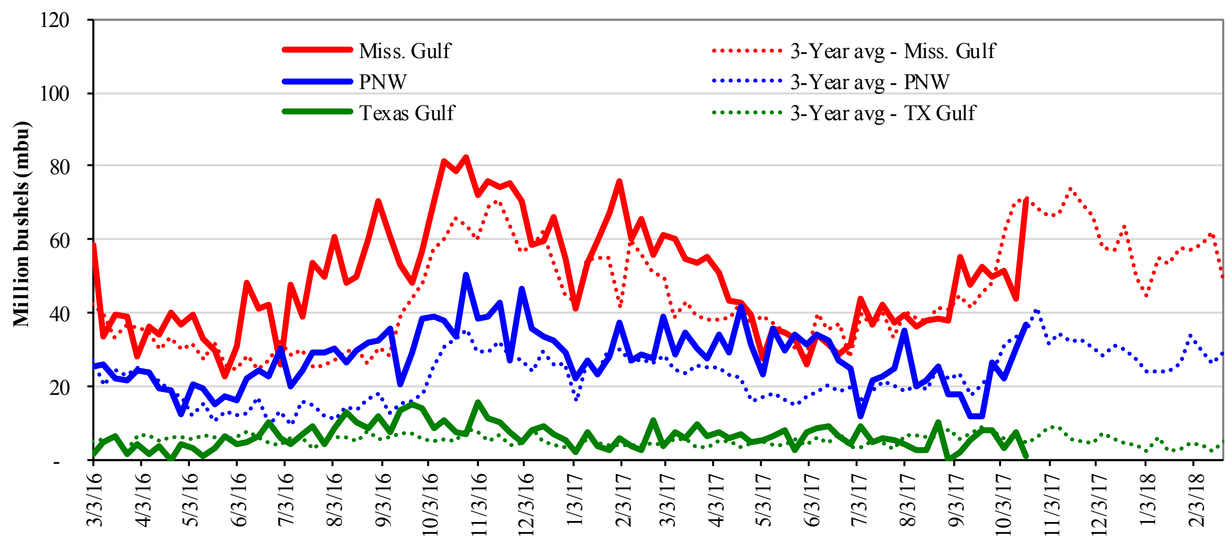
U.S. grain inspected for export (wheat, corn, and soybeans)



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 PNW[1] (wheat, corn, and soybeans)



Week ending 10/19/17 inspections (mbu):		Percent change from:	MS Gulf	TX Gulf	U.S. Gulf	PNW
Mississippi Gulf:	70.6	Last Week:	up 60	down 92	up 38	up 22
PNW:	36.6	Last Year (same week):	down 10	down 91	down 17	up 10
Texas Gulf:	0.6	3-yr avg. (4-wk. mov. Avg):	up 12	down 89	up 3	up 18

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

Ocean Transportation

Table 17

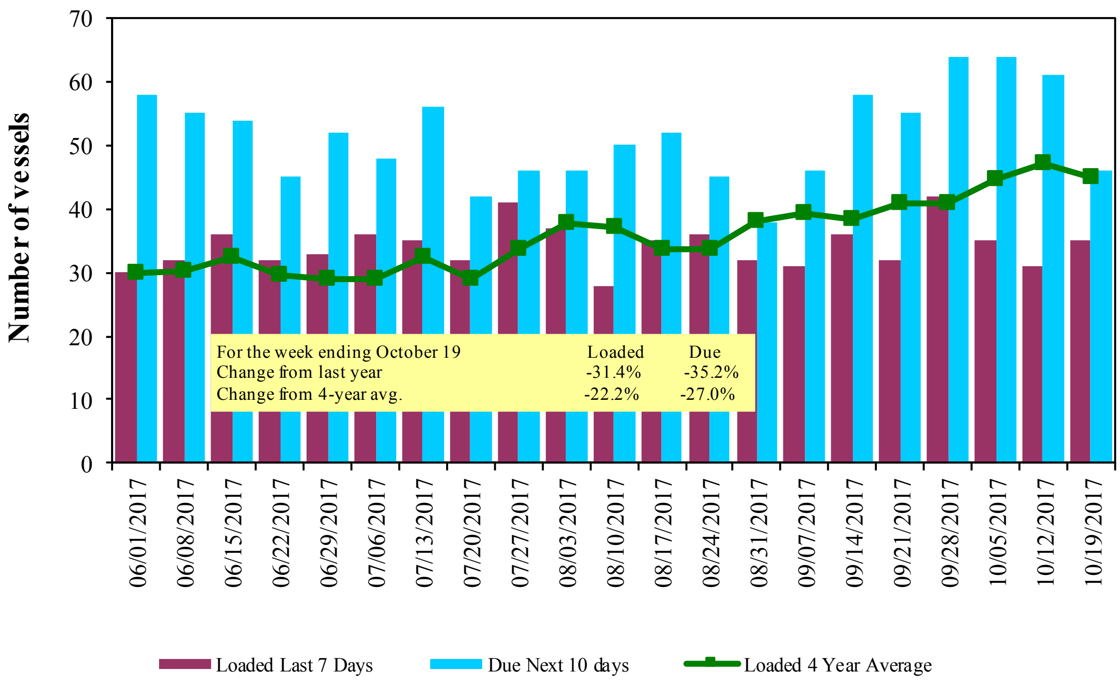
Weekly Port Region Grain Ocean Vessel Activity (number of vessels)

	Gulf			Pacific Northwest	Vancouver B.C.
Date	In port	Loaded 7-days	Due next 10-days	In port	In port
10/19/2017	62	35	46	20	n/a
10/12/2017	55	31	61	13	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

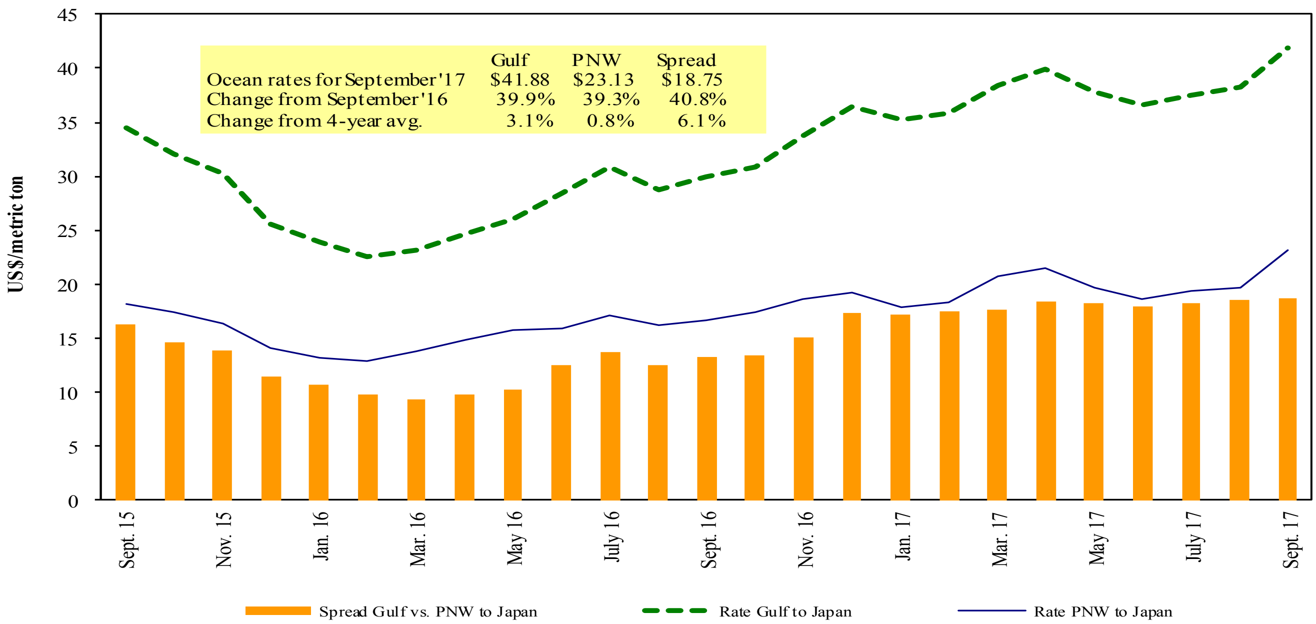


Source: Transportation & Marketing Programs/AMS/USDA

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

Figure 17

Grain Vessel Rates, U.S. to Japan



Data Source: O'Neil Commodity Consulting

Table 18

Ocean Freight Rates For Selected Shipments, Week Ending 10/21/2017

Export region	Import region	Grain types	Loading date	Volume loads (metric tons)	Freight rate (US$/metric ton)
U.S. Gulf	China	Heavy Grain	Nov 10/20	66,000	43.75
U.S. Gulf	China	Heavy Grain	Nov 1/10	66,000	42.00
U.S. Gulf	China	Heavy Grain	Nov 1/10	66,000	41.75
U.S. Gulf	China	Heavy Grain	Nov 1/10	66,000	41.25
U.S. Gulf	China	Heavy Grain	Nov 1/10	66,000	42.00
U.S. Gulf	China	Heavy Grain	Nov 1/10	66,000	41.50
U.S. Gulf	China	Heavy Grain	Oct 23/30	60,000	40.50
U.S. Gulf	China	Heavy Grain	Oct 15/30	66,000	42.50
U.S. Gulf	China	Heavy Grain	Oct 10/20	66,000	41.00
U.S. Gulf	China	Heavy Grain	Oct 1/10	66,000	41.25
U.S. Gulf	China	Heavy Grain	Oct 1/10	66,000	41.50
U.S. Gulf	China	Heavy Grain	Oct 1/10	66,000	38.75
PNW	China	Heavy Grain	Oct 1/10	60,000	25.00
PNW	Bangladesh	Wheat	Sep 29/Oct 9	13,620	58.00*
Brazil	China	Heavy Grain	Nov 1/10	60,000	31.90
Brazil	China	Heavy Grain	Oct 25/ Nov 10	60,000	32.50
Brazil	China	Heavy Grain	Oct 6/15	60,000	33.00
Brazil	China	Heavy Grain	Oct 1/10	60,000	332.75
Brazil	China	Heavy Grain	Sep 28/Oct 10	60,000	30.25

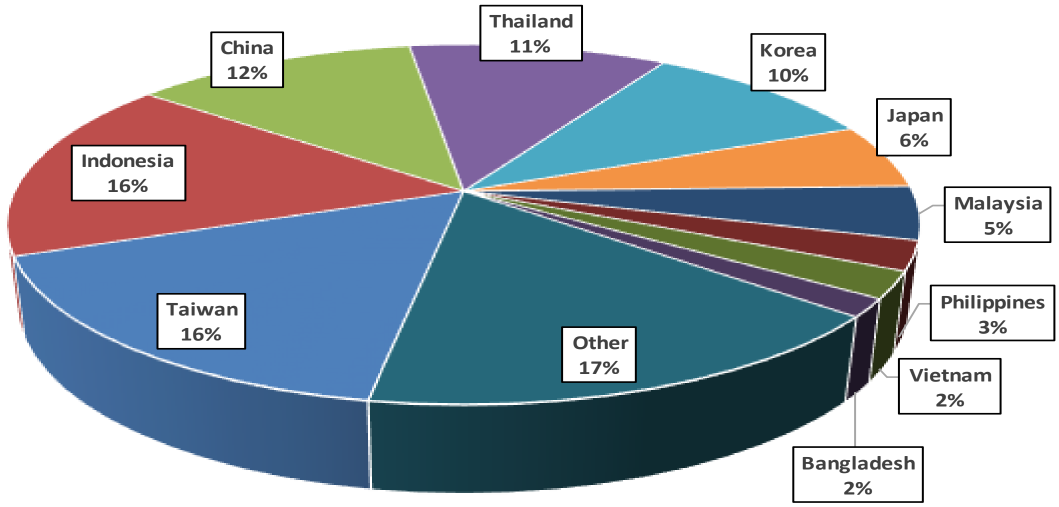
Rates shown are per metric ton (2,204.62 lbs. = 1 metric ton), F.O.B., except where otherwise indicated; op = option

*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.

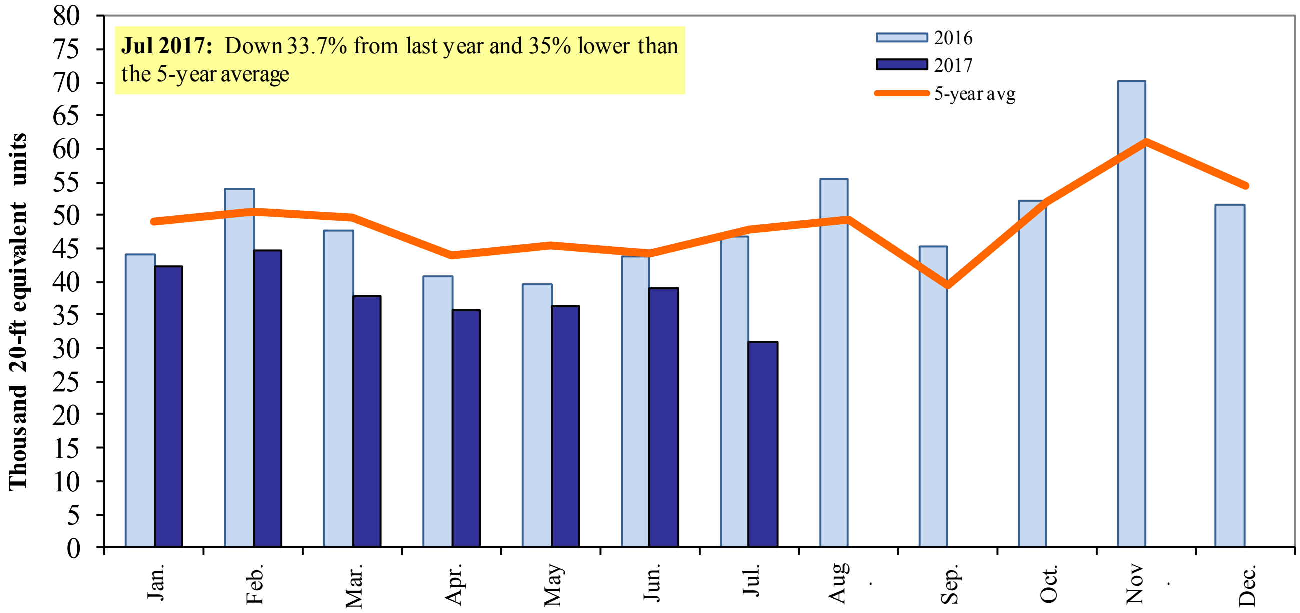
Figure 18
Top 10 Destination Markets for U.S. Containerized Grain Exports, January-July 2017



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.

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