USDA United States Department of Agriculture

Grain Transportation Report

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

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February 21, 2019

Contents

The next release is February 28, 2019

WEEKLY HIGHLIGHTS

USDA Agricultural Outlook to Examine Agricultural Transportation Issues

On February 21-22, USDA will hold its 95th Annual Agricultural Outlook Forum, in Arlington, VA. The Forum will include a session on February 22, entitled "Issues in Ag Transportation: Linking Producers to Consumers", which will examine various challenges that farmers face getting their products to market. Topics will include: challenges in gain rail; track and rail infrastructure investments; truck driver shortages; electronic logging device and hours of service issues for truck drivers; highway funding issues; barge supply outlook; conditions of locks and dams; and funding issues for rehabilitation, modernization, and maintenance of the river system. Under Secretary for Marketing and Regulatory Programs, Greg Ibach, will be the moderator. The program guide for the complete forum can be found here.

Highwater and Ice Continue to Slow Barge Traffic

According to American Commercial Barge Line, as of February 20, flood conditions have restricted barge traffic at several locks on the Ohio River to operating only during daylight hours. With more rain forecasted for the Ohio River Valley, barge conditions will likely further deteriorate for the rest of February. Ice accumulations have slowed barge traffic on the Illinois River. However, weather forecasters are expecting warmer temperatures later next week, which may improve navigation conditions. Highwater on the lower Mississippi River has restricted barge traffic to daylight hours only through Memphis, Vicksburg, and Baton Rouge. GTR Table 10 shows calendar year-to-date barge movements, on the locking portions of the Mississippi, Ohio, and Arkansas River, were 3.1 million tons, 11 percent lower than last year.

Grain Inspections Down but Remain Steady

For the week ending February 14, **total inspections of grain** (corn, wheat, and soybeans) for export from all major U.S. export regions reached 2.39 million metric tons (mmt), which is down 3 percent from the previous week, unchanged from last year, and down 11 percent from the 3-year average. Total corn inspections, destined primarily to Asia and Latin America, jumped 25 percent from week to week. The increase in corn inspections, however, could not offset the 37 percent drop in inspections of wheat. Mississippi Gulf grain inspections increased 1 percent from the previous week, but Pacific Northwest (PNW) inspections decreased 15 percent for the same time period. During the last four weeks, inspections of grain are 10 percent below last year and the 3-year average.

Snapshots by Sector

Rail

U.S. Class I railroads originated 20,720 **grain carloads** for the week ending February 9, down 4 percent from the previous week, up 9 percent from last year, and up 1 percent from the 3-year average.

Average February shuttle **secondary railcar** bids/offers per car were $1,217 above tariff for the week ending February 14, up $750 from last week. Average non-shuttle secondary railcar bids/offers per car were $250 above tariff, up $181 from last week. There were no shuttle or non-shuttle bids/offers this week last year.

Barge

For the week ending February 16, **barge grain movements** totaled 379,048 tons, 8 percent lower than the previous week and down 34 percent from the same period last year.

For the week ending February 16, 219 grain barges **moved down river**, 34 barges less than the previous week. There were 744 grain barges **unloaded in New Orleans**, 21 percent more than the previous week.

Ocean

For the week ending February 14, 38 **ocean-going grain vessels** were loaded in the Gulf, 6 percent more than the same period last year. Sixty-nine vessels are expected to be loaded within the next 10 days, 47 percent more than the same period last year.

For the week ending February 14, the ocean freight rate for shipping bulk grain, from the Gulf to Japan, was $39.00 per metric ton, 3 percent more than the previous week. The cost of shipping, from the PNW to Japan, was $22.00 per metric ton, 2 percent more than the previous week.

Fuel

For the week ending February 18, the **U.S. average diesel fuel price** increased 4 cents, from the previous week, to $3.006 per gallon, 2.1 cents below the same week last year.

Preferred citation: U.S. Dept. of Agriculture, Agricultural Marketing Service. *Grain Transportation Report.* February 21, 2019.
Web: **http://dx.doi.org/10.9752/TS056.02-21-2019**

Feature Article/Calendar

December 2018 Grain Stocks and Transportation Demand

Grain stocks were at record levels near the end of 2018. Corn stocks were down 5 percent from 2017, but soybean and wheat stocks were up 18 and 7 percent, respectively.

Grain storage is an important link between agricultural production and transportation demand. During the summer (wheat, barley, and oats) and fall (corn, soybeans, and sorghum) harvests, grain fills up storage bins from which it is sold throughout the remainder of the year, generating transportation demand.

In this article, we look at 2018 quarterly grain stocks snapshots to understand recent trends in transportation demand and to glean insight about transportation demand to come in the first half of 2019.

A Look Back: September through November 2018

USDA's National Agricultural Statistics Service (NASS) provides data on the inventory of grain in storage (i.e., stocks) as of four points during the year: March 1, June 1, September 1, and December 1. Since these dates match quarterly periods in the crop marketing year, the data can be analyzed period-to-period to better understand grain flows in and out of storage.

The United States held sizeable grain stocks in early September, and subsequently harvested the third largest corn crop and a record volume of soybeans. Both contributed to substantial supplies of grain in the fall, to enter either storage or shipping channels (October 11, 2018 *Grain Transportation Report* (*GTR*)).

NASS' December 1, 2018 stocks data released earlier this month suggest aggregate grain movements from September through the end of November 2018 were on par with previous years. More specifically, grain "disappearance"—the difference between fall grain supplies and grain stocks as of December 1, 2018—was 6.4 billion bushels (bbu), down 1 percent from last year and the prior 3-year average.* Earlier research (November 1, 2018 *GTR*) highlighted a shift in movements by commodity, particularly for corn and soybeans. According to NASS "disappearance" data, this different pattern for corn and soybeans continued. While wheat movements over this three-month span remained relatively unchanged (down 1 percent from a year ago), corn movements were up 6 percent and soybean movements were down 20 percent.

Compared to soybeans, corn has a much higher ratio of domestic to export use. Therefore, the change in the crop mix of disappearance from soybeans to corn tended to increase domestic movements and, in turn, increase truck movements. Corn and wheat inspections for export in the fourth quarter of 2018 (Oct-Dec) were up 229 and 46 million bushels (mbu) from the previous year, respectively. At the same time, soybean inspections were down 424 mbu. Total grain inspections were down 187 mbu. Unchanged disappearance, with lower exports, implies an increase in domestic movements.

While truck movements of grain are not directly observable due to data limitations (especially at the weekly or quarterly frequency required in this analysis), they may be inferred from looking at rail and barge shipments. Grain tonnages down the Mississippi River in September, October, and November were 12 percent lower than last year and 16 percent lower than the prior 3-year average. Calendar year fourth quarter rail carloads were down slightly, as well. Since total disappearance is about even, it suggests the modal movement of grain by truck expanded its share.

A Look at the Present and Outlook

December 1 grain stocks totaled 18.2 bbu in 2018. The record year-end grain stocks will, all else equal, serve to strengthen transportation demand throughout the first half of 2019 compared to previous years. The timing of demand is difficult to predict, but the share of ending stocks that leave storage by September 1 is relatively

* Note: "fall grain supplies" refers to grain stocks as of September 1, plus post-September grain production, which includes corn, soybeans, and grain sorghum. Commodities in the calculation include corn, soybeans, wheat, barley, oats, and grain sorghum.

consistent at around 70 to 75 percent. It is worth noting that, despite the shift in the commodity mix of disappearance between September and December, corn still represented by far the largest share of December 1 stocks, at about 66 percent, with soybeans and wheat representing 21 and 11 percent, respectively.

The location of grain stocks can shed some light on the geography of transportation demand. By December 1, 2018, the five states with the highest grain stocks were Illinois (2.79 bbu), Iowa (2.71 bbu), Nebraska (1.81 bbu), Minnesota (1.73 bbu), and Indiana (1.19 bbu). The top 5 states by change in December stocks from last year were Minnesota (down 192 mbu), Iowa (down 162 mbu), Ohio (up 147 mbu), Illinois (up 118 mbu), and Indiana (up 101 mbu).

On February 8, USDA released the latest *World Agricultural Supply and Demand Estimates* report for 2018/19 marketing year. Total corn, soybean, and wheat use (which includes food, feed, exports, and other uses) is projected up 66 mbu, down 205 mbu, and up 133 mbu, respectively, from last year—a net decrease of about 6 mbu for the three commodities. Corn, soybean, and wheat exports are projected to be up 12 mbu, down 254 mbu, and up 99 mbu, respectively, from a year ago, which would translate into fewer grain exports on net.

In summary, the level of grain transportation demand may be similar to last year (in the aggregate) but differ with respect to domestic and export shares. *PeterA.Caffarelli@ams.usda.gov*, *Jesse.Gastelle@ams.usda.gov*

Grain Transportation Indicators

Table 1
Grain Transport Cost Indicators[1]

	Truck	Rail		Barge	Ocean	
For the week ending		Unit Train	Shuttle		Gulf	Pacific
02/20/19	202	295	272	292	174	156
02/13/19	199	285	240	299	170	152

[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 Program/AMS/USDA

Table 2
Market Update: U.S. Origins to Export Position Price Spreads ($/bushel)

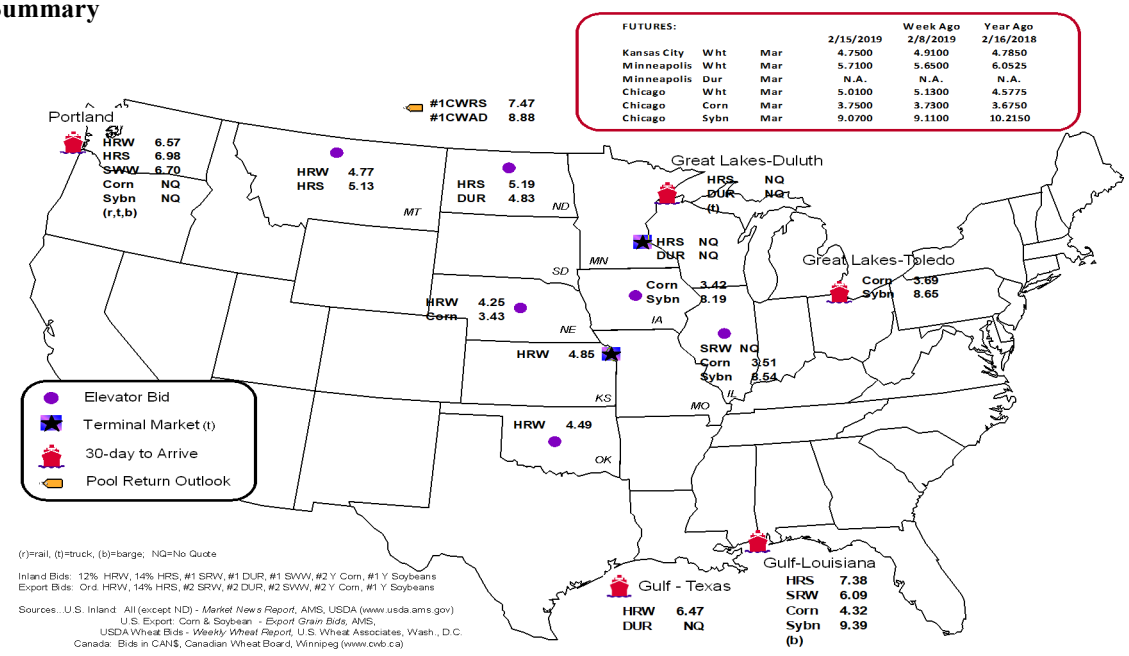
Commodity	Origin--Destination	2/15/2019	2/8/2019
Corn	IL--Gulf	-0.81	-0.79
Corn	NE--Gulf	-0.89	-0.89
Soybean	IA--Gulf	-1.20	-1.18
HRW	KS--Gulf	-1.62	-1.57
HRS	ND--Portland	-1.79	-1.74

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

Source: Transportation & Marketing Program/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]
2/13/2019[p]	649	1,692	4,417	401	7,159	2/9/2019	2,132
2/06/2019[r]	737	1,434	5,271	385	7,827	2/2/2019	2,744
2019 YTD[r]	3,512	6,933	36,102	3,139	49,686	2019 YTD	15,723
2018 YTD[r]	3,874	10,921	42,955	1,859	59,609	2018 YTD	12,070
2019 YTD as % of 2018 YTD	91	63	84	169	83	% change YTD	130
Last 4 weeks as % of 2018[2]	109	69	78	141	80	Last 4wks % 2018	132
Last 4 weeks as % of 4-year avg.[2]	83	78	79	66	78	Last 4wks % 4 yr	130
Total 2018	22,118	46,532	310,449	21,432	400,531	Total 2018	129,116
Total 2017	28,796	75,543	287,267	21,312	412,918	Total 2017	119,661

[1] Data is incomplete as it is voluntarily provided

[2] Compared with same 4-weeks in 2018 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 Grupo Mexico.

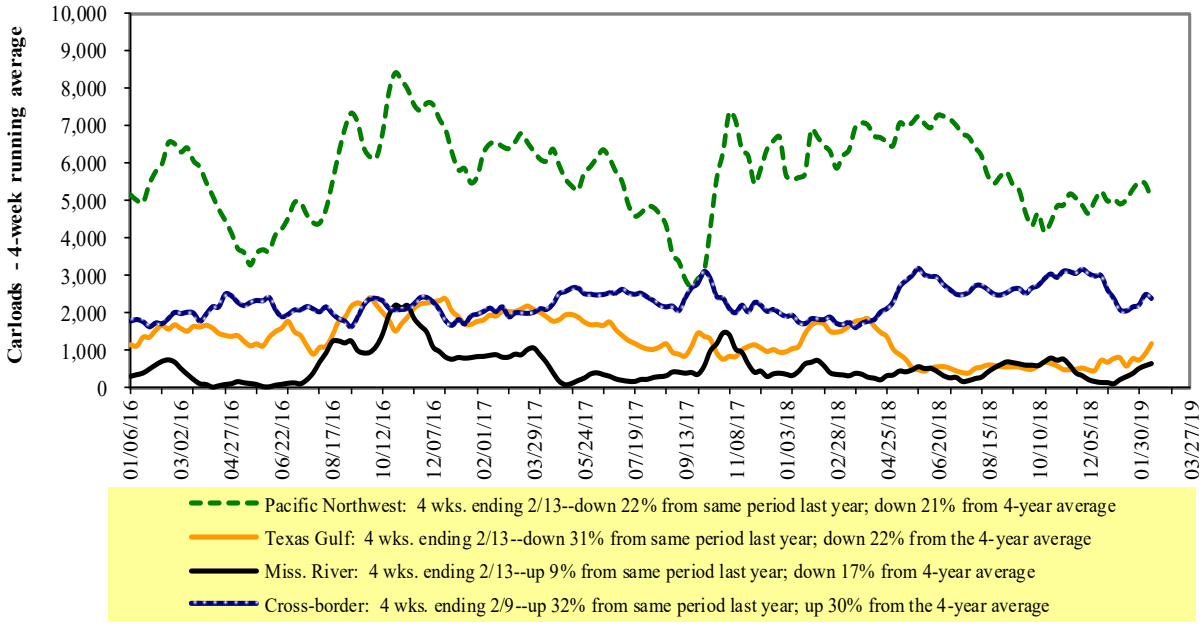
YTD = year-to-date; p = preliminary data; r = revised data; n/a = not available

Source: Transportation & Marketing Program/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 Program/AMS/USDA

Table 4

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

For the week ending:	East		West			U.S. total	Canada	
2/9/2019	CSXT	NS	BNSF	KCS	UP		CN	CP
This week	2,118	2,669	9,814	899	5,220	20,720	3,771	3,317
This week last year	1,112	2,356	10,270	630	4,667	19,035	3,000	4,254
2019 YTD	11,446	15,974	67,180	6,133	31,031	131,764	22,907	23,995
2018 YTD	10,767	14,542	69,520	5,867	30,504	131,200	20,720	25,343
2019 YTD as % of 2018 YTD	106	110	97	105	102	100	111	95
Last 4 weeks as % of 2018*	107	102	92	115	97	97	106	92
Last 4 weeks as % of 3-yr avg.**	96	90	98	106	90	95	104	95
Total 2018	98,978	133,146	635,458	48,638	267,713	1,183,933	211,954	244,697

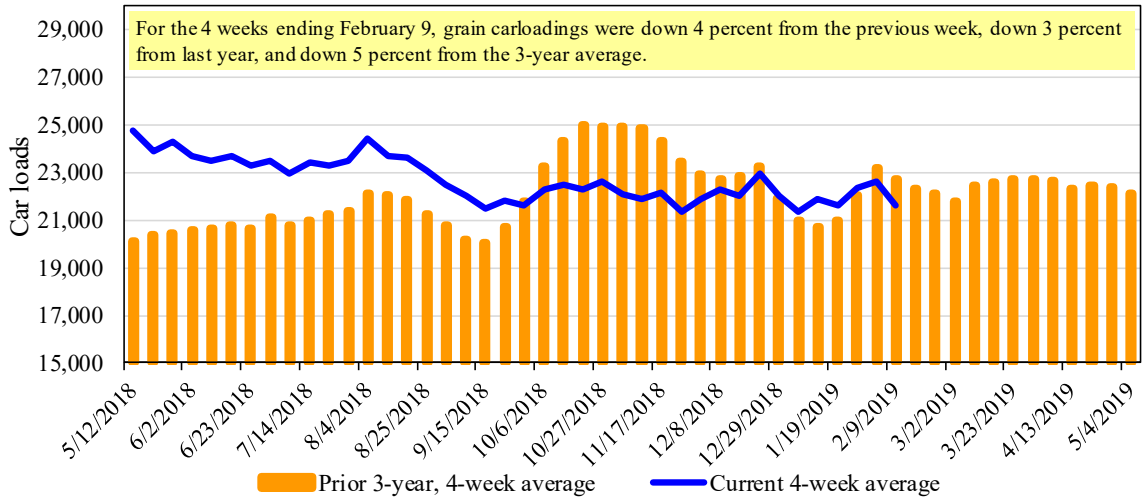
*The past 4 weeks of this year as a percent of the same 4 weeks last year.

**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:		Delivery period							
2/14/2019		Feb-19	Feb-18	Mar-19	Mar-18	Apr-19	Apr-18	May-19	May-18
BNSF[3]	COT grain units	no offer	n/a	0	0	no bids	0	no bids	0
	COT grain single-car[5]	no offer	n/a	92	84	3	0	2	no bids
UP[4]	GCAS/Region 1	no offer	n/a	no offer	no bids	10	no bids	n/a	no offer
	GCAS/Region 2	no offer	n/a	no offer	no bids	10	no bids	n/a	no offer

[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.

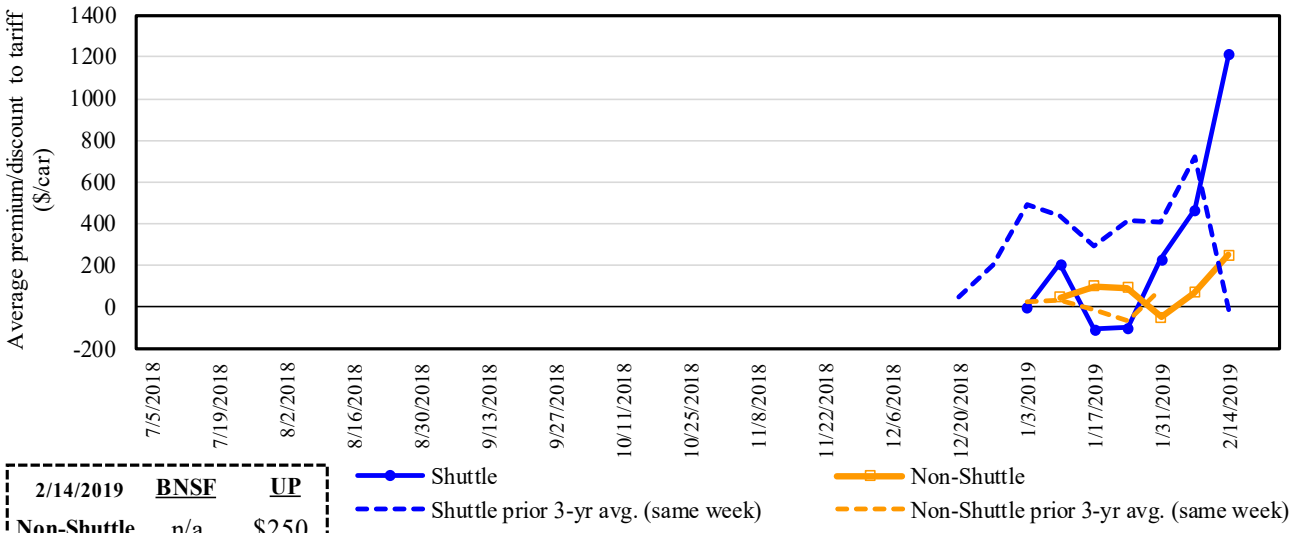
[5]Range is shown because average is not available. Not available = n/a.

Source: Transportation & Marketing Program/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 February 2019, Secondary Market



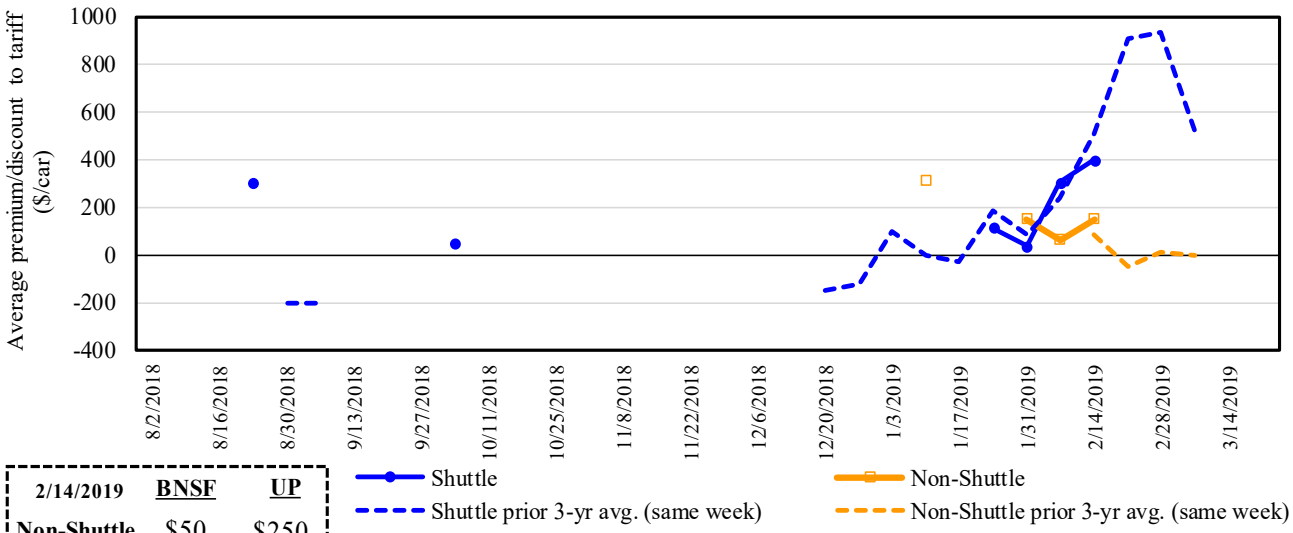
2/14/2019	BNSF	UP
Non-Shuttle	n/a	$250
Shuttle	$1,700	$733

Average Non-shuttle bids/offers rose $181 this week, and are at the peak.
Average Shuttle bids/offers rose $750 this week and are at the peak.

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

Figure 5

Bids/Offers for Railcars to be Delivered in March 2019, Secondary Market



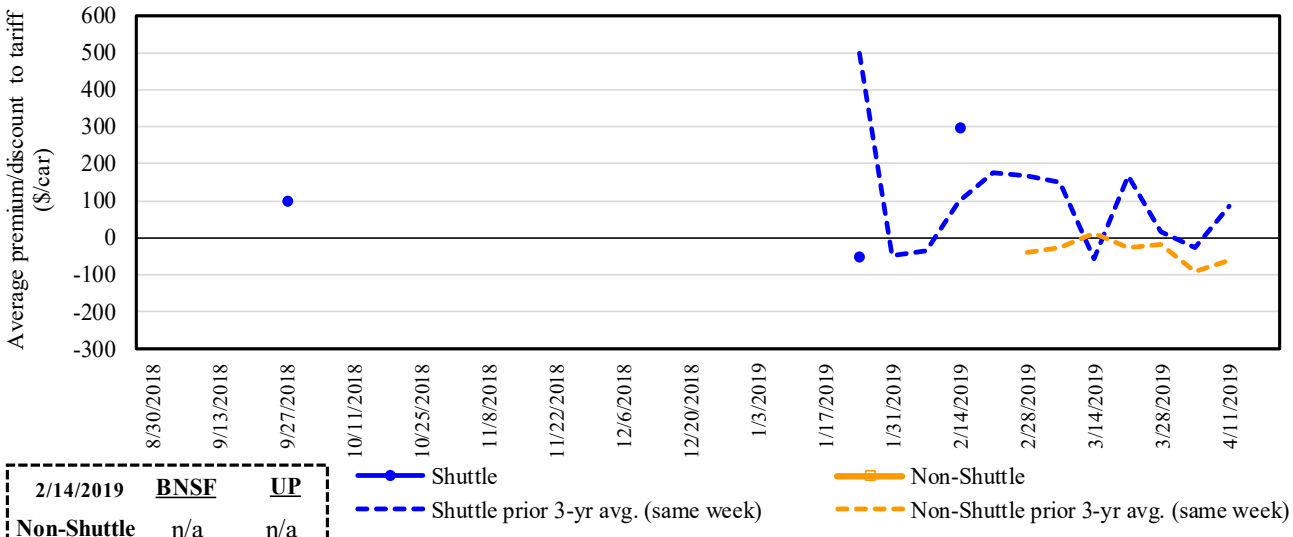
2/14/2019	BNSF	UP
Non-Shuttle	$50	$250
Shuttle	$700	$100

Average Non-shuttle bids/offers rose $88 this week, and are $163 below the peak.
Average Shuttle bids/offers rose $96 this week and are at the peak.

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

Figure 6

Bids/Offers for Railcars to be Delivered in April 2019, Secondary Market



2/14/2019	BNSF	UP
Non-Shuttle	n/a	n/a
Shuttle	$300	n/a

There were no Non-Shuttle bids/offers this week.
There were no Shuttle bids/offers last week. Average Non-Shuttle bids/offers this week are at the peak.

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

Table 6

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

	For the week ending: 2/14/2019	Delivery period					
		Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19
Non-shuttle	**BNSF-GF**	**n/a**	**50**	**n/a**	**n/a**	**n/a**	**n/a**
	Change from last week	n/a	50	n/a	n/a	n/a	n/a
	Change from same week 2018	n/a	n/a	n/a	n/a	n/a	n/a
	UP-Pool	**250**	**250**	**n/a**	**n/a**	**n/a**	**n/a**
	Change from last week	150	125	n/a	n/a	n/a	n/a
	Change from same week 2018	n/a	n/a	n/a	n/a	n/a	n/a
Shuttle	**BNSF-GF**	**1700**	**700**	**300**	**150**	**n/a**	**n/a**
	Change from last week	950	167	n/a	n/a	n/a	n/a
	Change from same week 2018	n/a	(225)	n/a	n/a	n/a	n/a
	UP-Pool	**733**	**100**	**n/a**	**n/a**	**n/a**	**n/a**
	Change from last week	550	25	n/a	n/a	n/a	n/a
	Change from same week 2018	n/a	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

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

Source: Transportation and Marketing Program/AMS/USDA

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]

February, 2019	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	$3,983	$106	$40.61	$1.11	3
	Grand Forks, ND	Duluth-Superior, MN	$4,268	$0	$42.38	$1.15	3
	Wichita, KS	Los Angeles, CA	$7,175	$0	$71.25	$1.94	2
	Wichita, KS	New Orleans, LA	$4,540	$187	$46.94	$1.28	1
	Sioux Falls, SD	Galveston-Houston, TX	$6,911	$0	$68.63	$1.87	2
	Northwest KS	Galveston-Houston, TX	$4,816	$205	$49.86	$1.36	1
	Amarillo, TX	Los Angeles, CA	$5,121	$285	$53.68	$1.46	3
Corn	Champaign-Urbana, IL	New Orleans, LA	$4,000	$211	$41.82	$1.06	3
	Toledo, OH	Raleigh, NC	$6,581	$0	$65.35	$1.66	4
	Des Moines, IA	Davenport, IA	$2,258	$45	$22.87	$0.58	0
	Indianapolis, IN	Atlanta, GA	$5,646	$0	$56.07	$1.42	4
	Indianapolis, IN	Knoxville, TN	$4,704	$0	$46.71	$1.19	4
	Des Moines, IA	Little Rock, AR	$3,609	$131	$37.14	$0.94	1
	Des Moines, IA	Los Angeles, CA	$5,327	$383	$56.70	$1.44	1
Soybeans	Minneapolis, MN	New Orleans, LA	$4,131	$208	$43.09	$1.17	15
	Toledo, OH	Huntsville, AL	$5,459	$0	$54.21	$1.48	3
	Indianapolis, IN	Raleigh, NC	$6,698	$0	$66.51	$1.81	4
	Indianapolis, IN	Huntsville, AL	$4,937	$0	$49.03	$1.33	4
	Champaign-Urbana, IL	New Orleans, LA	$4,745	$211	$49.22	$1.34	1
Shuttle Train							
Wheat	Great Falls, MT	Portland, OR	$4,078	$0	$40.50	$1.10	3
	Wichita, KS	Galveston-Houston, TX	$4,296	$0	$42.66	$1.16	3
	Chicago, IL	Albany, NY	$5,896	$0	$58.55	$1.59	4
	Grand Forks, ND	Portland, OR	$5,736	$0	$56.96	$1.55	2
	Grand Forks, ND	Galveston-Houston, TX	$6,056	$0	$60.14	$1.64	2
	Northwest KS	Portland, OR	$5,912	$336	$62.04	$1.69	3
Corn	Minneapolis, MN	Portland, OR	$5,180	$0	$51.44	$1.31	4
	Sioux Falls, SD	Tacoma, WA	$5,140	$0	$51.04	$1.30	4
	Champaign-Urbana, IL	New Orleans, LA	$3,800	$211	$39.83	$1.01	3
	Lincoln, NE	Galveston-Houston, TX	$3,880	$0	$38.53	$0.98	5
	Des Moines, IA	Amarillo, TX	$4,060	$165	$41.96	$1.07	3
	Minneapolis, MN	Tacoma, WA	$5,180	$0	$51.44	$1.31	4
	Council Bluffs, IA	Stockton, CA	$5,000	$0	$49.65	$1.26	4
Soybeans	Sioux Falls, SD	Tacoma, WA	$5,750	$0	$57.10	$1.55	3
	Minneapolis, MN	Portland, OR	$5,800	$0	$57.60	$1.57	3
	Fargo, ND	Tacoma, WA	$5,650	$0	$56.11	$1.53	3
	Council Bluffs, IA	New Orleans, LA	$4,775	$244	$49.84	$1.36	1
	Toledo, OH	Huntsville, AL	$4,634	$0	$46.02	$1.25	6
	Grand Island, NE	Portland, OR	$5,710	$344	$60.12	$1.64	1

[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: metric ton[3]	bushel[3]	Percent change[4] Y/Y
Date: February, 2019							
Wheat	MT	Chihuahua, CI	$7,284	$0	$74.43	$2.02	-2
	OK	Cuautitlan, EM	$6,743	$146	$70.39	$1.91	2
	KS	Guadalajara, JA	$7,371	$403	$79.43	$2.16	3
	TX	Salinas Victoria, NL	$4,329	$89	$45.14	$1.23	1
Corn	IA	Guadalajara, JA	$8,528	$362	$90.83	$2.31	4
	SD	Celaya, GJ	$7,880	$0	$80.51	$2.04	2
	NE	Queretaro, QA	$8,207	$304	$86.96	$2.21	3
	SD	Salinas Victoria, NL	$6,905	$0	$70.55	$1.79	2
	MO	Tlalnepantla, EM	$7,573	$297	$80.41	$2.04	3
	SD	Torreon, CU	$7,480	$0	$76.43	$1.94	2
Soybeans	MO	Bojay (Tula), HG	$8,284	$335	$88.07	$2.39	3
	NE	Guadalajara, JA	$8,842	$363	$94.05	$2.56	3
	IA	El Castillo, JA	$9,110	$0	$93.08	$2.53	2
	KS	Torreon, CU	$7,714	$266	$81.53	$2.22	4
Sorghum	NE	Celaya, GJ	$7,527	$332	$80.30	$2.04	4
	KS	Queretaro, QA	$8,000	$183	$83.61	$2.12	3
	NE	Salinas Victoria, NL	$6,633	$147	$69.27	$1.76	3
	NE	Torreon, CU	$6,962	$253	$73.72	$1.87	3

[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

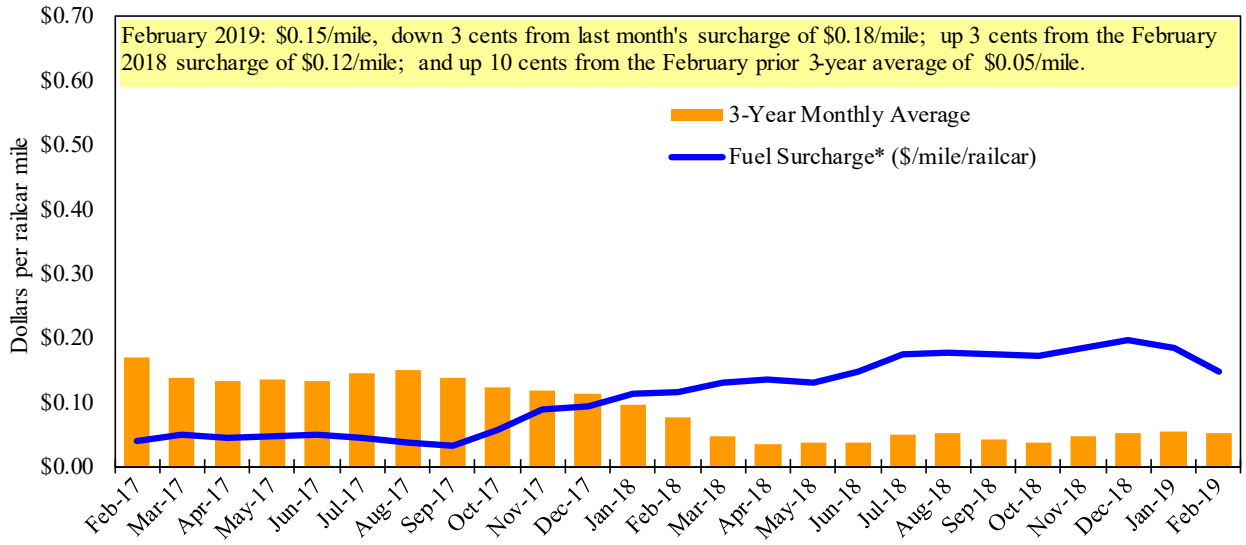
[3]Approximate load per car = 97.87 metric tons: Corn & Sorghum 56 lbs/bu, Wheat & Soybeans 60 lbs/bu

[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.

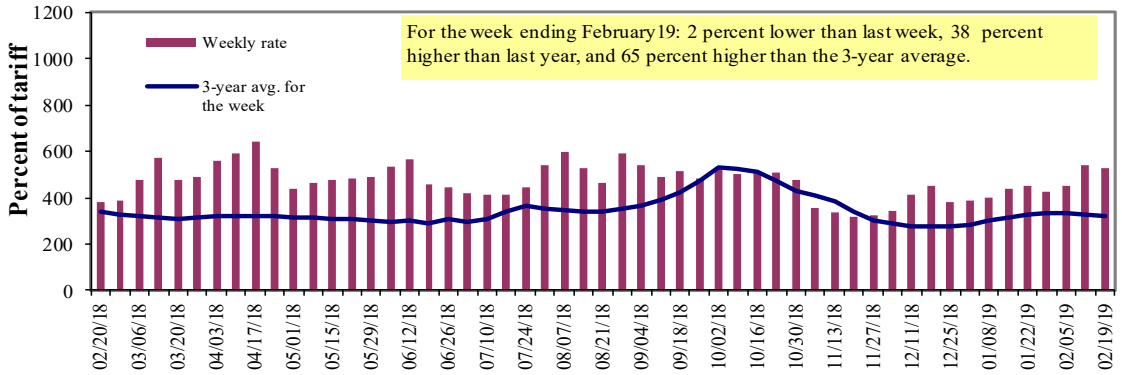
* Beginning January 2009, the Canadian Pacific fuel surcharge is computed by a monthly average of the bi-weekly fuel surcharge.

**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 Program/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]	2/19/2019	-	-	525	442	480	492	408
	2/12/2019	-	-	538	438	538	538	400
$/ton	2/19/2019	-	-	24.36	17.64	22.51	19.88	12.81
	2/12/2019	-	-	24.96	17.48	25.23	21.74	12.56
Current week % change from the same week:								
	Last year	-	-	38	51	48	51	86
	3-year avg. [2]	-	-	65	92	83	85	111
Rate[1]	March	-	513	505	392	425	425	367
	May	450	408	407	322	375	375	297

[1]Rate = percent of 1976 tariff benchmark index (1976 = 100 percent); [2]4-week moving average; ton = 2,000 pounds; "-" n/a due to closure

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.

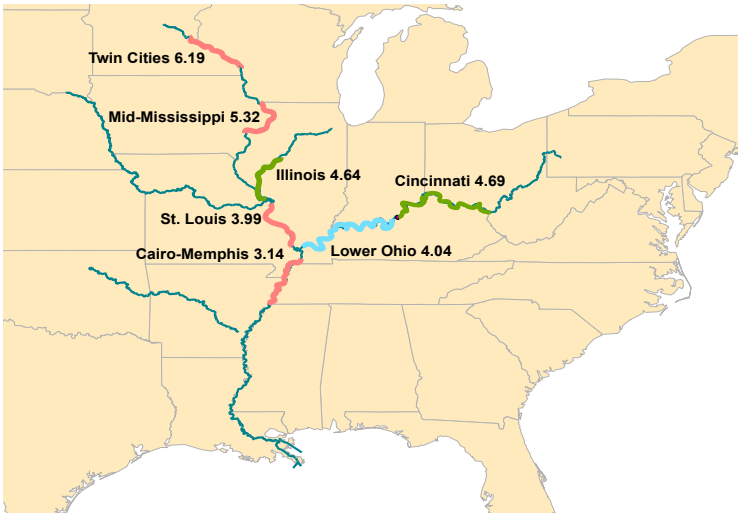
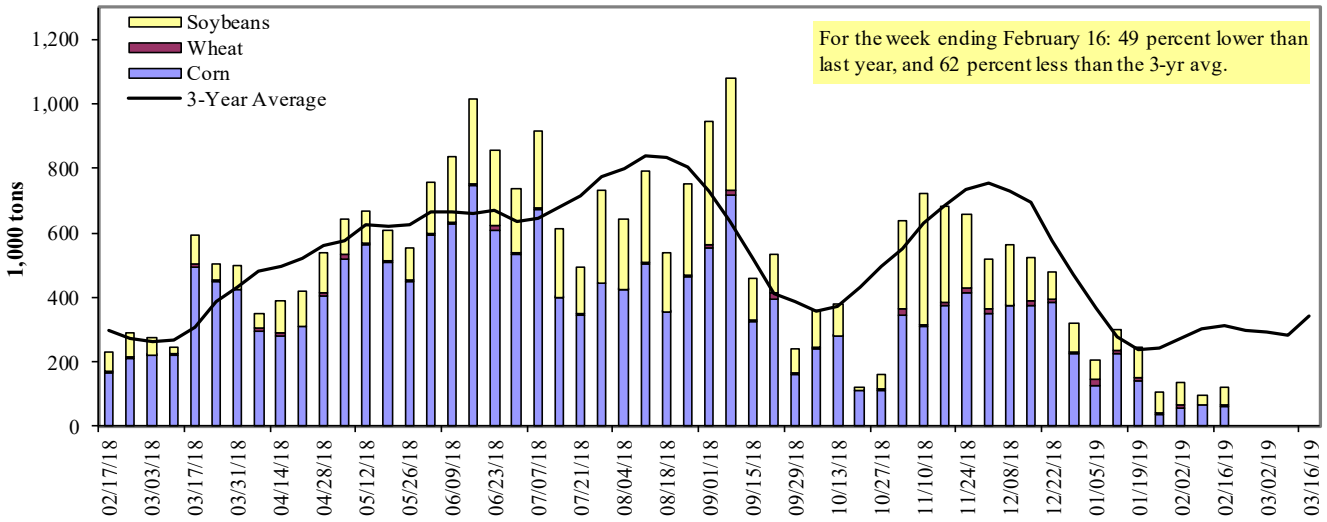


Figure 10

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 02/16/2019	Corn	Wheat	Soybeans	Other	Total
Mississippi River					
Rock Island, IL (L15)	0	0	0	0	0
Winfield, MO (L25)	6	0	11	0	17
Alton, IL (L26)	62	6	55	0	124
Granite City, IL (L27)	61	6	52	0	119
Illinois River (L8)	54	0	39	0	93
Ohio River (OLMSTED)	106	13	129	0	247
Arkansas River (L1)	0	3	10	0	13
Weekly total - 2019	167	22	191	0	379
Weekly total - 2018	297	34	237	4	571
2019 YTD[1]	1,362	257	1,490	9	3,117
2018 YTD[1]	1,473	178	1,850	23	3,524
2019 as % of 2018 YTD	92	144	81	38	88
Last 4 weeks as % of 2018[2]	55	117	66	30	63
Total 2018	23,349	1,674	12,819	133	37,975

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

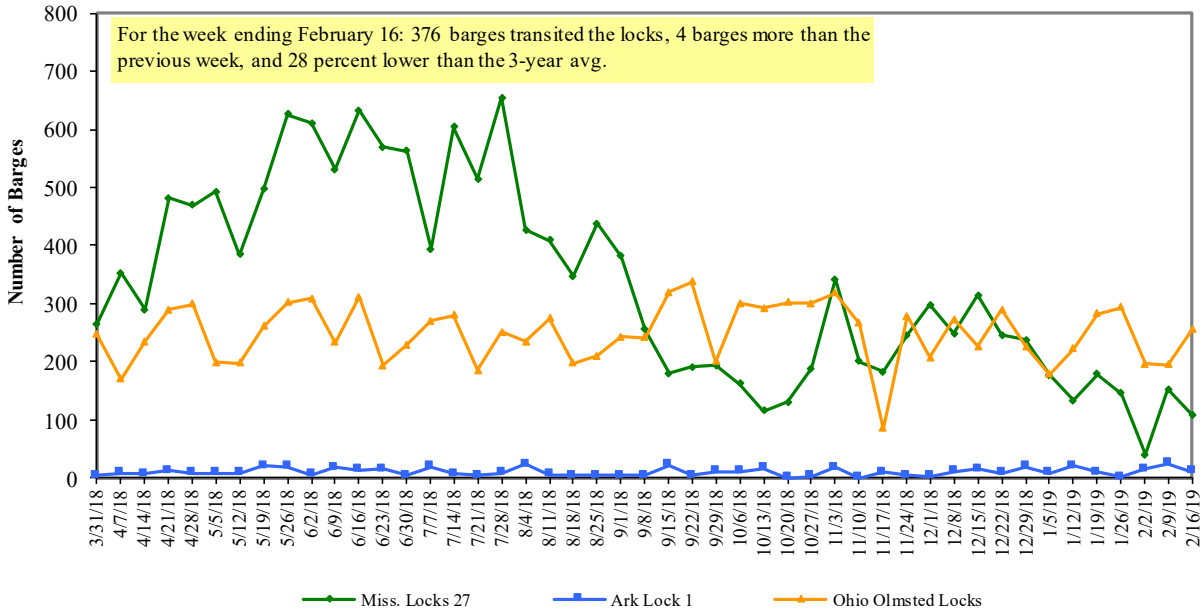
[2] As a percent of same period in 2018.

Note: 1. Total may not add exactly, due to rounding.
2. Starting from 11/24/2018, weekly movement through Ohio 52 is replaced by Olmsted.

Source: U.S. Army Corps of Engineers

Figure 11

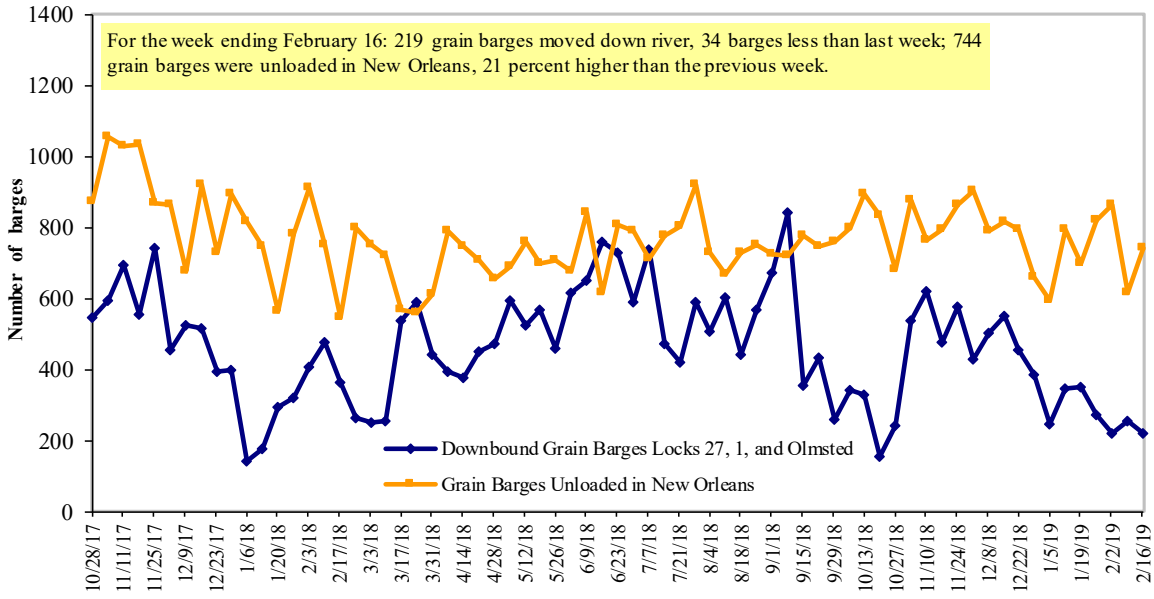
Upbound Empty Barges Transiting Mississippi River Locks 27, Arkansas River Lock and Dam 1, and Ohio River Olmsted Locks and Dam



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, Week Ending 2/18/2019 (US $/gallon)

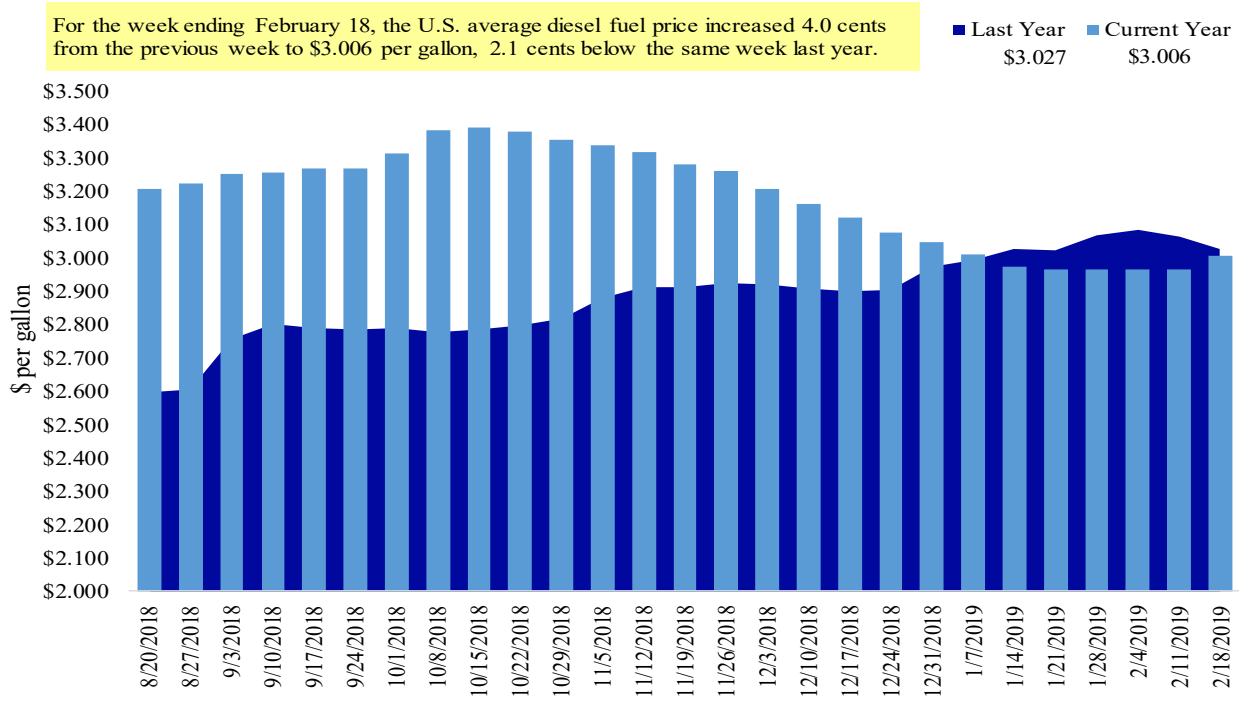
Region	Location	Price	Change from Week ago	Change from Year ago
I	East Coast	3.073	0.042	-0.009
	New England	3.165	0.004	0.036
	Central Atlantic	3.256	0.031	-0.018
	Lower Atlantic	2.927	0.055	-0.012
II	Midwest	2.904	0.055	-0.066
III	Gulf Coast	2.809	0.033	-0.009
IV	Rocky Mountain	2.887	0.017	-0.066
V	West Coast	3.458	0.023	0.059
	West Coast less California	3.104	0.020	0.032
	California	3.739	0.025	0.081
Total	U.S.	3.006	0.040	-0.021

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

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

Figure 13

Weekly Diesel Fuel Prices, U.S. Average



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

Grain Exports

Table 12

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

	Wheat						Corn	Soybeans	Total
For the week ending	HRW	SRW	HRS	SWW	DUR	All wheat			
Export Balances[1]									
2/07/2019*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
This week year ago	1,797	689	1,423	933	57	4,899	20,359	8,773	34,031
Cumulative exports-marketing year[2]									
2018/19 YTD	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2017/18 YTD	6,737	1,456	4,098	3,653	272	16,216	15,637	34,754	36,050
YTD 2018/19 as % of 2017/18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Last 4 wks as % of same period 2017/18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2017/18 Total	9,150	2,343	5,689	4,854	384	22,419	57,209	56,214	135,842
2016/17 Total	11,096	2,285	7,923	4,254	484	26,042	41,864	51,156	119,062

[1] Current unshipped (outstanding) export sales to date

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

* Please note tha "N/A" notates that the data for this table is not current for this week due to the federal shutdown in December

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 2/07/2019	Total Commitments[2] 2018/19 Current MY	2017/18 Last MY	% change current MY from last MY	Exports[3] 3-year avg 2015-2017
	- 1,000 mt -			
Mexico	n/a*	10,596	n/a	13,691
Japan	n/a	5,955	n/a	11,247
Korea	n/a	1,954	n/a	4,754
Colombia	n/a	2,679	n/a	4,678
Peru	n/a	1,975	n/a	2,975
Top 5 Importers	n/a	**23,159**	n/a	**37,344**
Total US corn export sales	**n/a**	**35,966**	**n/a**	**53,184**
% of Projected	n/a	69%		
Change from prior week[2]	**n/a**	**1,975**		
Top 5 importers' share of U.S. corn export sales	n/a	64%		70%
USDA forecast, February 2019	**62,341**	**52,163**	**n/a**	
Corn Use for Ethanol USDA forecast, February 2019	**141,605**	**140,335**	**n/a**	

(n) indicates negative number.

[1]Based on FAS Marketing Year Ranking Reports for 2017/18 - 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

*n/a indicates a missing value due to the recent partial federal government shutdown

Table 14

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

For the week ending 2/07/2019	Total Commitments[2] 2018/19 Current MY	2017/18 Last MY	% change current MY from last MY	Exports[3] 3-yr avg. 2015-2017
	- 1,000 mt -			- 1,000 mt -
China	n/a*	26,563	n/a	31,228
Mexico	n/a	2,791	n/a	3,716
Indonesia	n/a	1,226	n/a	2,250
Japan	n/a	1,451	n/a	2,145
Netherlands	n/a	916	n/a	2,209
Top 5 importers	n/a	**32,947**	**n/a**	**41,549**
Total US soybean export sales	**n/a**	**44,823**	**n/a**	**55,113**
% of Projected	n/a	78%		
Change from prior week[2]	**n/a**	**561**		
Top 5 importers' share of U.S. soybean export sales	n/a	74%		**75%**
USDA forecast, February, 2019	**51,090**	**57,221**	**n/a**	

(n) indicates negative number.

[1]Based on FAS Marketing Year Ranking Reports for 2017/18 - 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)

*n/a indicates a missing value due to the recent partial federal government shutdown

Table 15

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

For the week ending 2/07/2019	Total Commitments[2] 2018/19 Current MY	2017/18 Last MY	% change current MY from last MY	Exports[3] 3-yr avg 2015-2017
	- 1,000 mt -			- 1,000 mt -
Mexico	n/a*	2,660	n/a	2,781
Japan	n/a	2,494	n/a	2,649
Philippines	n/a	2,272	n/a	2,441
Korea	n/a	1,314	n/a	1,257
Nigeria	n/a	1,051	n/a	1,254
Indonesia	n/a	1,163	n/a	1,076
Taiwan	n/a	1,008	n/a	1,066
China	n/a	890	n/a	944
Colombia	n/a	558	n/a	714
Thailand	n/a	630	n/a	618
Top 10 importers	**n/a**	**14,040**	n/a	**14,800**
Total US wheat export sales	**n/a**	**21,115**	**n/a**	**22,869**
% of Projected	n/a	82%		
Change from prior week[2]	**n/a**	**311**		
Top 10 importers' share of U.S. wheat export sales	n/a	66%		65%
USDA forecast, February 2019	**27,248**	**25,886**	**n/a**	

(n) indicates negative number.

[1] Based on FAS Marketing Year Ranking Reports for 2017/18 - 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 sales.

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

* n/a indicates a missing value due to the recent partial federal government shutdown

Table 16

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

Port Regions	For the Week Ending 02/14/19	Previous Week*	Current Week as % of Previous	2019 YTD*	2018 YTD*	2019 YTD as % of 2018 YTD	Last 4-weeks as % of: Last Year	Last 4-weeks as % of: Prior 3-yr. avg.	2018 Total*
Pacific Northwest									
Wheat	179	399	45	1,529	1,547	99	92	97	13,315
Corn	242	120	202	1,500	1,638	92	73	117	20,024
Soybeans	211	227	93	1,453	2,290	63	76	63	7,719
Total	**632**	**746**	**85**	**4,482**	**5,475**	**82**	**80**	**86**	**41,058**
Mississippi Gulf									
Wheat	54	66	81	664	562	118	134	132	3,896
Corn	534	480	111	3,360	3,040	111	102	91	33,735
Soybeans	720	747	96	4,444	5,101	87	91	86	28,124
Total	**1,308**	**1,293**	**101**	**8,467**	**8,703**	**97**	**98**	**91**	**65,755**
Texas Gulf									
Wheat	118	111	106	561	655	86	67	96	3,198
Corn	0	30	0	63	63	100	95	70	730
Soybeans	0	0	n/a	0	0	n/a	n/a	0	69
Total	**118**	**141**	**84**	**624**	**718**	**87**	**69**	**91**	**3,997**
Interior									
Wheat	25	15	160	211	227	93	55	76	1,614
Corn	149	109	137	848	907	93	93	99	8,650
Soybeans	148	138	107	818	729	112	122	129	6,729
Total	**322**	**262**	**123**	**1,878**	**1,864**	**101**	**99**	**109**	**16,993**
Great Lakes									
Wheat	0	0	n/a	21	19	111	90	269	894
Corn	0	0	n/a	0	0	n/a	n/a	n/a	404
Soybeans	0	0	n/a	16	0	n/a	n/a	n/a	1,192
Total	**0**	**0**	**n/a**	**38**	**19**	**195**	**90**	**269**	**2,491**
Atlantic									
Wheat	0	0	n/a	0	0	n/a	n/a	0	69
Corn	0	0	n/a	21	0	n/a	n/a	n/a	138
Soybeans	6	11	57	208	346	60	48	37	2,047
Total	**6**	**11**	**57**	**229**	**346**	**66**	**51**	**38**	**2,253**
U.S. total from ports*									
Wheat	376	592	63	2,987	3,010	99	89	102	22,986
Corn	925	738	125	5,793	5,649	103	92	98	63,682
Soybeans	1,085	1,123	97	6,938	8,467	82	88	80	45,879
Total	**2,387**	**2,454**	**97**	**15,717**	**17,125**	**92**	**90**	**90**	**132,547**

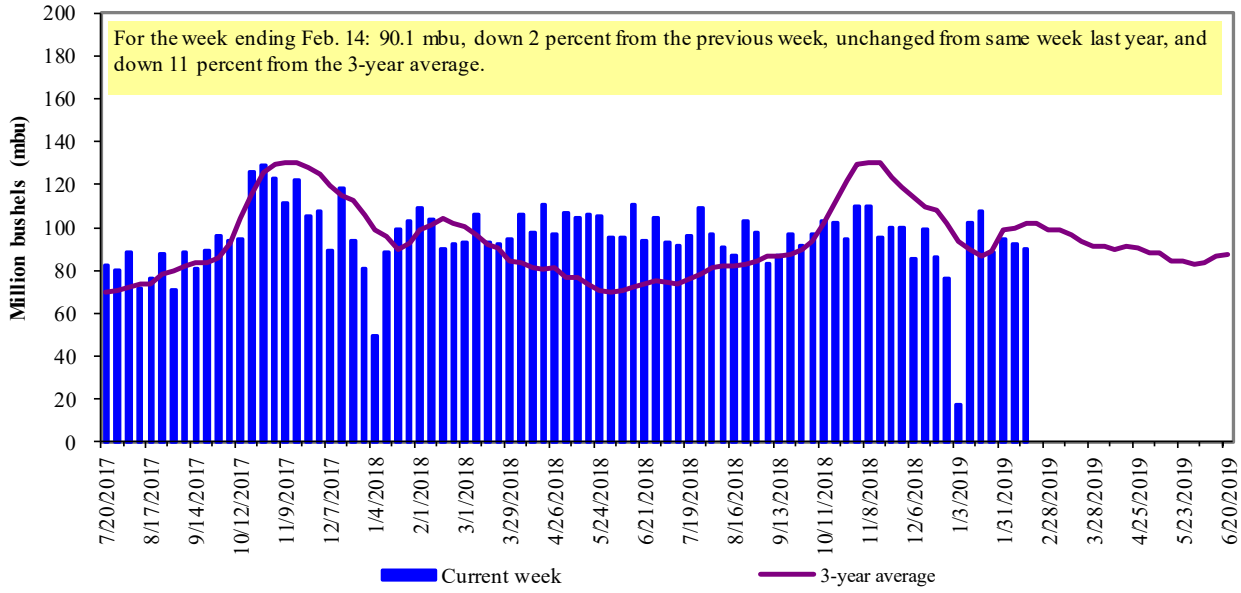
*Data includes revisions from prior weeks; some regional totals may not add exactly due to rounding.

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, 50 percent of U.S.-grown soybeans, and 20 percent of the U.S.-grown corn. Approximately 55 percent of the U.S. export grain shipments departed through the U.S. Gulf region in 2017.

Figure 14

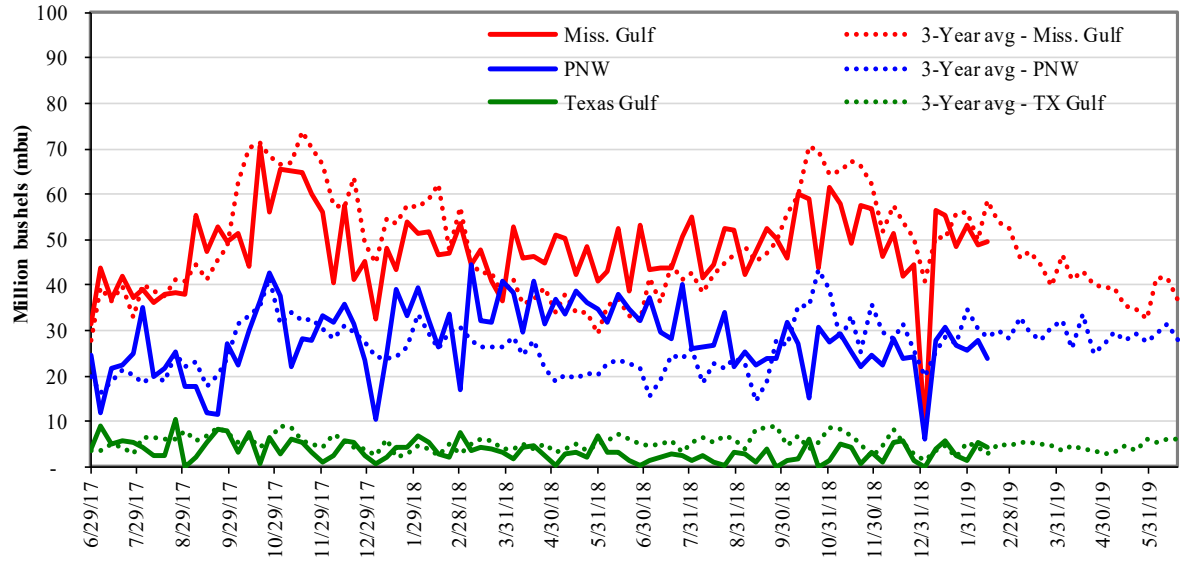
U.S. grain inspected for export (wheat, corn, and soybeans)



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 02/14/19 inspections (mbu):	
Mississippi Gulf:	49.5
PNW:	23.9
Texas Gulf:	4.3

Percent change from:	MS Gulf	TX Gulf	U.S. Gulf	PNW
Last Week:	up 1	down 18	unchanged	down 14
Last Year (same	up 6	up 48	up 9	down 9
3-yr avg. (4-wk. mov.	down 10	up 17	down 8	down 21

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

Table 17

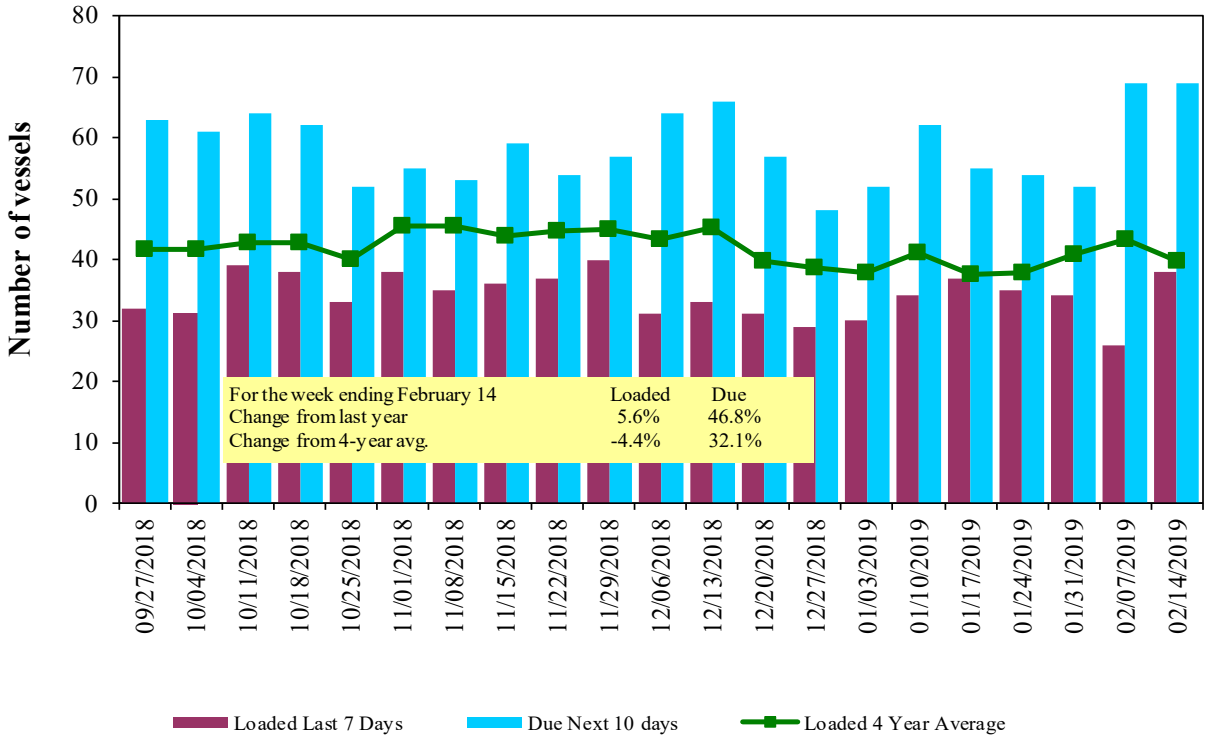
Weekly Port Region Grain Ocean Vessel Activity (number of vessels)

	Gulf			Pacific Northwest
Date	In port	Loaded 7-days	Due next 10-days	In port
2/14/2019	35	38	69	25
2/7/2019	46	26	69	20
2018 range	(23..88)	(24..41)	(38..67)	(4..30)
2018 avg.	40	34	54	17

Source: Transportation & Marketing Programs/AMS/USDA

Figure 16

U.S. Gulf Vessel Loading Activity

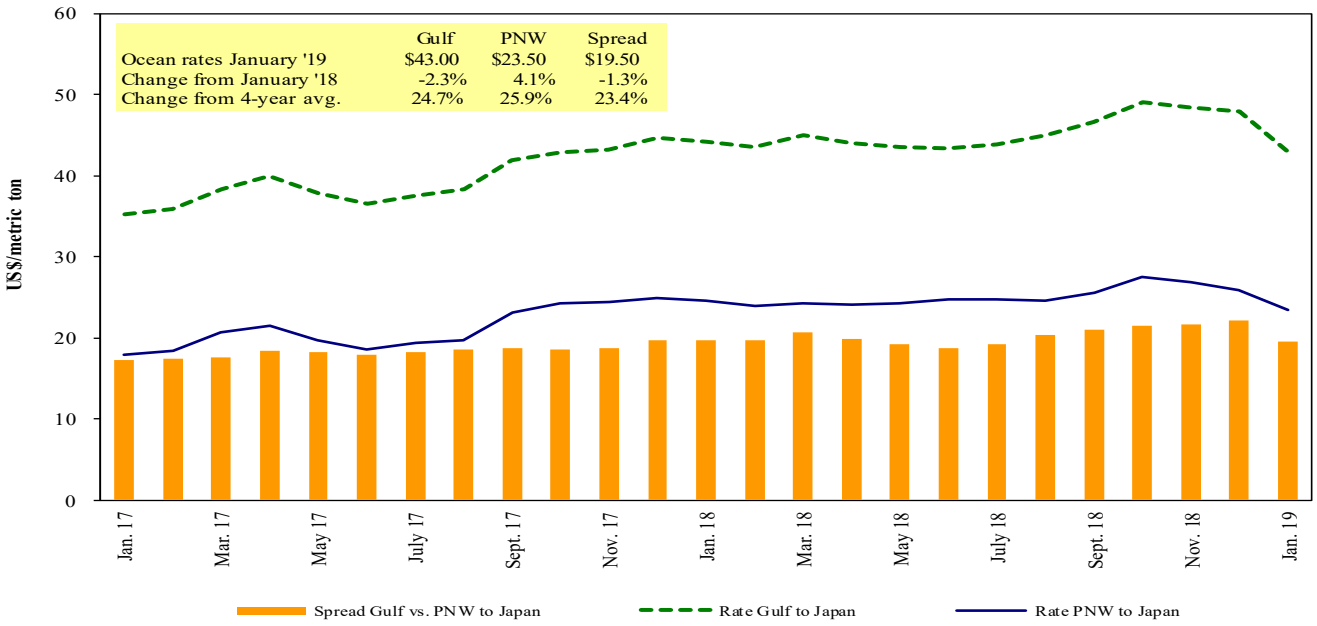


Source:Transportation & Marketing Program/AMS/USDA

[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 02/16/2019

Export region	Import region	Grain types	Loading date	Volume loads (metric tons)	Freight rate (US$/metric ton)
U.S. Gulf	Djibouti	Wheat	Dec 27/Jan 7	9,800	113.11*
PNW	Taiwan	Heavy Grain	Sep 15/Oct 31	63,000	25.00
Brazil	China	Heavy Grain	Mar 3/11	63,000	27.50
Brazil	China	Heavy Grain	Feb 26/Mar 4	66,000	24.75
Brazil	China	Heavy Grain	Feb 20/25	65,000	26.00
Brazil	China	Heavy Grain	Feb 13/26	60,000	26.75
Brazil	China	Heavy Grain	Jan 22/30	60,000	29.50
Brazil	China	Heavy Grain	Dec 15/20	60,000	37.50
Brazil	China	Heavy Grain	Dec 1/10	60,000	36.25
Brazil	China	Heavy Grain	Nov 20/30	60,000	38.00
Brazil	China	Heavy Grain	Nov 1/10	60,000	34.00
Brazil	S.Korea	Heavy Grain	Nov 5/10	66,000	43.00

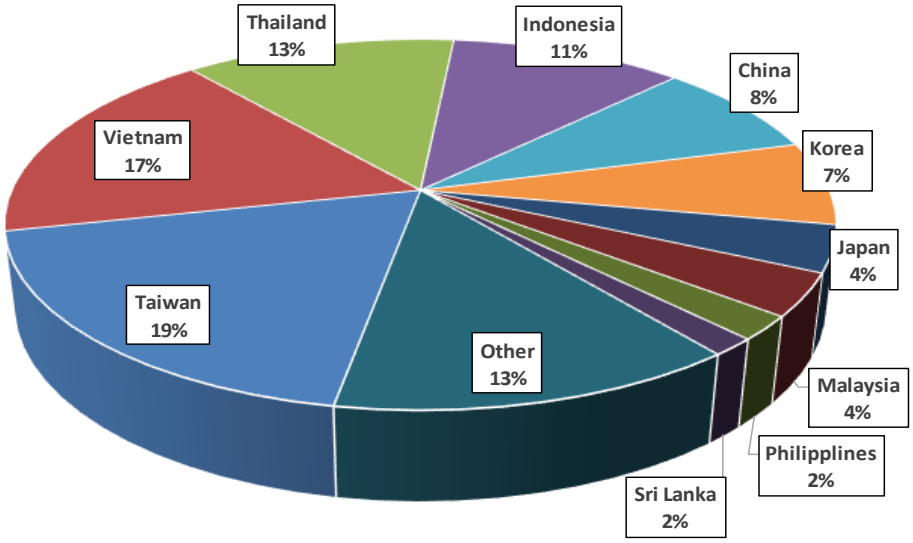
Rates shown are per metric ton (2,204.62 lbs. = 1 metric ton), F.O.B., except where otherwise indicated; op = option

*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 2017, containers were used to transport 7 percent of total U.S. waterborne grain exports. Approximately 62 percent of U.S. waterborne grain exports in 2017 went to Asia, of which 10 percent were moved in containers. Approximately 93 percent of U.S. waterborne containerized grain exports were destined for Asia.

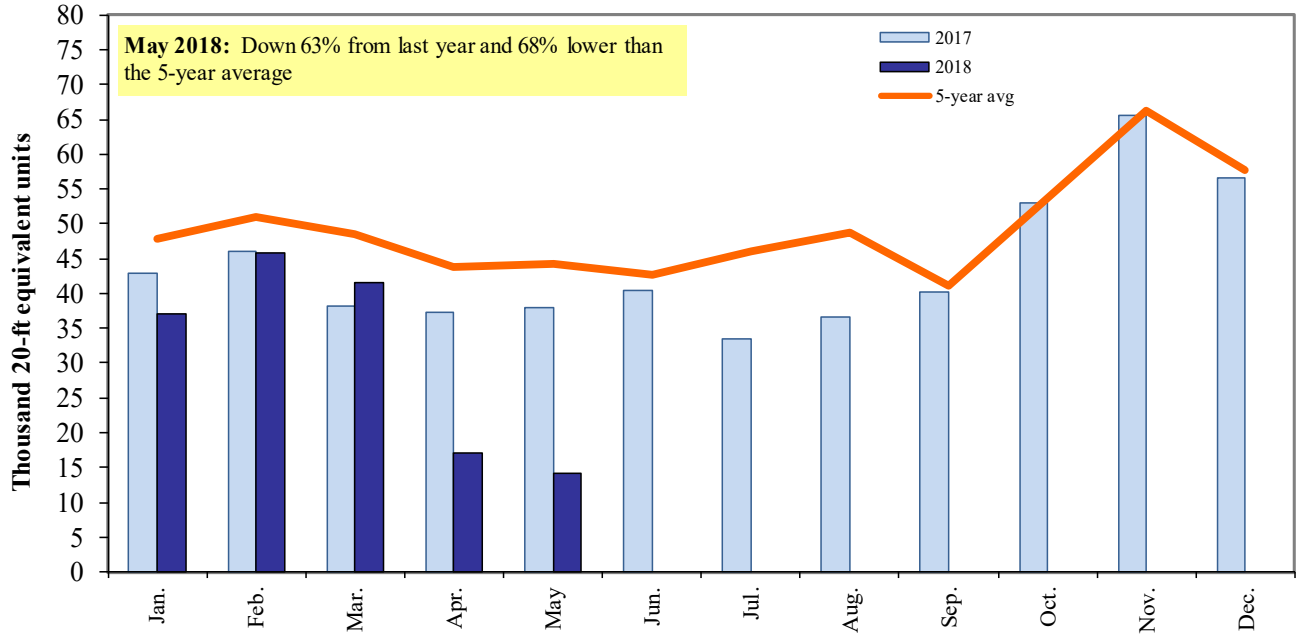
Figure 18
Top 10 Destination Markets for U.S. Containerized Grain Exports, January-May 2018



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

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