



Grain Transportation Report

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

Contact Us

April 18, 2019

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
April 25, 2019

Bulk Ocean Freight Rates Remain Relatively Low

As of April 11, 2019, the rate for shipping a metric ton (mt) of grain from the U.S. Gulf to Japan was \$42.00. This was 11 percent lower than the beginning of the year, and 4 percent below the same period a year ago. The rate for the Pacific Northwest to Japan was \$23.50 per mt. This was 6 percent lower than the beginning of the year, and 3 percent below the same period a year ago. The relatively low rates were due to slow bulk trade caused partly by closure of mines in Brazil, which impacted iron ore supply. According to Drewry, coal imports in China are also generally low during April because of the off-peak consumption season when electricity generation declines. This is also the case in other northern hemisphere countries.

Lower Soybean Inspections Push Total Grain Exports Down

For the week ending April 11, **total inspections of grain** (corn, wheat, and soybeans) for export from all major U.S. export regions reached 2.18 million metric tons (mmt). This indicates a 15 percent decrease from the previous week, a 15 percent decrease from last year, and a 10 percent decrease in the 3-year average. Total inspections receded primarily because of a 48 percent drop in soybean inspections. Pacific Northwest (PNW) soybean inspections were the lowest since late December. Although corn inspections increased 11 percent from week to week, wheat inspections were down 8 percent. Grain inspections decreased 23 percent from the previous week in the PNW, and decreased 9 percent in the Mississippi Gulf.

Flooding Continues to Disrupt Barge Traffic

Intense spring storms with heavy precipitation, combined with snowmelt runoff, continue to cause flood-related navigation disruptions for most of the nation's river systems. For the week ending April 13, only two Mississippi River Locks (Locks and Dam 26 and 27) reported any grain barge traffic. Year-to-date total grain shipments are 27 percent lower than the 3-year average. Spot barge rates of export grain from major originating points has been declining for 3 weeks as many shippers are not looking to buy barge services with the constant highwater conditions. In addition, barge operators are reporting that some river elevators are not buying grain, as on-going flood conditions can result in damage to grain stored near the river.

USDA Releases 2017 Census of Agriculture

Last week, USDA's National Agricultural Statistics Service released the [2017 Census of Agriculture](#). The Census is a complete count of U.S. farms and ranches and the people who operate them. It also provides valuable insights into demographics, economics, land and activities on U.S. farms and ranches. Among the findings, there are 2.04 million farms and ranches (down 3.2 percent from 2012) with an average size of 441 acres (up 1.6 percent) on 900 million acres (down 1.6 percent). In addition, farm expenses are \$326 billion with feed, livestock purchased, hired labor, fertilizer and cash rents topping the list of farm expenses in 2017.

Snapshots by Sector

Export Sales

For the week ending April 4, **unshipped balances** of wheat, corn, and soybeans totaled 31.5 mmt. This indicates a 14 percent decrease in outstanding sales, compared to the same time last year. Net weekly **wheat export sales** were .273 mmt, down 61 percent from the previous week. Net **corn export sales** totaled .548 mmt, up 2 percent from the previous week. Net **soybean export sales** totaled .270 mmt, down 86 percent from the past week.

Rail

U.S. Class I railroads originated 21,815 **grain carloads** for the week ending April 6. This is a 3 percent decrease from the previous week, 14 percent lower than last year, and 4 percent below the 3-year average.

Average April shuttle **secondary railcar** bids/offers (per car) were \$242 above tariff for the week ending April 11. This is down \$365 from last week and \$458 below last year. Average non-shuttle secondary railcar bids/offers were \$600 above tariff. There were no non-shuttle bids/offers last week or this week last year.

Barge

For the week ending April 13, **barge grain movements** totaled 428,581 tons. This is 15 percent lower than the previous week and 31 percent lower than the same period last year.

For the week ending April 13, 265 grain barges **moved down river**. This is 65 less barges than the previous week. There were 524 grain barges **unloaded in New Orleans**, 12 percent higher than the previous week.

Ocean

For the week ending April 11, 28 **ocean-going grain vessels** were loaded in the Gulf. This was 30 percent less than the same period last year. Fifty-seven vessels are expected to be loaded within the next 10 days, unchanged from the same period last year.

Fuel

For the week ending April 15, the **U.S. average diesel fuel price** increased to \$3.118 per gallon, 2.5 cents above the previous week's average and 1.4 cents above the same week last year.

Feature Article/Calendar

First Quarter Grain Inspections Below Last Year

In 2019, first quarter grain (corn, wheat, and soybeans) inspected for export from all U.S. ports reached 29.5 million metric tons (mmt). This indicates a 6 percent decrease from last year and a 5 percent drop from the 5-year average, according to USDA's Federal Grain Inspection Service (FGIS) (*see table*). Although first quarter inspections were down from last year for corn and soybeans, wheat inspections were up. Total grain inspections decreased primarily because of slower than normal demand for corn and soybeans, especially from Asia, Latin America, and Africa. Inspections of grain in the Gulf were slightly below last year. Pacific Northwest (PNW) grain inspections decreased as well during the first quarter.

Gulf Inspections: First quarter grain inspections at U.S. Gulf ports reached 16.5 mmt, down 1 percent from last year and 10 percent below the 5-year average (*see table*). U.S. Gulf corn and soybean inspections in the first quarter were down 5 percent and 2 percent, respectively, from last year. However, total U.S. Gulf wheat inspections increased 18 percent from last year, due to increased shipments to Africa and Latin America. Barge movements of grain through the locking sections of the Mississippi, Ohio, and Arkansas Rivers were down slightly from last year during the first quarter. River conditions in the first quarters of 2019 and 2018 were adversely impacted by high water conditions. U.S. Gulf rail deliveries to port were down 13 percent from the previous year.

First Quarter Total Grain Inspections By Ports, 2010-2019

(Includes Corn, Soybeans, and Wheat)

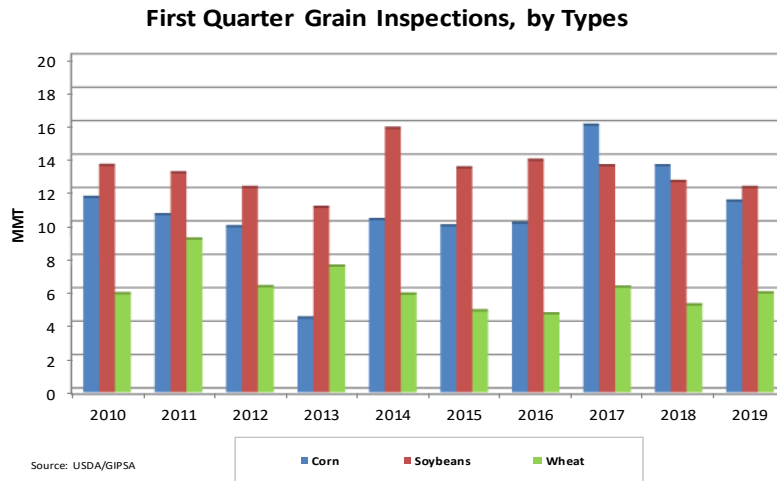
Year	U.S. Gulf	% of Average	PNW	% of Average	Atlantic & Lakes	% of Average	Interior	% of Average	U.S. Total	% of Average
1000 Metric Tons										
2010	19,298	105%	8,257	88%	711	86%	2,746	91%	31,012	98%
2011	21,714	118%	7,664	82%	761	92%	2,665	88%	32,804	104%
2012	15,692	85%	8,278	89%	475	57%	3,610	120%	28,055	89%
2013	12,492	68%	7,590	81%	884	107%	1,966	65%	22,932	72%
2014	19,626	106%	8,441	90%	984	119%	2,822	93%	31,874	101%
2015	16,976	92%	8,670	93%	910	110%	2,548	84%	29,105	92%
2016	16,700	90%	8,996	96%	884	107%	2,774	92%	29,354	93%
2017	21,836	118%	9,831	105%	695	84%	3,341	111%	35,703	113%
2018	17,141	93%	10,716	115%	665	80%	3,615	120%	32,137	102%
2019	16,539	90%	9,030	97%	447	54%	3,505	116%	29,521	93%
2014-2018 Avg.	18,456		9,331		828		3,020		31,635	

Source: USDA/FGIS

PNW Inspections: First quarter grain inspections in the PNW reached 9 mmt, down 16 percent from last year and 3 percent below the 5-year average (*see table*). First quarter rail deliveries of grain to PNW ports were down 14 percent, compared to last year (*see GTR Table 3*). Corn inspections in the PNW dropped 38 percent from last year, to 2.8 mmt. PNW soybean inspections decreased 3 percent from last year, but wheat inspections increased 15 percent as shipments to Asia rose.

Atlantic and Great Lakes Inspections: First quarter Atlantic and Great Lakes grain inspections decreased 29 percent from last year, to .447 mmt. Inspections of grain in the Atlantic and Great Lakes were 46 percent below the 5-year average. Inspections of corn, soybeans, and wheat inspections dropped significantly in the Atlantic and Great Lakes, due primarily to lower grain shipments to Asia.

Interior Inspections: First quarter Interior grain inspections reached 3.5 mmt, unchanged from last year and 17 percent above the 5-year average. Soybean inspections in the Interior reached a record 1.5 mmt, increasing 6 percent from last year. Shipments of soybeans from the Interior were destined primarily to Asia. Inspections of corn and wheat in the Interior decreased slightly from last year.



Corn and Soybean

Inspections: First quarter corn inspections reached 11.4 mmt, down 16 percent from last year and 5 percent below the 5-year average (*see figure*). U.S. Gulf corn inspections decreased 5 percent from last year. First quarter corn inspections in the PNW, however, dropped 38 percent from last year, due mainly to lower shipments to Korea.

Total soybean inspections were 12.2 mmt, down 3 percent from last year and 12 percent below the 5-year average (*see figure*). First quarter soybean inspections were down slightly from last year in the U.S. Gulf and PNW, reaching 7.1 and 3.3 mmt, respectively. Inspections of soybeans in the PNW and U.S. Gulf were well below the 5-year averages.

Wheat Inspections: Total first quarter wheat inspections totaled 5.9 mmt, up 14 percent from last year and 10 percent above the 5-year average (*see figure*). U.S. wheat inspections increased as demand from Africa rebounded.

Market Outlook: According to the USDA’s [World Agricultural Supply and Demand Estimates](#) report in April, the 2018/19 forecast for U.S. corn exports is 2 percent below last year, and down 3 percent from the previous month. Wheat exports are slightly below the past month but are projected to increase 2 percent from last year. The April projection for 2018/19 soybean exports is down 12 percent from last year but is unchanged from March. Cumulative marketing year-to-date export sales (shipped) of corn are well above the same time last year. Cumulative wheat sales are down slightly from last year, but soybeans are down 29 percent (*see GTR Table 12*). Johnny.Hill@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
04/17/19	209	313	230	211	188	167
04/10/19	208	280	246	224	188	168

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 Program/AMS/USDA

Table 2

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

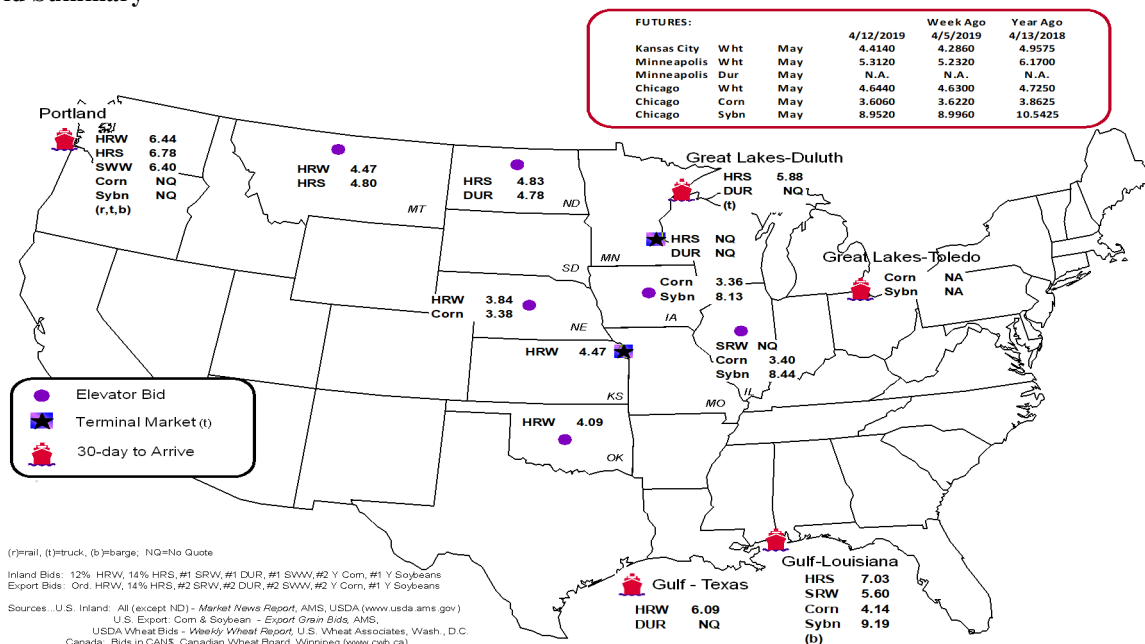
Commodity	Origin--Destination	4/12/2019	4/5/2019
Corn	IL--Gulf	-0.74	-0.76
Corn	NE--Gulf	-0.76	-0.82
Soybean	IA--Gulf	-1.06	-1.08
HRW	KS--Gulf	-1.62	-1.57
HRS	ND--Portland	-1.95	-1.98

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		Pacific	Atlantic &	Total	Week ending	Cross-Border Mexico ³
	Gulf	Texas Gulf	Northwest	East Gulf			
4/10/2019 ^p	1,070	1,476	6,785	330	9,661	4/6/2019	1,999
4/03/2019 ^r	1,254	1,796	6,363	307	9,720	3/30/2019	1,995
2019 YTD ^f	11,912	16,818	84,085	5,513	118,328	2019 YTD	31,139
2018 YTD ^f	6,120	24,173	95,326	5,226	130,845	2018 YTD	26,312
2019 YTD as % of 2018 YTD	195	70	88	105	90	% change YTD	118
Last 4 weeks as % of 2018 ²	485	78	98	56	102	Last 4wks % 2018	108
Last 4 weeks as % of 4-year avg. ²	355	77	110	68	111	Last 4wks % 4 yr	102
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.

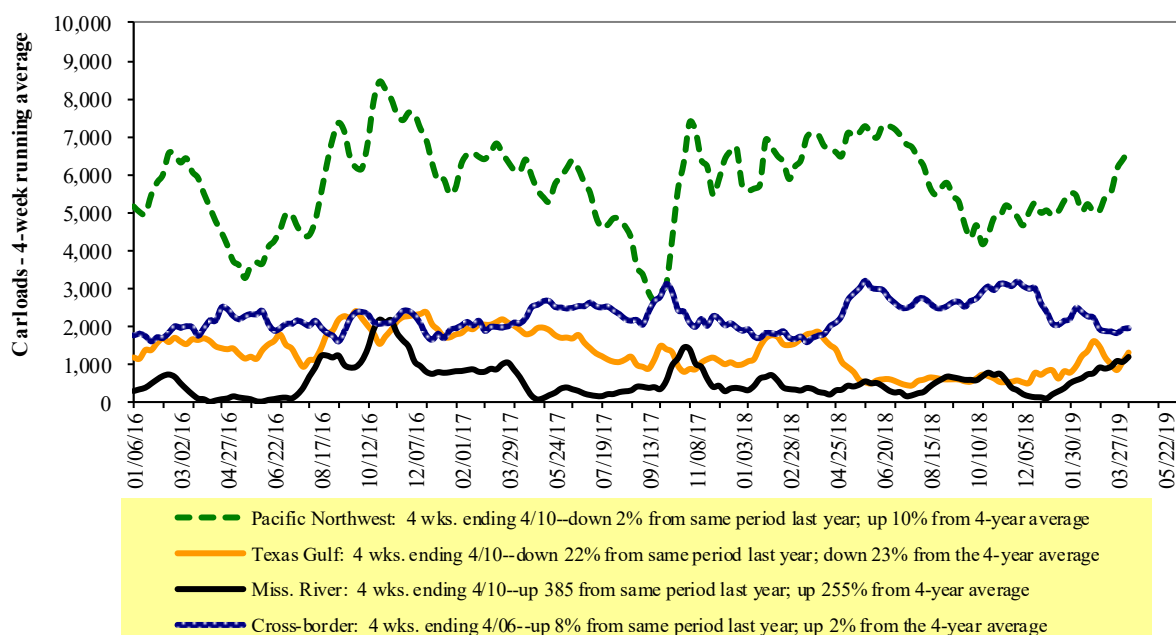
YTD = year-to-date; p = preliminary data; r = revised data; n/a = not available

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)

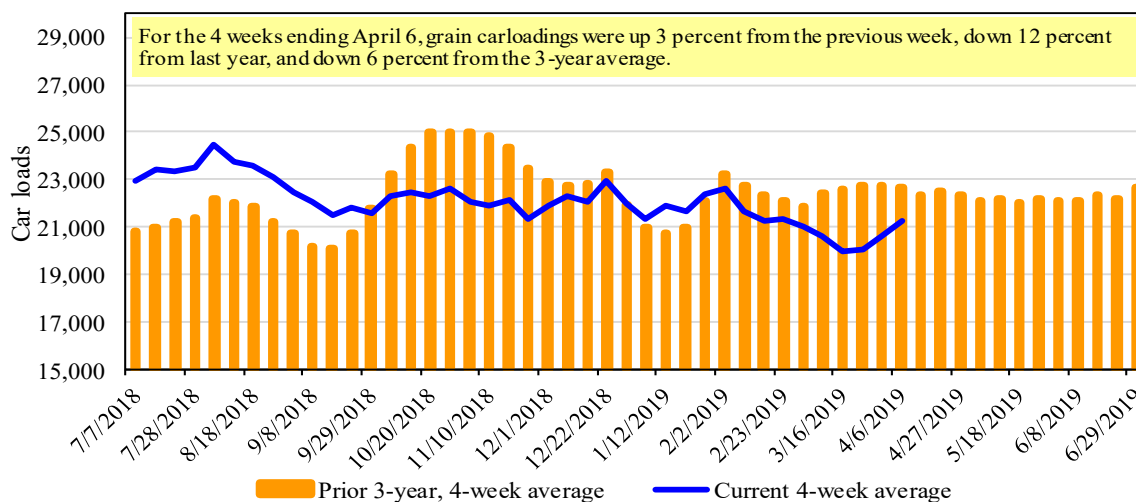
For the week ending: 4/6/2019	East		West			U.S. total	Canada	
	CSXT	NS	BNSF	KCS	UP		CN	CP
This week	2,421	2,780	10,252	1,253	5,109	21,815	5,701	5,589
This week last year	1,836	2,498	13,477	1,117	6,412	25,340	4,773	4,121
2019 YTD	28,214	37,510	147,601	16,081	69,918	299,324	57,554	57,395
2018 YTD	25,960	33,600	169,727	13,037	73,321	315,645	49,759	60,322
2019 YTD as % of 2018 YTD	109	112	87	123	95	95	116	95
Last 4 weeks as % of 2018*	110	122	76	146	86	88	112	102
Last 4 weeks as % of 3-yr avg.**	122	106	87	147	85	94	118	102
Total 2018	98,978	133,087	635,458	48,638	267,713	1,183,874	211,841	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 Offerings¹ (\$/car)²

For the week ending: 4/11/2019		Delivery period							
		Apr-19	Apr-18	May-19	May-18	Jun-19	Jun-18	Jul-19	Jul-18
BNSF ³	COT grain units	n/a	no offer	n/a	0	n/a	0	n/a	0
	COT grain single-car ⁵	n/a	no offer	n/a	0	n/a	0	n/a	0
UP ⁴	GCAS/Region 1	no offer	no offer	no offer	no offer	no bids	no bids	n/a	n/a
	GCAS/Region 2	no offer	no offer	no offer	no offer	179	no offer	n/a	n/a

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.

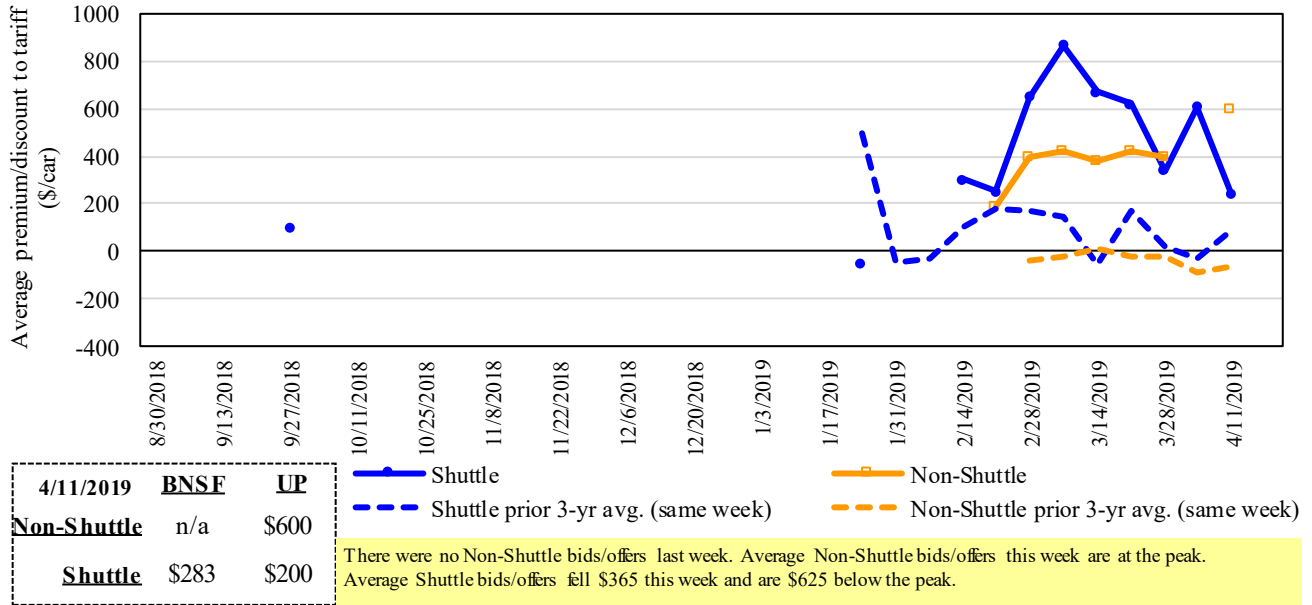
Region 2 includes: CO, IA, KS, MN, NE, WY, and Kansas City and St. Joseph, MO.

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

Source: Transportation & Marketing Program/AMS/USDA.

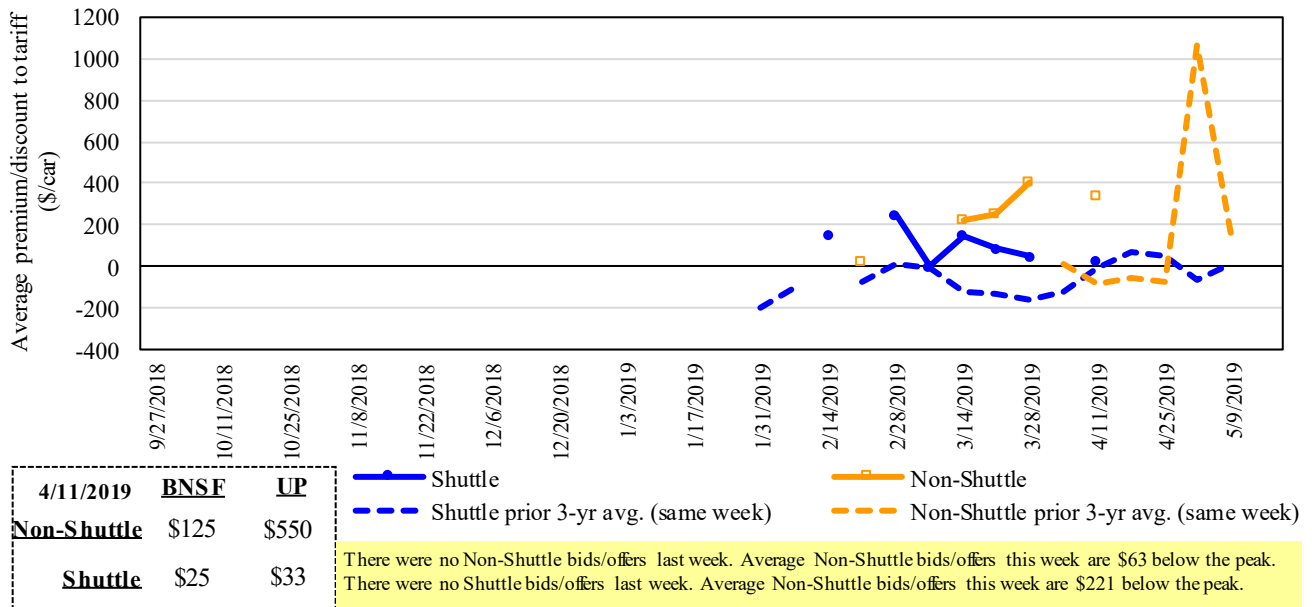
The **secondary rail market** information reflects trade values for service that was originally purchased from the railroad carrier as some form of guaranteed freight. The **auction and secondary rail** values are indicators of rail service quality and demand/supply.

Figure 4
Bids/Offers for Railcars to be Delivered in April 2019, Secondary Market



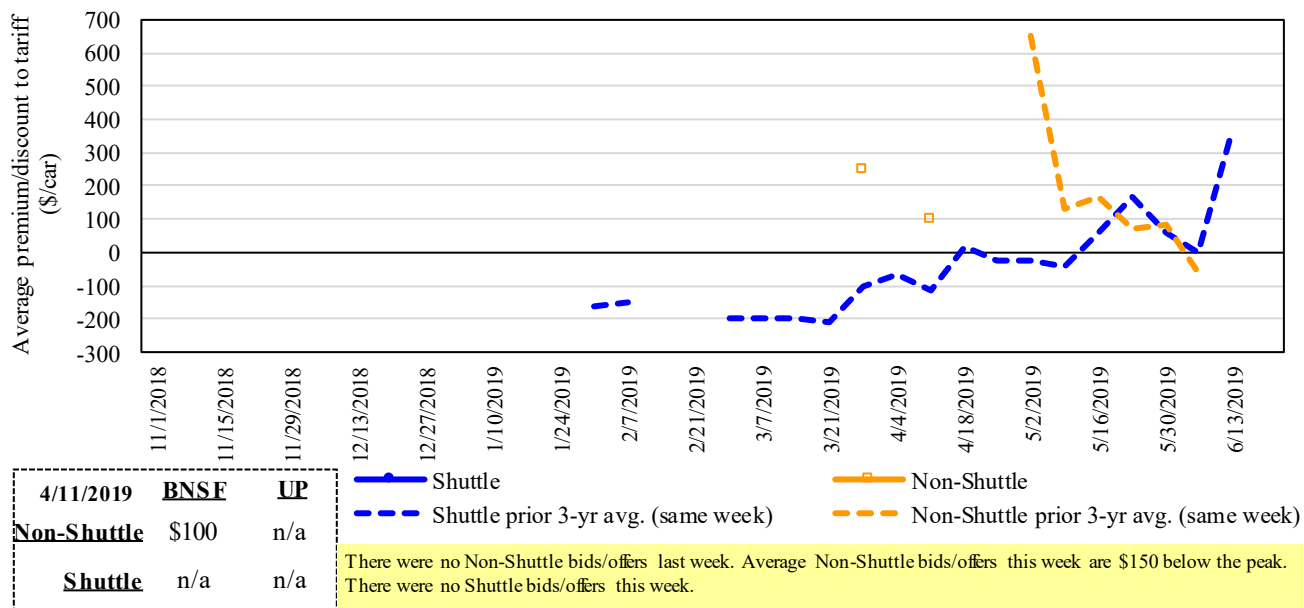
Non-shuttle bids include unit-train and single-car bids. n/a = not available.
 Source: Transportation & Marketing Program/AMS/USDA

Figure 5
Bids/Offers for Railcars to be Delivered in May 2019, Secondary Market



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 June 2019, Secondary Market



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:		Delivery period					
		Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19
Non-shuttle	4/11/2019						
	BNSF-GF	n/a	125	100	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 2018	n/a	n/a	n/a	n/a	n/a	n/a
	UP-Pool	600	550	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 2018	n/a	n/a	n/a	n/a	n/a	n/a	
Shuttle	BNSF-GF	283	25	n/a	n/a	n/a	n/a
	Change from last week	(617)	n/a	n/a	n/a	n/a	n/a
	Change from same week 2018	(517)	(775)	n/a	n/a	n/a	n/a
	UP-Pool	200	33	n/a	n/a	n/a	n/a
	Change from last week	(113)	n/a	n/a	n/a	n/a	n/a
	Change from same week 2018	(400)	(67)	n/a	n/a	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

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 Shipments¹

April, 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	\$91	\$40.46	\$1.10	2
	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	\$160	\$46.68	\$1.27	0
	Sioux Falls, SD	Galveston-Houston, TX	\$6,911	\$0	\$68.63	\$1.87	2
	Northwest KS	Galveston-Houston, TX	\$4,816	\$176	\$49.57	\$1.35	0
	Amarillo, TX	Los Angeles, CA	\$5,121	\$244	\$53.28	\$1.45	2
Corn	Champaign-Urbana, IL	New Orleans, LA	\$4,000	\$181	\$41.52	\$1.05	1
	Toledo, OH	Raleigh, NC	\$6,581	\$0	\$65.35	\$1.66	4
	Des Moines, IA	Davenport, IA	\$2,258	\$38	\$22.80	\$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	\$113	\$36.96	\$0.94	0
	Des Moines, IA	Los Angeles, CA	\$5,327	\$328	\$56.16	\$1.43	0
Soybeans	Minneapolis, MN	New Orleans, LA	\$4,131	\$179	\$42.80	\$1.16	0
	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	\$181	\$48.92	\$1.33	0
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	\$288	\$61.57	\$1.68	1
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	\$181	\$39.53	\$1.00	2
	Lincoln, NE	Galveston-Houston, TX	\$3,880	\$0	\$38.53	\$0.98	5
	Des Moines, IA	Amarillo, TX	\$4,060	\$142	\$41.72	\$1.06	2
	Minneapolis, MN	Tacoma, WA	\$5,180	\$0	\$51.44	\$1.31	4
Soybeans	Council Bluffs, IA	Stockton, CA	\$5,000	\$0	\$49.65	\$1.26	4
	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	\$209	\$49.49	\$1.35	0
	Toledo, OH	Huntsville, AL	\$4,634	\$0	\$46.02	\$1.25	6
	Grand Island, NE	Portland, OR	\$5,710	\$295	\$59.63	\$1.62	0

¹A 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.

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

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

⁴Percentage 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: April, 2019			Fuel				Percent
Commodity	Origin state	Destination region	Tariff rate/car ¹	Fuel surcharge per car ²	Tariff plus surcharge per:		change ⁴ Y/Y
					metric ton ³	bushel ³	
Wheat	MT	Chihuahua, CI	\$7,284	\$0	\$74.43	\$2.02	-2
	OK	Cuautitlan, EM	\$6,743	\$125	\$70.18	\$1.91	2
	KS	Guadalajara, JA	\$7,371	\$431	\$79.72	\$2.17	2
	TX	Salinas Victoria, NL	\$4,329	\$77	\$45.02	\$1.22	1
Corn	IA	Guadalajara, JA	\$8,528	\$370	\$90.92	\$2.31	3
	SD	Celaya, GJ	\$7,880	\$0	\$80.51	\$2.04	2
	NE	Queretaro, QA	\$8,207	\$265	\$86.56	\$2.20	2
	SD	Salinas Victoria, NL	\$6,905	\$0	\$70.55	\$1.79	2
	MO	Tlalnepantla, EM	\$7,573	\$258	\$80.02	\$2.03	2
	SD	Torreon, CU	\$7,480	\$0	\$76.43	\$1.94	2
Soybeans	MO	Bojay (Tula), HG	\$8,284	\$344	\$88.16	\$2.40	3
	NE	Guadalajara, JA	\$8,842	\$370	\$94.12	\$2.56	2
	IA	El Castillo, JA	\$9,110	\$0	\$93.08	\$2.53	2
	KS	Torreon, CU	\$7,714	\$265	\$81.52	\$2.22	4
Sorghum	NE	Celaya, GJ	\$7,527	\$335	\$80.33	\$2.04	3
	KS	Queretaro, QA	\$8,000	\$157	\$83.34	\$2.11	2
	NE	Salinas Victoria, NL	\$6,633	\$126	\$69.05	\$1.75	3
	NE	Torreon, CU	\$6,962	\$247	\$73.66	\$1.87	3

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

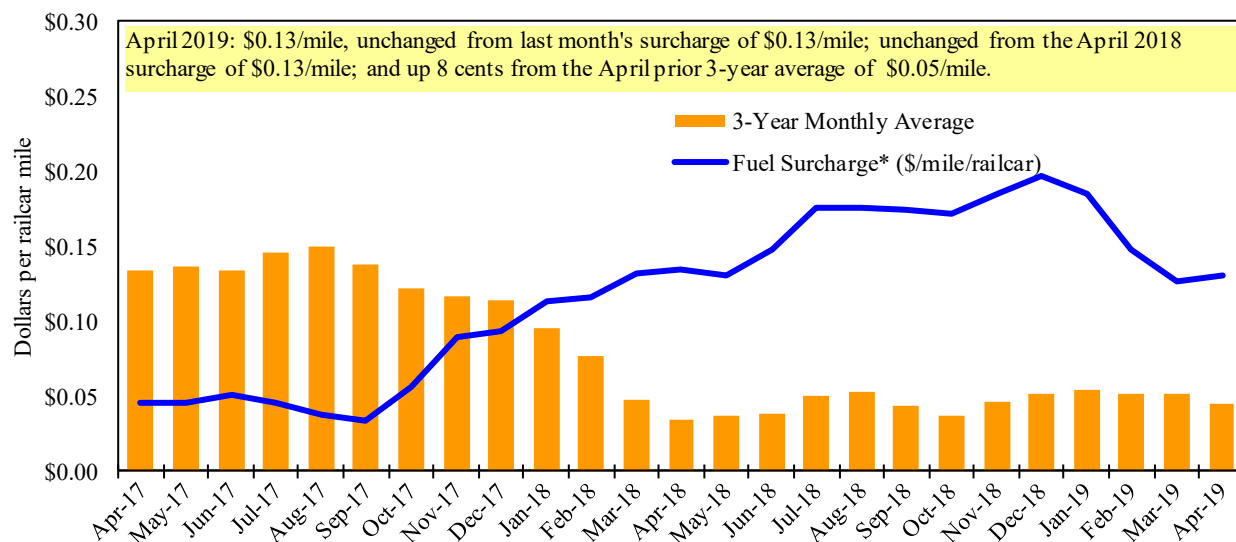
²Fuel surcharge adjusted to reflect the change in Ferrocarril Mexicano, S.A. de C.V railroad fuel surcharge policy as of 10/01/2009

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

⁴Percentage change calculated using tariff rate plus fuel surcharge

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

Figure 7

Railroad Fuel Surcharges, North American Weighted Average¹

¹ Weighted by each Class I railroad's proportion of grain traffic for the prior year.

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

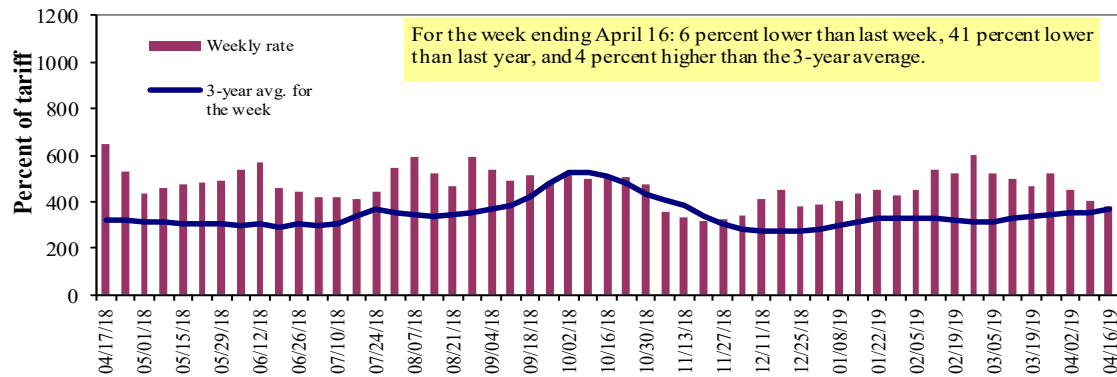
** CSX strike price changed from \$2.00/gal. to \$3.75/gal. starting January 1, 2015.

Sources: www.bnsf.com, www.cn.ca, www.cpr.ca, www.csx.com, www.kcsi.com, www.nscorp.com, www.uprr.com

Barge Transportation

Figure 8

Illinois River Barge Freight Rate^{1,2}



¹Rate = percent of 1976 tariff benchmark index (1976 = 100 percent); ²4-week moving average of the 3-year average.

Source: Transportation & Marketing 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
Rate¹	4/16/2019	-	-	380	283	318	320	275
	4/9/2019	-	-	403	305	375	383	292
\$/ton	4/16/2019	-	-	17.63	11.29	14.91	12.93	8.64
	4/9/2019	-	-	18.70	12.17	17.59	15.47	9.17
Current week % change from the same week:								
	Last year	-	-	-41	-47	-46	-45	-42
	3-year avg. ²	-	-	4	-2	2	2	6
Rate¹	May	458	408	380	300	325	325	280
	July	445	400	400	300	325	325	280

¹Rate = percent of 1976 tariff benchmark index (1976 = 100 percent); ²4-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:

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

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

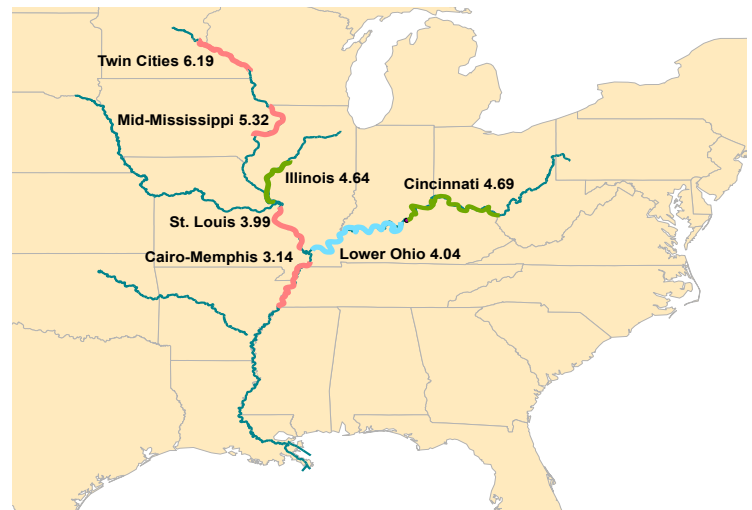
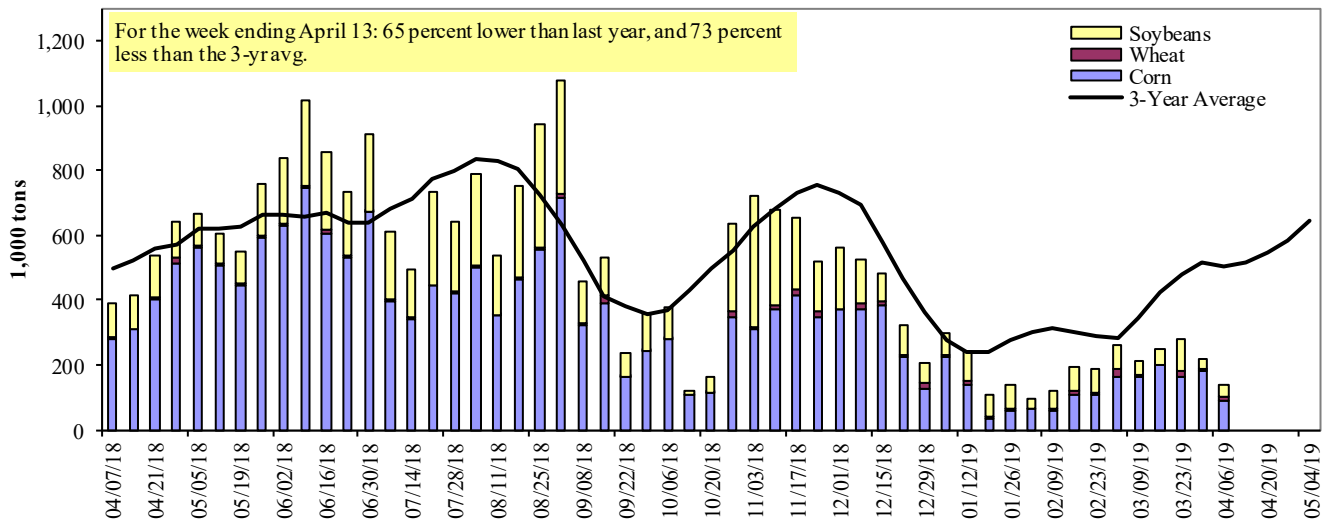


Figure 10

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 04/13/2019	Corn	Wheat	Soybeans	Other	Total
Mississippi River					
Rock Island, IL (L15)	0	0	0	0	0
Winfield, MO (L25)	0	0	0	0	0
Alton, IL (L26)	89	11	36	0	136
Granite City, IL (L27)	89	11	36	0	136
Illinois River (L8)					
	93	11	42	0	146
Ohio River (OLMSTED)					
	159	11	60	2	231
Arkansas River (L1)					
	0	29	32	0	62
Weekly total - 2019	248	51	128	2	429
Weekly total - 2018	400	24	195	0	618
2019 YTD ¹	3,454	690	2,883	42	7,068
2018 YTD ¹	4,847	443	3,111	47	8,448
2019 as % of 2018 YTD	71	156	93	88	84
Last 4 weeks as % of 2018 ²	66	144	98	117	79
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.

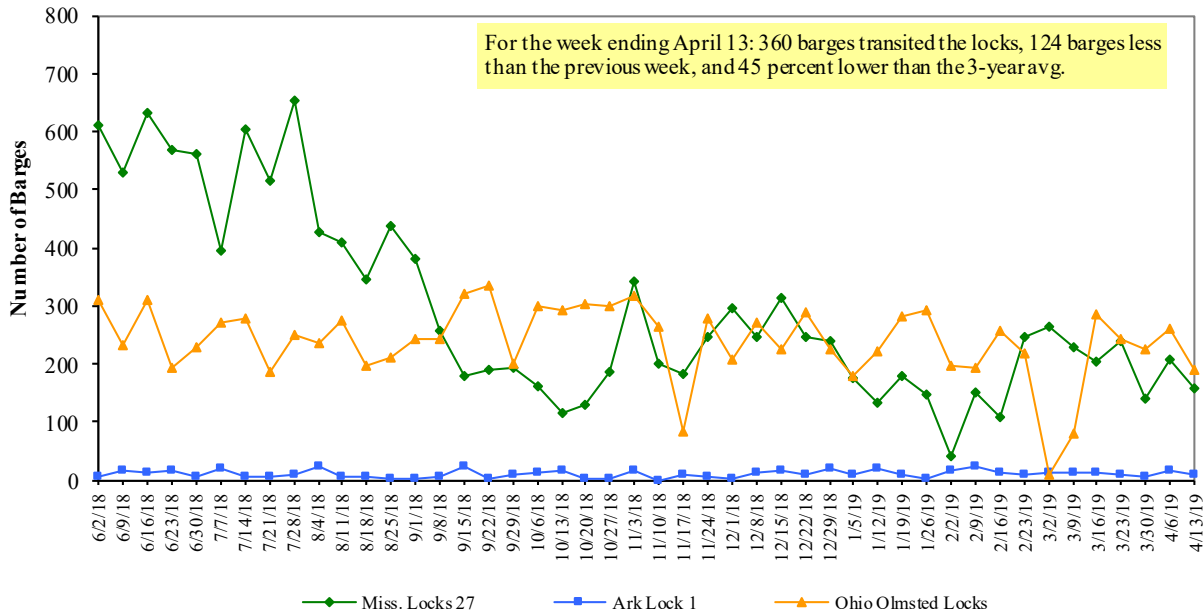
² As a percent of same period in 2018.

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.

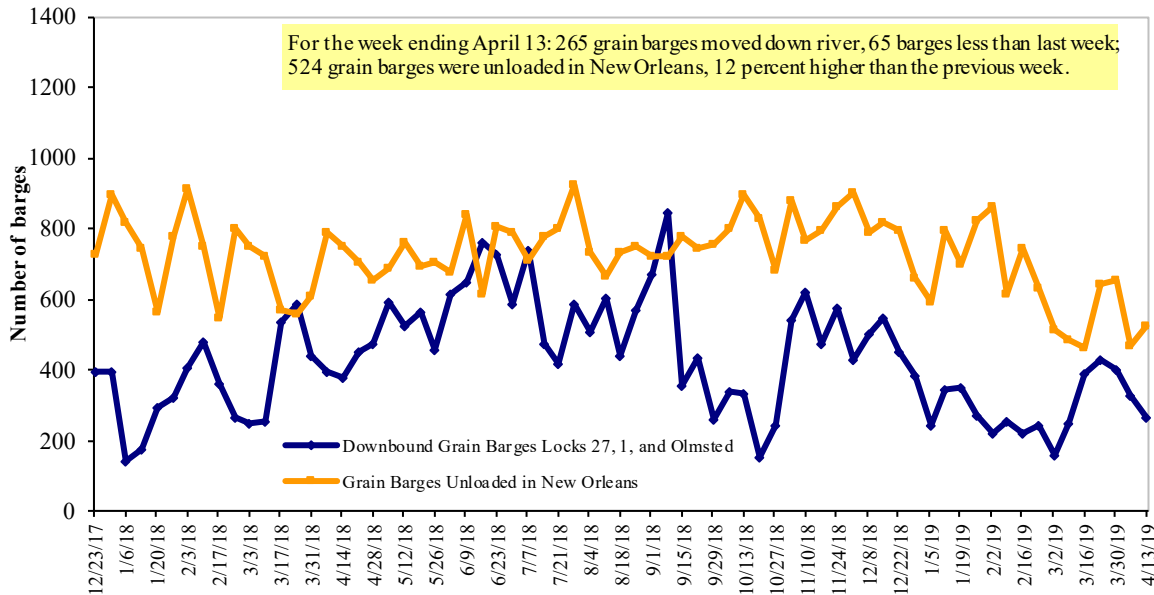
Source: U.S. Army Corps of Engineers

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 AMS FGIS

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.

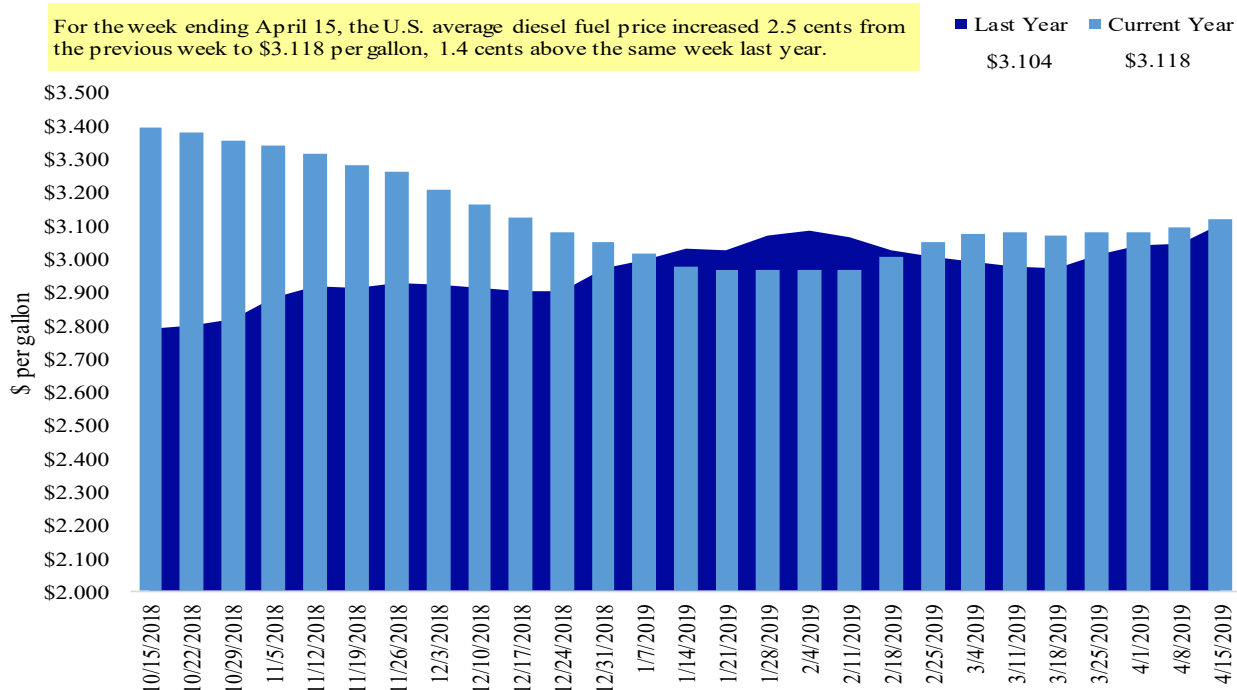
Table 11
Retail on-Highway Diesel Prices, Week Ending 4/15/2019 (US \$/gallon)

Region	Location	Price	Change from	
			Week ago	Year ago
I	East Coast	3.153	0.016	0.037
	New England	3.205	0.012	0.056
	Central Atlantic	3.342	0.018	0.067
	Lower Atlantic	3.015	0.017	0.017
II	Midwest	3.010	0.017	-0.006
III	Gulf Coast	2.899	0.020	-0.011
IV	Rocky Mountain	3.082	0.054	-0.055
V	West Coast	3.651	0.060	0.068
	West Coast less California	3.252	0.063	-0.074
	California	3.967	0.057	0.180
Total	U.S.	3.118	0.025	0.014

¹Diesel 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)

For the week ending	Wheat						Corn	Soybeans	Total
	HRW	SRW	HRS	SWW	DUR	All wheat			
Export Balances¹									
4/4/2019	2,433	894	1,342	1,044	84	5,796	12,719	13,017	31,532
This week year ago	901	497	1,299	948	66	3,711	22,052	10,997	36,759
Cumulative exports-marketing year²									
2018/19 YTD	6,271	2,404	5,476	4,251	399	18,801	31,024	30,894	80,719
2017/18 YTD	8,153	1,919	4,706	4,241	308	19,327	26,141	41,946	87,414
YTD 2018/19 as % of 2017/18	77	125	116	100	130	97	119	74	92
Last 4 wks as % of same period 2017/18	274	178	104	112	168	158	61	119	88
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

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

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

Table 13

Top 5 Importers¹ of U.S. Corn

For the week ending 4/04/2019	Total Commitments ²		% change current MY from last MY	Exports ³ 3-year avg 2015-2017
	2018/19	2017/18		
	Current MY	Last MY		
	- 1,000 mt -			
Mexico	13,954	12,238	14	13,691
Japan	9,355	8,825	6	11,247
Korea	3,548	3,908	(9)	4,754
Colombia	3,636	3,216	13	4,678
Peru	1,965	2,439	(19)	2,975
Top 5 Importers	32,458	30,625	6	37,344
Total US corn export sales	43,743	48,193	(9)	53,184
% of Projected	75%	78%		
Change from prior week²	548	840		
Top 5 importers' share of U.S. corn export sales	74%	64%		70%
USDA forecast, April 2019	58,524	62,036	(6)	
Corn Use for Ethanol USDA forecast, April 2019	139,700	142,367	(2)	

(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

Table 14

Top 5 Importers¹ of U.S. Soybeans

For the week ending 4/04/2019	Total Commitments ²		% change current MY from last MY	Exports ³ 3-yr avg. 2015-2017
	2018/19 Current MY	2017/18 Last MY		
		- 1,000 mt -		- 1,000 mt -
China	12,921	28,929	(55)	31,228
Mexico	4,652	3,740	24	3,716
Indonesia	1,767	1,695	4	2,250
Japan	2,044	1,773	15	2,145
Netherlands	1,828	1,185	54	2,209
Top 5 importers	23,212	37,323	(38)	41,549
Total US soybean export sales	43,910	52,942	(17)	55,113
% of Projected	86%	91%		
Change from prior week ²	270	1,458		
Top 5 importers' share of U.S. soybean export sales	53%	70%		75%
USDA forecast, April 2019	51,090	58,011	88	

(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 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 4/04/2019	Total Commitments ²		% change current MY from last MY	Exports ³ 3-yr avg 2015-2017
	2018/19 Current MY	2017/18 Last MY		
		- 1,000 mt -		- 1,000 mt -
Mexico	3,063	2,851	7	2,781
Japan	2,707	2,807	(4)	2,649
Philippines	3,041	2,512	21	2,441
Korea	1,547	1,421	9	1,257
Nigeria	1,432	1,186	21	1,254
Indonesia	1,314	1,180	11	1,076
Taiwan	1,103	1,106	(0)	1,066
China	42	894	(95)	944
Colombia	592	322	84	714
Thailand	744	687	8	618
Top 10 importers	15,585	14,966	4	14,800
Total US wheat export sales	24,597	23,038	7	22,869
% of Projected	96%	94%		
Change from prior week ²	273	121		
Top 10 importers' share of U.S. wheat export sales	63%	65%		65%
USDA forecast, April 2019	25,749	24,550	5	

(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 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 04/11/19	Previous Week*	Current Week as % of Previous	2019 YTD*	2018 YTD*	2019 YTD as % of 2018 YTD	Last 4-weeks as % of:		2018 Total*
							Last Year	Prior 3-yr. avg.	
Pacific Northwest									
Wheat	328	270	122	3,700	3,284	113	101	91	13,315
Corn	363	302	120	3,420	5,538	62	55	79	20,024
Soybeans	67	415	16	3,948	3,661	108	263	268	7,719
Total	758	987	77	11,068	12,483	89	91	109	41,058
Mississippi Gulf									
Wheat	62	93	67	1,427	1,338	107	82	93	3,896
Corn	606	582	104	7,795	9,027	86	82	85	33,735
Soybeans	241	325	74	7,905	7,949	99	129	121	28,124
Total	910	1,000	91	17,127	18,314	94	93	95	65,755
Texas Gulf									
Wheat	85	177	48	1,740	1,378	126	182	133	3,198
Corn	31	0	n/a	177	163	109	96	91	730
Soybeans	0	0	n/a	0	0	n/a	n/a	n/a	69
Total	116	177	65	1,917	1,541	124	167	127	3,997
Interior									
Wheat	19	44	44	435	424	103	150	97	1,614
Corn	161	160	101	1,956	2,126	92	76	86	8,650
Soybeans	143	129	111	1,841	1,740	106	95	124	6,729
Total	324	333	97	4,233	4,290	99	87	100	16,993
Great Lakes									
Wheat	12	0	n/a	42	23	185	333	106	894
Corn	0	0	n/a	0	0	n/a	n/a	n/a	404
Soybeans	26	0	n/a	43	0	n/a	n/a	300	1,192
Total	38	0	n/a	85	23	371	n/a	192	2,491
Atlantic									
Wheat	32	0	n/a	32	64	51	91	150	69
Corn	0	0	n/a	42	0	n/a	n/a	235	138
Soybeans	7	66	11	446	732	61	48	69	2,047
Total	39	66	59	520	796	65	56	81	2,253
U.S. total from ports*									
Wheat	538	584	92	7,375	6,510	113	112	101	22,986
Corn	1,161	1,044	111	13,391	16,853	79	72	83	63,682
Soybeans	485	935	52	14,182	14,083	101	139	147	45,879
Total	2,184	2,563	85	34,949	37,446	93	93	101	132,547

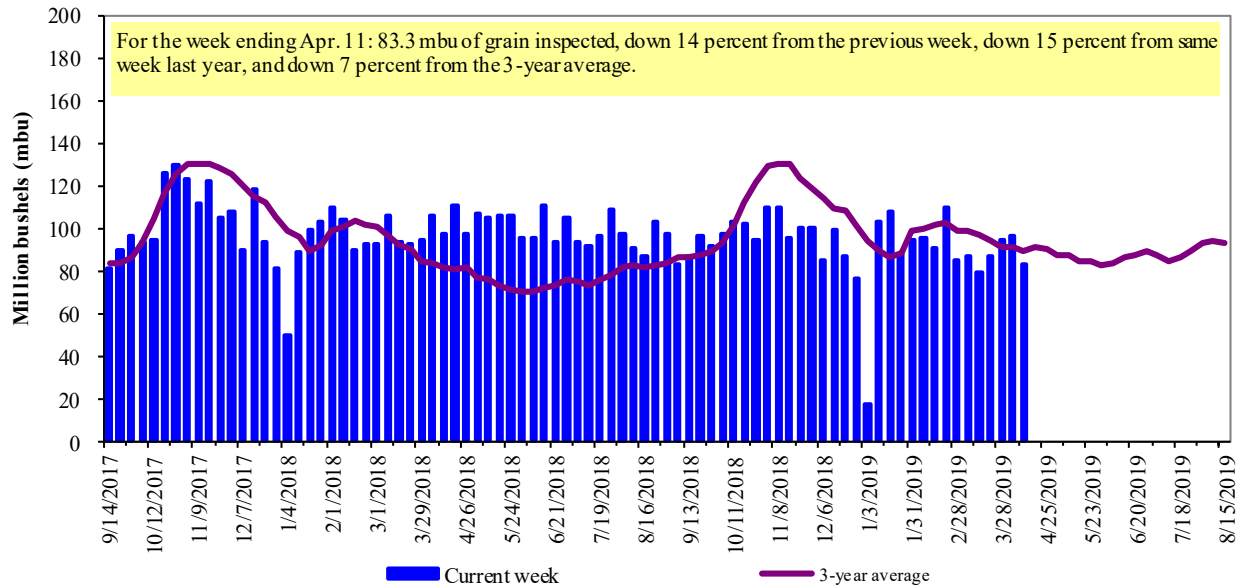
*Data includes revisions from prior weeks; some regional totals may not add exactly due to rounding.

Source: USDA/Federal Grain Inspection Service (www.gipsa.usda.gov/fgis); 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 53 percent of the U.S. export grain shipments departed through the U.S. Gulf region in 2018.

Figure 14

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

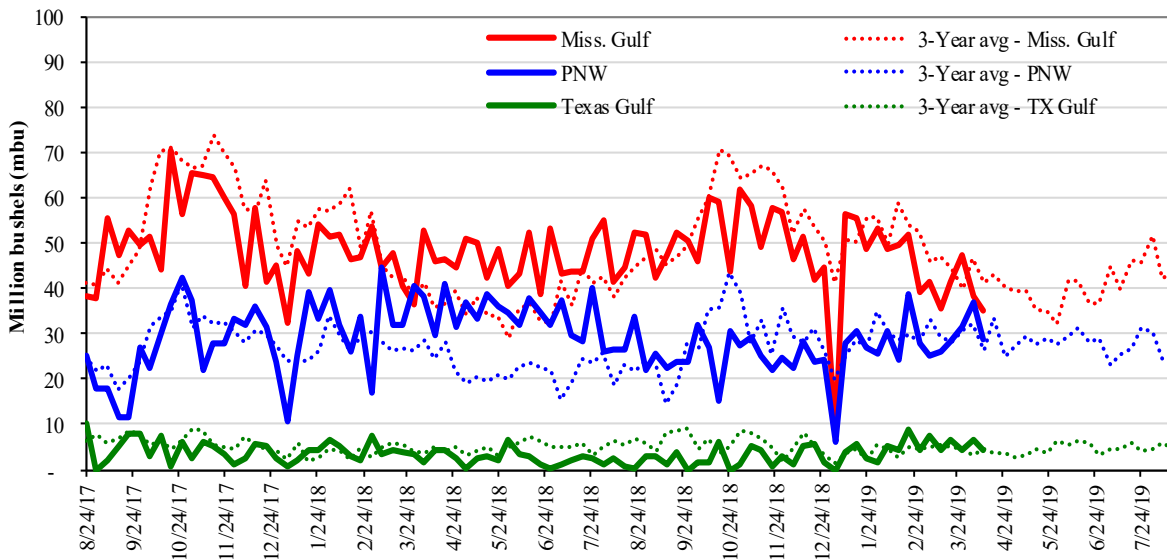


Source: USDA/Federal Grain Inspection Service (www.gipsa.usda.gov/fgis)

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)



<u>Week ending 04/11/19 inspections (mbu):</u>		<u>Percent change from:</u>				
Mississippi Gulf:	35.0	Last Week:	MS Gulf	TX Gulf	U.S. Gulf	PNW
PNW:	28.8	Last Year (same week):	down 9	down 34	down 12	down 22
Texas Gulf:	4.3	3-yr avg. (4-wk. mov. Avg):	down 24	down 2	down 22	down 3
			down 19	down 1	down 17	down 1

Source: USDA/ Federal Grain Inspection Service (www.gipsa.usda.gov/fgis)

Ocean Transportation

Table 17

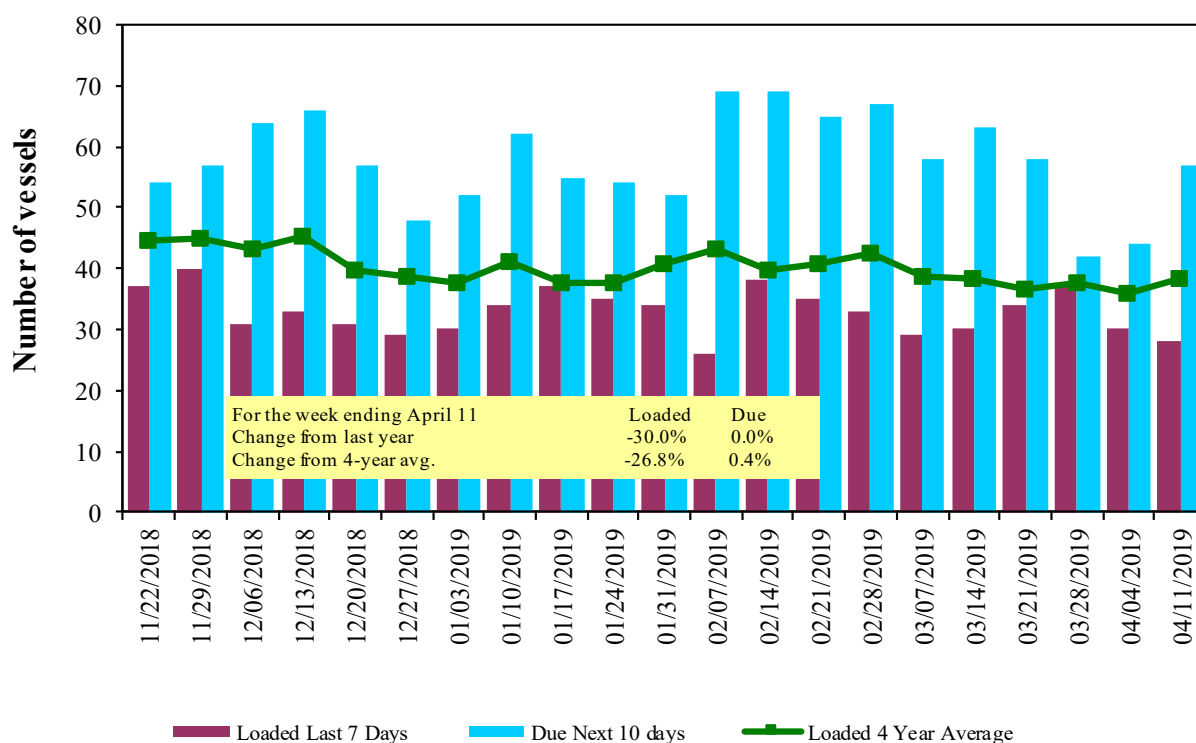
Weekly Port Region Grain Ocean Vessel Activity (number of vessels)

Date	Gulf			Pacific Northwest
	In port	Loaded 7-days	Due next 10-days	In port
4/11/2019	29	28	57	30
4/4/2019	35	30	44	31
2018 range	(23..88)	(24..41)	(38..67)	(4..30)
2018 avg.	40	34	54	17

Source: Transportation & Marketing Programs/AMS/USDA

Figure 16

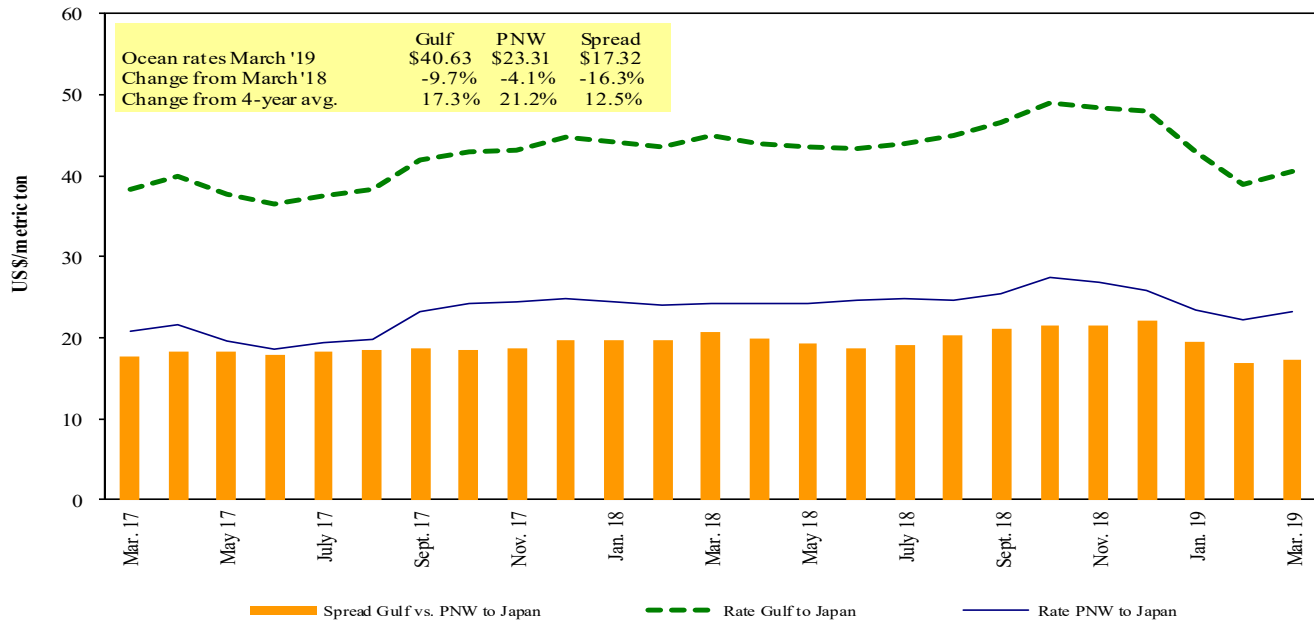
U.S. Gulf Vessel Loading Activity



Source: Transportation & Marketing Program/AMS/USDA
 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 04/13/2019

Export region	Import region	Grain types	Loading date	Volume loads (metric tons)	Freight rate (US\$/metric ton)
U.S. Gulf	China	Heavy Grain	Jun 1/30	63,000	42.00
U.S. Gulf	China	Heavy Grain	Mar 15/Apr 15	63,000	40.00
PNW	China	Heavy Grain	Mar 2/18	60,000	27.50
PNW	Oman	Wheat	Feb 18/28	25,000	69.94*
PNW	Taiwan	Heavy Grain	Sep 15/Oct 31	63,000	25.00
Brazil	China	Heavy Grain	Apr 15/30	63,000	32.50
Brazil	China	Heavy Grain	Mar 20/30	66,000	13.30
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
River Plate	China	Heavy Grain	Apr 21/30	65,000	37.85

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

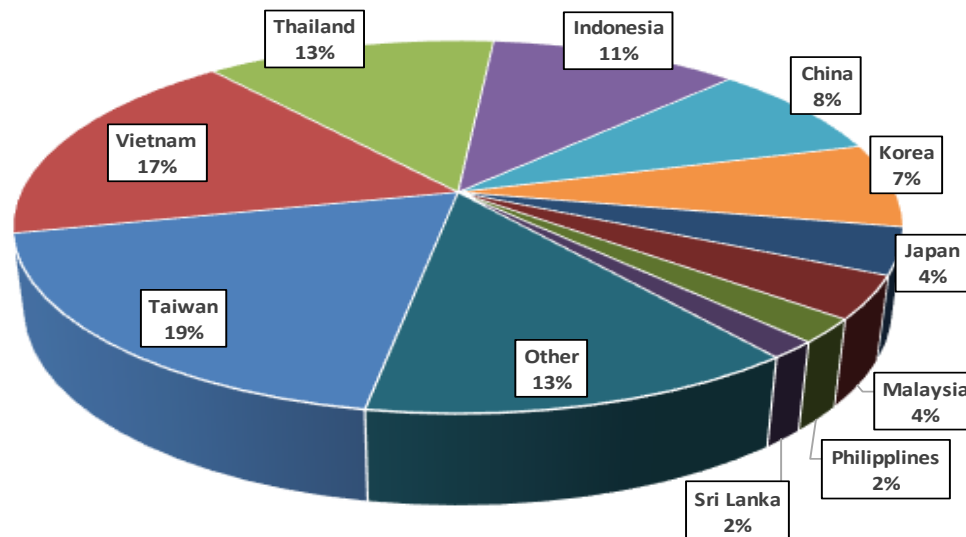
*50 percent of food aid from the United States is required to be shipped on U.S.-flag vessels.

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

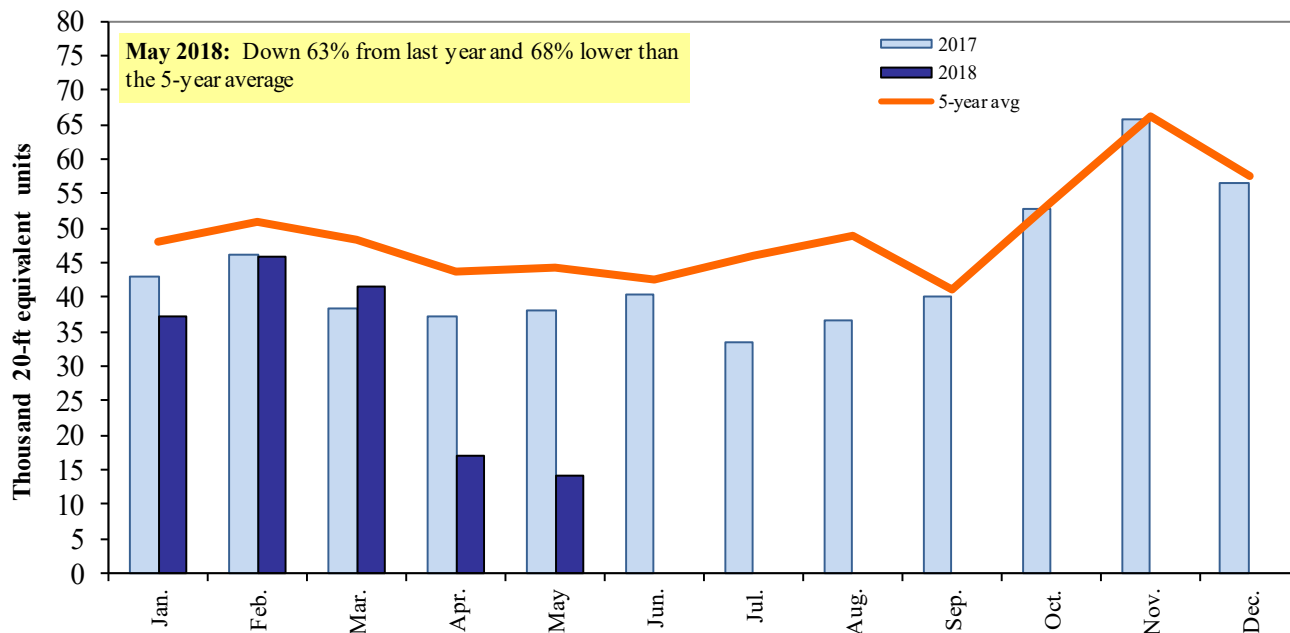


Service (PIERS) data

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@usda.gov (202) 720 - 0119
Kuo-Liang (Matt) Chang matt.chang@usda.gov (202) 720 - 0299

Weekly Highlight Editors

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

Grain Transportation Indicators

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

Rail Transportation

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

Barge Transportation

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

Truck Transportation

April Taylor april.taylor@usda.gov (202) 720 - 7880

Grain Exports

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

Ocean Transportation

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

Subscription Information: Send relevant information to GTRContactUs@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*. April 18, 2019. Web: <http://dx.doi.org/10.9752/TS056.04-18-2019>

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.