



Grain Transportation Report

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

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WEEKLY HIGHLIGHTS

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FMC to Investigate Ocean Carriers Making Unilateral Changes to Service Contracts

According to an April 23 Federal Maritime Commission (FMC) [news release](#), U.S. cargo owners forwarded complaints to FMC claiming some ocean carriers are unilaterally changing service contract terms by cancelling the port/container yard to final customer destination leg of the cargo shipment. These cancellations are allegedly due to lack of inland truck availability. The Commission's Bureau of Enforcement has initiated an expedited inquiry into these ocean carrier actions. Letters were sent last Friday, April 20, to those shipping lines whose service contract actions have been called into question. In this inquiry, the Commission is seeking information that will assist in understanding the timing, fairness, and lawfulness of the alleged unilateral changes to ocean carriers' obligations for inland trucking services. Shipping lines are expected to provide their responses to FMC within 30 days.

Diesel Fuel Prices Increase for Fifth Consecutive Week

The Energy Information Administration reported the average U.S. on-highway [diesel fuel price](#) increased 3 cents per gallon to \$3.13, during the week ending April 23. Prices have increased 16 cents since the end of March and have not been this high since January 2015. Demand for diesel fuel exports has been strong this year, putting pressure on supplies and prices. Prolonged winter weather has also put pressure on distillate fuel supplies, which are used to produce residential heating oil and diesel fuel.

STC Research Highlights Nation's Approach to Funding Locks and Dams

On April 16, the Soybean Transportation Coalition released a report titled "[Predictable Funding for Locks and Dams](#)," written by Texas A&M's Transportation Institute. The report describes the cost escalations and project delays resulting from the current funding approach, and identifies potential best practices. It also compares a hypothetical lock and dam project, constructed via the current funding approach, with one potentially constructed by implementing practices suggested in the study. The study aims to demonstrate that a project with the same initial price tag can have very different outcomes due to the reliability of funding practices. In other words, the report found that less reliability of funding generally results in costlier projects with longer delays.

Pacific Northwest Grain Inspections Rebound

For the week ending April 19, [total inspections of grain](#) (corn, wheat, and soybeans) for export from all major U.S. export regions reached 2.8 million metric tons (mmt). This is an 11 percent increase from the previous week, up 2 percent from last year, and 35 percent above the 3-year average. Export inspections were up for each of the three major grains, with wheat inspections experiencing the largest increase. Shipments of wheat were up 23 percent from the previous week, with Pacific Northwest (PNW) wheat inspections jumping 55 percent, and accounting for over 60 percent of total wheat inspections. Total PNW grain inspections increased 39 percent from the past week. Current outstanding (unshipped) export sales are up for soybeans but down for corn and wheat.

Snapshots by Sector

Export Sales

For the week ending April 12, [unshipped balances](#) of wheat, corn, and soybeans totaled 36.4 mmt, up 30 percent from the same time last year. Net weekly [wheat export sales](#) were negative .067 mmt, the lowest so far for the current marketing year. Net [corn export sales](#) were 1.1 mmt, up 30 percent from the previous week. Net [soybean export sales](#) totaled 1.0 mmt, down 31 percent from the previous week.

Rail

U.S. Class I railroads originated 22,559 [grain carloads](#) for the week ending April 14, down 11 percent from the previous week, up 5 percent from last year, and 2 percent above the 3-year average.

Average May shuttle [secondary railcar](#) bids/offers per car were \$692 above tariff for the week ending April 19, up \$242 from last week, and \$982 higher than last year. There were no non-shuttle bids/offers this week.

Barge

For the week ending April 21, [barge grain movements](#) totaled 654,800 tons, 6 percent lower than the previous week, and down 36 percent from the same period last year.

For the week ending April 21, 452 grain barges [moved down river](#), 73 barges more than the previous week. There were 708 grain barges [unloaded in New Orleans](#), 5 percent lower than the previous week.

Ocean

For the week ending April 19, 37 [ocean-going grain vessels](#) were loaded in the Gulf, 12 percent more than the same period last year. Fifty vessels are expected to be loaded within the next 10 days, 35 percent more than the same period last year.

For the week ending April 19, the ocean freight rate for shipping bulk grain from the Gulf to Japan was \$44.00 per metric ton, unchanged from the previous week. The cost of shipping from the PNW to Japan was \$24.00 per metric ton, 1 percent less than the previous week.

Feature Article/Calendar

Grain Transportation Update

According to USDA's [April World Agriculture Supply and Demand Estimates \(WASDE\) report](#), total grain exports are projected at 5.52 billion bushels (bbu) for the marketing year 2017/18. High grain stocks from December 2017 continued into March, translating into below average rail grain carloads and barge tonnages. However, that trend appears to be reversing for rail carloads, possibly due to higher than usual demand for corn exports. High-water conditions have kept weekly barge tonnages below average and increased freight rates, as barge operators face higher operating costs to handle longer transit times. Ocean freight rates for shipping bulk commodities, including grains, were mixed during the first quarter of 2018. Based on high grain stocks and unshipped export balances, the overall demand for transportation of shipping grain could increase or, at a minimum, remain stable in the short term.

Projected Exports Remain High for Corn

Year-to-date outstanding export sales (unshipped) for corn, wheat, and soybeans are up 3 percent from last year. Coinciding with that trend, unshipped export sales of corn hit an all-time high for the week ending March 15, driven by cumulative new export sales between January and mid-March that were 87 percent above the prior three-year average. As of April 12, year-to-date export corn sales are 58 percent above the same period last year. According to the April WASDE report, lower projected corn exports from Brazil and Argentina will help boost U.S. corn exports for the first half of the upcoming 2018/19 marketing year. Therefore, based on USDA's outstanding export sales, transportation demand could remain high for rail and barge shipments of corn for export.

	Corn	Soybeans	Wheat	Total	Y/Y
United States 2017/18 (Projected)					
Production	14,604	4,392	1,741	20,737	-4.7%
Exports	2,225	2,065	925	5,215	-5.6%
Domestic Use	12,545	2,103	1,087	15,735	1.1%
Ending Stocks/Use	14.8%	13.2%	52.9%		
United States 2016/17 (Estimated)					
Production	15,148	4,296	2,309	21,753	11.0%
Exports	2,293	2,174	1,055	5,522	19.5%
Domestic Use	12,356	2,039	1,167	15,562	4.2%
Ending Stocks/Use	15.7%	7.2%	53.2%		
2015/16					
Production	13,602	3,926	2,062	19,590	
Exports	1,901	1,942	778	4,621	
Domestic Use	11,763	2,002	1,174	14,939	
Ending Stocks/Use	12.7%	5.0%	50.0%		

High Grain Stocks through March 2018

Following a sizeable fall harvest and large carry-over stocks from the summer, grain stocks on December 1, 2017 were a record 18.0 bbu. Commercial facilities and farmers continued to hold substantial volumes through March 1, 2018, storing 12.8 bbu, which is 3 percent above a year ago and 13 percent above the three-year average. Disappearance from December to March dropped 5 percent compared to last year, correlating with reduced barge and rail shipments as described in the following sections.

Rail Grain Carloads Reverse Trend along with Rising Rates in Secondary Shuttle Market

Since August 2017, the amount of grain moved by rail has been below average, but carloads have picked up in recent weeks. However, since March 17 ([GTR Figure 3](#)), weekly grain carloads (4-week average) on U.S. Class I railroads have been above the three-year average. As of April 14, grain carloads were 9 percent above the three-year average; this is in contrast to the period from August 2017 to March 2018 when average grain carloads remained roughly 3 percent lower than their three-year average. As of April 14, U.S. Class I grain carloads are 3 percent behind last year.

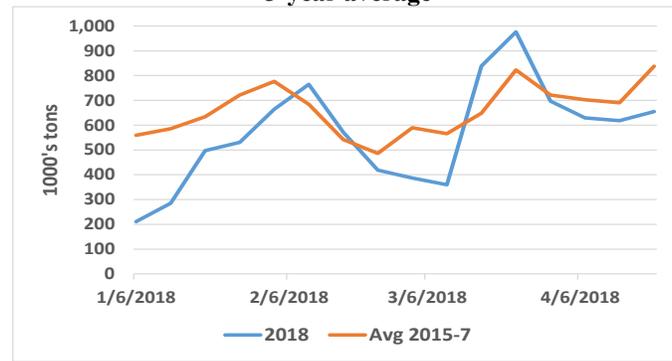
For the week ending April 19, secondary railcar market shuttle bids reached \$1,200 per car above tariff, for delivery of railcars in May on BNSF; roughly \$1,400 above the three-year average. Similarly, secondary railcar shuttle bids on Union Pacific (UP) are also higher than usual, although to a lesser degree. May bids for UP service are \$183 per car above tariff, roughly \$470 above the three-year average. The last time May shuttle bids traded in this range on the secondary market was during the major rail service disruptions of 2014, reaching \$2,500 above tariff for BNSF and \$500 above tariff for UP. In its agricultural network updates, BNSF noted it has experienced ongoing service disruptions this year due to adverse weather, scheduled maintenance projects, and capital improvement projects designed to increase long-term capacity. In a March 15 network service update, Union Pacific also noted congestion and other factors have caused service challenges across its network this year, and that it is deploying additional crews and locomotives to improve service. Train speeds for grain have slowed for BNSF since mid-January, according to

Surface Transportation performance data. BNSF’s monthly average miles-per-hour dropped 8 percent from January to April. While grain unit speeds fell from January to March for Union Pacific, they have since improved 11 percent from the week ending March 14 to April 18.

2018 Grain Barge Tonnages Below Average

As of April 21, calendar year-to-date grain barge tonnages through the locking portions of the Mississippi, Ohio, and Arkansas Rivers were 9.1 million tons; 14 percent lower than the 3-year average, and 27 percent lower than the 12.4 million tons moved during the same period in 2017. In early 2018, low water and ice delayed barge traffic on portions of the Mississippi and Illinois rivers and kept weekly tonnages below average. Water levels changed drastically in the second half of February when significant rain events caused high-water conditions that have continued into April. The high-water conditions slowed traffic and kept weekly tonnages below average except for a 2-week period in late March (Figure 1). In addition, lock repairs on the Ohio River have disrupted traffic and increased barge transit times.

Figure 1: Weekly grain barge tonnages, 2018 and 3-year average



Source: U.S. Army Corps of Engineers

High-water conditions led to increased barge freight rates, as barge operators experienced extra operating costs to handle longer transit times of barge movements. The high-water conditions have caused barge operators to reduce the size of tows, limit operations to “daylight only” in certain areas, and use towboats with high horsepower capacity to maintain safe navigation. **GTR Figure 8** shows the Illinois River barge rate for export grain has been above average since the high-water conditions began in February.

Dry-Bulk Ocean Freight Rates Mixed During First Quarter

Ocean freight rates for shipping bulk commodities, including grains, were mixed during the first quarter of 2018. The rates for shipping bulk grains from the U.S. Gulf to Japan averaged \$44.27 per metric ton (mt) during the quarter; 2 percent higher than the previous quarter, 21 percent higher than the same period last year, and 22 percent higher than the 4-year average. The cost of shipping from the Pacific Northwest (PNW) to Japan averaged \$24.25 per mt; 1 percent less than the previous quarter, but 27 percent more than the same period last year, and 24 percent more than the 4-year average. The cost of shipping a metric ton of grain from the U.S. Gulf to Europe averaged \$16.82 during the quarter—4 percent below the previous quarter, but 14 percent above the same period a year earlier, and 5 percent above the 4-year average. Many factors caused ocean rates to fluctuate during the quarter, including various holidays, China’s cut in steel production, high coal prices, a stagnant rate of new vessel deliveries, and a low rate of demolition for older vessels (see April 19, 2018 [Grain Transportation Report](#)). China has lifted restrictions on steel production, which could increase iron ore imports. According to Drewry Maritime Research, demolition will likely increase when the International Maritime Organization’s (IMO) rules and regulations on the Ballast Water Treatment System (BWTS) are implemented. However, higher ocean freight rates may incentivize owners to add new vessels or slow the retirement of older vessels, sustaining the existing vessel supply glut in the bulk market.

Diesel Prices Continue to Rise in 2018

The retail prices for diesel fuel averaged \$3.03 per gallon during the first 17 weeks of 2018, which is 46 cents higher than the average of the same period last year. As of the week ending April 23, prices increased for the fifth consecutive week, amounting to a 16-cent increase from \$2.97 to \$3.13. According to the Energy Information Agency’s latest [Short-Term Energy Outlook](#), ultra-low sulfur futures prices went up 9 cents from March 1 to April 5. Prolonged winter weather and sustained industrial production growth may have added pressure to distillate supplies and their retail prices. GTRContactUs@ams.usda.gov

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			
04/18/2018 ^p	295	826	7,361	707	9,189	4/14/2018	2,535
04/11/2018 ^r	225	1,234	5,571	891	7,921	4/7/2018	1,884
2018 YTD ^r	6,415	24,999	102,687	5,933	140,034	2018 YTD	28,847
2017 YTD ^r	12,203	31,367	100,069	9,490	153,129	2017 YTD	33,363
2018 YTD as % of 2017 YTD	53	80	103	63	91	% change YTD	86
Last 4 weeks as % of 2017 ²	51	80	105	172	100	Last 4wks % 2017	90
Last 4 weeks as % of 4-year avg. ²	49	84	126	144	114	Last 4wks % 4 yr	96
Total 2017	28,796	76,545	289,178	21,999	416,518	Total 2017	119,661
Total 2016	36,925	88,035	299,604	29,007	453,571	Total 2016	92,982

¹ Data is incomplete as it is voluntarily provided

² Compared with same 4-weeks in 2017 and prior 4-year average.

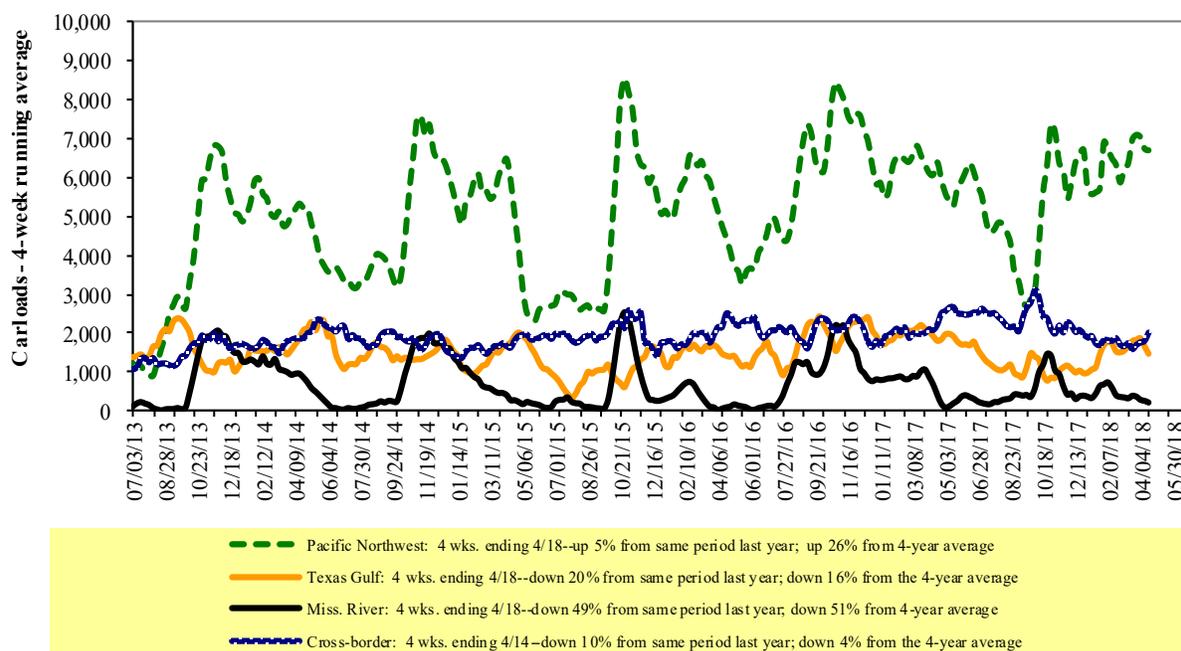
³ Cross-border weekly data is approximately 15 percent below the Association of American Railroads' reported weekly carloads received by Mexican railroads to reflect switching between KCSM and Grupo Mexico.

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

Source: Transportation & Marketing 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: 4/14/2018	East		West			U.S. total	Canada	
	CSXT	NS	BNSF	KCS	UP		CN	CP
This week	2,100	2,704	12,234	761	4,760	22,559	3,941	5,199
This week last year	1,326	2,678	11,587	968	5,007	21,566	4,404	5,107
2018 YTD	28,060	36,281	181,961	13,798	78,081	338,181	53,984	65,521
2017 YTD	28,249	42,457	169,237	14,709	92,275	346,927	59,887	64,376
2018 YTD as % of 2017 YTD	99	85	108	94	85	97	90	102
Last 4 weeks as % of 2017*	122	83	114	101	91	104	97	102
Last 4 weeks as % of 3-yr avg.**	110	82	120	104	99	109	107	108
Total 2017	89,465	142,827	578,964	50,223	289,574	1,151,053	198,633	244,766

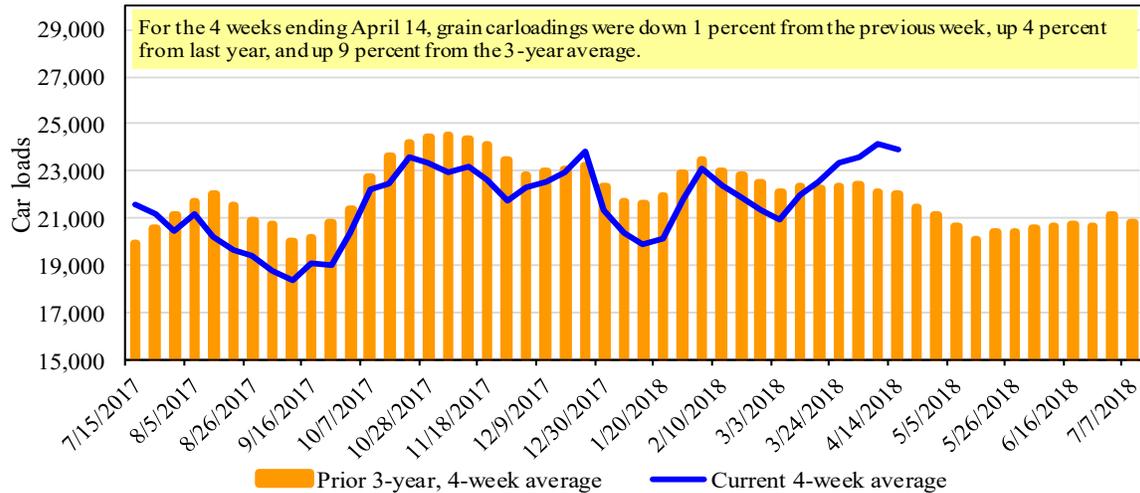
*The past 4 weeks of this year as a percent of the same 4 weeks last year.

**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: 4/19/2018		Delivery period							
		May-18	May-17	Jun-18	Jun-17	Jul-18	Jul-17	Aug-18	Aug-17
BNSF ³	COT grain units	no bids	no bids	0	0	0	no bids	0	no bids
	COT grain single-car ⁵	3	0	0	1	0	1	0	1
UP ⁴	GCAS/Region 1	no offer	no bids	no bids	no bids	no bids	no offer	n/a	n/a
	GCAS/Region 2	no offer	no bids	no offer	no bids	no offer	no offer	n/a	n/a

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

²Average premium/discount to tariff, last auction

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

⁴UP - GCAS = Grain Car Allocation System

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

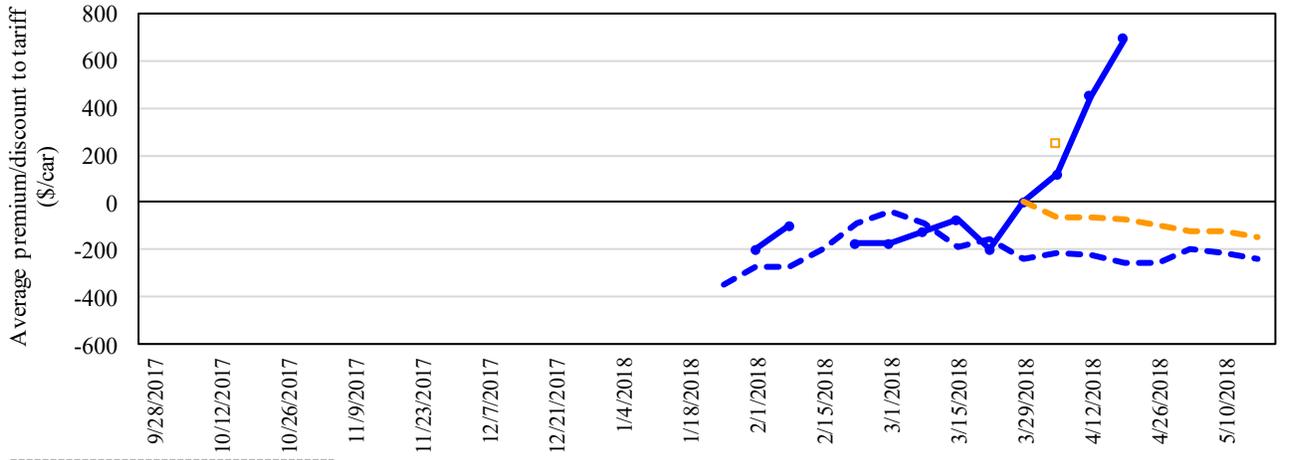
Region 2 includes: CO, IA, KS, MN, NE, WY, and Kansas City and St. Joseph, MO.

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

Source: Transportation & Marketing Programs/AMS/USDA.

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

Figure 4
Bids/Offers for Railcars to be Delivered in May 2018, Secondary Market



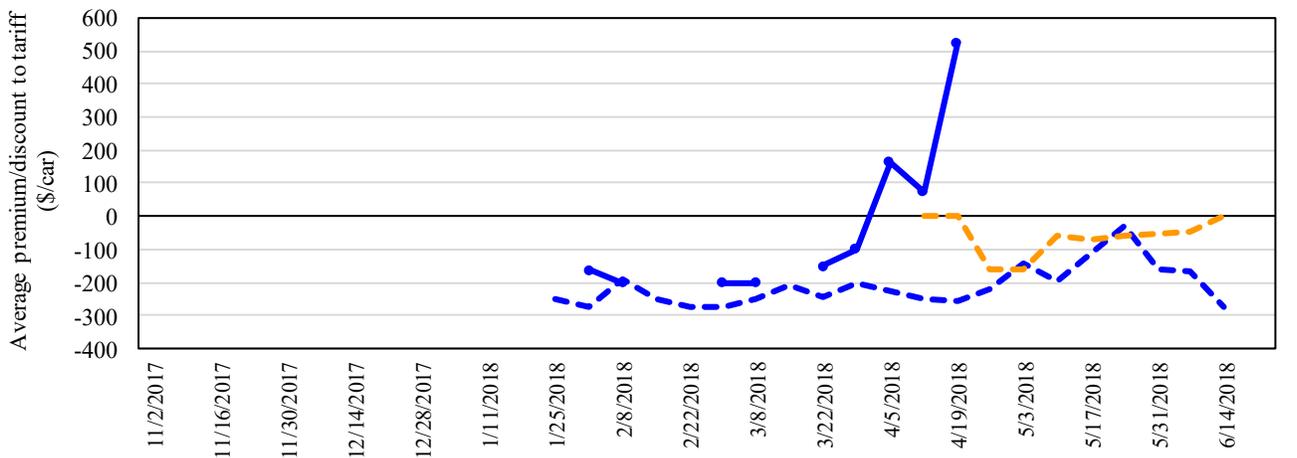
4/19/2018	BNSF	UP
Non-Shuttle	n/a	n/a
Shuttle	\$1,200	\$183

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

There were no Non-Shuttle bids/offers this week.
 Average Shuttle bids/offers rose \$242 this week and are at the peak.

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

Figure 5
Bids/Offers for Railcars to be Delivered in June 2018, Secondary Market



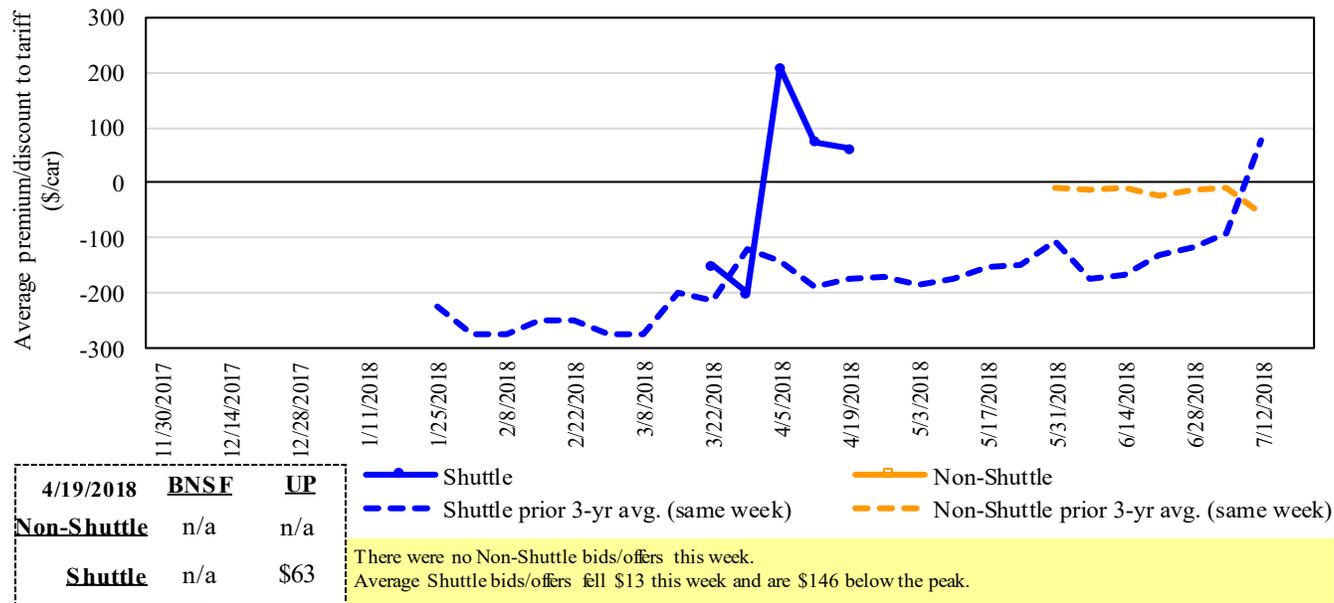
4/19/2018	BNSF	UP
Non-Shuttle	n/a	n/a
Shuttle	\$900	\$150

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

There were no Non-Shuttle bids/offers this week.
 Average Shuttle bids/offers rose \$450 this week and are at the peak.

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

Figure 6
Bids/Offers for Railcars to be Delivered in July 2018, Secondary Market



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

Table 6
Weekly Secondary Railcar Market (\$/car)¹

For the week ending: 4/19/2018		Delivery period					
		May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-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 2017	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 2017	n/a	n/a	n/a	n/a	n/a	n/a
Shuttle	BNSF-GF	1200	900	n/a	n/a	n/a	n/a
	Change from last week	400	n/a	n/a	n/a	n/a	n/a
	Change from same week 2017	1406	n/a	n/a	n/a	n/a	n/a
	UP-Pool	183	150	63	150	250	350
	Change from last week	83	75	(13)	0	0	0
	Change from same week 2017	558	450	238	n/a	n/a	(450)

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

Note: Bids listed are market INDICATORS only & are NOT guaranteed prices,

n/a = not available; GF = guaranteed freight; Pool = guaranteed pool

Sources: Transportation and Marketing Programs/AMS/USDA

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

The **tariff rail rate** is the base price of freight rail service, and together with **fuel surcharges** and any **auction and secondary rail** values constitute the full cost of shipping by rail. Typically, auction and secondary rail values are a small fraction of the full cost of shipping by rail relative to the tariff rate. High auction and secondary rail values, during times of high rail demand or short supply, can exceed the cost of the tariff rate plus fuel surcharge.

Table 7

Tariff Rail Rates for Unit and Shuttle Train Shipments¹

April, 2018	Origin region ³	Destination region ³	Tariff rate/car	Fuel surcharge per car	Tariff plus surcharge per:		Percent change Y/Y ⁴	
					metric ton	bushel ²		
Unit train								
Wheat	Wichita, KS	St. Louis, MO	\$3,883	\$96	\$39.51	\$1.08	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	\$169	\$46.76	\$1.27	5	
	Sioux Falls, SD	Galveston-Houston, TX	\$6,786	\$0	\$67.39	\$1.83	1	
	Northwest KS	Galveston-Houston, TX	\$4,816	\$185	\$49.66	\$1.35	5	
	Amarillo, TX	Los Angeles, CA	\$5,021	\$258	\$52.42	\$1.43	5	
Corn	Champaign-Urbana, IL	New Orleans, LA	\$3,931	\$191	\$40.93	\$1.04	9	
	Toledo, OH	Raleigh, NC	\$6,344	\$0	\$63.00	\$1.60	5	
	Des Moines, IA	Davenport, IA	\$2,258	\$40	\$22.82	\$0.58	1	
	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	\$119	\$37.02	\$0.94	4	
	Des Moines, IA	Los Angeles, CA	\$5,327	\$346	\$56.34	\$1.43	5	
Soybeans	Minneapolis, MN	New Orleans, LA	\$4,131	\$186	\$42.87	\$1.17	17	
	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	\$191	\$49.02	\$1.33	7	
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	2	
	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	\$304	\$60.73	\$1.65	5	
	Minneapolis, MN	Portland, OR	\$5,000	\$0	\$49.65	\$1.26	0	
Corn	Sioux Falls, SD	Tacoma, WA	\$4,960	\$0	\$49.26	\$1.25	0	
	Champaign-Urbana, IL	New Orleans, LA	\$3,731	\$191	\$38.95	\$0.99	10	
	Lincoln, NE	Galveston-Houston, TX	\$3,700	\$0	\$36.74	\$0.93	0	
	Des Moines, IA	Amarillo, TX	\$3,970	\$150	\$40.91	\$1.04	4	
	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	\$220	\$49.61	\$1.35	8
Toledo, OH		Huntsville, AL	\$4,352	\$0	\$43.22	\$1.18	3	
Grand Island, NE	Portland, OR	\$5,710	\$311	\$59.79	\$1.63	7		

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

Table 8

Tariff Rail Rates for U.S. Bulk Grain Shipments to Mexico

Date: April, 2018			Fuel			Percent	
Commodity	Origin state	Destination region	Tariff rate/car ¹	surcharge per car ²	Tariff plus surcharge per:		change ⁴ Y/Y
					metric ton ³	bushel ³	
Wheat	MT	Chihuahua, CI	\$7,459	\$0	\$76.21	\$2.07	0
	OK	Cuautitlan, EM	\$6,631	\$132	\$69.10	\$1.88	1
	KS	Guadalajara, JA	\$7,309	\$323	\$77.98	\$2.12	2
	TX	Salinas Victoria, NL	\$4,292	\$81	\$44.68	\$1.21	2
Corn	IA	Guadalajara, JA	\$8,313	\$293	\$87.93	\$2.23	2
	SD	Celaya, GJ	\$7,700	\$0	\$78.68	\$2.00	2
	NE	Queretaro, QA	\$8,013	\$278	\$84.72	\$2.15	3
	SD	Salinas Victoria, NL	\$6,743	\$0	\$68.90	\$1.75	2
	MO	Tlalnepantla, EM	\$7,379	\$271	\$78.16	\$1.98	3
	SD	Torreón, CU	\$7,300	\$0	\$74.59	\$1.89	2
Soybeans	MO	Bojay (Tula), HG	\$8,134	\$273	\$85.90	\$2.34	-5
	NE	Guadalajara, JA	\$8,692	\$298	\$91.85	\$2.50	-2
	IA	El Castillo, JA	\$8,960	\$0	\$91.55	\$2.49	0
	KS	Torreón, CU	\$7,489	\$219	\$78.75	\$2.14	1
Sorghum	NE	Celaya, GJ	\$7,345	\$271	\$77.82	\$1.97	3
	KS	Queretaro, QA	\$7,819	\$165	\$81.58	\$2.07	4
	NE	Salinas Victoria, NL	\$6,452	\$133	\$67.28	\$1.71	5
	NE	Torreón, CU	\$6,790	\$211	\$71.53	\$1.82	4

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

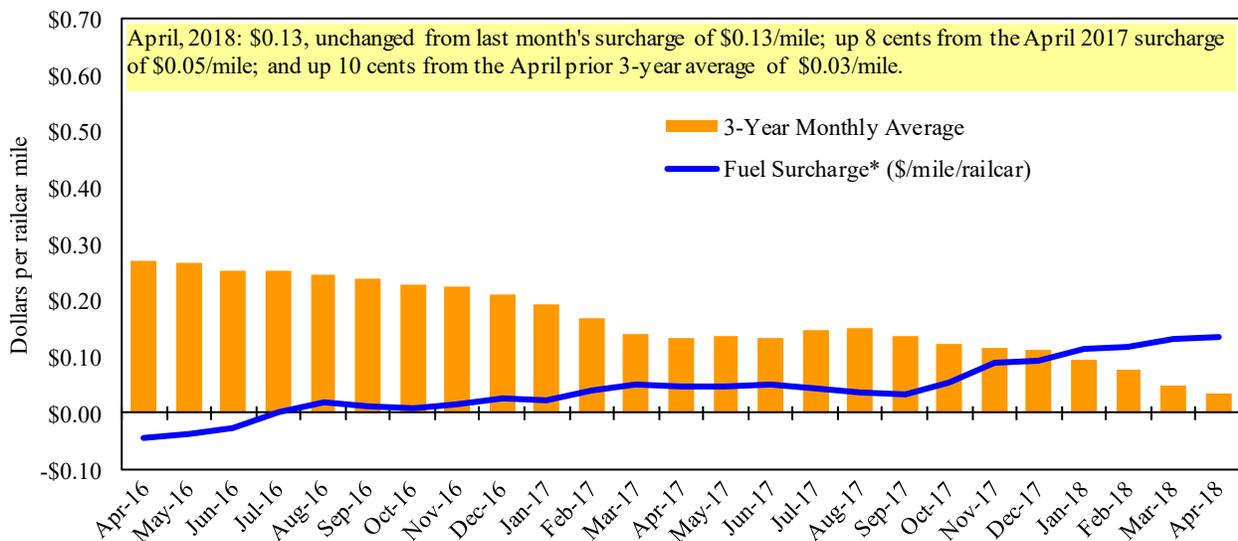
²Fuel surcharge adjusted to reflect the change in Ferrocarril Mexicano, S.A. de C.V railroad fuel surcharge policy as of 10/01/2009

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

⁴Percentage change calculated using tariff rate plus fuel surcharge

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

Figure 7

Railroad Fuel Surcharges, North American Weighted Average¹

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

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

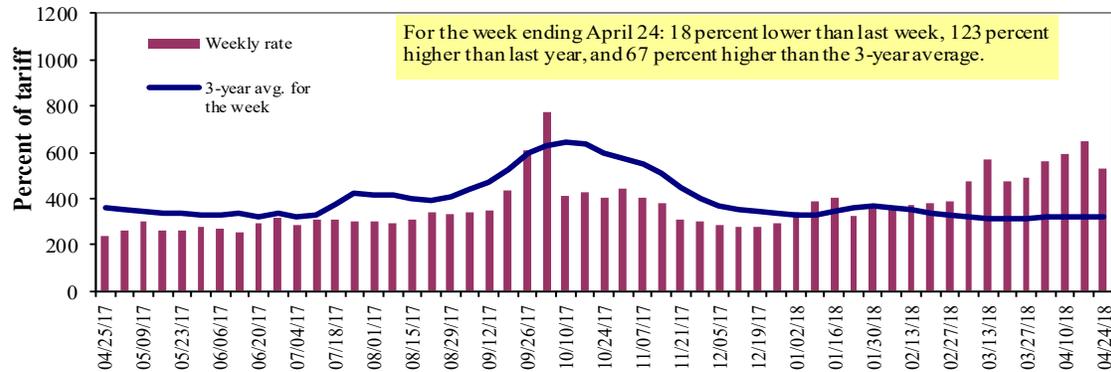
** CSX strike price changed from \$2.00/gal. to \$3.75/gal. starting January 1, 2015.

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

Barge Transportation

Figure 8

Illinois River Barge Freight Rate^{1,2}



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

Source: Transportation & Marketing Programs/AMS/USDA

Table 9

Weekly Barge Freight Rates: Southbound Only

		Twin Cities	Mid- Mississippi	Lower Illinois River	St. Louis	Cincinnati	Lower Ohio	Cairo- Memphis
Rate¹	4/24/2018	600	530	530	420	475	475	375
	4/17/2018	675	658	645	533	583	583	473
\$/ton	4/24/2018	37.14	28.20	24.59	16.76	22.28	19.19	11.78
	4/17/2018	41.78	35.01	29.93	21.27	27.34	23.55	14.85
Current week % change from the same week:								
	Last year	109	123	123	147	184	184	138
	3-year avg. ²	68	64	67	75	98	98	76
Rate¹	May	563	493	493	388	425	425	350
	July	513	470	470	363	375	375	325

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

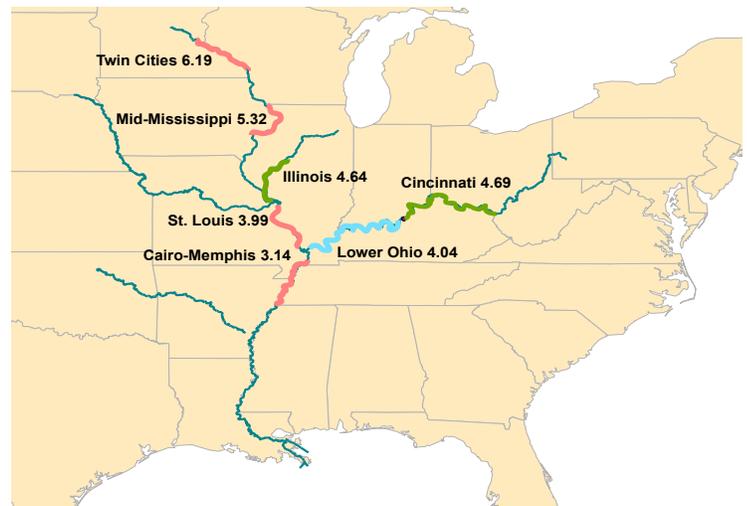
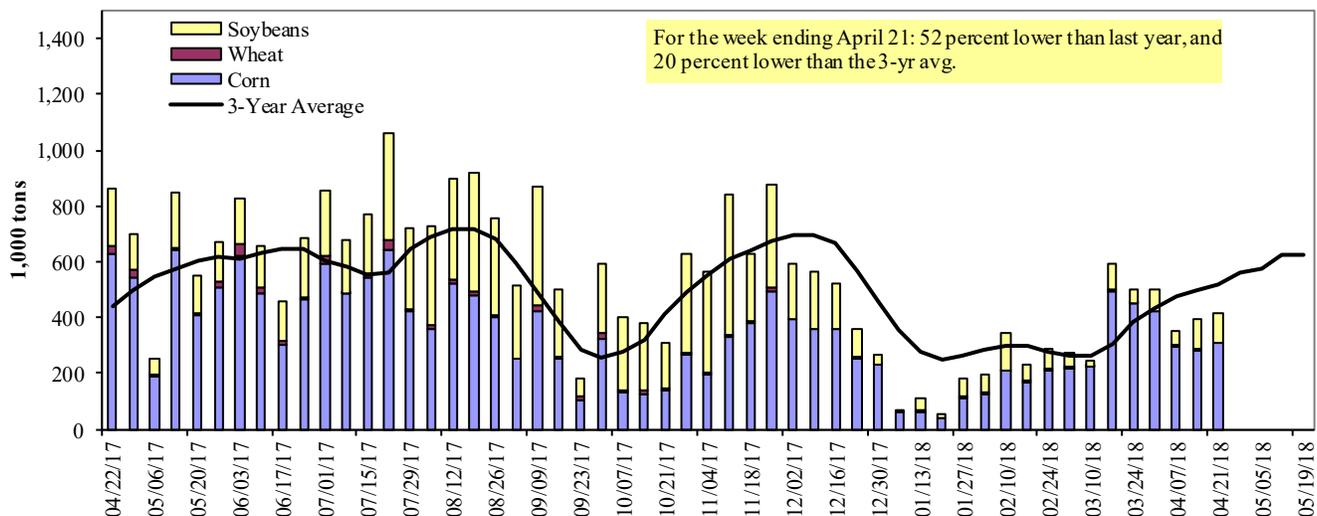


Figure 10

Barge Movements on the Mississippi 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 04/21/2018	Corn	Wheat	Soybeans	Other	Total
Mississippi River					
Rock Island, IL (L15)	149	0	59	3	211
Winfield, MO (L25)	145	0	82	0	227
Alton, IL (L26)	286	0	103	0	390
Granite City, IL (L27)	312	0	105	0	417
Illinois River (L8)	105	2	29	0	136
Ohio River (L52)	111	2	38	0	150
Arkansas River (L1)	1	28	59	0	88
Weekly total - 2018	424	30	201	0	655
Weekly total - 2017	686	83	257	3	1,030
2018 YTD ¹	5,271	473	3,312	47	9,103
2017 YTD	7,426	702	4,135	133	12,396
2018 as % of 2017 YTD	71	67	80	35	73
Last 4 weeks as % of 2017 ²	78	46	91	96	79
Total 2017	22,242	2,210	16,123	360	40,936

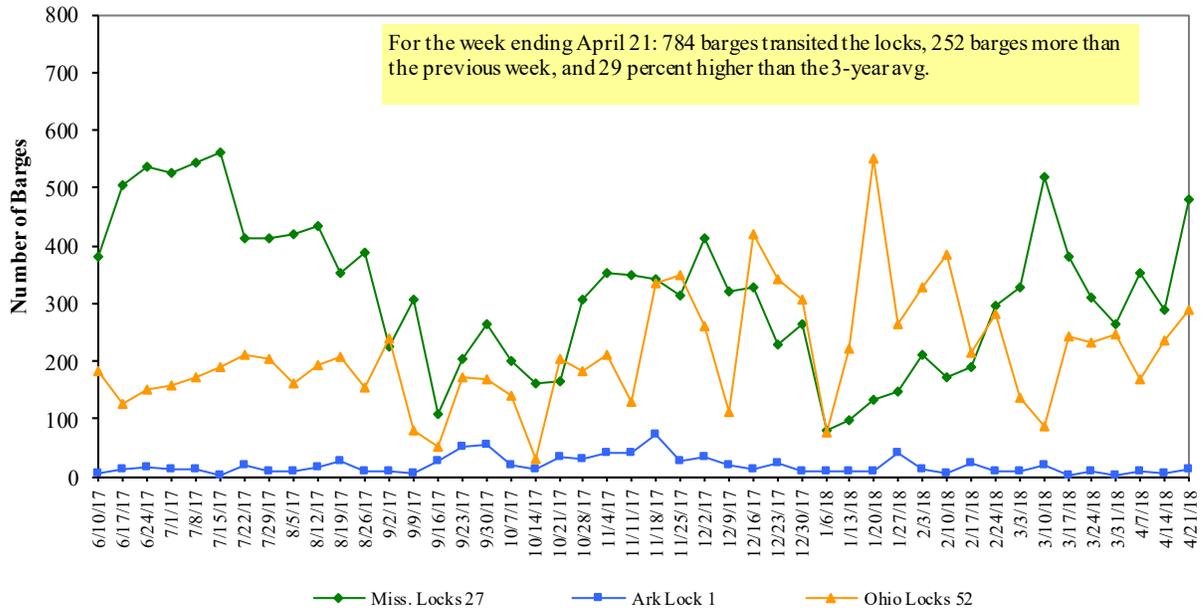
¹ Weekly total, YTD (year-to-date) and calendar year total includes Miss/27, Ohio/52, and Ark/1; "Other" refers to oats, barley, sorghum, and rye.

² As a percent of same period in 2017.

Note: Total may not add exactly, due to rounding.

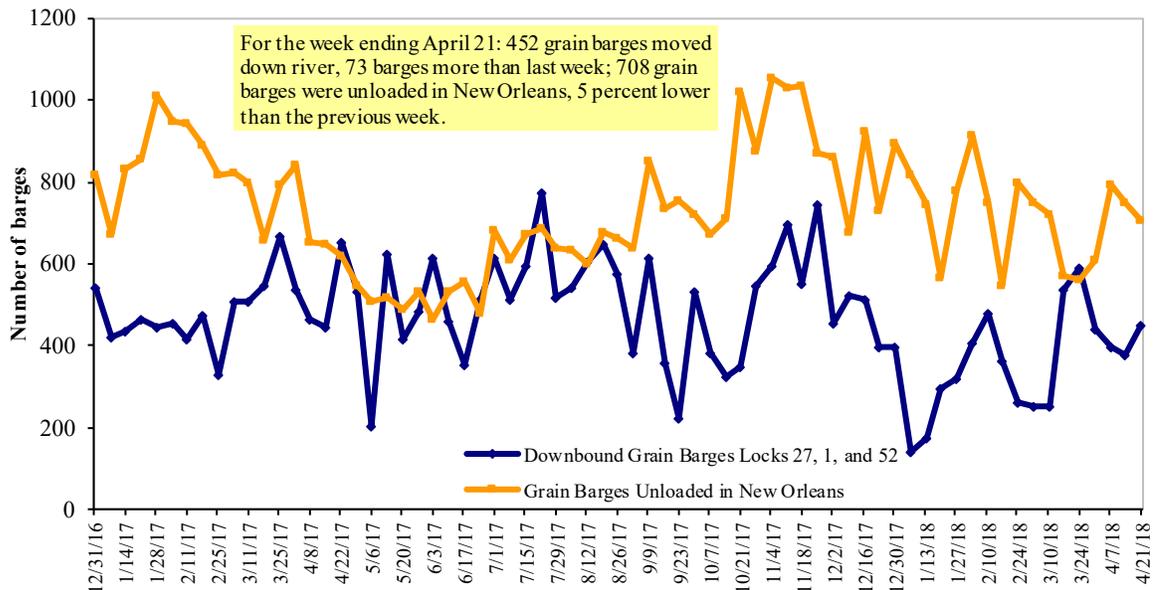
Source: U.S. Army Corps of Engineers

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, Week Ending 4/23/2018 (US \$/gallon)

Region	Location	Price	Change from	
			Week ago	Year ago
I	East Coast	3.142	0.026	0.510
	New England	3.171	0.022	0.521
	Central Atlantic	3.295	0.020	0.510
	Lower Atlantic	3.028	0.030	0.508
II	Midwest ²	3.047	0.031	0.517
III	Gulf Coast ³	2.936	0.026	0.478
IV	Rocky Mountain	3.181	0.044	0.519
V	West Coast	3.616	0.033	0.741
	West Coast less California	3.366	0.040	0.580
	California	3.815	0.028	0.868
Total	U.S.	3.133	0.029	0.538

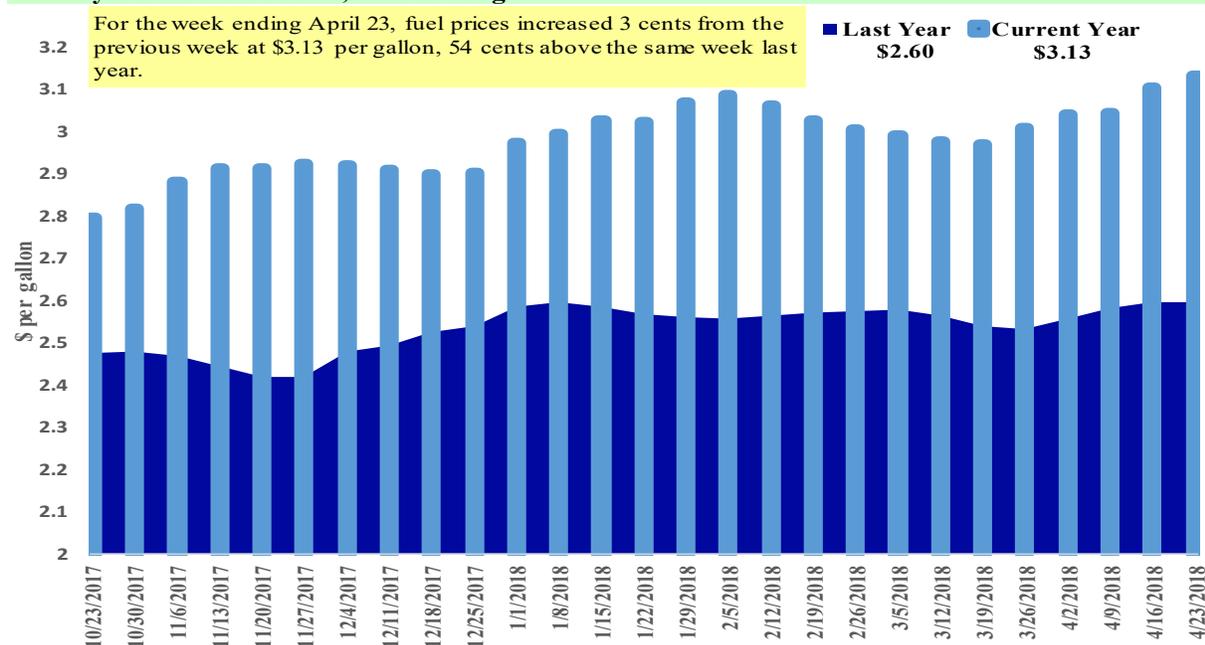
¹Diesel fuel prices include all taxes. Prices represent an average of all types of diesel fuel.

²Same as North Central ³Same as South Central

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

Figure 13

Weekly Diesel Fuel Prices, U.S. Average



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

Grain Exports

Table 12

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

For the week ending	Wheat						Corn	Soybeans	Total
	HRW	SRW	HRS	SWW	DUR	All wheat			
Export Balances¹									
4/12/2018	770	462	1,117	778	65	3,192	21,550	11,635	36,376
This week year ago	1,881	407	1,691	1,325	129	5,433	15,444	7,130	28,007
Cumulative exports-marketing year²									
2017/18 YTD	8,315	1,978	4,827	4,351	309	19,780	27,735	42,401	89,915
2016/17 YTD	9,646	2,016	6,760	3,420	378	22,220	34,613	48,495	105,328
YTD 2017/18 as % of 2016/17	86	98	71	127	82	89	80	87	85
Last 4 wks as % of same period 2016/17	52	126	78	71	51	70	146	147	132
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 Importers¹ of U.S. Corn

For the week ending 4/12/2018	Total Commitments ²		% change current MY from last MY	Exports ³ 3-year avg 2014-2016
	2017/18	2016/17		
	Current MY	Last MY		
- 1,000 mt -				
Mexico	12,349	12,115	2	12,297
Japan	8,966	9,724	(8)	11,450
Korea	4,040	5,044	(20)	4,494
Colombia	3,462	3,856	(10)	4,179
Peru	2,498	2,532	(1)	2,693
Top 5 Importers	31,316	33,270	(6)	35,113
Total US corn export sales	49,285	50,056	(2)	49,308
% of Projected	87%	86%		
Change from prior week²	1,092	756		
Top 5 importers' share of U.S. corn export sales	64%	66%		71%
USDA forecast, April 2018	56,616	58,346	(3)	
Corn Use for Ethanol USDA forecast, April 2018	141,605	137,973	3	

¹ Based on FAS Marketing Year Ranking Reports for 2016/17 - www.fas.usda.gov; Marketing year (MY) = Sep 1 - Aug 31.

² Cumulative Exports (shipped) + Outstanding Sales (unshipped), FAS Weekly Export Sales Report, or Export Sales Query--
<http://www.fas.usda.gov/esquery/>. Total commitments change (net sales) from prior week could include revisions from
previous week's outstanding sales or accumulated sales.

³ FAS Marketing Year Ranking Reports - <http://apps.fas.usda.gov/export-sales/myrkaug.htm>; 3-yr average

Table 14

Top 5 Importers¹ of U.S. Soybeans

For the week ending 4/12/2018	Total Commitments ²		% change current MY from last MY	Exports ³ 3-yr avg. 2014-2016
	2017/18	2016/17		
	Current MY	Last MY		
	- 1,000 mt -			- 1,000 mt -
China	28,877	35,451	(19)	31,881
Mexico	3,870	3,319	17	3,452
Indonesia	1,773	1,720	3	1,987
Japan	1,816	1,841	(1)	2,067
Netherlands	1,185	1,408	(16)	2,098
Top 5 importers	37,521	43,740	(14)	41,486
Total US soybean export sales	54,035	55,625	(3)	52,919
% of Projected	96%	94%		
Change from prior week ²	1,041	135		
Top 5 importers' share of U.S. soybean export sales	69%	79%		78%
USDA forecast, April 2018	56,267	59,237	95	

(n) indicates negative number.

¹ Based on FAS Marketing Year Ranking Reports for 2016/17 - 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 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 4/12/2018	Total Commitments ²		% change current MY from last MY	Exports ³ 3-yr avg 2014-2016
	2017/18	2016/17		
	Current MY	Last MY		
	- 1,000 mt -			- 1,000 mt -
Japan	2,742	2,679	2	2,620
Mexico	2,857	3,150	(9)	2,743
Philippines	2,560	2,540	1	2,395
Brazil	128	1,215	(89)	862
Nigeria	1,186	1,559	(24)	1,254
Korea	1,421	1,350	5	1,104
China	894	1,357	(34)	1,623
Taiwan	1,106	1,040	6	768
Indonesia	1,130	1,078	5	726
Colombia	614	822	(25)	635
Top 10 importers	14,638	16,791	(13)	14,729
Total US wheat export sales	22,971	27,653	(17)	22,804
% of Projected	91%	96%		
Change from prior week ²	(67)	414		
Top 10 importers' share of U.S. wheat export sales	64%	61%		65%
USDA forecast, April 2018	25,204	28,747	(12)	

(n) indicates negative number.

¹ Based on FAS Marketing Year Ranking Reports for 2016/17 - 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 04/19/18	Previous Week*	Current Week as % of Previous	2018 YTD*	2017 YTD*	2018 YTD as % of 2017 YTD	Last 4-weeks as % of:		2017 Total*
							Last Year	Prior 3-yr. avg.	
Pacific Northwest									
Wheat	396	255	155	3,682	4,379	84	86	112	14,805
Corn	599	514	116	6,138	4,723	130	155	184	10,928
Soybeans	72	0	n/a	3,732	3,757	99	62	74	13,246
Total	1,067	770	139	13,552	12,859	105	112	138	38,978
Mississippi Gulf									
Wheat	108	113	95	1,445	1,465	99	102	116	4,198
Corn	819	836	98	9,817	12,337	80	110	133	28,690
Soybeans	277	238	117	8,227	9,797	84	59	86	32,911
Total	1,205	1,187	101	19,489	23,598	83	94	119	65,800
Texas Gulf									
Wheat	90	121	75	1,469	2,147	68	48	79	6,354
Corn	31	0	n/a	194	316	61	83	118	733
Soybeans	0	0	n/a	0	0	n/a	n/a	n/a	292
Total	122	121	101	1,663	2,464	67	52	84	7,379
Interior									
Wheat	46	39	118	470	576	82	77	81	1,727
Corn	185	198	94	2,311	2,331	99	98	126	8,758
Soybeans	129	159	81	1,869	1,639	114	123	153	5,508
Total	360	396	91	4,650	4,546	102	104	129	15,993
Great Lakes									
Wheat	12	4	327	34	70	49	24	37	711
Corn	23	0	n/a	23	0	n/a	n/a	152	192
Soybeans	0	0	n/a	0	53	0	0	0	890
Total	35	4	968	57	123	47	33	50	1,793
Atlantic									
Wheat	0	0	n/a	64	37	174	0	0	46
Corn	31	0	n/a	31	5	682	682	399	32
Soybeans	17	73	24	749	764	98	185	295	2,001
Total	48	73	66	844	805	105	200	212	2,079
U.S. total from ports*									
Wheat	652	532	123	7,163	8,674	83	78	101	27,841
Corn	1,689	1,549	109	18,513	19,712	94	121	147	49,333
Soybeans	495	470	105	14,578	16,008	91	74	103	54,847
Total	2,836	2,550	111	40,254	44,395	91	99	125	132,021

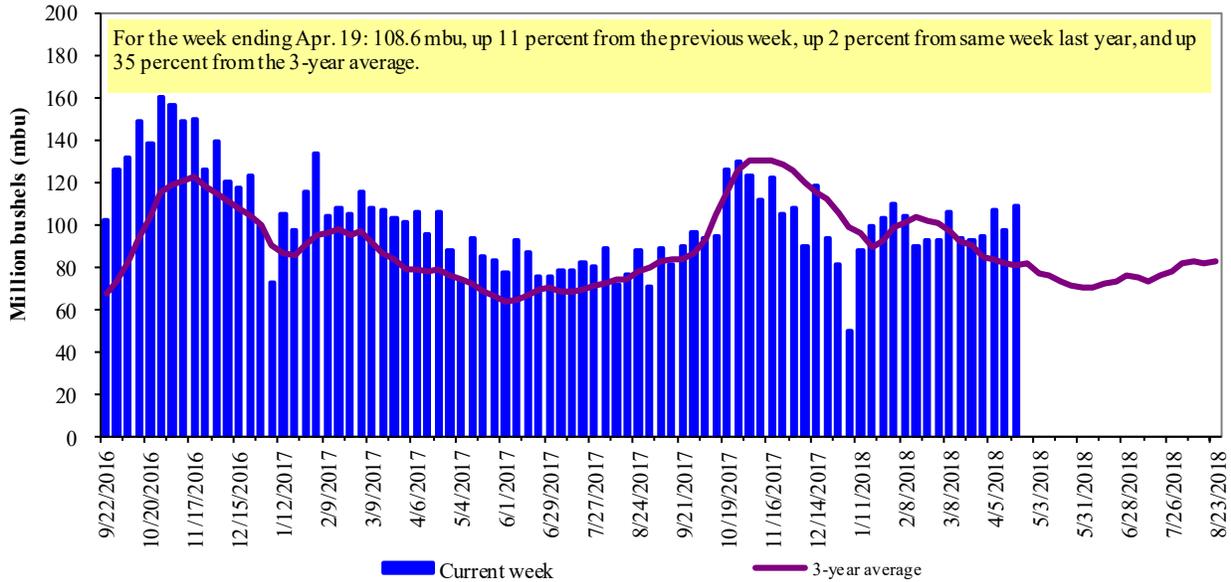
*Data includes revisions from prior weeks; some regional totals may not add exactly due to rounding.

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

The United States exports approximately one-quarter of the grain it produces. On average, this includes nearly 45 percent of U.S.-grown wheat, 35 percent of U.S.-grown soybeans, and 20 percent of the U.S.-grown corn. Approximately 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)

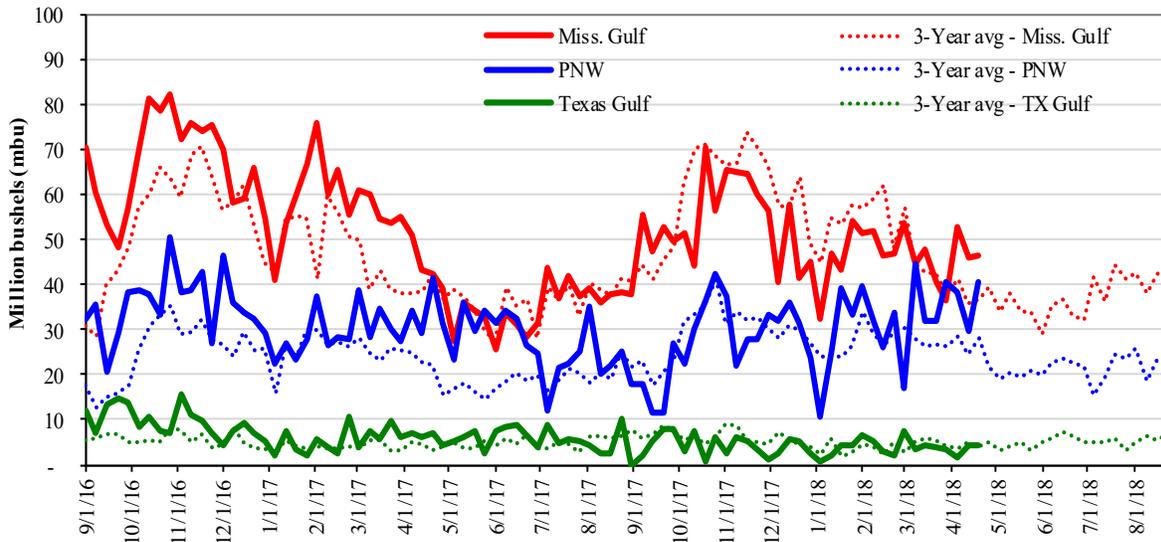


Source: Grain Inspection, Packers and Stockyards Administration/USDA (www.gipsa.usda.gov)

Note: 3-year average consists of 4-week running average

Figure 15

U.S. Grain Inspections: U.S. Gulf and PNW¹ (wheat, corn, and soybeans)



<u>Week ending 04/19/18 inspections (mbu):</u>		<u>Percent change from:</u>			
Mississippi Gulf:	46.4	Last Week:	up 1	up 3	up 1
PNW:	40.8	Last Year (same week):	up 9	down 35	up 3
Texas Gulf:	4.6	3-yr avg. (4-wk. mov. Avg):	up 22	up 10	up 21
					up 52

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

Ocean Transportation

Table 17

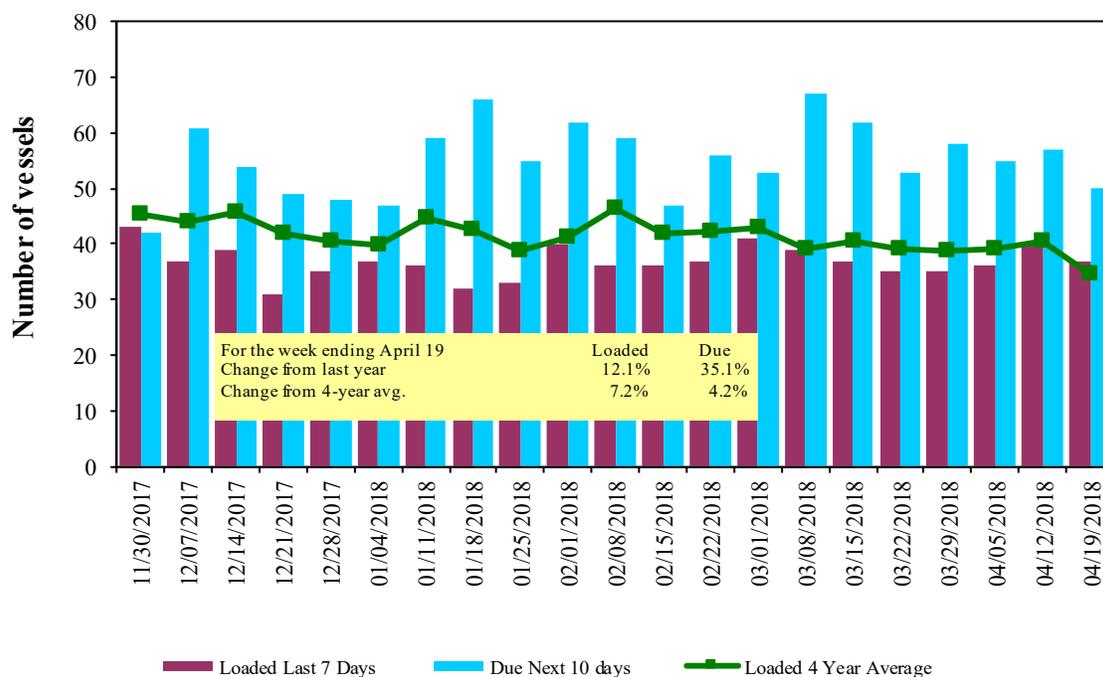
Weekly Port Region Grain Ocean Vessel Activity (number of vessels)

Date	Gulf			Pacific Northwest
	In port	Loaded 7-days	Due next 10-days	In port
4/19/2018	55	37	50	28
4/12/2018	51	40	57	28
2017 range	(25..66)	(28..54)	(37..87)	(5..44)
2017 avg	46	38	56	20

Source: Transportation & Marketing Programs/AMS/USDA

Figure 16

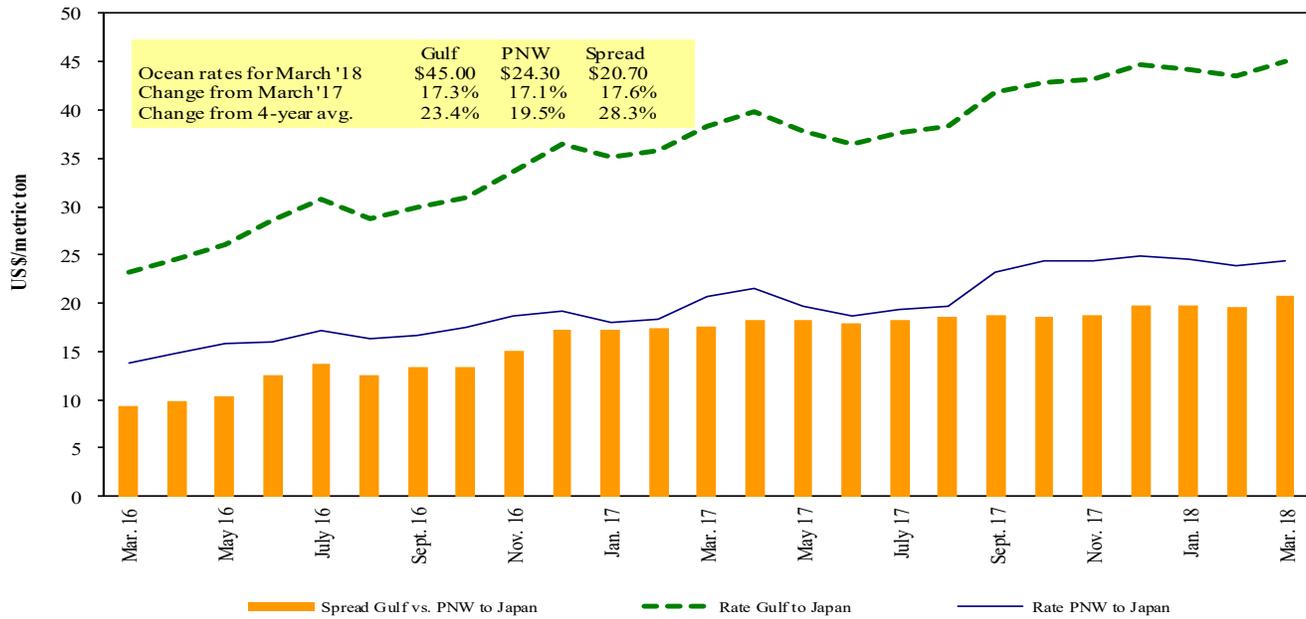
U.S. Gulf Vessel Loading Activity



Source: Transportation & Marketing Programs/AMS/USDA
¹U.S. Gulf includes Mississippi, Texas, and East Gulf

Figure 17

Grain Vessel Rates, U.S. to Japan



Data Source: O'Neil Commodity Consulting

Table 18

Ocean Freight Rates For Selected Shipments, Week Ending 04/21/2018

Export region	Import region	Grain types	Loading date	Volume loads (metric tons)	Freight rate (US\$/metric ton)
U.S. Gulf	Djibouti	Sorghum	Apr 16/26	18,200	69.87*
U.S. Gulf	Rotterdam	Heavy Grain	Apr 17/30	65,000	21.00
U.S. Gulf	Somalia	Sorghum	Apr 16/26	40,000	130.77*
PNW	Bangladesh	Wheat	Apr 6/16	43,500	46.61*
Brazil	China	Heavy Grain	May 3/31	60,000	35.50
Brazil	China	Heavy Grain	Apr 25/30	60,000	35.00
Brazil	China	Heavy Grain	Apr 20/30	60,000	34.00
Brazil	China	Heavy Grain	Apr 3/12	66,000	36.25
Brazil	China	Heavy Grain	Mar 12/21	66,000	32.00
Brazil	China	Heavy Grain	Mar 1/10	66,000	30.00
EC S. America	China	Heavy Grain	Mar 15/24	60,000	33.50

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

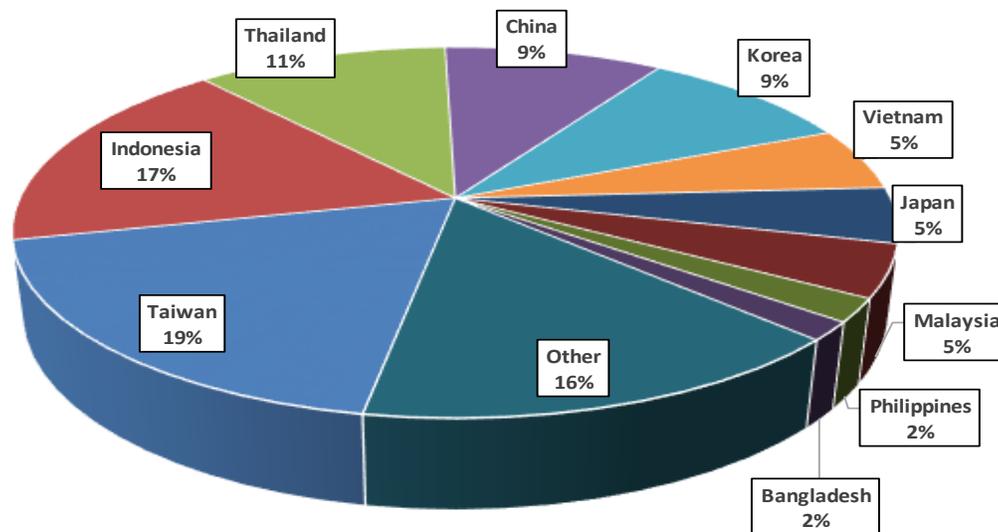
*50 percent of food aid from the United States is required to be shipped on U.S.-flag vessels.

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–December 2017

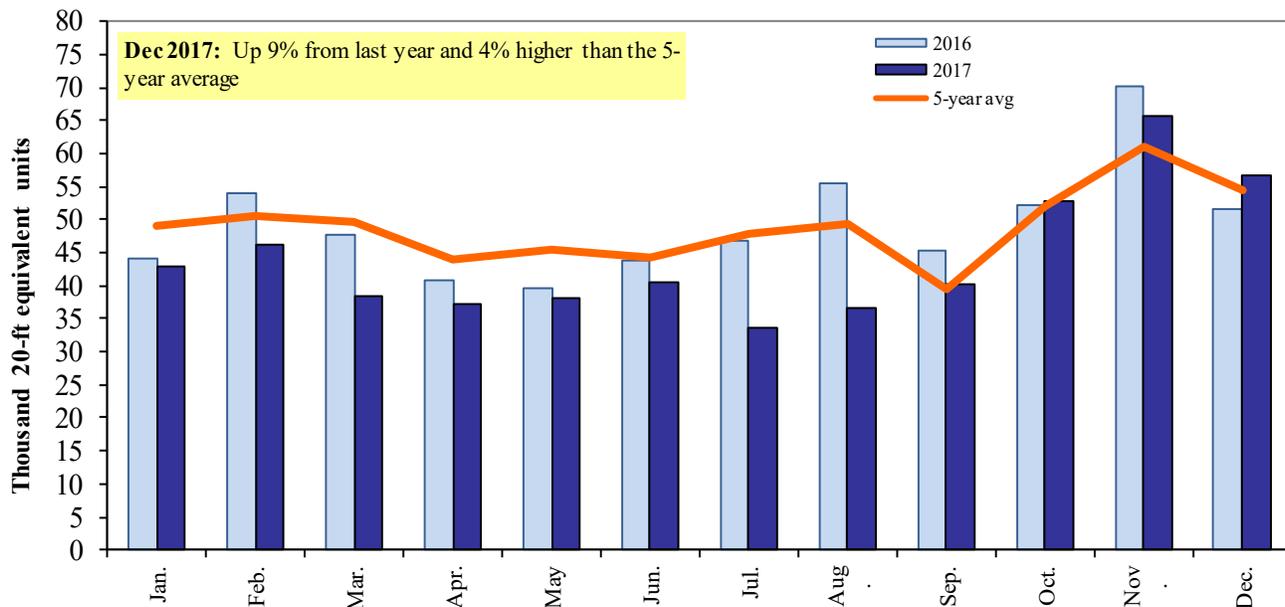


Service (PIERS) data

Note: The following Harmonized Tariff Codes are used to calculate containerized grains movements: 100190, 100200, 100300, 100400, 100590, 100700, 110100, 230310, 110220, 110290, 120100, 230210, 230990, 230330, and 120810.

Figure 19

Monthly Shipments of Containerized Grain to Asia



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

Note: The following Harmonized Tariff Codes are used to calculate containerized grains movements: 100190, 100200, 100300, 100400, 100590, 100700, 110100, 110220, 110290, 120100, 120810, 230210, 230310, 230330, and 230990.

Contacts and Links

Coordinators

Surajudeen (Deen) Olowolayemo	surajudeen.olowolayemo@ams.usda.gov	(202) 720 - 0119
Pierre Bahizi	pierre.bahizi@ams.usda.gov	(202) 690 - 0992
Adam Sparger	adam.sparger@ams.usda.gov	(202) 205 - 8701

Weekly Highlight Editors

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

Grain Transportation Indicators

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

Rail Transportation

Adam Sparger	adam.sparger@ams.usda.gov	(202) 205 - 8701
Johnny Hill	johnny.hill@ams.usda.gov	(202) 690 - 3295
Jesse Gastelle	jesse.gastelle@ams.usda.gov	(202) 690 - 1144
Peter Caffarelli	petera.caffarelli@ams.usda.gov	(202) 690 - 3244

Barge Transportation

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

Truck Transportation

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

Grain Exports

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

Ocean Transportation

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

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