United States Department of Agriculture

Grain Transportation Report

A weekly publication of the Agricultural Marketing Service
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May 17, 2018

Contents

The next release is May 24, 2018

WEEKLY HIGHLIGHTS

USDA's Initial Crop Projections for 2018/19

Last week, USDA released its May World Agricultural Supply and Demand Estimates report, which presents the Department's initial assessment of U.S. and world crop supply and demand prospects for 2018/19. USDA projects the United States will produce 522.7 million metric tons (mmt) of corn, soybeans, and wheat in 2018/19, down 3 percent from last year and the 3-year average. Despite the drop in grain production, grain movements could increase slightly in the upcoming marketing year, as USDA forecasts grain exports to grow 2 percent and domestic consumption to remain stable compared to 2017/18. These projections will continue to be revised in the coming months. As the report notes, "Due to spring planting still underway in the Northern Hemisphere, and being several months away in the Southern Hemisphere, these projections are highly tentative."

Bulk Ocean Freight Rates Remain Relatively Stable

Ocean freight rates for shipping bulk grains have remained relatively stable for the past 6 weeks. As of the week ending May 10, the rate for shipping a metric ton (mt) of grain, from the U.S. Gulf to Japan was $44 and from the Pacific Northwest to Japan was $24.50. Over the past 6 weeks, rates have remained unchanged, fluctuating within a 1 to 2 percent range. According to the May 10 *Transportation and Export Report,* by O'Neil Commodity Consulting, rates have remained soft because the much-anticipated improvement in cargo demand has not yet materialized.

Total Grain Inspections Down but Wheat and Soybeans Up

For the week ending May 10, **total inspections of grain** (corn, wheat, and soybeans) for export from all major U.S. export regions reached 2.6 million metric tons (mmt); down 5 percent from the previous week, up 9 percent from last year, and 32 percent above the 3-year average. Although wheat and soybean inspections increased 22 and 23 percent, respectively, from the previous week the increases could not offset the 19 percent decrease in corn inspections. Grain inspections were down 11 percent from the past week in the Pacific (PNW) and down 1 percent in the Mississippi Gulf. Current outstanding (unshipped) export sales are up for soybeans but down for corn and wheat.

Snapshots by Sector

Export Sales

For the week ending May 3, **unshipped balances** of wheat, corn, and soybeans totaled 32.7 mmt, up 31 percent from the same time last year. Net weekly **wheat export sales** were .035 mmt, down 85 percent from the previous week. Net **corn export sales** were .696 mmt, down 27 percent from the previous week. Net **soybean export sales** totaled .354 mmt, down 15 percent from the previous week.

Rail

U.S. Class I railroads originated 25,100 **grain carloads** for the week ending May 5; up 5 percent from the previous week, 15 percent from last year, and 29 percent from the 3-year average.

Average May shuttle **secondary railcar** bids/offers, per car, were $381 above tariff for the week ending May 10, up $190 from last week, and $544 higher than last year. Average non-shuttle secondary railcar bids/offers, per car, were $700 above tariff, down $368 from last week, and $788 higher than last year.

Barge

For the week ending May 12, **barge grain movements** totaled 834,668 tons, 6 percent lower than the previous week and down 16 percent from the same period last year.

For the week ending May 12, 526 grain barges **moved down river**, 69 barges less than the previous week. There were 759 grain barges **unloaded in New Orleans**, 10 percent higher than the previous week.

Ocean

For the week ending May 10, 36 **ocean-going grain vessels** were loaded in the Gulf, 29 percent more than the same period last year. Forty-nine vessels are expected to be loaded within the next 10 days, 6 percent less than the same period last year.

For the week ending May 10, the ocean freight rate for shipping bulk grain from the Gulf to Japan was $44.00 per metric ton, down 1 percent from the previous week. The cost of shipping from the PNW to Japan was $24.50 per metric ton, up 2 percent from the previous week.

Fuel

For the week ending May 14, the U.S. average **diesel fuel price** increased 7 cents from the previous week to $3.24 per gallon, 70 cents higher than the same week last year

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Feature Article/Calendar

Wheat Transportation Costs Steady; Landed Costs Mixed During First Quarter

During the first quarter of 2018, transportation costs for shipping wheat from Kansas and North Dakota to Japan were down from the previous quarter. Shipping rates were mostly down from the fourth quarter of 2017, except for slight increases in rail rates from Kansas to the Pacific Northwest (PNW) and ocean freight rates through the Gulf. Rail rates were mostly unchanged from quarter to quarter. Year-to-year transportation costs for shipping wheat—from each state through the PNW and Gulf—increased primarily due to higher trucking and ocean rates (*see tables 1 and 2*). Higher farm values in Kansas and North Dakota resulted in higher year-to-year landed costs for shipping wheat. First quarter exports of wheat to Japan increased year to year, despite lower total exports of wheat to other destinations.

Quarter-to-quarter transportation costs for shipping wheat—through the PNW to Japan from Kansas—were unchanged, but North Dakota costs decreased 1 percent. From quarter to quarter, transportation costs to ship through the Gulf were unchanged for Kansas and North Dakota. Year-to-year transportation costs for shipping wheat to Japan, through the PNW, were up 13 percent from Kansas and 9 percent from North Dakota. For the same period, transportation costs for shipping wheat through the Gulf increased 13 percent from Kansas and 10 percent from North Dakota (*see tables 1 and 2).*

Table 1: Quarterly rate comparisons for shipping Kansas & North Dakota wheat to Japan through the PNW

	Kansas					North Dakota				
Mode	2017 1st qtr	2017 4th qtr	2018 1st qtr	Year-to-Year change	Quarterly change	2017 1st qtr	2017 4th qtr	2018 1st qtr	Year-to-Year change	Quarterly change
			$/metric ton	%	%			$/metric ton	%	%
Truck	11.14	14.39	13.87	24.51	-3.61	11.14	14.39	13.87	24.51	-3.61
Rail[1]	57.41	59.73	60.42	5.24	1.16	55.67	55.72	55.67	0.00	-0.09
Ocean vessel	19.02	24.56	24.25	27.50	-1.26	19.02	24.56	24.25	27.50	-1.26
Transportation Costs	87.57	98.68	98.54	12.53	-0.14	85.83	94.67	93.79	9.27	-0.93
Farm Value[2]	125.54	128.97	155.92	24.20	20.90	180.78	209.32	209.32	15.79	0.00
Total Landed Cost	213.11	227.65	254.46	19.40	11.78	266.61	303.99	303.11	13.69	-0.29
Transport % of landed cost	41.09	43.35	38.73			32.19	31.14	30.94		

Table 2: Quarterly rate comparisons for shipping Kansas & North Dakota wheat to Japan through the Gulf

	Kansas					North Dakota				
Mode	2017 1st qtr	2017 4th qtr	2018 1st qtr	Year-to-Year change	Quarterly change	2017 1st qtr	2017 4th qtr	2018 1st qtr	Year-to-Year change	Quarterly change
			$/metric ton	%	%			$/metric ton	%	%
Truck	11.14	14.39	13.87	24.51	-3.61	11.14	14.39	13.87	24.51	-3.61
Rail[1]	40.50	41.42	41.42	2.27	0.00	59.05	58.90	58.90	-0.25	0.00
Ocean vessel	36.45	43.56	44.27	21.45	1.63	36.45	43.56	44.27	21.45	1.63
Transportation Costs	88.09	99.37	99.56	13.02	0.19	106.64	116.85	117.04	9.75	0.16
Farm Value[2]	125.54	128.97	155.92	24.20	20.90	180.78	209.32	209.32	15.79	0.00
Total Landed Cost	213.63	228.34	255.48	19.59	11.89	287.42	326.17	326.36	13.55	0.06
Transport % of landed cost	41.23	43.52	38.97			37.10	35.82	35.86		

Source: USDA/AMS/TMP

[1] Rail tariff rates include fuel surcharges and revisions for heavy axle railcars and shuttle trains. The rail tariff rate is a base price of rail freight rates, but during periods of high rail demand or car shortages, high auction and secondary market rates could exceed the base rail tariffs per car

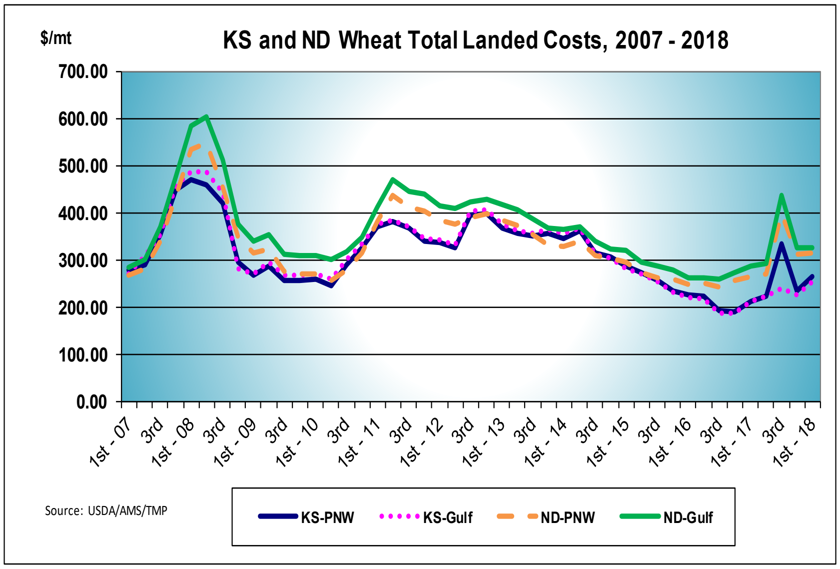
[2] Source: USDA/NASS, wheat prices for North Dakota (mainly HRS) and Kansas (mainly HRW)

Quarter-to-quarter ocean freight rates for shipping wheat to Japan decreased 1 percent in the PNW, but increased 2 percent in the Gulf for the same period (*see tables 1, 2*). Quarter-to-quarter ocean rates in the Gulf continued to increase, boosted by increased demand for grain and other bulk products (*see April 19, 2018 GTR*). Compared to last year, ocean rates for shipping wheat to Japan increased 28 percent through the PNW, and 22 percent through the Gulf. Truck rates were down 4 percent from quarter to quarter, but year-to-year trucking rates increased 25 percent due to increased trucking activity.

Quarter-to-quarter rail tariff rates for shipping wheat through the PNW to Japan were up slightly from Kansas, but unchanged from North Dakota (*see table 1*). Year-to-year rail rates for shipping wheat from the PNW were up 5 percent from Kansas, and unchanged for North Dakota. Quarter-to-quarter rail rates for shipping wheat from each state to the Gulf were unchanged (*see table 2*). Year-to-year rail rates to the Gulf were up 2 percent from Kansas, but remained unchanged from North Dakota.

First quarter total landed costs in 2018 for shipping wheat from Kansas to Japan were up from the previous quarter and the same period last year. Higher farm values caused landed costs to increase quarter to quarter for shipping wheat from Kansas; higher transportation costs and farm values caused year-to-year landed costs to increase. Total landed costs, for shipping from North Dakota, remained the same for each route from quarter to quarter. However, costs increased 14 percent from year to year (*tables 1 and 2*). Increasing trucking and ocean rates, pushed year-to-year landed costs higher for shipping wheat from North Dakota.

The total landed costs, for shipping wheat, ranged from $254 to $326 per metric ton (mt (*tables 1 and 2*), continuing above $300 per mt for North Dakota routes (*see figure*). First quarter transportation costs represented 39 and 31 percent of the total landed costs, through the PNW. Landed costs from Kansas, via the PNW, were down from the previous quarter and last year. North Dakota landed costs, however, were unchanged from the previous quarter, but slightly below last year. Transportation costs represented 39 and 36 percent of the total landed costs, for shipping wheat through the Gulf, below the previous quarter and last year for Kansas. North Dakota transportation costs, as a percent of the landed costs for shipping wheat through the Gulf, were unchanged from the previous quarter but below last year. (*tables 1 and 2*).



According to the Grain Inspection, Packers and Stockyards Administration (GIPSA), first quarter 2018 inspections of wheat, for export to Japan, totaled 0.682 million metric tons (mmt); up 14 percent from last year, and 7 percent above the fourth quarter of 2017. First quarter shipments of wheat to Japan increased, despite a drop in total wheat exports; Japanese imports of wheat increased partly due to increasing demand for food wheat. First quarter wheat exports to Japan accounted for 13 percent of total U.S. wheat exports, which reached 5.3 mmt. Total U.S. first quarter wheat exports decreased 17 percent from last year, due primarily to increasing export competition (see April 12, 2018 *GTR*). According to USDA's May *WASDE* forecast, 2017/18 U.S. wheat exports are projected to reach 24.8 mmt, down 14 percent from last year and down 2 percent from the April estimate. Johnny.Hill@ams.usda.gov

Grain Transportation Indicators

Table 1

Grain Transport Cost Indicators[1]

For the week ending	Truck	Rail: Unit Train	Rail: Shuttle	Barge	Ocean: Gulf	Ocean: Pacific
05/16/18	217	313	230	264	197	174
05/09/18	213	333	222	257	198	170

[1]Indicator: Base year 2000 = 100; Weekly updates include truck = diesel ($/gallon); rail = near-month secondary rail market bid and monthly tariff rate with fuel surcharge ($/car); barge = Illinois River barge rate (index = percent of tariff rate); and ocean = routes to Japan ($/metric ton)

Source: Transportation & Marketing Programs/AMS/USDA

Table 2

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

Commodity	Origin--Destination	5/11/2018	5/4/2018
Corn	IL--Gulf	-0.87	-0.80
Corn	NE--Gulf	-0.98	-0.91
Soybean	IA--Gulf	-1.26	-1.24
HRW	KS--Gulf	-1.80	-1.79
HRS	ND--Portland	-2.13	-2.31

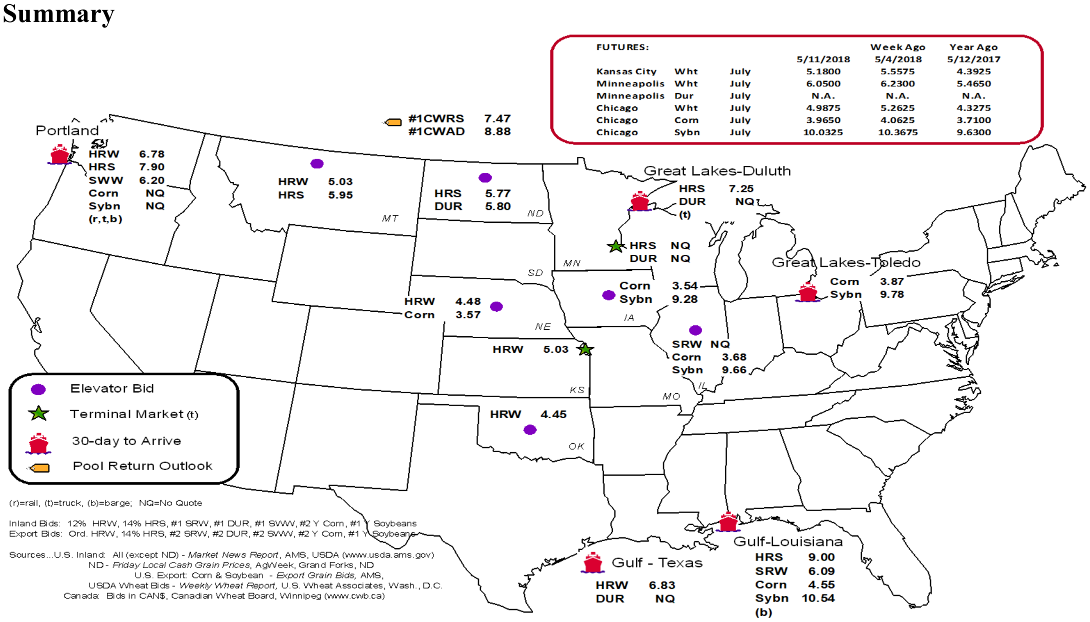
Note: nq = no quote; n/a = not available

Source: Transportation & Marketing Programs/AMS/USDA

The **grain bid summary** illustrates the market relationships for commodities. Positive and negative adjustments in differential between terminal and futures markets, and the relationship to inland market points, are indicators of changes in fundamental market supply and demand. The map may be used to monitor market and time differentials.

Figure 1

Grain Bid Summary



Rail Transportation

Table 3
Rail Deliveries to Port (carloads)[1]

For the Week Ending	Mississippi Gulf	Texas Gulf	Pacific Northwest	Atlantic & East Gulf	Total	Week ending	Cross-Border Mexico[3]
05/09/2018[p]	639	675	7,948	754	10,016	5/5/2018	3,466
05/02/2018[r]	126	682	6,637	658	8,103	4/28/2018	2,647
2018 YTD[r]	7,871	27,812	123,610	8,272	167,565	2018 YTD	37,078
2017 YTD[r]	12,523	37,224	115,654	10,289	175,690	2017 YTD	41,367
2018 YTD as % of 2017 YTD	63	75	107	80	95	% change YTD	90
Last 4 weeks as % of 2017[2]	402	47	131	278	119	Last 4wks % 2017	101
Last 4 weeks as % of 4-year avg.[2]	171	50	173	243	142	Last 4wks % 4 yr	121
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.

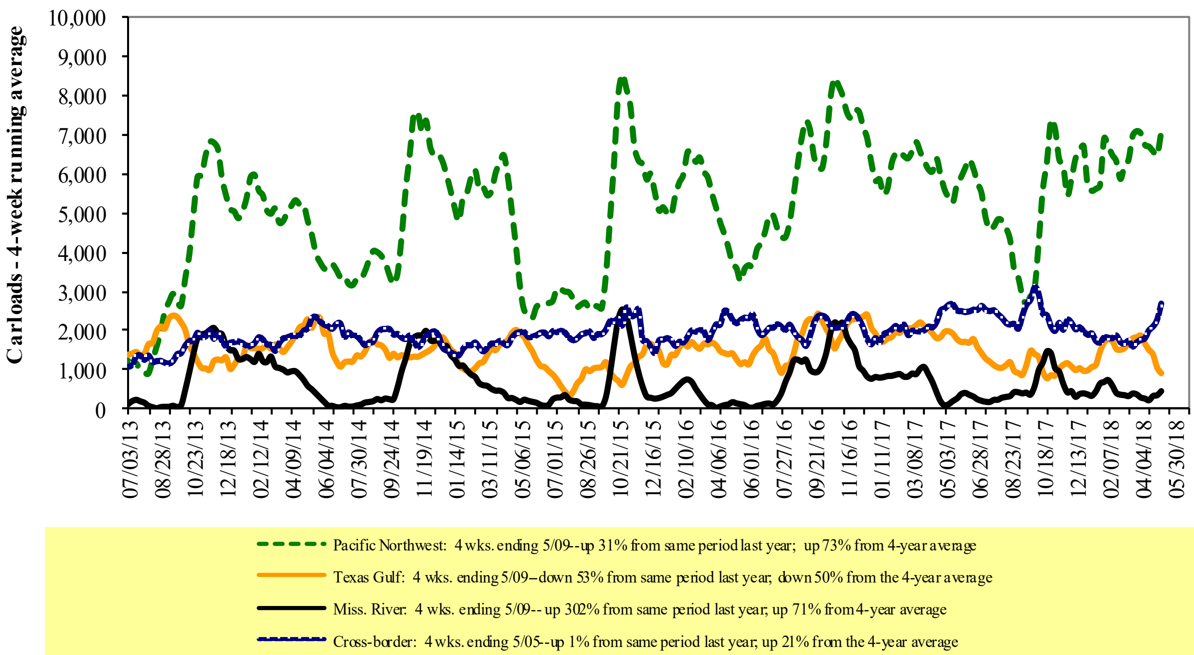
[3] Cross-border weekly data is approximately 15 percent below the Association of American Railroads' reported weekly carloads received by Mexican railroads to reflect switching between KCSM and Grupo Mexico.

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: 5/5/2018	East		West			U.S. total	Canada	
	CSXT	NS	BNSF	KCS	UP		CN	CP
This week	2,032	2,974	13,917	1,008	5,169	25,100	4,217	5,918
This week last year	1,434	2,830	10,768	873	5,945	21,850	3,441	5,161
2018 YTD	34,816	44,718	222,298	16,716	94,625	413,173	66,820	80,165
2017 YTD	33,185	50,574	204,407	17,568	110,265	415,999	70,558	78,170
2018 YTD as % of 2017 YTD	105	88	109	95	86	99	95	103
Last 4 weeks as % of 2017*	141	103	112	96	93	108	111	105
Last 4 weeks as % of 3-yr avg.**	128	100	133	101	100	118	111	112
Total 2017	89,465	142,746	578,964	50,223	289,574	1,150,972	198,625	244,766

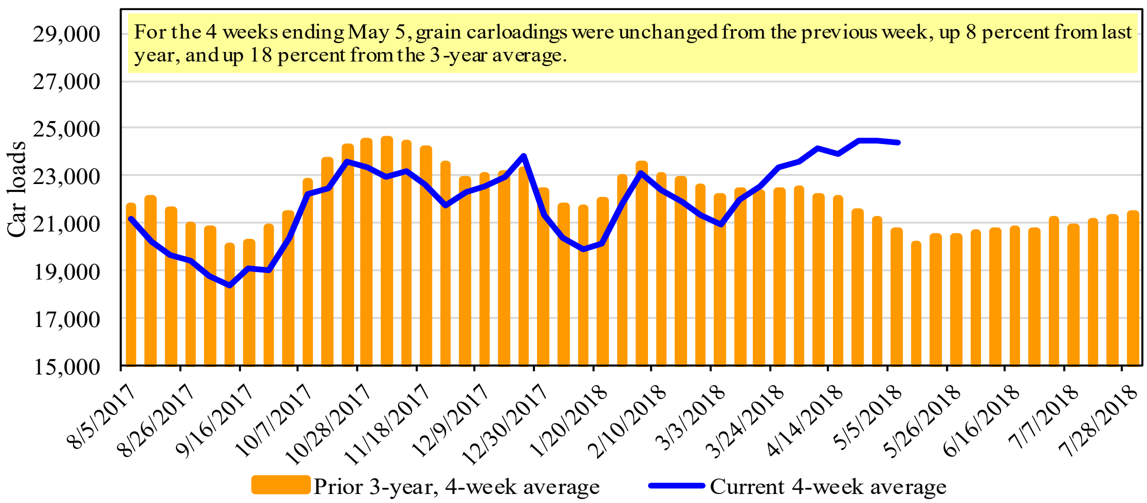
*The past 4 weeks of this year as a percent of the same 4 weeks last year.

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

For the week ending: 5/10/2018		Delivery period							
		May-18	May-17	Jun-18	Jun-17	Jul-18	Jul-17	Aug-18	Aug-17
BNSF[3]	COT grain units	no offer	no offer	no offer	no bids	0	no bids	no bids	0
	COT grain single-car[5]	no offer	no offer	no offer	0	3	no bids	0	no bids
UP[4]	GCAS/Region 1	no offer	no offer	no offer	no bids	10	no bids	n/a	n/a
	GCAS/Region 2	no offer	no offer	no offer	no bids	no offer	no bids	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.

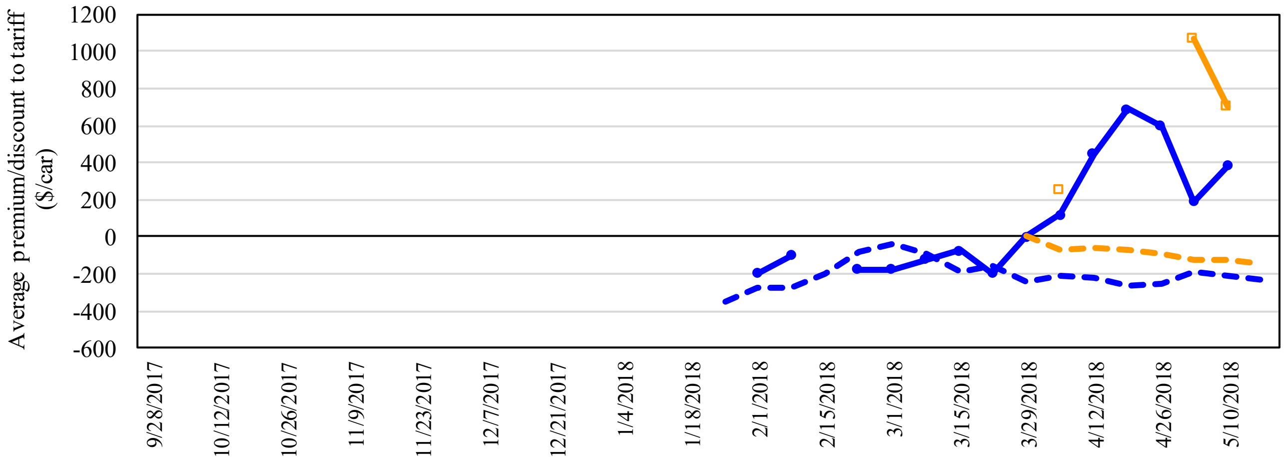
Region 2 includes: CO, IA, KS, MN, NE, WY, and Kansas City and St. Joseph, MO.

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

Source: Transportation & Marketing 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

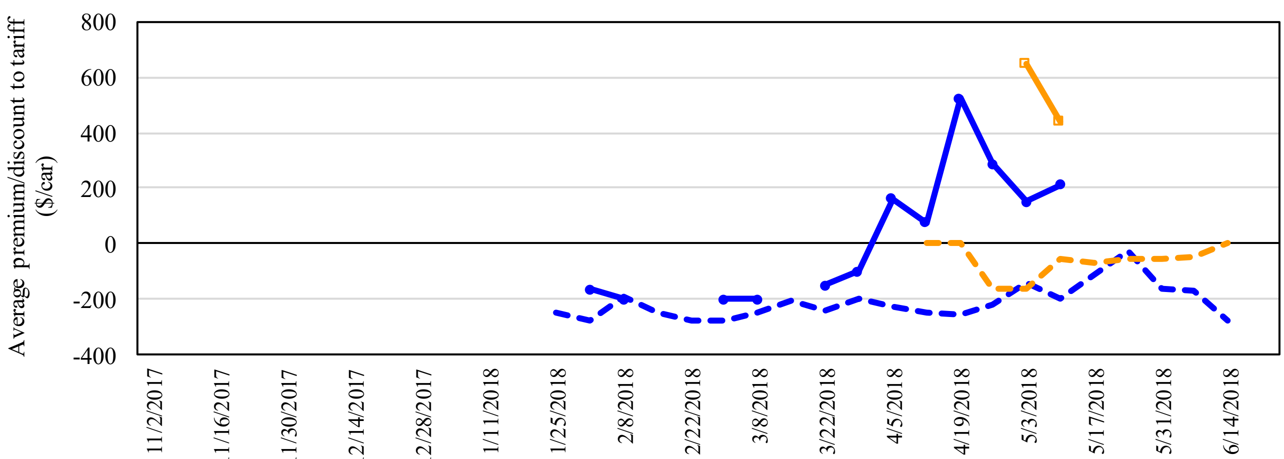


5/10/2018	BNSF	UP
Non-Shuttle	n/a	$700
Shuttle	$850	-$88

Average Non-shuttle bids/offers fell $368 this week, and are $368 below the peak.
Average Shuttle bids/offers rose $190 this week and are $310 below the peak.

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

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



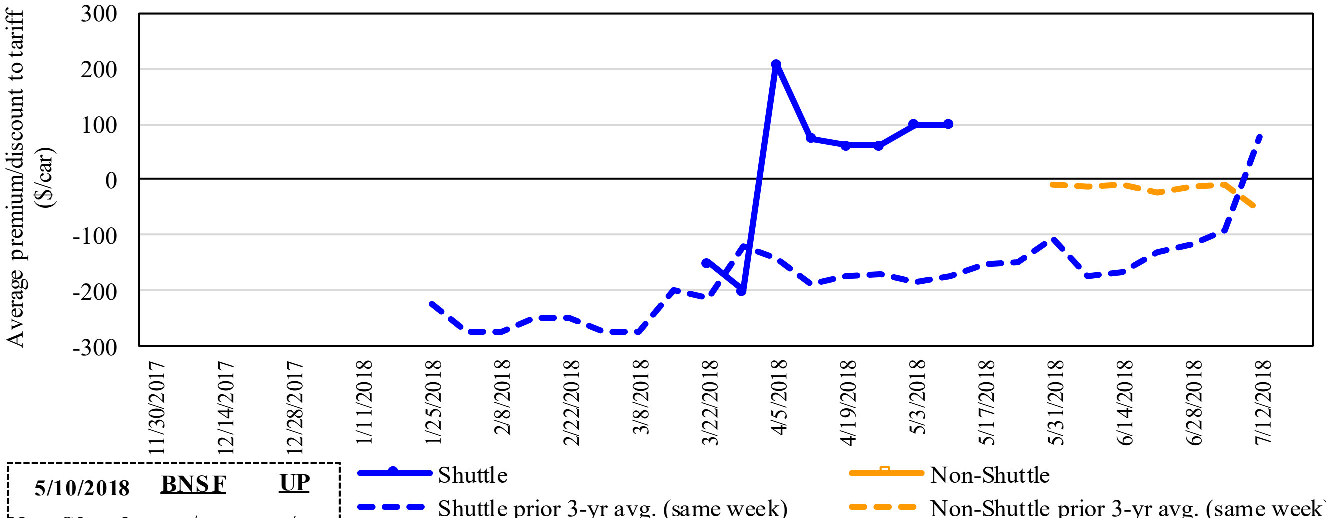
5/10/2018	BNSF	UP
Non-Shuttle	$250	$625
Shuttle	$500	-$75

Average Non-shuttle bids/offers fell $213 this week, and are $213 below the peak.
Average Shuttle bids/offers rose $63 this week and are $313 below the peak.

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

Figure 6

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



5/10/2018	BNSF	UP
Non-Shuttle	n/a	n/a
Shuttle	n/a	$100

There were no Non-Shuttle bids/offers this week.
Average Shuttle bids/offers are unchanged this week and are $108 below the peak.

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: 5/10/2018	Delivery period May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18
Non-shuttle	**BNSF-GF**	**n/a**	**250**	**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	250	n/a	n/a	n/a	n/a
	UP-Pool	**700**	**625**	**n/a**	**n/a**	**n/a**	**n/a**
	Change from last week	(368)	(25)	n/a	n/a	n/a	n/a
	Change from same week 2017	875	625	n/a	n/a	n/a	n/a
Shuttle	**BNSF-GF**	**850**	**500**	**n/a**	**n/a**	**n/a**	**n/a**
	Change from last week	367	200	n/a	n/a	n/a	n/a
	Change from same week 2017	825	n/a	n/a	n/a	n/a	n/a
	UP-Pool	**(88)**	**(75)**	**100**	**100**	**75**	**400**
	Change from last week	12	(75)	0	(100)	(175)	(50)
	Change from same week 2017	263	188	275	n/a	n/a	(250)

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

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

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

Sources: Transportation and Marketing Programs/AMS/USDA

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

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

Table 7

Tariff Rail Rates for Unit and Shuttle Train Shipments[1]

May, 2018	Origin region[3]	Destination region[3]	Tariff rate/car	Fuel surcharge per car	Tariff plus surcharge per: metric ton	Tariff plus surcharge per: bushel[2]	Percent change Y/Y[4]
Unit train							
Wheat	Wichita, KS	St. Louis, MO	$3,883	$91	$39.46	$1.07	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	$160	$46.68	$1.27	5
	Sioux Falls, SD	Galveston-Houston, TX	$6,786	$0	$67.39	$1.83	1
	Northwest KS	Galveston-Houston, TX	$4,816	$176	$49.57	$1.35	5
	Amarillo, TX	Los Angeles, CA	$5,021	$244	$52.29	$1.42	5
Corn	Champaign-Urbana, IL	New Orleans, LA	$3,931	$181	$40.83	$1.04	9
	Toledo, OH	Raleigh, NC	$6,344	$0	$63.00	$1.60	5
	Des Moines, IA	Davenport, IA	$2,258	$38	$22.80	$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	$113	$36.96	$0.94	3
	Des Moines, IA	Los Angeles, CA	$5,327	$328	$56.16	$1.43	5
Soybeans	Minneapolis, MN	New Orleans, LA	$4,131	$171	$42.72	$1.16	16
	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	$181	$48.92	$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	$288	$60.57	$1.65	5
Corn	Minneapolis, MN	Portland, OR	$5,000	$0	$49.65	$1.26	0
	Sioux Falls, SD	Tacoma, WA	$4,960	$0	$49.26	$1.25	0
	Champaign-Urbana, IL	New Orleans, LA	$3,731	$181	$38.85	$0.99	9
	Lincoln, NE	Galveston-Houston, TX	$3,700	$0	$36.74	$0.93	0
	Des Moines, IA	Amarillo, TX	$3,970	$142	$40.83	$1.04	3
	Minneapolis, MN	Tacoma, WA	$5,000	$0	$49.65	$1.26	0
	Council Bluffs, IA	Stockton, CA	$4,820	$0	$47.86	$1.22	2
Soybeans	Sioux Falls, SD	Tacoma, WA	$5,600	$0	$55.61	$1.51	0
	Minneapolis, MN	Portland, OR	$5,650	$0	$56.11	$1.53	0
	Fargo, ND	Tacoma, WA	$5,500	$0	$54.62	$1.49	0
	Council Bluffs, IA	New Orleans, LA	$4,775	$209	$49.49	$1.35	7
	Toledo, OH	Huntsville, AL	$4,352	$0	$43.22	$1.18	3
	Grand Island, NE	Portland, OR	$5,710	$295	$59.63	$1.62	7

[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

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: May, 2018							
Wheat	MT	Chihuahua, CI	$7,459	$0	$76.21	$2.07	0
	OK	Cuautitlan, EM	$6,631	$125	$69.03	$1.88	1
	KS	Guadalajara, JA	$7,309	$321	$77.95	$2.12	3
	TX	Salinas Victoria, NL	$4,292	$77	$44.64	$1.21	2
Corn	IA	Guadalajara, JA	$8,313	$287	$87.87	$2.23	2
	SD	Celaya, GJ	$7,700	$0	$78.68	$2.00	2
	NE	Queretaro, QA	$8,013	$265	$84.58	$2.15	3
	SD	Salinas Victoria, NL	$6,743	$0	$68.90	$1.75	2
	MO	Tlalnepantla, EM	$7,379	$258	$78.03	$1.98	3
	SD	Torreon, CU	$7,300	$0	$74.59	$1.89	2
Soybeans	MO	Bojay (Tula), HG	$8,134	$268	$85.84	$2.33	-5
	NE	Guadalajara, JA	$8,692	$292	$91.79	$2.50	-2
	IA	El Castillo, JA	$8,960	$0	$91.55	$2.49	0
	KS	Torreon, CU	$7,489	$213	$78.69	$2.14	1
Sorghum	NE	Celaya, GJ	$7,345	$265	$77.75	$1.97	3
	KS	Queretaro, QA	$7,819	$157	$81.49	$2.07	4
	NE	Salinas Victoria, NL	$6,452	$126	$67.20	$1.71	5
	NE	Torreon, CU	$6,790	$205	$71.47	$1.81	4

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

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

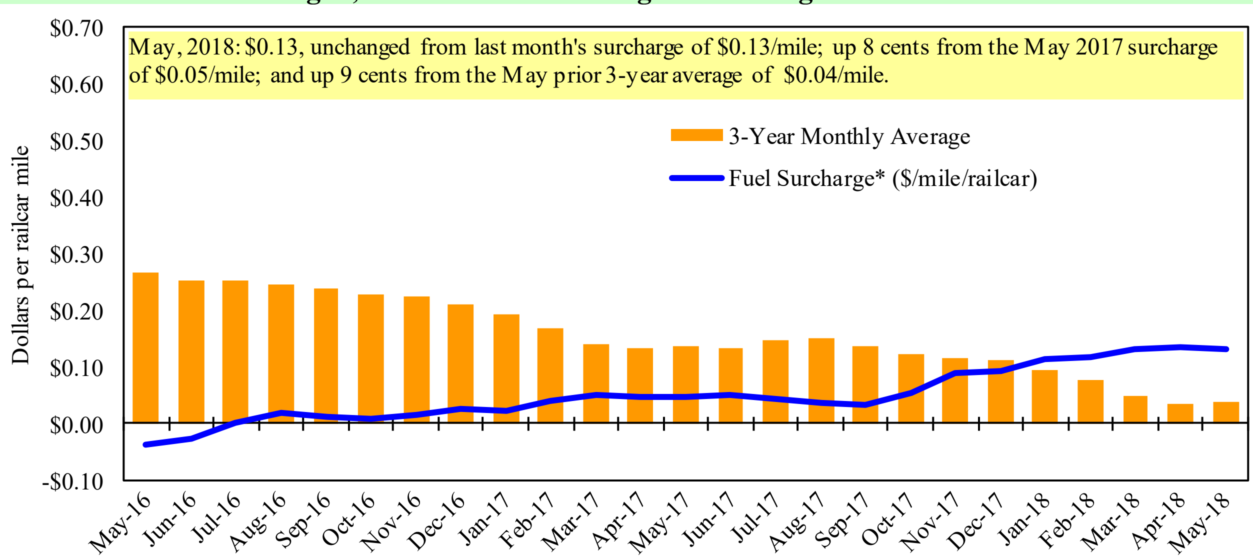
[3]Approximate load per car = 97.87 metric tons: Corn & Sorghum 56 lbs/bu, Wheat & Soybeans 60 lbs/bu

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

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

Figure 7

Railroad Fuel Surcharges, North American Weighted Average[1]

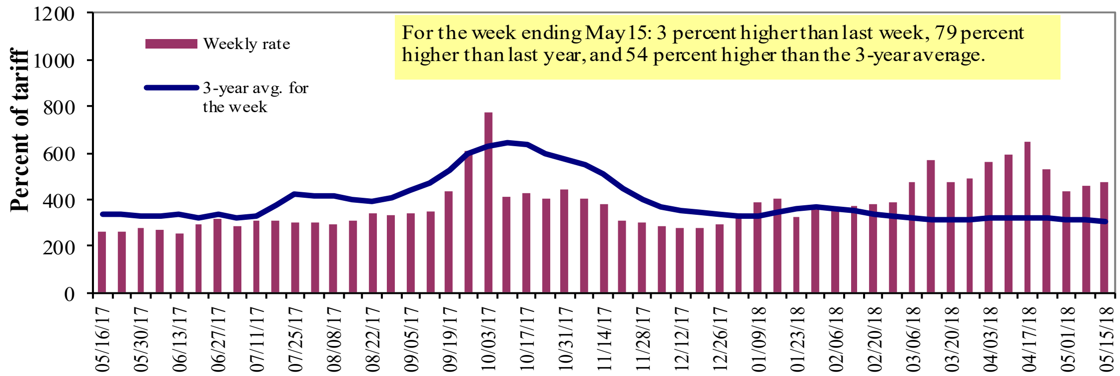


[1] Weighted by each Class I railroad's proportion of grain traffic for the prior year.
* Beginning January 2009, the Canadian Pacific fuel surcharge is computed by a monthly average of the bi-weekly fuel surcharge.
**CSX strike price changed from $2.00/gal. to $3.75/gal. starting January 1, 2015.
Sources: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

Barge Transportation

Figure 8

Illinois River Barge Freight Rate[1,2]



[1]Rate = percent of 1976 tariff benchmark index (1976 = 100 percent); [2]4-week moving average of the 3-year average.

Source: Transportation & Marketing Programs/AMS/USDA

Table 9

Weekly Barge Freight Rates: Southbound Only

		Twin Cities	Mid-Mississippi	Lower Illinois River	St. Louis	Cincinnati	Lower Ohio	Cairo-Memphis
Rate[1]	5/15/2018	513	475	475	338	350	350	288
	5/8/2018	-	-	463	350	330	330	308
$/ton	5/15/2018	-	-	22.04	13.49	16.42	14.14	9.04
	5/8/2018	-	-	21.48	13.97	15.48	13.33	9.67
Current week % change from the same week:								
	Last year	61	79	79	90	75	75	67
	3-year avg. [2]	44	50	54	57	64	64	43
Rate[1]	June	488	430	433	313	330	330	280
	August	488	430	433	320	388	388	320

[1]Rate = percent of 1976 tariff benchmark index (1976 = 100 percent); [2]4-week moving average; ton = 2,000 pounds; "-" = no quote

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.

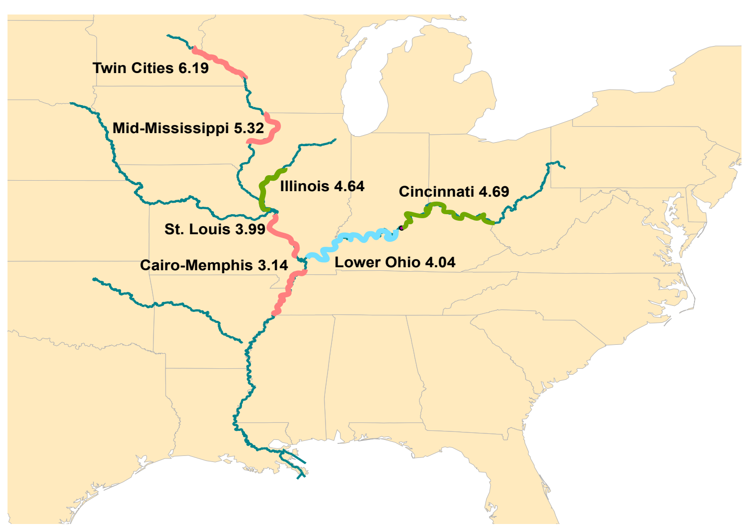
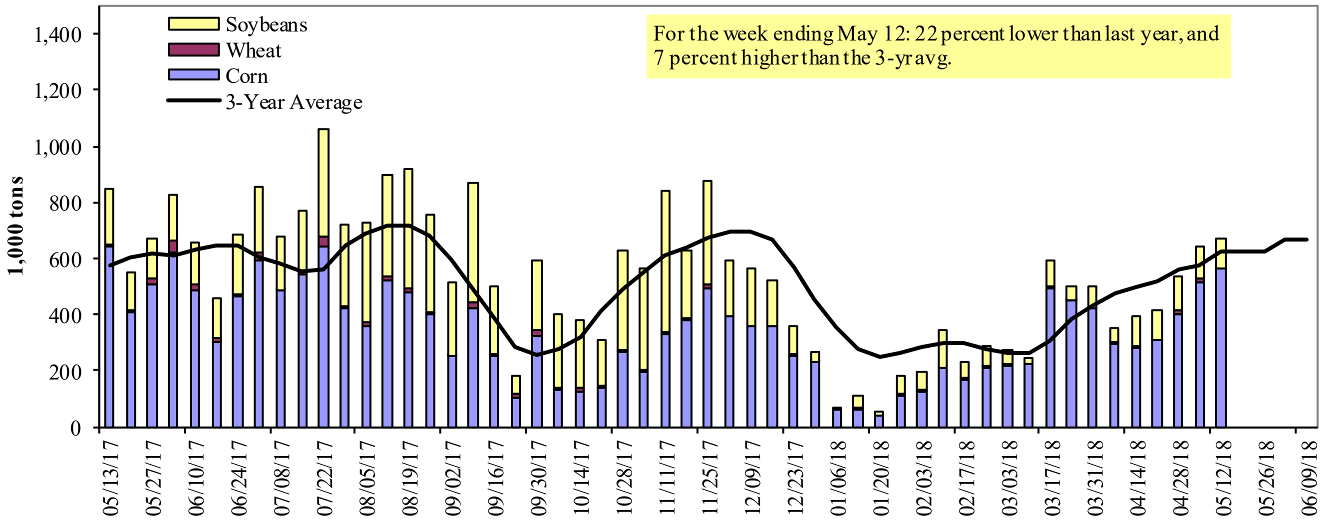


Figure 10

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 05/12/2018	Corn	Wheat	Soybeans	Other	Total
Mississippi River					
Rock Island, IL (L15)	199	3	33	0	234
Winfield, MO (L25)	351	5	51	2	408
Alton, IL (L26)	521	5	84	2	612
Granite City, IL (L27)	561	5	102	2	669
Illinois River (L8)	117	0	24	0	141
Ohio River (L52)	99	4	33	0	135
Arkansas River (L1)	4	4	22	0	31
Weekly total - 2018	664	13	156	2	835
Weekly total - 2017	714	25	247	2	988
2018 YTD[1]	7,064	567	3,874	56	11,561
2017 YTD	8,995	791	4,618	137	14,541
2018 as % of 2017 YTD	79	72	84	41	80
Last 4 weeks as % of 2017[2]	98	72	103	145	98
Total 2017	22,242	2,210	16,123	360	40,936

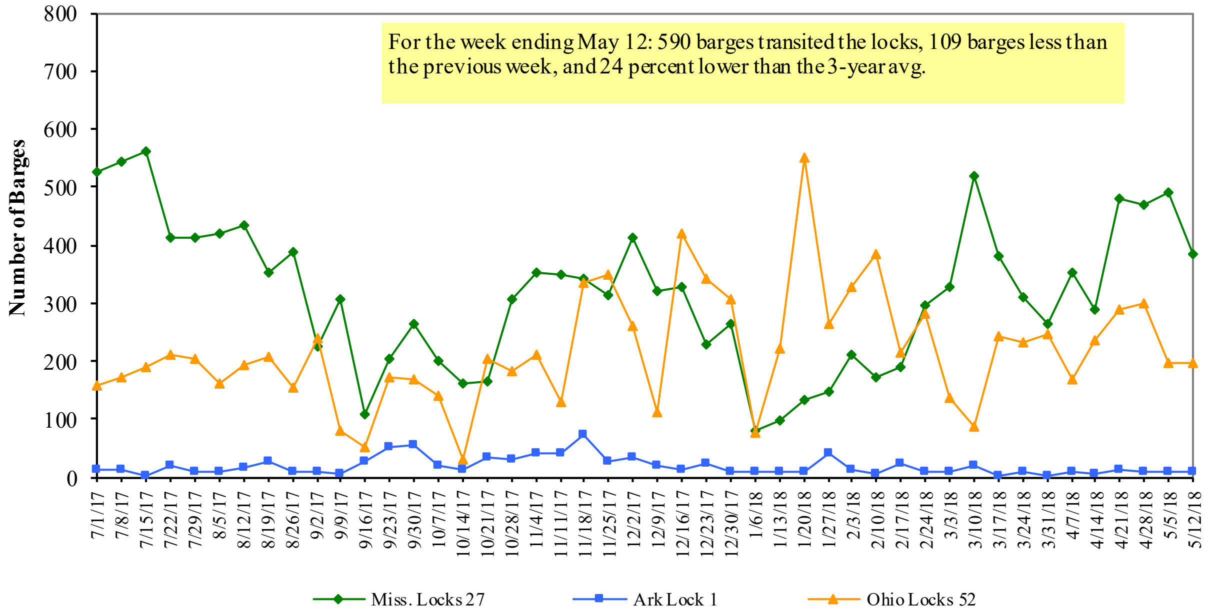
[1] Weekly total, YTD (year-to-date) and calendar year total includes Miss/27, Ohio/52, and Ark/1; "Other" refers to oats, barley, sorghum, and rye.

[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

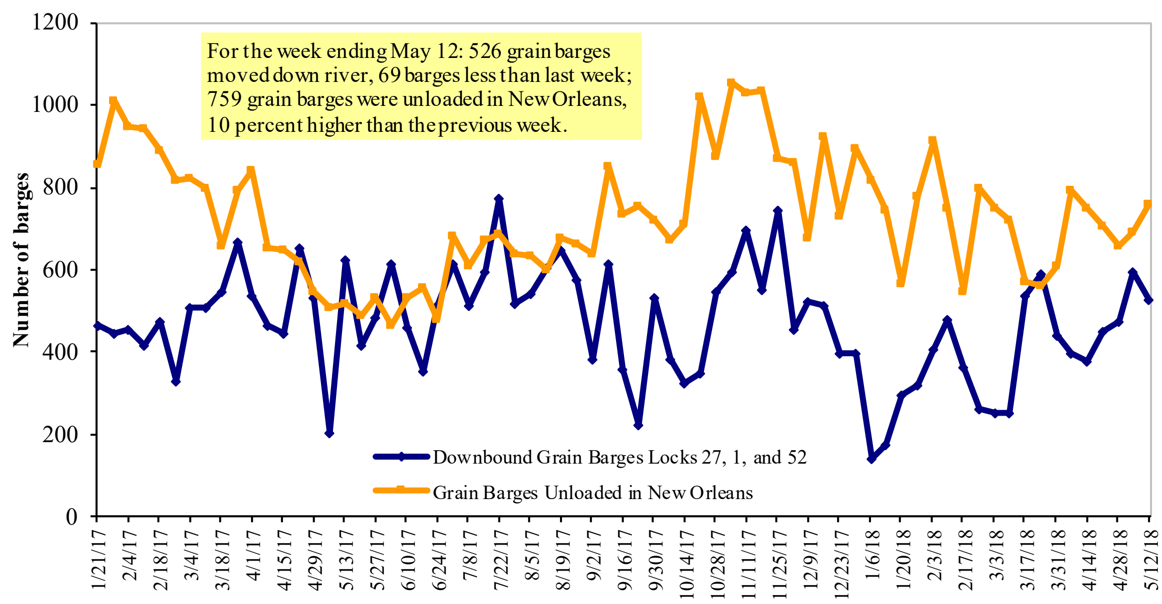
Upbound Empty Barges Transiting Mississippi River Locks 27, Arkansas River Lock and Dam 1, and Ohio River Locks and Dam 52



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 5/14/2018 (US $/gallon)

Region	Location	Price	Change from Week ago	Change from Year ago
I	East Coast	3.236	0.058	0.641
	New England	3.251	0.036	0.625
	Central Atlantic	3.380	0.044	0.643
	Lower Atlantic	3.132	0.071	0.644
II	Midwest[2]	3.175	0.083	0.696
III	Gulf Coast[3]	3.012	0.057	0.630
IV	Rocky Mountain	3.316	0.067	0.690
V	West Coast	3.731	0.069	0.907
	West Coast less California	3.482	0.073	0.754
	California	3.929	0.066	1.027
Total	U.S.	3.239	0.068	0.695

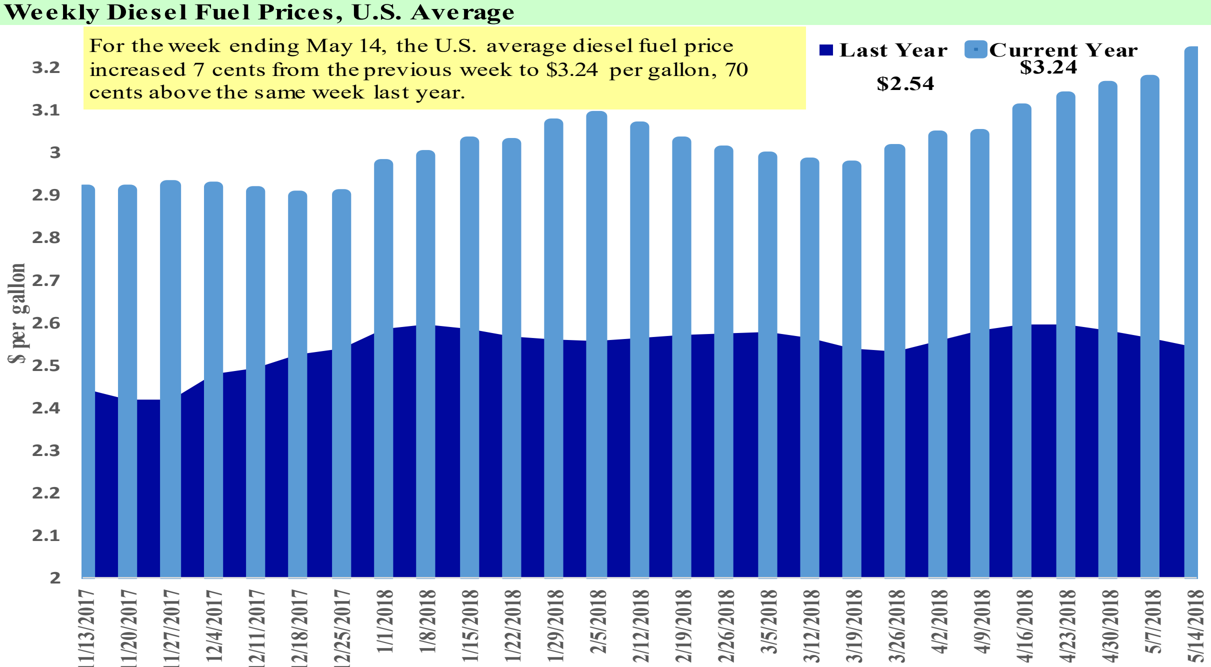
[1]Diesel fuel prices include all taxes. Prices represent an average of all types of diesel fuel.

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

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

Figure 13

Weekly Diesel Fuel Prices, U.S. Average



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

Grain Exports

Table 12

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

For the week ending	Wheat HRW	Wheat SRW	Wheat HRS	Wheat SWW	Wheat DUR	All wheat	Corn	Soybeans	Total
Export Balances[1]									
5/3/2018	633	381	830	701	22	2,565	19,002	11,168	32,735
This week year ago	1,475	257	1,107	944	114	3,897	14,157	6,870	24,924
Cumulative exports-marketing year[2]									
2017/18 YTD	8,618	2,140	5,259	4,574	383	20,973	32,630	43,957	97,560
2016/17 YTD	10,304	2,170	7,359	3,825	393	24,052	37,936	50,130	112,118
YTD 2017/18 as % of 2016/17	84	99	71	120	97	87	86	88	87
Last 4 wks as % of same period 2016/17	47	160	89	79	33	74	143	166	139
2016/17 Total	11,096	2,285	7,923	4,254	484	26,042	41,864	51,156	119,062
2015/16 Total	5,538	3,057	6,285	3,551	670	19,101	45,564	49,821	114,486

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

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

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

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

Table 13

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

For the week ending 5/03/2018	Total Commitments[2] 2018/19 Next MY	2017/18 Current MY	2016/17 Last MY	% change current MY from last MY	Exports[3] 3-year avg 2014-2016
			- 1,000 mt -		
Mexico	1,315	13,127	12,482	5	12,297
Japan	515	9,437	10,202	(7)	11,450
Korea	0	4,244	5,454	(22)	4,494
Colombia	0	3,929	3,925	0	4,179
Peru	18	2,602	2,665	(2)	2,693
Top 5 Importers	**1,847**	**33,338**	**34,728**	**(4)**	**35,113**
Total US corn export sales	**2,101**	**51,632**	**52,093**	**(1)**	**49,308**
% of Projected		91%	89%		
Change from prior week[2]	**90**	**696**	**278**		
Top 5 importers' share of U.S. corn export sales	88%	65%	67%		71%
USDA forecast, May 2018	**53,435**	**56,616**	**58,346**	**(3)**	
Corn Use for Ethanol USDA forecast, May 2018	**142,875**	**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/esrquery/. Total commitments change (net sales) from prior week could include revisions from previous week's outstanding sales or accumulated sales.

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

Table 14

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

For the week ending 5/03/2018	Total Commitments[2] 2018/19 Next MY	2017/18 Current MY	2016/17 Last MY	% change current MY from last MY	Exports[3] 3-yr avg. 2014-2016
	- 1,000 mt -				- 1,000 mt -
China	1,020	28,739	35,805	(20)	31,881
Mexico	443	4,052	3,420	18	3,452
Indonesia	48	1,973	1,877	5	1,987
Japan	118	1,881	2,004	(6)	2,067
Netherlands	0	1,405	1,553	(10)	2,098
Top 5 importers	**1,628**	**38,050**	**44,659**	**(15)**	**41,486**
Total US soybean export sales	**5,325**	**55,125**	**57,000**	**(3)**	**52,919**
% of Projected	9%	98%	96%		
Change from prior week[2]	**278**	**354**	**324**		
Top 5 importers' share of U.S. soybean export sales	31%	69%	78%		**78%**
USDA forecast, May 2018	**62,398**	**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/. The total commitments change (net sales) from prior week could include reivisions from previous week's outstanding sales and/or accumulated sales

[3] FAS Marketing Year Final Reports - www.fas.usda.gov/export-sales/myfi_rpt.htm. (Carryover plus Accumulated Exports)

Table 15

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

For the week ending 5/03/2018	Total Commitments[2] 2018/19 Next MY	2017/18 Current MY	2016/17 Last MY	% change current MY from last MY	Exports[3] 3-yr avg 2014-2016
	- 1,000 mt -				- 1,000 mt -
Japan	177	2,899	2,728	6	2,620
Mexico	239	2,952	3,192	(8)	2,743
Philippines	236	2,545	2,664	(4)	2,395
Brazil	0	128	1,215	(89)	862
Nigeria	110	1,187	1,599	(26)	1,254
Korea	224	1,485	1,388	7	1,104
China	0	900	1,482	(39)	1,623
Taiwan	69	1,136	1,045	9	768
Indonesia	100	1,141	1,154	(1)	726
Colombia	6	668	860	(22)	635
Top 10 importers	**1,160**	**15,042**	**17,325**	(13)	**14,729**
Total US wheat export sales	**1,926**	**23,539**	**27,949**	**(16)**	**22,804**
% of Projected	8%	95%	97%		
Change from prior week[2]	**48**	**35**	**(24)**		
Top 10 importers' share of U.S. wheat export sales	60%	64%	62%		65%
USDA forecast, May 2018	**25,204**	**24,796**	**28,747**	**(14)**	

(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 sales

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

Table 16

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

Port Regions	For the Week Ending 05/10/18	Previous Week*	Current Week as % of Previous	2018 YTD*	2017 YTD*	2018 YTD as % of 2017 YTD	Last 4-weeks as % of: Last Year	Prior 3-yr. avg.	2017 Total*
Pacific Northwest									
Wheat	224	196	114	4,382	5,550	79	69	95	14,805
Corn	487	691	70	7,720	5,703	135	151	215	10,928
Soybeans	143	69	207	4,089	4,003	102	92	240	13,246
Total	**854**	**957**	**89**	**16,191**	**15,257**	**106**	**106**	**158**	**38,978**
Mississippi Gulf									
Wheat	141	70	202	1,690	1,781	95	106	113	4,198
Corn	827	912	91	12,385	14,019	88	138	120	28,690
Soybeans	337	343	98	9,205	10,467	88	128	183	32,911
Total	**1,306**	**1,325**	**99**	**23,280**	**26,266**	**89**	**133**	**130**	**65,800**
Texas Gulf									
Wheat	21	9	229	1,542	2,551	60	29	43	6,354
Corn	0	0	n/a	216	347	62	88	105	733
Soybeans	0	0	n/a	0	0	n/a	n/a	n/a	292
Total	**21**	**9**	**229**	**1,758**	**2,898**	**61**	**35**	**50**	**7,379**
Interior									
Wheat	15	37	40	542	659	82	95	102	1,727
Corn	213	235	90	2,968	2,959	100	106	129	8,758
Soybeans	147	104	141	2,299	1,925	119	143	184	5,508
Total	**374**	**376**	**100**	**5,810**	**5,544**	**105**	**116**	**142**	**15,993**
Great Lakes									
Wheat	25	37	66	160	142	113	119	119	711
Corn	0	44	0	70	45	157	157	128	192
Soybeans	0	0	n/a	0	53	0	0	0	890
Total	**25**	**81**	**31**	**230**	**239**	**96**	**111**	**106**	**1,793**
Atlantic									
Wheat	0	0	n/a	64	37	174	n/a	0	46
Corn	0	0	n/a	38	5	831	n/a	540	32
Soybeans	65	47	138	917	834	110	205	313	2,001
Total	**65**	**47**	**138**	**1,019**	**875**	**116**	**247**	**208**	**2,079**
U.S. total from ports*									
Wheat	425	350	122	8,380	10,720	78	69	88	27,841
Corn	1,527	1,883	81	23,397	23,077	101	137	142	49,333
Soybeans	693	563	123	16,511	17,282	96	124	194	54,847
Total	**2,645**	**2,795**	**95**	**48,288**	**51,079**	**95**	**115**	**136**	**132,021**

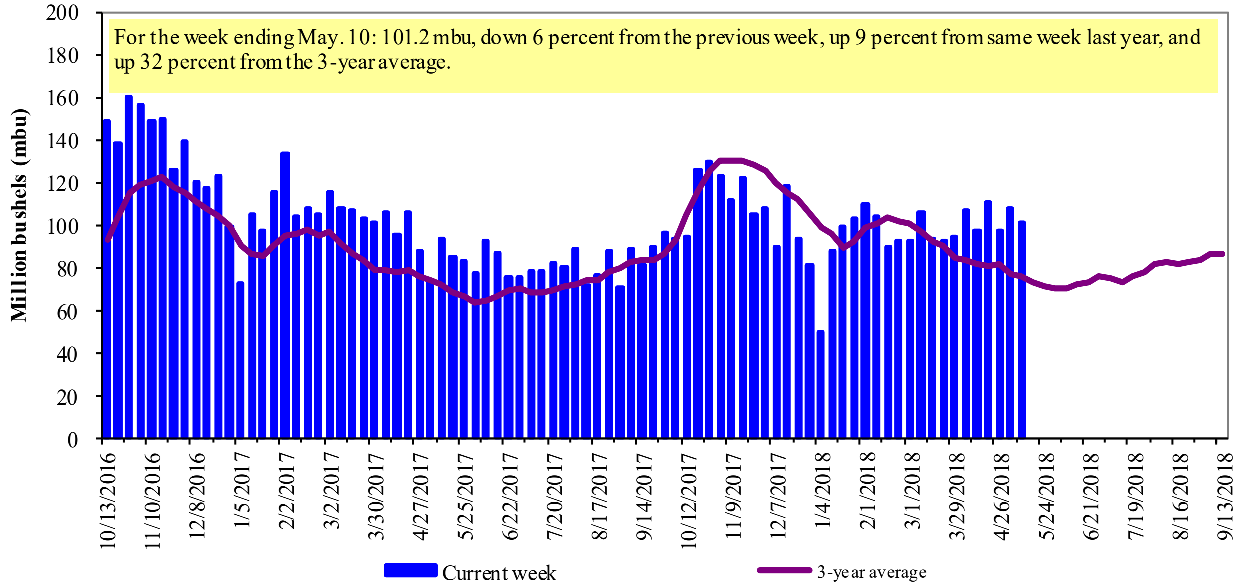
*Data includes revisions from prior weeks; some regional totals may not add exactly due to rounding.

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

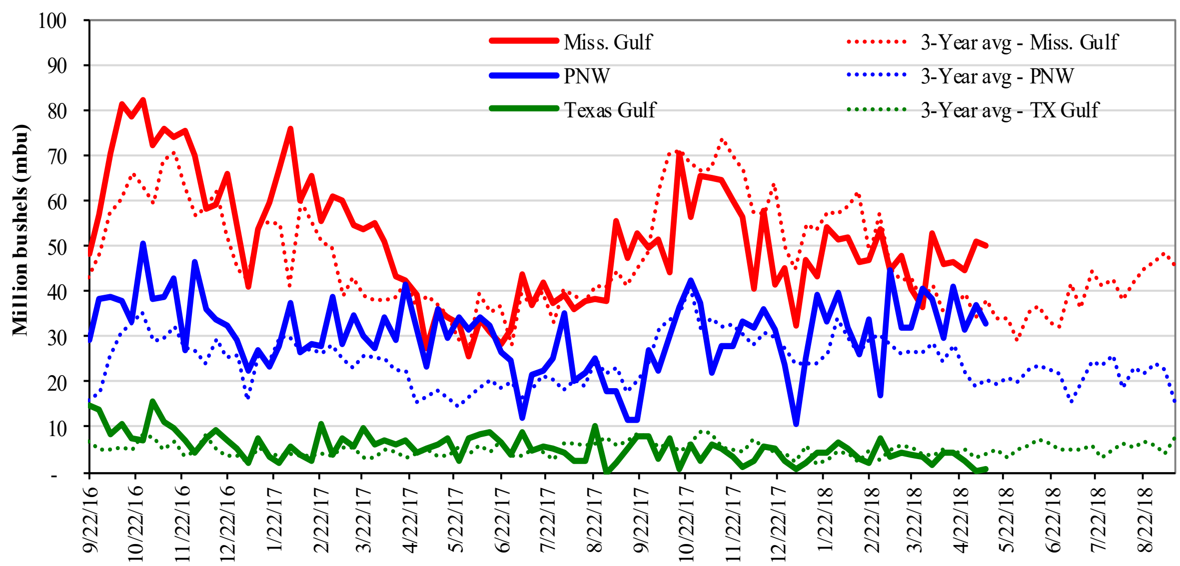
U.S. grain inspected for export (wheat, corn, and soybeans)



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



Week ending 05/10/18 inspections (mbu):		Percent change from:	MS Gulf	TX Gulf	U.S. Gulf	PNW
Mississippi Gulf:	50.2	Last Week:	down 2	up 129	unchanged	down 12
PNW:	32.6	Last Year (same week):	up 40	down 87	up 21	down 9
Texas Gulf:	0.8	3-yr avg. (4-wk. mov. Avg):	up 35	down 81	up 24	up 47

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

Ocean Transportation

Table 17

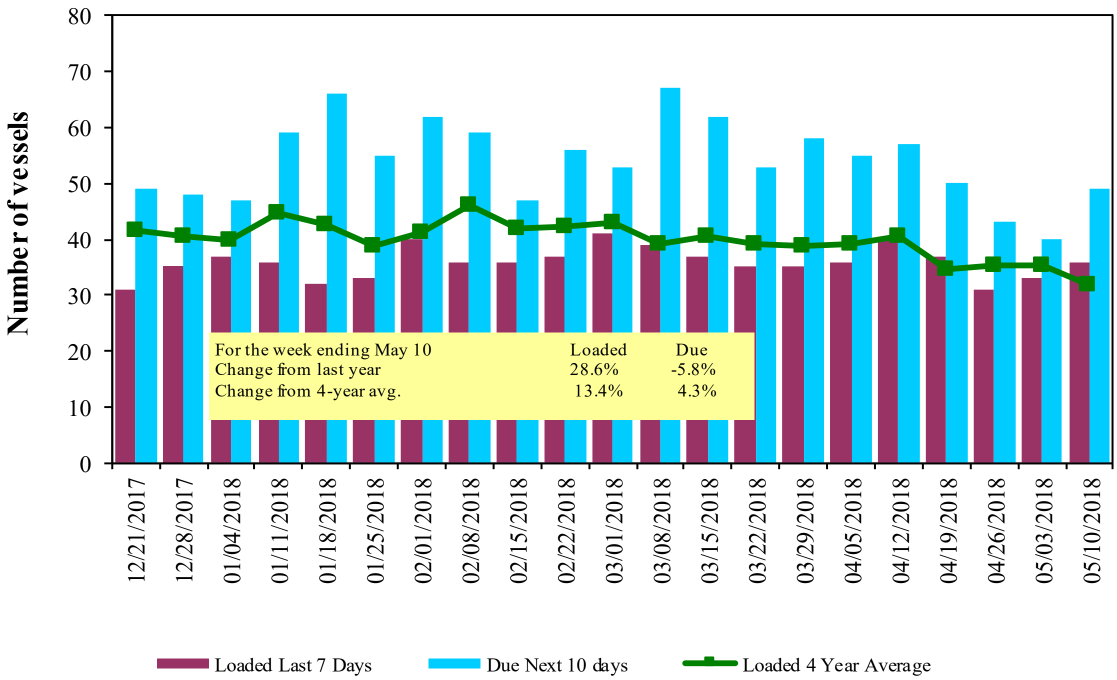
Weekly Port Region Grain Ocean Vessel Activity (number of vessels)

	Gulf			Pacific Northwest
Date	In port	Loaded 7-days	Due next 10-days	In port
5/10/2018	34	36	49	28
5/3/2018	43	33	40	30
2017 range	(25..66)	(28..54)	(37..87)	(5..44)
2017 avg.	46	38	56	20

Source: Transportation & Marketing Programs/AMS/USDA

Figure 16

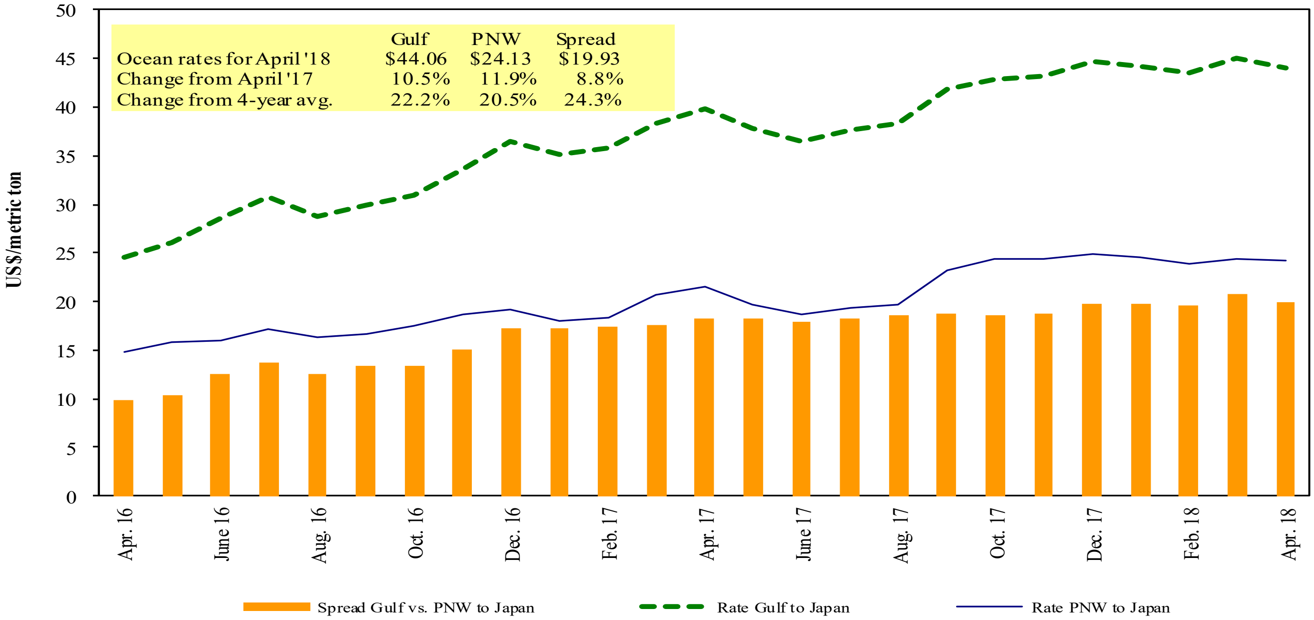
U.S. Gulf Vessel Loading Activity



Source: Transportation & Marketing Programs/AMS/USDA

[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 05/12/2018

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	63.35*
Brazil	China	Heavy Grain	May 26/Jun 2	66,000	31.50
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

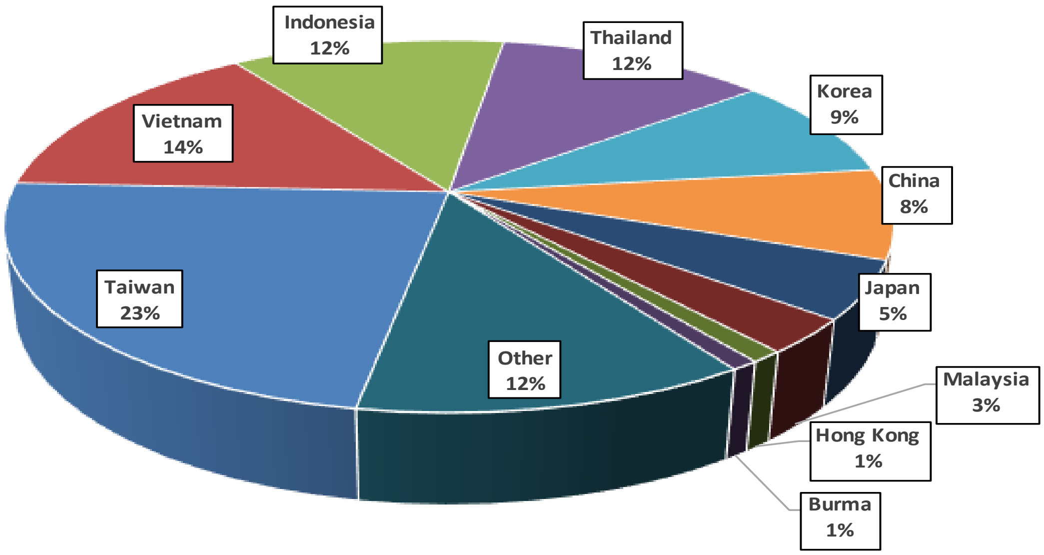
*50 percent of food aid from the United States is required to be shipped on U.S.-flag vessels.

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-February 2018

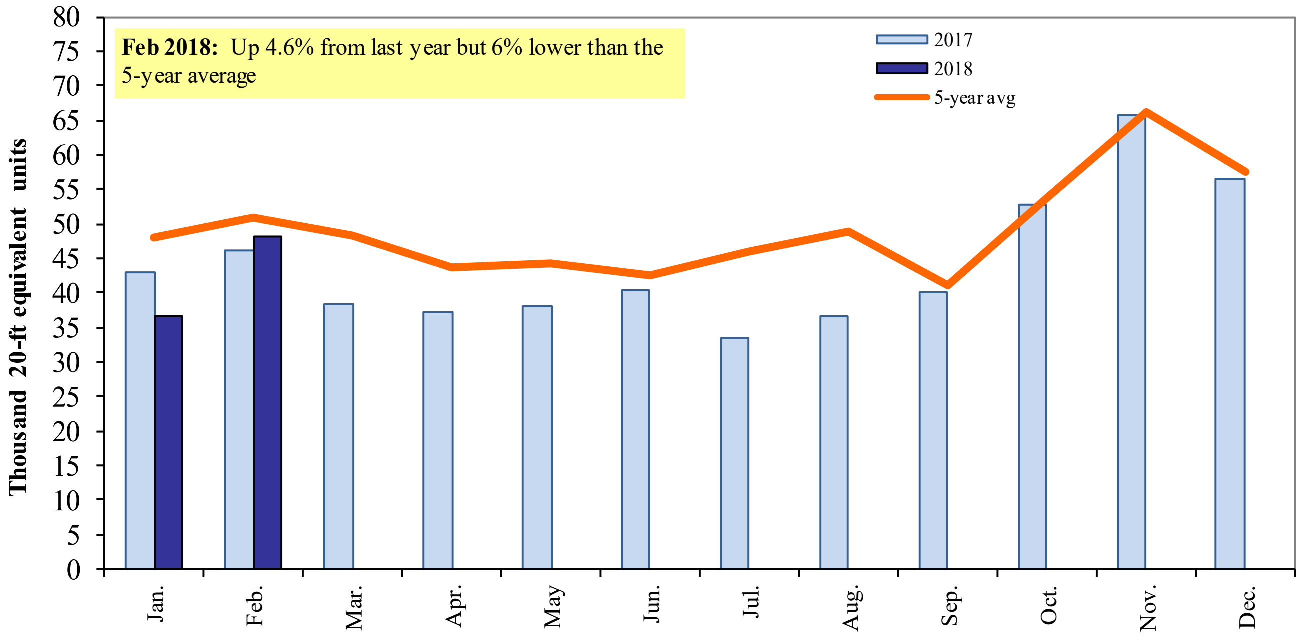


Service (PIERS) data

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.

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