United States Department of Agriculture

Grain Transportation Report

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

Contact Us

August 22, 2019

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 August 29, 2019

WEEKLY HIGHLIGHTS

Navigation Difficulties Slow Barge Traffic

Total **downbound barge** traffic through the locking system of the Mississippi, Illinois, Ohio, and Arkansas rivers has decreased the last three weeks. Water levels have rapidly declined since the flooding and highwater events earlier this year. Lower water levels, aggravated by increased sediments deposited during the flood stages, cause grounding hazards. Several barges have grounded this month. The U.S. Coast Guard and U.S. Army Corps of Engineers (USACE) issued warnings to mariners to reduce speeds and proceed with caution along portions of the inland waterways. USACE lock maintenance and dredging operations have also caused delays and traffic restrictions in some areas. These navigational issues, combined with recent high barge shipping rates and a low supply of barges upriver, have decreased the number of grain barges and volume of grain transiting the locks. The number of **barges unloaded** at the Port of New Orleans has remained high, suggesting increased grain shipments are arriving from elevators south of the locking portion of the river system.

EIA reports Strong Distillate Production in 2019 and 2020

The Energy Information Administration's (EIA) most recent *Short-Term Energy Outlook* reports crude oil prices are expected to remain stable or slightly lower through the end of the year as distillate fuel production rises. "EIA estimates that distillate fuel yields at U.S. refineries averaged 29.6 percent in July, the highest for any July on record. In both 2019 and 2020, EIA expects refiners to continue increasing distillate yields. This, in combination with rising refinery runs, is expected to lead to record levels of distillate production in both years. EIA expects high U.S. distillate production to support rising U.S. distillate fuel exports to help satisfy global demand for low-sulfur bunker fuel that meets new maritime fuel specifications, which come into effect in January 2020." Lower crude oil prices and strong distillate inventories apply downward pressure on diesel fuel rates. Over the past 6 weeks, U.S. average **diesel fuel prices** have fallen more than 6 cents per gallon.

FMCSA Seeks Comments on Hours of Service Proposed Rule

The Federal Motor Carrier Safety Administration (FMCSA) seeks comments on flexibility within the hours of service (HOS) rule by: (1) allowing the 30-minute rest break to be satisfied by a driver using on duty, not driving status; (2) splitting 10 hours off duty in a sleeper berth into two periods; (3) allowing one off-duty break of at least 30 minutes, but not more than three hours, that would pause a truck driver's 14-hour driving window; (4) extending by two hours the time driving is permitted to account for adverse conditions; and (5) lengthening the short-haul drivers' maximum on-duty period from 12 to 14 hours and extending the distance limit from 100 to 150 air miles. The proposed rule, with comments due by October 7, is available here: https://www.govinfo.gov/content/pkg/FR-2019-08-22/pdf/2019-17810.pdf.

Snapshots by Sector

Export Sales

For the week ending August 8, **unshipped balances** of wheat, corn, and soybeans totaled 13.3 mmt. This indicates a 17 percent decrease in outstanding sales, compared to the same time last year. Net **corn export sales** reached .056 mmt, up 32 percent from the previous week. Net **soybean export sales** were negative .110 mmt, compared to the past week. Net weekly **wheat export sales** reached .462 mmt, down 5 percent from the previous week.

Rail

U.S. Class I railroads originated 21,402 **grain carloads** during the week ending August 10. This is a 5 percent decrease from the previous week, 2 percent less than last year, and 3 percent lower than the 3-year average.

Average September shuttle **secondary railcar** bids/offers (per car) were $150 below tariff for the week ending August 15. This is $125 more than last week and $206 lower than this week last year. There were no non-shuttle bids/offers this week.

Barge

For the week ending August 17, **barge grain movements** totaled 547,342 tons. This is a 3.5 percent decrease from the previous week and 23 percent less than the same period last year.

For the week ending August 17, 348 grain barges **moved down river**. This is 20 fewer barges than the previous week. There were 682 grain barges **unloaded in New Orleans**, 3 percent less than the previous week.

Ocean

For the week ending August 15, 44 **ocean-going grain vessels** were loaded in the Gulf. This is 47 percent more than the same period last year. Forty-four vessels are expected to be loaded within the next 10 days. This is 19 percent fewer than the same period last year.

As of August 15, the rate for shipping a metric ton (mt) of grain from the U.S. Gulf to Japan was $50.50. This is 3 percent more than the previous week. The rate from the PNW to Japan was $27.75 per mt, 3 percent more than the previous week.

Fuel

For the week ending August 19, the U.S. average **diesel fuel price** decreased 1.7 cents from the previous week, to $2.994 per gallon. This price is 21.3 cents less than the same week last year.

Preferred citation: U.S. Dept. of Agriculture, Agricultural Marketing Service. *Grain Transportation Report.* August 22, 2019.
Web: **http://dx.doi.org/10.9752/TS056.08-22-2019**

Second Quarter Corn and Soybean Transportation Costs Mixed

Transportation costs for shipping corn and soybeans from Minneapolis, Minnesota (MN) to Japan, through the Gulf and the Pacific Northwest (PNW), were mixed during the second quarter of 2019. The overall costs of shipping corn and soybeans from the Gulf remained unchanged from quarter to quarter because increases in ocean and trucking rates were offset by decreases in barge and rail rates (see *Table 1*).

Higher trucking rates drove the increase in quarter-to-quarter transportation costs for shipping grain to Japan from the PNW. Trucking rates for moving grain increased as demand for grain remained strong during the second quarter. Ocean rates increased as well, from quarter to quarter, due to strong demand for coal and iron ore (*July 25, 2019 Grain Transportation Report (GTR)*). Although year-to-year transportation costs for shipping corn from the PNW were unchanged, the costs for shipping soybeans decreased for the same period. Total landed costs for shipping corn from Minnesota to Japan, through each export region, increased from quarter to quarter. However, total landed costs decreased for shipping soybeans to each of the export regions (see *Tables 1,2*).

Table 1: Cost of Shipping Corn and Soybeans from Minneapolis to Japan through the U.S. Gulf

	Corn					Soybeans				
	$/metric ton			Percent change		$/metric ton			Percent Change	
	2ndQtr 18	1stQtr 19	2ndQtr 19	Yr. to Yr.	Qtr to Qtr	2ndQtr 18	1stQtr 19	2ndQtr 19	Yr. to Yr.	Qtr to Qtr
Truck	12.06	8.78	10.98	-8.96	25.06	12.06	8.78	10.98	-8.96	25.06
Barge[1]	_	16.98	13.06	_	-23.09	_	16.98	13.06	_	-23.09
Rail[2]	_	51.44	50.76	_	-1.32	_	47.98	47.93	_	-0.10
Ocean	43.68	40.86	42.78	-2.06	4.70	43.68	40.86	42.78	-2.06	4.70
Total Transportation Cost	55.74	118.06	117.58	110.94	-0.41	55.74	114.60	114.75	105.87	0.13
Farm Value [3]	135.29	134.43	139.23	2.91	3.57	135.29	312.08	298.97	120.98	-4.20
Total Landed Cost	191.03	252.49	256.81	34.43	1.71	191.03	426.68	413.72	116.57	-3.04
Transportation % Landed Cost	29.18	46.76	45.78			29.18	26.86	27.74		

Table 2: Cost of Shipping Corn and Soybeans from Minneapolis to Japan through the U.S. PNW

	Corn					Soybeans				
	$/metric ton			Percent change		$/metric ton			Percent Change	
	2ndQtr 18	1stQtr 19	2ndQtr 19	Yr. to Yr.	Qtr to Qtr	1stQtr 18	1stQtr 19	2ndQtr 19	Yr. to Yr.	Qtr to Qtr
Truck	12.06	8.78	10.98	-8.96	25.06	13.87	8.78	10.98	-20.84	25.06
Rail[2]	49.65	51.44	51.44	3.61	0.00	56.29	57.60	57.60	2.33	0.00
Ocean	24.37	22.98	23.56	-3.32	2.52	24.25	22.98	23.56	-2.85	2.52
Total Transportation Cost	86.08	83.20	85.98	-0.12	3.34	94.41	89.36	92.14	-2.40	3.11
Farm Value [3]	135.29	134.43	139.23	2.91	3.57	346.37	310.24	298.97	-13.68	-3.63
Total Landed Cost	221.37	217.63	225.21	1.73	3.48	440.78	399.60	391.11	-11.27	-2.12
Transportation % Landed Cost	38.89	38.23	38.18			21.42	22.36	23.56		

[1] Barge rates are from St. Louis to the the Gulf; 4th quarter MN rail rates to St. Louis not used due to river being opened

[2] Rail rates quotes are from MN to St. Louis in Gulf. All rail tariffs include fuel surcharges and revisions for heavy axle rail cars and shuttle trains. The rail tariff rate is 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

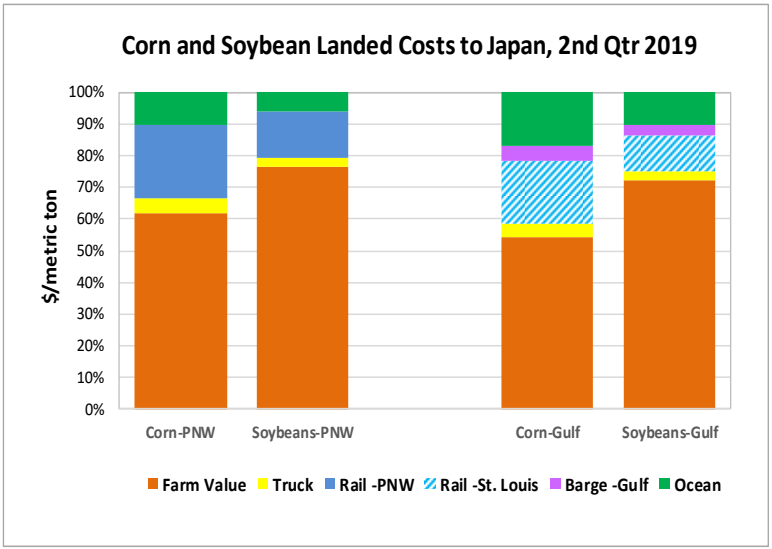
[3] Source: USDA/NASS, Agricultural Prices

U.S. Gulf Costs: Quarter-to-quarter transportation costs from Minneapolis, MN to Japan through the Gulf were unchanged for corn and soybeans (see table 1). Lower transportation costs were caused primarily by lower barge rates from St. Louis to the U.S. Gulf. Barge rates were pushed down by persistent flooding and lock closures earlier in the quarter, which reduced the demand for barge services (April 4, 2019 *GTR*). Quarter-to-quarter trucking rates for moving grain from Minnesota to locally served grain elevators jumped 25 percent and ocean rates increased 5 percent. During the second quarter, corn and soybean farm values accounted for 54 and 72 percent, respectively, of the landed costs for shipping grain through the Gulf (see Figure). The share of landed costs was below the first quarter for corn, but above for soybeans *(see Table 1).*

During the second quarter of 2019, farm value increased from last year for corn shipped from MN through the Gulf to Japan. Farm value for soybeans decreased during that same period. Transportation costs for shipping corn and soybeans accounted for 46 and 28 percent, respectively, of the landed costs in the Gulf. The costs were below the first quarter for corn, but above the first quarter for soybeans (*Table 1*). The barge share of total landed costs was below the first quarter for corn and soybeans, but the ocean share was above the first quarter for corn and unchanged for soybeans.

Second quarter corn exports in the U.S. Gulf, down 43 percent from last year, reached 6.4 mmt and accounted for 53 percent of total corn exports. Second quarter soybean exports shipped from the U.S. Gulf, up 3 percent from last year, totaled 4.3 mmt and accounted for 55 percent of total soybean exports. (*July 18, 2019 GTR).*

Pacific Northwest Costs: Total transportation costs for shipping corn and soybeans from Minneapolis, via the PNW to Japan, increased 3 percent from quarter to quarter (*see Table 2*). Quarter-to-quarter rates increased for trucking and ocean shipping. Due primarily to lower trucking rates, year-to-year transportation costs for shipping grain from the PNW to Japan were unchanged for corn, but down 2 percent for soybeans. Year-to-year rail rates for shipping grain from the PNW increased 4 percent for corn and 2 percent for soybeans.



Due to higher transportation costs and farm values, quarter-to-quarter total landed costs for shipping corn from Minnesota through the PNW to Japan, increased 4 percent. Total landed costs for soybeans, however, decreased 2 percent because of lower farm values. Year-to-year landed costs for shipping corn to Japan increased 2 percent due to higher rail rates and farm values. During the same period, landed costs for shipping soybeans decreased 11 percent due to lower transportation costs and farm values (see table 2). First quarter transportation costs, for grain shipped through the PNW, accounted for 38 percent of the total landed costs for corn and 24 percent for soybeans. The share of corn to total landed costs was below the previous quarter and last year, while the share for soybeans was above for each of these periods. Farm value accounted for 62 percent of the total landed cost for corn shipped through the PNW, while soybeans accounted for 76 percent (*see figure*).

Corn exports from the PNW reached 3.5 mmt during the second quarter, down 50 percent from last year and due primarily to lower demand from Asia (*July 18, 2019 GTR)*. PNW corn exports accounted for 29 percent of total second quarter corn exports. Second quarter soybean exports from the PNW reached 1.4 mmt, down only 5 percent from last year. PNW soybean exports accounted for 18 percent of total soybean exports during the second quarter. *Johnny.Hill@usda.gov*

Grain Transportation Indicators

Table 1

Grain Transport Cost Indicators[1]

	Truck	Rail		Barge	Ocean	
For the week ending		Unit Train	Shuttle		Gulf	Pacific
08/21/19	201	n/a	214	262	226	197
08/14/19	202	n/a	214	288*	219	191

[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)
n/a = not available

*Revised

Source: Transportation & Marketing Program/AMS/USDA

Table 2

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

Commodity	Origin--Destination	8/16/2019	8/9/2019
Corn	IL--Gulf	-0.41	-0.44
Corn	NE--Gulf	-0.50	-0.53
Soybean	IA--Gulf	-0.79	-1.20
HRW	KS--Gulf	-1.77	-1.62
HRS	ND--Portland	-1.86	-1.65

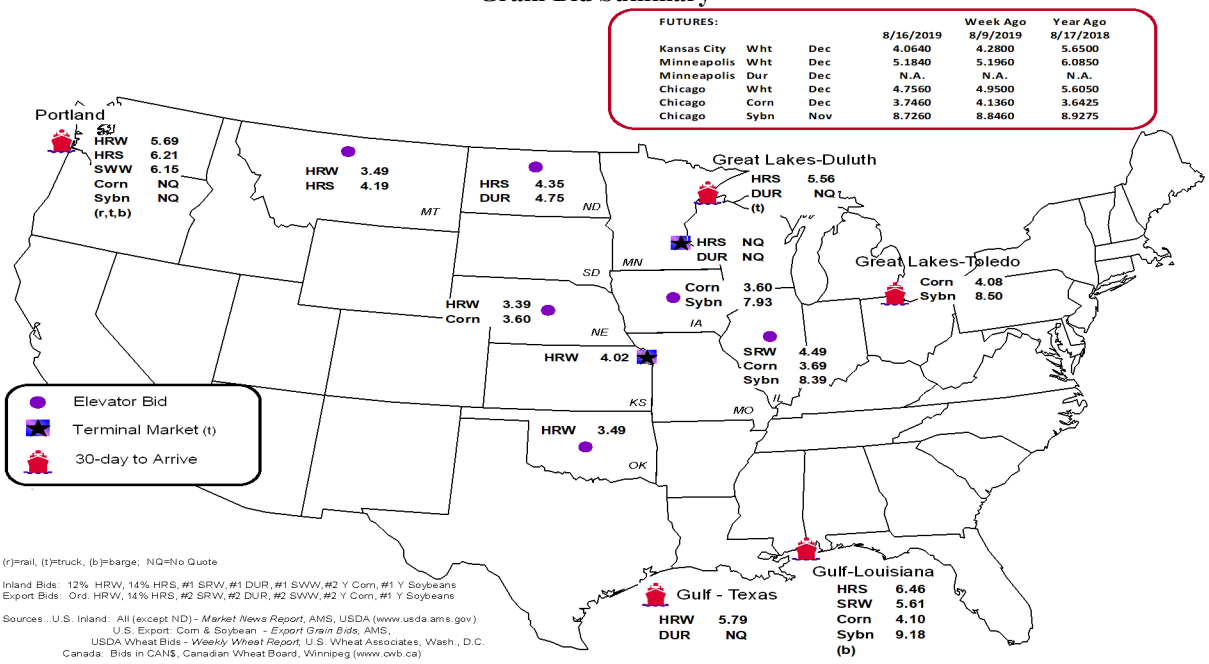
Note: nq = no quote; n/a = not available

Source: Transportation & Marketing Program/AMS/USDA

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

Figure 1

Grain Bid Summary



Rail Transportation

Table 3

Rail Deliveries to Port (carloads)[1]

For the Week Ending	Mississippi Gulf	Texas Gulf	Pacific Northwest	Atlantic & East Gulf	Total	Week ending	Cross-Border Mexico[3]
8/14/2019[p]	686	591	4,351	321	5,949	8/10/2019	2,597
8/07/2019[r]	799	1,145	3,919	456	6,319	8/3/2019	2,759
2019 YTD[r]	31,689	37,793	167,123	12,151	248,756	2019 YTD	77,357
2018 YTD[r]	12,961	35,274	216,352	13,745	278,332	2018 YTD	75,293
2019 YTD as % of 2018 YTD	244	107	77	88	89	% change YTD	103
Last 4 weeks as % of 2018[2]	184	141	71	153	88	Last 4wks % 2018	108
Last 4 weeks as % of 4-year avg.[2]	143	92	88	193	97	Last 4wks % 4 yr	132
Total 2018	22,118	46,532	310,449	21,432	400,531	Total 2018	129,116
Total 2017	28,796	75,543	287,267	21,312	412,918	Total 2017	119,661

[1] Data is incomplete as it is voluntarily provided

[2] Compared with same 4-weeks in 2018 and prior 4-year average.

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

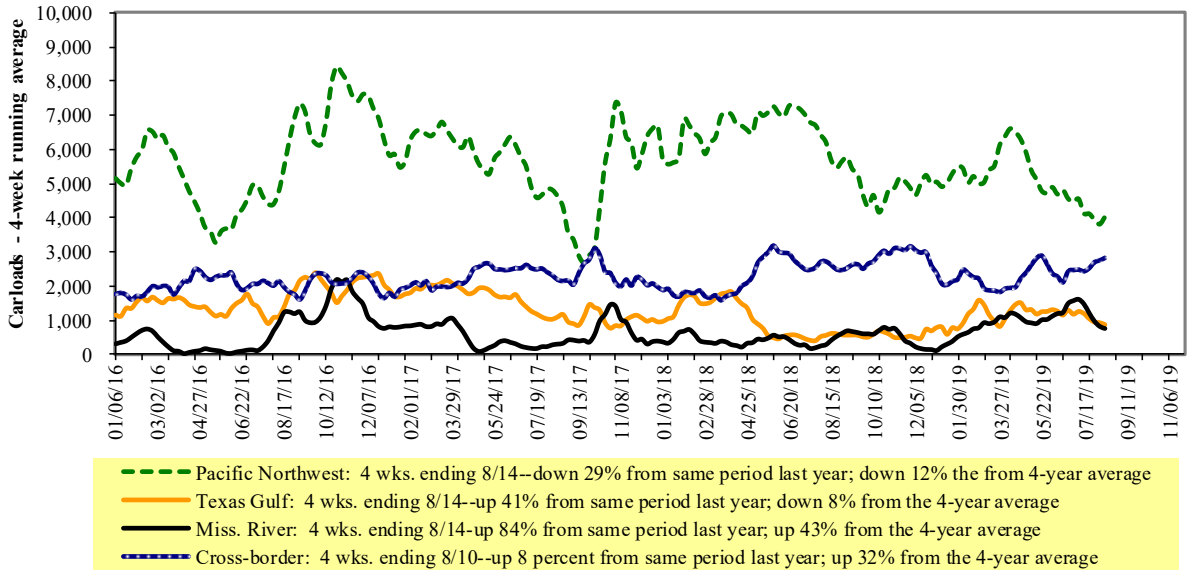
YTD = year-to-date; p = preliminary data; r = revised data; n/a = not available

Source: Transportation & Marketing Program/AMS/USDA

Railroads originate approximately 24 percent of U.S. grain shipments. Trends in these loadings are indicative of market conditions and expectations.

Figure 2

Rail Deliveries to Port



Source: Transportation & Marketing Program/AMS/USDA

Table 4

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

For the week ending:	East		West			U.S. total	Canada	
8/10/2019	CSXT	NS	BNSF	KCS	UP		CN	CP
This week	1,376	2,964	11,457	903	4,702	21,402	3,168	4,546
This week last year	2,082	2,581	11,101	1,003	5,000	21,767	4,385	4,546
2019 YTD	59,873	91,744	354,917	35,768	165,768	708,070	135,361	140,721
2018 YTD	62,531	82,463	399,546	30,968	167,533	743,041	120,747	148,518
2019 YTD as % of 2018 YTD	96	111	89	115	99	95	112	95
Last 4 weeks as % of 2018*	79	102	88	118	104	94	79	99
Last 4 weeks as % of 3-yr avg.**	105	107	91	131	99	97	82	100
Total 2018	98,978	133,267	635,458	48,638	267,713	1,184,054	211,806	244,697

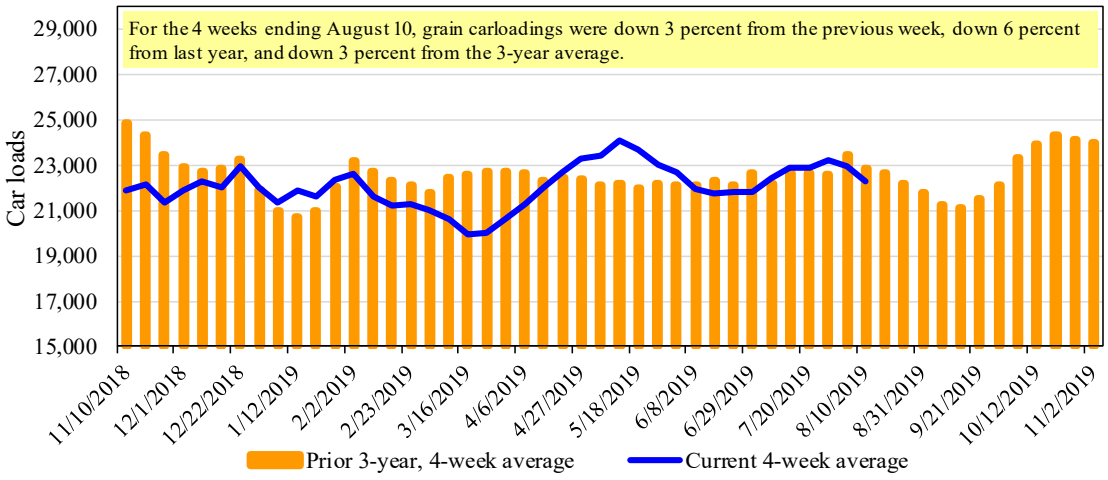
*The past 4 weeks of this year as a percent of the same 4 weeks last year.

**The past 4 weeks as a percent of the same period from the prior 3-year average. YTD = year-to-date.

Source: Association of American Railroads (www.aar.org)

Figure 3

Total Weekly U.S. Class I Railroad Grain Car Loadings



Source: Association of American Railroads

Table 5

Railcar Auction Offerings[1] ($/car)[2]

For the week ending:		Delivery period							
8/15/2019		Sep-19	Sep-18	Oct-19	Oct-18	Nov-19	Nov-18	Dec-19	Dec-18
BNSF[3]	COT grain units	0	0	no bid	0	no bid	0	no bid	0
	COT grain single-car[5]	0	118	70	165	61	86	62	116
UP[4]	GCAS/Region 1	no offer	no offer	no offer	no offer	no offer	no offer	n/a	n/a
	GCAS/Region 2	no bid	no offer	no bid	no offer	no offer	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.

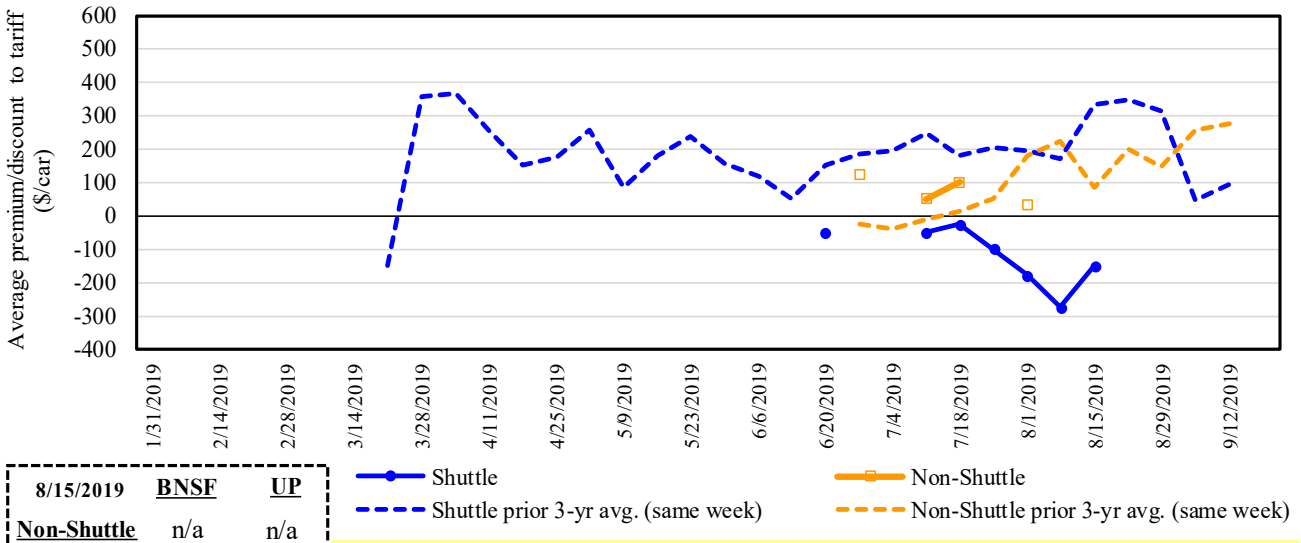
Region 2 includes: CO, IA, KS, MN, NE, WY, and Kansas City and St. Joseph, MO.

[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 September 2019, Secondary Market

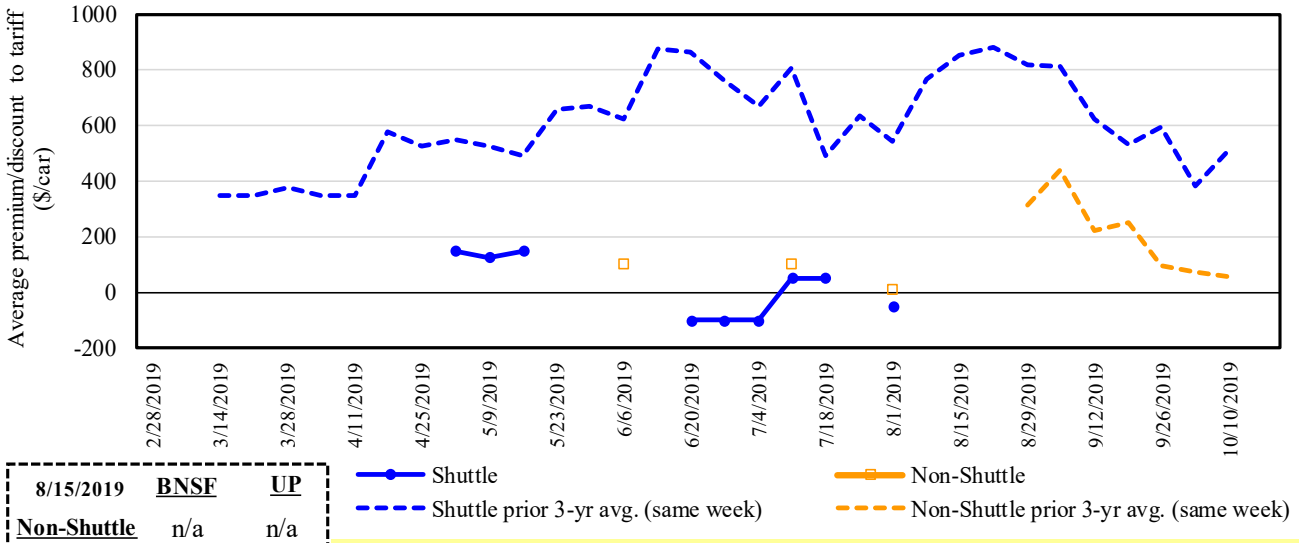


8/15/2019	BNSF	UP
Non-Shuttle	n/a	n/a
Shuttle	-$150	n/a

There were no Non-Shuttle bids/offers this week.
Average Shuttle bids/offers rose $125 this week and are $125 below the peak.

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

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



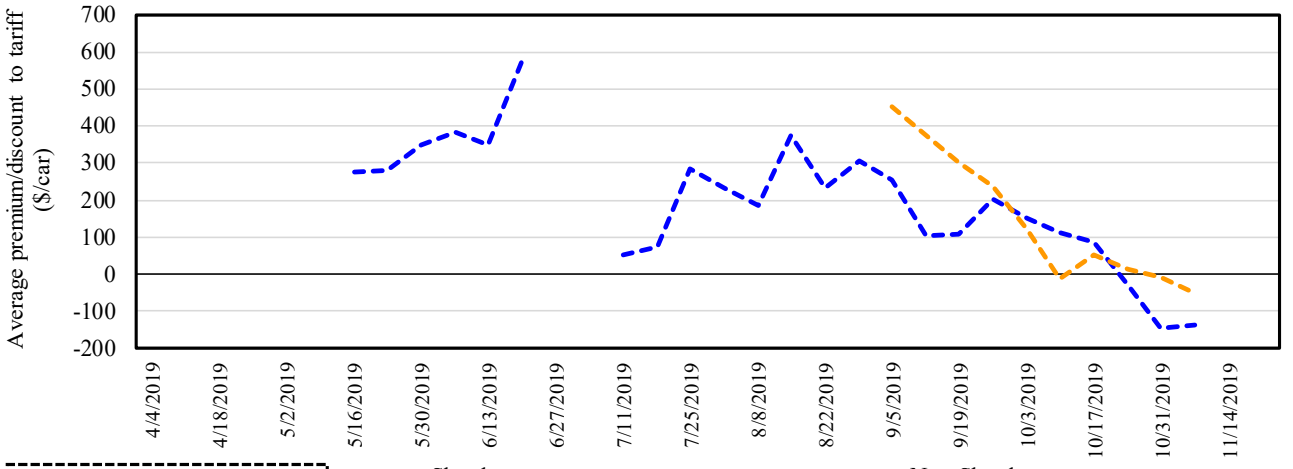
8/15/2019	BNSF	UP
Non-Shuttle	n/a	n/a
Shuttle	n/a	n/a

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

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

Figure 6

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



8/15/2019	BNSF	UP
Non-Shuttle	n/a	n/a
Shuttle	n/a	n/a

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

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

Table 6

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

	For the week ending: 8/15/2019	Delivery period					
		Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20
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 2018	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 2018	n/a	n/a	n/a	n/a	n/a	n/a
Shuttle	**BNSF-GF**	**(150)**	**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 2018	(350)	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 2018	n/a	n/a	n/a	n/a	n/a	n/a

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

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

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

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

Source: Transportation and Marketing Program/AMS/USDA

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

Table 7

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

August, 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	$101	$40.56	$1.10	0
	Grand Forks, ND	Duluth-Superior, MN	$4,333	$0	$43.03	$1.17	2
	Wichita, KS	Los Angeles, CA	$7,240	$0	$71.90	$1.96	1
	Wichita, KS	New Orleans, LA	$4,525	$178	$46.70	$1.27	-1
	Sioux Falls, SD	Galveston-Houston, TX	$6,976	$0	$69.28	$1.89	1
	Northwest KS	Galveston-Houston, TX	$4,801	$195	$49.61	$1.35	-1
	Amarillo, TX	Los Angeles, CA	$5,121	$271	$53.55	$1.46	-1
Corn	Champaign-Urbana, IL	New Orleans, LA	$3,800	$201	$39.73	$1.01	-4
	Toledo, OH	Raleigh, NC	$6,581	$0	$65.35	$1.66	4
	Des Moines, IA	Davenport, IA	$2,114	$43	$21.42	$0.54	-7
	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	$3,660	$125	$37.59	$0.95	1
	Des Moines, IA	Los Angeles, CA	$5,520	$365	$58.44	$1.48	2
Soybeans	Minneapolis, MN	New Orleans, LA	$3,631	$201	$38.05	$1.04	-12
	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	$4,545	$201	$47.13	$1.28	-5
Shuttle Train							
Wheat	Great Falls, MT	Portland, OR	$4,143	$0	$41.14	$1.12	2
	Wichita, KS	Galveston-Houston, TX	$4,361	$0	$43.31	$1.18	2
	Chicago, IL	Albany, NY	$5,896	$0	$58.55	$1.59	4
	Grand Forks, ND	Portland, OR	$5,736	$0	$56.96	$1.55	0
	Grand Forks, ND	Galveston-Houston, TX	$6,121	$0	$60.78	$1.65	1
	Northwest KS	Portland, OR	$6,012	$320	$62.88	$1.71	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	$3,720	$201	$38.94	$0.99	-1
	Lincoln, NE	Galveston-Houston, TX	$3,880	$0	$38.53	$0.98	5
	Des Moines, IA	Amarillo, TX	$4,060	$157	$41.88	$1.06	1
	Minneapolis, MN	Tacoma, WA	$5,180	$0	$51.44	$1.31	4
	Council Bluffs, IA	Stockton, CA	$5,000	$0	$49.65	$1.26	4
Soybeans	Sioux Falls, SD	Tacoma, WA	$5,750	$0	$57.10	$1.55	3
	Minneapolis, MN	Portland, OR	$5,800	$0	$57.60	$1.57	3
	Fargo, ND	Tacoma, WA	$5,650	$0	$56.11	$1.53	3
	Council Bluffs, IA	New Orleans, LA	$4,775	$232	$49.72	$1.35	-1
	Toledo, OH	Huntsville, AL	$4,634	$0	$46.02	$1.25	6
	Grand Island, NE	Portland, OR	$5,710	$327	$59.95	$1.63	-1

[1]A unit train refers to shipments of at least 25 cars. Shuttle train rates are generally available for qualified shipments of 75-120 cars that meet railroad efficiency requirements.

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

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

[4]Percentage change year over year calculated using tariff rate plus fuel surcharge

Sources: www.bnsf.com, www.cn.ca, www.csx.com, www.up.com

Table 8

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

Date: August, 2019							
Commodity	Origin state	Destination region	Tariff rate/car[1]	Fuel surcharge per car[2]	Tariff plus surcharge per: metric ton[3]	Tariff plus surcharge per: bushel[3]	Percent change[4] Y/Y
Wheat	MT	Chihuahua, CI	$7,509	$0	$76.72	$2.09	3
	OK	Cuautitlan, EM	$6,775	$139	$70.65	$1.92	0
	KS	Guadalajara, JA	$7,534	$596	$83.07	$2.26	5
	TX	Salinas Victoria, NL	$4,329	$85	$45.10	$1.23	0
Corn	IA	Guadalajara, JA	$8,828	$508	$95.39	$2.42	8
	SD	Celaya, GJ	$8,140	$0	$83.17	$2.11	6
	NE	Queretaro, QA	$8,207	$291	$86.83	$2.20	2
	SD	Salinas Victoria, NL	$6,905	$0	$70.55	$1.79	2
	MO	Tlalnepantla, EM	$7,573	$284	$80.28	$2.04	2
	SD	Torreon, CU	$7,690	$0	$78.57	$1.99	5
Soybeans	MO	Bojay (Tula), HG	$8,497	$480	$91.72	$2.49	6
	NE	Guadalajara, JA	$9,122	$503	$98.34	$2.67	7
	IA	El Castillo, JA	$9,390	$0	$95.94	$2.61	5
	KS	Torreon, CU	$7,914	$349	$84.43	$2.30	7
Sorghum	NE	Celaya, GJ	$7,787	$452	$84.19	$2.14	8
	KS	Queretaro, QA	$8,000	$174	$83.52	$2.12	2
	NE	Salinas Victoria, NL	$6,633	$140	$69.20	$1.76	2
	NE	Torreon, CU	$7,172	$323	$76.58	$1.94	6

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

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

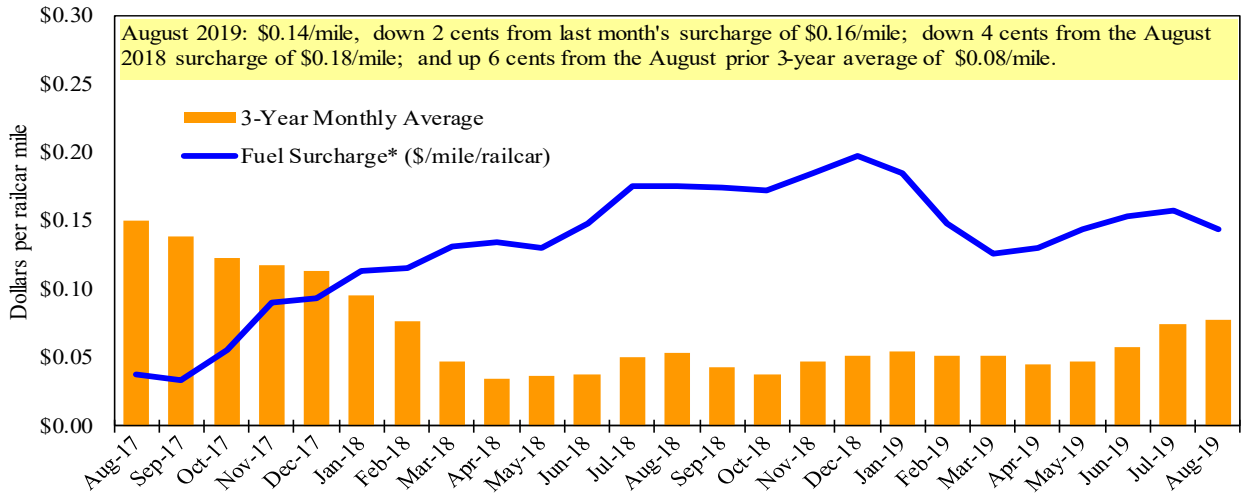
[3]Approximate load per car = 97.87 metric tons: Corn & Sorghum 56 lbs/bu, Wheat & Soybeans 60 lbs/bu

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

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

Figure 7

Railroad Fuel Surcharges, North American Weighted Average[1]



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

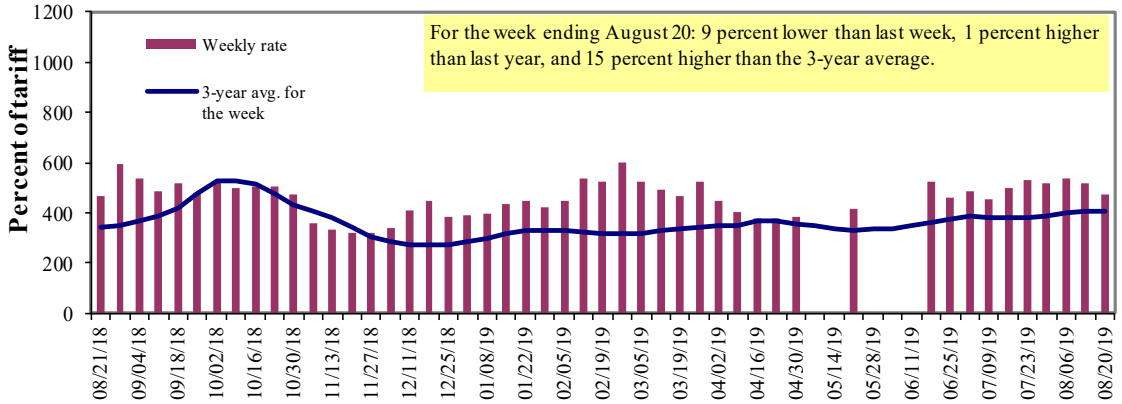
* Beginning January 2009, the Canadian Pacific fuel surcharge is computed by a monthly average of the bi-weekly fuel surcharge.

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

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

Barge Transportation

Figure 8
Illinois River Barge Freight Rate[1,2]



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

Source: Transportation & Marketing Program/AMS/USDA

Table 9
Weekly Barge Freight Rates: Southbound Only

		Twin Cities	Mid-Mississippi	Lower Illinois River	St. Louis	Cincinnati	Lower Ohio	Cairo-Memphis
Rate[1]	8/20/2019	489	480	471	374	356	356	373
	8/13/2019	529	594	519	391	338	338	400
$/ton	8/20/2019	30.27	25.54	21.85	14.92	16.70	14.38	11.71
	8/13/2019	32.75	31.60	24.08	15.60	15.85	13.66	12.56
Current week % change from the same week:								
	Last year	-4	2	1	15	-13	-13	17
	3-year avg. [2]	2	15	15	32	7	7	45
Rate[1]	September	442	443	430	481	380	380	390
	November	415	406	395	310	345	345	290

[1]Rate = percent of 1976 tariff benchmark index (1976 = 100 percent); [2]4-week moving average; ton = 2,000 pounds; "-" n/a due to closure
* - Current weekly rate is a nominal value, reflecting the anticipation of improved navigation conditions
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.

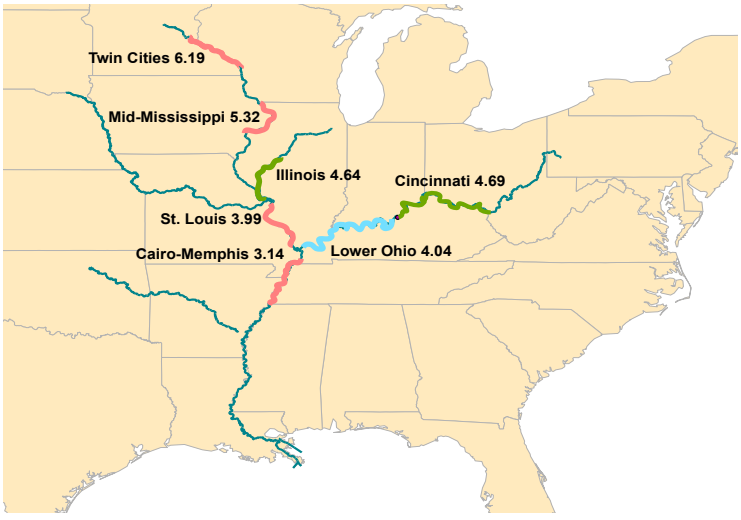
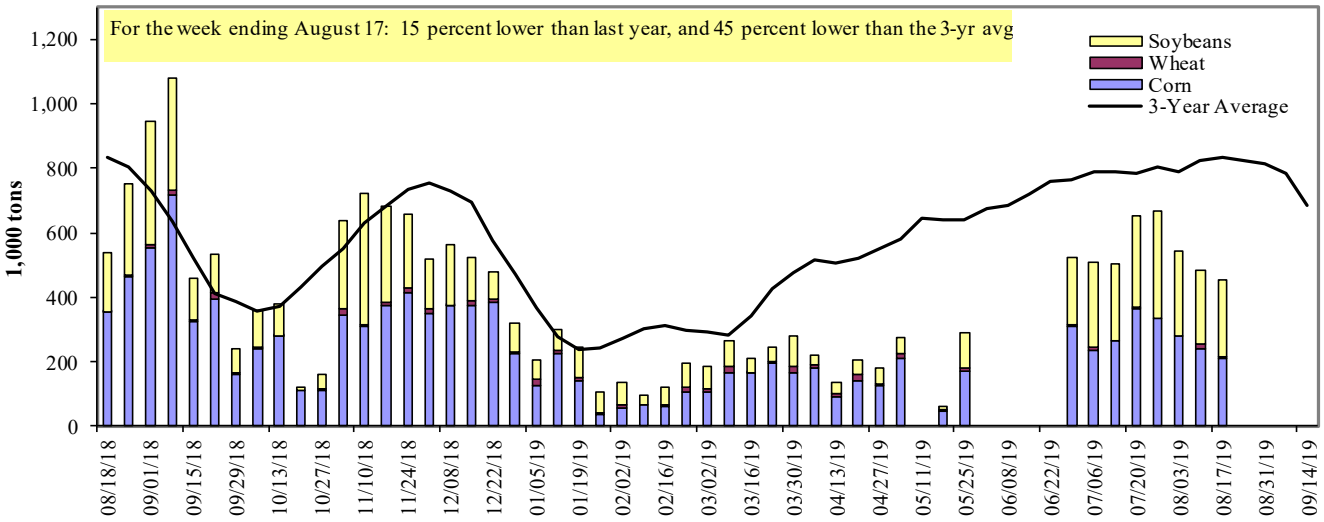


Figure 10

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 08/17/2019	Corn	Wheat	Soybeans	Other	Total
Mississippi River					
Rock Island, IL (L15)	180	0	147	5	333
Winfield, MO (L25)	160	2	171	5	337
Alton, IL (L26)	225	5	235	5	469
Granite City, IL (L27)	208	6	242	5	461
Illinois River (LAGRANGE)	44	0	51	0	95
Ohio River (OLMSTED)	5	18	47	0	70
Arkansas River (L1)	0	0	17	0	17
Weekly total - 2019	213	24	305	5	547
Weekly total - 2018	424	42	246	0	712
2019 YTD[1]	8,111	1,141	6,949	106	16,308
2018 YTD[1]	15,395	1,179	7,655	82	24,311
2019 as % of 2018 YTD	53	97	91	129	67
Last 4 weeks as % of 2018[2]	56	51	111	190	76
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.

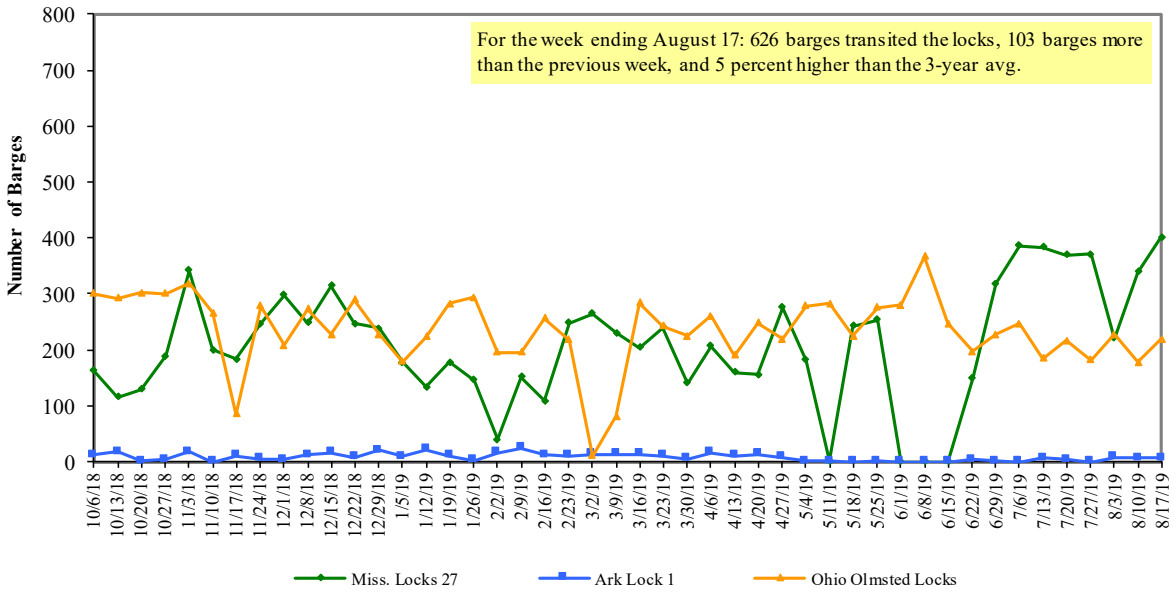
[2] As a percent of same period in 2018.

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

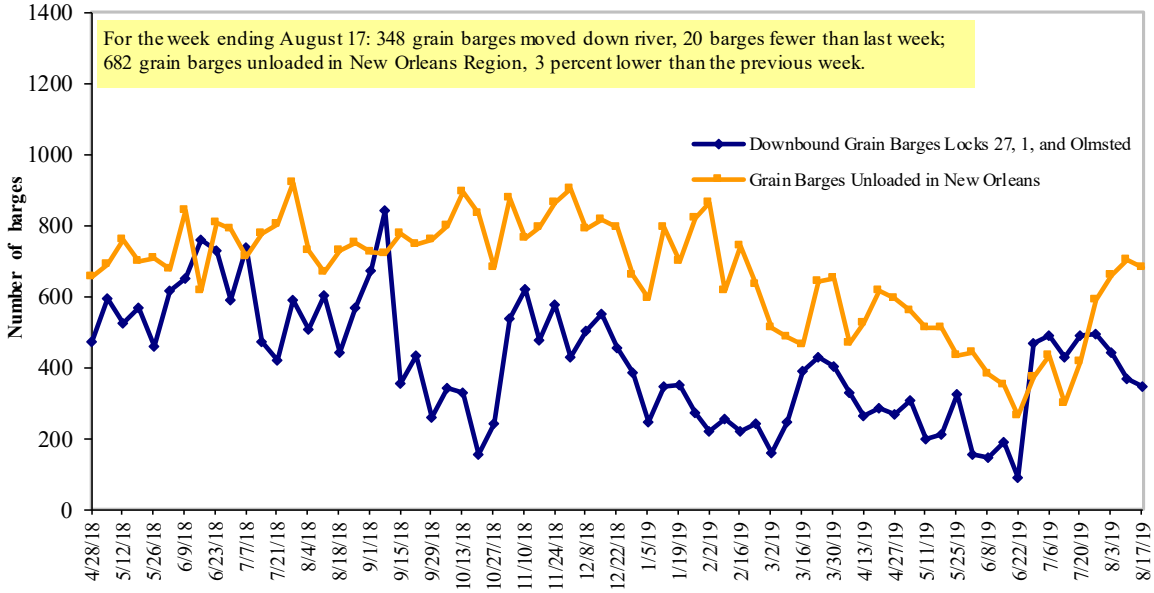
Upbound Empty Barges Transiting Mississippi River Locks 27, Arkansas River Lock and Dam 1, and Ohio River Olmsted Locks and Dam



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 8/19/2019 (US $/gallon)

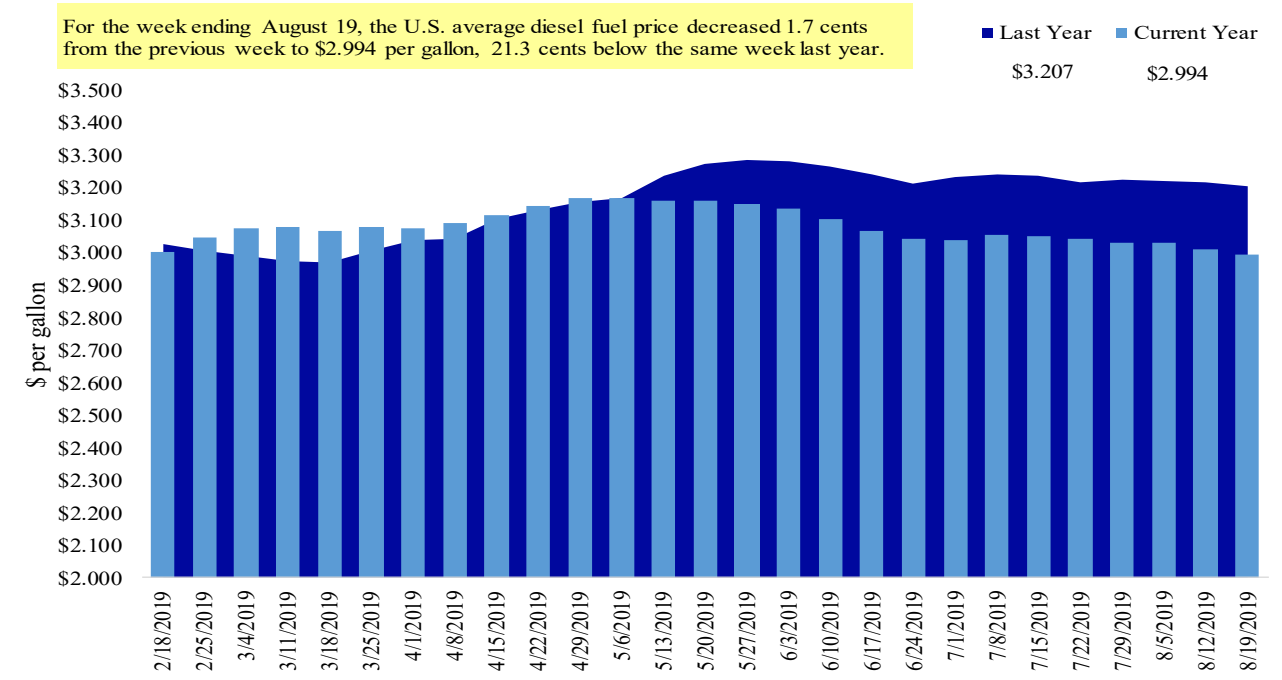
Region	Location	Price	Change from Week ago	Change from Year ago
I	East Coast	3.019	-0.015	-0.188
	New England	3.048	-0.025	-0.213
	Central Atlantic	3.199	-0.016	-0.181
	Lower Atlantic	2.892	-0.012	-0.184
II	Midwest	2.900	-0.024	-0.229
III	Gulf Coast	2.751	-0.012	-0.230
IV	Rocky Mountain	2.939	-0.001	-0.410
V	West Coast	3.564	-0.016	-0.142
	West Coast less California	3.158	-0.006	-0.265
	California	3.887	-0.022	-0.042
Total	U.S.	2.994	-0.017	-0.213

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

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

Figure 13

Weekly Diesel Fuel Prices, U.S. Average



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

Grain Exports

Table 12

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

	Wheat						Corn	Soybeans	Total
For the week ending	HRW	SRW	HRS	SWW	DUR	All wheat			
Export Balances[1]									
8/8/2019	1,407	696	1,579	1,011	334	5,027	2,593	5,648	13,268
This week year ago	1,167	579	1,406	1,197	165	4,513	6,849	4,718	16,080
Cumulative exports-marketing year[2]									
2018/19 YTD	2,386	536	1,061	748	91	4,821	47,391	43,013	95,225
2017/18 YTD	1,041	497	1,177	1,060	28	3,804	53,343	53,891	111,038
YTD 2018/19 as % of 2017/18	229	108	90	71	327	127	89	80	86
Last 4 wks as % of same period 2017/18	130	136	105	84	191	113	52	153	99
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 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 Importers[1] of U.S. Corn

For the week ending 8/08/2019	Total Commitments[2]			% change current MY from last MY	Exports[3] 3-year avg 2015-2017
	2019/20 Next MY	2018/19 Current MY	2017/18 Last MY		
		- 1,000 mt -			
Mexico	2,263	15,598	15,223	2	13,691
Japan	589	12,807	11,695	10	11,247
Korea	0	3,698	5,846	(37)	4,754
Colombia	23	4,680	4,798	(2)	4,678
Peru	0	1,992	3,242	(39)	2,975
Top 5 Importers	**2,875**	**38,774**	**40,803**	**(5)**	**37,344**
Total US corn export sales	**4,381**	**49,984**	**60,193**	**(17)**	**53,184**
% of Projected	8%	94%	97%		
Change from prior week[2]	**308**	**56**	**271**		
Top 5 importers' share of U.S. corn export sales	66%	78%	68%		70%
USDA forecast, August 2019	**54,707**	**53,435**	**62,036**	**(14)**	
Corn Use for Ethanol USDA forecast, August 2019	**139,065**	**137,795**	**142,367**	**(3)**	

(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 Importers[1] of U.S. Soybeans

For the week ending 8/08/2019	Total Commitments[2]			% change current MY from last MY	Exports[3] 3-yr avg. 2015-2017
	2019/20 Next MY	2018/19 Current MY	2017/18 Last MY		
		- 1,000 mt -			- 1,000 mt -
China	194	14,064	27,922	(50)	31,228
Mexico	819	4,952	4,487	10	3,716
Indonesia	3,624	2,365	2,659	(11)	2,250
Japan	157	2,631	2,341	12	2,145
Netherlands	0	2,179	2,379	(8)	2,209
Top 5 importers	**4,794**	**26,191**	**39,788**	**(34)**	**41,549**
Total US soybean export sales	**4,469**	**48,661**	**58,609**	**(17)**	**55,113**
% of Projected	9%	105%	101%		
Change from prior week[2]	**817**	**(110)**	**133**		
Top 5 importers' share of U.S. soybean export sales	107%	54%	68%		**75%**
USDA forecast, August 2019	**48,365**	**46,322**	**58,147**	**80**	

(n) indicates negative number.

[1] Based on FAS Marketing Year Ranking Reports for 2017/18 - www.fas.usda.gov; Marketing year (MY) = Sep 1 - Aug 31.

[2] Cumulative Exports (shipped) + Outstanding Sales (unshipped), FAS Weekly Export Sales Report, or Export Sales Query--http://www.fas.usda.gov/esrquery/. The total commitments change (net sales) from prior week could include reivisions from previous week's outstanding sales and/or accumulated sales

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

Table 15

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

For the week ending 8/08/2019	Total Commitments[2]		% change current MY from last MY	Exports[3] 3-yr avg 2015-2017
	2019/20 Current MY	2018/19 Last MY		
	- 1,000 mt -			- 1,000 mt -
Mexico	1,361	946	44	2,781
Japan	1,005	1,020	(1)	2,649
Philippines	1,215	1,277	(5)	2,441
Korea	522	672	(22)	1,257
Nigeria	625	453	38	1,254
Indonesia	306	284	8	1,076
Taiwan	455	404	13	1,066
China	60	0	n/a	944
Colombia	64	340	(81)	714
Thailand	311	404	(23)	618
Top 10 importers	**5,923**	**5,800**	2	**14,800**
Total US wheat export sales	**9,849**	**8,317**	**18**	**22,869**
% of Projected	37%	33%		
Change from prior week[2]	**462**	**803**		
Top 10 importers' share of U.S. wheat export sales	60%	70%		65%
USDA forecast, August 2019	**26,567**	**25,504**	**4**	

(n) indicates negative number.

[1] Based on FAS Marketing Year Ranking Reports for 2017/18 - www.fas.usda.gov; Marketing year = Jun 1 - May 31.

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

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

Table 16

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

Port Regions	For the Week Ending 08/15/19	Previous Week*	Current Week as % of Previous	2019 YTD*	2018 YTD*	2019 YTD as % of 2018 YTD	Last 4-weeks as % of: Last Year	Last 4-weeks as % of: Prior 3-yr. avg.	2018 Total*
Pacific Northwest									
Wheat	266	421	63	8,543	8,088	106	88	82	13,315
Corn	0	0	n/a	6,858	14,402	48	7	8	20,024
Soybeans	271	133	204	6,419	5,793	111	381	349	7,719
Total	**538**	**554**	**97**	**21,820**	**28,283**	**77**	**71**	**75**	**41,058**
Mississippi Gulf									
Wheat	85	132	64	3,226	2,633	122	139	117	3,896
Corn	360	526	68	15,113	22,548	67	60	72	33,735
Soybeans	799	664	120	15,588	14,888	105	130	119	28,124
Total	**1,243**	**1,322**	**94**	**33,927**	**40,069**	**85**	**92**	**96**	**65,755**
Texas Gulf									
Wheat	56	71	78	4,626	2,098	221	349	105	3,198
Corn	17	14	122	458	535	86	82	46	730
Soybeans	0	0	n/a	2	67	2	n/a	n/a	69
Total	**73**	**85**	**85**	**5,085**	**2,699**	**188**	**239**	**88**	**3,997**
Interior									
Wheat	37	95	39	1,217	944	129	217	160	1,614
Corn	125	167	75	4,853	5,561	87	92	104	8,650
Soybeans	144	155	93	4,336	4,289	101	110	142	6,729
Total	**306**	**417**	**74**	**10,405**	**10,794**	**96**	**108**	**124**	**16,993**
Great Lakes									
Wheat	70	29	240	608	401	151	127	103	894
Corn	0	0	n/a	0	324	0	0	0	404
Soybeans	0	35	0	398	389	102	74	100	1,192
Total	**70**	**64**	**110**	**1,006**	**1,114**	**90**	**83**	**77**	**2,491**
Atlantic									
Wheat	0	0	n/a	32	67	48	0	0	69
Corn	0	0	n/a	92	67	136	n/a	0	138
Soybeans	4	7	59	859	1,380	62	74	115	2,047
Total	**4**	**7**	**59**	**982**	**1,514**	**65**	**73**	**93**	**2,253**
U.S. total from ports*									
Wheat	515	748	69	18,251	14,232	128	120	96	22,986
Corn	501	707	71	27,373	43,437	63	48	55	63,682
Soybeans	1,219	994	123	27,601	26,806	103	145	144	45,879
Total	**2,235**	**2,449**	**91**	**73,225**	**84,474**	**87**	**90**	**92**	**132,547**

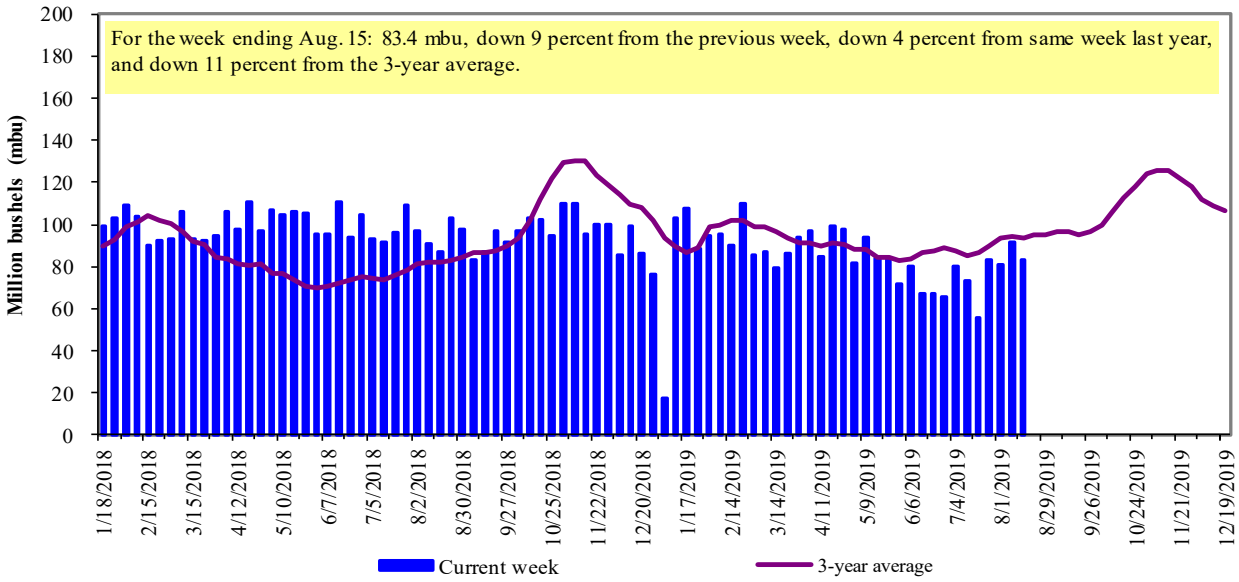
*Data includes revisions from prior weeks; some regional totals may not add exactly due to rounding.

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

The United States exports approximately one-quarter of the grain it produces. On average, this includes nearly 45 percent of U.S.-grown wheat, 50 percent of U.S.-grown soybeans, and 20 percent of the U.S.-grown corn. Approximately 53 percent of the U.S. export grain shipments departed through the U.S. Gulf region in 2018.

Figure 14

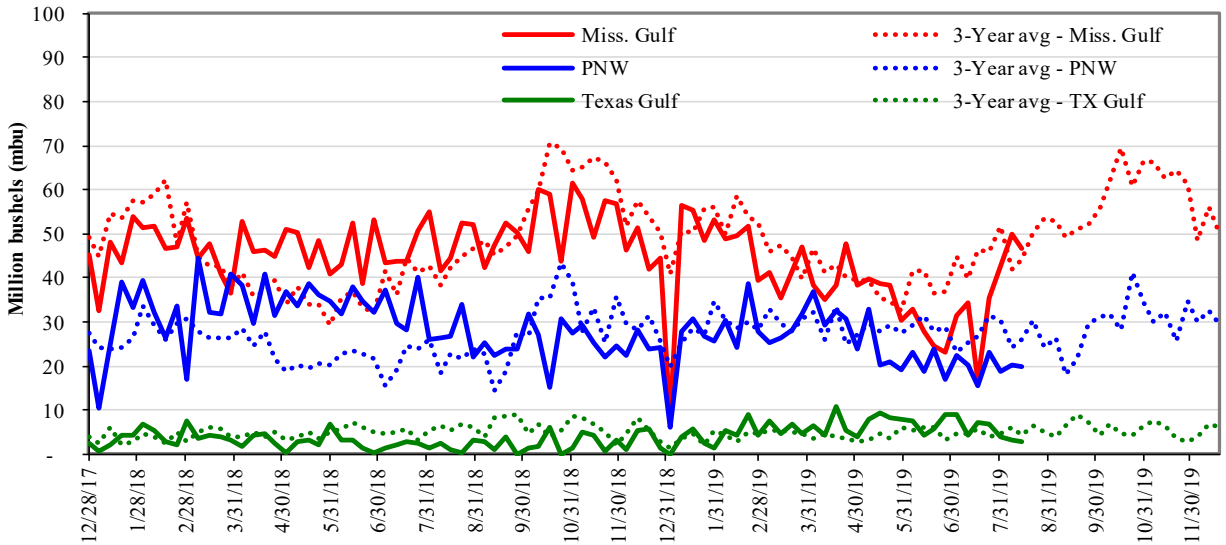
U.S. grain inspected for export (wheat, corn, and soybeans)



Source: 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 08/15/19 inspections (mbu):	
Mississippi Gulf:	46.6
PNW:	19.8
Texas Gulf:	2.7

Percent change from:	MS Gulf	TX Gulf	U.S. Gulf	PNW
Last Week:	down 7	down 14	down 7	down 3
Last Year (same	up 4	up 192	up 8	down 26
3-yr avg. (4-wk. mov.	up 2	down 43	down 3	down 30

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

Table 17

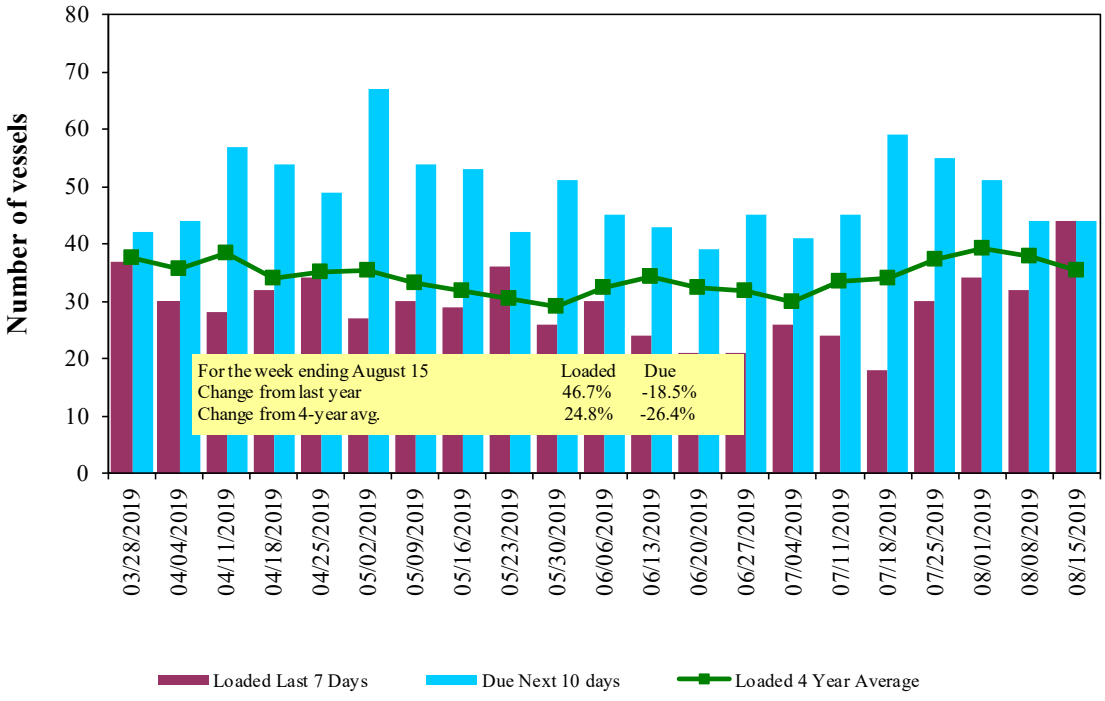
Weekly Port Region Grain Ocean Vessel Activity (number of vessels)

	Gulf			Pacific Northwest
Date	In port	Loaded 7-days	Due next 10-days	In port
8/15/2019	41	44	44	15
8/8/2019	53	32	44	17
2018 range	(23..88)	(24..41)	(38..67)	(4..30)
2018 avg.	40	34	54	17

Source: Transportation & Marketing Programs/AMS/USDA

Figure 16

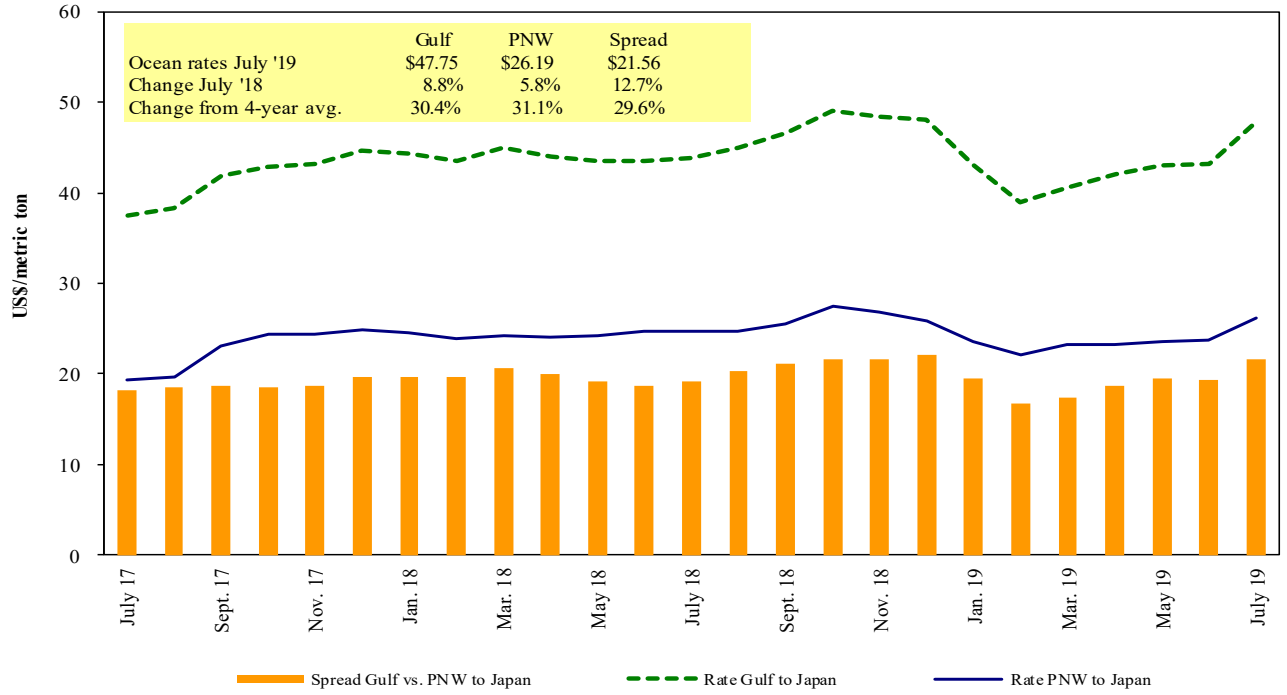
U.S. Gulf Vessel Loading Activity



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

Figure 17

Grain Vessel Rates, U.S. to Japan



Data Source: O'Neil Commodity Consulting

Table 18

Ocean Freight Rates For Selected Shipments, Week Ending 08/17/2019

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
U.S. Gulf	Pt Sudan	Sorghum	Sep 20/30	38,540	133.75*
U.S. Gulf	Djibouti	Wheat	Aug 19/29	20,000	85.66*
U.S. Gulf	Durban	Sorghum	Jul 19/29	11,000	145.22*
PNW	China	Heavy Grain	Mar 2/18	60,000	27.50
PNW	Yemen	Wheat	Aug 19/29	29,200	71.75*
Brazil	China	Heavy Grain	Jun 10/20	65,000	33.00
Brazil	China	Heavy Grain	Apr 20/May 5	63,000	33.00
Brazil	China	Heavy Grain	Apr 15/30	63,000	32.50
Brazil	China	Heavy Grain	Mar 3/11	63,000	27.50
River Plate	China	Heavy Grain	Apr 21/30	65,000	37.85

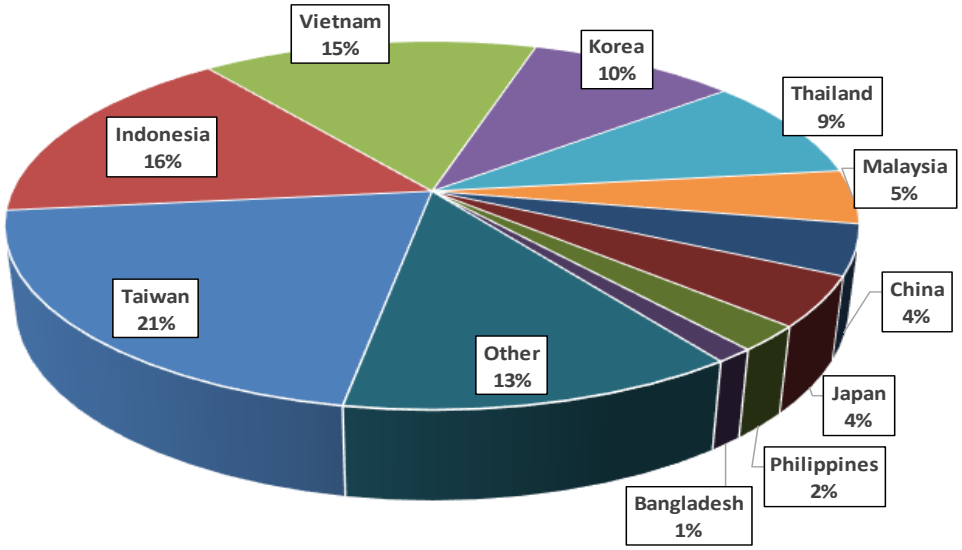
Rates shown are per metric ton (2,204.62 lbs. = 1 metric ton), F.O.B., except where otherwise indicated; op = option

*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.

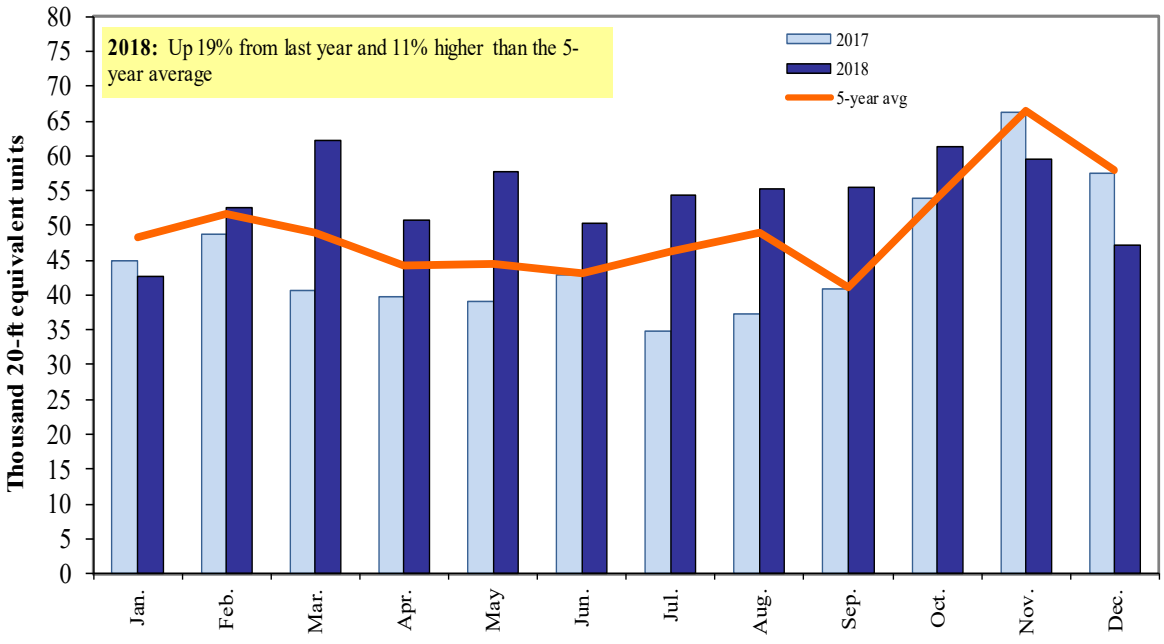
Figure 18
Top 10 Destination Markets for U.S. Containerized Grain Exports, 2018



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

Note: The following Harmonized Tariff Codes are used to calculate containerized grains movements: 1001, 100190, 1002, 1003 100300, 1004, 100400, 1005, 100590, 1007, 100700, 1102, 110100, 230310, 110220, 110290, 1201, 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
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		
April Taylor	april.taylor@usda.gov	(202) 720 - 7880
Kuo-Liang (Matt) Chang	matt.chang@usda.gov	(202) 720 - 0299
Kelly P. Nelson	kelly.nelson@usda.gov	(202) 690 - 0992
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 (Freight rates and vessels)	surajudeen.olowolayemo@usda.gov	(202) 720 - 0119
April Taylor (Container movements)	april.taylor@usda.gov	(202) 720 - 7880

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.* August 22, 2019. Web: **http://dx.doi.org/10.9752/TS056.08-22-2019**