USDA United States Department of Agriculture

Grain Transportation Report

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

Contact Us

October 15, 2020

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 October 22, 2020

WEEKLY HIGHLIGHTS

DOT Releases Data on Large Truck Crashes

Motor vehicle fatalities decreased for a third consecutive year, according to 2019 preview summary data released by the Department of Transportation's (DOT) National Highway Traffic Safety Administration (NHTSA) on October 1. Fatalities in crashes involving at least one large truck remained relatively unchanged from 2018 (5,006) to 2019 (5,005). Total highway fatalities declined by 2 percent, from 36,835 in 2018 to 36,096 in 2019. In addition, large-truck occupant fatalities increased by 0.2 percent, from 890 in 2018 to 892 in 2019, compared to a 0.8-percent increase between 2017 and 2019. From 2018, fatalities decreased in 35 States, the District of Columbia and Puerto Rico. Large trucks, as defined by NHTSA, include both commercial and noncommercial trucks over 10,000 pounds, incorporating medium and heavy-duty pickup trucks. The Federal Motor Carrier Safety Administration requested funding for a new study on the causes of large truck crashes, last conducted from 2001 to 2003.

Grain Transportation Report (*GTR*) Figure 8 Returns to Showing Illinois River Rates

On October 13, the U.S. Army Corps of Engineers reopened the LaGrange Lock and Dam (Versailles, IL) after closing it in early July for major rehabilitation and replacement of lock machinery (see repair schedule here). During the closure, the *GTR* temporarily introduced figure 8a, which reported barge rates on the mid-Mississippi. Figure 8a substituted for the regular *GTR* figure 8, which tracks Illinois River barges rates. This week, with LaGrange's reopening, the *GTR* has retired figure 8a and resumed updating the regular ***GTR* figure 8**. The weekly rates during the closure can be found in the *GTR* online datasets. Starting this week, the Illinois River barge rate will also replace the Mid-Mississippi rate as the benchmark to calculate cost index for ***GTR* table 1**.

Federal Motor Carrier Safety Administration (FMCSA) Launches Online Tool To Answer HOS Questions

On September 29, FMCSA launched its Educational Tool for Hours of Service (ETHOS), an online tool for carriers and drivers to help them better understand the agency's revised hours-of-service (HOS) regulations, effective since September 29. Once a user keys in duty-status information, ETHOS identifies potential violations to the HOS rules for transporting non-passenger cargo, including the following: 11-hour driving limit; 14-hour driving window; 30-minute rest break; and sleeper berth provision. The website notes ETHOS does not cover the 60/70-hour limit regulations, which have not changed under the new rules.

FMCSA Extends Emergency HOS Waiver for Livestock and Feed

FMCSA recently extended—through December 31—the waiver on hours-of-service (HOS) requirements for trucks transporting livestock and feed. The waiver is based on the national emergency declared for COVID-19. It specifically does not cover drivers carrying mixed loads with only a "nominal quantity" of a waiver-qualifying item.

Snapshots by Sector

Export Sales

For the week ending October 1, **unshipped balances** of wheat, corn, and soybeans totaled 61.2 million metric tons (mmt). This represented a significant increase in outstanding sales from the same time last year. Net **corn export sales** were 1.2 mmt, down 40 percent from the past week. Net **soybean export sales** were 2.6 mmt, unchanged from the previous week. Net weekly **wheat export sales** were 0.531 mmt, up 5 percent from the previous week.

Rail

U.S. Class I railroads originated 26,534 **grain carloads** during the week ending October 3. This was a 6-percent increase from the previous week, 35 percent more than last year, and 21 percent more than the 3-year average.

Average October shuttle **secondary railcar** bids/offers (per car) were $769 above tariff for the week ending October 8. This was $213 less than last week and $738 more than this week last year. There were no non-shuttle bids/offers this week.

Barge

For the week ending October 10, **barge grain movements** totaled 754,507 tons. This was 7 percent less than the previous week and 45 percent more than the same period last year.

For the week ending October 10, 475 grain barges **moved down river**—39 barges fewer than the previous week. There were 759 grain barges **unloaded in New Orleans**, 17 percent lower than the previous week.

Ocean

For the week ending October 8, 44 **oceangoing grain vessels** were loaded in the Gulf—42 percent more than the same period last year. Within the next 10 days (starting October 9), 57 vessels were expected to be loaded—27 percent more than the same period last year.

As of October 8, the rate for shipping a metric ton (mt) of grain from the U.S. Gulf to Japan was $43.25. This was unchanged from the previous week. The rate from the Pacific Northwest (PNW) to Japan was $23.75 per mt, unchanged from the previous week.

Fuel

For the week ending October 12, the U.S. average **diesel fuel price** increased 0.8 cent from the previous week to $2.395 per gallon, 65.6 cents below the same week last year.

Preferred citation: U.S. Department of Agriculture, Agricultural Marketing Service. *Grain Transportation Report.* October 15, 2020.
Web: **http://dx.doi.org/10.9752/TS056.10-15-2020**

Feature Article/Calendar

Bulk Ocean Freight Rates Increased During Third Quarter 2020, Fell From Last Year

Ocean freight rates and vessel-loading activities are key indicators for forecasting levels of cargo exported from one country to another. Barring other, overriding factors, both indicators tend to increase as overseas cargo demand rises. Grain is one factor in that demand. However, because grain competes for available vessel space and capacity with other bulk commodities, it can also be useful to consider market trends for other commodities such as coal, iron ore, steel, cement, fertilizer, and other minor bulk items. Likewise, it can be helpful to consider the effects of vessel supply trends on cargo demand. This article examines changes in the bulk ocean freight rates for routes from the U.S. Gulf to Japan, Pacific Northwest to Japan, and U.S. Gulf to Europe (see table). It also examines the grain-vessel-loading activities in the U.S. Gulf and Pacific Northwest (PNW) in recent weeks.

Trends in Ocean Freight Rates for Major Routes

The ocean freight rate for shipping a metric ton (mt) of grain from the U.S. Gulf to Japan averaged $42.99—up 18 percent from second quarter 2020 to third quarter 2020 (quarter to quarter), down 14 percent from third quarter 2019 (year to year), and up 5 percent from the 4-year average (see table). The cost of shipping grain from the Pacific Northwest (PNW) to Japan averaged $23.05 per mt—up 22 percent quarter to quarter, down 17 percent year to year, and up 2 percent from the 4-year average. It cost $19.21 per mt to ship grain from the U.S. Gulf to Europe—up 46 percent quarter to quarter, down 5 percent year to year, and up 8 percent from the 4-year average.

Ocean freight rates for grain routes during third quarter 2020

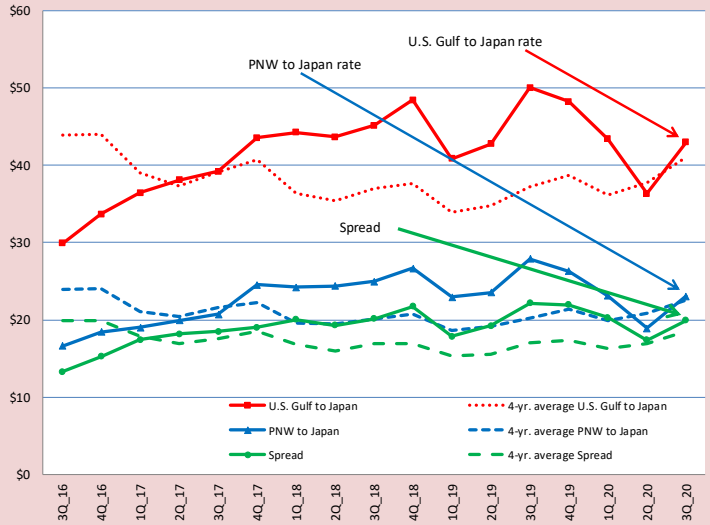
Route	Jul.	Aug.	Sep.	3rd quarter 2020	Change from 2nd qtr. '20	Change from 3rd qtr. '19	Change from 4-yr. avg.
	--$/mt--			--$/mt--	Percent		
U.S. Gulf to Japan	40.90	44.13	43.94	42.99	18	-14	5
PNW to Japan	21.10	24.00	24.06	23.05	22	-17	2
Spread	19.80	20.13	19.88	19.94	15	-10	8
U.S. Gulf to Europe	18.60	19.94	19.09	19.21	46	-5	8

Note: qtr. = quarter; avg. = average; mt = metric ton; yr. = year; PNW = Pacific Northwest.
Source: O'Neil Commodity Consulting.

Ocean freight rates started to increase by the end of the last quarter as the bulk market rallied from the COVID-19-induced slowdown (see July 23, 2020 *Grain Transportation Report (GTR)*). The market rally continued in July as the Chinese government's efforts to support economic growth and infrastructure development fed the country's demand for steel and iron ore. Ocean freight rates ticked up in July.

Rates continued to increase in August as the activities in the bulk

Figure 1. Grain vessel rates and spread (per mt), U.S. to Japan, 2016-20.



Note: mt = metric ton; Q = quarter; yr. = year; PNW = Pacific Northwest.
Source: O'Neil Commodity Consulting.

market began to resume globally. Recent flooding in China hampered domestic coal supply and prompted more coal imports. Then, as the flood waters receded, construction activity gained momentum, boosting the demand for steel.

According to September issue of Drewry Shipping Insight (Drewry), China crude steel production increased by 3.3 percent during the first 7 months of 2020. Disruption of the supply of iron ore from Brazil, coupled with a rise in the global demand, prompted India to export more iron ore as its price surged. Ocean freight rates remained stable in September as China's demand for iron ore remain strong.

Current Market Analysis and Outlook

For the week ending October 8, the ocean freight rate for shipping a metric ton of grain from the U.S. Gulf to Japan was $43.25—5 percent less than January 2 (first available rate in 2020) and 16 percent less than the same week last year. The rate from PNW to Japan was $23.75 per mt—5 percent less than January 2 and 17 percent less than the same week last year. Although ocean freight rates increased from quarter to quarter, they decreased from year to year. Currently, freight rates are lower than the first available rates in the beginning of the year and lower than the same period last year.

In the near and long terms, it is unclear whether ocean freight rates—subject to countervailing forces—will continue steady, fall, or increase. A couple of market situations will exert upward pressure on ocean freight rates, especially Panamax vessel rates. For one, the Chinese government shows every sign of continuing to fuel economic growth and infrastructure development, which should continue to spur the country's appetite for steel and iron ore (see July 23, 2020 *GTR).* Likewise, robust grain demand from China and other Asian countries has driven a recent increase in grain-vessel-loading activity in the U.S. Gulf (see September 17 and October 1 *GTR*).

On the other hand, tending to weaken ocean freight rates, coal demand has waned as several European countries try to phase out coal power generation in the long term (according to Drewry). Exerting further downward pressure on rates, the dry bulk fleet continues to expand. In August, 31 million deadweight tons of new dry bulk vessels were added to the fleet—38 percent more than a year ago (Drewry). An additional 2 percent of the existing fleet is scheduled to delivered by the end of 2020.

Surajudeen.Olowolayemo@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
10/14/20	161	288	253	352	193	168
10/07/20	160	288	262	280	193	168

[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); ocean = routes to Japan ($/metric ton);
*Due to the closure of several lock and dam facilities on Illinois River between July 1 and October 27, 2020, mid-Mississippi barge rate was substituted for Illinois rate as the benchmark for calculating cost index during the closures. Illinois rates begin again this week
n/a = not available.
Source: USDA, Agricultural Marketing Service.

Table 2

Market Update: U.S. origins to export position price spreads ($/bushel)

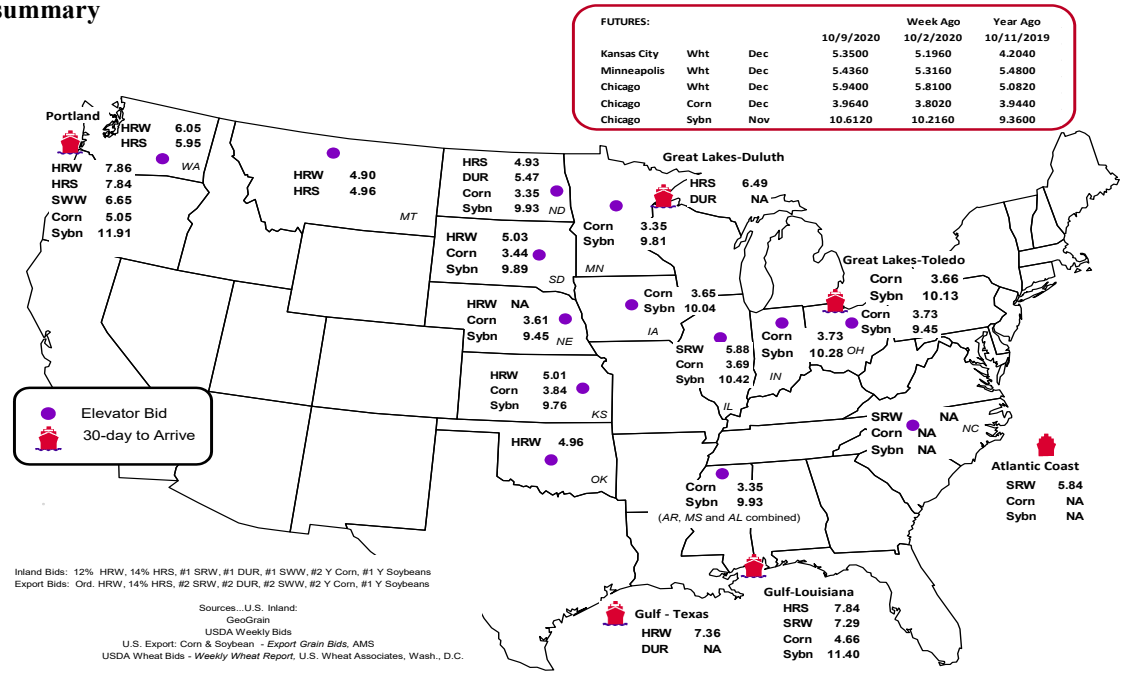
Commodity	Origin–destination	10/9/2020	10/2/2020
Corn	IL–Gulf	-0.97	-0.90
Corn	NE–Gulf	-1.05	-1.00
Soybean	IA–Gulf	-1.36	-1.31
HRW	KS–Gulf	-2.35	-2.40
HRS	ND–Portland	-2.91	-2.84

Note: nq = no quote; n/a = not available; HRW = hard red winter wheat; HRS = hard red spring wheat.
Source: USDA, Agricultural Marketing Service.

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]
10/07/2020[p]	1,588	1,762	8,366	837	12,553	10/3/2020	2,179
9/30/2020[r]	1,945	1,451	6,077	391	9,864	9/26/2020	2,362
2020 YTD[r]	23,742	39,567	200,819	9,173	273,301	2020 YTD	98,236
2019 YTD[r]	35,948	44,797	197,349	13,946	292,040	2019 YTD	97,438
2020 YTD as % of 2019 YTD	66	88	102	66	94	% change YTD	101
Last 4 weeks as % of 2019[2]	357	188	207	286	220	Last 4wks. % 2019	100
Last 4 weeks as % of 4-year avg.[2]	197	126	151	151	151	Last 4wks. % 4 yr.	93
Total 2019	40,974	51,167	251,181	16,192	359,514	Total 2019	127,622
Total 2018	22,118	46,532	310,449	21,432	400,531	Total 2018	129,674

[1]Data is incomplete as it is voluntarily provided.

[2] Compared with same 4-weeks in 2019 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 Kansas City Southern de Mexico (KCSM) and Grupo Mexico.

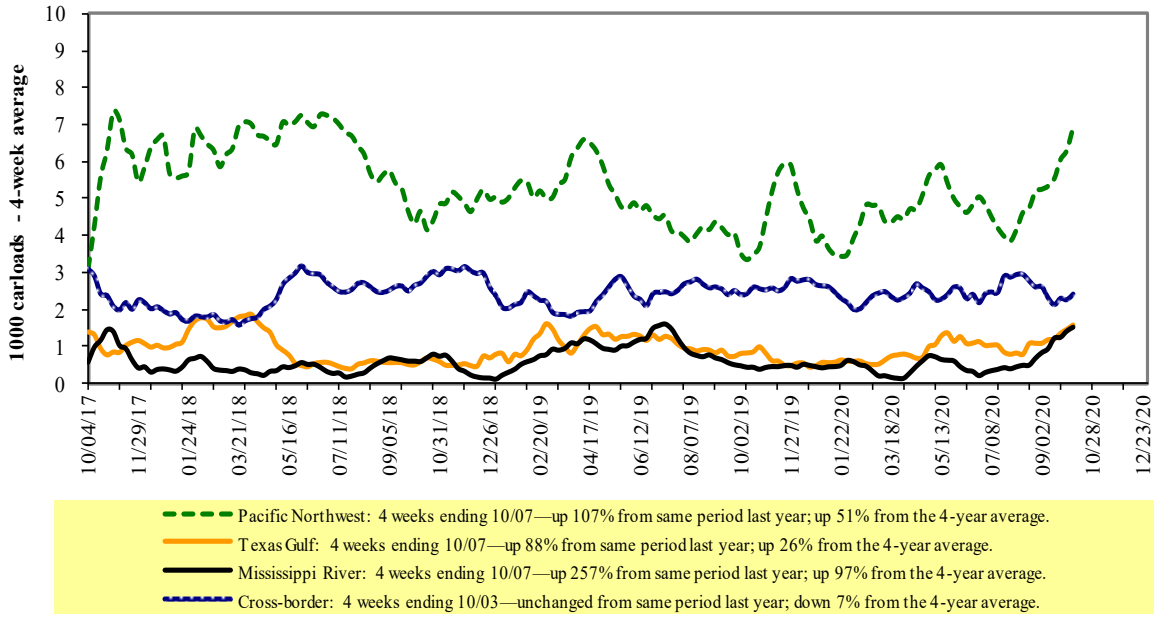
YTD = year-to-date; p = preliminary data; r = revised data; n/a = not available; wks. = weeks; avg. = average.

Source: USDA, Agricultural Marketing Service.

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: USDA, Agricultural Marketing Service.

Table 4

Class I rail carrier grain car bulletin (grain carloads originated)

For the week ending:	East		West			U.S. total	Canada	
10/3/2020	CSXT	NS	BNSF	KCS	UP		CN	CP
This week	1,882	2,402	14,673	1,364	6,213	26,534	5,252	5,002
This week last year	1,649	2,072	9,584	1,370	5,002	19,677	4,905	4,448
2020 YTD	65,187	94,472	438,749	42,527	208,145	849,080	166,312	184,957
2019 YTD	72,301	108,826	434,030	45,360	202,834	863,351	161,571	176,516
2020 YTD as % of 2019 YTD	90	87	101	94	103	98	103	105
Last 4 weeks as % of 2019*	92	96	143	101	128	127	127	110
Last 4 weeks as % of 3-yr. avg.**	96	84	125	116	120	116	116	107
Total 2019	91,611	136,942	568,369	58,527	260,269	1,115,718	212,513	235,892

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

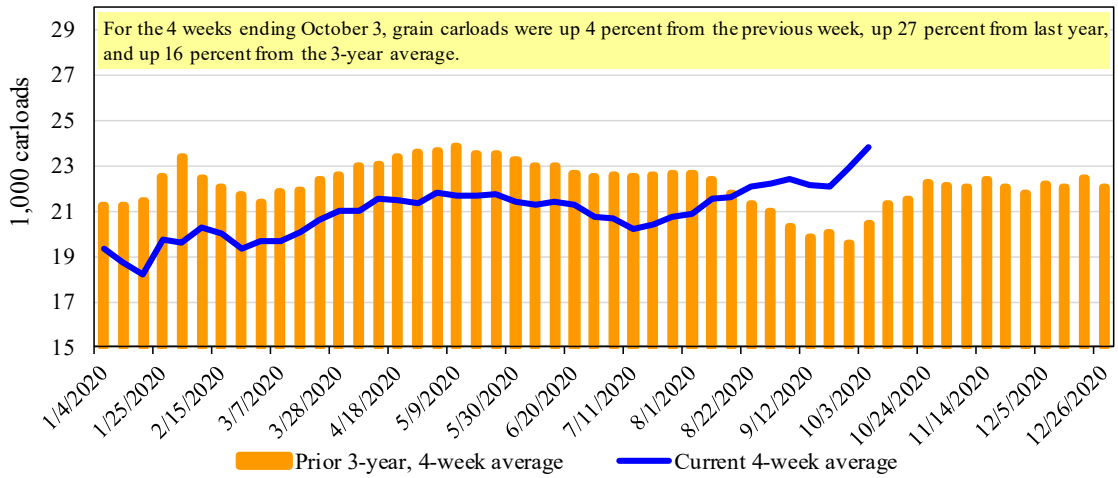
**The past 4 weeks as a percent of the same period from the prior 3-year average. YTD = year-to-date; avg. = average; yr. = year.

Note: NS = Norfolk Southern; KCS = Kansas City Southern; UP = Union Pacific; CN = Canadian National; CP = Canadian Pacific.

Source: Association of American Railroads.

Figure 3

Total weekly U.S. Class I railroad grain carloads



Source: Association of American Railroads.

Table 5

Railcar auction offerings[1] ($/car)[2]

For the week ending:		Delivery period							
10/8/2020		Oct-20	Oct-19	Nov-20	Nov-19	Dec-20	Dec-19	Jan-21	Jan-20
BNSF[3]	COT grain units	no offer	0	92	0	0	no bid	no bid	no bid
	COT grain single-car	no offer	0	8	0	26	1	0	1
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 offer	no offer	no offer	no bid	no offer	no bid	n/a	n/a

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

[2]Average premium/discount to tariff, last auction. n/a = not available.

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

[4]UP - GCAS = Union Pacific Railroad Grain Car Allocation System.

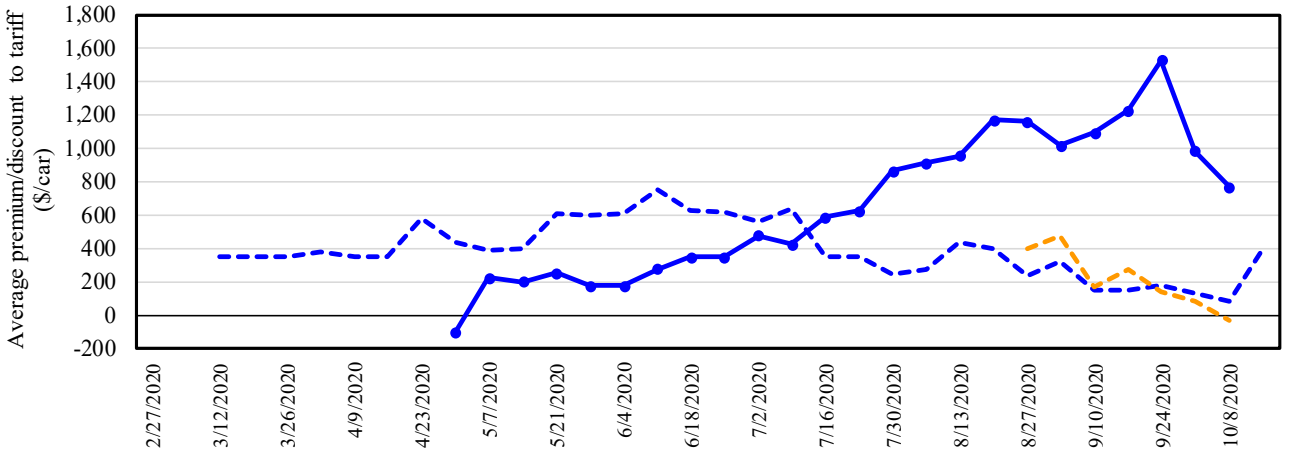
Region 1 includes: AR, IL, LA, MO, NM, OK, TX, WI, and Duluth, MN.

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

Source: USDA, Agricultural Marketing Service.

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 October 2020, secondary market

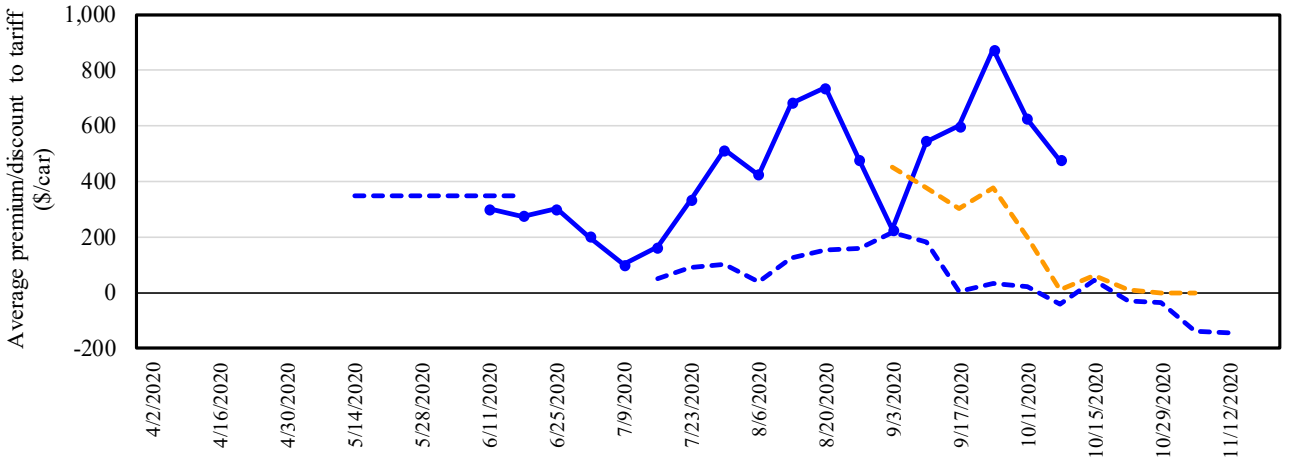


10/8/2020	BNSF	UP
Non-shuttle	n/a	n/a
Shuttle	$975	$563

There were no non-shuttle bids/offers this week.
Average shuttle bids/offers fell $213 this week and are $760 below the peak.

Note: Non-shuttle bids include unit-train and single-car bids. n/a = not available; avg. = average; yr. = year; BNSF = BNSF Railway; UP = Union Pacific Railroad.
Source: USDA, Agricultural Marketing Service.

Figure 5
Bids/offers for railcars to be delivered in November 2020, secondary market



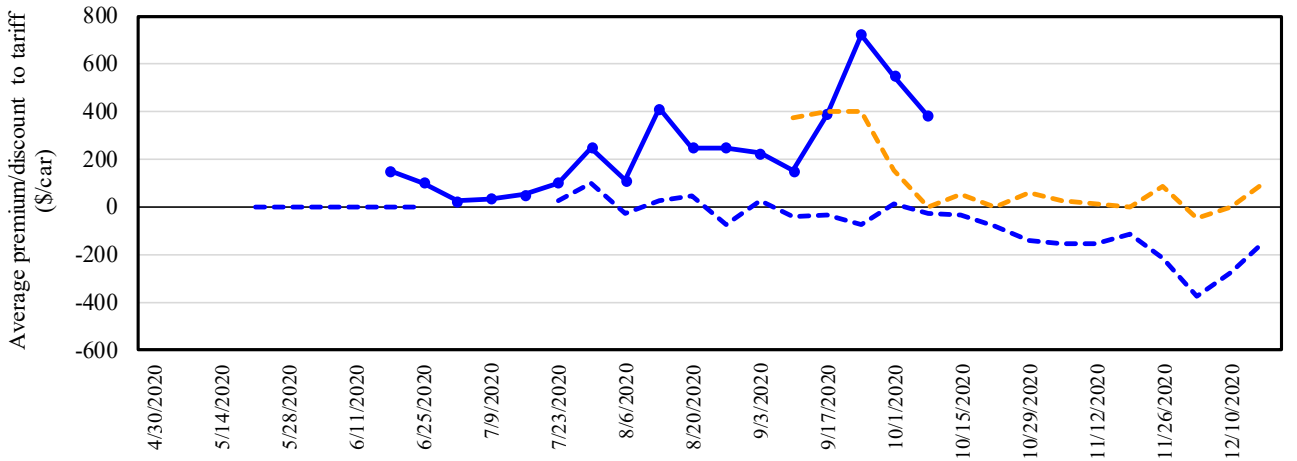
10/8/2020	BNSF	UP
Non-shuttle	n/a	n/a
Shuttle	$600	$350

There were no non-shuttle bids/offers this week.
Average shuttle bids/offers fell $150 this week and are $400 below the peak.

Note: Non-shuttle bids include unit-train and single-car bids. n/a = not available; avg. = average; yr. = year; BNSF = BNSF Railway; UP = Union Pacific Railroad.
Source: USDA, Agricultural Marketing Service.

Figure 6

Bids/offers for railcars to be delivered in December 2020, secondary market



10/8/2020	BNSF	UP
Non-shuttle	n/a	n/a
Shuttle	$500	$263

There were no non-shuttle bids/offers this week.
Average shuttle bids/offers fell $169 this week and are $344 below the peak.

Note: Non-shuttle bids include unit-train and single-car bids. n/a = not available; avg. = average; yr. = year; BNSF = BNSF Railway; UP = Union Pacific Railroad.
Source: USDA, Agricultural Marketing Service.

Table 6

Weekly secondary railcar market ($/car)[1]

	For the week ending: 10/8/2020	Delivery period					
		Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21
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 2019	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 2019	n/a	n/a	n/a	n/a	n/a	n/a
Shuttle	**BNSF-GF**	**975**	**600**	**500**	**500**	**n/a**	**n/a**
	Change from last week	(38)	50	(100)	n/a	n/a	n/a
	Change from same week 2019	913	588	550	200	n/a	n/a
	UP-Pool	**563**	**350**	**263**	**n/a**	**n/a**	**n/a**
	Change from last week	(387)	(350)	(238)	n/a	n/a	n/a
	Change from same week 2019	563	450	313	n/a	n/a	n/a

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

Note: Bids listed are market indicators only and are not guaranteed prices. n/a = not available; GF = guaranteed freight; Pool = guaranteed pool; BNSF = BNSF Railway; UP = Union Pacific Railroad.

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

Source: USDA, Agricultural Marketing Service.

The **tariff rail rate** is the base price of freight rail service. Together with **fuel surcharges** and any **auction and secondary rail** values, the tariff rail rate constitutes 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. However, during times of high rail demand or short supply, high auction and secondary rail values can exceed the cost of the tariff rate plus fuel surcharge.

Table 7

Tariff rail rates for unit and shuttle train shipments[1]

October 2020	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	$35	$39.90	$1.09	-1
	Grand Forks, ND	Duluth-Superior, MN	$4,208	$0	$41.79	$1.14	-3
	Wichita, KS	Los Angeles, CA	$7,115	$0	$70.66	$1.92	-2
	Wichita, KS	New Orleans, LA	$4,525	$62	$45.55	$1.24	-2
	Sioux Falls, SD	Galveston-Houston, TX	$6,851	$0	$68.03	$1.85	-2
	Colby, KS	Galveston-Houston, TX	$4,801	$68	$48.35	$1.32	-2
	Amarillo, TX	Los Angeles, CA	$5,121	$95	$51.80	$1.41	-3
Corn	Champaign-Urbana, IL	New Orleans, LA	$3,900	$70	$39.43	$1.00	-3
	Toledo, OH	Raleigh, NC	$7,833	$0	$77.79	$1.98	15
	Des Moines, IA	Davenport, IA	$2,455	$15	$24.53	$0.62	1
	Indianapolis, IN	Atlanta, GA	$5,979	$0	$59.37	$1.51	3
	Indianapolis, IN	Knoxville, TN	$5,040	$0	$50.05	$1.27	3
	Des Moines, IA	Little Rock, AR	$3,900	$44	$39.16	$0.99	1
	Des Moines, IA	Los Angeles, CA	$5,780	$128	$58.67	$1.49	-2
Soybeans	Minneapolis, MN	New Orleans, LA	$3,631	$37	$36.43	$0.99	-4
	Toledo, OH	Huntsville, AL	$6,595	$0	$65.49	$1.78	17
	Indianapolis, IN	Raleigh, NC	$7,125	$0	$70.75	$1.93	3
	Indianapolis, IN	Huntsville, AL	$5,247	$0	$52.11	$1.42	3
	Champaign-Urbana, IL	New Orleans, LA	$4,645	$70	$46.83	$1.27	-2
Shuttle train							
Wheat	Great Falls, MT	Portland, OR	$4,018	$0	$39.90	$1.09	-3
	Wichita, KS	Galveston-Houston, TX	$4,236	$0	$42.07	$1.14	-3
	Chicago, IL	Albany, NY	$6,376	$0	$63.32	$1.72	-10
	Grand Forks, ND	Portland, OR	$5,676	$0	$56.37	$1.53	-2
	Grand Forks, ND	Galveston-Houston, TX	$5,996	$0	$59.54	$1.62	-2
	Colby, KS	Portland, OR	$6,012	$112	$60.81	$1.66	-3
Corn	Minneapolis, MN	Portland, OR	$5,180	$0	$51.44	$1.31	0
	Sioux Falls, SD	Tacoma, WA	$5,140	$0	$51.04	$1.30	0
	Champaign-Urbana, IL	New Orleans, LA	$3,820	$70	$38.63	$0.98	-3
	Lincoln, NE	Galveston-Houston, TX	$3,880	$0	$38.53	$0.98	0
	Des Moines, IA	Amarillo, TX	$4,320	$55	$43.45	$1.10	0
	Minneapolis, MN	Tacoma, WA	$5,180	$0	$51.44	$1.31	0
	Council Bluffs, IA	Stockton, CA	$5,100	$0	$50.65	$1.29	2
Soybeans	Sioux Falls, SD	Tacoma, WA	$5,850	$0	$58.09	$1.58	0
	Minneapolis, MN	Portland, OR	$5,900	$0	$58.59	$1.59	0
	Fargo, ND	Tacoma, WA	$5,750	$0	$57.10	$1.55	0
	Council Bluffs, IA	New Orleans, LA	$4,875	$81	$49.22	$1.34	-3
	Toledo, OH	Huntsville, AL	$4,945	$0	$49.11	$1.34	3
	Grand Island, NE	Portland, OR	$5,260	$115	$53.37	$1.45	-13

[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 pounds per bushel (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 (Y/Y) calculated using tariff rate plus fuel surcharge.

Source: BNSF Railway, Canadian National Railway, CSX Transportation, and Union Pacific Railroad.

Table 8

Tariff rail rates for U.S. bulk grain shipments to Mexico

Date: October 2020							
Commodity	Origin state	Destination region	Tariff rate per car[1]	Fuel surcharge per car[2]	Tariff rate plus fuel surcharge per: metric ton[3]	bushel[3]	Percent change[4] Y/Y
Wheat	MT	Chihuahua, CI	$7,384	$0	$75.45	$2.05	-2
	OK	Cuautitlan, EM	$6,713	$49	$69.08	$1.88	-2
	KS	Guadalajara, JA	$7,471	$413	$80.55	$2.19	-3
	TX	Salinas Victoria, NL	$4,329	$29	$44.53	$1.21	-1
Corn	IA	Guadalajara, JA	$8,902	$331	$94.34	$2.39	-2
	SD	Celaya, GJ	$8,140	$0	$83.17	$2.11	0
	NE	Queretaro, QA	$8,300	$99	$85.82	$2.18	-2
	SD	Salinas Victoria, NL	$6,905	$0	$70.55	$1.79	0
	MO	Tlalnepantla, EM	$7,665	$97	$79.30	$2.01	-2
	SD	Torreon, CU	$7,690	$0	$78.57	$1.99	0
Soybeans	MO	Bojay (Tula), HG	$8,547	$312	$90.52	$2.46	-2
	NE	Guadalajara, JA	$9,157	$321	$96.83	$2.63	-2
	IA	El Castillo, JA	$9,410	$0	$96.15	$2.61	-1
	KS	Torreon, CU	$8,014	$212	$84.05	$2.29	-1
Sorghum	NE	Celaya, GJ	$7,772	$285	$82.33	$2.09	-2
	KS	Queretaro, QA	$8,108	$61	$83.46	$2.12	-1
	NE	Salinas Victoria, NL	$6,713	$49	$69.09	$1.75	-1
	NE	Torreon, CU	$7,092	$187	$74.38	$1.89	-3

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

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

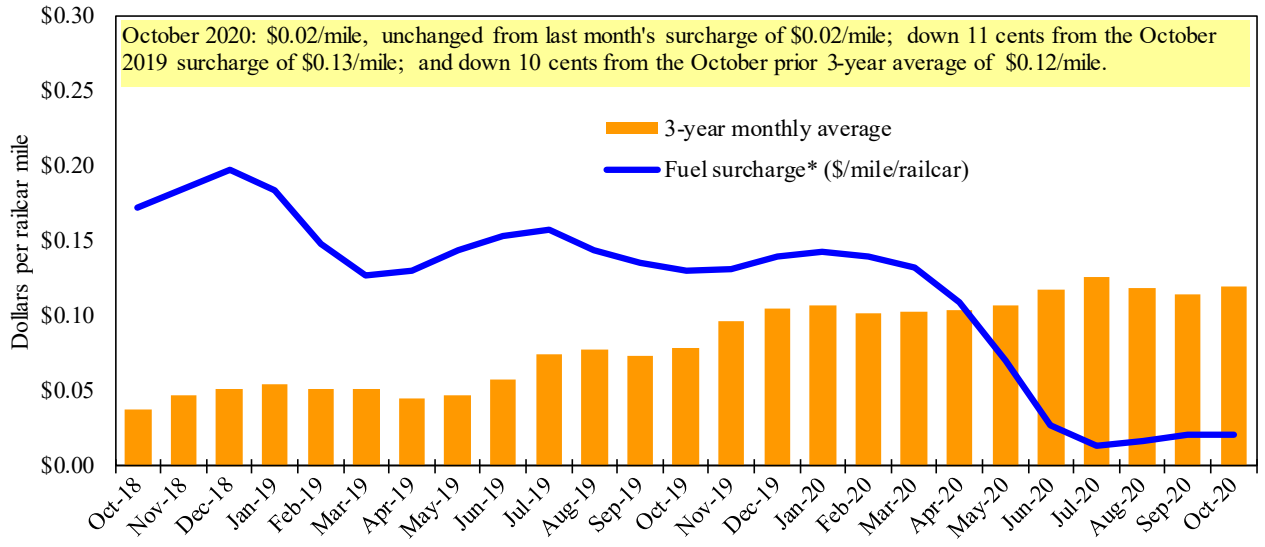
[3]Approximate load per car = 97.87 metric tons: Corn & Sorghum 56 lbs/bu, Wheat & Soybeans 60 lbs/bu.

[4]Percentage change calculated using tariff rate plus fuel surchage; Y/Y = year over year.

Sources: BNSF Railway, Union Pacific Railroad, Kansas City Southern.

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.

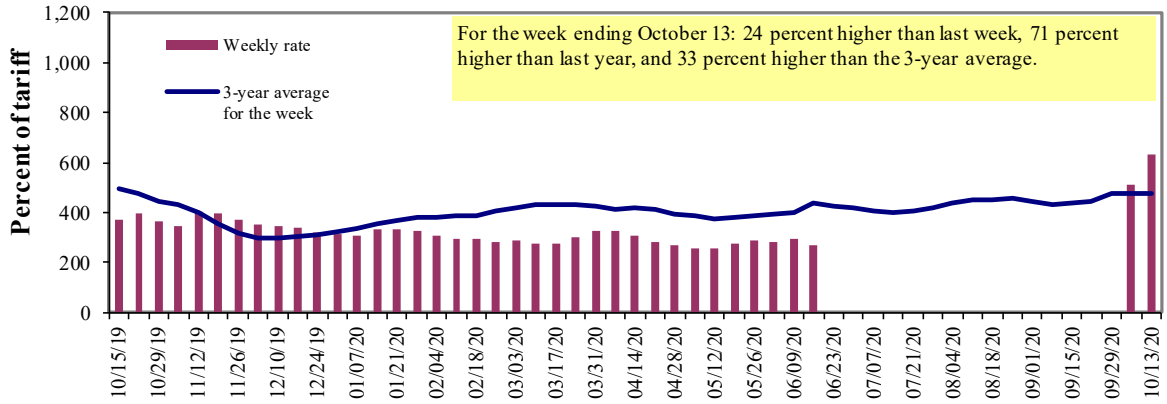
**CSX strike price changed from $2.00/gal. to $3.75/gal. starting January 1, 2015.

Sources: BNSF Railway, Canadian National Railway, CSX Transportation, Canadian Pacific Railway, Union Pacific Railroad, Kansas City Southern Railway, Norfolk Southern Corporation.

Barge Transportation

Figure 8

Illinois River barge freight rate[1,2,3]



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

[3]No rates data from 06/23/20 to 9/29/20 due to the lock closure for rehabilitation and replacement of lock machinery.

Table 9

Weekly barge freight rates: Southbound only

		Twin Cities	Mid-Mississippi	Lower Illinois River	St. Louis	Cincinnati	Lower Ohio	Cairo-Memphis
Rate[1]	10/13/2020	660	665	634	537	517	517	494
	10/6/2020	520	513	510	430	423	423	402
$/ton	10/13/2020	40.85	35.38	29.42	21.43	24.25	20.89	15.51
	10/6/2020	32.19	27.29	23.66	17.16	19.84	17.09	12.62
Current week % change from the same week:								
	Last year	76	68	71	70	42	42	65
	3-year avg. [2]	38	38	33	25	2	2	12
Rate[1]	November	555	452	440	356	372	372	315
	January	-	-	433	309	317	317	271

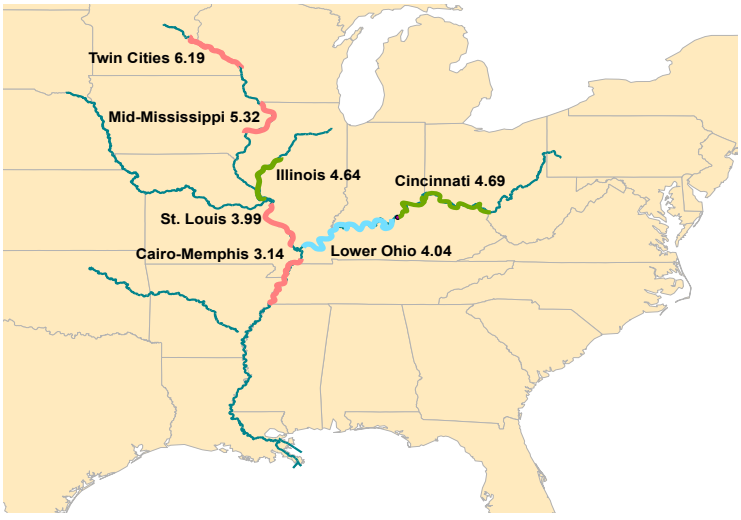
[1]Rate = percent of 1976 tariff benchmark index (1976 = 100 percent); [2]4-week moving average; ton = 2,000 pounds; "-" not available due to closure.

Source: USDA, Agricultural Marketing Service.

Figure 9
Benchmark tariff rates

Calculating barge rate per ton:
(Rate * 1976 tariff benchmark rate per ton)/100

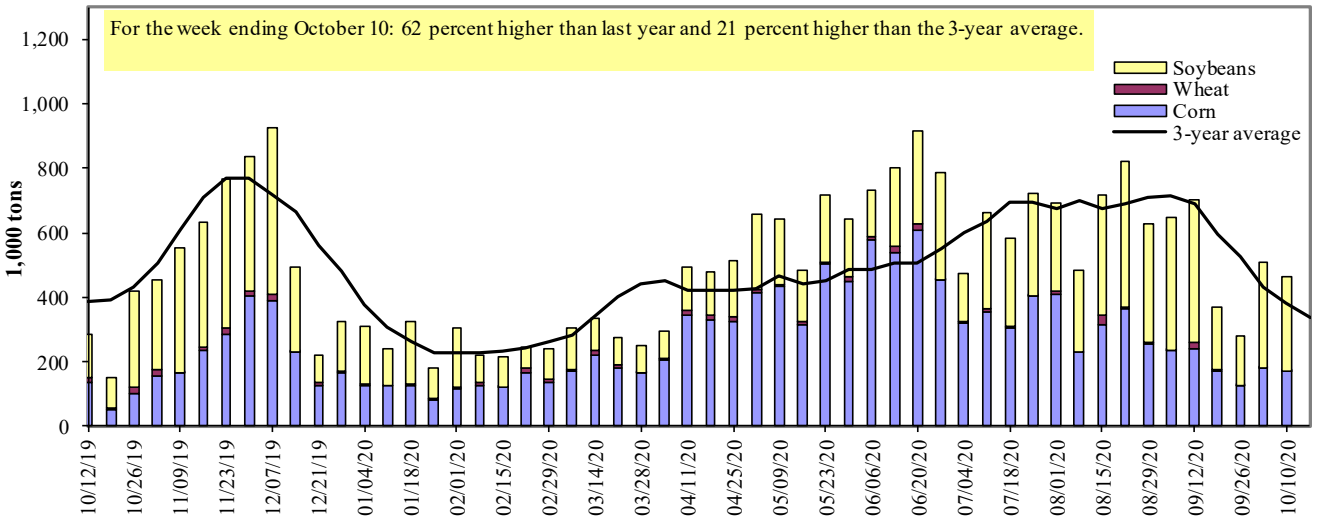
Select applicable index from market quotes are included in tables on this page. The 1976 benchmark rates per ton are provided in map.



Map Credit: USDA, Agricultural Marketing Service

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 10/10/2020	Corn	Wheat	Soybeans	Other	Total
Mississippi River					
Rock Island, IL (L15)	41	0	152	0	192
Winfield, MO (L25)	132	3	256	2	393
Alton, IL (L26)	170	3	290	2	464
Granite City, IL (L27)	170	3	290	2	464
Illinois River (La Grange)	0	0	0	0	0
Ohio River (Olmsted)	117	0	107	2	226
Arkansas River (L1)	7	21	36	0	64
Weekly total - 2020	294	24	433	3	755
Weekly total - 2019	214	42	263	0	520
2020 YTD[1]	14,354	1,557	11,775	125	27,810
2019 YTD[1]	9,801	1,348	9,830	134	21,113
2020 as % of 2019 YTD	146	115	120	93	132
Last 4 weeks as % of 2019[2]	128	105	121	164	123
Total 2019	12,780	1,631	14,683	154	29,247

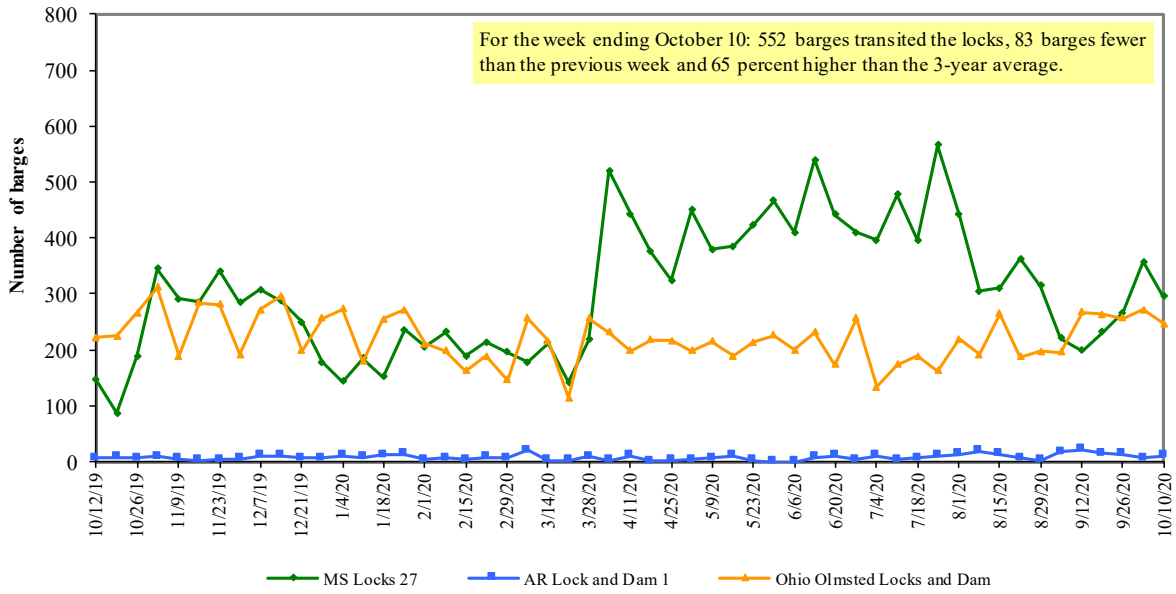
[1] Weekly total, YTD (year-to-date), and calendar year total include MS/27, OH/Olmsted, and AR/1; Other refers to oats, barley, sorghum, and rye. L (as in "L15") refers to a lock or lock and dam facility. Olmsted = Olmsted Locks and Dam. La Grange = La Grange Lock and Dam.

[2] As a percent of same period in 2019.

Note: Total may not add exactly because of rounding. Starting from 11/24/2018, weekly movement through Ohio 52 is replaced by Olmsted.
Source: U.S. Army Corps of Engineers.

Figure 11

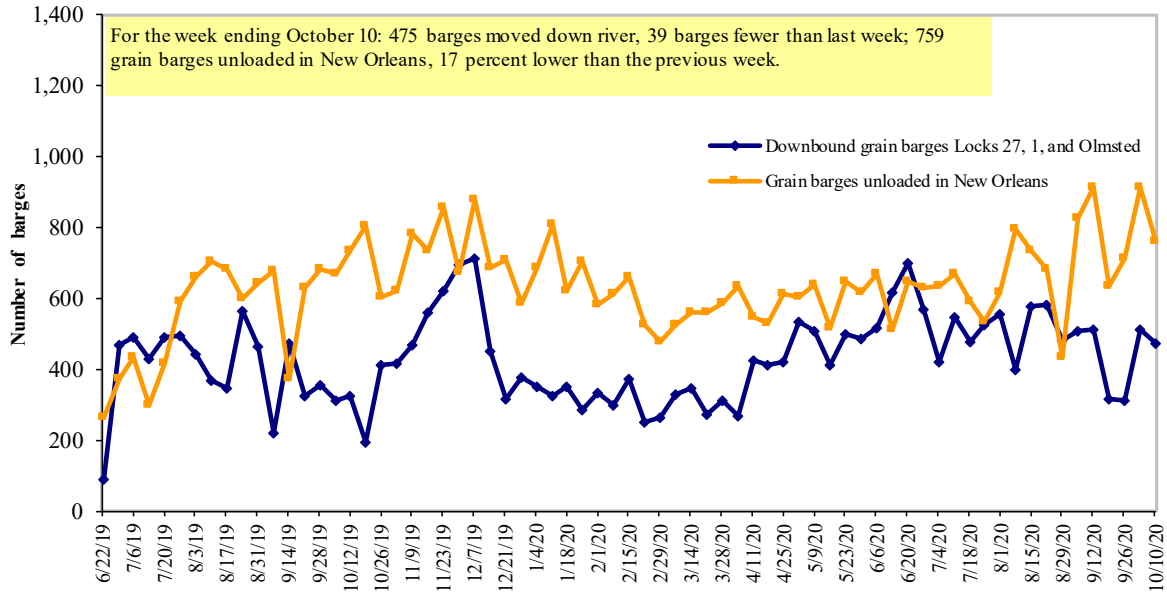
Upbound empty barges transiting Mississippi River Locks 27, Arkansas River Lock and Dam 1, and Ohio River Olmsted Locks and Dam



Source: U.S. Army Corps of Engineers.

Figure 12

Grain barges for export in New Orleans region



Note: Olmsted = Olmsted Locks and Dam.

Source: U.S. Army Corps of Engineers and USDA, Agricultural Marketing Service.

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 10/12/2020 (U.S. $/gallon)

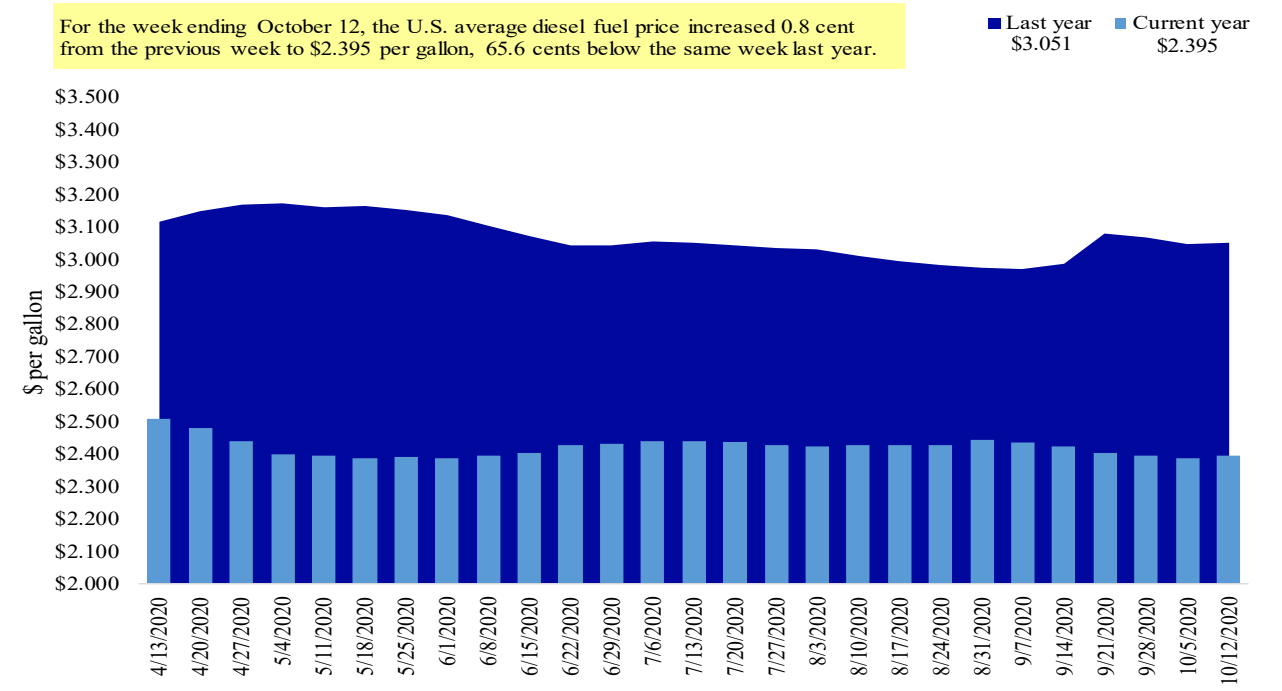
Region	Location	Price	Change from Week ago	Change from Year ago
I	East Coast	2.473	0.000	-0.571
	New England	2.578	0.001	-0.464
	Central Atlantic	2.649	-0.006	-0.578
	Lower Atlantic	2.332	0.004	-0.588
II	Midwest	2.275	0.016	-0.692
III	Gulf Coast	2.148	0.007	-0.657
IV	Rocky Mountain	2.330	0.011	-0.711
V	West Coast	2.933	0.005	-0.720
	West Coast less California	2.538	0.004	-0.702
	California	3.258	0.006	-0.724
Total	United States	2.395	0.008	-0.656

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

Source: U.S. Department of Energy, Energy Information Administration.

Figure 13

Weekly diesel fuel prices, U.S. average



Source: U.S. Department of Energy, Energy Information Administration, Retail On-Highway Diesel Prices.

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]									
10/1/2020	1,513	314	1,667	1,316	220	5,030	22,170	33,970	61,170
This week year ago	1,323	589	1,302	1,082	205	4,500	7,915	12,359	24,774
Cumulative exports-marketing year[2]									
2020/21 YTD	3,875	850	2,603	1,842	322	9,491	3,678	6,750	19,918
2019/20 YTD	3,707	1,105	2,326	1,497	291	8,926	2,081	3,892	14,900
YTD 2020/21 as % of 2019/20	105	77	112	123	110	106	177	173	134
Last 4 wks. as % of same period 2019/20*	123	65	133	119	116	117	265	262	237
Total 2019/20	9,526	2,318	6,960	4,751	922	24,477	42,622	43,994	111,094
Total 2018/19	8,591	3,204	6,776	5,164	479	24,214	48,924	46,189	119,327

[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: marketing year: wheat = 6/01-5/31, corn and soybeans = 9/01-8/31. YTD = year-to-date; wks. = weeks; HRW= hard red winter; SRW = soft red winter; HRS= hard red spring; SWW= soft white wheat; DUR= durum.

Source: USDA, Foreign Agricultural Service.

Table 13

Top 5 importers[1] of U.S. corn

For the week ending 10/01/2020	Total commitments[2]		% change	Exports[3]
	2020/21 current MY	2019/20 last MY	current MY from last MY	3-yr. avg. 2017-19
		- 1,000 mt -		
Mexico	4,679	5,373	(13)	14,869
Japan	3,284	1,334	146	11,221
Columbia	994	378	163	4,830
Korea	347	71	389	4,011
China	9,975	59	-	909
Top 5 importers	**19,278**	**7,215**	**167**	**35,840**
Total U.S. corn export sales	**25,848**	**9,996**	**159**	**49,983**
% of projected exports	44%	22%		
Change from prior week[2]	**1,226**	**285**		
Top 5 importers' share of U.S. corn export sales	75%	72%		72%
USDA forecast September 2020	**59,160**	**44,911**	**32**	
Corn use for ethanol USDA forecast, September 2020	**129,540**	**123,317**	**5**	

[1]Based on USDA, Foreign Agricultural Service (FAS) marketing year ranking reports for 2018/19; marketing year (MY) = Sep 1 - Aug 31.

[2]Cumulative exports (shipped) + outstanding sales (unshipped), FAS weekly export sales report, or export sales query. 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 (carryover plus accumulated export); yr. = year; avg. = average.

Note: A red number in parentheses indicates a negative number; mt = metric ton.

Source: USDA, Foreign Agricultural Service.

Table 14

Top 5 importers[1] of U.S. soybeans

For the week ending 10/01/2020	Total commitments[2] 2020/21 current MY	2019/20 last MY	% change current MY from last MY	Exports[3] 3-yr. avg. 2017-19
		- 1,000 mt -		- 1,000 mt -
China	22,108	4,790	362	19,106
Mexico	2,114	2,210	(4)	4,591
Egypt	634	520	22	2,980
Indonesia	557	425	31	2,360
Japan	630	636	(1)	2,288
Top 5 importers	**26,043**	**8,581**	**204**	**31,324**
Total U.S. soybean export sales	**40,720**	**16,252**	**151**	**49,352**
% of projected exports	70%	36%		
change from prior week[2]	**2,591**	**2,093**		
Top 5 importers' share of U.S. soybean export sales	64%	53%		**63%**
USDA forecast, September 2020	**57,902**	**45,777**	**126**	

[1]Based on USDA, Foreign Agricultural Service (FAS) marketing year ranking reports for 2018/19; marketing year (MY) = Sep 1 - Aug 31.

[2]Cumulative exports (shipped) + outstanding sales (unshipped), FAS weekly export sales report, or export sales query. The total commitments change (net sales) from prior week could include revisions from previous week's outstanding sales and/or accumulated sales.

[3]FAS marketing year ranking reports (carryover plus accumulated export); yr. = year; avg. = average.

Note: A red number in parentheses indicates a negative number; mt = metric ton.

Source: USDA, Foreign Agricultural Service.

Table 15

Top 10 importers[1] of all U.S. wheat

For the week ending 10/01/2020	Total commitments[2] 2020/21 current MY	2019/20 last MY	% change current MY from last MY	Exports[3] 3-yr. avg. 2017-19
		1,000 mt -		- 1,000 mt -
Mexico	1,697	2,010	(16)	3,213
Philippines	2,196	1,607	37	2,888
Japan	1,355	1,318	3	2,655
Nigeria	643	859	(25)	1,433
Korea	858	825	4	1,372
Indonesia	608	336	81	1,195
Taiwan	674	670	1	1,175
Thailand	363	418	(13)	727
Italy	458	422	9	622
Colombia	193	414	(53)	618
Top 10 importers	**9,045**	**8,878**	2	**15,897**
Total U.S. wheat export sales	**14,521**	**13,427**	8	**23,821**
% of projected exports	55%	51%		
change from prior week[2]	**531**	**522**		
Top 10 importers' share of U.S. wheat export sales	62%	66%		67%
USDA forecast, September 2020	**26,567**	**26,294**	1	

[1] Based on USDA, Foreign Agricultural Service(FAS) marketing year ranking reports for 2018/19; Marketing year (MY) = Jun 1 - May 31.

[2] Cumulative exports (shipped) + outstanding sales (unshipped), FAS weekly export sales report, or export sales query. The 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 (carryover plus accumulated export); yr. = year; avg. = average.

Note: A red number in parentheses indicates a negative number.

Source: USDA, Foreign Agricultural Service.

Table 16

Grain inspections for export by U.S. port region (1,000 metric tons)

Port regions	For the week ending 10/08/20	Previous week*	Current week as % of previous	2020 YTD*	2019 YTD*	2020 YTD as % of 2019 YTD	Last 4-weeks as % of: Last year	Last 4-weeks as % of: Prior 3-yr. avg.	2019 total*
Pacific Northwest									
Wheat	223	406	55	12,901	10,885	119	104	109	13,961
Corn	0	95	0	8,255	6,921	119	970	104	7,047
Soybeans	844	640	132	5,845	7,724	76	631	554	11,969
Total	**1,067**	**1,140**	**94**	**27,001**	**25,530**	**106**	**242**	**185**	**32,977**
Mississippi Gulf									
Wheat	72	64	112	3,145	3,873	81	153	134	4,448
Corn	485	616	79	22,329	17,369	129	189	101	20,763
Soybeans	1,008	1,103	91	21,234	21,200	100	121	127	31,398
Total	**1,565**	**1,784**	**88**	**46,708**	**42,442**	**110**	**137**	**118**	**56,609**
Texas Gulf									
Wheat	206	193	107	3,751	5,283	71	222	187	6,009
Corn	11	0	n/a	610	577	106	530	117	640
Soybeans	61	84	72	544	2	n/a	n/a	n/a	2
Total	**278**	**277**	**100**	**4,905**	**5,861**	**84**	**323**	**235**	**6,650**
Interior									
Wheat	14	20	69	1,691	1,534	110	74	82	1,987
Corn	123	149	83	6,626	6,007	110	104	80	7,857
Soybeans	192	152	127	5,065	5,434	93	107	129	7,043
Total	**329**	**320**	**103**	**13,381**	**12,975**	**103**	**102**	**97**	**16,887**
Great Lakes									
Wheat	25	31	79	684	903	76	45	67	1,339
Corn	0	0	n/a	54	0	n/a	n/a	0	11
Soybeans	0	22	0	407	473	86	437	147	493
Total	**25**	**54**	**46**	**1,145**	**1,376**	**83**	**94**	**91**	**1,844**
Atlantic									
Wheat	1	0	n/a	28	37	74	101	160	37
Corn	2	9	21	26	98	27	327	68	99
Soybeans	116	57	203	740	1,001	74	n/a	499	1,353
Total	**119**	**66**	**180**	**793**	**1,136**	**70**	**n/a**	**388**	**1,489**
U.S. total from ports*									
Wheat	541	714	76	22,198	22,516	99	116	119	27,781
Corn	621	869	71	37,899	30,971	122	193	96	36,417
Soybeans	2,220	2,058	108	33,835	35,834	94	172	177	52,258
Total	**3,382**	**3,641**	**93**	**93,933**	**89,320**	**105**	**161**	**136**	**116,457**

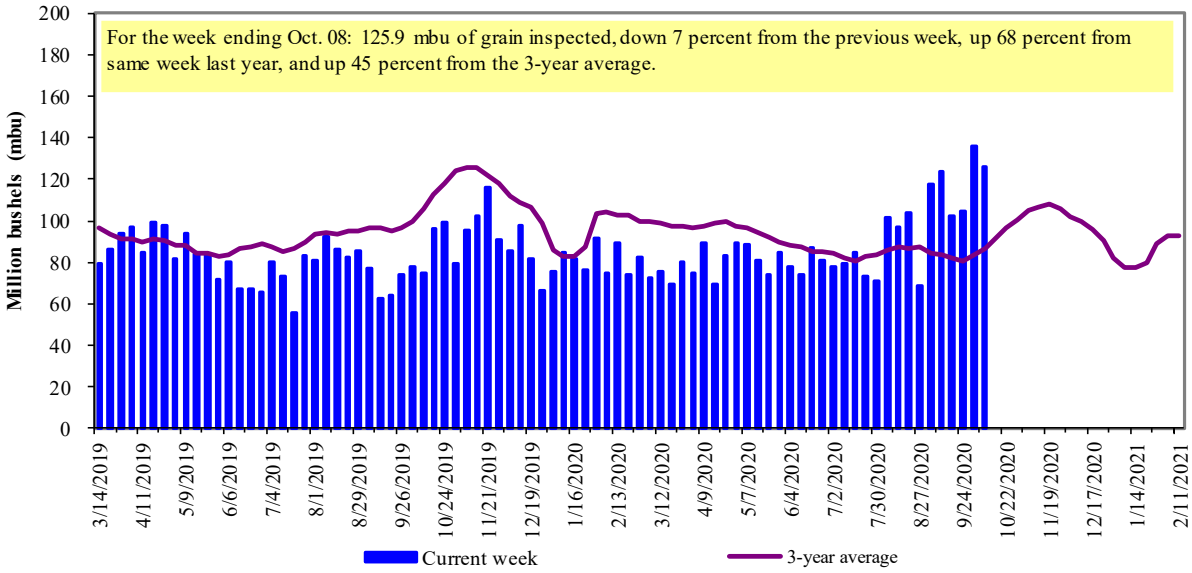
*Data includes revisions from prior weeks; some regional totals may not add exactly due to rounding.

Source: USDA, Federal Grain Inspection Service; YTD= year-to-date; n/a = not applicable or no change.

The United States exports approximately one-quarter of the grain it produces. On average, this includes nearly 45 percent of U.S.-grown wheat, 50 percent of U.S.-grown soybeans, and 20 percent of the U.S.-grown corn. Approximately 55 percent of the U.S. export grain shipments departed through the U.S. Gulf region in 2019.

Figure 14

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

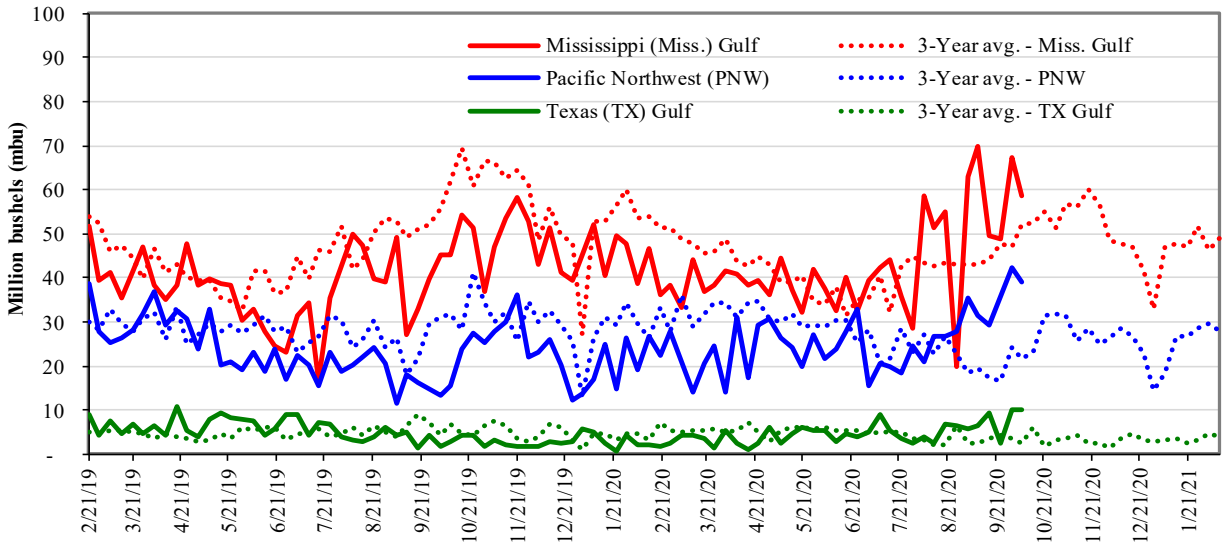


Note: 3-year average consists of 4-week running average.

Source: USDA, Federal Grain Inspection Service.

Figure 15

U.S. Grain inspections: U.S. Gulf and PNW[1] (wheat, corn, and soybeans)



Week ending 10/08/20 inspections (mbu):	
MS Gulf:	58.8
PNW:	39.2
TX Gulf:	10.2

Percent change from:	MS Gulf	TX Gulf	U.S. Gulf	PNW
Last wk:	down 13	unchanged	down 11	down 7
Last Year (same wk):	up 30	up 261	up 44	up 154
3-yr avg. (4-wk. mov. Avg):	up 23	up 196	up 35	up 96

Source: USDA, Federal Grain Inspection Service.

Table 17

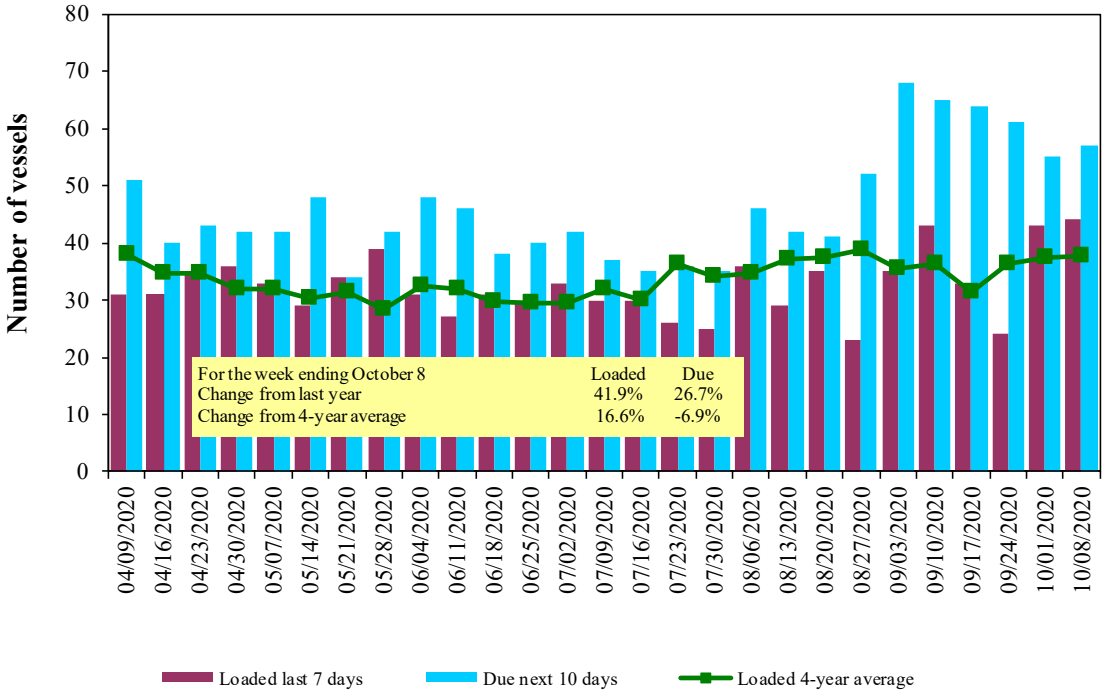
Weekly port region grain ocean vessel activity (number of vessels)

	Gulf			Pacific Northwest
Date	In port	Loaded 7-days	Due next 10-days	In port
10/8/2020	48	44	57	19
10/1/2020	53	43	55	15
2019 range	(26…61)	(18...44)	(33...69)	(8...33)
2019 average	40	31	49	17

Source: USDA, Agricultural Marketing Service.

Figure 16

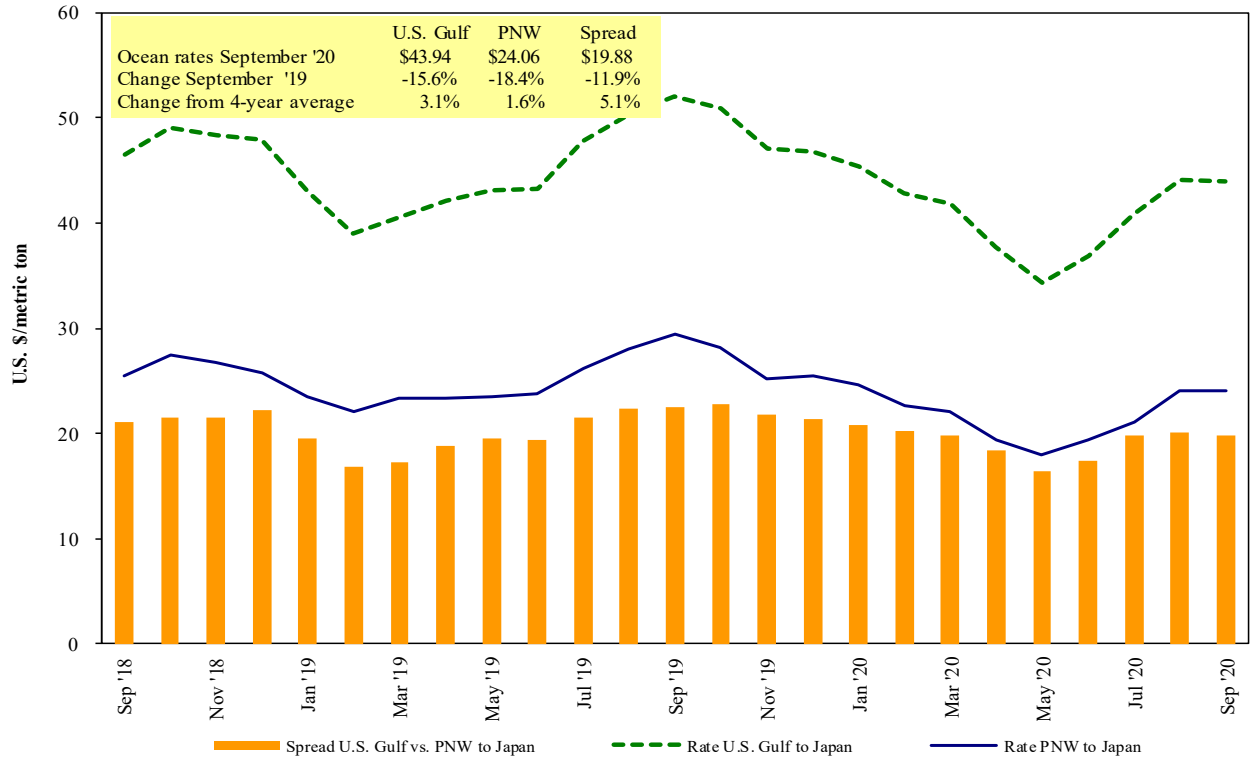
U.S. Gulf[1] vessel loading activity



[1]U.S. Gulf includes Mississippi, Texas, and East Gulf.
Source:USDA, Agricultural Marketing Service.

Figure 17

Grain vessel rates, U.S. to Japan



Note: PNW = Pacific Northwest.

Source: O'Neil Commodity Consulting.

Table 18

Ocean freight rates for selected shipments, week ending 10/10/2020

Export region	Import region	Grain types	Loading date	Volume loads (metric tons)	Freight rate (US$/metric ton)
U.S. Gulf	China	Heavy grain	Oct 16/25	66,000	41.75
U.S. Gulf	China	Heavy grain	Aug 18/24	66,000	39.50
U.S. Gulf	Djibouti	Wheat	Oct 16/26	12,180	94.48*
U.S. Gulf	Djibouti	Wheat	Sep 18/28	15,810	54.86*
U.S. Gulf	Cameroon	Sorghum	Oct 10/20	8,580	68.50*
U.S. Gulf	Mozambique	Sorghum	Aug 10/20	30,780	41.35
U.S. Gulf	Pt Sudan	Sorghum	Jun 5/15	33,370	99.50
PNW	China	Soybeans	Sep 1/30	63,000	22.10 op 22.60
PNW	Indonesia	Soybean Meal	Nov 10/20	8,600	37.86*
PNW	Yemen	Wheat	Aug 4/14	15,000	42.95*
Vancouver	Japan	Wheat	Sep 15/30	20,000	24.30
Vancouver	Japan	Canola	Sep 15/30	30,000	24.30
Brazil	Japan	Corn	Sep 11/20	49,000	34.75
Brazil	Japan	Corn	Sep 1/10	60,000	34.00

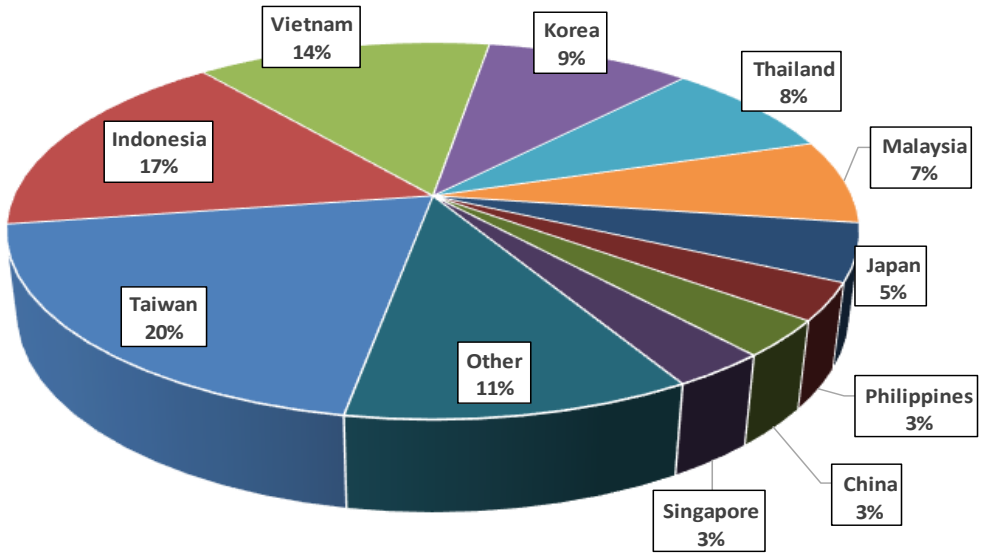
*50 percent of food aid from the United States is required to be shipped on U.S.-flag vessels.

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

Source: Maritime Research, Inc.

In 2019, containers were used to transport 9 percent of total U.S. waterborne grain exports. Approximately 60 percent of U.S. waterborne grain exports in 2019 went to Asia, of which 14 percent were moved in containers. Approximately 94 percent of U.S. waterborne containerized grain exports were destined for Asia.

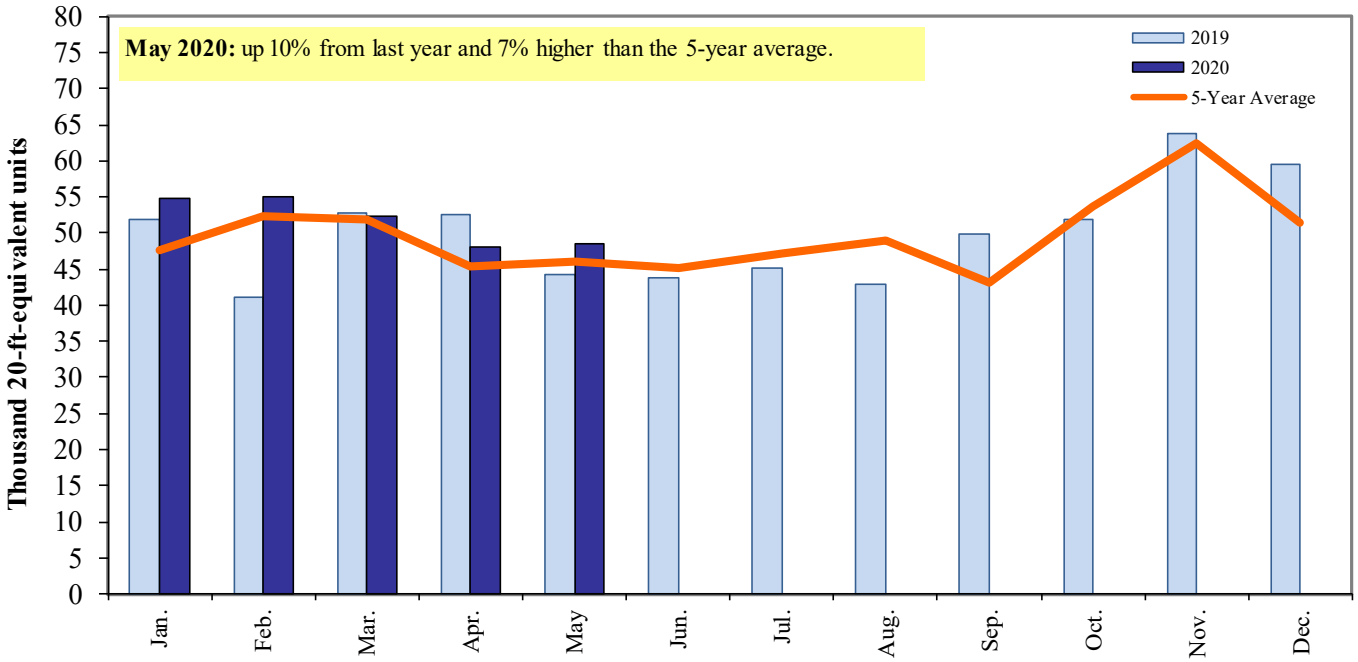
Figure 18
Top 10 destination markets for U.S. containerized grain exports, Jan-May 2020



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, 120810, and 120190.

Source: USDA, Agricultural Marketing Service, Transportation Services Division analysis of PIERS data.

Figure 19
Monthly shipments of containerized grain to Asia



Note: The following Harmonized Tariff Codes are used to calculate containerized grains movements: 100190, 100200, 100300, 100400, 100590, 100700, 110100, 110220, 110290, 1201, 120100, 120190, 120810, 230210, 230310, 230330, and 230990.

Source: USDA, Agricultural Marketing Service, Transportation Services Division analysis of PIERS data.

Contacts and Links

Coordinators		
Surajudeen (Deen) Olowolayemo	surajudeen.olowolayemo@usda.gov	(202) 720 - 0119
Maria Williams	maria.williams@usda.gov	(202) 690 - 4430
Bernadette Winston	bernadette.winston@usda.gov	(202) 690 - 0487
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
Bernadette Winston	bernadette.winston@usda.gov	(202) 690 - 0487
Matt Chang	matt.chang@usda.gov	(202) 720 - 0299
Truck Transportation		
April Taylor	april.taylor@usda.gov	(202) 720 - 7880
Grain Exports		
Johnny Hill	johnny.hill@usda.gov	(202) 690 - 3295
Kranti Mulik	kranti.mulik@usda.gov	(202) 756 - 2577
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
Editor		
Maria Williams	maria.williams@usda.gov	(202) 690-4430

Subscription Information: Please sign up to receive regular email announcements of the latest *GTR* issue by entering your email address **here** and selecting your preference to receive Transportation Research and Analysis. For any other information, you may contact us at **GTRContactUs@usda.gov**

Preferred citation: U.S. Department of Agriculture, Agricultural Marketing Service. *Grain Transportation Report.* October 15, 2020. Web: **http://dx.doi.org/10.9752/TS056.10-15-2020**