USDA United States Department of Agriculture

Grain Transportation Report

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

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October 29, 2020

Contents

The next release is November 5, 2020

WEEKLY HIGHLIGHTS

Additional Illinois River Lock and Dam Sites Scheduled to Reopen

The Illinois River includes eight lock and dam sites that require significant repairs such as major rehabilitation and replacement of lock machinery (see repair schedule). To facilitate the repairs, extended closures were scheduled. On October 29, the U.S. Army Corps of Engineers will reopen Starved Rock Lock and Dam (Utica, IL) and Marseilles Lock and Dam (Marseilles, IL) after closing them in early July. In addition, Dresden Island Lock and Dam (Morris, IL) reopened on October 24 from full closure and on October 28 from partial closure.

Grain Inspections Up; Soybeans Continue Above Average

For the week ending October 22, **total inspections of grain** (corn, wheat, and soybeans) for export from all major U.S. export regions totaled 3.81 million metric tons (mmt). Total grain inspections were up 8 percent from the previous week, up 43 percent from last year, and up 47 percent from the 3-year average. Increased inspections were driven by a 51 percent jump in wheat inspections (primarily, for Asia and Latin America) and an 18-percent increase in soybean inspections. Total soybean inspections remained 82 percent above the 3-year average. Corn inspections, however, dropped 30 percent from the previous week as shipments to Asia receded. In the Pacific Northwest (PNW) and Mississippi Gulf, grain inspections were up 11 percent from the previous week for each region. Compared to the same period last year, total year-to-date inspections increased 8 percent.

FMC Investigates Implications of "Merchant" as a Term of Vessel-Operating Common Carriers

On October 14, the Federal Maritime Commission (FMC) solicited public comment on use of the term "merchant" in bills of lading for vessel-operating common carriers (VOCCs). FMC seeks input on several questions, including how the term ''merchant'' is defined in VOCC bills of lading. The agency also seeks to learn whether (because of the definition) third parties who are not in contractual privity with the carrier may be subject to joint or several liability. Finally, FMC asks whether carriers have enforced the "merchant" definition against third parties that have not consented to be bound by, or otherwise accept, the terms and conditions of the bill of lading. Comments are requested on or before November 6, 2020.

Snapshots by Sector

Export Sales

For the week ending October 15, **unshipped balances** of wheat, corn, and soybeans totaled 62.1 million metric tons (mmt). This is a historical record for outstanding sales. Net **corn export sales** were 1.832 mmt, up significantly from the past week. Net **soybean export sales** were 2.226 mmt, down 14 percent from the previous week. Net weekly **wheat export sales** were 0.367 mmt, down 31 percent from the previous week.

Rail

U.S. Class I railroads originated 25,547 **grain carloads** during the week ending October 17. This was a 7-percent decrease from the previous week, 24 percent more than last year, and 18 percent more than the 3-year average.

Average November shuttle **secondary railcar** bids/offers (per car) were $438 above tariff for the week ending October 22. This was $315 less than last week and $484 more than this week last year. There were no non-shuttle bids/offers this week.

Barge

For the week ending October 24, **barge grain movements** totaled 1,185,727 tons. This was 6 percent more than the previous week and 79 percent more than the same period last year.

For the week ending October 24, 757 grain barges **moved down river**—58 more barges than the previous week. There were 982 grain barges **unloaded in New Orleans**, 5 percent more than the previous week.

Ocean

For the week ending October 22, 38 **oceangoing grain vessels** were loaded in the Gulf—6 percent more than the same period last year. Within the next 10 days (starting October 23), 56 vessels were expected to be loaded—10 percent more than the same period last year.

As of October 22, the rate for shipping a metric ton (mt) of grain from the U.S. Gulf to Japan was $42.50. This was 1 percent less than 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 26, the U.S. average **diesel fuel price** decreased 0.3 cents from the previous week to $2.385 per gallon, 67.9 cents below the same week last year.

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Feature Article/Calendar

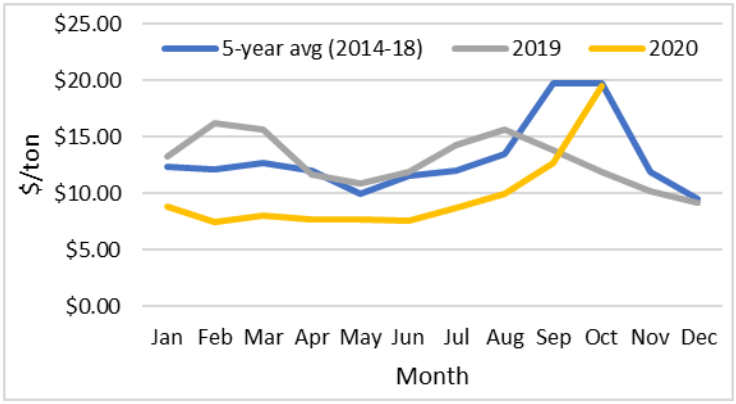
China Drives Demand for Barge Transportation in Recent Weeks

As a major mode for bringing grain to market, barges move roughly half of all grain destined for export, including about 60 percent of exported corn and 50 percent of exported soybeans. Although flat at the start of the year, grain traffic on the Mississippi River has risen considerably in the past 6 weeks. As this article discusses, both rates and movements have increased, reflecting a higher demand for barge transportation. In recent weeks, exports to China out of the Mississippi Gulf have grown substantially.

Barge Rates and Movements Track Up …

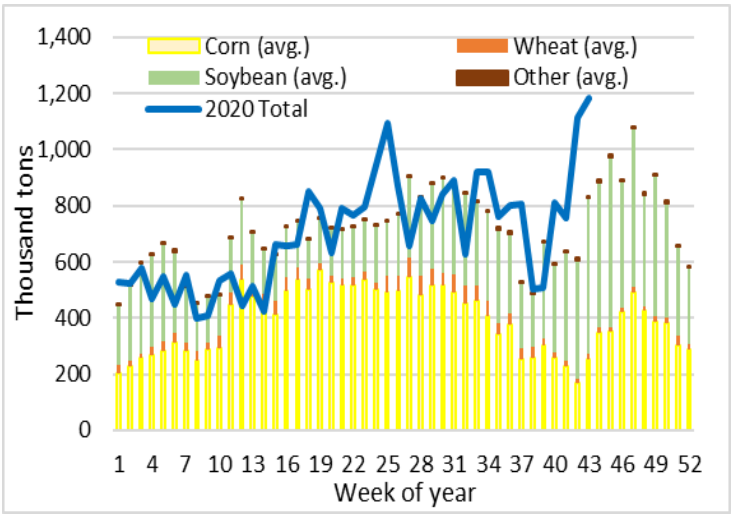
Typically, current (near-by) barge rates and volumes increase in June as newly harvested wheat becomes available (fig. 1).[1] Both 2020 and 5-year average barge rates start to show large increases in August. In August, the corn and soybean harvests begin, and demand for barges to move new crops to export markets increases because shippers usually purchase barge service in advance. This means grain barge rates usually reach their annual peak in September-October and start to fall afterward, even though peak volumes usually occur in November. Although rates were below average for most of 2020 (by $3.76/ton), the 2020 September-October current barge rates continued to rise and caught up with the 5-year average at a time when rates are normally poised to fall.

Figure 1: Monthly average St. Louis barge rate, adjusted for inflation.



Source: USDA, Agricultural Marketing Service

Figure 2: Weekly downbound grain barge movements, 2020 and 5-year average (calendar year).



Note: avg.= 5-year average.
Source: U.S. Army Corps of Engineers.

Strong since April (fig. 2), weekly barge grain movements were consistently above average in August and significantly above average in September and October. For the most recent week ending October 24 (***GTR* table 10**), grain barge movements reached 1.2 million tons, 43 percent higher than the 5-year average. Total calendar year-to-date (YTD) grain barge tonnages on the locking portion of the Mississippi River system had reached 30.1 million, 36.3 percent higher than 2019 and 1.5 percent higher than the 5-year average for the same period (see ***GTR* table 10**). The fact that *both* barge rates and

[1] USDA's Agricultural Marketing Service collects and reports three barge rates (***GTR* table 9**): (1) current (near-by) rates (the price barge operators offer to sell current service); (2) 1-month rates (forward prices, by 1 month, reported by barge operators to lock the service in the next month); and (3) 3-month forward rates (forward prices, by 3 months, reported by barge operators to lock the services 3 months from now).

volumes have been high suggests a high demand for barge has helped shape these trends (rather than being due to changes in supply).

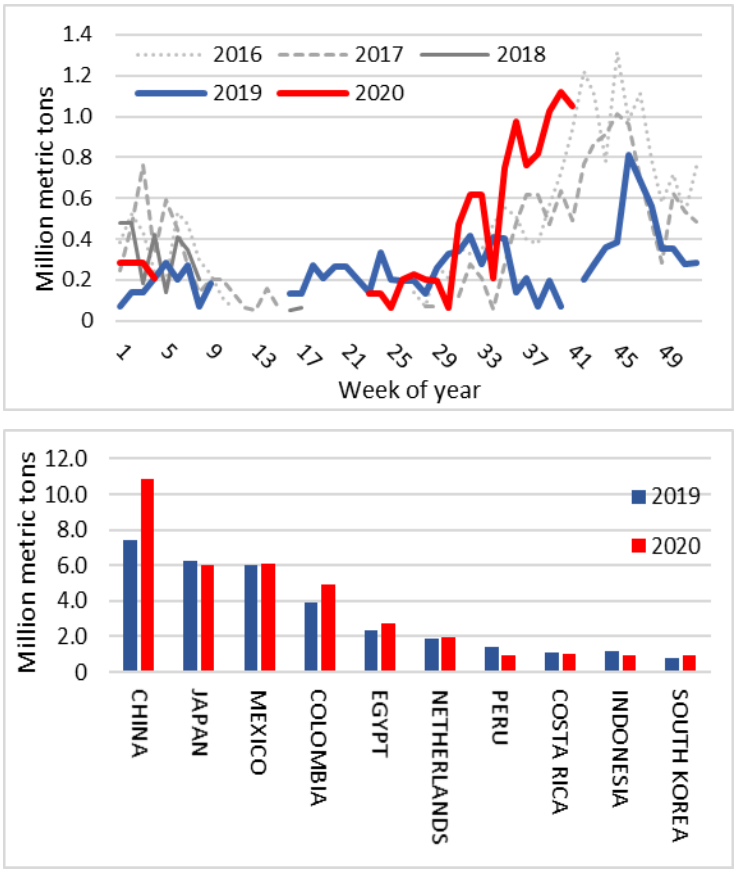
… Because of Increased Demand

Seasonal demand for barge is a key, consistent factor behind the typical annual barge rate changes. Higher demand for barge services lifts freight rates and volumes, and lower demand suppresses them. Fluctuations in barge rates and volumes stem from a variety of factors, including local weather patterns, navigation circumstances, lock closures, and other changes to the grain and barge markets.

Notwithstanding week-by-week differences, figure 1 shows 2020 grain barge rates paralleled (albeit at a lower level) the 5-year averages until the beginning of October. Since then, barge volumes have increased well above seasonal levels.

Increased purchases of U.S. corn and soybeans from China are the reason for the recent increases in barge rates and movements. Figure 3 shows this interrelationship between barge movements on the Mississippi River and exports to China (data are from USDA's Ag Transport Open Data Platform). The top panel in figure 3 plots week-to-week grain exports to China out of the Mississippi Gulf. Barge movements have tracked quite closely with export volumes over the past several weeks: a dip in export volumes in week 34 (fig. 3) mirrored a dip in downbound barge movements in week 32 (fig. 2). Since the dips, both indicators have trended upward in tandem. YTD grain exports to China from the Mississippi Gulf are significantly higher than last year (fig. 3, bottom panel).

Figure 3: Weekly grain exports to China from the Mississippi Gulf (top) and year-to-date grain exports from the Mississippi Gulf to the top 10 destination countries (bottom).



Source: USDA, Agricultural Marketing Service, Agricultural Transportation Open Data Platform.

Outlook

In October, USDA's *World Agricultural Supply and Demand Estimates* report projected marketing year 2020/21 corn exports at 2.3 billion bushels and soybean exports at a record-high 2.2 billion bushels. Projected exports for both commodities are about 31 percent higher than last year, which could support barge movements the remainder of the year. In addition to the current barge rate data, USDA's Agricultural Marketing Service also assembles and reports weekly 1-month and 3-month forward rates collected from barge operators. This data provides an indicator of the barge industry's perspective of near-future market supply and demand. As of October 27, the reported St. Louis forward grain barge rate for locking the service in November is $15.32 per ton, about $4.50 higher than the same time last year. The reported forward rate for January is $13.73 per ton, $3.53 higher than last year and $0.65 higher than the 5-year average (***GTR* table 9**). These relatively high forward rates suggest barge operators are optimistic about export and grain barge demand for the rest of 2020 and first quarter of 2021.

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Grain Transportation Indicators

Table 1

Grain transport cost indicators[1]

	Truck	Rail		Barge	Ocean	
For the week ending		Unit train	Shuttle		Gulf	Pacific
10/28/20	160	288	239	287	190	168
10/21/20	160	288	253	349	192	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); n/a = not available.
Source: USDA, Agricultural Marketing Service.

Table 2

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

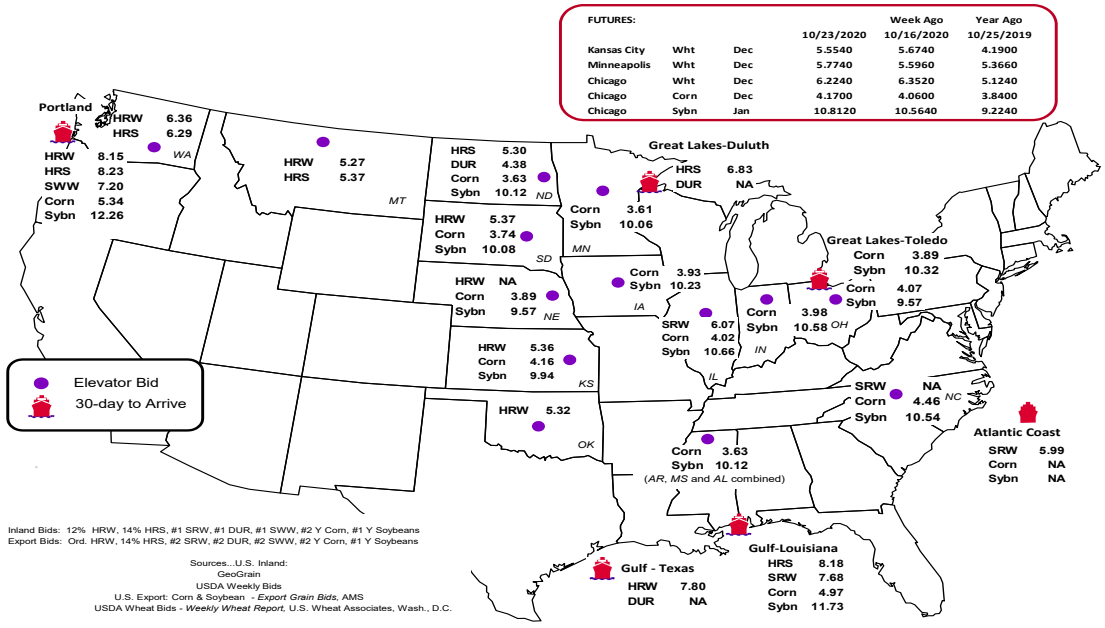
Commodity	Origin–destination	10/23/2020	10/16/2020
Corn	IL–Gulf	-0.95	-1.02
Corn	NE–Gulf	-1.08	-1.09
Soybean	IA–Gulf	-1.50	-1.45
HRW	KS–Gulf	-2.44	-2.44
HRS	ND–Portland	-2.93	-2.95

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]
10/21/2020[p]	1,790	2,258	9,479	678	14,205	10/17/2020	1,697
10/14/2020[r]	1,467	2,258	8,822	738	13,285	10/10/2020	2,215
2020 YTD[r]	26,999	44,083	219,347	10,589	301,018	2020 YTD	102,148
2019 YTD[r]	36,741	46,710	206,484	14,597	304,532	2019 YTD	102,909
2020 YTD as % of 2019 YTD	73	94	106	73	99	% change YTD	99
Last 4 weeks as % of 2019[2]	456	194	224	240	235	Last 4wks. % 2019	82
Last 4 weeks as % of 4-year avg.[2]	150	179	148	100	148	Last 4wks. % 4 yr.	83
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.

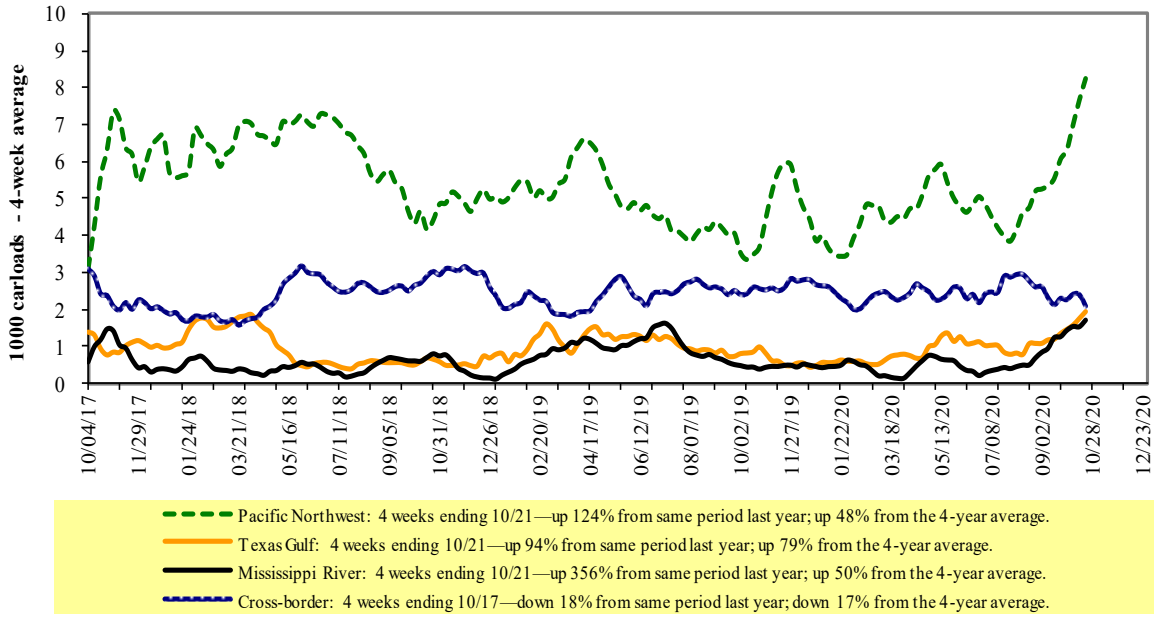
YTD = year-to-date; p = preliminary data; r = revised data; n/a = not available; wks. = weeks; avg. = average.

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	
10/17/2020	CSXT	NS	BNSF	KCS	UP		CN	CP
This week	2,497	2,637	12,835	1,230	6,348	25,547	5,875	5,911
This week last year	1,910	2,033	10,440	1,163	5,081	20,627	5,026	4,429
2020 YTD	69,701	99,842	465,264	45,315	221,939	902,061	177,481	196,212
2019 YTD	75,848	112,976	455,463	47,657	212,937	904,881	170,205	186,303
2020 YTD as % of 2019 YTD	92	88	102	95	104	100	104	105
Last 4 weeks as % of 2019*	115	116	140	109	136	132	121	117
Last 4 weeks as % of 3-yr. avg.**	104	100	126	126	127	122	122	110
Total 2019	91,611	136,941	568,369	58,527	260,269	1,115,717	212,486	235,892

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

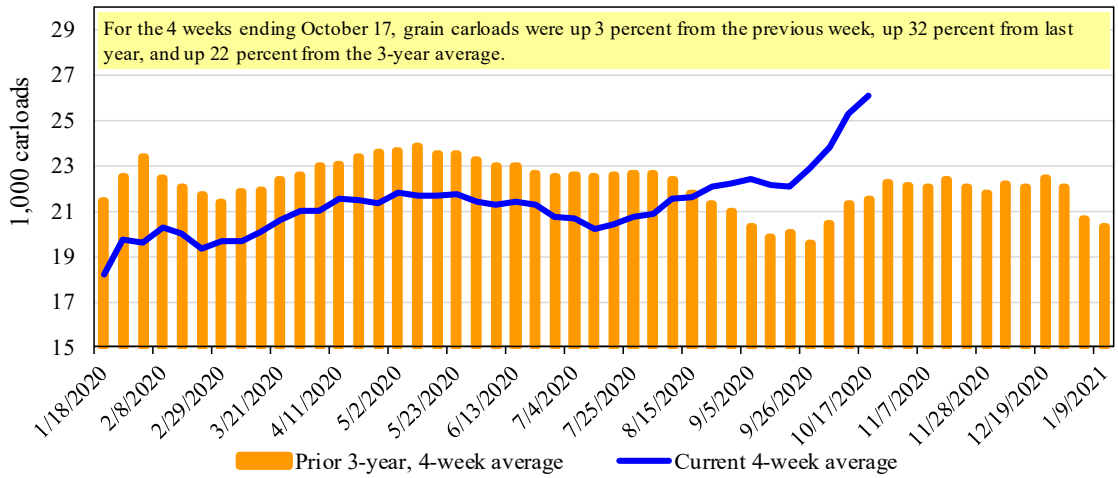
**The past 4 weeks as a percent of the same period from the prior 3-year average. YTD = year-to-date; avg. = average; yr. = year.

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							
10/22/2020		Nov-20	Nov-19	Dec-20	Dec-19	Jan-21	Jan-20	Feb-21	Feb-20
BNSF[3]	COT grain units	0	0	0	no bid	no bid	0	no bid	0
	COT grain single-car	0	0	0	0	50	1	0	0
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 bid	no offer	no bid	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. 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.

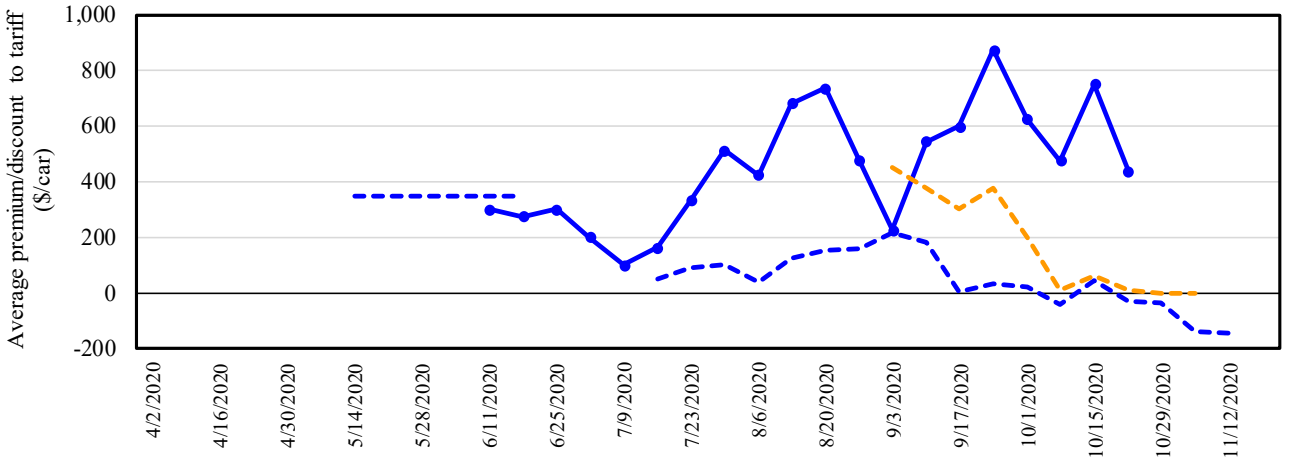
Region 1 includes: AR, IL, LA, MO, NM, OK, TX, WI, and Duluth, MN.

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 November 2020, secondary market

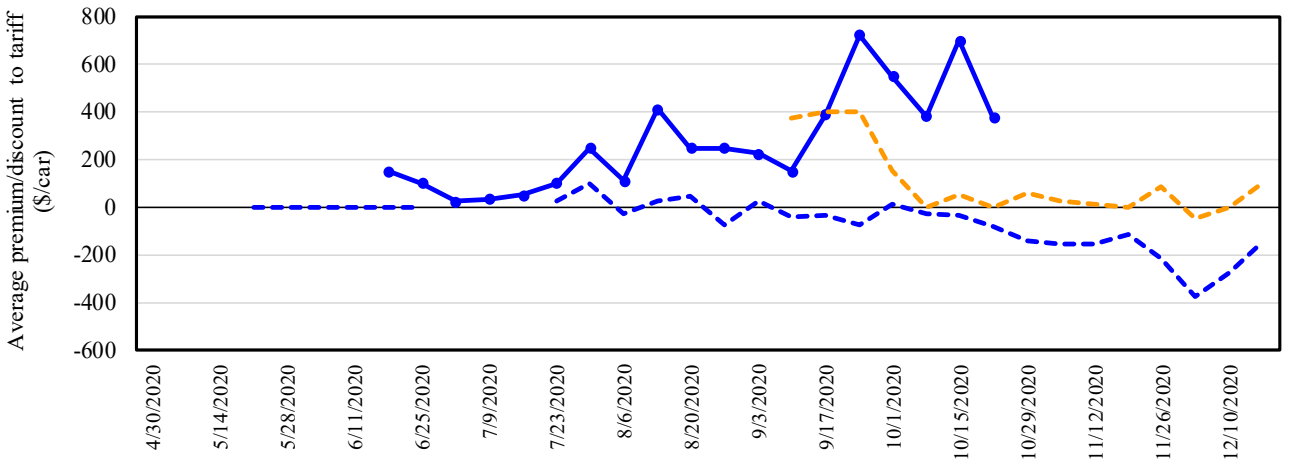


10/22/2020	BNSF	UP
Non-shuttle	n/a	n/a
Shuttle	$550	$325

There were no non-shuttle bids/offers this week.
Average shuttle bids/offers fell $315 this week and are $438 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 December 2020, secondary market



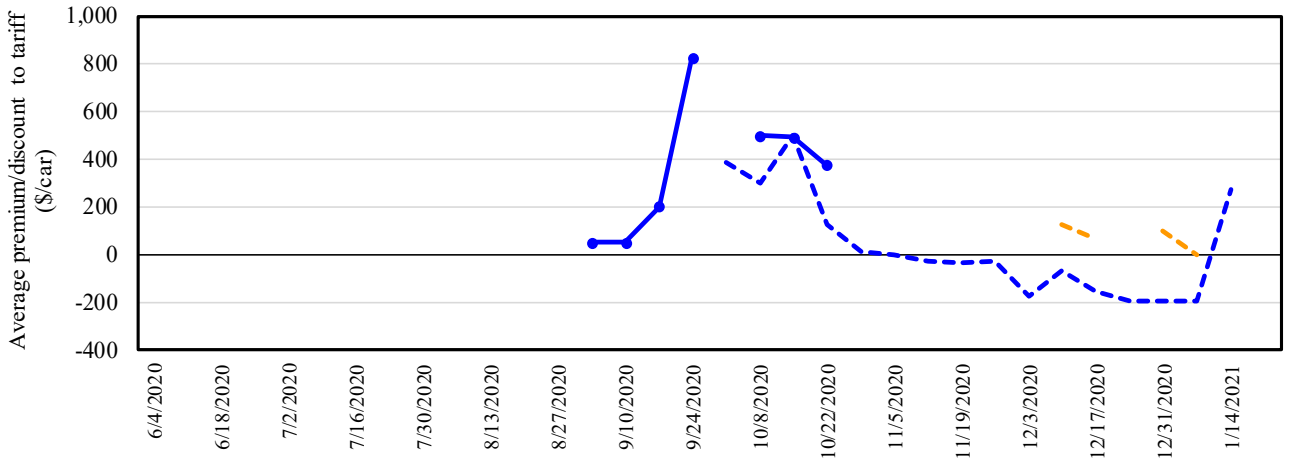
10/22/2020	BNSF	UP
Non-shuttle	n/a	n/a
Shuttle	$400	$350

There were no non-shuttle bids/offers this week.
Average shuttle bids/offers fell $325 this week and are $350 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 January 2021, secondary market



10/22/2020	BNSF	UP
Non-shuttle	n/a	n/a
Shuttle	n/a	$375

There were no non-shuttle bids/offers this week.
Average shuttle bids/offers fell $117 this week and are $450 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: 10/22/2020	Delivery period					
		Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-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**	**550**	**400**	**n/a**	**n/a**	**n/a**	**n/a**
	Change from last week	(317)	(500)	n/a	n/a	n/a	n/a
	Change from same week 2019	594	450	n/a	n/a	n/a	n/a
	UP-Pool	**325**	**350**	**375**	**n/a**	**175**	**n/a**
	Change from last week	(313)	(150)	(117)	n/a	n/a	n/a
	Change from same week 2019	375	450	n/a	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							
	Origin		Tariff rate	Fuel surcharge	Tariff rate plus fuel surcharge per:		Percent change[4]
Commodity	state	Destination region	per car[1]	per car[2]	metric ton[3]	bushel[3]	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.

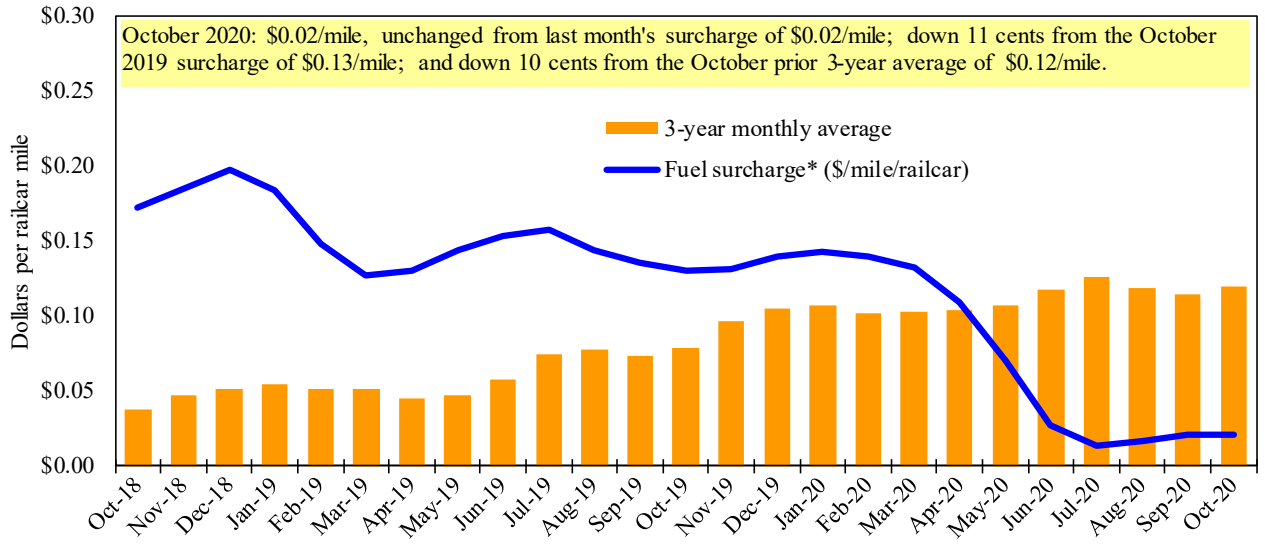
[3]Approximate load per car = 97.87 metric tons: Corn & Sorghum 56 lbs/bu, Wheat & Soybeans 60 lbs/bu.

[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.

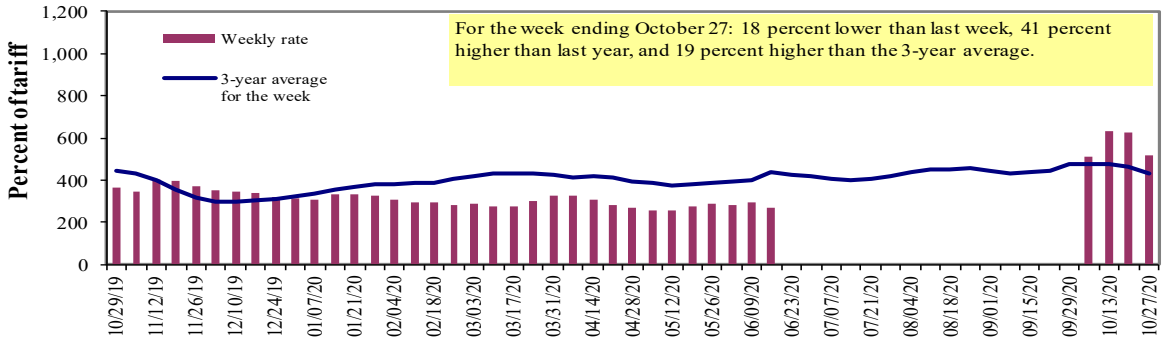
* Beginning January 2009, the Canadian Pacific fuel surcharge is computed by a monthly average of the bi-weekly fuel surcharge.

**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.
Source: USDA, Agricultural Marketing Service.

Table 9
Weekly barge freight rates: Southbound only

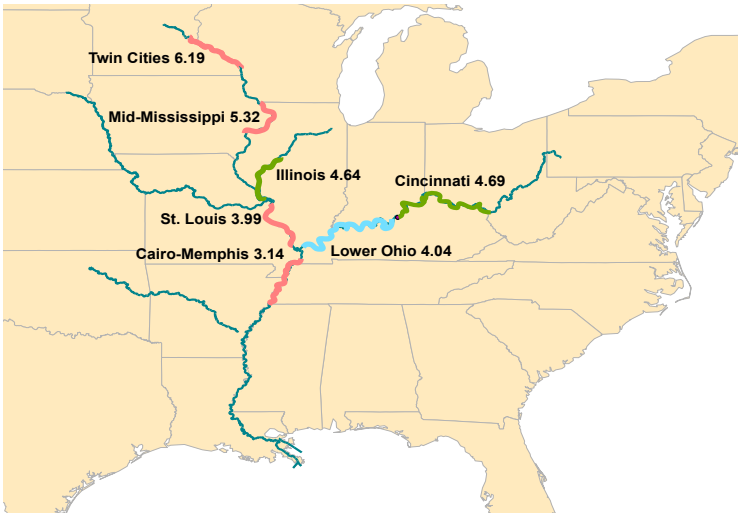
		Twin Cities	Mid-Mississippi	Lower Illinois River	St. Louis	Cincinnati	Lower Ohio	Cairo-Memphis
Rate[1]	10/27/2020	671	566	516	443	444	444	443
	10/20/2020	646	638	629	544	529	529	584
$/ton	10/27/2020	41.53	30.11	23.94	17.68	20.82	17.94	13.91
	10/20/2020	39.99	33.94	29.19	21.71	24.81	21.37	18.34
Current week % change from the same week:								
	Last year	74	47	41	70	58	58	89
	3-year avg. [2]	51	30	19	22	5	5	31
Rate[1]	November	646	491	474	384	380	380	360
	January	-	-	456	344	339	339	306

[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

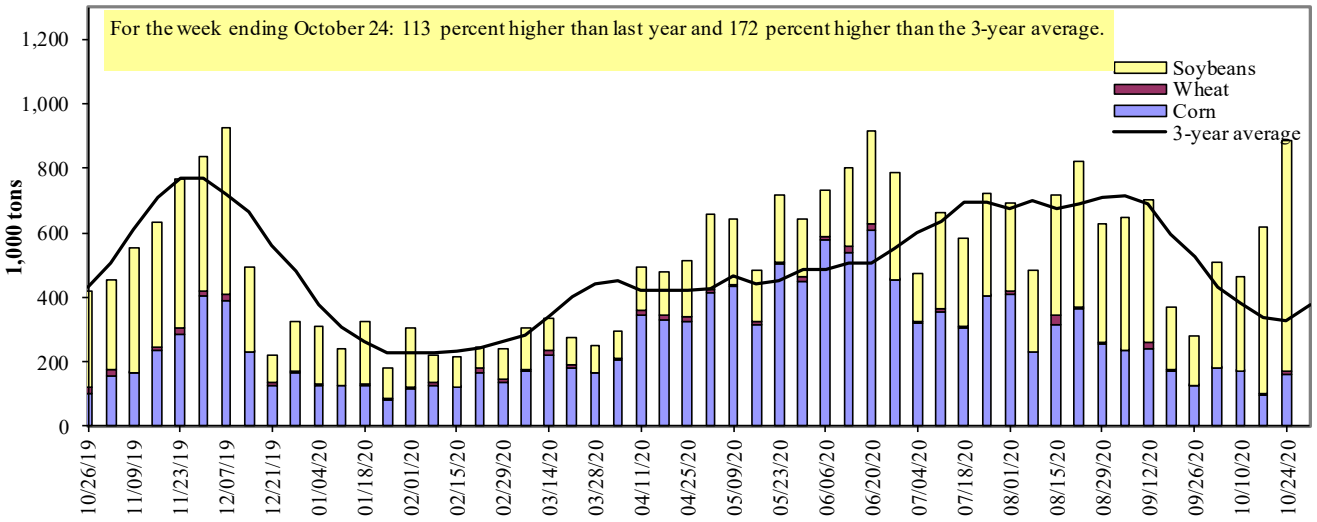
Select applicable index from market quotes are included in tables on this page. The 1976 benchmark rates per ton are provided in map.



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 10/24/2020	Corn	Wheat	Soybeans	Other	Total
Mississippi River					
Rock Island, IL (L15)	30	0	238	0	268
Winfield, MO (L25)	94	14	535	2	645
Alton, IL (L26)	173	14	642	5	834
Granite City, IL (L27)	159	14	711	10	894
Illinois River (La Grange)	48	0	84	0	132
Ohio River (Olmsted)	114	5	116	2	236
Arkansas River (L1)	0	14	42	0	56
Weekly total - 2020	273	34	868	11	1,186
Weekly total - 2019	203	47	414	0	664
2020 YTD[1]	14,882	1,621	13,437	171	30,111
2019 YTD[1]	10,133	1,411	10,408	136	22,087
2020 as % of 2019 YTD	147	115	129	126	136
Last 4 weeks as % of 2019[2]	150	113	229	955	193
Total 2019	12,780	1,631	14,683	154	29,247

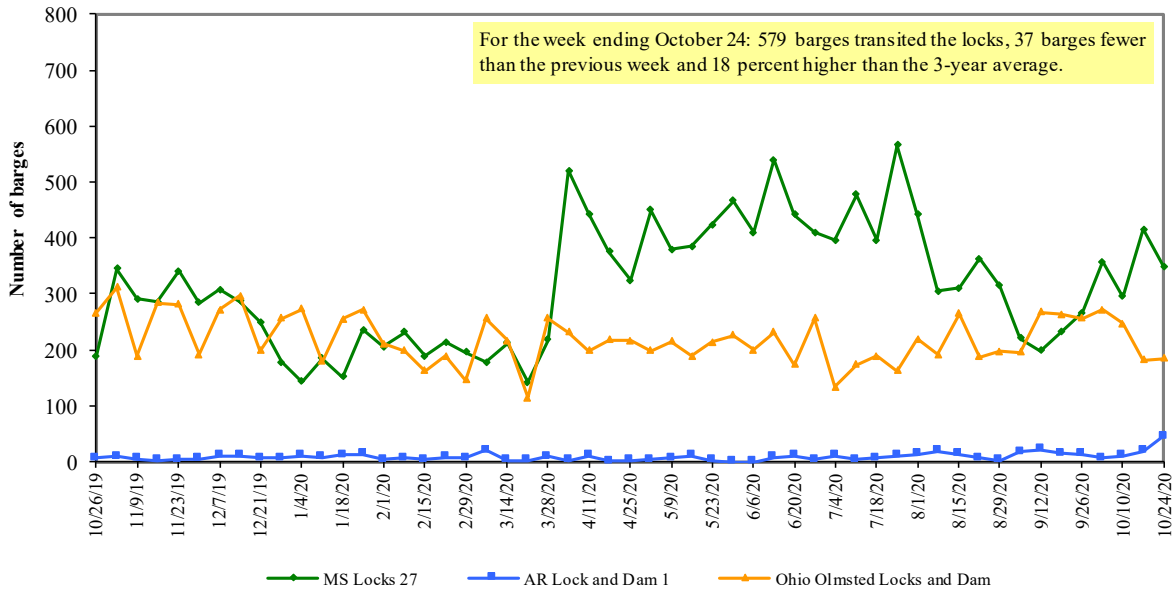
[1] Weekly total, YTD (year-to-date), and calendar year total include MS/27, OH/Olmsted, and AR/1; Other refers to oats, barley, sorghum, and rye. L (as in "L15") refers to a lock or lock and dam facility. Olmsted = Olmsted Locks and Dam. La Grange = La Grange Lock and Dam.

[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

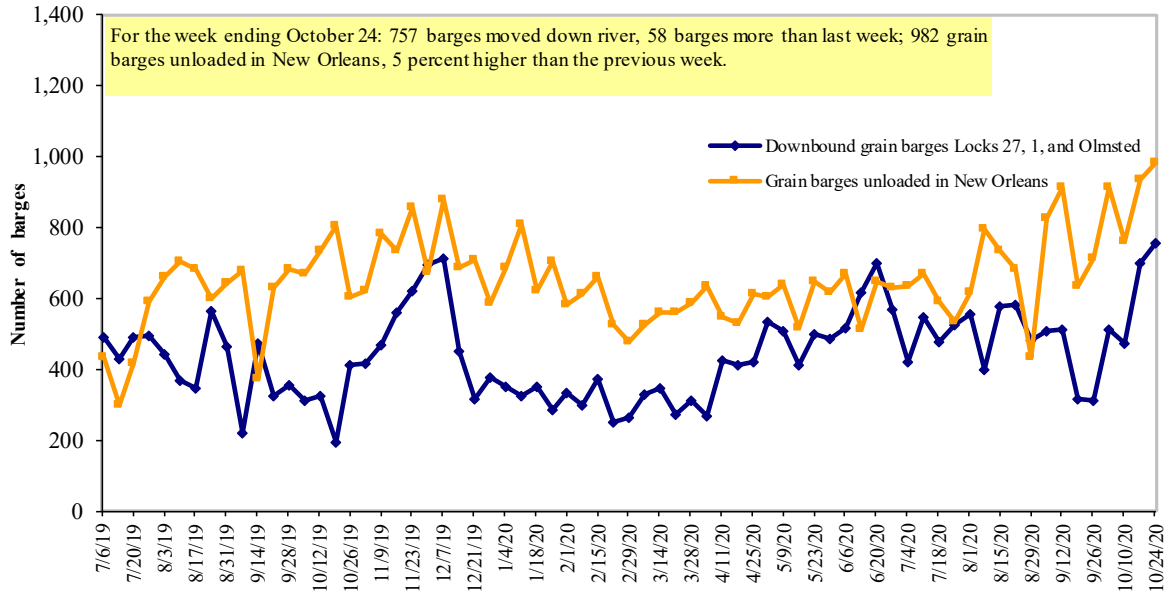
Upbound empty barges transiting Mississippi River Locks 27, Arkansas River Lock and Dam 1, and Ohio River Olmsted Locks and Dam



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 10/26/2020 (U.S. $/gallon)

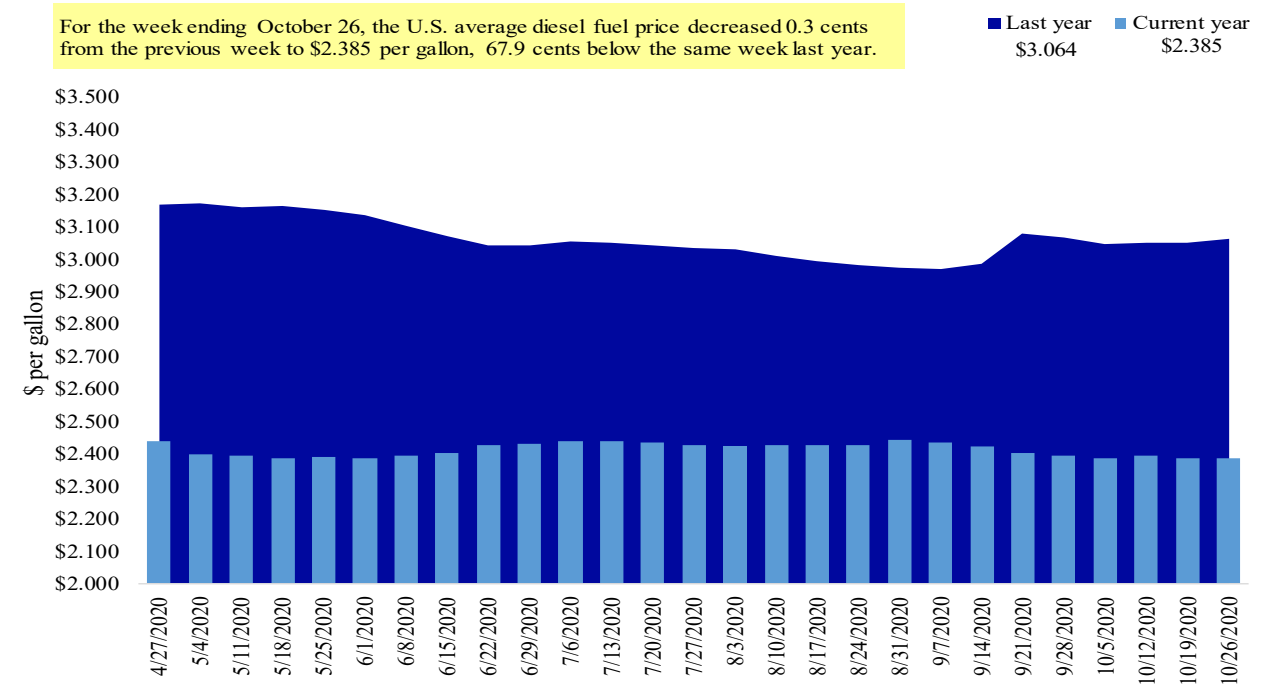
Region	Location	Price	Change from Week ago	Change from Year ago
I	East Coast	2.461	-0.004	-0.595
	New England	2.574	-0.001	-0.454
	Central Atlantic	2.648	-0.004	-0.598
	Lower Atlantic	2.311	-0.005	-0.621
II	Midwest	2.262	-0.007	-0.701
III	Gulf Coast	2.146	0.003	-0.660
IV	Rocky Mountain	2.324	-0.002	-0.758
V	West Coast	2.920	-0.004	-0.804
	West Coast less California	2.537	-0.005	-0.842
	California	3.235	-0.004	-0.763
Total	United States	2.385	-0.003	-0.679

[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]									
10/15/2020	1,643	404	1,507	1,452	221	5,227	22,944	33,926	62,097
This week year ago	1,240	617	1,172	916	205	4,149	7,729	12,096	23,975
Cumulative exports-marketing year[2]									
2020/21 YTD	4,144	879	2,905	1,940	322	10,190	5,391	11,423	27,004
2019/20 YTD	4,049	1,163	2,644	1,766	313	9,935	3,127	6,165	19,226
YTD 2020/21 as % of 2019/20	102	76	110	110	103	103	172	185	140
Last 4 wks. as % of same period 2019/20*	127	55	137	151	109	124	288	280	256
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 10/15/2020	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	5,260	5,812	(10)	14,869
Japan	3,950	1,530	158	11,221
Columbia	1,257	581	116	4,830
Korea	339	71	378	4,011
China	10,549	60	17,571	909
Top 5 importers	**21,354**	**8,053**	**165**	**35,840**
Total U.S. corn export sales	**28,335**	**10,856**	**161**	**49,983**
% of projected exports	48%	24%		
Change from prior week[2]	**1,832**	**491**		
Top 5 importers' share of U.S. corn export sales	75%	74%		72%
USDA forecast October 2020	**59,160**	**45,242**	**31**	
Corn use for ethanol USDA forecast, October 2020	**128,270**	**123,241**	**4**	

[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 10/15/2020	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	24,922	5,709	337	19,106
Mexico	2,430	2,437	(0)	4,591
Egypt	878	688	28	2,980
Indonesia	703	486	45	2,360
Japan	713	690	3	2,288
Top 5 importers	**29,647**	**10,010**	**196**	**31,324**
Total U.S. soybean export sales	**45,350**	**18,261**	**148**	**49,352**
% of projected exports	76%	40%		
change from prior week[2]	**2,226**	**409**		
Top 5 importers' share of U.S. soybean export sales	65%	55%		**63%**
USDA forecast, October 2020	**59,946**	**45,668**	**131**	

[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 10/15/2020	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	2,119	2,180	(3)	3,213
Philippines	2,228	1,615	38	2,888
Japan	1,452	1,399	4	2,655
Nigeria	750	939	(20)	1,433
Korea	858	828	4	1,372
Indonesia	606	335	81	1,195
Taiwan	675	678	(0)	1,175
Thailand	442	418	6	727
Italy	458	443	3	622
Colombia	199	434	(54)	618
Top 10 importers	**9,785**	**9,267**	6	**15,897**
Total U.S. wheat export sales	**15,417**	**14,084**	9	**23,821**
% of projected exports	58%	54%		
change from prior week[2]	**367**	**262**		
Top 10 importers' share of U.S. wheat export sales	63%	66%		67%
USDA forecast, October 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 10/22/20	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	272	148	184	13,322	11,617	115	76	90	13,961
Corn	1	0	n/a	8,257	6,922	119	n/a	25	7,047
Soybeans	981	981	100	7,807	8,389	93	433	298	11,969
Total	**1,255**	**1,129**	**111**	**29,386**	**26,927**	**109**	**210**	**170**	**32,977**
Mississippi Gulf									
Wheat	26	0	n/a	3,171	3,995	79	70	68	4,448
Corn	460	713	65	23,672	18,059	131	183	142	20,763
Soybeans	1,373	964	142	23,811	23,216	103	127	132	31,398
Total	**1,859**	**1,677**	**111**	**50,653**	**45,270**	**112**	**139**	**133**	**56,609**
Texas Gulf									
Wheat	37	94	39	3,882	5,518	70	156	167	6,009
Corn	0	11	0	621	579	107	135	42	640
Soybeans	169	117	144	829	2	n/a	n/a	n/a	2
Total	**206**	**222**	**93**	**5,332**	**6,099**	**87**	**275**	**264**	**6,650**
Interior									
Wheat	31	10	323	1,732	1,611	107	52	68	1,987
Corn	164	165	100	7,005	6,254	112	124	105	7,857
Soybeans	177	183	97	5,473	5,771	95	113	116	7,043
Total	**373**	**358**	**104**	**14,210**	**13,636**	**104**	**111**	**107**	**16,887**
Great Lakes									
Wheat	15	0	n/a	698	936	75	56	121	1,339
Corn	0	0	n/a	54	11	474	0	0	11
Soybeans	43	73	59	523	473	111	n/a	97	493
Total	**58**	**73**	**79**	**1,276**	**1,421**	**90**	**153**	**93**	**1,844**
Atlantic									
Wheat	2	2	81	31	37	84	942	n/a	37
Corn	0	7	0	33	99	33	650	201	99
Soybeans	60	62	98	862	1,090	79	295	261	1,353
Total	**62**	**71**	**88**	**926**	**1,226**	**76**	**307**	**260**	**1,489**
U.S. total from ports*									
Wheat	383	254	151	22,836	23,714	96	85	100	27,781
Corn	625	896	70	39,641	31,925	124	171	115	36,417
Soybeans	2,804	2,379	118	39,306	38,941	101	186	174	52,258
Total	**3,812**	**3,529**	**108**	**101,783**	**94,580**	**108**	**159**	**144**	**116,457**

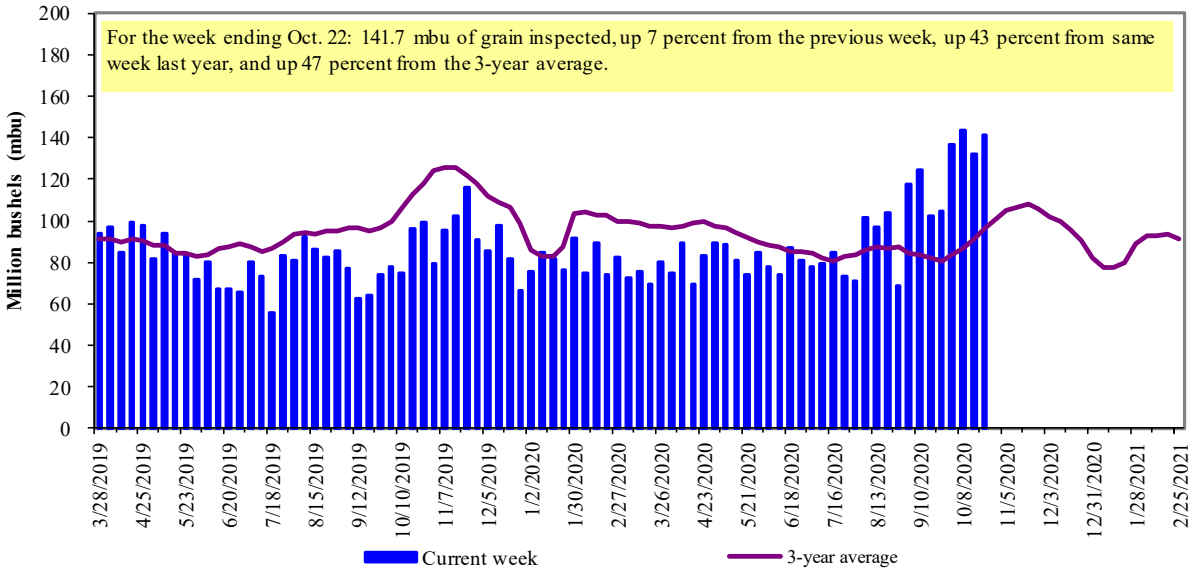
*Data includes revisions from prior weeks; some regional totals may not add exactly due to rounding.

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)

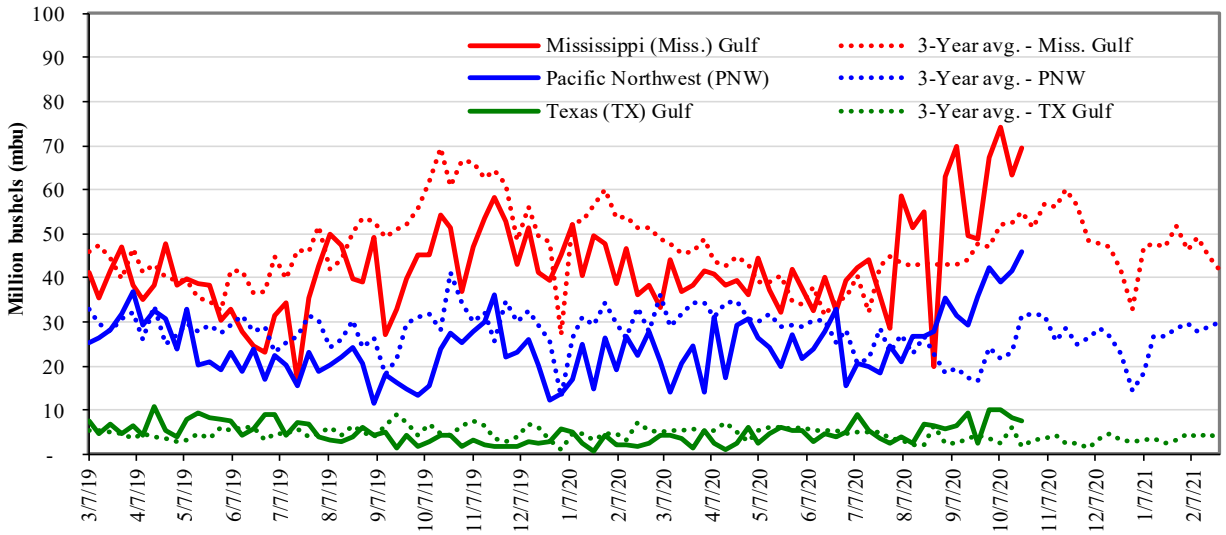


Note: 3-year average consists of 4-week running average.

Source: USDA, Federal Grain Inspection Service.

Figure 15

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



Week ending 10/22/20 inspections (mbu):	
MS Gulf:	69.5
PNW:	46.1
TX Gulf:	7.6

Percent change from:	MS Gulf	TX Gulf	U.S. Gulf	PNW
Last wk:	up 10	down 8	up 8	up 11
Last Year (same wk):	up 36	up 70	up 38	up 68
3-yr avg. (4-wk. mov. Avg):	up 35	up 119	up 40	up 84

Source: USDA, Federal Grain Inspection Service.

Table 17

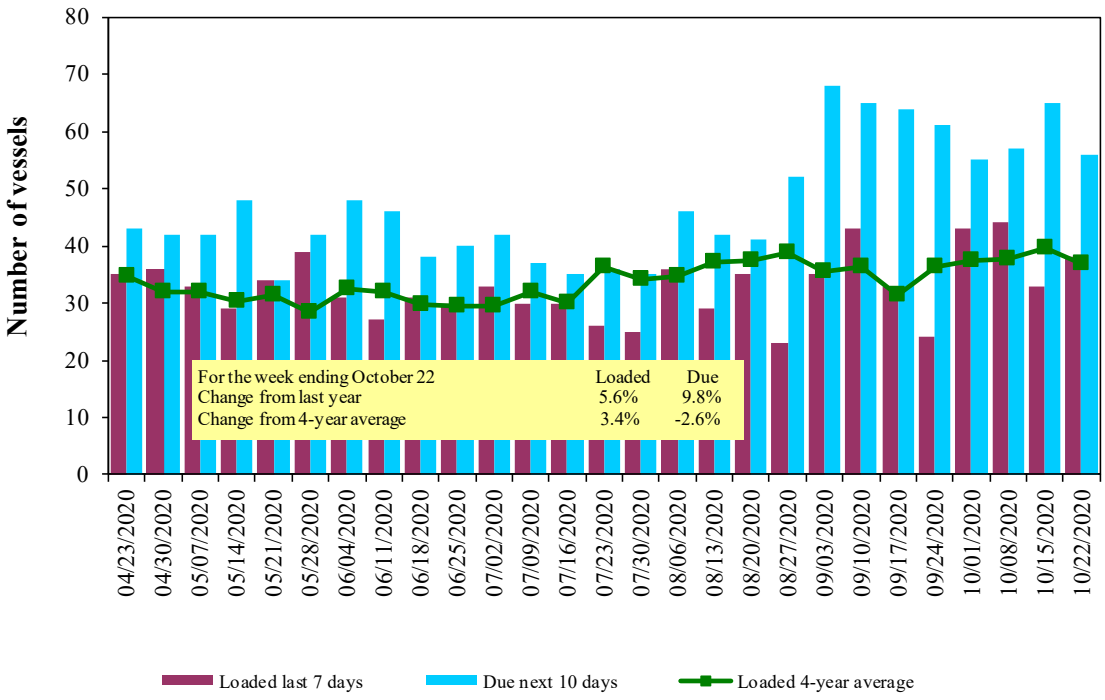
Weekly port region grain ocean vessel activity (number of vessels)

	Gulf			Pacific Northwest
Date	In port	Loaded 7-days	Due next 10-days	In port
10/22/2020	56	38	56	16
10/15/2020	48	33	65	17
2019 range	(26…61)	(18...44)	(33...69)	(8...33)
2019 average	40	31	49	17

Source: USDA, Agricultural Marketing Service.

Figure 16

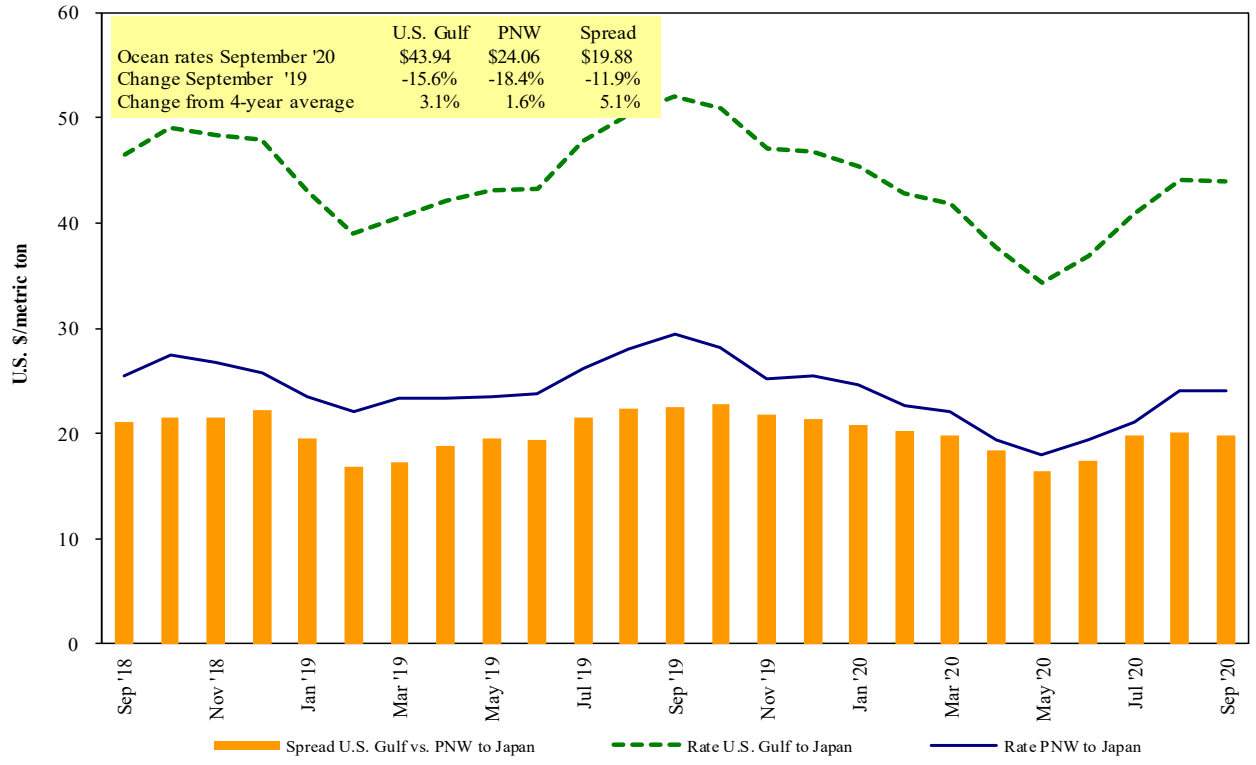
U.S. Gulf[1] vessel loading activity



[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 10/24/2020

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

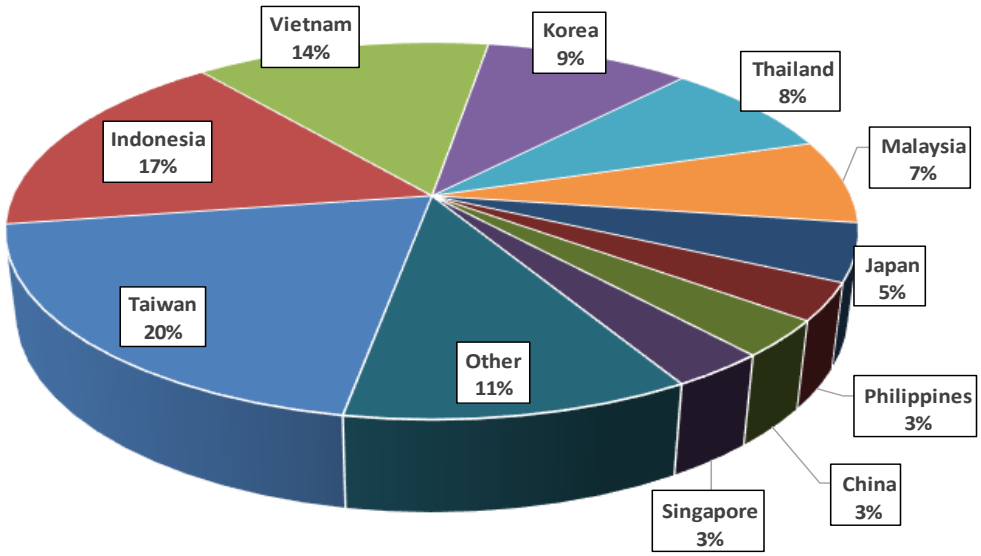
*50 percent of food aid from the United States is required to be shipped on U.S.-flag vessels.

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.

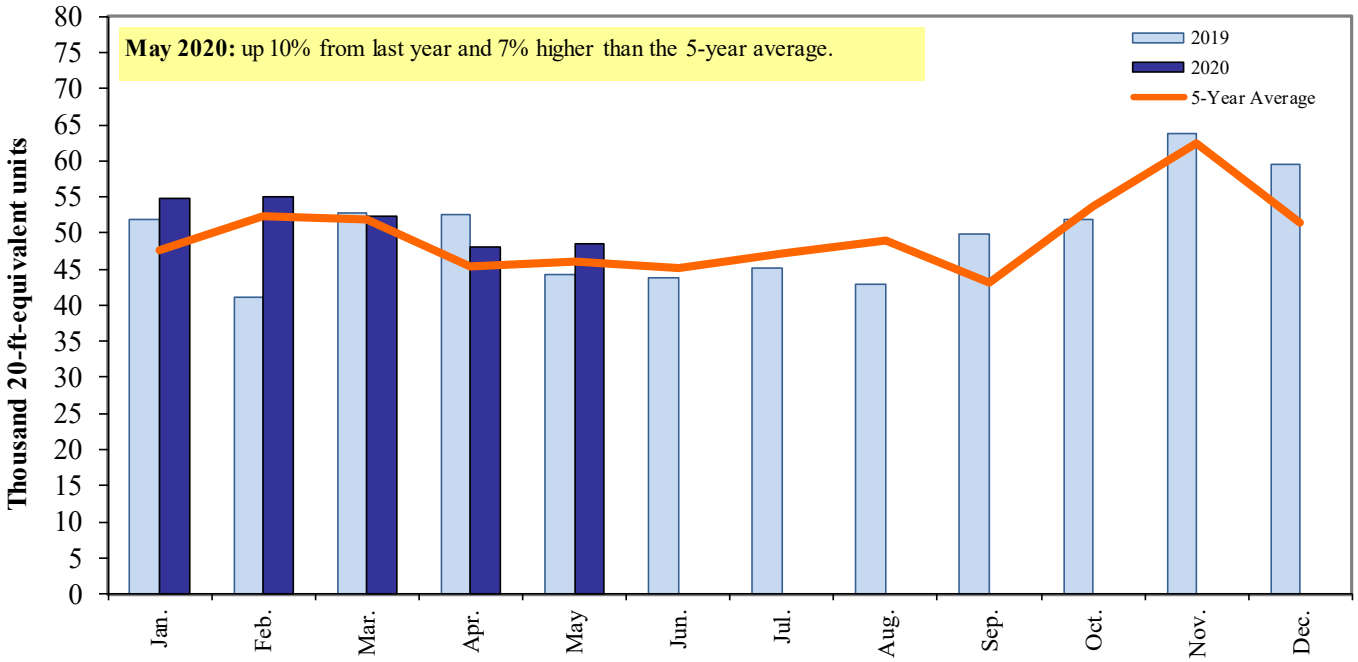
Figure 18
Top 10 destination markets for U.S. containerized grain exports, Jan-May 2020



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.

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