



Grain Transportation Report

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

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July 30, 2020

WEEKLY HIGHLIGHTS

Contents

Article/
Calendar

Grain
Transportation
Indicators

Rail

Barge

Truck

Exports

Ocean

Brazil

Mexico

Grain Truck/Ocean
Rate Advisory

Datasets

Specialists

Subscription
Information

The next
release is
August 6, 2020

LaGrange Lock and Dam Closure Period Extended

The planned closure of the LaGrange closure (see [July 2 Grain Transportation Report](#)) is now extended through October 13, according to a discussion at the Inland Waterways Users Board on July 22. Because of high water, the contractor could not perform certain pre-closure tasks. The extended closure will overlap with the period of high activity in Illinois grain harvesting. In an attempt to keep the closure period to the original 90 days, the Rock Island District of the U.S. Army Corps of Engineers (USACE) is in discussions with the contractor to accelerate the process. However, USACE cannot guarantee an expedited process. The other lock closures on the Illinois River remain on schedule.

FMCSA Launches Online Database for Reporting Drug and Alcohol Violations

The Federal Motor Carrier Safety Association (FMCSA) recently launched an online database for reporting violations and other information about Commercial Driver's License CDL holders, related to FMCSA's drug and alcohol testing program. FMCSA's CDL [Drug and Alcohol Clearinghouse](#) serves as a central location to help employers quickly identify drivers with possible violations of drug and alcohol programs. The database also helps law enforcement officers identify drivers with such violations—giving access to this information when drivers are stopped for traffic violations. FMCSA partnered with the U.S. Department of Transportation to design and develop the web system, including the requirements, system architecture, and user interface.

FHWA Announces \$60 Million in Grant Funding

On July 6, The Federal Highway Administration (FHWA) [announced](#) the availability of \$60 million in grant funding for State and local projects aiming to improve travel for commuters, reduce congestion, and serve as national models for other States and metropolitan areas. Authorized in 2015, the funds will promote the early distribution of technologies aiming to improve transportation systems. State departments of transportation, local government groups, transit agencies and metropolitan planning organizations are eligible to apply, and partnerships with private-sector groups are encouraged. The deadline for applications is Aug. 31.

15 States Sign MOU To Accelerate Truck Electrification

On July 14, the District of Columbia and 15 states (California, Connecticut, Colorado, Hawaii, Maine, Maryland, Massachusetts, New Jersey, New York, North Carolina, Oregon, Pennsylvania, Rhode Island, Vermont, and Washington) released a joint [memorandum of understanding](#) (MOU). These jurisdictions will work together to accelerate the market for electric medium- and heavy-duty vehicles, including long-haul delivery trucks (big-rigs). The long-range goal is for 100 percent of all new medium- and heavy-duty vehicle sales to be zero emission by 2050, with a provisional target of 30 percent of sales to be zero emission by 2030.

Snapshots by Sector

Export Sales

For the week ending July 16, [unshipped balances](#) of wheat, corn, and soybeans totaled 20.1 million metric tons (mmt). This represented an 11-percent increase in outstanding sales from the same time last year. Net [corn export sales](#) were 0.221 mmt, down 78 percent from last week. Net [soybean export sales](#) were 0.365 mmt, up 17 percent from the previous week. Net [wheat export sales](#) were 0.617 mmt, down 19 percent from the previous week.

Rail

U.S. Class I railroads originated 22,395 [grain carloads](#) during the week ending July 18. This was a 15-percent more than the previous week, 2 percent less than last year, and 3 percent less than the 3-year average.

Average August shuttle [secondary railcar](#) bids/offers (per car) were \$272 above tariff for the week ending July 23. This was \$78 more than last week and \$450 more than this week last year. There were no non-shuttle bids/offers this week.

Barge

For the week ending July 25, [barge grain movements](#) totaled 838,643 tons. This was 12 percent more than the previous week and 7 percent more than the same period last year.

For the week ending July 25, 525 grain barges [moved down river](#)—46 more barges than the previous week. There were 535 grain barges [unloaded in New Orleans](#), 9 percent fewer than the previous week.

Ocean

For the week ending July 23, 26 [oceangoing grain vessels](#) were loaded in the U.S. Gulf—13 percent fewer than the same period last year. Within the next 10 days (starting July 24), 36 vessels were expected to be loaded—35 percent fewer than the same period last year.

As of July 23, the rate for shipping a metric ton (mt) of grain from the U.S. Gulf to Japan was \$41.50. This was 2 percent less than the previous week. The rate from the Pacific Northwest to Japan was \$20.75 per mt, 3 percent less than the previous week.

Fuel

For the week ending July 27, the U.S. average [diesel fuel price](#) decreased 0.6 cents from the previous week to \$2.427 per gallon, 60.7 cents below the same week last year.

New Rail Data and “Agriculture by Rail” Story on USDA’s Ag Transport Open Data Platform

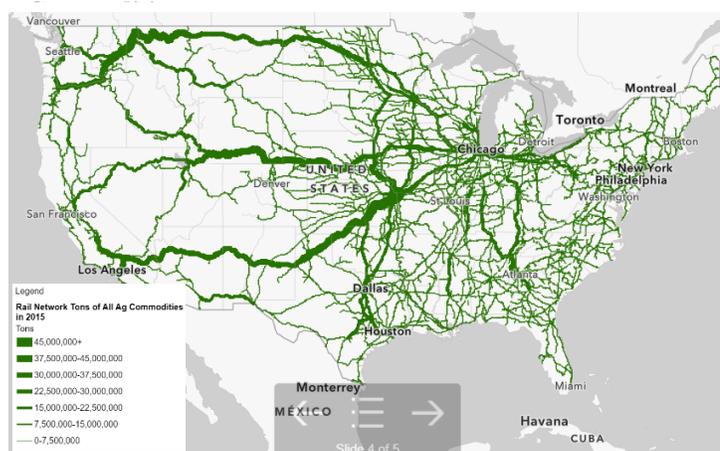
On June 1, 2020, the Transportation Services Division (TSD) of USDA’s Agricultural Marketing Service (AMS) launched an [upgraded version of its Agricultural Transportation Open Data Platform](#), dubbed AgTransport 2.0 for short. Originally launched last June, the platform enables decision makers across the agricultural supply chain to interact with, visualize, and share data and make better, data-driven decisions. The upgrade incorporates new data and stories on transportation modes and ag-transport-related issues.

Across the country, agricultural shippers depend on efficient, reliable rail service. Because agriculture is tied to farmland, operations cannot locate close to end markets. Instead, producers’ bulk commodities (such as grain) must often be shipped far from the farm.

Rail transportation is virtually the only cost-effective option for serving locations without nearby water transportation.

As shown in a map of agricultural tonnage flowing across the rail network in 2015, the web of possible railroad routes is densest in the eastern half of the United States (fig. 1). The major arteries of the Class I U.S. railroads stem largely from the production-rich interior and run mainly between the Midwest and coastal export ports, as well as between Midwest farms and distant domestic feedlot and dairy regions, like California. In 2017, 34 percent of the grain tonnage destined for export was transported by rail.¹ For wheat, the share is 60 percent.

Figure 1: 2015 Rail Network Tonnages of All Agriculture



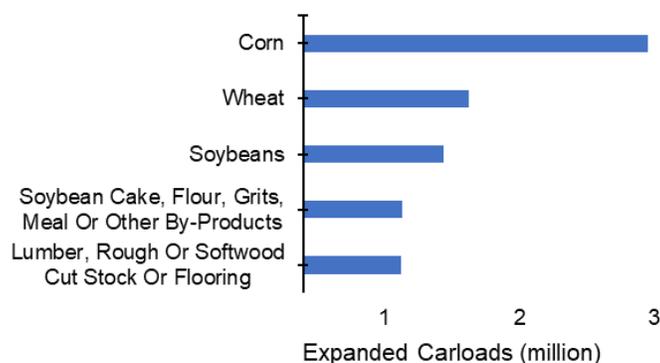
Source: USDA, Agricultural Marketing Service. Underlying flow data developed from Oak Ridge National Laboratory based on the Surface Transportation Board’s Carload Waybill Sample.

Telling Rail’s Story Through Data

A wealth of information on the railroads’ role in agricultural transportation can be gleaned from a Surface Transportation Board (STB) dataset: the [Public Use Carload Waybill Sample \(CWS\)](#). This dataset includes 68 variables on individual railroad shipments between 2005 and 2018, totaling just under 9 million rows. Despite its value, the vastness and complexity of the CWS means the raw data is unwieldy and not readily accessible.

However, AgTransport 2.0 offers an easy-to-use and interactive form of the data. It also weaves this data with text into a new interactive report on [The Role of Rail in Agricultural Transportation](#). Agricultural producers, shippers, and other stakeholders can now easily query, visualize, share, and export from the CWS data. Figure 2 shows grain and oilseed movements by

Figure 2: Top 5 Ag Commodities by Rail Carloads, Past 5 Years



Source: USDA, Agricultural Marketing Service, based on the Surface Transportation Board’s public Carload Waybill Sample.

¹ USDA, Agricultural Marketing Service, “[Transportation of U.S. Grains: A Modal Share Analysis.](#)” Agricultural Transportation Open Data Platform, accessed July 27, 2020.

rail greatly surpasses the demand for rail carloads of any other agricultural commodity. Even *individually*, any one of grain’s three largest components—corn, wheat, or soybeans—outstrips the rail demand of any other agricultural commodity. Other major carload shipments of agricultural products include soybean cake (meal), corn syrup, and agricultural chemicals (not all pictured).

Trends in Railroading Agriculture

The rail and grain industries are dynamic. In the late 1970s, there were over 50 Class I railroads, compared to only seven today. Since the partial economic deregulation of railroads in the 1980s, railroads have continuously innovated and found ways to reduce costs through economies of scale. They have also increasingly leveraged their strengths, especially in long-distance hauls to which rail is so well suited. Over the years, agricultural users of rail freight have shipped over longer and longer distances (fig. 3a) and in progressively larger-sized shipments (fig. 3b).

Figure 3a shows grain shipments by rail continue to trend toward longer distances—mainly reflecting growing distances for corn and soybeans. Most rail shipments of corn and soybeans travel over 1,500 miles, while most wheat tends to travel less distance, 501-1,500 miles.

Figure 3b shows railroads have increasingly combined more cars per shipment to reduce costs per ton. For all grain commodities, bigger shipments, in terms of the number of cars, have accounted for a growing share of the tonnage moved. However, there is some variation by commodity. For example, most corn and soybeans move in shipment sets of at least 75 cars, with the share growing over time. While most wheat also moves in these large sets, its volumes have been relatively stable. Large amounts of wheat still move in shipments of 6 to 49 cars.

Find More on AgTransport 2.0

On the platform, [The Role of Rail in Agricultural Transportation](#) report is interactive, enabling users to compare these trends across commodities, regions, timeframes, and with many more variables. The report includes additional charts comparing agriculture to other sectors that use rail (such as coal, petroleum, and intermodal, among others), timeline charts showing agricultural tonnages by rail over time, and charts showing additional trends in agricultural rail shipment characteristics. Plus, users can create their own charts on the platform using the [CWS](#), or any of the platform’s many other datasets on truck, rail, barge, ocean, and exports.

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Figure 3a: Grain Rail Tonnages by Shipment Miles

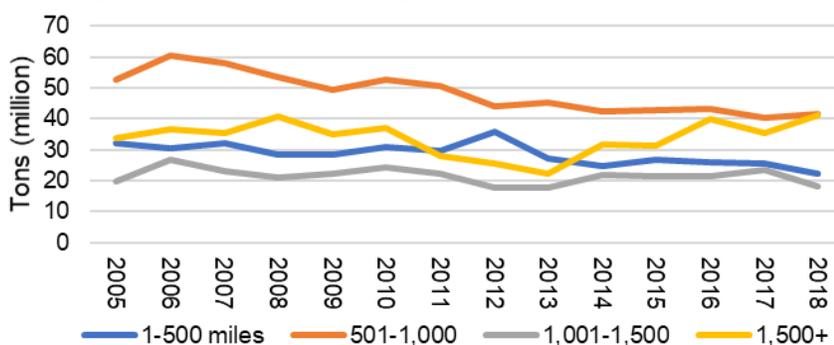
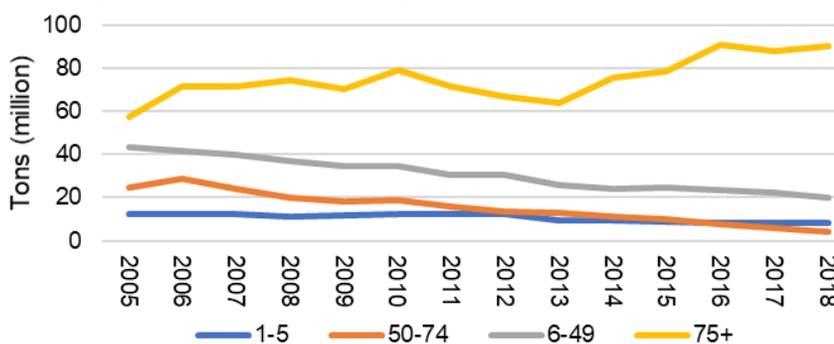


Figure 3b: Grain Rail Tonnages by Number of Cars in the Shipment



Note: In these figures, grain includes corn, soybeans, and wheat.
Source: USDA, Agricultural Marketing Service, based on the Surface Transportation Board’s public Carload Waybill Sample.

Grain Transportation Indicators

Table 1

Grain transport cost indicators¹

For the week ending	Truck	Rail		Barge*	Ocean	
		Unit train	Shuttle		Gulf	Pacific
07/29/20	163	280	234	205	186	147
07/22/20	163	280	231	187	190	152

¹Indicator: 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.

n/a = not available.

Source: USDA, Agricultural Marketing Service.

Table 2

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

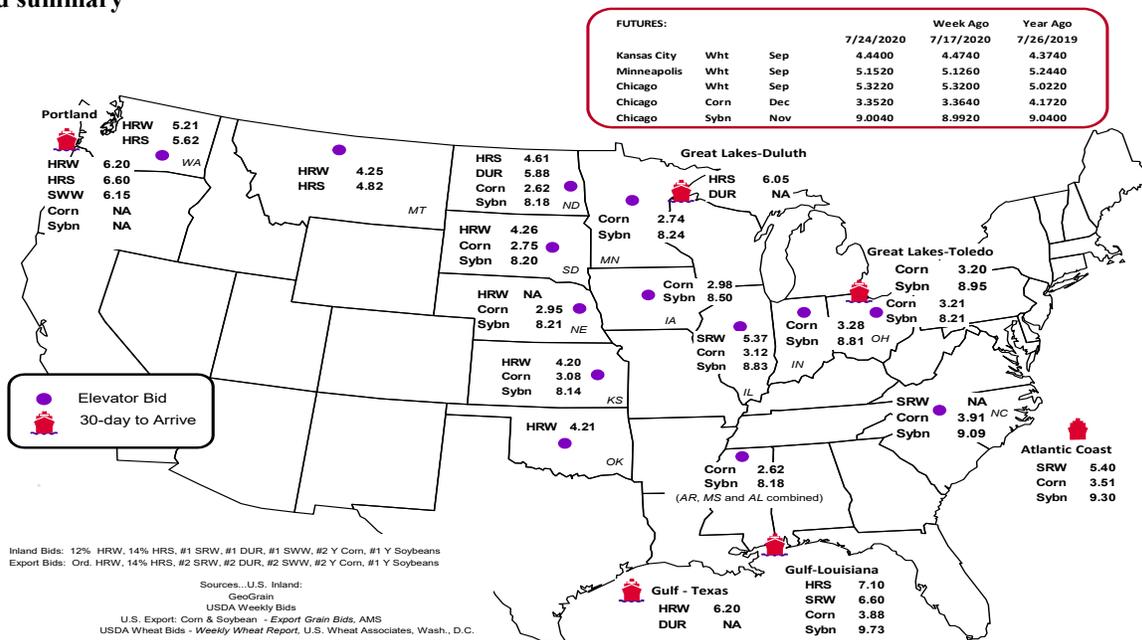
Commodity	Origin-destination	7/24/2020	7/17/2020
Corn	IL-Gulf	-0.76	-0.74
Corn	NE-Gulf	-0.93	-0.92
Soybean	IA-Gulf	-1.23	-1.17
HRW	KS-Gulf	-2.00	-1.98
HRS	ND-Portland	-1.99	-1.93

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		Pacific	Atlantic &	Total	Week ending	Cross-border Mexico ³
	Gulf	Texas Gulf	Northwest	East Gulf			
7/22/2020 ^p	312	337	4,840	187	5,676	7/18/2020	3,720
7/15/2020 ^r	575	1,089	3,725	92	5,481	7/11/2020	2,769
2020 YTD ^r	12,294	25,688	138,062	5,802	181,846	2020 YTD	70,990
2019 YTD ^r	29,513	35,208	154,497	10,880	230,098	2019 YTD	69,366
2020 YTD as % of 2019 YTD	42	73	89	53	79	% change YTD	102
Last 4 weeks as % of 2019 ²	34	81	97	41	80	Last 4wks. % 2019	115
Last 4 weeks as % of 4-year avg. ²	92	90	79	60	81	Last 4wks. % 4 yr.	119
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

¹Data is incomplete as it is voluntarily provided.

²Compared with same 4-weeks in 2019 and prior 4-year average.

³Cross-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.

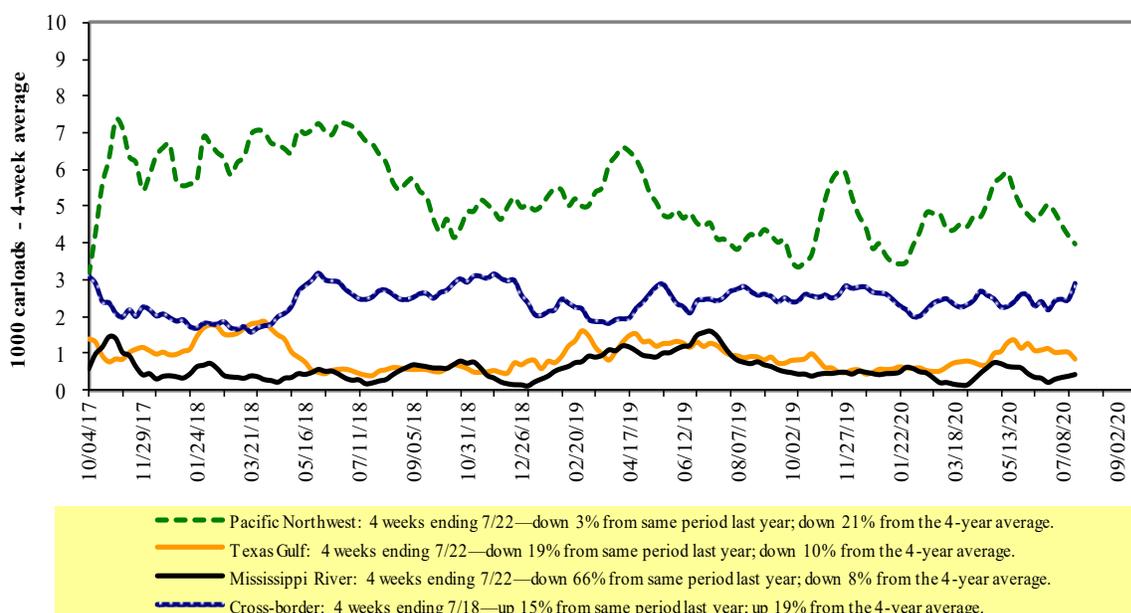
YTD = year-to-date; p = preliminary data; r = revised data; n/a = not available; wks. = weeks; avg. = average.

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: 7/18/2020	East		West			U.S. total	Canada	
	CSXT	NS	BNSF	KCS	UP		CN	CP
This week	1,497	2,623	11,427	1,052	5,796	22,395	4,446	5,311
This week last year	1,761	3,194	10,457	1,184	6,169	22,765	3,189	4,928
2020 YTD	47,419	68,712	309,319	30,018	144,830	600,298	116,776	129,991
2019 YTD	54,913	83,166	320,868	32,575	150,210	641,732	125,398	126,389
2020 YTD as % of 2019 YTD	86	83	96	92	96	94	93	103
Last 4 weeks as % of 2019*	83	84	90	89	93	89	113	110
Last 4 weeks as % of 3-yr. avg.**	75	90	89	96	98	90	121	106
Total 2019	91,611	137,203	568,369	58,527	260,269	1,115,979	212,501	235,892

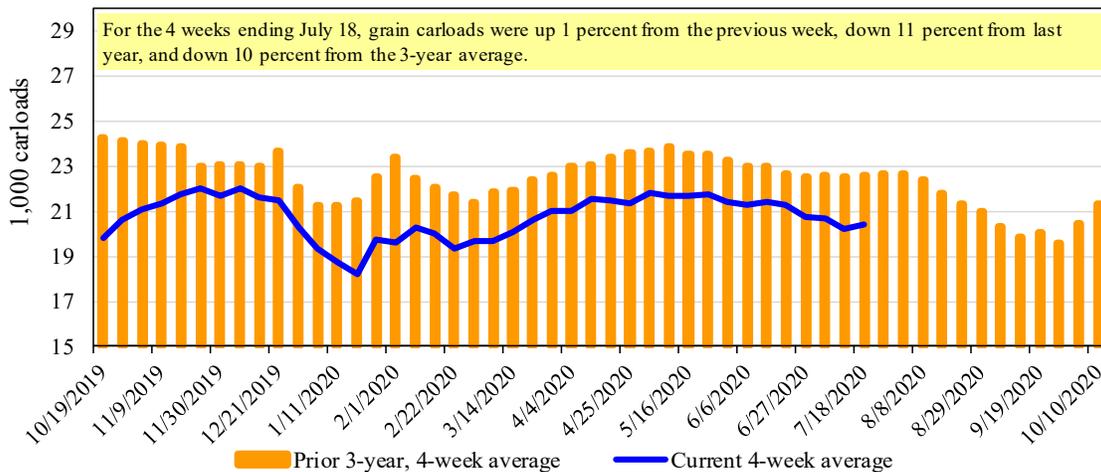
*The past 4 weeks of this year as a percent of the same 4 weeks last year.

**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 offerings¹ (\$/car)²

For the week ending: 7/23/2020		Delivery period							
		Aug-20	Aug-19	Sep-20	Sep-19	Oct-20	Oct-19	Nov-20	Nov-19
BNSF ³	COT grain units	0	no offer	0	no offer	0	0	0	0
	COT grain single-car	0	0	20	0	10	60	5	33
UP ⁴	GCAS/Region 1	no offer	no offer	no offer	10	no offer	no offer	n/a	n/a
	GCAS/Region 2	10	no offer	no bid	no bid	no offer	no offer	n/a	n/a

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

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

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

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

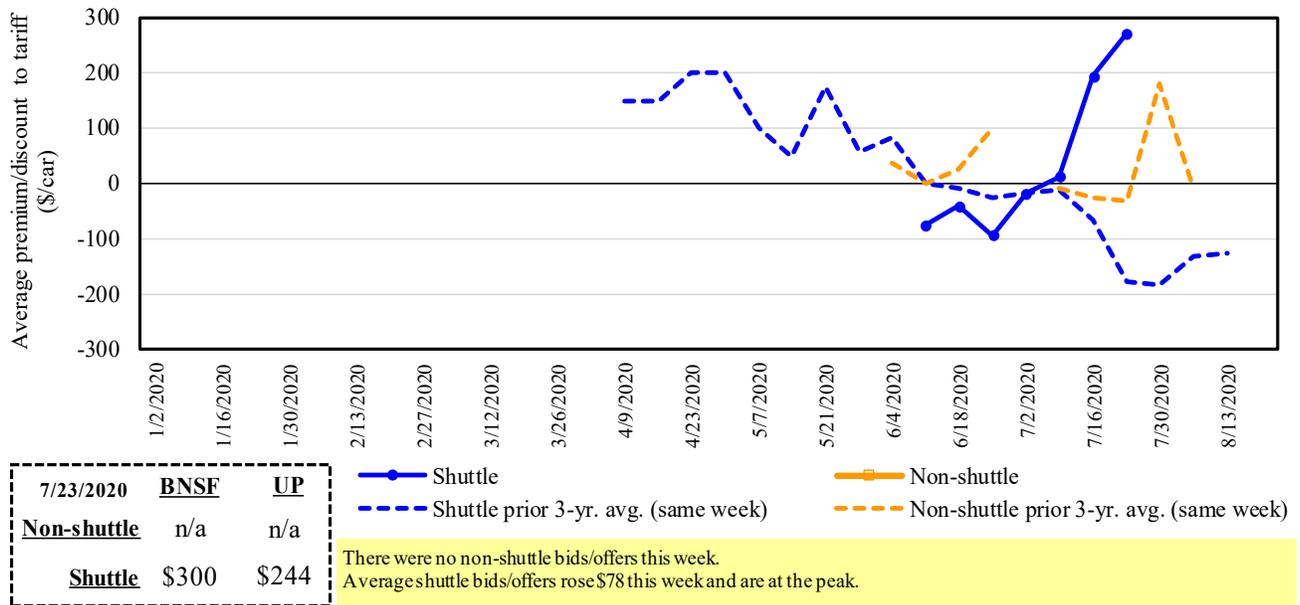
Region 1 includes: AR, IL, LA, MO, NM, OK, TX, WI, and Duluth, MN.

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

Source: USDA, Agricultural Marketing Service.

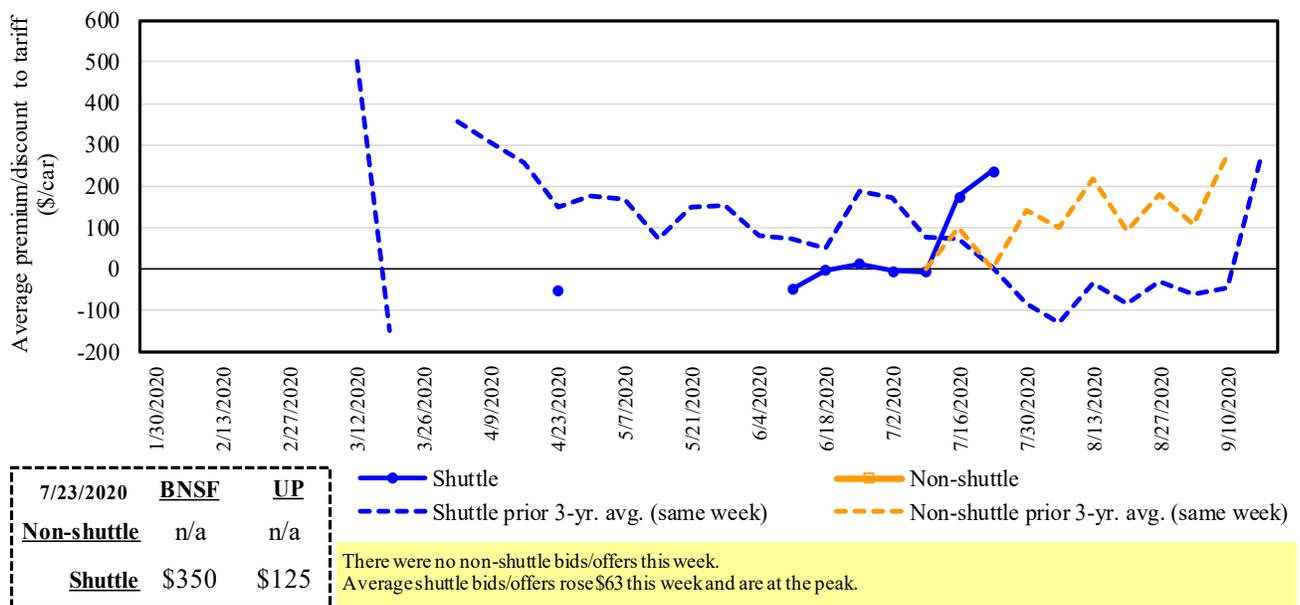
The **secondary rail market** information reflects trade values for service that was originally purchased from the railroad carrier as some form of guaranteed freight. The **auction and secondary rail** values are indicators of rail service quality and demand/supply.

Figure 4
Bids/offers for railcars to be delivered in August 2020, secondary market



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.

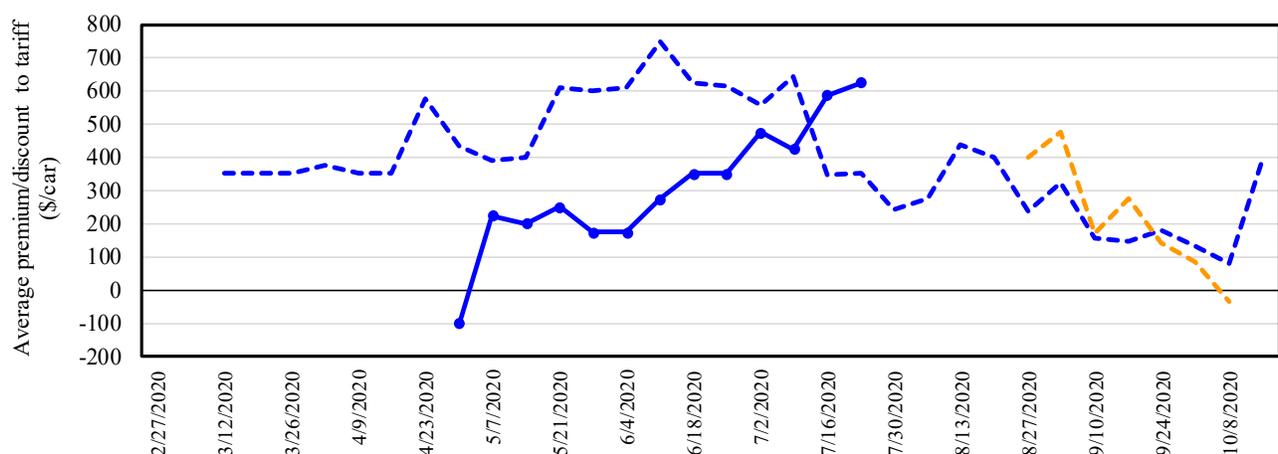
Figure 5
Bids/offers for railcars to be delivered in September 2020, secondary market



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 October 2020, secondary market



	BNSF	UP
7/23/2020		
Non-shuttle	n/a	n/a
Shuttle	\$700	\$550

There were no non-shuttle bids/offers this week.
Average shuttle bids/offers rose \$38 this week and are at 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: 7/23/2020		Delivery period					
		Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-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	300	350	700	400	200	n/a
	Change from last week	50	50	(50)	n/a	100	n/a
	Change from same week 2019	481	n/a	n/a	n/a	n/a	n/a
	UP-Pool	244	125	550	267	0	n/a
	Change from last week	106	75	125	104	0	n/a
	Change from same week 2019	419	225	n/a	n/a	n/a	n/a

¹Average 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 shipments¹

July 2020	Origin region ³	Destination region ³	Tariff rate/car	Fuel surcharge per car	Tariff plus surcharge per:		Percent change Y/Y ⁴
					metric ton	bushel ²	
Unit train							
Wheat	Wichita, KS	St. Louis, MO	\$3,983	\$30	\$39.85	\$1.08	-2
	Grand Forks, ND	Duluth-Superior, MN	\$4,333	\$0	\$43.03	\$1.17	2
	Wichita, KS	Los Angeles, CA	\$7,240	\$0	\$71.90	\$1.96	0
	Wichita, KS	New Orleans, LA	\$4,525	\$53	\$45.47	\$1.24	-3
	Sioux Falls, SD	Galveston-Houston, TX	\$6,976	\$0	\$69.28	\$1.89	0
	Colby, KS	Galveston-Houston, TX	\$4,801	\$59	\$48.26	\$1.31	-3
	Amarillo, TX	Los Angeles, CA	\$5,121	\$81	\$51.66	\$1.41	-4
Corn	Champaign-Urbana, IL	New Orleans, LA	\$3,900	\$60	\$39.33	\$1.00	-2
	Toledo, OH	Raleigh, NC	\$6,816	\$0	\$67.69	\$1.72	4
	Des Moines, IA	Davenport, IA	\$2,415	\$13	\$24.11	\$0.61	12
	Indianapolis, IN	Atlanta, GA	\$5,818	\$0	\$57.78	\$1.47	3
	Indianapolis, IN	Knoxville, TN	\$4,874	\$0	\$48.40	\$1.23	4
	Des Moines, IA	Little Rock, AR	\$3,800	\$38	\$38.11	\$0.97	1
Soybeans	Des Moines, IA	Los Angeles, CA	\$5,680	\$109	\$57.49	\$1.46	-2
	Minneapolis, MN	New Orleans, LA	\$3,631	\$30	\$36.35	\$0.99	-5
	Toledo, OH	Huntsville, AL	\$5,630	\$0	\$55.91	\$1.52	3
	Indianapolis, IN	Raleigh, NC	\$6,932	\$0	\$68.84	\$1.87	3
	Indianapolis, IN	Huntsville, AL	\$5,107	\$0	\$50.71	\$1.38	3
Champaign-Urbana, IL	New Orleans, LA	\$4,645	\$60	\$46.73	\$1.27	-1	
Shuttle train							
Wheat	Great Falls, MT	Portland, OR	\$4,143	\$0	\$41.14	\$1.12	2
	Wichita, KS	Galveston-Houston, TX	\$4,361	\$0	\$43.31	\$1.18	0
	Chicago, IL	Albany, NY	\$7,074	\$0	\$70.25	\$1.91	20
	Grand Forks, ND	Portland, OR	\$5,801	\$0	\$57.61	\$1.57	1
	Grand Forks, ND	Galveston-Houston, TX	\$6,121	\$0	\$60.78	\$1.65	1
	Colby, KS	Portland, OR	\$6,012	\$96	\$60.65	\$1.65	-4
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	\$60	\$38.53	\$0.98	-2
	Lincoln, NE	Galveston-Houston, TX	\$3,880	\$0	\$38.53	\$0.98	0
	Des Moines, IA	Amarillo, TX	\$4,220	\$47	\$42.38	\$1.08	1
	Minneapolis, MN	Tacoma, WA	\$5,180	\$0	\$51.44	\$1.31	0
	Council Bluffs, IA	Stockton, CA	\$5,000	\$0	\$49.65	\$1.26	0
Soybeans	Sioux Falls, SD	Tacoma, WA	\$5,850	\$0	\$58.09	\$1.58	2
	Minneapolis, MN	Portland, OR	\$5,900	\$0	\$58.59	\$1.59	2
	Fargo, ND	Tacoma, WA	\$5,750	\$0	\$57.10	\$1.55	2
	Council Bluffs, IA	New Orleans, LA	\$4,875	\$70	\$49.10	\$1.34	-2
	Toledo, OH	Huntsville, AL	\$4,805	\$0	\$47.72	\$1.30	4
	Grand Island, NE	Portland, OR	\$5,260	\$98	\$53.21	\$1.45	-12

¹A unit train refers to shipments of at least 25 cars. Shuttle train rates are generally available for qualified shipments of

75-120 cars that meet railroad efficiency requirements.

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

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

⁴Percentage change year over year (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: July 2020			Tariff rate per car ¹	Fuel surcharge per car ²	Tariff rate plus fuel surcharge per:		Percent change ⁴ Y/Y
Commodity	Origin state	Destination region			metric ton ³	bushel ³	
Wheat	MT	Chihuahua, CI	\$7,509	\$0	\$76.72	\$2.09	3
	OK	Cuautitlan, EM	\$6,775	\$42	\$69.65	\$1.89	-2
	KS	Guadalajara, JA	\$7,534	\$410	\$81.16	\$2.21	-3
	TX	Salinas Victoria, NL	\$4,329	\$25	\$44.49	\$1.21	-2
Corn	IA	Guadalajara, JA	\$8,902	\$325	\$94.28	\$2.39	-1
	SD	Celaya, GJ	\$8,140	\$0	\$83.17	\$2.11	0
	NE	Queretaro, QA	\$8,278	\$86	\$85.46	\$2.17	-2
	SD	Salinas Victoria, NL	\$6,905	\$0	\$70.55	\$1.79	0
	MO	Tlahpantla, EM	\$7,643	\$84	\$78.95	\$2.00	-2
	SD	Torreon, CU	\$7,690	\$0	\$78.57	\$1.99	0
Soybeans	MO	Bojay (Tula), HG	\$8,547	\$306	\$90.45	\$2.46	-2
	NE	Guadalajara, JA	\$9,172	\$313	\$96.91	\$2.63	0
	IA	El Castillo, JA	\$9,490	\$0	\$96.97	\$2.64	4
	KS	Torreon, CU	\$7,964	\$205	\$83.47	\$2.27	0
Sorghum	NE	Celaya, GJ	\$7,772	\$279	\$82.26	\$2.09	-3
	KS	Queretaro, QA	\$8,108	\$52	\$83.37	\$2.12	0
	NE	Salinas Victoria, NL	\$6,713	\$42	\$69.01	\$1.75	0
	NE	Torreon, CU	\$7,092	\$181	\$74.32	\$1.89	-3

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

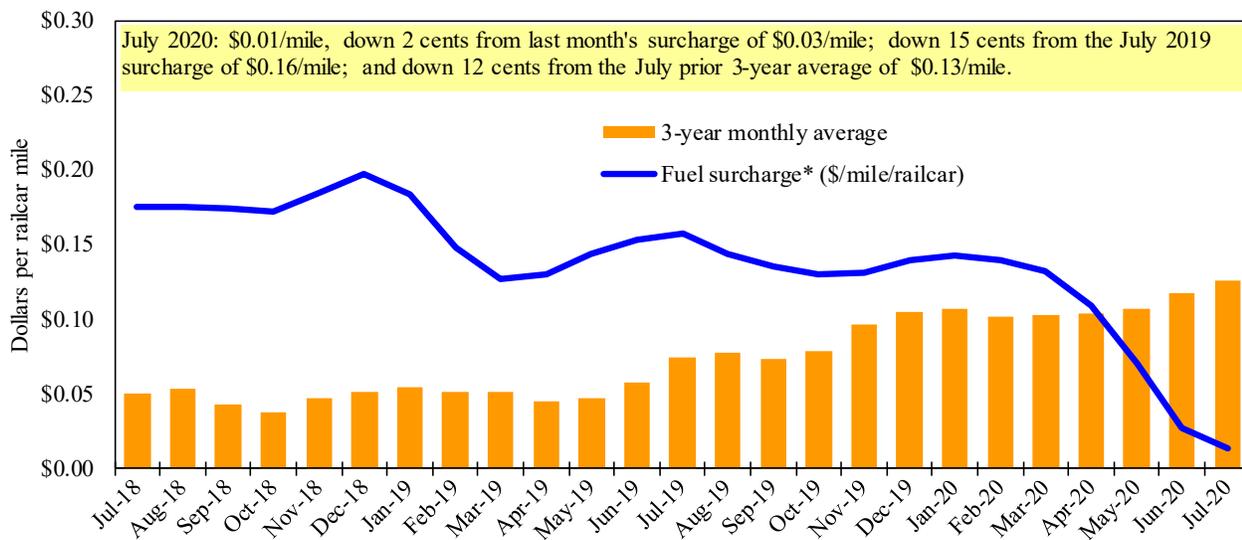
²Fuel surcharge adjusted to reflect the change in Ferrocarril Mexicano, S.A. de C.V railroad fuel surcharge policy as of 10/01/2009.

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

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

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

Figure 7

Railroad fuel surcharges, North American weighted average¹

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

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

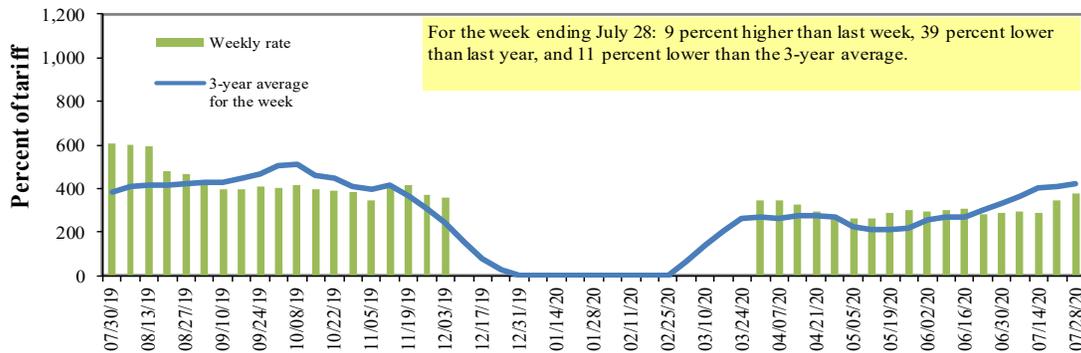
**CSX strike price changed from \$2.00/gal. to \$3.75/gal. starting January 1, 2015.

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

Barge Transportation

Figure 8a

Mid-Mississippi barge freight rate^{1,2}



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

Source: 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	7/28/2020	469	375	-	259	316	316	239
	7/21/2020	425	343	-	214	216	216	200
\$/ton	7/28/2020	29.03	19.95	-	10.33	14.82	12.77	7.50
	7/21/2020	26.31	18.25	-	8.54	10.13	8.73	6.28
Current week % change from the same week:								
	Last year	-7	-39	-	-17	14	14	-40
	3-year avg. ²	4	-13	-	-17	5	4	-9
Rate ¹	August	476	386	-	286	348	348	272
	October	532	495	491	393	496	496	386

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

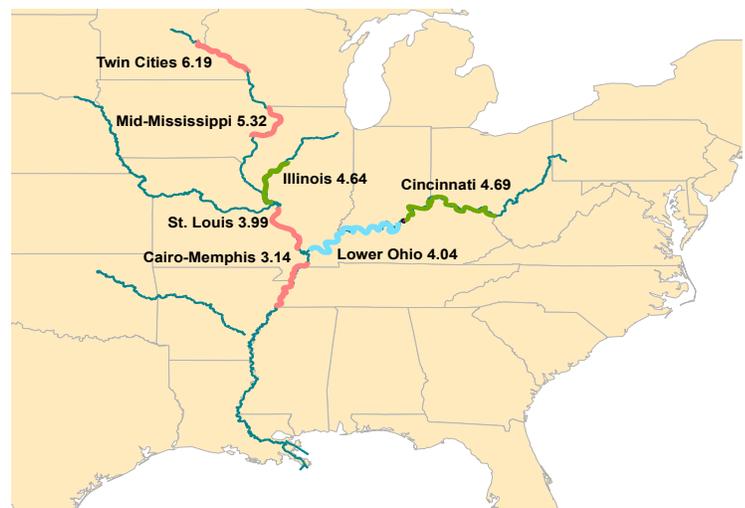
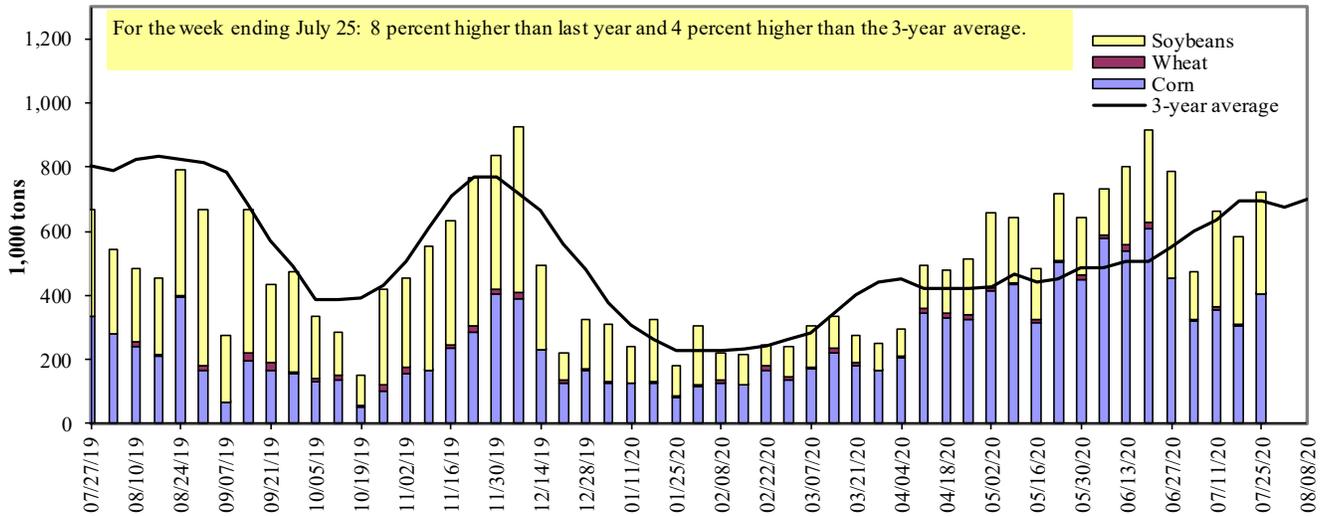


Figure 10

Barge movements on the Mississippi River¹ (Locks 27 - Granite City, IL)



¹ The 3-year average is a 4-week moving average.

Source: U.S. Army Corps of Engineers.

Table 10

Barge grain movements (1,000 tons)

For the week ending 07/25/2020	Corn	Wheat	Soybeans	Other	Total
Mississippi River					
Rock Island, IL (L15)	241	6	213	0	461
Winfield, MO (L25)	390	2	341	0	732
Alton, IL (L26)	409	2	311	0	721
Granite City, IL (L27)	404	2	315	0	721
Illinois River (La Grange)	0	0	0	0	0
Ohio River (Olmsted)	25	16	50	0	91
Arkansas River (L1)	1	15	10	0	27
Weekly total - 2020	430	33	375	0	839
Weekly total - 2019	353	11	419	2	785
2020 YTD ¹	11,013	1,116	7,280	97	19,506
2019 YTD ¹	7,353	1,066	6,020	77	14,516
2020 as % of 2019 YTD	150	105	121	125	134
Last 4 weeks as % of 2019 ²	111	180	85	193	102
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.

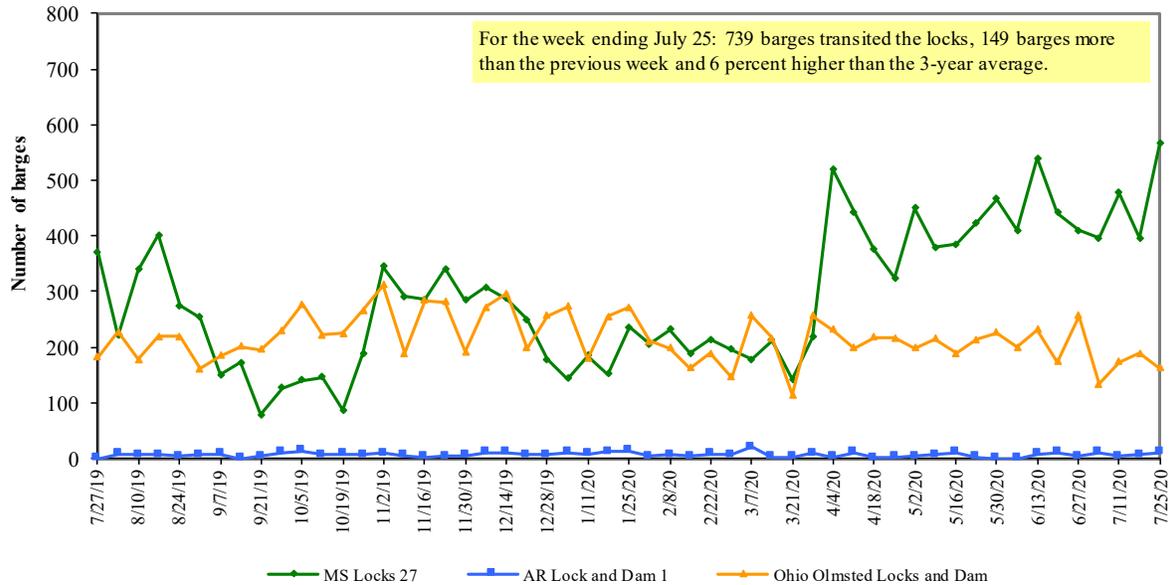
² As a percent of same period in 2019.

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

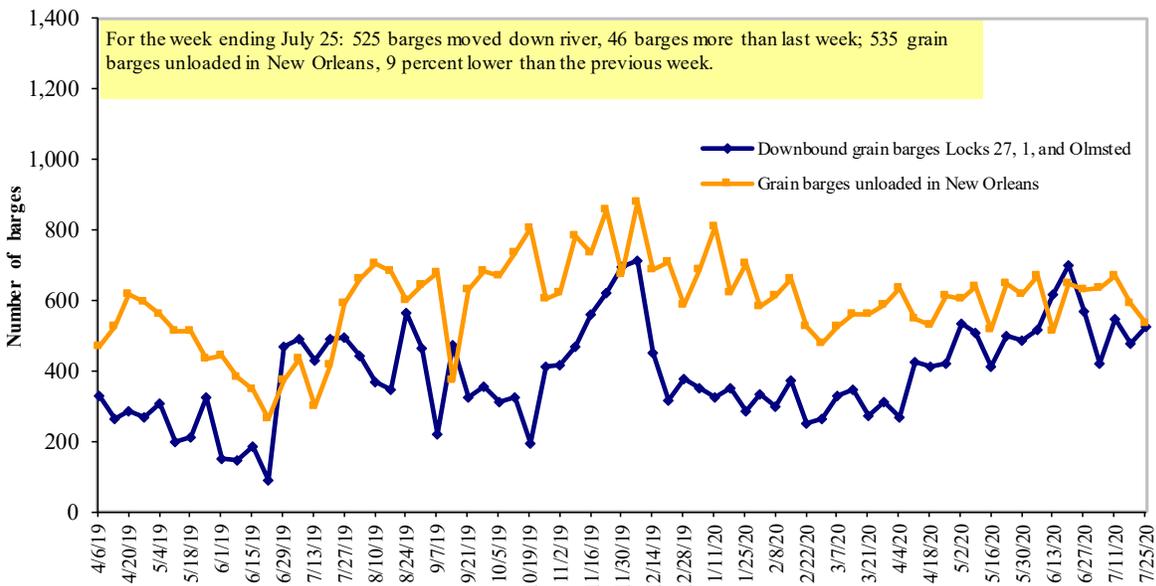
Upbound empty barges transiting Mississippi River Locks 27, Arkansas River Lock and Dam 1, and Ohio River Olmsted Locks and Dam



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 7/27/2020 (U.S. \$/gallon)

Region	Location	Price	Change from	
			Week ago	Year ago
I	East Coast	2.519	-0.001	-0.540
	New England	2.632	0.006	-0.474
	Central Atlantic	2.697	-0.002	-0.549
	Lower Atlantic	2.375	-0.002	-0.549
II	Midwest	2.301	-0.008	-0.639
III	Gulf Coast	2.183	-0.015	-0.610
IV	Rocky Mountain	2.342	-0.001	-0.625
	West Coast	2.954	0.000	-0.652
V	West Coast less California	2.586	-0.011	-0.600
	California	3.256	0.008	-0.684
Total	United States	2.427	-0.006	-0.607

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

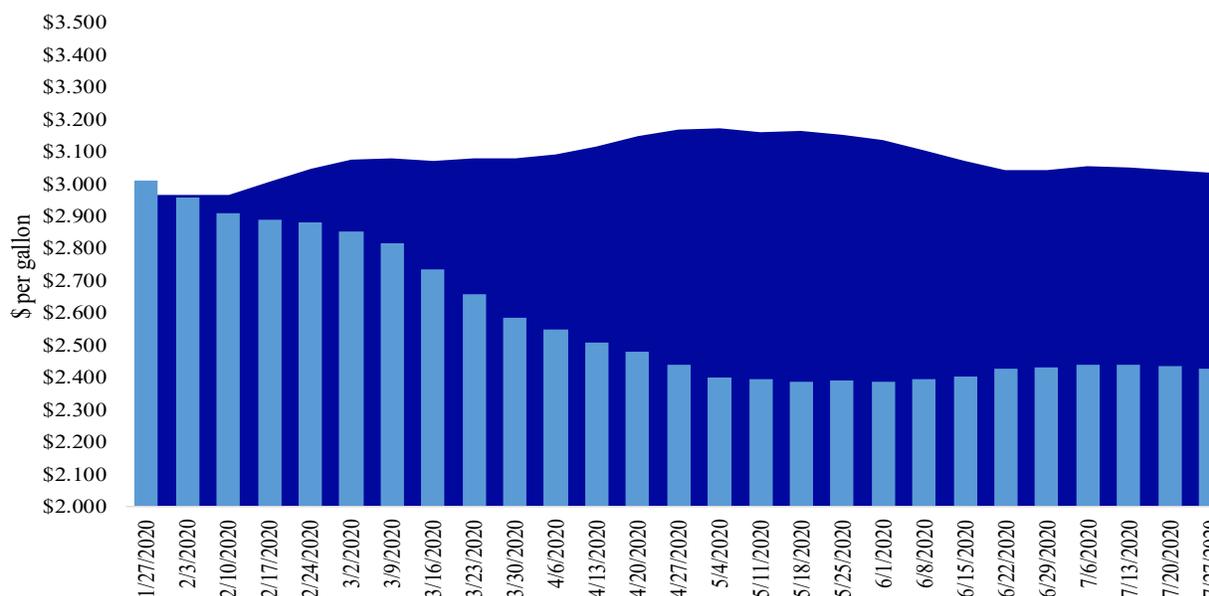
Source: U.S. Department of Energy, Energy Information Administration.

Figure 13

Weekly diesel fuel prices, U.S. average

For the week ending July 27, the U.S. average diesel fuel price decreased 0.6 cents from the previous week to \$2.427 per gallon, 60.7 cents below the same week last year.

■ Last year ■ Current year
\$3.034 \$2.427



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)

For the week ending	Wheat					All wheat	Corn	Soybeans	Total
	HRW	SRW	HRS	SWW	DUR				
Export balances¹									
7/16/2020	1,696	676	1,770	1,172	203	5,517	6,678	7,865	20,060
This week year ago	1,613	833	1,357	1,008	298	5,109	4,456	8,563	18,127
Cumulative exports-marketing year²									
2019/20 YTD	1,618	214	838	596	159	3,425	37,032	38,808	79,264
2018/19 YTD	1,789	303	763	471	59	3,386	45,287	40,019	88,691
YTD 2019/20 as % of 2018/19	90	70	110	127	267	101	82	97	89
Last 4 wks. as % of same period 2018/19*	114	70	123	112	67	106	171	93	116
Total 2018/19	8,591	3,204	6,776	5,164	479	24,214	48,924	46,189	119,327
Total 2017/18	9,150	2,343	5,689	4,854	384	22,419	57,209	56,214	135,842

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 importers¹ of U.S. corn

For the week ending 07/16/2020	Total commitments ²			% change current MY from last MY	Exports ³ 3-yr. avg. 2016-18
	2020/21 next MY	2019/20 current MY	2018/19 last MY*		
		- 1,000 mt -			
Mexico	2,043	14,368	15,324	(6)	14,659
Japan	721	9,802	12,595	(22)	11,955
Korea	0	2,566	3,697	(31)	4,977
Colombia	94	4,539	4,670	(3)	4,692
Peru	40	558	1,992	(72)	2,808
Top 5 importers	2,898	31,834	38,277	(17)	39,091
Total U.S. corn export sales	7,689	43,710	49,742	(12)	54,024
% of projected exports	14%	97%	95%		
Change from prior week ²	2,327	221	121		
Top 5 importers' share of U.S. corn export sales	38%	73%	77%		72%
USDA forecast July 2020	54,707	45,165	52,570	(14)	
Corn use for ethanol USDA forecast, July 2020	132,080	123,190	136,601	(10)	

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

²Cumulative 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.

³FAS 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 importers¹ of U.S. soybeans

For the week ending 7/16/2020	Total commitments ²			% change current MY from last MY	Exports ³ 3-yr. avg. 2016-18
	2020/21 next MY	2019/20 current MY	2018/19 last MY*		
		- 1,000 mt -			- 1,000 mt -
China	6,102	16,441	14,293	15	25,733
Mexico	670	4,713	4,871	(3)	4,271
Indonesia	8	2,166	2,349	(8)	2,386
Japan	126	2,397	2,501	(4)	2,243
Egypt	0	3,603	2,639	37	1,983
Top 5 importers	6,906	29,319	26,653	10	36,616
Total U.S. soybean export sales	10,387	46,673	48,582	(4)	53,746
% of projected exports	19%	104%	102%		
change from prior week ²	2,301	365	(78)		
Top 5 importers' share of U.S. soybean export sales	66%	63%	55%		68%
USDA forecast, July 2020	55,858	44,959	47,738	94	

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

²Cumulative 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.

³FAS 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 importers¹ of all U.S. wheat

For the week ending 7/16/2020	commitments ²		% change current MY from last MY	Exports ³ 3-yr. avg. 2017-19
	2020/21 current MY	2019/20 last MY		
		- 1,000 mt -		- 1,000 mt -
Mexico	889	1,224	(27)	3,213
Philippines	1,212	1,039	17	2,888
Japan	885	779	14	2,655
Nigeria	437	618	(29)	1,433
Korea	573	411	39	1,372
Indonesia	269	307	(12)	1,195
Taiwan	359	365	(1)	1,175
Thailand	199	315	(37)	727
Italy	283	161	76	622
Colombia	121	305	(60)	618
Top 10 importers	5,228	5,521	(5)	15,897
Total U.S. wheat export sales	8,941	8,494	5	23,821
% of projected exports	35%	32%		
change from prior week ²	617	660		
Top 10 importers' share of U.S. wheat export sales	58%	65%		67%
USDA forecast, July 2020	25,886	26,294	(2)	

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

²Cumulative 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.

³FAS 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 07/23/20	Previous week*	Current week as % of previous	2020 YTD*	2019 YTD*	2020 YTD as % of 2019 YTD	Last 4-weeks as % of:		2019 total*
							Last year	Prior 3-yr. avg.	
Pacific Northwest									
Wheat	269	286	94	8,968	7,677	117	129	111	13,961
Corn	216	242	89	6,181	6,744	92	174	79	7,047
Soybeans	0	0	n/a	2,759	5,801	48	2	2	11,969
Total	485	528	92	17,908	20,222	89	90	75	32,977
Mississippi Gulf									
Wheat	141	48	296	2,264	2,874	79	190	132	4,448
Corn	394	717	55	17,159	13,868	124	176	100	20,763
Soybeans	341	365	93	12,038	13,486	89	95	107	31,398
Total	876	1,130	78	31,462	30,228	104	133	105	56,609
Texas Gulf									
Wheat	65	143	46	2,641	4,413	60	82	119	6,009
Corn	30	0	n/a	458	404	113	117	87	640
Soybeans	0	0	n/a	7	2	413	0	0	2
Total	96	143	67	3,106	4,819	64	84	115	6,650
Interior									
Wheat	50	42	119	1,292	1,047	123	81	94	1,987
Corn	143	197	73	4,804	4,423	109	108	107	7,857
Soybeans	152	107	142	3,623	3,886	93	77	88	7,043
Total	345	346	100	9,719	9,356	104	92	98	16,887
Great Lakes									
Wheat	46	21	226	388	507	76	170	115	1,339
Corn	0	0	n/a	0	0	n/a	n/a	0	11
Soybeans	0	0	n/a	61	340	18	0	0	493
Total	46	21	226	448	847	53	44	46	1,844
Atlantic									
Wheat	1	1	n/a	7	32	22	n/a	141	37
Corn	0	0	n/a	8	92	9	0	0	99
Soybeans	5	6	75	426	786	54	16	23	1,353
Total	6	7	84	441	909	49	17	23	1,489
U.S. total from ports*									
Wheat	573	539	106	15,561	16,550	94	115	115	27,781
Corn	783	1,156	68	28,610	25,530	112	156	94	36,417
Soybeans	497	478	104	18,915	24,301	78	61	77	52,258
Total	1,853	2,174	85	63,085	66,381	95	105	93	116,457

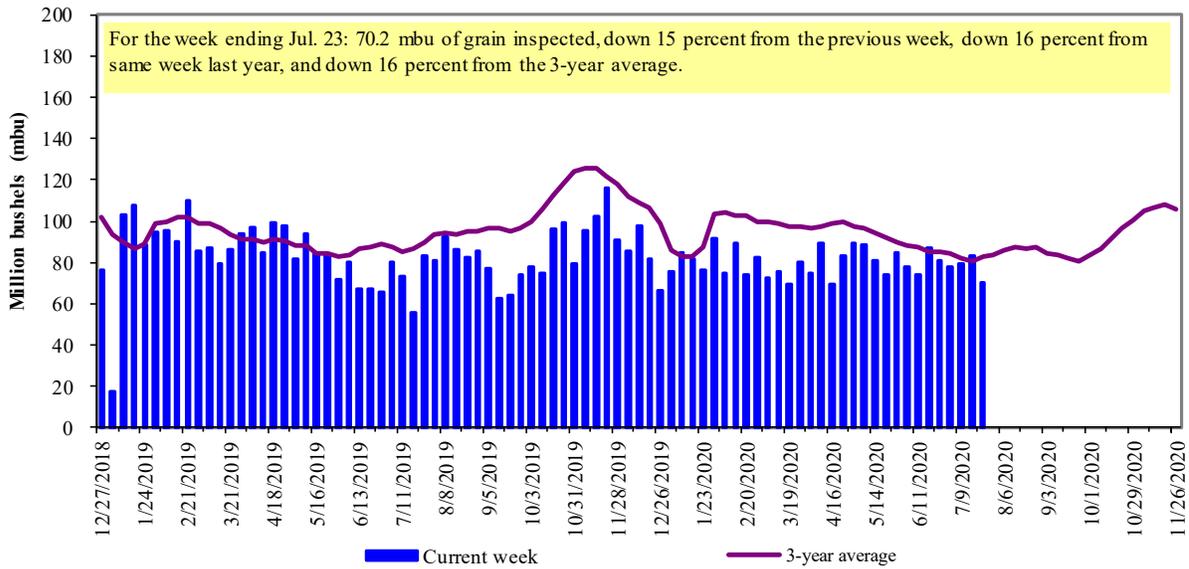
*Data includes revisions from prior weeks; some regional totals may not add exactly due to rounding.

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)

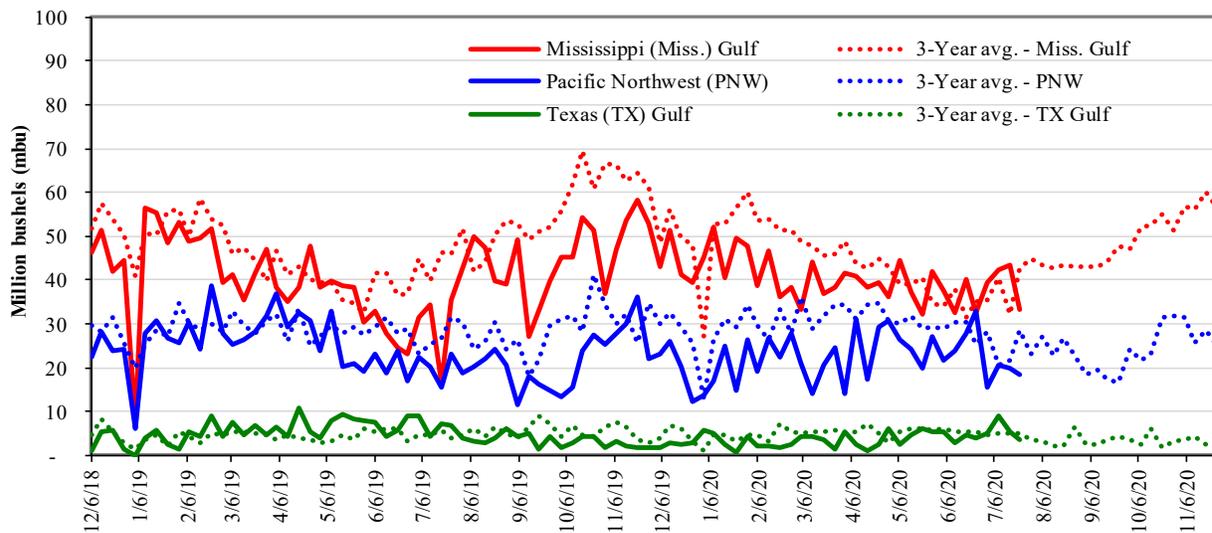


Note: 3-year average consists of 4-week running average.

Source: USDA, Federal Grain Inspection Service.

Figure 15

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



Week ending 07/23/20 inspections (mbu):		Percent change from:			
		MS Gulf	TX Gulf	U.S. Gulf	PNW
MS Gulf:	33.2	Last wk: down 23	down 32	down 24	down 8
PNW:	18.4	Last Year (same wk): down 6	down 47	down 13	down 20
TX Gulf:	3.6	3-yr avg.(4-wk. mov. Avg): down 12	down 28	down 14	down 26

Source: USDA, Federal Grain Inspection Service.

Ocean Transportation

Table 17

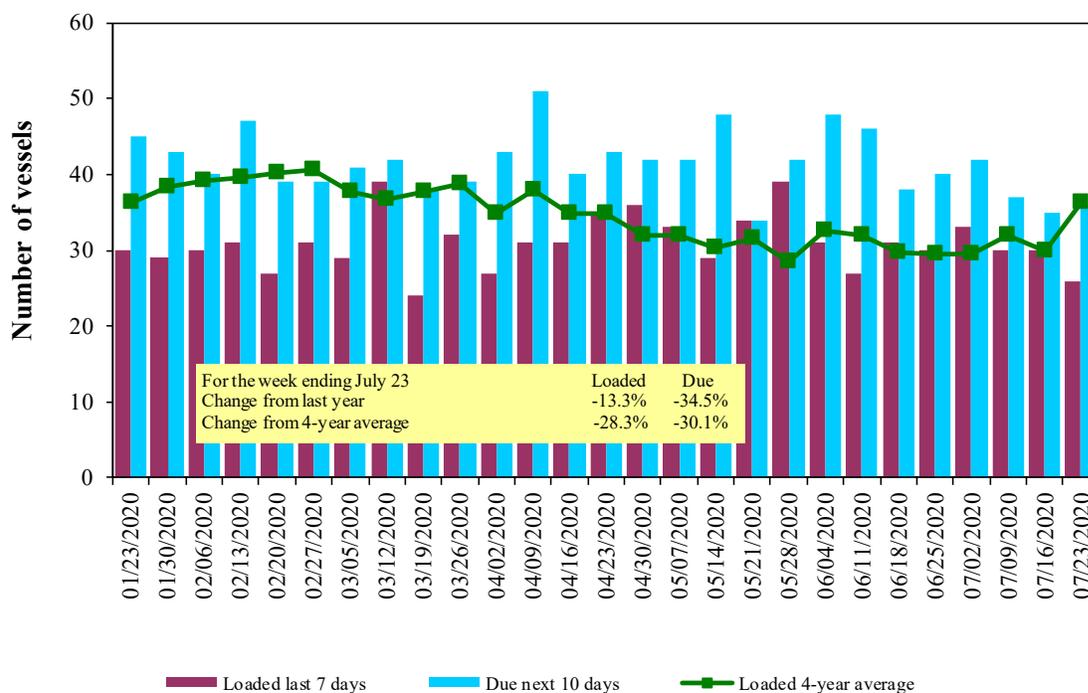
Weekly port region grain ocean vessel activity (number of vessels)

Date	Gulf			Pacific Northwest
	In port	Loaded 7-days	Due next 10-days	In port
7/23/2020	22	26	36	15
7/16/2020	27	30	35	14
2019 range	(26...61)	(18...44)	(33...69)	(8...33)
2019 average	40	31	49	17

Source: USDA, Agricultural Marketing Service.

Figure 16

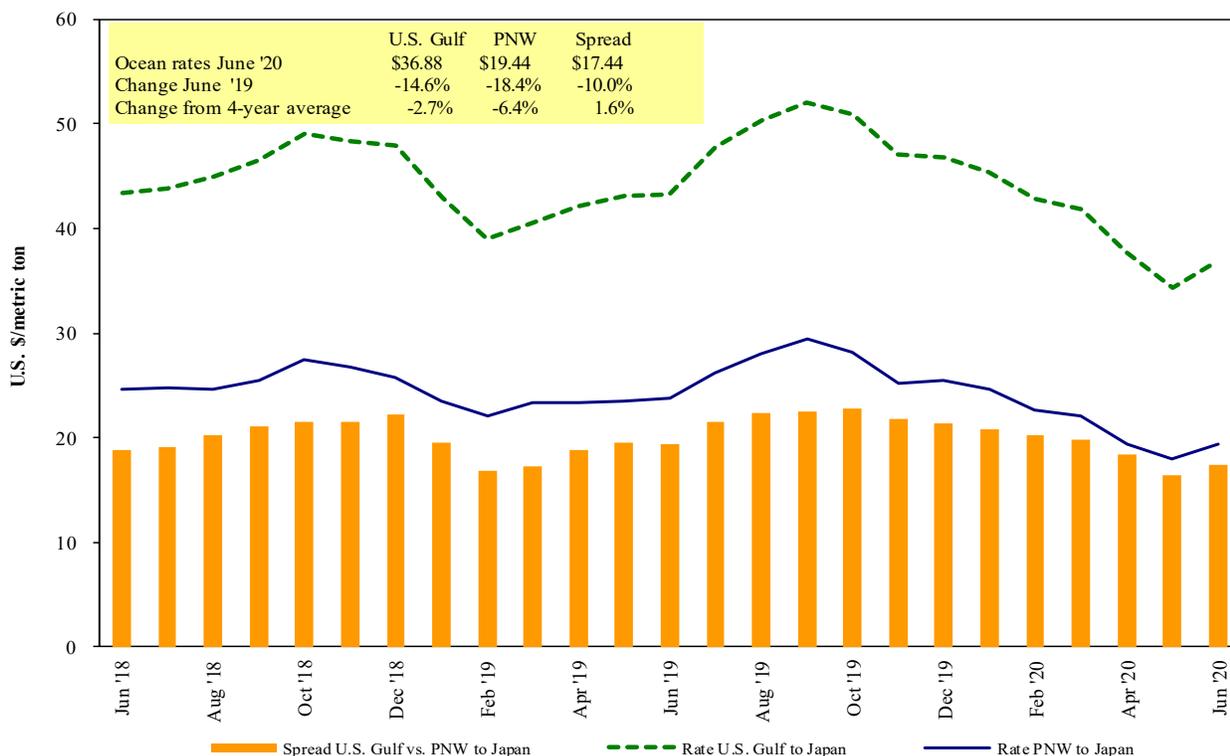
U.S. Gulf¹ vessel loading activity



¹U.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 07/25/2020

Export region	Import region	Grain types	Loading date	Volume loads (metric tons)	Freight rate (US\$/metric ton)
U.S. Gulf	Mombasa	Wheat	Jul 23/Aug 3	1,200	117.97*
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	Yemen	Wheat	Aug 4/14	15,000	42.95*
PNW	Yemen	Wheat	Jun 5/15	40,000	40.89
PNW	Yemen	Wheat	Jun 5/15	30,000	44.89
PNW	Yemen	Wheat	May 18/26	20,000	55.75*
PNW	Yemen	Wheat	May 4/14	49,630	36.50
PNW	Yemen	Wheat	Jul 1/10	40,000	46.94*
Vancouver	Japan	Wheat	Sep 15/30	20,000	24.30
Vancouver	Japan	Canola	Sep 15/30	30,000	24.30
Brazil	Pakistan	Heavy grain	Jul 20/30	70,000	21.85
Brazil	China	Heavy grain	Jun 25/30	65,000	23.50
Brazil	Japan	Corn	Sep 11/20	49,000	34.75
Brazil	Japan	Corn	Sep 1/10	60,000	34.00
Brazil	SE Asia	Corn	Jul 1/6	66,000	22.75
Brazil	Pakistan	Heavy grain	Jun 19/29	70,000	21.85

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

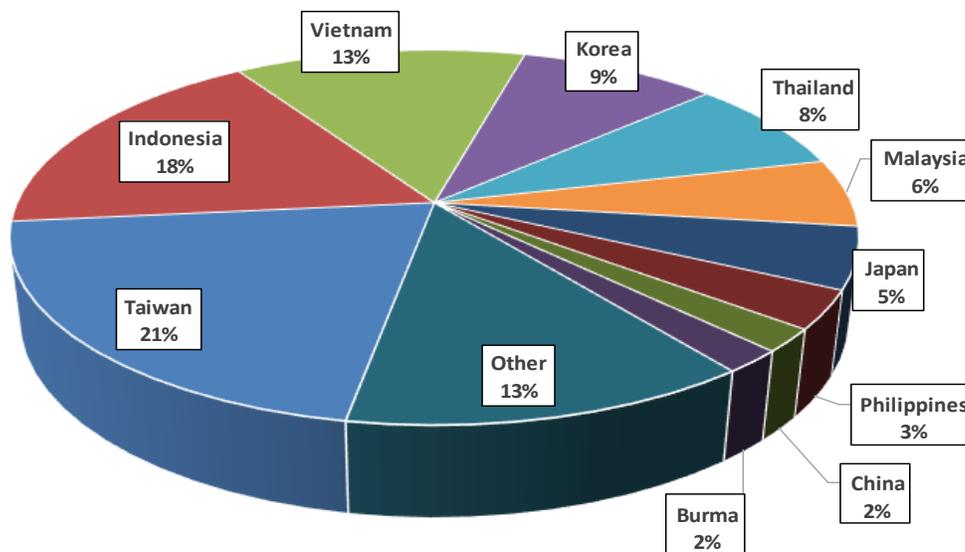
Note: Rates shown are per metric ton (2,204.62 lbs. = 1 metric ton), free on board (F.O.B), except where otherwise indicated;

op = option.

Source: Maritime Research, Inc.

In 2018, containers were used to transport 8 percent of total U.S. waterborne grain exports. Approximately 55 percent of U.S. waterborne grain exports in 2018 went to Asia, of which 13 percent were moved in containers. Approximately 94 percent of U.S. waterborne containerized grain exports were destined for Asia.

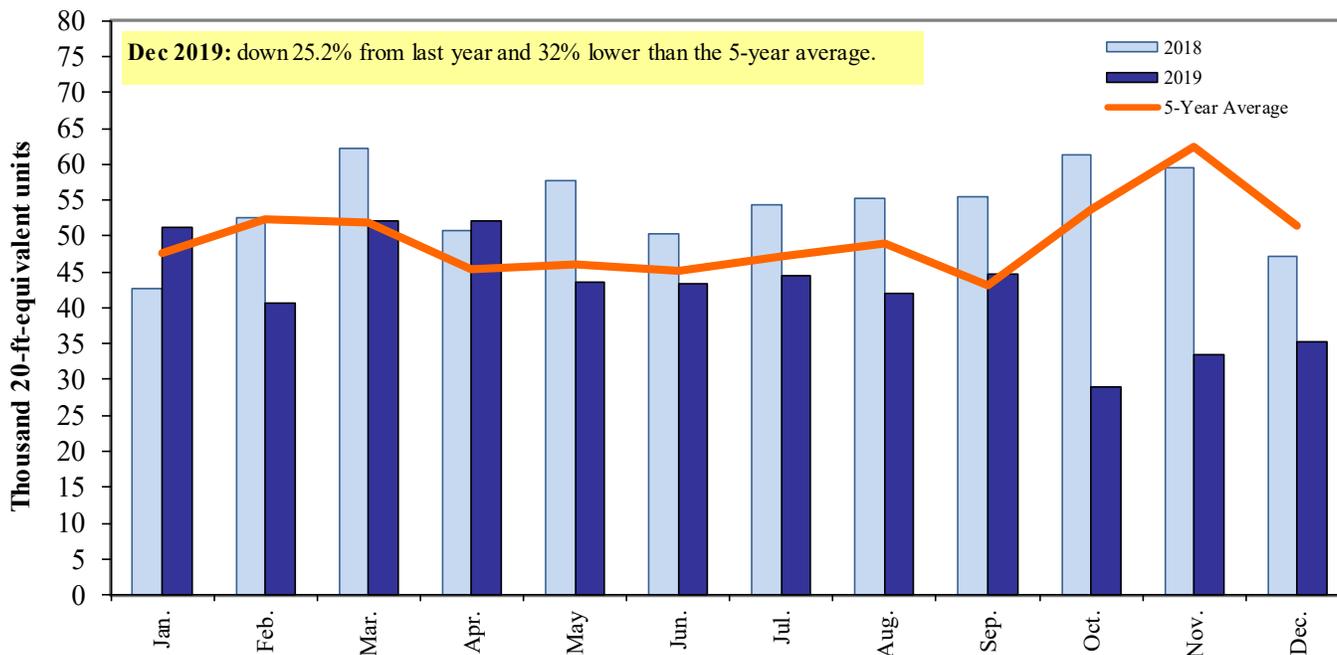
Figure 18
Top 10 destination markets for U.S. containerized grain exports, 2019



Note: The following Harmonized Tariff Codes are used to calculate containerized grains movements: 1001, 100190, 1002, 1003, 100300, 1004, 100400, 1005, 100590, 1007, 100700, 1102, 110100, 230310, 110220, 110290, 1201, 120100, 230210, 230990, 230330, and 120810.

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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