



Grain Transportation Report

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

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July 9, 2020

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The next release is July 16, 2020 WEEKLY HIGHLIGHTS

USDA Participates in Ex Parte Communications with STB Members

On June 25, USDA met with the Surface Transportation Board (STB) in response to STB's invitation for additional stakeholder input on rate review options. Specifically, USDA weighed in on a proposed new procedure (Final Offer Rate Review (Docket Ex Parte 755)) for challenging the reasonableness of railroad rates in smaller cases. In the meetings with STB, USDA emphasized the need for further change, while expressing appreciation for the steps the Board had already taken. USDA suggested the Board incorporate a measure of price markups (such as a "competitive benchmark") to determine market dominance. USDA also suggested reducing STB's proposed threshold distance to determine the presence of effective truck competition. For more details, visit USDA's archive of STB comments.

FMCSA To Provide Flexibility for Random Drug Testing

Because States' different reopening timetables (from COVID-19 closures) cause different disruptions, the Federal Motor Carrier Safety Administration (FMCSA) will exercise case-by-case discretion about whether or not to enforce its minimum annual percentage random drug-testing rates. The agency will also decide, case by case, whether to enforce its requirement for testing dates to be spread throughout the calendar year. For calendar year 2020, the standard required driver selection rates remain at 50 percent of employers' average number of driver positions for controlled-substance testing and 10 percent for random alcohol testing. Late last year, FMCSA increased the annual random selection rate for drug testing from 25 percent to 50 percent. To be considered for an exemption, carriers must document in writing their reasons for noncompliance. FMCSA stressed the current random testing requirements are not suspended, and employers who can meet them must continue to do so. The enforcement change applies to 2020, but FMCA may also exercise discretion in motor carrier investigations occurring in 2021.

ADOT Extends Increased Truck Weight Limits Through July 30

The Arizona Department of Transportation (ADOT) has extended the temporary higher weight limits for commercial trucks hauling critical supplies and goods during the COVID-19 pandemic. The temporary measure, previously extended to June 30, will now remain in effect until July 30. In light of the national emergency declaration, and to correspond with the temporary increase in truck weights by neighboring States in April, ADOT raised the gross weight limit for commercial vehicles to 90,000 pounds up from 80,000 pounds, without the need for an overweight permit.

Snapshots by Sector

Export Sales

For the week ending June 25, **unshipped balances** of wheat, corn, and soybeans totaled 21.6 million metric tons (mmt). This represented a 2-percent decrease in outstanding sales from the same time last year. Net **corn export sales** were 0.361 mmt, down 22 percent from the past week. Net **soybean export sales** were 0.242 mmt, down 60 percent from the previous week. Net **wheat export sales** were 0.414 mmt, down 20 percent from the previous week.

Rai

U.S. Class I railroads originated 19,303 **grain carloads** during the week ending June 27. This was a 10-percent decrease from the previous week, 8 percent less than last year, and 13 percent lower than the 3-year average.

Average July shuttle secondary railcar bids/offers (per car) were \$38 above tariff for the week ending July 2. This was \$9 more than last week and \$4 lower than this week last year. There were no non-shuttle bids/offers this week.

Barge

For the week ending July 4, barge grain movements totaled 658,856 tons. This was 24 percent less than the previous week and 16 percent less than the same period last year.

For the week ending July 4, 420 grain barges **moved down river**—147 fewer barges than the previous week. There were 635 grain barges **unloaded in New Orleans**, 1 percent more than the previous week.

Ocear

For the week ending July 2, 33 **oceangoing grain vessels** were loaded in the U.S. Gulf—27 percent more than the same period last year. Within the next 10 days (starting July 3), 42 vessels were expected to be loaded—2 percent more than the same period last year.

As of July 2, the rate for shipping a metric ton (mt) of grain from the U.S. Gulf to Japan was \$39.50. This was 1 percent more than the previous week. The rate from the Pacific Northwest to Japan was \$20.50 per mt, unchanged from the previous week.

Fue

For the week ending July 6, the U.S. average **diesel fuel price** increased 0.7 cents from the previous week to \$2.437 per gallon, 61.8 cents below the same week last year.

Feature Article/Calendar

Ethanol and DDGS Content on USDA's Ag Transportation Open Data Platform

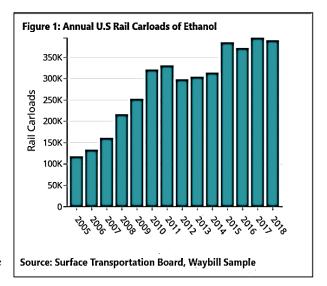
On June 1, 2020, the Transportation Services Division (TSD) of USDA's Agricultural Marketing Service (AMS) launched an upgraded version of its Agricultural Transportation Open Data Platform, dubbed AgTransport 2.0 for short. Originally launched last June, the platform enhances the ability of decision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

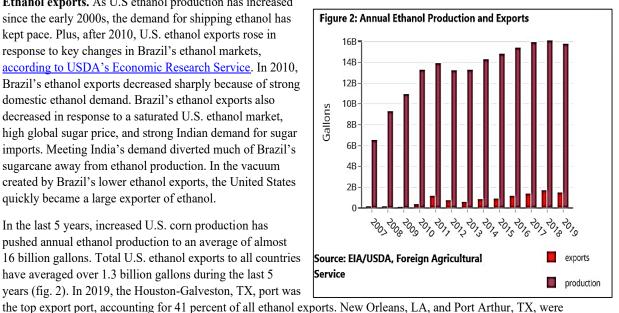
This article discusses information from the Ethanol and Distillers' Dried Grains With Solubles (DDGS) Transportation dashboard on AgTransport 2.0. Through a series of interactive charts, the dashboard examines transportation's role in the ethanol supply chain. Ethanol is a key industrial use for corn and other grains and accounted for around 36 percent of total U.S. corn use in marketing year 2019/20, according to USDA's Economic Research Service. The data cover ethanol rail shipments, rail tariffs, ethanol and DDGS exports by port district, and bulk and containerized exports of DDGS. The charts and accompanying text shed light on how these markets drive the demand for transportation.

Overview of ethanol and DDGS transportation. After production costs, such as feedstock and energy. transportation is typically the third-highest contributor to the wholesale cost of ethanol. Trucks are most critical for the relatively short-distance movement of harvested biomass used to make ethanol. After biomass is converted to ethanol at production facility, it is transported to a fuel terminal or to the end user (domestic or foreign) by a combination of rail, truck, barge, and/or ocean shipping. Domestically, ethanol is blended with gasoline at the fuel terminal and then distributed by truck to fueling stations. The majority of DDGS, a byproduct of the process, is moved to U.S. feedlots. In 2018, major U.S. railroads delivered almost 390,000 carloads of ethanol (over 11 billion gallons) to their destinations, accounting for 73 percent of the total U.S. ethanol production in 2018 (fig. 1). On the open data platform, the chart used for figure 1 can be filtered for year and other variables.

Ethanol exports. As U.S ethanol production has increased since the early 2000s, the demand for shipping ethanol has kept pace. Plus, after 2010, U.S. ethanol exports rose in response to key changes in Brazil's ethanol markets, according to USDA's Economic Research Service. In 2010, Brazil's ethanol exports decreased sharply because of strong domestic ethanol demand. Brazil's ethanol exports also decreased in response to a saturated U.S. ethanol market, high global sugar price, and strong Indian demand for sugar imports. Meeting India's demand diverted much of Brazil's sugarcane away from ethanol production. In the vacuum created by Brazil's lower ethanol exports, the United States quickly became a large exporter of ethanol.

In the last 5 years, increased U.S. corn production has pushed annual ethanol production to an average of almost 16 billion gallons. Total U.S. ethanol exports to all countries have averaged over 1.3 billion gallons during the last 5 years (fig. 2). In 2019, the Houston-Galveston, TX, port was





also key ports (fig. 3). On the platform, <u>figure 2</u> can be filtered for year, and <u>figure 3</u> can be filtered for country, month and year.

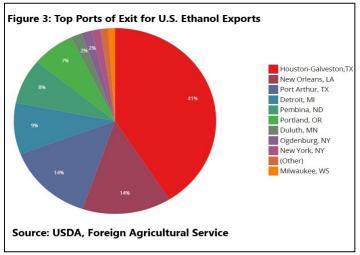
DDGS exports. As already discussed, the primary coproduct of ethanol production is distillers' grains. About a third of every bushel of corn used to make ethanol ends up as distille rs' grains—about 17.5 pounds, if dried to approximately 10 percent moisture content. If the solubles left over from distillation are added, the product becomes distillers' dried grains with solubles (DDGS). Lighter and easier to transport than wet distiller grains, DDGS is sold to more distant locations. The ethanol industry has continued to market DDGS successfully overseas, and U.S. exports of DDGS have grown significantly since 2007, annually averaging 11.5 million metric tons in the last 5 years (fig. 4.) On the platform, figure 4 can be filtered for country, year, month and district.

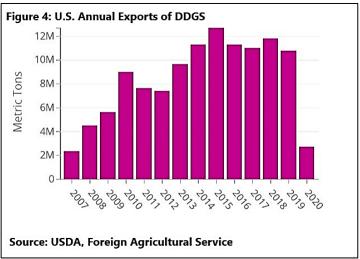
The exports of DDGS can easily shift between bulk and containerized ocean shipping. Bulk exports of DDGS increased sharply in 2015 in response to higher Chinese demand. Although bulk exports of DDGS have not since matched the 2015 peak, they have been stable. Containerized exports of DDGS declined in 2015 after China—a major destination market for U.S. containerized exports of DDGS—imposed multiple rounds of temporary trade restrictions on U.S DDGS (fig. 5).

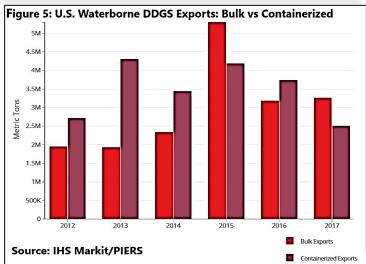
To some extent, bulk and containerized shipping compete with each other. A variety of factors determine whether bulk or containerized shipping is more cost effective, including container availability, freight rates, and shipment volume. Cost effectiveness can affect demand and, ultimately, the volumes shipped by these methods. Also affecting volumes, the growth in DDGS exports and changes in destination markets may require the market to shift between bulk and containerized shipments. For example, some emerging destinations require mostly bulk shipment of DDGS, whereas others can accept only containers.

For interactive versions of the charts appearing in this article, see <u>AgTransport 2.0</u> where the data can be analyzed in more detail.

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Grain Transportation Indicators

Table 1 **Grain transport cost indicators**¹

	Truck	Ra	nil	Barge	Ocean	
For the week ending		Unit train	Shuttle		Gulf	Pacific
07/08/20	164	n/a	224	n/a	177	145
07/01/20	163	n/a	224	n/a	176	145

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)

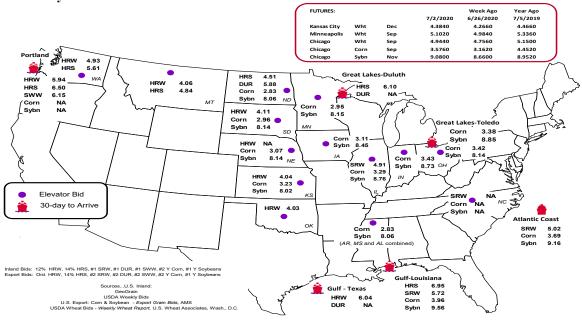
Commodity	Origin-destination	7/2/2020	6/26/2020
Corn	IL-Gulf	-0.67	-0.67
Corn	NE-Gulf	-0.89	-0.82
Soybean	IA-Gulf	-1.11	-1.08
HRW	KS–Gulf	-2.00	-2.08
HRS	ND-Portland	-1.99	-2.02

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

tan denveries to port (carioa	45)						
	Mississippi		Pacific	Atlantic &			Cross-border
For the week ending	Gulf	Texas Gulf	Northwest	East Gulf	Total	Week ending	Mexico ³
7/01/2020 ^p	344	1,116	3,832	244	5,536	6/27/2020	3,005
6/24/2020 ^r	125	1,059	5,745	94	7,023	6/20/2020	1,978
2020 YTD ^r	10,974	23,383	125,984	5,313	165,654	2020 YTD	62,317
2019 YTD ^r	26,335	32,208	142,991	9,515	211,049	2019 YTD	61,134
2020 YTD as % of 2019 YTD	42	73	88	56	78	% change YTD	102
Last 4 weeks as % of 2019 ²	18	87	109	48	83	Last 4wks. % 2019	99
Last 4 weeks as % of 4-year avg. ²	53	82	89	68	85	Last 4wks. % 4 yr.	101
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

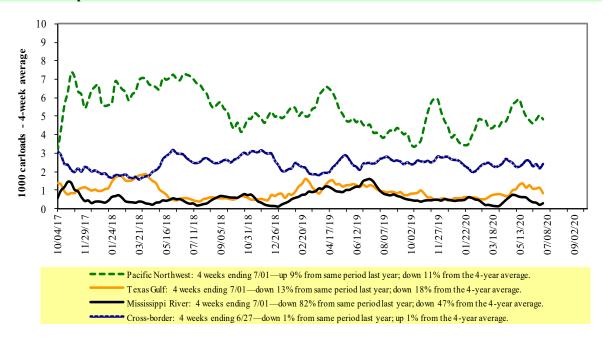
¹Data is incomplete as it is voluntarily provided.

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

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.

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.

Table 4

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

For the week ending:	Ea	ast		West		U.S. total	Car	nada
6/27/2020	CSXT	NS	BNSF	KCS	UP	U.S. total	CN	CP
This week	1,402	2,724	9,436	1,017	4,724	19,303	4,713	5,609
This week last year	1,681	2,929	10,064	932	5,265	20,871	4,818	4,839
2020 YTD	43,322	61,076	277,938	26,975	128,580	537,891	103,318	115,734
2019 YTD	49,953	73,723	285,498	28,925	132,915	571,014	114,107	113,132
2020 YTD as % of 2019 YTD	87	83	97	93	97	94	91	102
Last 4 weeks as % of 2019*	84	86	98	90	99	95	98	112
Last 4 weeks as % of 3-yr. avg.**	84	90	92	98	97	92	116	105
Total 2019	91,611	137,060	568,369	58,527	260,269	1,115,836	212,486	235,892

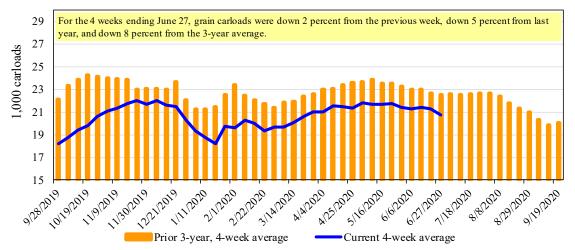
^{*}The past 4 weeks of this year as a percent of the same 4 weeks last year.

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

Fo	or the week ending:		<u>Delivery period</u>							
	7/2/2020	Jul-20	Jul-19	Aug-20	Aug-19	Sep-20	Sep-19	Oct-20	Oct-19	
BNSF ³	COT grain units	no bids	20	0	6	no bids	0	no bids	no bids	
	COT grain single-car	0	0	0	0	0	1	0	11	
UP ⁴	GCAS/Region 1	no offer	no offer	no offer	no offer	no offer	no offer	n/a	n/a	
	GCAS/Region 2	no bid	no offer	no bid	no bids	no bid	no offer	n/a	n/a	

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

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

Source: USDA, Agricultural Marketing Service.

^{**}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.

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.

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 July 2020, secondary market 300 Average premium/discount to tariff 250 200 150 100 (\$/car) 50 0 -50 -100 -150 -200 -250 2/12/2019 2/26/2019 2/6/2020 4/2/2020 1/9/2020 3/5/2020 3/19/2020 7/9/2020 /23/2020 2/20/2020 4/16/2020 4/30/2020 5/14/2020 5/28/2020 6/11/2020 6/25/2020 Non-shuttle Shuttle <u>UP</u> **BNSF** 7/2/2020 Shuttle prior 3-yr. avg. (same week) ---- Non-shuttle prior 3-yr. avg. (same week) Non-shuttle n/a n/a There were no non-shuttle bids/offers this week. \$100 -\$25 **Shuttle** Average shuttle bids/offers rose \$9 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. = y ear; BNSF = BNSF Railway; UP = Union Pacific Railroad. Source: USDA, Agricultural Marketing Service.

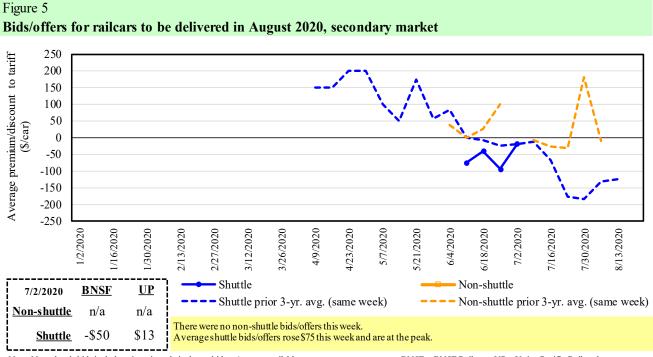
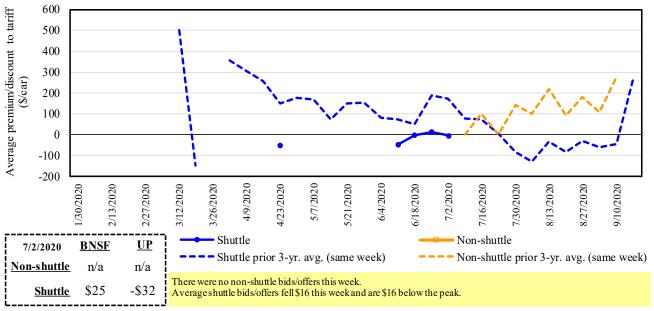


Figure 6
Bids/offers for railcars to be delivered in September 2020, secondary market



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.

Table 6

Weekly secondary railcar market (\$/car)¹

	For the week ending:			De	livery period		
	7/2/2020	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20
	BNSF-GF	n/a	n/a	n/a	n/a	n/a	n/a
le	Change from last week	n/a	n/a	n/a	n/a	n/a	n/a
-shuttle	Change from same week 2019	n/a	n/a	n/a	n/a	n/a	n/a
Non-s	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
	BNSF-GF	(25)	(50)	25	600	n/a	n/a
	Change from last week	93	100	(19)	n/a	n/a	n/a
Shuttle	Change from same week 2019	25	n/a	n/a	n/a	n/a	n/a
Shu	UP-Pool	100	13	(32)	350	200	25
	Change from last week	(75)	51	(13)	0	(100)	(75)
	Change from same week 2019	(33)	n/a	n/a	450	n/a	n/a

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

 $Note: Bids\ listed\ are\ market\ indicators\ only\ and\ are\ not\ guaranteed\ prices.\ n/a=not\ available; GF=guaranteed\ freight; Pool=guaranteed\ pool; and are not\ guaranteed\ prices.\ n/a=not\ available; GF=guaranteed\ prool; and are not\ guaranteed\ prices.\ n/a=not\ available; GF=guaranteed\ prool; and are not\ guaranteed\ prices.$

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

				Fuel			Percent
	0 3	To 11 11 1 3	Tariff	surcharge_	Tariff plus surch		change
July 2020	Origin region ³	Destination region ³	rate/car	per car	metric ton	bus he l ²	Y/Y ⁴
Unit train	Wishias KC	Ct. Lawin MO	¢2.002	620	\$20.9 <i>5</i>	¢1.00	2
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
	Des Moines, IA	Los Angeles, CA	\$5,680	\$109	\$57.49	\$1.46	-2
Soybeans	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

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

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.

Table 8

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

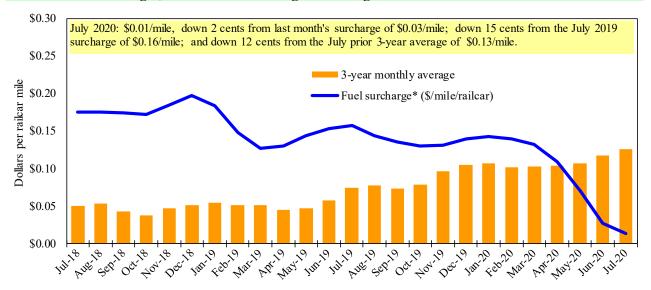
Date	: July 2020			Fuel	Tari	ff rate plus	Percent
	Origin		Tariff rate	surcharge	fuel surc	harge per:	change ⁴
Commodity	state	Destination region	per car¹	per car ²	metric ton ³	bus he l ³	Y/Y
Wheat	MT	Chihuahua, CI	\$7,509	\$0	\$76.72	\$2.09	3
	OK	Cuautitlan, EM	\$6,775	\$42	\$69.65	\$1.89	-2
	KS	Guadalajara, 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	Tlalnepantla, 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

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.

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

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.

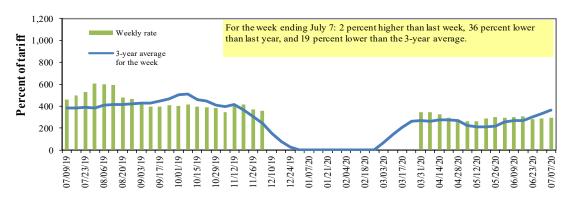
⁴Percentage change calculated using tariff rate plus fuel surchage; Y/Y = year over year.

^{*} 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.

Barge Transportation

Figure 8a Mid-Mississippi barge freight rate^{1,2}



 $^{^{1}}$ Rate = percent of 1976 tariff benchmark index (1976 = 100 percent); 2 4-week moving average of the 3-year average.

Source: 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	7/7/2020	375	295	-	192	189	189	183
	6/30/2020	373	288	-	183	186	186	180
\$/ton	7/7/2020	23.21	15.69	-	7.66	8.86	7.64	5.75
	6/30/2020	23.09	15.32	-	7.30	8.72	7.51	5.65
Curren	t week % chang	e from the s	same week:					
	Last year	-18	-36	-	-31	-31	-31	-34
	3-year avg. ²	-14	-27	=	-31	-32	-32	-25
Rate ¹	August	383	313	-	241	240	240	229
	October	471	453	457	373	448	448	352

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

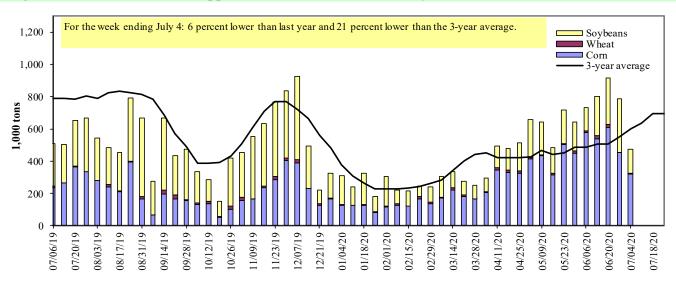
Select applicable index from market quotes are included in tables on this page. The 1976 benchmark rates per ton are provided in map.

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)**

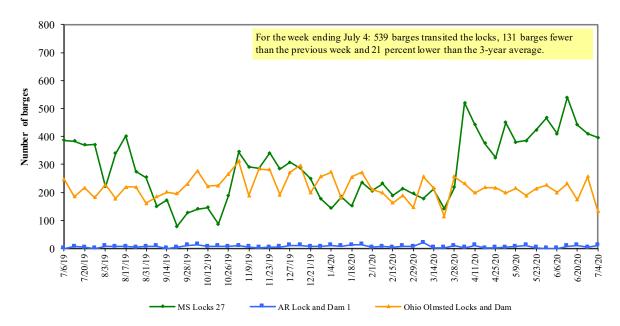
For the week ending 07/04/2020	Corn	Wheat	Soybe ans	Other	Total
Mississippi River					
Rock Island, IL (L15)	284	5	213	5	507
Winfield, MO (L25)	417	6	222	0	645
Alton, IL (L26)	395	6	215	0	617
Granite City, IL (L27)	321	2	151	0	473
Illinois River (La Grange)	14	0	3	0	17
Ohio River (Olmsted)	29	19	45	0	93
Arkansas River (L1)	1	75	17	0	93
Weekly total - 2020	351	95	212	0	659
Weekly total - 2019	305	67	408	0	780
2020 YTD ¹	9,831	949	6,225	90	17,096
2019 YTD ¹	6,279	986	4,942	74	12,282
2020 as % of 2019 YTD	157	96	126	122	139
Last 4 weeks as % of 2019 ²	217	190	132	836	177
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.

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.

² As a percent of same period in 2019.

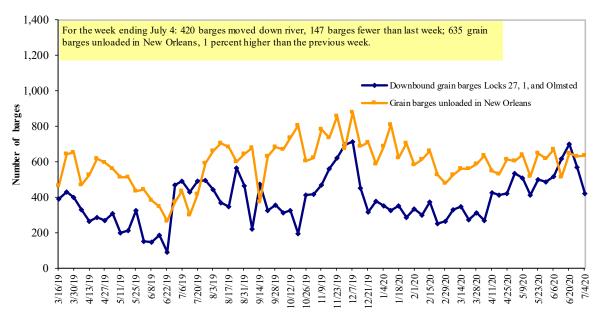
Figure 11
Upbound empty barges transiting Mississippi River Locks 27, Arkansas River Lock and Dam 1, and Ohio River Olmsted Locks and Dam



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

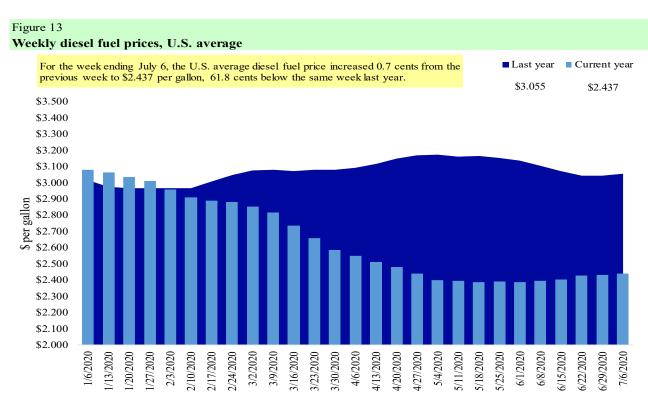
The **weekly diesel price** provides a proxy for trends in U.S. truck rates as diesel fuel is a significant expense for truck grain movements.

Table 11 Retail on-highway diesel prices, week ending 7/6/2020 (U.S. \$/gallon)

	, , ,	-	Change	e from
Region	Location	Price	Week ago	Year ago
I	East Coast	2.527	0.003	-0.554
	New England	2.652	0.004	-0.482
	Central Atlantic	2.696	-0.008	-0.579
	Lower Atlantic	2.388	0.011	-0.552
II	Midwest	2.306	0.007	-0.662
III	Gulf Coast	2.204	0.010	-0.600
IV	Rocky Mountain	2.345	0.002	-0.635
V	West Coast	2.960	0.012	-0.664
	West Coast less California	2.596	0.010	-0.612
	California	3.260	0.014	-0.693
Total	United States	2.437	0.007	-0.618

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.



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)

etat enport animies und cumulative enports (1,000 metric tons)									
		Wheat						Soybe ans	Total
For the week ending	HRW	SRW	HRS	SWW	DUR	All wheat			
Export balances ¹									
6/25/2020	1,933	511	1,621	1,099	225	5,389	8,431	7,745	21,565
This week year ago	1,825	853	1,387	1,019	174	5,259	6,026	10,620	21,905
Cumulative exports-marketing year ²									
2019/20 YTD	839	101	464	389	85	1,878	33,883	37,298	73,058
2018/19 YTD	1,071	161	385	272	55	1,944	42,890	37,780	82,614
YTD 2019/20 as % of 2018/19	78	62	120	143	156	97	79	99	88
Last 4 wks. as % of same period 2018/19*	109	65	122	106	136	106	163	72	105
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.

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 6/25/2020	T	% change	Exports ³		
	2020/21	2019/20	2018/19	current MY	3-yr. avg.
	next MY	current MY	last MY*	from last MY	2016-18
		- 1,000 mt -			
Mexico	1,710	14,156	15,233	(7)	14,659
Japan	643	9,602	11,941	(20)	11,955
Korea	0	2,569	3,695	(30)	4,977
Colombia	20	4,270	4,584	(7)	4,692
Peru	40	377	1,992	(81)	2,808
Top 5 importers	2,413	30,975	37,445	(17)	39,091
Total U.S. corn export sales	3,893	42,314	48,916	(13)	54,024
% of projected exports	7%	94%	93%		
Change from prior week ²	263	361	176		
Top 5 importers' share of U.S. corn					
export sales	62%	73%	77%		72%
USDA forecast June 2020	54,707	45,165	52,545	(14)	
Corn use for ethanol USDA forecast,					
June 2020	132,080	124,460	136,601	(9)	

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

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

Source: USDA, Foreign Agricultural Service.

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

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.

Table 14

Top 5 importers¹ of U.S. soybeans

For the week ending 6/25/2020		% change	Exports ³		
	2020/21	2019/20	2018/19	current MY	3-yr. avg.
	next MY	current MY	last MY*	from last MY	2016-18
		- 1,000 mt -			- 1,000 mt -
China	4,035	15,775	14,324	10	25,733
Mexico	596	4,619	4,896	(6)	4,271
Indonesia	0	1,932	2,135	(10)	2,386
Japan	100	2,367	2,425	(2)	2,243
Egypt	0	3,487	2,639	32	1,983
Top 5 importers	4,731	28,180	26,419	7	36,616
Total U.S. soybean export sales	6,937	45,043	48,400	(7)	53,746
% of projected exports	12%	100%	102%		
change from prior week ²	842	242	804		
Top 5 importers' share of U.S.					
soybean export sales	68%	63%	55%		68%
USDA forecast, June 2020	55,858	44,959	47,629	94	

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

Source: USDA, Foreign Agricultural Service.

Table 15

Top 10 importers¹ of all U.S. wheat

For the week ending 6/25/202	0 con	nmitments ²	% change	Exports ³
	2020/21	2019/20	current MY	3-yr. avg.
c	urrent MY	last MY	from last MY	2017-19
		- 1,000 mt -		- 1,000 mt -
Mexico	583	901	(35)	3,213
Philippines	1,046	893	17	2,888
Japan	737	647	14	2,655
Nigeria	393	570	(31)	1,433
Korea	549	304	80	1,372
Indonesia	188	261	(28)	1,195
Taiwan	353	363	(3)	1,175
Thailand	174	200	(13)	727
Italy	205	90	129	622
Colombia	120	256	(53)	618
Top 10 importers	4,347	4,482	(3)	15,897
Total U.S. wheat export sales	7,266	7,203	1	23,821
% of projected exports	28%	27%		
change from prior week ²	414	255		
Top 10 importers' share of				
U.S. wheat export sales	60%	62%		67%
USDA forecast, June 2020	25,886	26,294	(2)	·

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

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

 $Source: USDA, For eign\ Agricultural\ Service.$

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 (carry over plus accumulated export); yr. = year; avg. = average.

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

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.

FAS marketing year final reports (carry over plus accumulated export); yr. = year; avg. = average.

Table 16
Grain inspections for export by U.S. port region (1,000 metric tons)

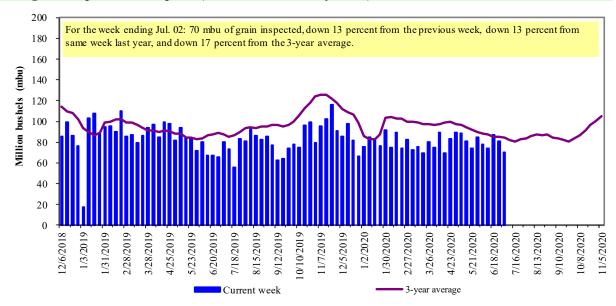
	For the week ending	Previous	Current week			2020 YTD as	Last 4-we	eeks as % of:	
Port regions	07/02/20	week*	as % of previous	2020 YTD*	2019 YTD*	% of 2019 YTD	Last year	Prior 3-yr. avg.	2019 total*
Pacific Northwest									
Wheat	116	410	28	8,061	7,191	112	115	100	13,961
Corn	222	442	50	5,475	6,495	84	243	101	7,047
Soybeans	0	11	0	2,747	4,956	55	2	2	11,969
Total	338	863	39	16,283	18,641	<u>87</u>	117	85	32,977
Mississippi Gulf		000	•	10,200	10,011	•			- ,,
Wheat	67	45	150	1,931	2,732	71	140	132	4,448
Corn	506	574	88	15,509	12,904	120	227	107	20,763
Soybeans	423	229	185	10,867	12,315	88	71	88	31,398
Total	996	848	117	28,307	27,951	101	132	102	56,609
Texas Gulf	,,,	0.10	11,	20,00	21,901	101	102	102	20,007
Wheat	114	70	163	2,188	3,930	56	56	78	6,009
Corn	19	35	55	428	393	109	88	132	640
Soybeans	0	0	n/a	7	0	n/a	n/a	0	2
Total	133	105	127	2,623	4,324	61	58	80	6,650
Interior				,	,-				-,
Wheat	24	18	137	1,156	906	128	101	131	1,987
Corn	199	168	119	4,278	3,879	110	112	98	7,857
Soybeans	119	107	111	3,294	3,461	95	74	84	7,043
Total	342	292	117	8,728	8,246	106	95	96	16,887
Great Lakes									
Wheat	22	0	n/a	321	477	67	94	118	1,339
Corn	0	0	n/a	0	0	n/a	n/a	0	11
Soybeans	0	0	n/a	61	241	25	46	54	493
Total	22	0	n/a	382	718	53	69	63	1,844
Atlantic									
Wheat	0	0	n/a	5	32	17	n/a	0	37
Corn	0	0	n/a	8	92	9	0	0	99
Soybeans	8	5	158	413	716	58	19	19	1,353
Total	8	5	158	426	840	51	17	19	1,489
U.S. total from ports	*								
Wheat	344	542	63	13,662	15,268	89	98	101	27,781
Corn	946	1,219	78	25,698	23,762	108	192	103	36,417
Soybeans	549	351	156	17,388	21,689	80	55	65	52,258
Total	1,838	2,113	87	56,749	60,720	93	109	92	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.

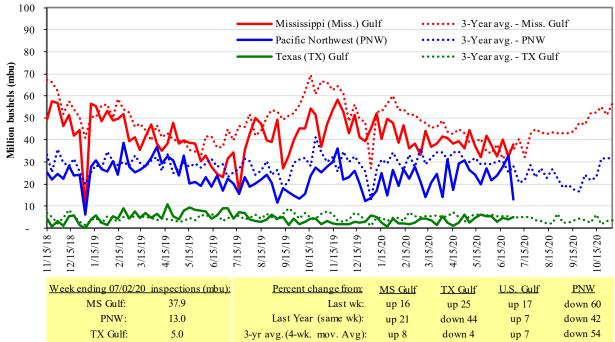
Figure 14
U.S. grain inspected for export (wheat, corn, and soybeans)



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

Source: USDA, Federal Grain Inspection Service.





Source: USDA, Federal Grain Inspection Service.

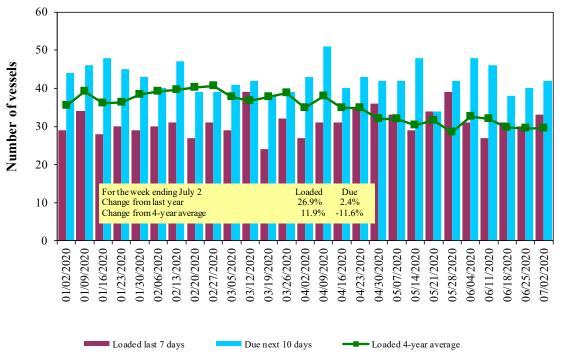
Ocean Transportation

Table 17
Weekly port region grain ocean vessel activity (number of vessels)

				Pacific
		Gulf		Northwest
		Loaded	Due next	
Date	In port	7-days	10-days	In port
7/2/2020	29	33	42	16
6/25/2020	26	30	40	18
2019 range	(2661)	(1844)	(3369)	(833)
2019 average	40	31	49	17

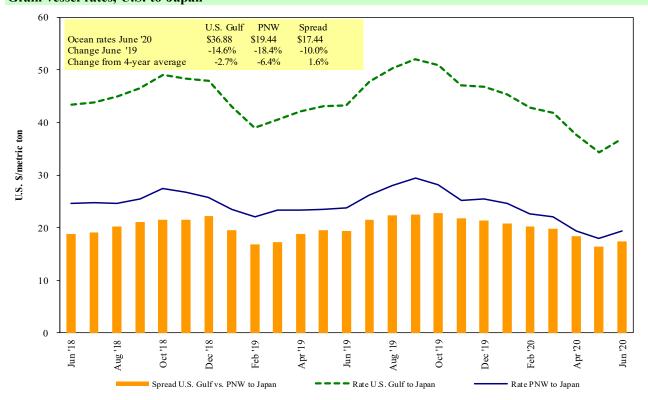
Source: USDA, Agricultural Marketing Service.

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 07/04/2020

Export	Import	Grain	Loading	Volume loads	Freight rate
region	region	types	date	(metric tons)	(US\$/metric ton)
U.S. Gulf	Djibouti	Wheat	Jun 5/15	30,000	131.75*
U.S. Gulf	Djibouti	Sorghum	Apr 17/27	45,730	105.75*
U.S. Gulf	Pt Sudan	Sorghum	Jun 5/15	33,370	99.50
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*
PNW	Taiwan	Wheat	Apr 27/May 11	50,700	29.40
Brazil	China	Heavy grain	Jun 25/30	65,000	23.50
Brazil	China	Heavy grain	May 20/30	69,000	21.00
Brazil	China	Heavy grain	May 19/29	66,000	21.50
Brazil	SE Asia	Corn	Jul 1/6	66,000	22.75
Brazil	China	Heavy grain	May 1/31	60,000	33.25 op 33.00
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.

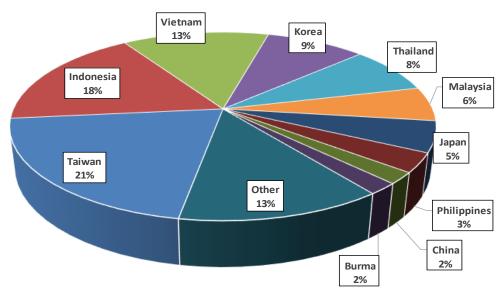
Note: Rates shown are per metric ton (2,204.62 lbs. = 1 metric ton), free on board (F.O.B), except where otherwise indicated; op = option.

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

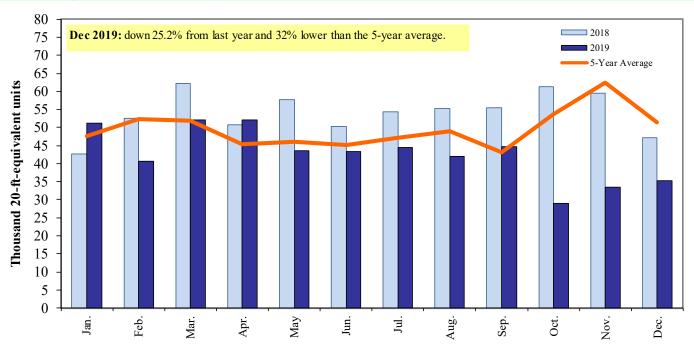
Top 10 destination markets for U.S. containerized grain exports, 2019



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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