



Grain Transportation Report

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

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June 11, 2020

WEEKLY HIGHLIGHTS

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The next release is June 18, 2020

Grain Inspections Lowest Since Late December

For the week ending June 4, **total inspections of grain** (corn, wheat, and soybeans) for export from all major U.S. export regions were 1.76 million metric tons (mmt). Total grain inspections were down 17 percent from the previous week, down 15 percent from last year, and down 24 percent from the 3-year average. Inspections of grain were the lowest since late December of last year. From the previous week (week to week), inspections were down 22 percent for wheat, down 4 percent for corn, and down 47 percent for soybeans. Week to week, Pacific Northwest (PNW) grain inspections decreased 20 percent, and Mississippi Gulf inspections decreased 23 percent. Also, week to week, current outstanding export sales were down for wheat and corn but up for soybeans.

Ocean Freight Rates Inched Up After Declining 11 Consecutive Weeks

After declining 11 consecutive weeks, ocean freight rates for shipping bulk grain have been creeping upward for the past 2 weeks. As of March 5, the rate for shipping a metric ton (mt) of grain from the U.S. Gulf to Japan was \$43.75, and the rate from the Pacific Northwest (PNW) to Japan was \$23.75. From then until the week ending May 21, the U.S. Gulf-to-Japan rate declined 22 percent to \$34 per mt, and the PNW-to-Japan rate declined 25 percent to \$17.75. These declines were a response to a dip in global trade of bulk commodities. For the week ending June 4, the rates rose slightly to \$35 per mt for the U.S. Gulf-to-Japan route and to \$18.50 per mt for the PNW-to-Japan route. For the week ending June 4, 35 oceangoing grain vessels were loading or waiting to load in the U.S. Gulf, compared to an average of 28 vessels per week during the 8 prior weeks. Eighteen vessels were loading or waiting to load in PNW, compared to an average of 14 vessels per week during the prior 8 weeks.

Diesel Fuel Prices Increase

For the week ending June 8, the U.S. average diesel fuel price increased 1 cent from the previous week to \$2.396 per gallon, 70.9 cents below the same week last year. Average diesel fuel prices inched up, as economic activity began slowly resuming across the country. Over the past 22 weeks, diesel fuel prices have increased only 1 other week—0.4 cents during the week ending May 25. The Department of Energy's Energy Information Administration expects the largest declines in U.S. oil consumption have already occurred and demand will generally rise during the next 18 months.

Snapshots by Sector

Export Sales

For the week ending May 28, **unshipped balances** of wheat, corn, and soybeans totaled 20.7 million metric tons (mmt). This represented a 3-percent decrease in outstanding sales from the same time last year. Net **corn export sales** were 0.638 mmt, up 49 percent from the past week. Net **soybean export sales** were 0.495 mmt, down 23 percent from the previous week. Net weekly **wheat export sales** were 0.180 mmt, down 14 percent from the previous week.

Rail

U.S. Class I railroads originated 21,246 grain carloads during the week ending May 30. This was 3 percent less than the previous week, 2 percent more than last year, and 6 percent lower than the 3-year average.

Average June shuttle **secondary railcar** bids/offers (per car) were \$31 below tariff for the week ending June 4. This was \$63 more than last week and \$370 lower than this week last year. There were no non-shuttle bids/offers this week.

Barge

For the week ending June 6, barge grain movements totaled 795,780 tons. This was 4 percent more than the previous week and 211 percent more than the same period last year.

For the week ending June 6, 517 grain barges **moved down river**—29 more barges than the previous week. There were 670 grain barges **unloaded in New Orleans**, 9 percent more than the previous week.

Ocear

For the week ending June 4, 31 occangoing grain vessels were loaded in the U.S. Gulf—3 percent more than the same period last year. Within the next 10 days (starting June 5), 48 vessels were expected to be loaded—7 percent more than the same period last year.

As of June 4, the rate for shipping a metric ton (mt) of grain from the U.S. Gulf to Japan was \$35.00. This was 2 percent more than the previous week. The rate from PNW to Japan was \$18.50 per mt, 3 percent more than the previous week.

Feature Article/Calendar

USDA's Open Data Platform: An Analysis of Bulk Vessel Fleet Data

On June 1, Transportation Services Division (TSD) of USDA's Agricultural Marketing Service (AMS) <u>launched</u> an upgraded version—AgTransport 2.0—of its <u>Agricultural Transportation Open Data Platform</u>. Originally launched last June, the platform significantly enhances stakeholders' ability to access, interact with, visualize, and share agricultural transportation data. The platform facilitates efficient, data-driven decisions to transport agricultural goods domestically and internationally. The new upgrade incorporates new data and stories on various transportation modes and ag-transport-related issues. This article discusses ocean-vessel-fleet data for bulk shipments.

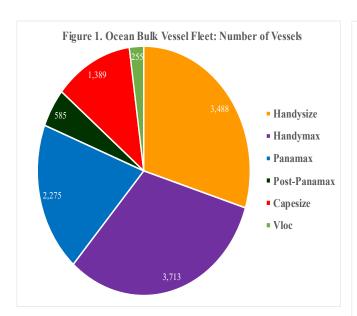
AgTransport 2.0's Data on Global Bulk Vessel Fleet

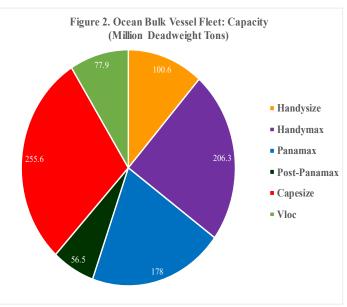
The <u>Bulk Vessel Fleet page</u> on AgTransport 2.0 describes the industry characteristics of the global bulk vessel fleet, which is used for international shipments of grain involved in imports and exports. The global fleet data allow us to provide additional background and context for <u>Ocean Transportation</u>, beyond what is reported weekly in the *Grain Transportation Report*. The data cover the total number of vessels in each size category, the associated total capacity in million deadweight tons (dwt), and ocean freight rates for Panamax vessels. Data are updated annually and currently are available for 2007-19. Illustrated with a series of charts, the data can be filtered by year and vessel type for more insightful analysis.

According to Drewry Shipping Consultants Ltd., bulk vessels are identified by size in the following categories:

- Handysize vessel (10,000-40,000 dwt)
- Handymax/Supramax vessel (40,000-65,000 dwt)
- Panamax vessel (65,000-85,000 dwt)
- Post-Panamax vessel (85,000-120,000 dwt)
- Capesize vessel (120,000-220,000 dwt)
- Very large ore carrier (Vloc) (220,000+ dwt)

In December 2019, the total dry bulk vessel operating fleet was 11,705 vessels, with a cargo capacity of 874.8 million deadweight tons (dwt). Figure 1 shows the number of vessels in each size category in December 2019, and figure 2 shows the corresponding capacity. The Capesize segment amounted to 255.6 million deadweight tons (mdwt) (29 percent of total global capacity), while representing only 12 percent of the fleet, with 1,389 vessels. The Panamax segment, with 2,275 vessels (19 percent), totaled 178 mdwt in capacity (20 percent of the total).





¹ The global fleet data are from Drewry Shipping Consultants Ltd., and the ocean freight rate data are from O'Neil Commodity Consulting, Inc.

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Figure 3 shows the number and capacity of vessels have increased steadily, up significantly in 2019 from a decade before. The expanded count and capacity were driven mainly by the Handymax, Capesize, Vloc, and Post-Panamax vessel categories

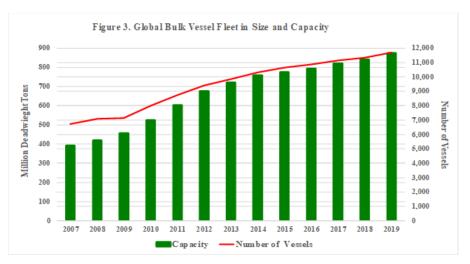
(fig. 4). (On AgTransport 2.0, the chart in figure 4 can be filtered by vessel type—by one type or several.) Leading up to the 2008 Beijing Olympics, a push to expand China's infrastructure increased global shipments of bulk commodities, especially coal and iron ore. This higher demand led to higher ocean freight rates, which in turn, encouraged ship owners to order new vessels. Rapid expansion of the global dry bulk fleet size and capacity began in 2009 and continued through 2019.

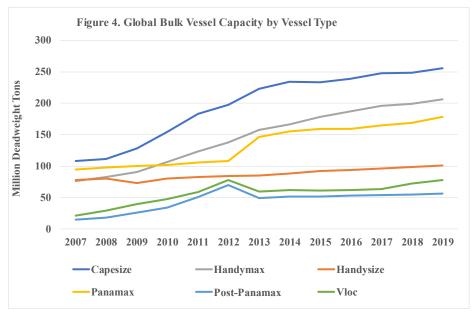
The Panamax segment started to increase in 2012 (fig. 4). The number of Panamax vessels was relatively stable before 2007, but higher ocean freight rates from 2004 to 2008 encouraged vessel owners to order the construction of more new vessels. Panamax is the most commonly used vessel to transport grain from the United States to Asia. Figure 5 shows the relationship between total capacity of the Panamax segment and ocean freight rates for shipping bulk grain from the U.S. Gulf and Pacific Northwest (PNW) to Japan.

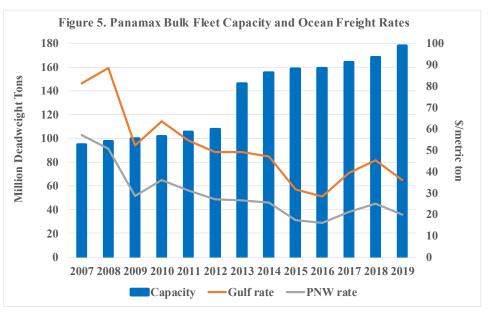
Ocean freight rates returned to pre-2004 levels in 2009 as the global economic crisis settled in. In 2010, rates increased briefly as the global economy recovered slightly from the economic recession. However, the delivery of new vessels—ordered during the period of higher ocean freight rates between 2004 and 2008—led to excess vessel supply in the bulk shipping market. This excess caused bulk ocean freight rates to remain historically low through 2016.

For interactive versions of the charts appearing in this article, see AgTransport 2.0 where the data can be analyzed and accessed in more detail. We sincerely hope you find this new tool to be a valuable improvement in our data delivery.

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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
06/10/20	161	n/a	221	163	157	131
06/03/20	160	n/a	219	157	153	128

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); 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	6/5/2020	5/29/2020
Corn	IL-Gulf	-0.62	-0.67
Corn	NE-Gulf	-0.78	-0.77
Soybean	IA-Gulf	-0.97	-0.94
HRW	KS-Gulf	-1.95	-1.92
HRS	ND-Portland	-2.18	-2.17

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 Week Ago 5/29/2020 4.6120 FUTURES: 5.1860 5.2500 5.6860 4.9640 5.1520 5.1440 HRW 5.88 2.64 7.72 ND 4.44 2.82 7.93 Sybn HRW Sybi HRW Elevator Bid SRW Sybn 5.90 3.77 9.25 GeoGrain USDA Weekly Bids J.S. Export: Corn & Soybean - Export HRW

Rail Transportation

Table 3

Rail deliveries to port (carloads)¹

ran deriveries to port (carroa							
	Mississippi		Pacific	Atlantic &			Cross-border
For the week ending	Gulf	Texas Gulf	Northwest	East Gulf	Total	Week ending	Mexico ³
6/03/2020 ^p	5	1,519	4,566	191	6,281	5/30/2020	2,029
5/27/2020 ^r	583	907	4,851	187	6,528	5/23/2020	2,888
2020 YTD ^r	9,842	19,251	106,517	4,573	140,183	2020 YTD	52,521
2019 YTD ^r	20,049	27,437	125,182	7,981	180,649	2019 YTD	51,198
2020 YTD as % of 2019 YTD	49	70	85	57	78	% change YTD	103
Last 4 weeks as % of 2019 ²	40	96	97	64	87	Last 4wks. % 2019	109
Last 4 weeks as % of 4-year avg. ²	87	112	87	67	90	Last 4wks. % 4 yr.	102
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

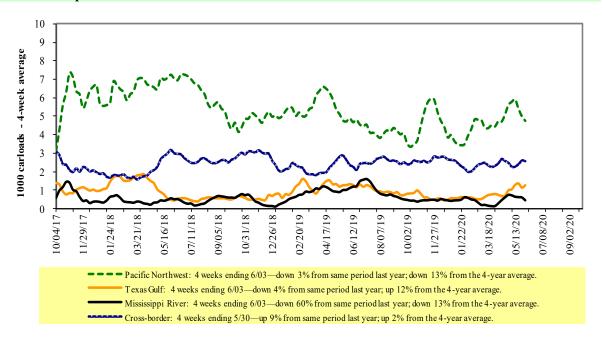
¹Data is incomplete as it is voluntarily provided.

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

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:	East		0	West		U.S. total	Cai	nada
5/30/2020	CSXT	NS	BNSF	KCS	UP	U.S. total	CN	CP
This week	1,760	2,165	10,738	815	5,768	21,246	3,958	5,155
This week last year	1,598	2,975	10,643	1,029	4,588	20,833	4,048	5,253
2020 YTD	37,542	51,020	234,659	22,916	108,614	454,751	85,349	95,489
2019 YTD	43,112	62,036	241,395	24,391	112,825	483,759	95,786	95,088
2020 YTD as % of 2019 YTD	87	82	97	94	96	94	89	100
Last 4 weeks as % of 2019*	83	74	93	103	113	94	98	119
Last 4 weeks as % of 3-yr. avg.**	86	83	88	102	106	92	102	109
Total 2019	91,611	137,192	568,369	58,527	260,269	1,115,968	212,535	235,892

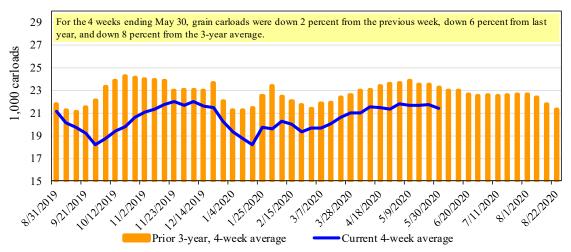
^{*}The past 4 weeks of this year as a percent of the same 4 weeks last year.

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>								
	6/4/2020	Jun-20	Jun-19	Jul-20	Jul-19	Aug-20	Aug-19	Sep-20	Sep-19		
BNSF ³	COT grain units COT grain single-car	0 0	0	no bids 0	0 0	no bids 0	no bids 0	no bids 0	0 1		
UP ⁴	GCAS/Region 1 GCAS/Region 2	no offer no bid	no offer no offer	no offer no bid	no offer 10	no offer no bid	no bids no bids	n/a n/a	n/a n/a		

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

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 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.

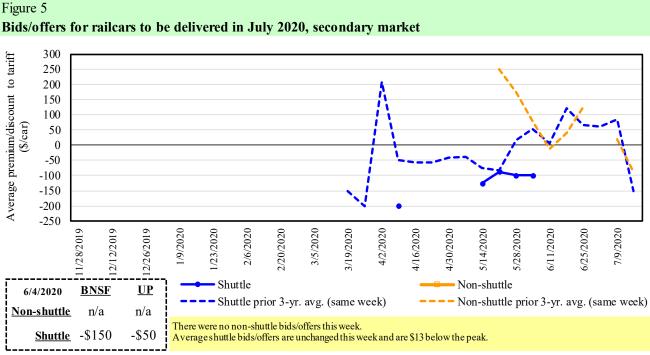
³BNSF - COT = BNSF Railway Certificate of Transportation; north grain and south grain bids were combined effective the week ending 6/24/06.

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

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.

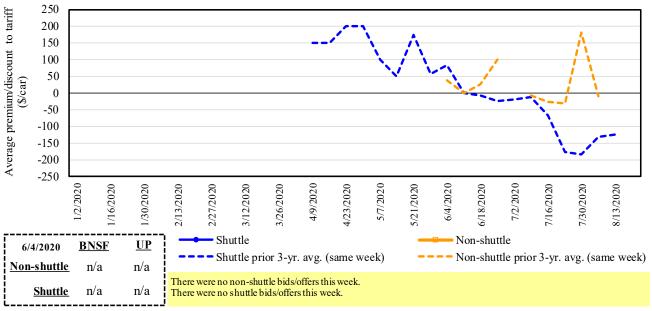
Figure 4 Bids/offers for railcars to be delivered in June 2020, secondary market 700 Average premium/discount to tariff 600 500 400 300 200 100 0 -100 -200 -300 1/14/2019 1/28/2019 2/12/2019 2/26/2019 3/5/2020 1/9/2020 2/6/2020 4/2/2020 /23/2020 2/20/2020 3/19/2020 4/16/2020 1/30/2020 5/14/2020 6/11/2020 5/28/2020 Non-shuttle Shuttle <u>UP</u> **BNSF** 6/4/2020 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. \$13 -\$75 **Shuttle** Average shuttle bids/offers rose \$63 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.



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 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.

Table 6

Weekly secondary railcar market (\$/car)¹

	For the week ending:			De	livery period		
	6/4/2020	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-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	(75)	(150)	n/a	n/a	n/a	n/a
	Change from last week	25	n/a	n/a	n/a	n/a	n/a
Shuttle	Change from same week 2019	(353)	(150)	n/a	n/a	n/a	n/a
Shu	UP-Pool	13	(50)	n/a	n/a	175	n/a
	Change from last week	101	50	n/a	n/a	0	n/a
	Change from same week 2019	(388)	25	n/a	n/a	n/a	n/a

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

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

 $BNSF = BNSF \; Railway ; UP = Union \; Pacific \; Railroad.$

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	D 4 4 3	Tariff	surcharge_	Tariff plus surch		change
June 2020	Origin region ³	Destination region ³	rate/car	per car	metric ton	bus he l ²	Y/Y ⁴
<u>Unit train</u>	Wishias WC	Ct. Lawis MO	¢2.002	0.40	620.06	¢1.00	2
Wheat	Wichita, KS	St. Louis, MO	\$3,983	\$40	\$39.96	\$1.09	-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	\$71	\$45.64	\$1.24	-2
	Sioux Falls, SD	Galveston-Houston, TX	\$6,976	\$0	\$69.28	\$1.89	0
	Colby, KS	Galveston-Houston, TX	\$4,801	\$78	\$48.45	\$1.32	-3
	Amarillo, TX	Los Angeles, CA	\$5,121	\$109	\$51.93	\$1.41	-3
Corn	Champaign-Urbana, IL	New Orleans, LA	\$3,900	\$80	\$39.53	\$1.00	-5
	Toledo, OH	Raleigh, NC	\$6,816	\$0	\$67.69	\$1.72	4
	Des Moines, IA	Davenport, IA	\$2,415	\$17	\$24.15	\$0.61	6
	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	\$50	\$38.23	\$0.97	-4
	Des Moines, IA	Los Angeles, CA	\$5,680	\$146	\$57.85	\$1.47	-5
Soybeans	Minneapolis, MN	New Orleans, LA	\$3,631	\$52	\$36.58	\$1.00	-4
	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	\$80	\$46.93	\$1.28	-5
Shuttle train							
Wheat	Great Falls, MT	Portland, OR	\$4,143	\$0	\$41.14	\$1.12	2
	Wichita, KS	Galveston-Houston, TX	\$4,361	\$0	\$43.31	\$1.18	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	\$128	\$60.97	\$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	\$80	\$38.73	\$0.98	-3
	Lincoln, NE	Galveston-Houston, TX	\$3,880	\$0	\$38.53	\$0.98	0
	Des Moines, IA	Amarillo, TX	\$4,220	\$63	\$42.53	\$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	\$93	\$49.33	\$1.34	-1
	Toledo, OH	Huntsville, AL	\$4,805	\$0	\$47.72	\$1.30	4
	Grand Island, NE	Portland, OR	\$5,260	\$131	\$53.53	\$1.46	-11

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): com 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

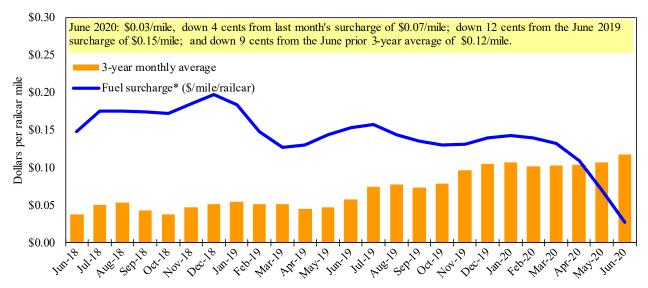
Date	: June 2020)		Fuel	Tari	iff rate plus	Percent
	Origin		Tariff rate	surcharge	fuel surc	harge per:	change ⁴
Commodity	state	Destination region	per car¹	per car ²	metric ton ³	bus he l ³	Y/Y
Wheat	MT	Chihuahua, CI	\$7,509	\$0	\$76.72	\$2.09	3
	OK	Cuautitlan, EM	\$6,775	\$56	\$69.79	\$1.90	1
	KS	Guadalajara, JA	\$7,534	\$329	\$80.34	\$2.18	-1
	TX	Salinas Victoria, NL	\$4,329	\$33	\$44.57	\$1.21	-1
Corn	IA	Guadalajara, JA	\$8,902	\$273	\$93.75	\$2.38	0
	SD	Celaya, GJ	\$8,140	\$0	\$83.17	\$2.11	3
	NE	Queretaro, QA	\$8,278	\$112	\$85.73	\$2.18	-1
	SD	Salinas Victoria, NL	\$6,905	\$0	\$70.55	\$1.79	0
	MO	Tlalnepantla, EM	\$7,643	\$109	\$79.21	\$2.01	-1
	SD	Torreon, CU	\$7,690	\$0	\$78.57	\$1.99	3
Soybeans	MO	Bojay (Tula), HG	\$8,547	\$256	\$89.94	\$2.45	-2
	NE	Guadalajara, JA	\$9,172	\$265	\$96.42	\$2.62	-1
	IA	El Castillo, JA	\$9,490	\$0	\$96.97	\$2.64	4
	KS	Torreon, CU	\$7,964	\$179	\$83.20	\$2.26	0
Sorghum	NE	Celaya, GJ	\$7,772	\$239	\$81.85	\$2.08	-1
	KS	Queretaro, QA	\$8,108	\$70	\$83.55	\$2.12	0
	NE	Salinas Victoria, NL	\$6,713	\$56	\$69.16	\$1.75	0
	NE	Torreon, CU	\$7,092	\$162	\$74.12	\$1.88	-2

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.

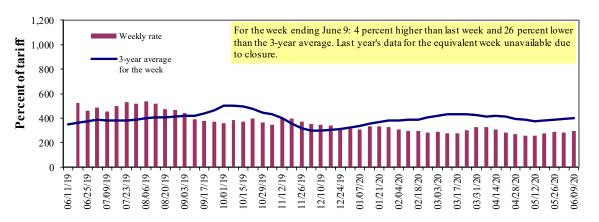
^{*} Beginning January 2009, the Canadian Pacific fuel surcharge is computed by a monthly average of the bi-weekly fuel surcharge.

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

Barge Transportation

Figure 8

Illinois River 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

				Lower				
		Twin	Mid-	Illinois	G. T.	.	Lower	Cairo-
		Cities	Mississippi	River	St. Louis	Cincinnati	Ohio	Memphis
Rate ¹	6/9/2020	353	300	294	191	181	181	180
	6/2/2020	355	293	283	190	180	180	179
\$/ton	6/9/2020	21.85	15.96	13.64	7.62	8.49	7.31	5.65
	6/2/2020	21.97	15.59	13.13	7.58	8.44	7.27	5.62
Curren	t week % chang	e from the s	same week:					
	Last year	-	_	-	=	-37	-37	-30
	3-year avg. ²	-20	-25	-26	-33	-39	-39	-30
Rate ¹	July	356	298	-	193	188	188	182
	September	397	371	=	345	358	358	343

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

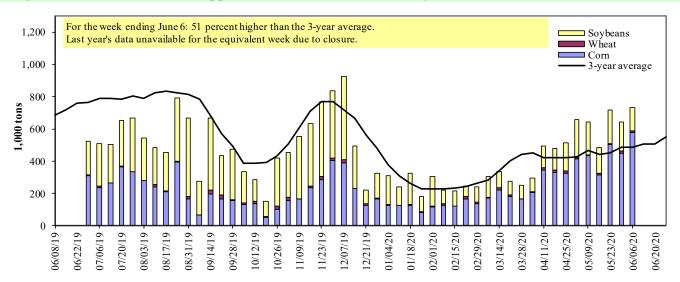
Select applicable index from market quotes are included in tables on this page. The 1976 benchmark rates per ton are provided in map.

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)**

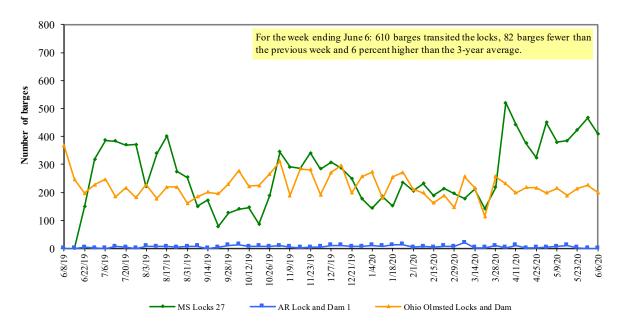
For the week ending 06/06/2020	Corn	Wheat	Soybe ans	Other	Total
Mississippi River					
Rock Island, IL (L15)	291	0	79	0	369
Winfield, MO (L25)	490	3	98	0	591
Alton, IL (L26)	566	8	146	0	719
Granite City, IL (L27)	580	8	142	0	730
Illinois River (La Grange)	63	3	35	0	101
Ohio River (Olmsted)	30	0	18	0	49
Arkansas River (L1)	0	10	7	0	17
Weekly total - 2020	611	18	167	0	796
Weekly total - 2019	132	4	121	0	256
2020 YTD ¹	7,794	707	4,982	51	13,533
2019 YTD ¹	5,342	858	4,002	69	10,271
2020 as % of 2019 YTD	146	82	125	73	132
Last 4 weeks as % of 2019 ²	252	390	140	113	207
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.

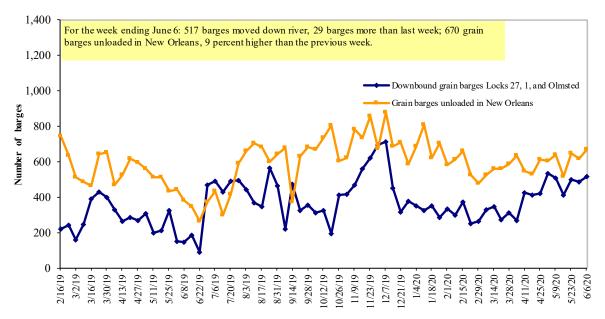
Figure 11
Upbound empty barges transiting Mississippi River Locks 27, Arkansas River Lock and Dam 1, and Ohio River Olmsted Locks and Dam



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

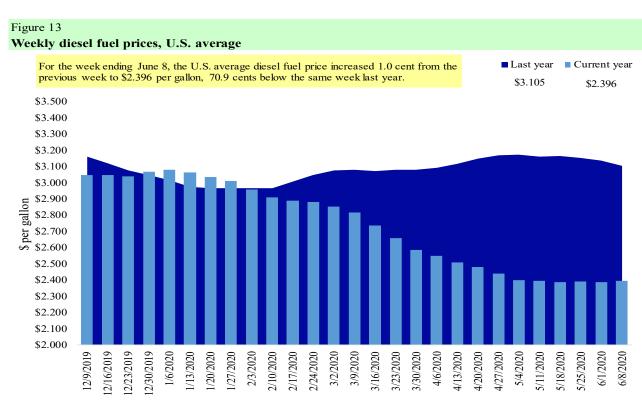
The **weekly diesel price** provides a proxy for trends in U.S. truck rates as diesel fuel is a significant expense for truck grain movements.

Table 11 Retail on-highway diesel prices, week ending 6/8/2020 (U.S. \$/gallon)

			Change	e from
Region	Location	Price	Week ago	Year ago
I	East Coast	2.501	0.009	-0.624
	New England	2.629	0.014	-0.556
	Central Atlantic	2.672	0.006	-0.636
	Lower Atlantic	2.359	0.010	-0.630
II	Midwest	2.240	0.014	-0.762
III	Gulf Coast	2.172	0.001	-0.671
IV	Rocky Mountain	2.351	0.011	-0.763
V	West Coast	2.918	0.018	-0.797
	West Coast less California	2.578	0.018	-0.704
	California	3.198	0.017	-0.860
Total	United States	2.396	0.010	-0.709

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)

2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1									
		Wheat						Soybe ans	Total
For the week ending	HRW	SRW	HRS	SWW	DUR	All wheat			
Export balances ¹									
5/28/2020	641	129	1,040	614	43	2,468	11,461	6,731	20,660
This week year ago	808	129	376	291	24	1,628	7,868	11,769	21,265
Cumulative exports-marketing year ²									
2019/20 YTD	9,526	2,318	6,960	4,751	922	24,477	29,015	35,926	89,418
2018/19 YTD	8,591	3,204	6,776	5,164	479	24,214	40,371	34,913	99,497
YTD 2019/20 as % of 2018/19	111	72	103	92	192	101	72	103	90
Last 4 wks. as % of same period 2018/19*	125	135	305	246	295	192	158	54	103
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 importers¹ of U.S. corn

For the week ending 5/28/2020	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	1,703	13,555	15,049	(10)	14,659
Japan	534	9,050	11,449	(21)	11,955
Korea	0	2,315	3,694	(37)	4,977
Colombia	27	4,026	4,460	(10)	4,692
Peru	0	191	1,992	(90)	2,808
Top 5 importers	2,264	29,136	36,643	(20)	39,091
Total U.S. corn export sales	3,413	40,476	48,238	(16)	54,024
% of projected exports	6%	90%	92%		
Change from prior week ²	28	638	(9)		
Top 5 importers' share of U.S. corn					
export sales	66%	72%	76%		72%
USDA forecast May 2020	54,707	45,165	52,545	(14)	
Corn use for ethanol USDA forecast,					
May 2020	132,080	125,730	136,601	(8)	

¹Based 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 5/28/2020		% 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	1,498	14,946	13,555	10	25,733
Mexico	501	4,441	4,729	(6)	4,271
Indonesia	0	1,835	2,019	(9)	2,386
Japan	87	2,250	2,264	(1)	2,243
Egypt	0	3,190	2,425	32	1,983
Top 5 importers	2,086	26,661	24,991	7	36,616
Total U.S. soybean export sales	2,940	42,657	46,682	(9)	53,746
% of projected exports	5%	93%	98%		
change from prior week ²	607	495	510		
Top 5 importers' share of U.S.					
soybean export sales	71%	62%	54%		68%
USDA forecast, May 2020	55,858	45,640	47,629	96	

Based 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 5/28/2020)	Total commi	% 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 -
Philippines	462	3,584	3,234	11	3,047
Mexico	143	3,857	3,322	16	3,034
Japan	363	2,780	2,785	(0)	2,695
Nigeria	165	1,590	1,648	(4)	1,564
Indonesia	113	1,066	1,622	(34)	1,381
Korea	122	1,657	1,440	15	1,355
Taiwan	79	1,428	1,164	23	1,164
Egypt	0	101	821	(88)	821
Thailand	115	877	757	16	747
Iraq	0	262	674	(61)	574
Top 10 importers	1,560	17,203	17,465	(1)	16,382
Total U.S. wheat export sales	3,470	26,945	25,842	4	24,388
% of projected exports	13%	102%	101%		
change from prior week ²	437	180	(26)		
Top 10 importers' share of		_	_		
U.S. wheat export sales	45%	64%	68%		67%
USDA forecast, May 2020	25,886	26,431	25,504	4	

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.

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

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

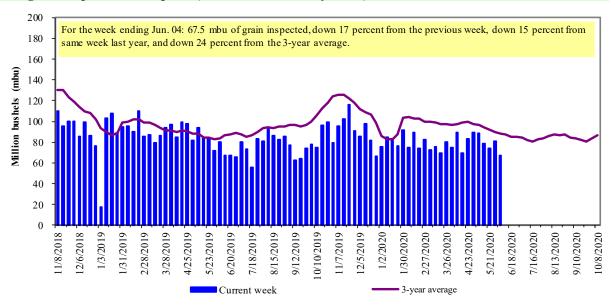
	For the week ending	Previous	Current week			2020 YTD as	Last 4-we	eeks as % of:	
Port regions	06/04/20	week*	as % of previous	2020 YTD*	2019 YTD*	% of 2019 YTD	Last year	Prior 3-yr. avg.	2019 total*
Pacific Northwest									
Wheat	278	363	76	6,843	6,131	112	131	111	13,961
Corn	293	343	85	4,145	5,947	70	124	74	7,047
Soybeans	0	3	0	2,736	4,370	63	21	16	11,969
Total	571	710	80	13,724	16,448	83	111	78	32,977
Mississippi Gulf	3/1	710	00	10,724	10,110	00	111	70	52,711
Wheat	38	58	66	1,545	2,479	62	37	45	4,448
Corn	592	638	93	13,103	11,916	110	137	105	20,763
Soybeans	130	294	44	9,554	10,721	89	57	74	31,398
Total	760	990	77	24,201	25,116	96	95	91	56,609
Texas Gulf	700	//0	11	24,201	25,110	70	73	71	30,007
Wheat	106	135	78	1,788	3,232	55	57	87	6,009
Corn	30	11	279	374	331	113	163	104	640
Soybeans	0	0	n/a	7	0	n/a	n/a	0	2
Total	136	146	93	2,169	3,563	61	64	88	6,650
Interior	100	1.0	~	2,200	0,000	V-1	••		0,000
Wheat	30	28	105	994	751	132	80	79	1,987
Corn	166	134	124	3,551	3,232	110	105	92	7,857
Soybeans	87	111	78	2,883	2,905	99	100	97	7,043
Total	282	273	103	7,429	6,888	108	100	92	16,887
Great Lakes									
Wheat	0	0	n/a	204	388	52	34	56	1,339
Corn	0	0	n/a	0	0	n/a	n/a	0	11
Soybeans	0	0	n/a	17	145	12	8	10	493
Total	0	0	n/a	220	533	41	26	34	1,844
Atlantic									
Wheat	4	0	n/a	5	32	17	n/a	n/a	37
Corn	0	0	n/a	8	75	11	0	0	99
Soybeans	7	11	60	388	587	66	41	59	1,353
Total	11	11	97	401	694	58	37	52	1,489
J.S. total from ports	*								
Wheat	456	585	78	11,379	13,014	87	80	89	27,781
Corn	1,081	1,126	96	21,181	21,501	99	128	92	36,417
Soybeans	224	420	53	15,585	18,728	83	58	64	52,258
Total	1,760	2,131	83	48,145	53,242	90	93	85	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.

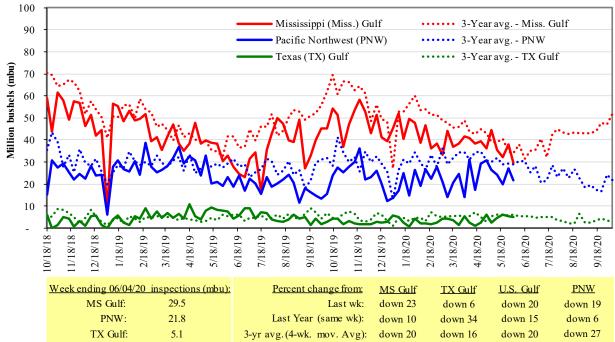
Figure 14
U.S. grain inspected for export (wheat, corn, and soybeans)



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)



Source: USDA, Federal Grain Inspection Service.

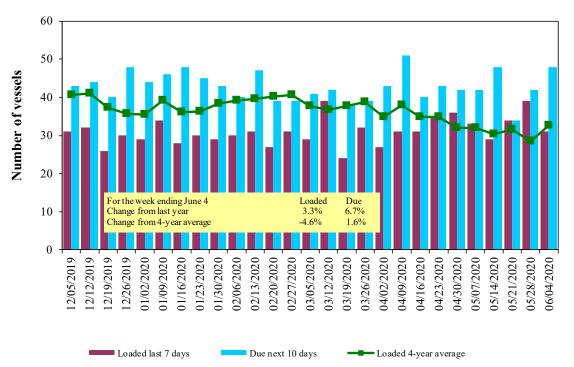
Ocean Transportation

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

, i			,	Pacific
		Gulf		Northwest
		Loaded	Due next	
Date	In port	7-days	10-days	In port
6/4/2020	35	31	48	18
5/28/2020	23	39	42	14
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 06/06/2020

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	Mar 26/Apr 6	35,000	51.84*
PNW	Taiwan	Wheat	Apr 27/May 11	50,700	29.40
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	China	Heavy grain	Apr 2/16	66,000	30.75
Brazil	China	Heavy grain	Mar 1/10	65,000	32.00
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.

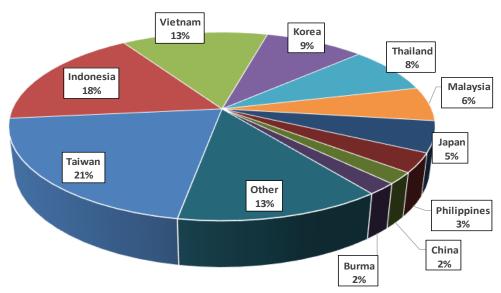
Note: Rates shown are per metric ton (2,204.62 lbs. = 1 metric ton), free on board (F.O.B), except where otherwise indicated; op = option.

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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Preferred citation: U.S. Dept. of Agriculture, Agricultural Marketing Service. *Grain Transportation Report*. June 11, 2020. Web: http://dx.doi.org/10.9752/TS056.06-11-2020

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