USDA United States Department of Agriculture

Grain Transportation Report

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

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May 14, 2020

Contents

The next release is May 21, 2020

WEEKLY HIGHLIGHTS

STB Issues Guidance on Demurrage

On April 30, the Surface Transportation Board (STB) issued three decisions regarding demurrage and accessorial charges. Railroads charge demurrage when excessive time is taken to load or unload rail cars. In one decision (effective May 30, 2020), STB clarified the principles it considers in evaluating the reasonableness of demurrage and accessorial rules and charges. For instance, STB stated that demurrage charges based on factors outside shippers' control do not fit the legitimate intent of incentivizing efficient handling of rail cars. In a second STB decision, a final rule (effective June 20, 2020) specified billing requirements for demurrage when third parties are involved. Finally, STB invited parties to comment on minimum information to be included on Class I carriers' demurrage invoices. Comments are due by June 5, 2020, for the first round and July 6, 2020, for the reply round. According to the Association of American Railroads, grain represented about 9 percent of railroads' total originated tonnage in 2018.

DOT Releases Preliminary Estimates of Highway Crashes

Highway truck fatalities were down for a third consecutive year in 2019, according to data released by the U.S Department of Transportation's (DOT) National Highway Traffic Safety Administration (NHTSA). Since 2018, fatalities decreased 1.2 percent (36,120) overall. Truck traffic fatalities were down despite a 1-percent increase in vehicle miles traveled (which would typically correlate with increased traffic fatalities). Region 1 (Massachusetts, Maine, New Hampshire, Rhode Island and Vermont) had the largest decrease in fatalities (8 percent), while Region 4 (Alabama, Florida, Georgia, South Carolina and Tennessee) had a 2-percent increase. Fatalities in crashes involving at least one large truck and drivers over 65 increased by 1 percent in 2019. Nine of 10 regions had net decreases in traffic fatalities in 2019. Final data for 2018 and the 2019 annual report file will be available in late fall of 2020 and may include revised estimates.

FMCSA Adopts Crash Accountability Program

Effective May 1, the Federal Motor Carrier Safety Administration (FMCSA) has permanently installed a new pilot program, the Crash Preventability Demonstration Program. The program allows crashes in certain eligible categories not to be counted in a motor carrier's safety measurement profile if the carrier was not at fault. Carriers with eligible crashes that occurred on or after August 1, 2019, can submit a request for data review with the required documentation through the agency's DataQs website. The FMCSA is in the process of expanding the type of crashes that will be considered.

Snapshots by Sector

Export Sales

For the week ending April 30, **unshipped balances** of wheat, corn, and soybeans totaled 22.7 million metric tons (mmt). This represented a 15-percent decrease in outstanding sales, compared to the same time last year. Net **corn export sales** were 0.775 mmt, down 43 percent from the past week. Net **soybean export sales** were 0.653 mmt, down 39 percent from the previous week. Net weekly **wheat export sales** were 0.245 mmt, down 48 percent from the previous week.

Rail

U.S. Class I railroads originated 22,653 **grain carloads** during the week ending May 2. This was a 4-percent increase from the previous week, 2 percent more than last year, and 4 percent lower than the 3-year average.

Average May shuttle **secondary railcar** bids/offers (per car) were $213 below tariff for the week ending May 7. This was $64 less than last week and $271 lower than this week last year. There were no non-shuttle bids/offers this week.

Barge

For the week ending May 9, **barge grain movements** totaled 793,314 tons. This was 7 percent less than the previous week and 115 percent more than the same period last year.

For the week ending May 9, 506 grain barges **moved down river**—28 fewer barges than the previous week. There were 640 grain barges **unloaded in New Orleans**, 6 percent more than the previous week.

Ocean

For the week ending May 7, 33 **oceangoing grain vessels** were loaded in the Gulf—10 percent more than the same period last year. Within the next 10 days (starting May 8), 42 vessels were expected to be loaded—22 percent fewer than the same period last year.

As of May 7, the rate for shipping a metric ton (mt) of grain from the U.S. Gulf to Japan was $35.00. This was 3 percent less than the previous week. The rate from PNW to Japan was $18.25 per mt, 3 percent less than the previous week.

Fuel

For the week ending May 11, the U.S. average **diesel fuel price** decreased 0.5 cents from the previous week to $2.394 per gallon, 76.6 cents below the same week last year.

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Web: **http://dx.doi.org/10.9752/TS056.05-14-2020**

Feature Article/Calendar

Grain Transportation Costs to Mexico in First Quarter 2020

Mexico is one of the largest importers of U.S. grain (corn, soybeans, and wheat). In 2019, Mexico imported 14.42 million metric tons (mmt) of U.S. corn, with a total value of $2.72 billion. Also, in 2019, Mexico imported 3.55 mmt tons of wheat (valued at $0.81 billion) and 5.1 mmt tons of soybeans ($1.87 billion), according to USDA's Global Agricultural Trade System data. Because of Mexico's role as a major, nearby destination for U.S. grain, sustaining strong export levels depends heavily on retaining low transportation and landed costs. Grain is usually transported from the United States to Mexico by one of two routes—either by cross-border land movements or by seaborne movements to Mexican ports for inland distribution. This article examines changing costs of transporting grain from the United States to Mexico through the land and water routes—from fourth quarter 2019 to first quarter 2020 (quarter to quarter) and from first quarter 2019 to first quarter 2020 (year to year).

Quarterly costs of transporting United States grain to Veracruz and Guadalajara, Mexico

	Water route (to Veracruz) $/metric ton					Land route (to Guadalajara) $/metric ton				
	2019 1st qtr.	2019 4th qtr.	2020 1st qtr.	Percent change Yr. to yr.	Qtr. to qtr.	2019 1st qtr.	2019 4th qtr.	2020 1st qtr.	Percent change Yr. to yr.	Qtr. to qtr.
Corn										
Origin			IL					IA		
Truck	8.78	11.46	10.70	21.9	-6.6	4.37	4.19	4.62	5.7	10.3
Rail [1]						91.00	96.23	96.35	5.9	0.1
Barge	24.50	18.46	15.55	-36.5	-15.8					
Ocean[2]	13.89	15.23	13.64	-1.8	-10.4					
Total transportation cost	47.17	45.15	39.89	-15.4	-11.7	95.37	100.42	100.97	5.9	0.5
Farm value[3]	141.20	146.45	138.05	-2.2	-5.7	139.49	146.06	146.45	5.0	0.3
Landed cost[4]	188.37	191.60	177.94	-5.5	-7.1	234.86	246.48	247.42	5.3	0.4
Transport % of landed cost	25	24	22			41	41	41		
Soybeans										
Origin			IL					NE		
Truck	8.78	11.46	10.70	21.9	-6.6	4.37	4.19	4.62	5.7	10.3
Rail						94.21	98.86	98.97	5.1	0.1
Barge	24.50	18.46	15.55	-36.5	-15.8					
Ocean	13.89	15.23	13.64	-1.8	-10.4					
Total transportation cost	47.17	45.15	39.89	-15.4	-11.7	98.58	103.05	103.59	5.1	0.5
Farm value	321.87	329.96	325.55	1.1	-1.3	302.89	304.12	307.30	1.5	1.0
Landed cost	369.04	375.11	365.44	-1.0	-2.6	401.47	407.17	410.89	2.3	0.9
Transport % of landed cost	13	12	11			25	25	25		
Wheat										
Origin			KS					KS		
Truck	4.37	4.19	4.62	5.7	10.3	4.37	4.19	4.62	5.7	10.3
Rail	42.66	43.31	43.31	1.5	0.0	79.65	83.13	83.27	4.5	0.2
Ocean	13.89	15.23	13.64	-1.8	-10.4					
Total transportation cost	60.92	62.73	61.57	1.1	-1.8	84.02	87.32	87.89	4.6	0.7
Farm value	181.39	142.57	160.81	-11.3	12.8	181.39	142.57	160.81	-11.3	12.8
Landed cost	242.31	205.30	222.38	-8.2	8.3	265.41	229.89	248.70	-6.3	8.2
Transport % of landed cost	25	31	28			32	38	35		

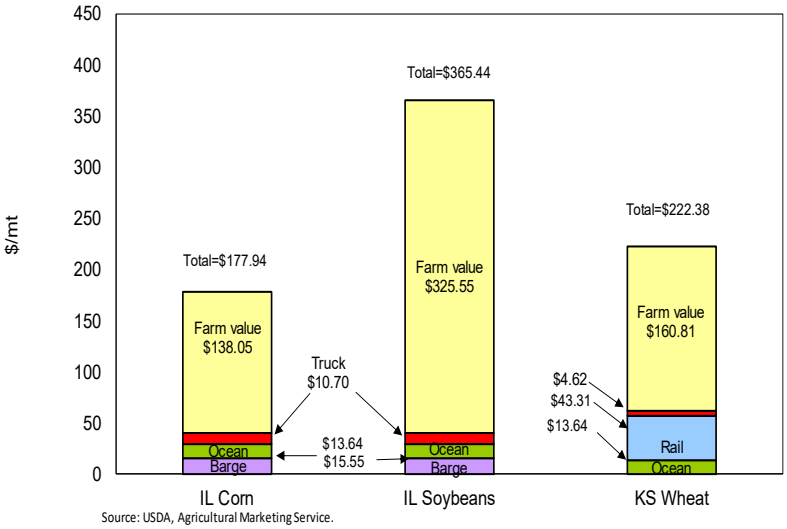
[1]Rail rates include U.S. and Mexico portions of the movement. Mexico rail rates are estimated based on actual quoted market rates. BNSF and Union Pacific quoted rail tariff rates are through rates for shuttle trains. Rail rates include fuel surcharges, but do not include the cost of purchasing empty rail cars in the secondary market, which could exceed the rail tariff rate plus fuel surcharge shown in the table.
[2]Source for ocean freight rates: O'Neil Commodity Consulting.
[3]Source for farm values: USDA, National Agricultural Statistics Service.
[4]Landed cost is total transportation cost plus farm value.
Note: Total may not add exactly because of rounding.
Source: Compiled by the USDA, Agricultural Marketing Service.

Transportation costs. Via water routes, total transportation costs of shipping grain from the United States to Mexico declined quarter to quarter.[1] For corn and soybeans, this decline responded to falling truck, barge, and ocean freight rates (see table). For wheat, the decline was mainly in response to falling ocean freight rates. Barge rates fell because of flagging demand for barge services, with less grain shipped downriver (fig. 10, *Grain Transportation Report (GTR)*). Ocean freight rates fell quarter to quarter because of the slump in the global dry bulk trade (April 16, *GTR*). Year to year, total transportation costs decreased for waterborne corn and soybeans and increased slightly for waterborne wheat.

[1] Water routes typically involve truck transportation to barge to oceangoing vessel, or truck to rail to oceangoing vessel.

Next, via land routes, total transportation costs of shipping grain from the United States to Mexico changed little from quarter to quarter. However, year to year, total transportation costs increased for all grains because of increases in truck and rail (public tariff) rates over a year ago. Rail rates held fairly steady during the quarter.

Figure 1. Water route shipment costs ($/mt) to Veracruz, Mexico



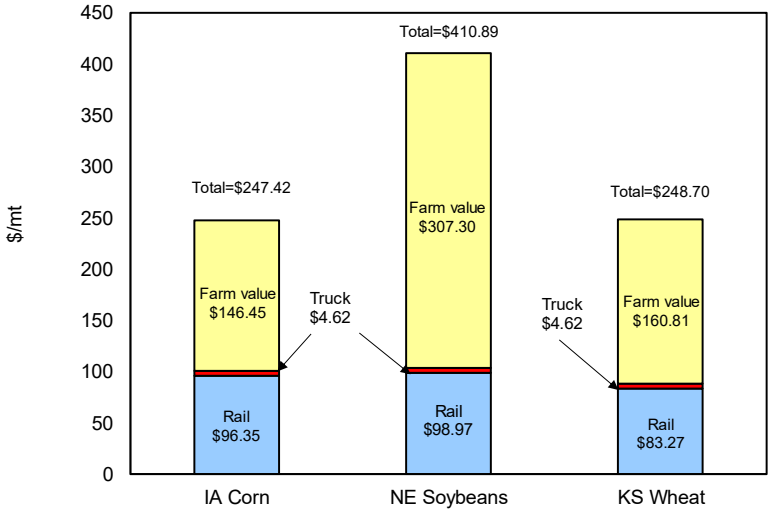
Source: USDA, Agricultural Marketing Service.

Landed costs.[1] Quarter to quarter, landed costs decreased for corn and soybeans shipped to Mexico via water, but increased for waterborne wheat. Landed costs for waterborne corn and soybeans declined because of lower transportation costs and farm values. Landed costs for waterborne wheat rose mainly because of increased farm values.

For grains shipped via land, landed costs were stable for corn and soybeans quarter to quarter, while increasing for wheat. Just as for waterborne wheat, landed costs for land-hauled wheat rose with increased farm value. Year to year, landed costs decreased for all grains (combined) shipped by water routes and for wheat transported by land routes. However, landed costs increased year to year for corn and soybeans transported by land because of increased total transportation costs and farm values.

First-quarter landed costs for waterborne grains ranged from $178 per metric ton (mt) to $365 per mt (see table and fig. 1). For land-hauled grains, landed costs ranged from $247 per mt to $411 per mt (see table and fig. 2). The share of landed costs for transportation ranged from 11 percent to 28 percent for the water route and from 25 percent to 41 percent for the land route (see table). In general, quarter to quarter, the transportation share of the landed cost decreased for waterborne shipments.

Figure 2. Land route shipment costs ($/mt) to Guadalajara, Mexico



Source: USDA, Agricultural Marketing Service.

U.S. Export to Mexico: According to USDA's Federal Grain Inspection Service data, Mexico imported 3.13 million metric tons (mmt) of U.S. corn, 1.12 mmt of U.S. soybeans, and 0.76 mmt of U.S. wheat in the first quarter of 2020. Quarter to quarter, these imports amounted to 2 percent more corn, but 14 percent less wheat and 12 percent less soybeans. However, year to year, U.S. inspections for export to Mexico rose 2 percent for corn and 8 percent for wheat, while soybean inspections fell just 1 percent. Lower U.S. transportation and landed costs could keep U.S. grain shipments to Mexico competitive.

surajudeen.olowolayemo@usda.gov

[1] Landed costs include the cost of the good (farm value) and the cost to receive it (transportation costs).

Grain Transportation Indicators

Table 1

Grain transport cost indicators[1]

	Truck	Rail		Barge	Ocean	
For the week ending		Unit train	Shuttle		Gulf	Pacific
05/13/20	161	n/a	214	144	157	129
05/06/20	161	n/a	217	143	161	133

[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	5/8/2020	5/1/2020
Corn	IL–Gulf	-0.65	-0.63
Corn	NE–Gulf	-0.88	-0.86
Soybean	IA–Gulf	-0.97	-0.96
HRW	KS–Gulf	-2.05	-2.04
HRS	ND–Portland	-2.06	-2.11

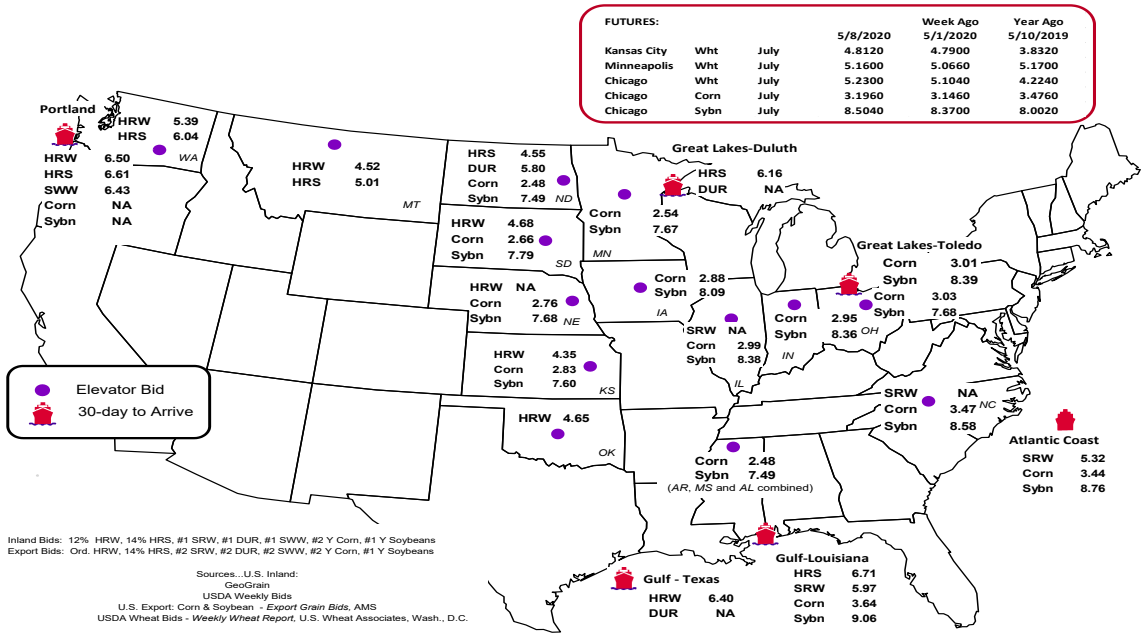
Note: nq = no quote; n/a = not available; HRW = hard red winter wheat; HRS = hard red spring wheat.

Source: USDA, Agricultural Marketing Service.

The **grain bid summary** illustrates the market relationships for commodities. Positive and negative adjustments in differential between terminal and futures markets, and the relationship to inland market points, are indicators of changes in fundamental market supply and demand. The map may be used to monitor market and time differentials.

Figure 1

Grain bid summary



Rail Transportation

Table 3

Rail deliveries to port (carloads)[1]

For the week ending	Mississippi Gulf	Texas Gulf	Pacific Northwest	Atlantic & East Gulf	Total	Week ending	Cross-border Mexico[3]
5/06/2020[p]	628	1,025	5,562	108	7,323	5/2/2020	2,151
4/29/2020[r]	662	1,782	6,480	321	9,245	4/25/2020	2,083
2020 YTD[r]	8,066	14,182	87,501	3,898	113,647	2020 YTD	42,138
2019 YTD[r]	15,583	22,135	105,630	6,930	150,278	2019 YTD	41,672
2020 YTD as % of 2019 YTD	52	64	83	56	76	% change YTD	101
Last 4 weeks as % of 2019[2]	78	80	107	57	97	Last 4wks. % 2019	87
Last 4 weeks as % of 4-year avg.[2]	177	76	107	51	102	Last 4wks. % 4 yr.	89
Total 2019	40,974	51,167	251,181	16,192	359,514	Total 2019	127,622
Total 2018	22,118	46,532	310,449	21,432	400,531	Total 2018	129,674

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

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

[3] Cross-border weekly data is approximately 15 percent below the Association of American Railroads' reported weekly carloads received by Mexican railroads. to reflect switching between Kansas City Southern de Mexico (KCSM) and Grupo Mexico.

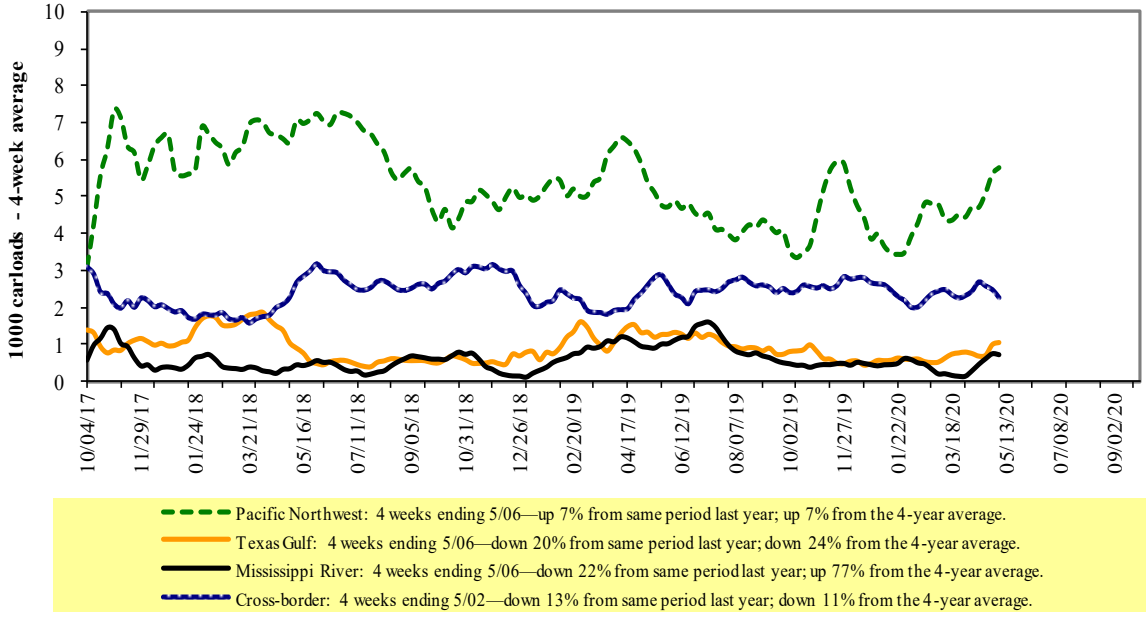
YTD = year-to-date; p = preliminary data; r = revised data; n/a = not available; wks. = weeks; avg. = average.

Source: USDA, Agricultural Marketing Service.

Railroads originate approximately 24 percent of U.S. grain shipments. Trends in these loadings are indicative of market conditions and expectations.

Figure 2

Rail deliveries to port



Source: USDA, Agricultural Marketing Service.

Table 4

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

For the week ending:	East		West			U.S. total	Canada	
5/2/2020	CSXT	NS	BNSF	KCS	UP		CN	CP
This week	2,065	2,569	11,462	876	5,681	22,653	5,222	5,098
This week last year	1,927	3,155	10,982	1,217	5,017	22,298	4,773	4,551
2020 YTD	31,215	41,807	191,581	18,864	85,645	369,112	68,875	75,059
2019 YTD	35,504	49,607	194,917	20,471	92,560	393,059	79,023	77,897
2020 YTD as % of 2019 YTD	88	84	98	92	93	94	87	96
Last 4 weeks as % of 2019*	97	78	95	83	98	93	88	105
Last 4 weeks as % of 3-yr. avg.**	92	83	91	92	99	92	105	110
Total 2019	91,611	137,181	568,369	58,527	260,269	1,115,957	212,530	235,892

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

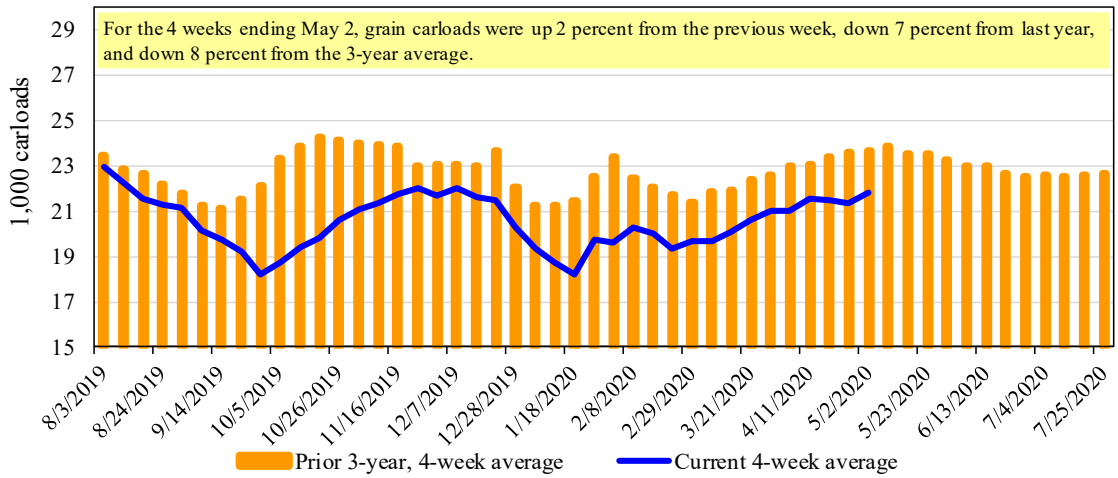
**The past 4 weeks as a percent of the same period from the prior 3-year average. YTD = year-to-date; avg. = average; yr. = year.

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

Source: Association of American Railroads.

Figure 3

Total weekly U.S. Class I railroad grain carloads



Source: Association of American Railroads.

Table 5

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

For the week ending:		Delivery period							
5/7/2020		May-20	May-19	Jun-20	Jun-19	Jul-20	Jul-19	Aug-20	Aug-19
BNSF[3]	COT grain units	no bids	no offer	0	0	no bids	0	0	25
	COT grain single-car	0	no offer	0	257	0	171	no bids	167
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 offer	no bid	no offer	n/a	n/a

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

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

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

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

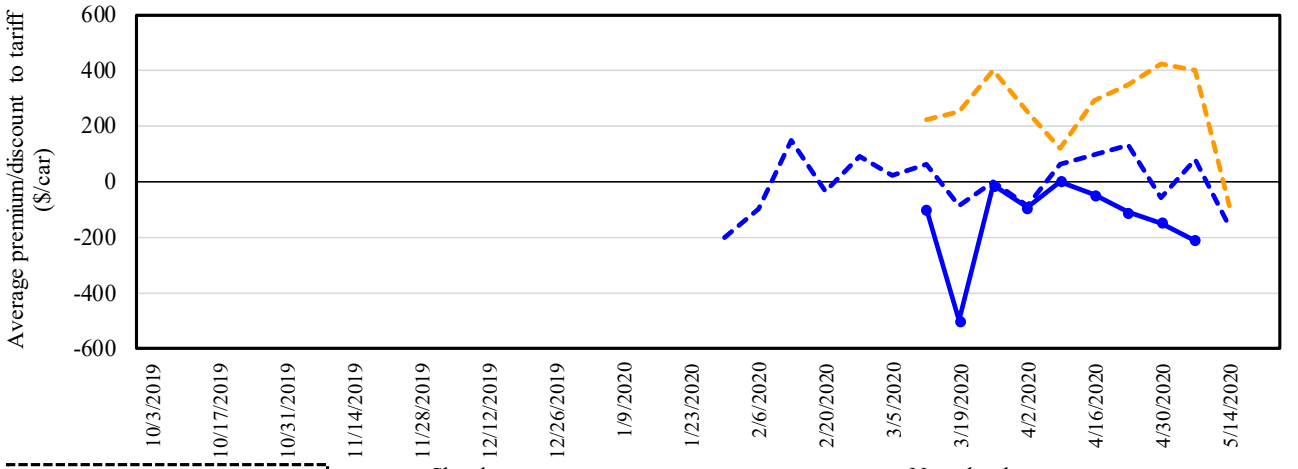
Region 1 includes: AR, IL, LA, MO, NM, OK, TX, WI, and Duluth, MN.

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

Source: USDA, Agricultural Marketing Service.

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

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

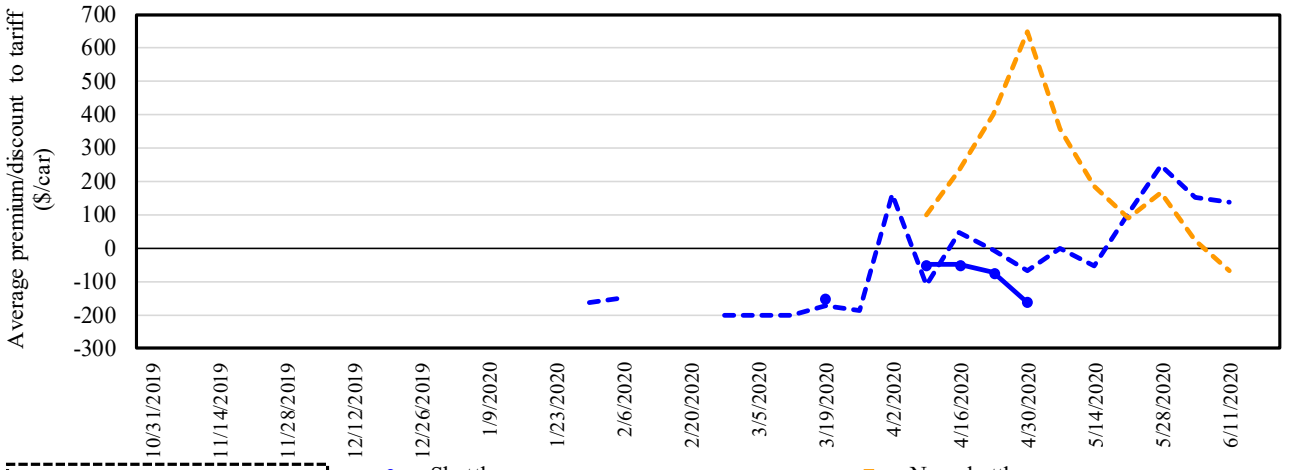


5/7/2020	BNSF	UP
Non-shuttle	n/a	n/a
Shuttle	-$300	-$125

There were no non-shuttle bids/offers this week.
Average shuttle bids/offers fell $64 this week and are $213 below the peak.

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

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



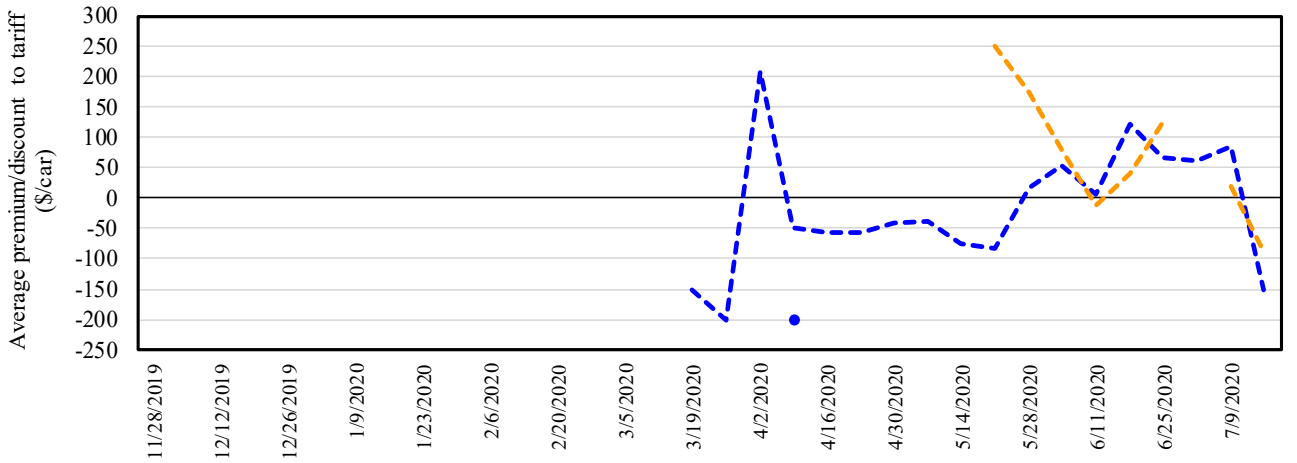
5/7/2020	BNSF	UP
Non-shuttle	n/a	n/a
Shuttle	n/a	n/a

There were no non-shuttle bids/offers this week.
There were no shuttle bids/offers this week.

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 July 2020, secondary market



5/7/2020	BNSF	UP
Non-shuttle	n/a	n/a
Shuttle	n/a	n/a

There were no non-shuttle bids/offers this week.
There were no shuttle bids/offers this week.

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: 5/7/2020	Delivery period					
		May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20
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)**	**n/a**	**n/a**	**n/a**	**n/a**	**225**
	Change from last week	(140)	n/a	n/a	n/a	n/a	n/a
	Change from same week 2019	(350)	n/a	n/a	n/a	n/a	n/a
	UP-Pool	**(125)**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**
	Change from last week	13	n/a	n/a	n/a	n/a	n/a
	Change from same week 2019	(192)	n/a	n/a	n/a	n/a	n/a

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

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

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

Source: USDA, Agricultural Marketing Service.

The **tariff rail rate** is the base price of freight rail service. Together with **fuel surcharges** and any **auction and secondary rail** values, the tariff rail rate constitutes the full cost of shipping by rail. Typically, auction and secondary rail values are a small fraction of the full cost of shipping by rail relative to the tariff rate. However, during times of high rail demand or short supply, high auction and secondary rail values can exceed the cost of the tariff rate plus fuel surcharge.

Table 7

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

May 2020	Origin region[3]	Destination region[3]	Tariff rate/car	Fuel surcharge per car	Tariff plus surcharge per: metric ton	Tariff plus surcharge per: bushel[2]	Percent change Y/Y[4]
Unit train							
Wheat	Wichita, KS	St. Louis, MO	$3,983	$66	$40.21	$1.09	-1
	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	1
	Wichita, KS	New Orleans, LA	$4,525	$116	$46.08	$1.25	-2
	Sioux Falls, SD	Galveston-Houston, TX	$6,976	$0	$69.28	$1.89	1
	Colby, KS	Galveston-Houston, TX	$4,801	$127	$48.93	$1.33	-2
	Amarillo, TX	Los Angeles, CA	$5,121	$176	$52.61	$1.43	-2
Corn	Champaign-Urbana, IL	New Orleans, LA	$3,900	$131	$40.03	$1.02	-4
	Toledo, OH	Raleigh, NC	$6,816	$0	$67.69	$1.72	4
	Des Moines, IA	Davenport, IA	$2,415	$28	$24.26	$0.62	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	$81	$38.54	$0.98	-3
	Des Moines, IA	Los Angeles, CA	$5,680	$237	$58.76	$1.49	-3
Soybeans	Minneapolis, MN	New Orleans, LA	$3,631	$112	$37.17	$1.01	-2
	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	$131	$47.43	$1.29	-3
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	2
	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	$208	$61.77	$1.68	0
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	$131	$39.23	$1.00	-1
	Lincoln, NE	Galveston-Houston, TX	$3,880	$0	$38.53	$0.98	0
	Des Moines, IA	Amarillo, TX	$4,220	$102	$42.92	$1.09	2
	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	$151	$49.91	$1.36	0
	Toledo, OH	Huntsville, AL	$4,805	$0	$47.72	$1.30	4
	Grand Island, NE	Portland, OR	$5,260	$213	$54.35	$1.48	-9

[1]A unit train refers to shipments of at least 25 cars. Shuttle train rates are generally available for qualified shipments of 75-120 cars that meet railroad efficiency requirements.

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

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

[4]Percentage change year over year (Y/Y) calculated using tariff rate plus fuel surcharge.

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

Table 8

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

Date: May 2020							
Commodity	Origin state	Destination region	Tariff rate per car[1]	Fuel surcharge per car[2]	Tariff rate plus fuel surcharge per: metric ton[3]	bushel[3]	Percent change[4] Y/Y
Wheat	MT	Chihuahua, CI	$7,509	$0	$76.72	$2.09	3
	OK	Cuautitlan, EM	$6,775	$91	$70.15	$1.91	0
	KS	Guadalajara, JA	$7,534	$380	$80.86	$2.20	2
	TX	Salinas Victoria, NL	$4,329	$55	$44.79	$1.22	-1
Corn	IA	Guadalajara, JA	$8,902	$329	$94.32	$2.39	4
	SD	Celaya, GJ	$8,140	$0	$83.17	$2.11	3
	NE	Queretaro, QA	$8,278	$185	$86.47	$2.19	0
	SD	Salinas Victoria, NL	$6,905	$0	$70.55	$1.79	0
	MO	Tlalnepantla, EM	$7,643	$180	$79.93	$2.03	0
	SD	Torreon, CU	$7,690	$0	$78.57	$1.99	3
Soybeans	MO	Bojay (Tula), HG	$8,547	$307	$90.46	$2.46	3
	NE	Guadalajara, JA	$9,172	$322	$97.00	$2.64	3
	IA	El Castillo, JA	$9,490	$0	$96.97	$2.64	4
	KS	Torreon, CU	$7,964	$224	$83.66	$2.27	3
Sorghum	NE	Celaya, GJ	$7,772	$292	$82.40	$2.09	3
	KS	Queretaro, QA	$8,108	$113	$84.00	$2.13	1
	NE	Salinas Victoria, NL	$6,713	$91	$69.51	$1.76	0
	NE	Torreon, CU	$7,092	$206	$74.57	$1.89	1

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

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

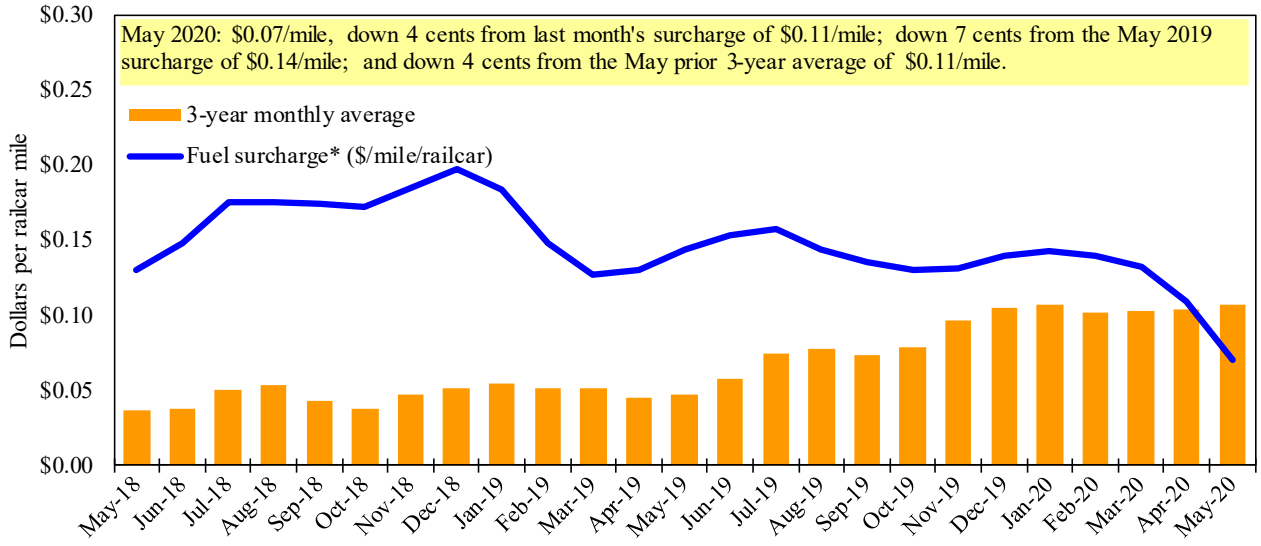
[3]Approximate load per car = 97.87 metric tons: Corn & Sorghum 56 lbs/bu, Wheat & Soybeans 60 lbs/bu.

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

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

Figure 7

Railroad fuel surcharges, North American weighted average[1]



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

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

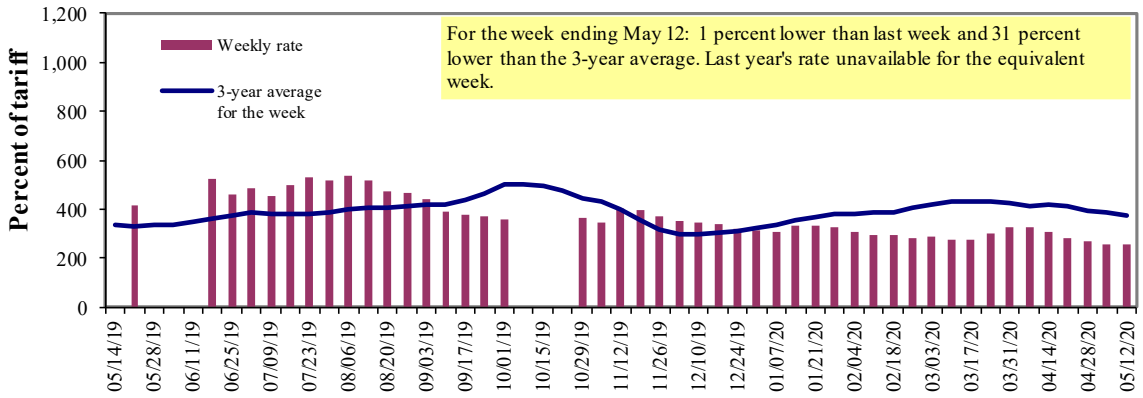
**CSX strike price changed from $2.00/gal. to $3.75/gal. starting January 1, 2015.

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

Barge Transportation

Figure 8

Illinois River barge freight rate[1,2]



[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]	5/12/2020	318	263	259	178	176	176	166
	5/5/2020	321	266	257	176	183	183	167
$/ton	5/12/2020	19.68	13.99	12.02	7.10	8.25	7.11	5.21
	5/5/2020	19.87	14.15	11.92	7.02	8.58	7.39	5.24
Current week % change from the same week:								
	Last year	-	-	-	-	-48	-48	-40
	3-year avg. [2]	-27	-30	-31	-35	-41	-41	-35
Rate[1]	May	318	263	261	179	183	183	173
	July	326	276	-	208	218	218	216

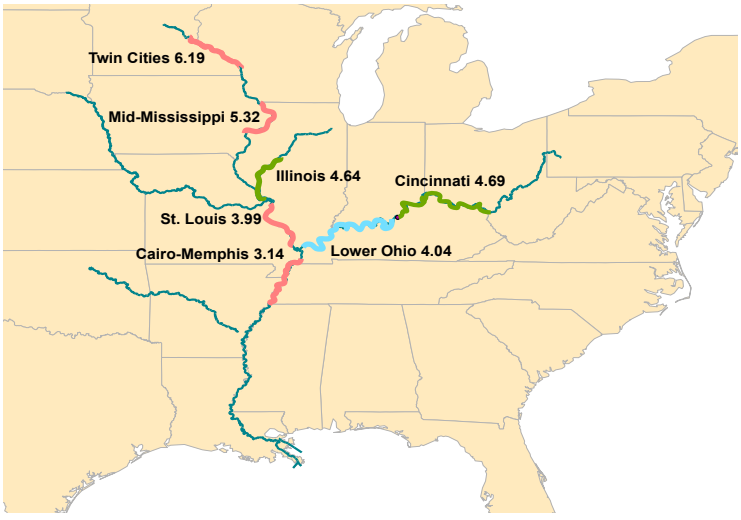
[1]Rate = percent of 1976 tariff benchmark index (1976 = 100 percent); [2]4-week moving average; ton = 2,000 pounds; "-" not available due to closure.

Source: USDA, Agricultural Marketing Service.

Figure 9
Benchmark tariff rates

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

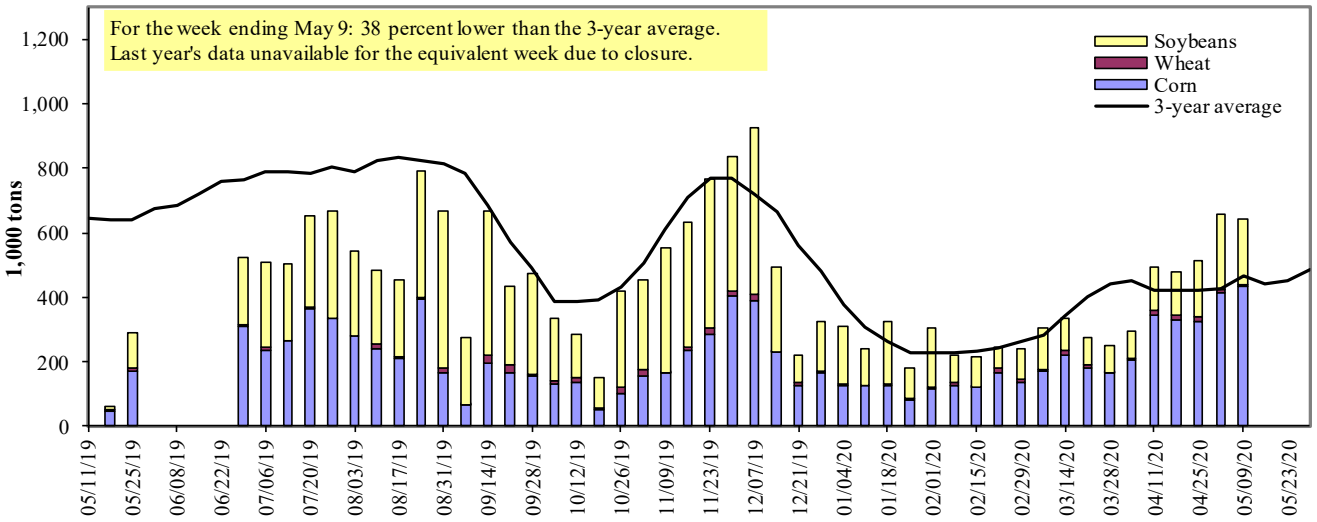
Select applicable index from market quotes are included in tables on this page. The 1976 benchmark rates per ton are provided in map.



Map Credit: USDA, Agricultural Marketing Service

Figure 10

Barge movements on the Mississippi River[1] (Locks 27 - Granite City, IL)



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

Source: U.S. Army Corps of Engineers.

Table 10

Barge grain movements (1,000 tons)

For the week ending 05/09/2020	Corn	Wheat	Soybeans	Other	Total
Mississippi River					
Rock Island, IL (L15)	136	6	81	11	234
Winfield, MO (L25)	247	2	129	8	385
Alton, IL (L26)	420	5	192	11	627
Granite City, IL (L27)	436	5	201	11	653
Illinois River (La Grange)	90	5	57	0	151
Ohio River (Olmsted)	75	2	25	0	101
Arkansas River (L1)	0	27	13	0	39
Weekly total - 2020	511	33	238	11	793
Weekly total - 2019	223	27	111	9	370
2020 YTD[1]	5,779	591	4,138	41	10,548
2019 YTD[1]	4,544	829	3,398	60	8,830
2020 as % of 2019 YTD	127	71	122	67	119
Last 4 weeks as % of 2019[2]	163	88	202	146	168
Total 2019	12,780	1,631	14,683	154	29,247

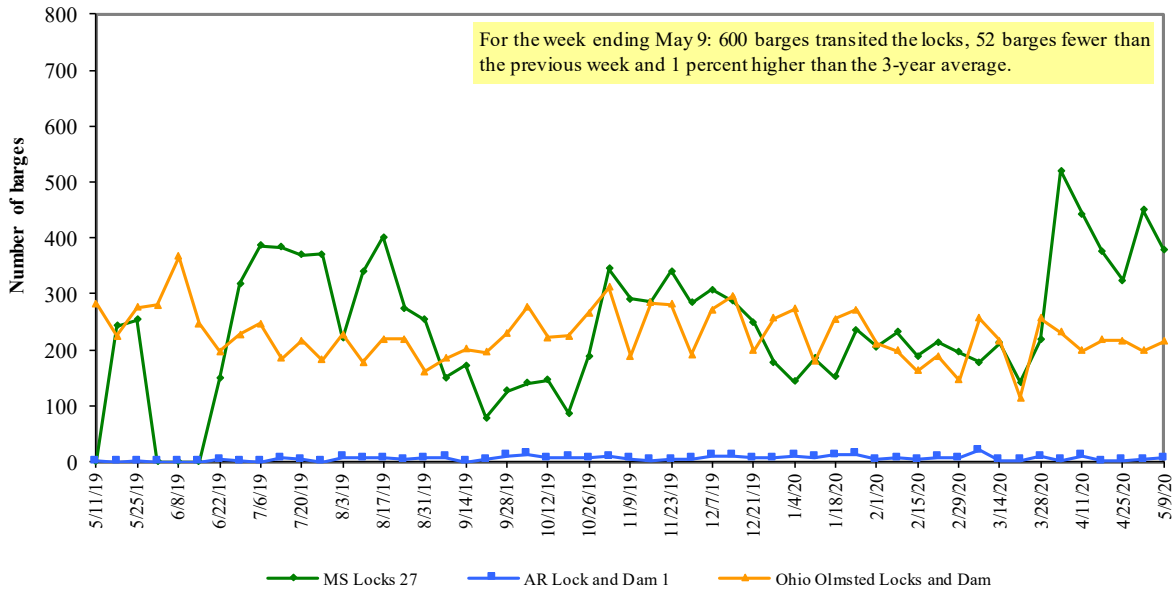
[1] Weekly total, YTD (year-to-date), and calendar year total include MS/27, OH/Olmsted, and AR/1; Other refers to oats, barley, sorghum, and rye. L (as in "L15") refers to a lock or lock and dam facility. Olmsted = Olmsted Locks and Dam. La Grange = La Grange Lock and Dam.

[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

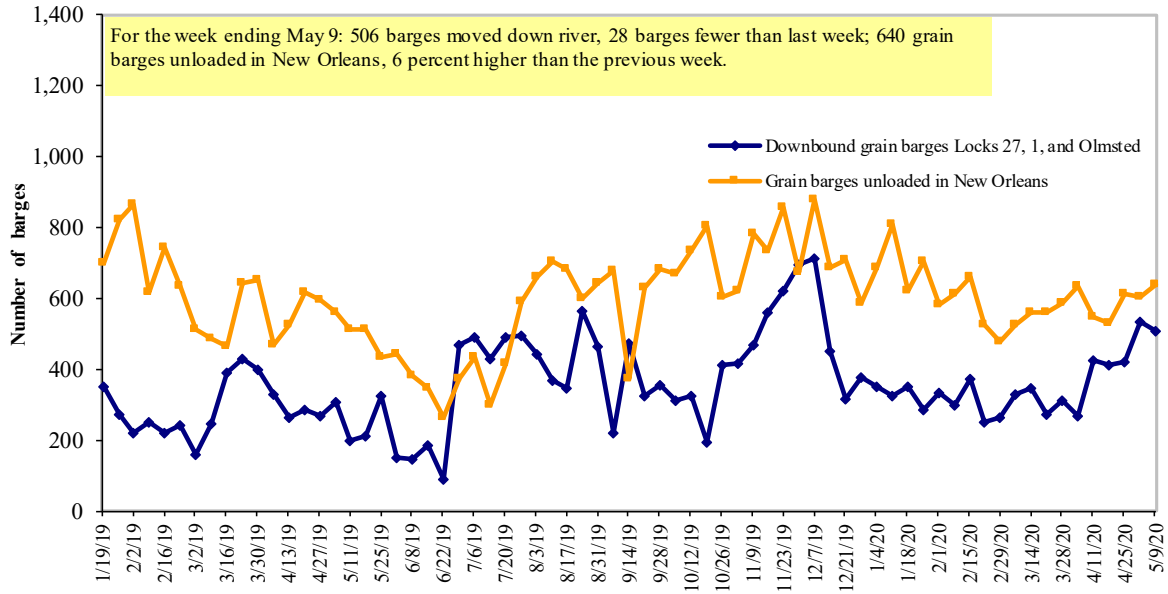
Upbound empty barges transiting Mississippi River Locks 27, Arkansas River Lock and Dam 1, and Ohio River Olmsted Locks and Dam



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 5/11/2020 (U.S. $/gallon)

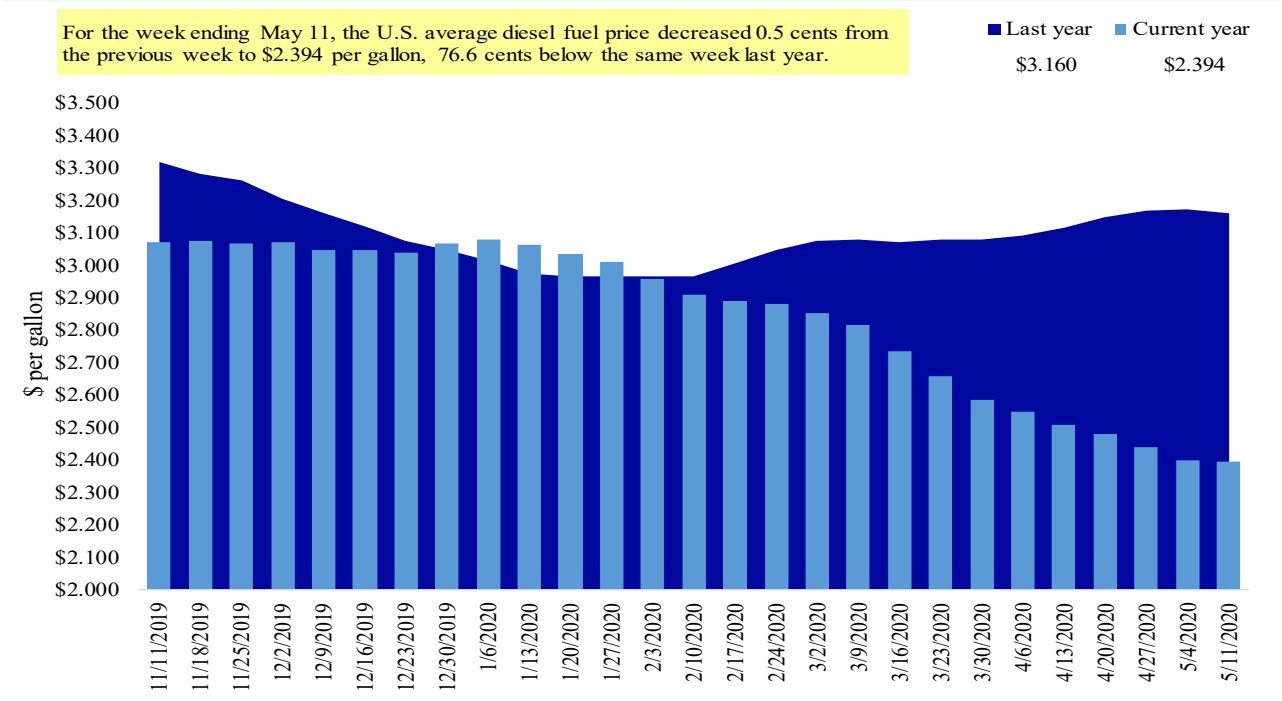
Region	Location	Price	Change from Week ago	Change from Year ago
I	East Coast	2.498	-0.012	-0.678
	New England	2.630	-0.022	-0.608
	Central Atlantic	2.680	-0.008	-0.685
	Lower Atlantic	2.348	-0.012	-0.687
II	Midwest	2.240	-0.008	-0.806
III	Gulf Coast	2.178	0.009	-0.727
IV	Rocky Mountain	2.346	-0.024	-0.835
V	West Coast	2.900	0.001	-0.890
	West Coast less California	2.557	0.012	-0.798
	California	3.182	-0.009	-0.954
Total	United States	2.394	-0.005	-0.766

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

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

Figure 13

Weekly diesel fuel prices, U.S. average



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

Grain Exports

Table 12

U.S. export balances and cumulative exports (1,000 metric tons)

	Wheat						Corn	Soybeans	Total
For the week ending	HRW	SRW	HRS	SWW	DUR	All wheat			
Export balances[1]									
4/30/2020	1,411	173	1,244	832	90	3,750	13,419	5,520	22,689
This week year ago	1,954	651	837	736	59	4,237	10,328	12,118	26,684
Cumulative exports-marketing year[2]									
2019/20 YTD	8,463	2,225	6,496	4,391	851	22,427	24,102	34,186	80,714
2018/19 YTD	7,335	2,730	6,144	4,658	448	21,315	36,017	32,748	90,080
YTD 2019/20 as % of 2018/19	115	82	106	94	190	105	67	104	90
Last 4 wks. as % of same period 2018/19*	74	35	137	109	282	90	125	40	81
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 importers[1] of U.S. corn

For the week ending 4/30/2020	Total commitments[2] 2019/20 current MY	2018/19 last MY*	% change current MY from last MY	Exports[3] 3-yr. avg. 2016-18
	- 1,000 mt -			
Mexico	12,943	14,709	(12)	14,659
Japan	8,134	10,404	(22)	11,955
Korea	1,968	3,695	(47)	4,977
Colombia	3,637	4,051	(10)	4,692
Peru	86	1,992	(96)	2,808
Top 5 importers	**26,767**	**34,850**	**(23)**	**39,091**
Total U.S. corn export sales	**37,521**	**46,345**	**(19)**	**54,024**
% of projected exports	69%	88%		
Change from prior week[2]	**775**	**288**		
Top 5 importers' share of U.S. corn export sales	71%	75%		72%
USDA forecast May 2020	**54,707**	**52,545**	**4**	
Corn use for ethanol USDA forecast, May 2020	**132,080**	**136,601**	**(3)**	

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

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

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

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

Source: USDA, Foreign Agricultural Service.

Table 14

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

For the week ending 4/30/2020	Total commitments[2] 2019/20 current MY	Total commitments[2] 2018/19 last MY*	% change current MY from last MY	Exports[3] 3-yr. avg. 2016-18
	- 1,000 mt -			- 1,000 mt -
China	13,540	13,271	2	25,733
Mexico	4,217	4,688	(10)	4,271
Indonesia	1,700	1,807	(6)	2,386
Japan	2,137	2,175	(2)	2,243
Egypt	2,750	2,354	17	1,983
Top 5 importers	**24,345**	**24,296**	**0**	**36,616**
Total U.S. soybean export sales	**39,706**	**44,866**	**(12)**	**53,746**
% of projected exports	71%	94%		
change from prior week[2]	**653**	**(207)**		
Top 5 importers' share of U.S. soybean export sales	61%	54%		**68%**
USDA forecast, May 2020	**55,858**	**47,629**	**117**	

[1]Based on USDA, Foreign Agricultural Service (FAS) marketing year ranking reports for 2018/19; marketing year (MY) = Sep 1 - Aug 31.
[2]Cumulative exports (shipped) + outstanding sales (unshipped), FAS weekly export sales report, or export sales query. The total commitments change (net sales) from prior week could include revisions from previous week's outstanding sales and/or accumulated sales.
[3]FAS marketing year ranking reports (carryover plus accumulated export); yr. = year; avg. = average.
Note: A red number in parentheses indicates a negative number; mt = metric ton.
Source: USDA, Foreign Agricultural Service.

Table 15

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

For the week ending 4/30/2020	Total commitments[2] 2019/20 current MY	Total commitments[2] 2018/19 last MY*	% change current MY from last MY	Exports[3] 3-yr. avg. 2016-18
	- 1,000 mt -			- 1,000 mt -
Philippines	3,454	3,158	9	3,047
Mexico	3,811	3,288	16	3,034
Japan	2,745	2,742	0	2,695
Nigeria	1,568	1,631	(4)	1,564
Indonesia	1,066	1,332	(20)	1,381
Korea	1,615	1,584	2	1,355
Taiwan	1,442	1,107	30	1,164
Egypt	101	815	(88)	821
Thailand	876	747	17	747
Iraq	262	616	(57)	574
Top 10 importers	**16,941**	**17,019**	(0)	**16,382**
Total U.S. wheat export sales	**26,177**	**25,552**	**2**	**24,388**
% of projected exports	101%	100%		
change from prior week[2]	**245**	**91**		
Top 10 importers' share of U.S. wheat export sales	65%	67%		67%
USDA forecast, May 2020	**25,886**	**25,504**	**1**	

[1] Based on USDA, Foreign Agricultural Service(FAS) marketing year ranking reports for 2018/19; Marketing year (MY) = Jun 1 - May 31.
[2] Cumulative exports (shipped) + outstanding sales (unshipped), FAS weekly export sales report, or export sales query. The total commitments change (net sales) from prior week could include revisions from the previous week's outstanding and/or accumulated sales.
[3] FAS marketing year final reports (carryover plus accumulated export); yr. = year; avg. = average.
Note: A red number in parentheses indicates a negative number.
Source: USDA, Foreign Agricultural Service.

Table 16

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

Port regions	For the week ending 05/07/20	Previous week*	Current week as % of previous	2020 YTD*	2019 YTD*	2020 YTD as % of 2019 YTD	Last 4-weeks as % of: Last year	Last 4-weeks as % of: Prior 3-yr. avg.	2019 total*
Pacific Northwest									
Wheat	232	363	64	5,638	5,213	108	79	88	13,961
Corn	365	311	117	2,979	5,007	59	69	64	7,047
Soybeans	96	144	67	2,664	4,018	66	648	140	11,969
Total	**693**	**818**	**85**	**11,281**	**14,238**	**79**	**87**	**81**	**32,977**
Mississippi Gulf									
Wheat	33	93	35	1,377	2,031	68	57	73	4,448
Corn	726	729	100	10,518	10,084	104	111	93	20,763
Soybeans	294	108	272	8,710	9,318	93	81	92	31,398
Total	**1,053**	**930**	**113**	**20,605**	**21,433**	**96**	**93**	**91**	**56,609**
Texas Gulf									
Wheat	63	95	66	1,311	2,395	55	32	43	6,009
Corn	0	65	0	278	272	102	116	184	640
Soybeans	0	0	n/a	7	0	n/a	n/a	n/a	2
Total	**63**	**160**	**39**	**1,596**	**2,667**	**60**	**42**	**58**	**6,650**
Interior									
Wheat	31	49	63	871	601	145	109	129	1,987
Corn	220	212	103	2,880	2,598	111	106	89	7,857
Soybeans	125	133	93	2,515	2,442	103	76	85	7,043
Total	**375**	**395**	**95**	**6,266**	**5,642**	**111**	**93**	**91**	**16,887**
Great Lakes									
Wheat	0	20	0	130	168	77	102	112	1,339
Corn	0	0	n/a	0	0	n/a	n/a	0	11
Soybeans	0	0	n/a	8	43	20	n/a	96	493
Total	**0**	**20**	**0**	**138**	**210**	**66**	**109**	**81**	**1,844**
Atlantic									
Wheat	0	0	n/a	1	32	4	n/a	0	37
Corn	0	8	0	8	56	14	57	47	99
Soybeans	7	15	47	353	507	70	50	29	1,353
Total	**7**	**23**	**30**	**362**	**596**	**61**	**51**	**31**	**1,489**
U.S. total from ports*									
Wheat	358	619	58	9,328	10,440	89	67	80	27,781
Corn	1,311	1,325	99	16,663	18,017	92	96	83	36,417
Soybeans	522	401	130	14,257	16,329	87	97	93	52,258
Total	**2,192**	**2,345**	**93**	**40,247**	**44,786**	**90**	**87**	**85**	**116,457**

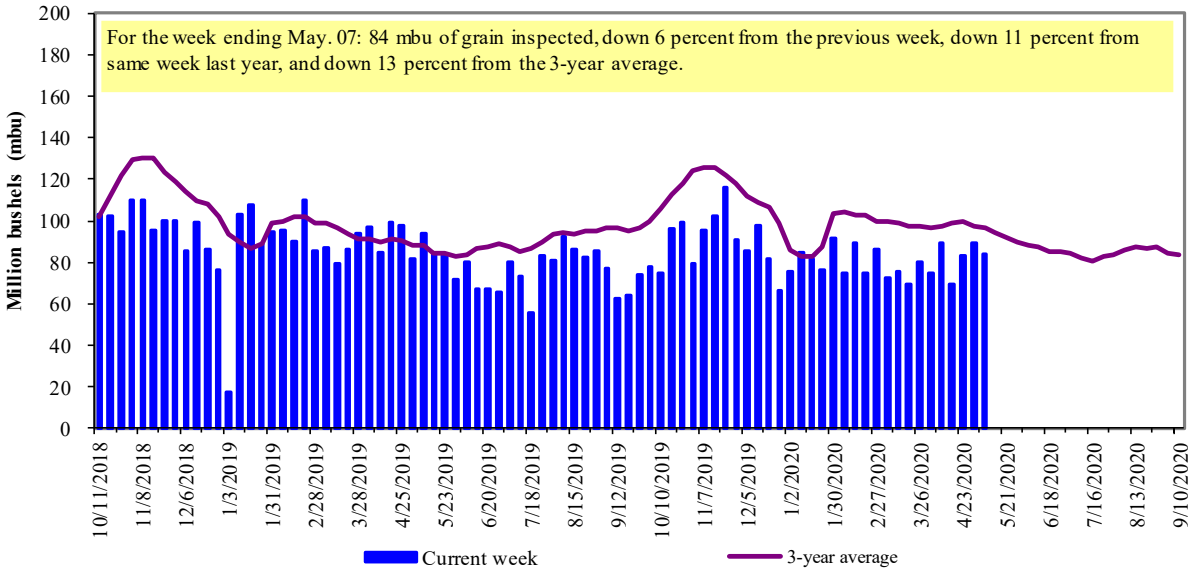
*Data includes revisions from prior weeks; some regional totals may not add exactly due to rounding.

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)

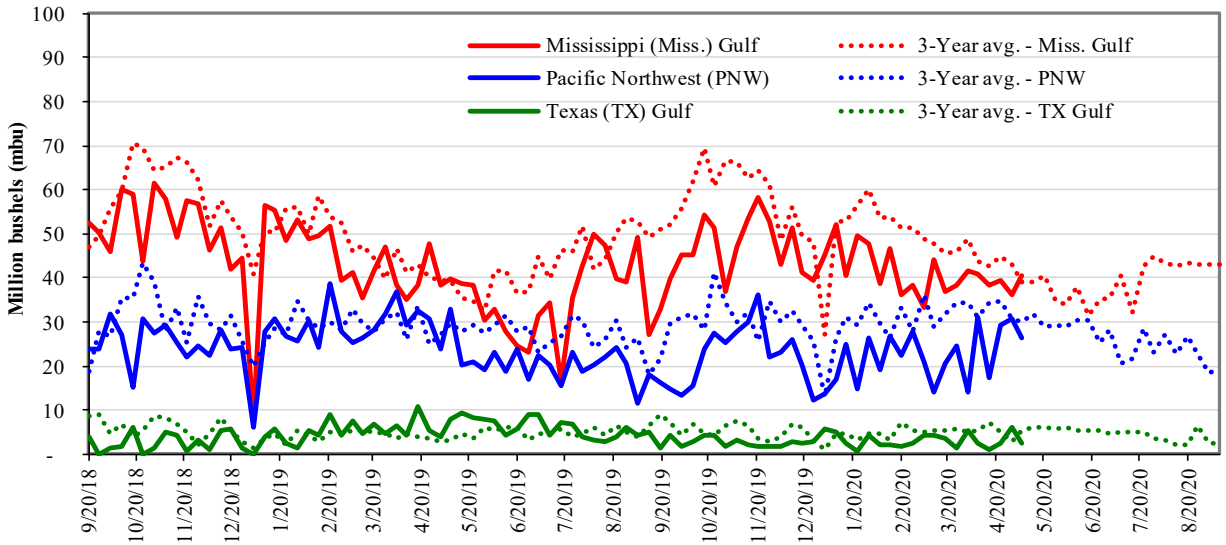


Note: 3-year average consists of 4-week running average.

Source: USDA, Federal Grain Inspection Service.

Figure 15

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



Week ending 05/07/20 inspections (mbu):	
MS Gulf:	40.6
PNW:	26.4
TX Gulf:	2.3

Percent change from:	MS Gulf	TX Gulf	U.S. Gulf	PNW
Last wk:	up 13	down 62	up 2	down 14
Last Year (same wk):	up 2	down 71	down 10	down 20
3-yr avg. (4-wk. mov. Avg):	down 4	down 54	down 10	down 18

Source: USDA, Federal Grain Inspection Service.

Table 17

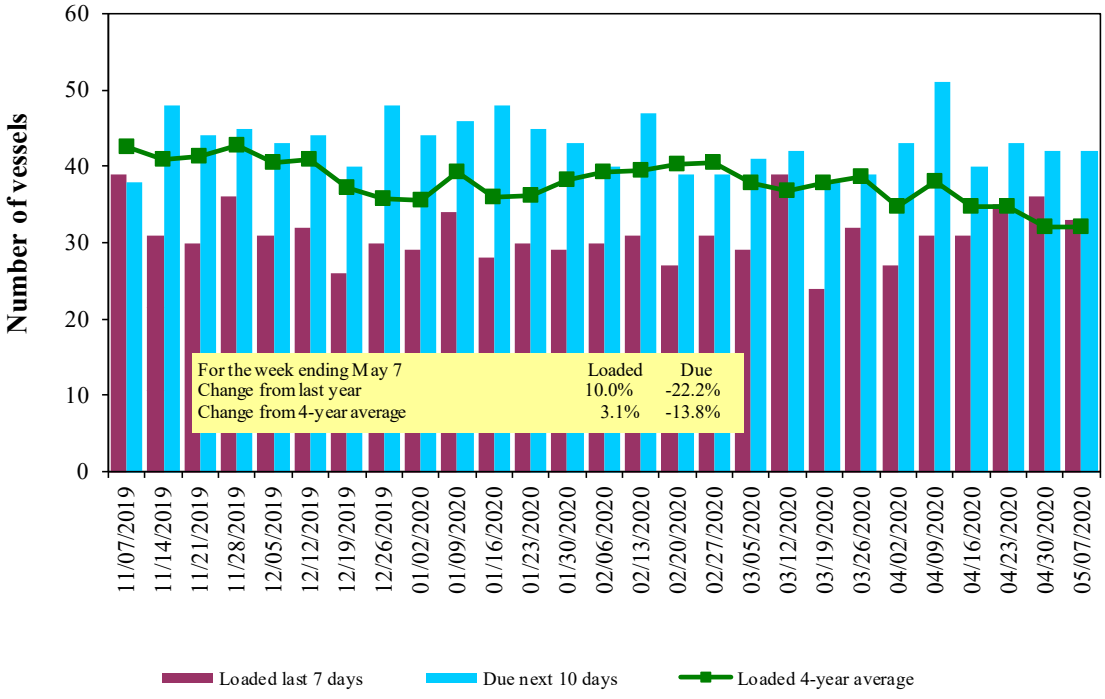
Weekly port region grain ocean vessel activity (number of vessels)

	Gulf			Pacific Northwest
Date	In port	Loaded 7-days	Due next 10-days	In port
5/7/2020	22	33	42	15
4/30/2020	25	36	42	16
2019 range	(26…61)	(18...44)	(33...69)	(8...33)
2019 average	40	31	49	17

Source: USDA, Agricultural Marketing Service.

Figure 16

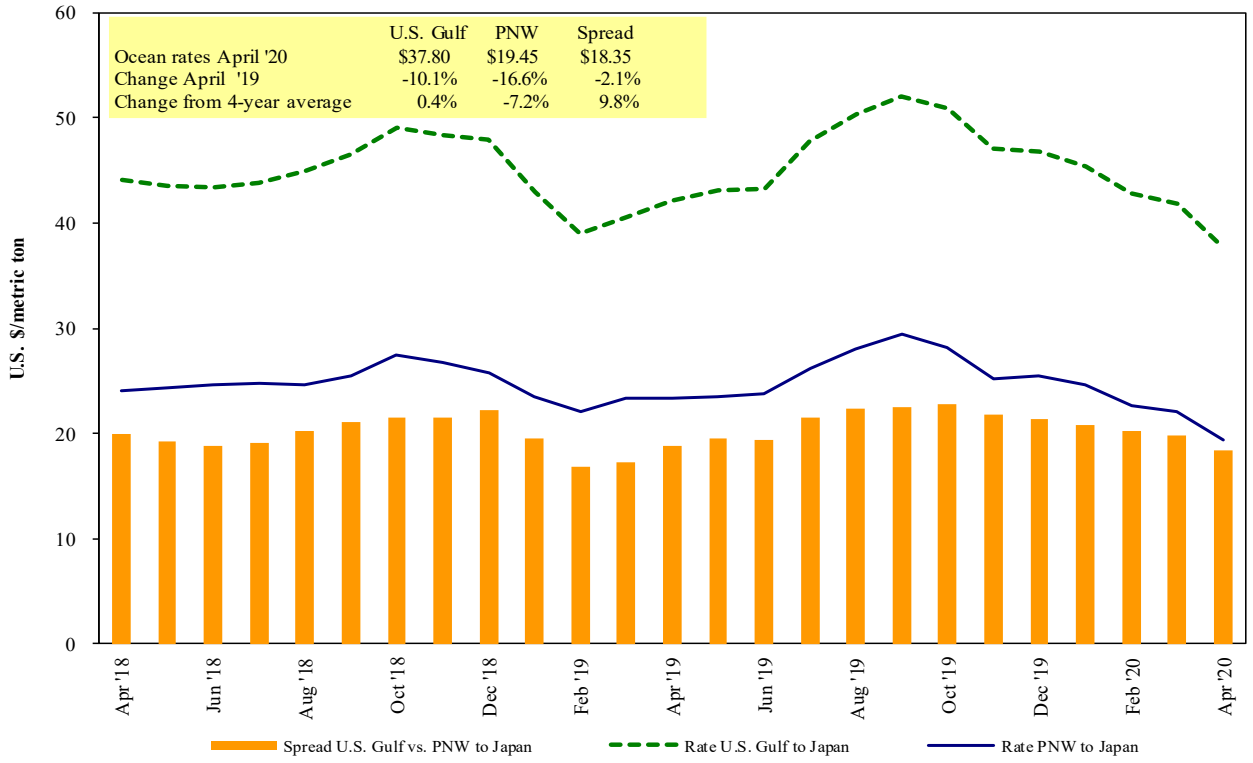
U.S. Gulf[1] vessel loading activity



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

Figure 17

Grain vessel rates, U.S. to Japan



Note: PNW = Pacific Northwest.

Source: O'Neil Commodity Consulting.

Table 18

Ocean freight rates for selected shipments, week ending 05/09/2020

Export region	Import region	Grain types	Loading date	Volume loads (metric tons)	Freight rate (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	China	Heavy grain	Jan 25/30	65,000	46.50
U.S. Gulf	Rotterdam	Heavy grain	Feb 5/11	55,000	19.50
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
PNW	China	Heavy grain	Jan 22/26	63,000	23.00
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	China	Heavy grain	Feb 12/21	65,000	34.50
Brazil	China	Heavy grain	Feb 18/27	60,000	34.00

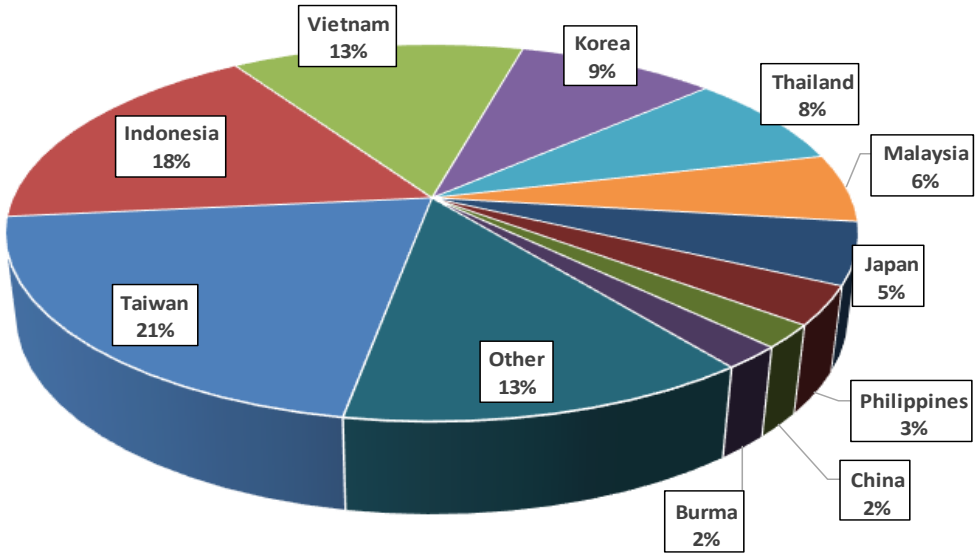
*50 percent of food aid from the United States is required to be shipped on U.S.-flag vessels.

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

Source: Maritime Research, Inc.

In 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.

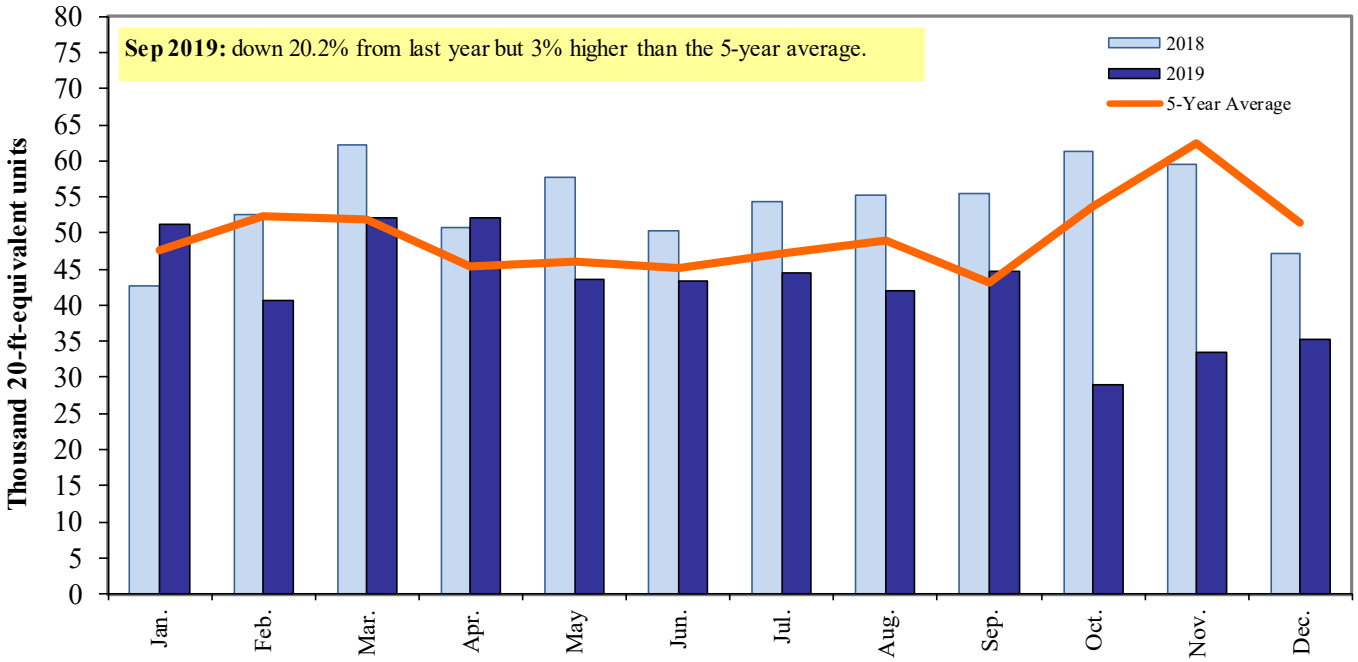
Figure 18
Top 10 destination markets for U.S. containerized grain exports, 2019



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.

Contacts and Links

Coordinators		
Surajudeen (Deen) Olowolayemo	surajudeen.olowolayemo@usda.gov	(202) 720 - 0119
Maria Williams	maria.williams@usda.gov	(202) 690 - 4430
Bernadette Winston	bernadette.winston@usda.gov	(202) 690 - 0487
Grain Transportation Indicators		
Surajudeen (Deen) Olowolayemo	surajudeen.olowolayemo@usda.gov	(202) 720 - 0119
Rail Transportation		
Johnny Hill	johnny.hill@usda.gov	(202) 690 - 3295
Jesse Gastelle	jesse.gastelle@usda.gov	(202) 690 - 1144
Peter Caffarelli	petera.caffarelli@usda.gov	(202) 690 - 3244
Barge Transportation		
April Taylor	april.taylor@usda.gov	(202) 720 - 7880
Kelly P. Nelson	kelly.nelson@usda.gov	(202) 690 - 0992
Bernadette Winston	bernadette.winston@usda.gov	(202) 690 - 0487
Truck Transportation		
April Taylor	april.taylor@usda.gov	(202) 720 - 7880
Grain Exports		
Johnny Hill	johnny.hill@usda.gov	(202) 690 - 3295
Kranti Mulik	kranti.mulik@usda.gov	(202) 756 - 2577
Ocean Transportation		
Surajudeen (Deen) Olowolayemo (Freight rates and vessels)	surajudeen.olowolayemo@usda.gov	(202) 720 - 0119
April Taylor (Container movements)	april.taylor@usda.gov	(202) 720 - 7880
Editor		
Maria Williams	maria.williams@usda.gov	(202) 690-4430

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