United States Department of Agriculture

Grain Transportation Report

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

Contact Us

April 29, 2021

Contents

The next release is May 6, 2021

WEEKLY HIGHLIGHTS

South American Drought Causes Concern for Barge Transportation

Over the last several weeks, drought-driven declines in water levels of the rivers of Argentina, Brazil, and Paraguay have forced barges to lower their capacities to avoid grounding. These lighter barge loads have slowed the flow of corn, soybeans, soybean meal, and soybean oil to key export locations. In Paraguay, parts of the Paraná River (a major artery for soybean transport) have been closed to barge navigation since the beginning of April. According to Bloomberg, free-on-board corn export prices in Argentina and Brazil for spot, 30 days forward, and 60 days forward are being quoted at record highs. Argentina and landlocked Paraguay depend more on barge than Brazil, which mostly relies on rail and truck for agricultural transportation. Supply disruptions from these key South American sources could shift global buyers to pull from U.S. stocks instead.

USACE Seeks Comments on Guidance for Implementing Water Resources Development Act 2020

The U.S. Army Corps of Engineers (USACE) is currently accepting stakeholder comments on implementation guidance for the Water Resources Development Act (WRDA) 2020. The public is encouraged to submit comments through the Federal e-rulemaking portal before May 7. WRDA 2020 included key provisions to invest in U.S. ports, harbors, and inland waterways; build more resilient communities; and ensure that USACE carries out projects in an economically and environmentally responsible manner.

Corn Inspections Increase Sharply

For the week ending April 22, **total inspections of grain** (corn, wheat, and soybeans) for export from all major U.S. export regions totaled 2.8 million metric tons (mmt). Total grain inspections were up 14 percent from the previous week, up 28 percent from last year, and up 16 percent from the 3-year average. The increase in inspections reflected a 25-percent jump in corn inspections and a 5-percent increase in soybean inspections. Inspections destined to Asia accounted for most of the corn increase. Corn accounted for about 70 percent of total grain inspections for the week. Inspections of wheat, however, were down 10 percent from the previous week. Pacific Northwest (PNW) grain inspections rose 21 percent from the past week, and Mississippi Gulf inspections rose 23 percent.

Snapshots by Sector

Export Sales

For the week ending April 15, **unshipped balances** of wheat, corn, and soybeans totaled 36.9 mmt. This was 4 percent lower than last week, but 64 percent higher than the same time last year. Net **corn export sales** were 0.387 mmt, up 18 percent from the past week. Net **soybean export sales** were 0.064 mmt, down 29 percent from the previous week. Net **wheat export sales** were 0.240 mmt, significantly down from the previous week.

Rail

U.S. Class I railroads originated 26,236 **grain carloads** during the week ending April 17. This was an 8-percent increase from the previous week, 27 percent more than last year, and 16 percent more than the 3-year average.

Average May shuttle **secondary railcar** bids/offers (per car) were $38 above tariff for the week ending April 22. This was $54 less than last week and $148 more than this week last year. There were no non-shuttle bids/offers this week.

Barge

For the week ending April 24, **barge grain movements** totaled 957,500 tons. This was 20 percent higher than the previous week and 45 percent higher than the same period last year.

For the week ending April 24, 597 grain barges **moved down river**—92 barges more than the previous week. There were 729 grain barges **unloaded in New Orleans**, 16 percent more than the previous week.

Ocean

For the week ending April 22, 32 **oceangoing grain vessels** were loaded in the Gulf—9 percent less than the same period last year. Within the next 10 days (starting April 23, 2021), 41 vessels were expected to be loaded—5 percent less than the same period last year.

As of April 22, the rate for shipping a metric ton of grain from the U.S. Gulf to Japan was $62.50. This was 8 percent more than the previous week. The rate from PNW to Japan was $36.50 per metric ton, 7 percent more than the previous week.

Fuel

For the week ending April 26, the U.S. average **diesel fuel price** was unchanged from the previous week at $3.124 per gallon, 68.7 cents above the same week last year.

Preferred citation: U.S. Department of Agriculture, Agricultural Marketing Service. *Grain Transportation Report.* April 29, 2021.
Web: **http://dx.doi.org/10.9752/TS056.04-29-2021**

Feature Article/Calendar

The following list contains information and links to upcoming events in 2021.

Date	Event	Format	Website for More Information
May 10-14	**AASHTO Spring Meeting and Council on Water Transportation** The American Association of State Highway and Transportation Officials (AASHTO) spring meeting focuses on two themes: the value of transportation and transportation workforce challenges.	Online	http://www.aashtospringmeeting.org/
May 15-19	**2021 American Trucking Association (ATA) Midyear Management Session** ATA will host its 2021 midyear management session in San Antonio, TX. The session convenes attendees to discuss ATA's strategic priorities, as well as challenges affecting their businesses and workforce.	In-person	https://mymgmt.trucking.org/
May 18-20	**The American Waterways Operators (AWO) Spring Convention** At AWO's spring convention, "Barge-In," and annual membership meeting, AWO members will have the opportunity to educate key lawmakers and their staff on issues critical to the industry.	Online	https://www.americanwaterways.com/bargein2021
May 24-28	**FreightweekSTL 2021** Offered in partnership with the Inland Marine Expo, this annual event provides an opportunity for industry leaders, freight and logistics experts, international shippers, carriers, and others to discuss transportation as it relates to infrastructure, global trade, and the regional economy.	Online	https://freightweekstl.thefreightway.com/
May 25-26	**JOC Breakbulk and Project Cargo Conference** This *Journal of Commerce* (JOC) event aims to provide information to cargo owners on such topics as changing market conditions, regulatory policies, and logistics.	Online	https://events.joc.com/breakbulk/index.html
June 2-4	**National Grain and Feed Association (NGFA) 125th Annual Convention** NGFA will host a hybrid (in-person and virtual) anual meeting in Colorado Springs, CO. The convention will focus on enhancing the growth and economic performance of U.S. agriculture in a global, open-market environment.	Online and In-person	https://imis.ngfa.org/convention
June 8-9	**IGC 2021 Grain Conference** The conference will cover current issues affecting grains trade, including strategic risks for global markets, climate change, trade finance, and the latest grains, oilseeds and rice market developments. Two special sessions will address potential business developments in South East Asia and in Central America.	Online	https://www.world-grain.com/events/175-igc-grain-conference-2021-virtual
June 22-24	**2021 Pacific Northwestern Waterways Association (PNWA) Summer Conference** PNWA's summer conference provides a midyear opportunity for PNWA members and colleagues to discuss Pacific Northwest navigation, energy, trade, and economic development issues. Registration opens in April.	In-person	https://www.pnwa.net/events/2021-pnwa-summer-conference/
July 12-13	**Midwest Association of Rail Shippers (MARS) 2021 Summer Meeting** MARS will hold its summer meeting in Lake Geneva, WI. The meeting provides an open forum for resolving transportation and car supply issues. Presentations share information on railroad operating practices, freight car supply, new innovations in transportation, and legislative matters.	In-person	https://www.mwrailshippers.com/event/2021-summer-meeting/
Aug. 26-27	**STB National Grain Car Council and TEGMA Fall Symposium** The Surface Transportation Board's (STB) annual meeting of the National Grain Car Council in Kansas City, MO, will discuss railroads' preparedness for the upcoming harvest. In conjunction with STB's meeting, the Transportation, Elevator and Grain Merchants Association (TEGMA) holds its annual meeting to discuss operational and business issues.	In-person	https://www.tegma.org/2021-fall-symposium
Sep. 13-17	**FTR Transportation Conference 2021** FTR will hold its 2021 annual conference in-person in Indianapolis, IN, over 4 days. Sessions will cover topics in rail, trucking, and intermodal shipping. The impact of the pandemic on future freight movements will also be discussed.	In-person	https://www.ftrconference.com/
Sep. 21-23	**TRB: Innovations in Freight Data Workshop** The Transportation Research Board (TRB) aims to bring together a broad community of data users and providers. Discussion topics will include recent and emerging data sources, as well as data users' experience with freight data for private- and public-sector decision making, and other topics.	Online	https://www.trb.org/Calendar/Blurbs/810583.aspx

Grain Transportation Indicators

Table 1
Grain transport cost indicators[1]

	Truck	Rail		Barge	Ocean	
For the week ending		Non-Shuttle	Shuttle		Gulf	Pacific
04/28/21	210	295	222	192	280	259
04/21/21	210	295	224	192	259	241

[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.

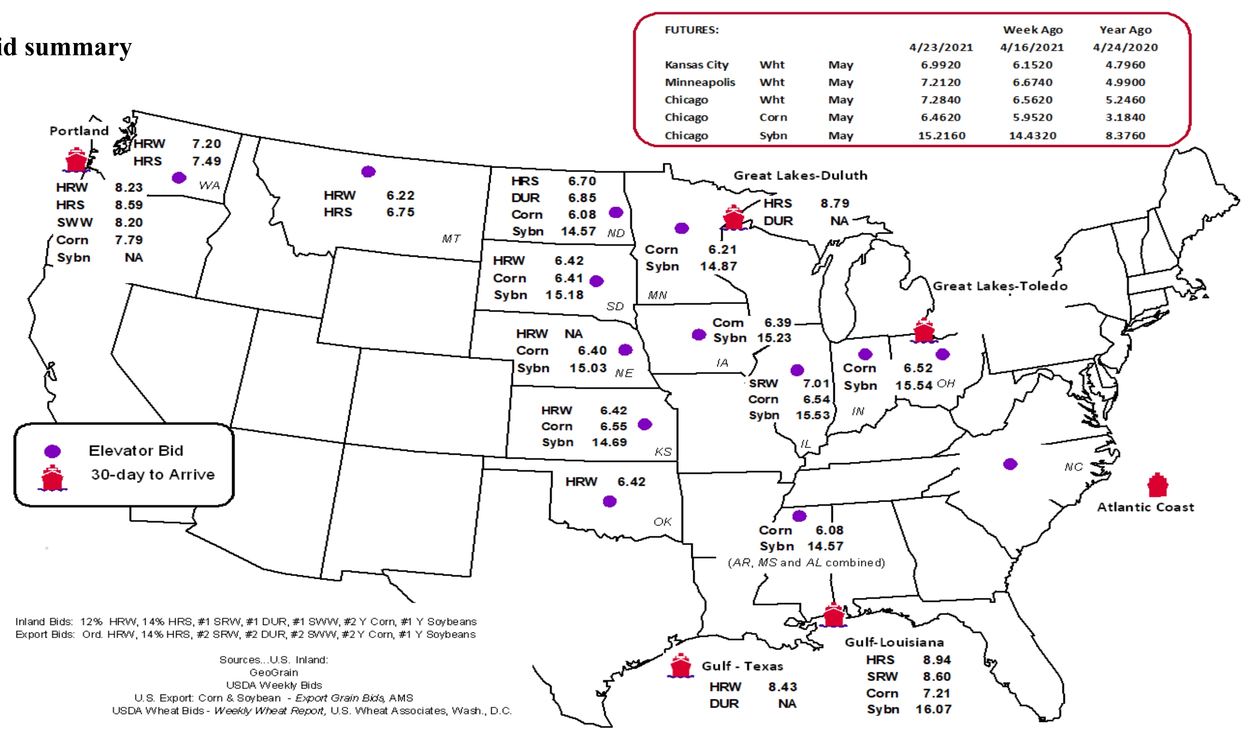
Table 2
Market Update: U.S. origins to export position price spreads ($/bushel)

Commodity	Origin–destination	4/23/2021	4/16/2021
Corn	IL–Gulf	-0.67	-0.67
Corn	NE–Gulf	-0.81	-0.77
Soybean	IA–Gulf	-0.84	-0.80
HRW	KS–Gulf	-2.01	-1.92
HRS	ND–Portland	-1.89	-1.89

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]
4/21/2021[p]	1,151	870	6,364	216	8,601	4/17/2021	3,173
4/14/2021[r]	1,404	2,026	6,181	223	9,834	4/10/2021	3,235
2021 YTD[r]	28,048	27,402	107,203	9,122	171,775	2021 YTD	40,931
2020 YTD[r]	6,152	10,608	69,333	3,262	89,355	2020 YTD	38,413
2021 YTD as % of 2020 YTD	456	258	155	280	192	% change YTD	107
Last 4 weeks as % of 2020[2]	258	213	124	140	146	Last 4wks. % 2020	120
Last 4 weeks as % of 4-year avg.[2]	261	113	104	68	115	Last 4wks. % 4 yr.	136
Total 2020	45,294	64,116	299,882	24,458	433,750	Total 2020	126,407
Total 2019	40,974	51,167	251,181	16,192	359,514	Total 2019	127,622

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

[2] Compared with same 4-weeks in 2020 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.

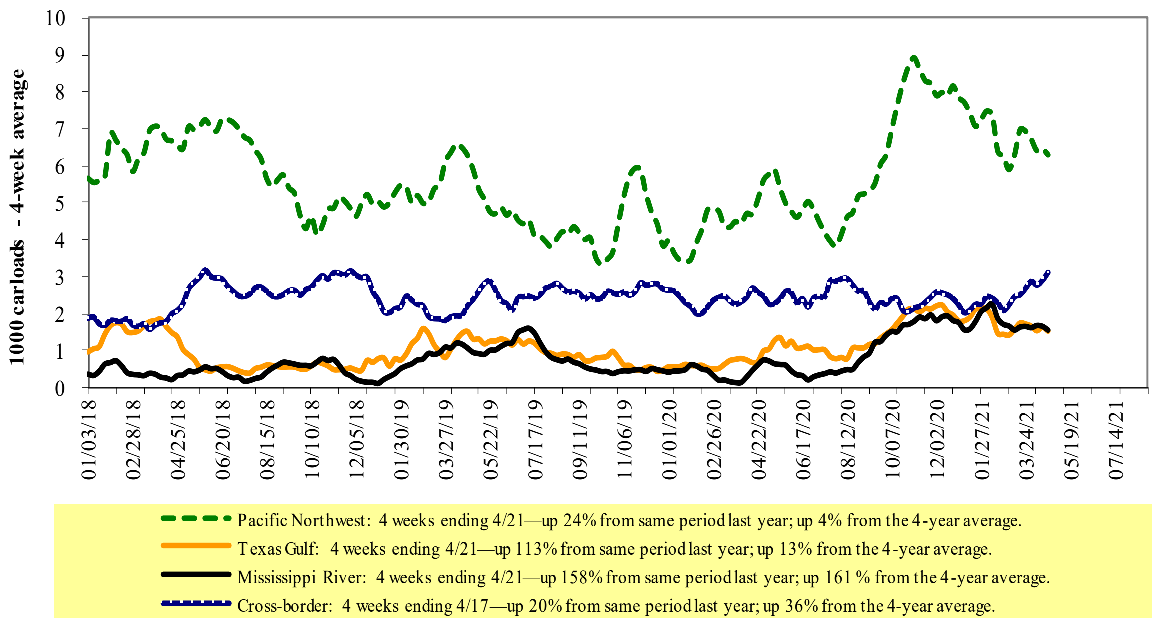
YTD = year-to-date; p = preliminary data; r = revised data; n/a = not available; wks. = weeks; avg. = average.

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: 4/17/2021	East		West			U.S. total	Canada	
	CSXT	NS	BNSF	KCS	UP		CN	CP
This week	1,825	2,572	13,386	1,149	7,304	26,236	5,577	6,059
This week last year	1,937	2,021	10,862	884	4,983	20,687	4,175	5,106
2021 YTD	30,445	38,863	195,965	15,580	98,867	379,720	75,057	80,597
2020 YTD	27,560	36,658	169,391	17,096	73,979	324,684	59,018	64,178
2021 YTD as % of 2020 YTD	110	106	116	91	134	117	127	126
Last 4 weeks as % of 2020*	113	107	116	97	132	117	115	131
Last 4 weeks as % of 3-yr. avg.**	100	99	109	99	128	111	115	132
Total 2020	91,659	130,845	613,630	57,782	296,701	1,190,617	238,898	261,778

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

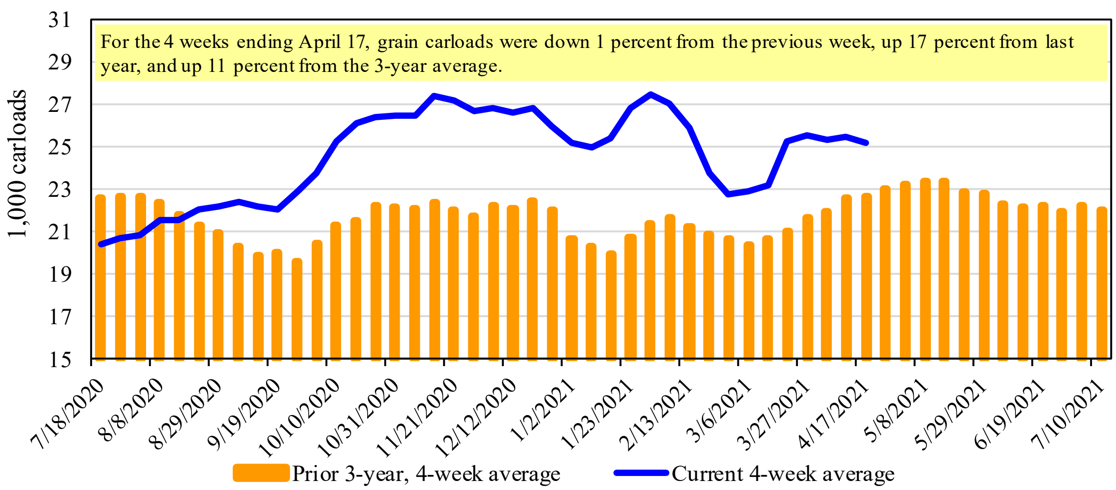
**The past 4 weeks as a percent of the same period from the prior 3-year average. YTD = year-to-date; avg. = average; yr. = year.

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: 4/22/2021		Delivery period May-21	May-20	Jun-21	Jun-20	Jul-21	Jul-20	Aug-21	Aug-20
BNSF[3]	COT grain units	0	0	no bids	no bids	no bids	no bids	no bids	no bids
	COT grain single-car	25	0	0	0	0	0	0	0
UP[4]	GCAS/Region 1	no offer	10	no offer	no offer	no offer	no offer	n/a	n/a
	GCAS/Region 2	no offer	no bid	no offer	no bid	no offer	no bid	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.

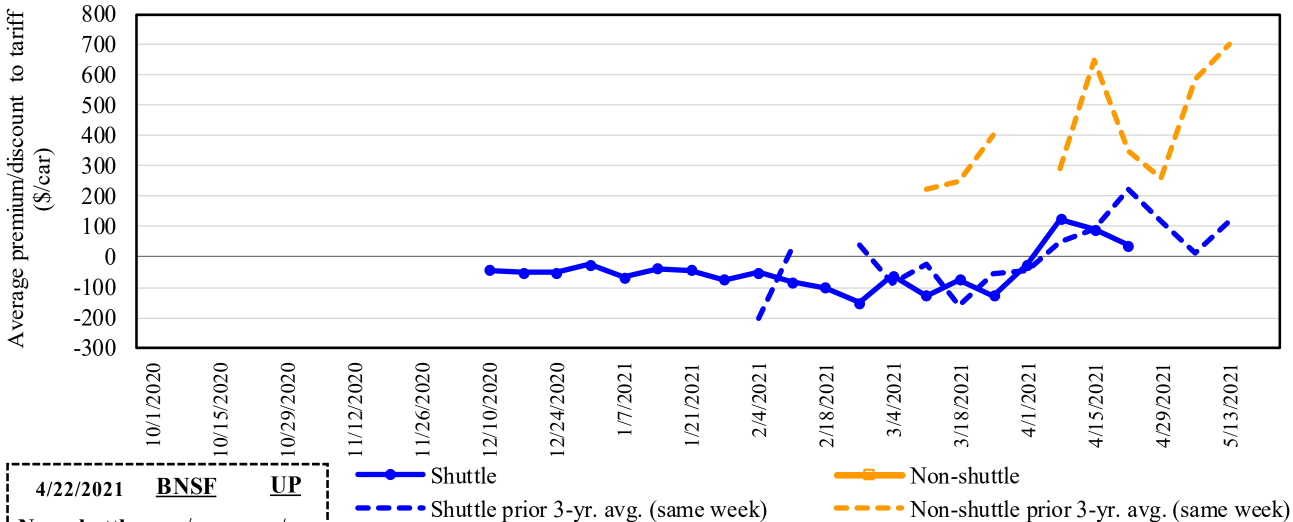
Region 1 includes: AR, IL, LA, MO, NM, OK, TX, WI, and Duluth, MN.

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 2021, secondary market

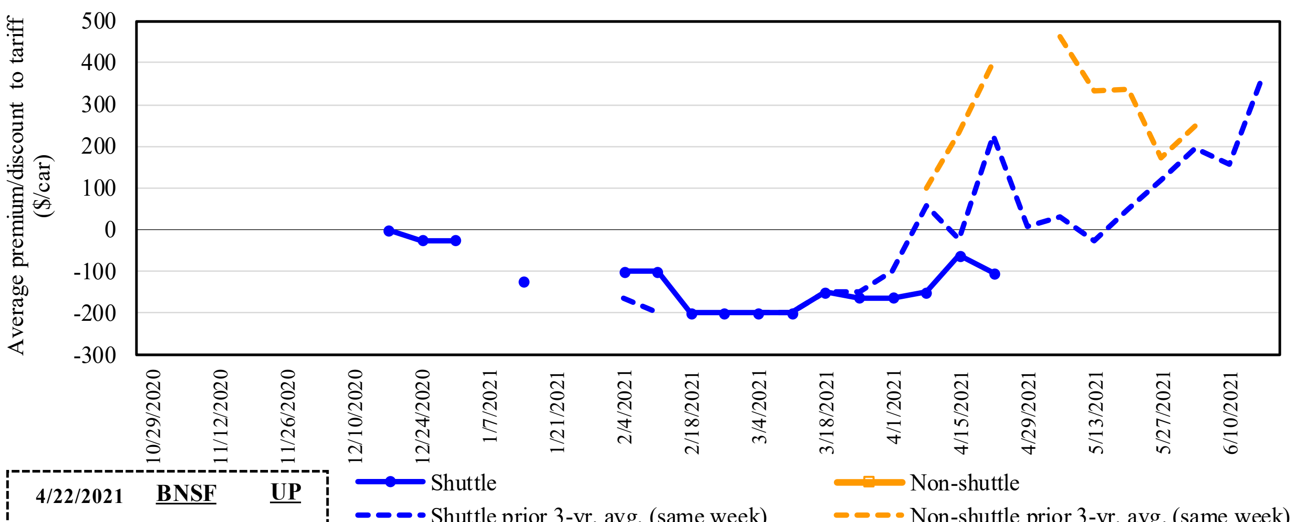


4/22/2021	BNSF	UP
Non-shuttle	n/a	n/a
Shuttle	-$50	$125

There were no non-shuttle bids/offers this week.
Average shuttle bids/offers fell $54 this week and are $88 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 2021, secondary market



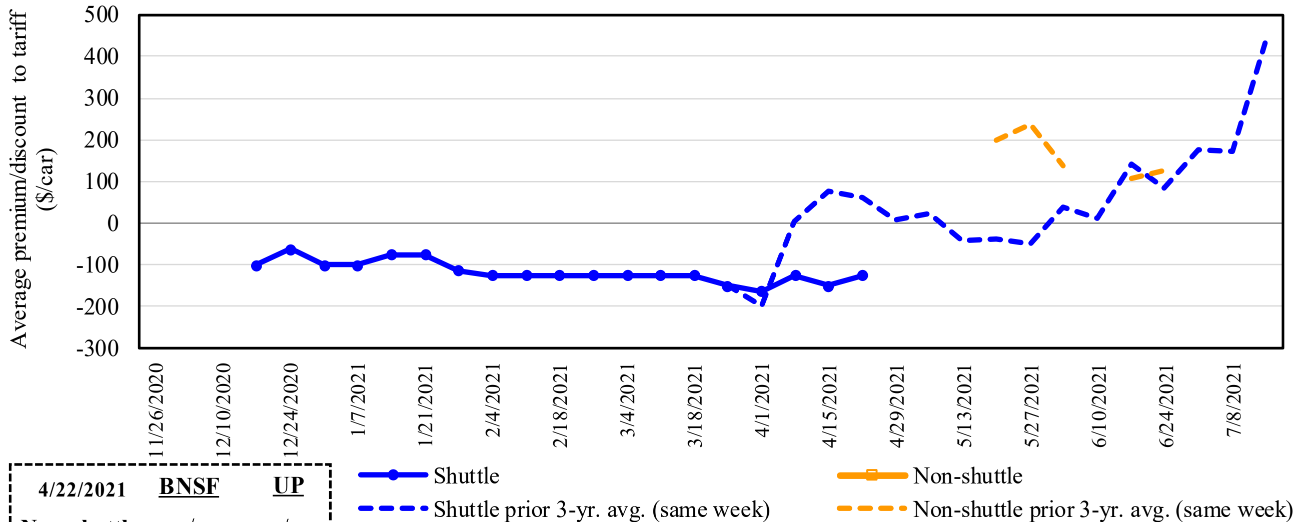
4/22/2021	BNSF	UP
Non-shuttle	n/a	n/a
Shuttle	-$156	-$50

There were no non-shuttle bids/offers this week.
Average shuttle bids/offers fell $41 this week and are $103 below the peak.

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

Figure 6

Bids/offers for railcars to be delivered in July 2021, secondary market



4/22/2021	BNSF	UP
Non-shuttle	n/a	n/a
Shuttle	-$150	-$100

There were no non-shuttle bids/offers this week.
Average shuttle bids/offers rose $25 this week and are $63 below the peak.

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

Table 6

Weekly secondary railcar market ($/car)[1]

	For the week ending: 4/22/2021	Delivery period					
		May-21	**Jun-21**	**Jul-21**	**Aug-21**	**Sep-21**	**Oct-21**
Non-shuttle	**BNSF-GF**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**
	Change from last week	n/a	n/a	n/a	n/a	n/a	n/a
	Change from same week 2020	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 2020	n/a	n/a	n/a	n/a	n/a	n/a
Shuttle	**BNSF-GF**	**(50)**	**(156)**	**(150)**	**(200)**	**(50)**	**992**
	Change from last week	(71)	(31)	50	0	(242)	179
	Change from same week 2020	8	n/a	n/a	n/a	0	n/a
	UP-Pool	**125**	**(50)**	**(100)**	**(150)**	**(150)**	**625**
	Change from last week	(38)	(50)	0	0	0	0
	Change from same week 2020	288	25	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]

April 2021	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	$76	$40.31	$1.10	0
	Grand Forks, ND	Duluth-Superior, MN	$4,208	$0	$41.79	$1.14	-3
	Wichita, KS	Los Angeles, CA	$7,115	$0	$70.66	$1.92	-2
	Wichita, KS	New Orleans, LA	$4,525	$134	$46.26	$1.26	0
	Sioux Falls, SD	Galveston-Houston, TX	$6,851	$0	$68.03	$1.85	-2
	Colby, KS	Galveston-Houston, TX	$4,801	$146	$49.13	$1.34	0
	Amarillo, TX	Los Angeles, CA	$5,121	$204	$52.88	$1.44	-1
Corn	Champaign-Urbana, IL	New Orleans, LA	$3,900	$151	$40.23	$1.02	0
	Toledo, OH	Raleigh, NC	$7,833	$0	$77.79	$1.98	15
	Des Moines, IA	Davenport, IA	$2,455	$32	$24.70	$0.63	1
	Indianapolis, IN	Atlanta, GA	$5,979	$0	$59.37	$1.51	3
	Indianapolis, IN	Knoxville, TN	$5,040	$0	$50.05	$1.27	3
	Des Moines, IA	Little Rock, AR	$3,900	$94	$39.66	$1.01	2
	Des Moines, IA	Los Angeles, CA	$5,780	$273	$60.11	$1.53	1
Soybeans	Minneapolis, MN	New Orleans, LA	$5,246	$148	$53.56	$1.46	42
	Toledo, OH	Huntsville, AL	$6,595	$0	$65.49	$1.78	17
	Indianapolis, IN	Raleigh, NC	$7,125	$0	$70.75	$1.93	3
	Indianapolis, IN	Huntsville, AL	$5,247	$0	$52.11	$1.42	3
	Champaign-Urbana, IL	New Orleans, LA	$4,645	$151	$47.63	$1.30	0
Shuttle train							
Wheat	Great Falls, MT	Portland, OR	$4,018	$0	$39.90	$1.09	-3
	Wichita, KS	Galveston-Houston, TX	$4,236	$0	$42.07	$1.14	-3
	Chicago, IL	Albany, NY	$6,376	$0	$63.32	$1.72	-10
	Grand Forks, ND	Portland, OR	$5,676	$0	$56.37	$1.53	-2
	Grand Forks, ND	Galveston-Houston, TX	$5,996	$0	$59.54	$1.62	-2
	Colby, KS	Portland, OR	$6,012	$240	$62.08	$1.69	-1
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	$151	$39.43	$1.00	-1
	Lincoln, NE	Galveston-Houston, TX	$3,880	$0	$38.53	$0.98	0
	Des Moines, IA	Amarillo, TX	$4,320	$118	$44.07	$1.12	2
	Minneapolis, MN	Tacoma, WA	$5,180	$0	$51.44	$1.31	0
	Council Bluffs, IA	Stockton, CA	$5,100	$0	$50.65	$1.29	2
Soybeans	Sioux Falls, SD	Tacoma, WA	$5,850	$0	$58.09	$1.58	0
	Minneapolis, MN	Portland, OR	$5,900	$0	$58.59	$1.59	0
	Fargo, ND	Tacoma, WA	$5,750	$0	$57.10	$1.55	0
	Council Bluffs, IA	New Orleans, LA	$4,875	$174	$50.14	$1.36	0
	Toledo, OH	Huntsville, AL	$4,945	$0	$49.11	$1.34	3
	Grand Island, NE	Portland, OR	$5,260	$246	$54.67	$1.49	-1

[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: April 2021					Tariff rate plus fuel surcharge per:		Percent change[4]
Commodity	Origin state	Destination region	Tariff rate per car[1]	Fuel surcharge per car[2]	metric ton[3]	bushel[3]	Y/Y
Wheat	MT	Chihuahua, CI	$7,384	$0	$75.45	$2.05	-2
	OK	Cuautitlan, EM	$6,713	$105	$69.65	$1.89	-1
	KS	Guadalajara, JA	$7,471	$644	$82.91	$2.25	1
	TX	Salinas Victoria, NL	$4,347	$64	$45.07	$1.23	0
Corn	IA	Guadalajara, JA	$8,902	$531	$96.38	$2.45	1
	SD	Celaya, GJ	$8,140	$0	$83.17	$2.11	0
	NE	Queretaro, QA	$8,300	$218	$87.04	$2.21	0
	SD	Salinas Victoria, NL	$6,905	$0	$70.55	$1.79	0
	MO	Tlalnepantla, EM	$7,665	$213	$80.49	$2.04	0
	SD	Torreon, CU	$7,690	$0	$78.57	$1.99	0
Soybeans	MO	Bojay (Tula), HG	$8,547	$500	$92.43	$2.51	1
	NE	Guadalajara, JA	$9,157	$517	$98.84	$2.69	1
	IA	El Castillo, JA	$9,410	$0	$96.15	$2.61	-1
	KS	Torreon, CU	$8,014	$349	$85.45	$2.32	1
Sorghum	NE	Celaya, GJ	$7,772	$463	$84.15	$2.14	1
	KS	Queretaro, QA	$8,108	$131	$84.17	$2.14	0
	NE	Salinas Victoria, NL	$6,713	$105	$69.66	$1.77	0
	NE	Torreon, CU	$7,092	$314	$75.67	$1.92	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.

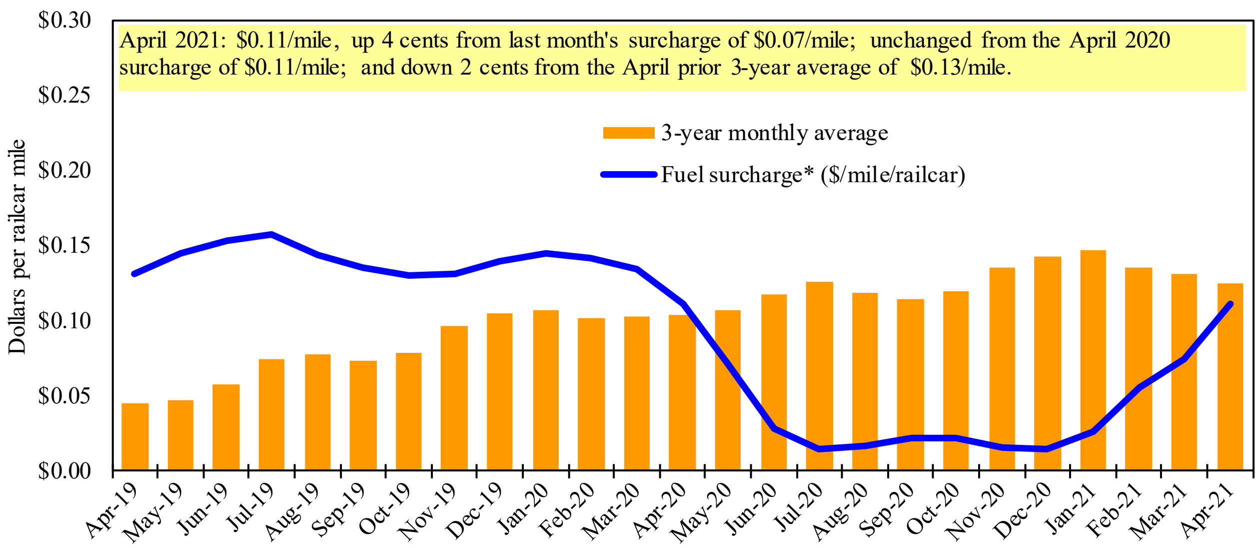
[3]Approximate load per car = 97.87 metric tons: Corn & Sorghum 56 lbs/bu, Wheat & Soybeans 60 lbs/bu.

[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

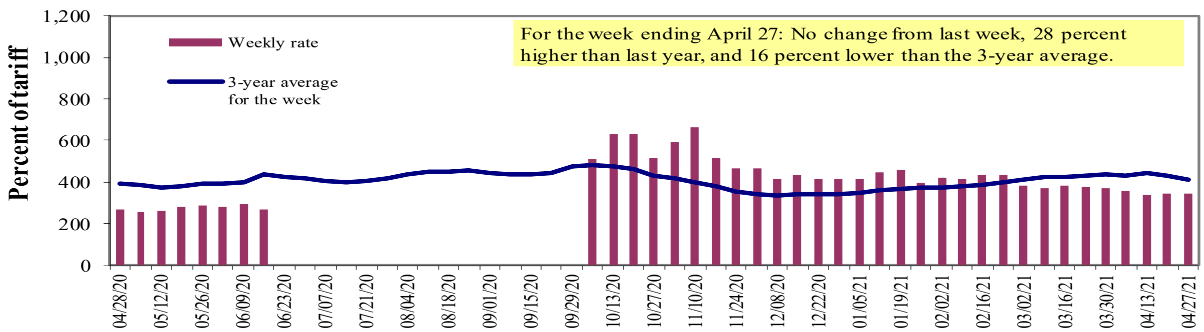
Railroad fuel surcharges, North American weighted average[1]



[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[1,2,3]



[1]Rate = percent of 1976 tariff benchmark index (1976 = 100 percent); [2]4-week moving average of the 3-year average.
[3]No rates data from 06/23/20 to 9/29/20 due to the lock closure for rehabilitation and replacement of lock machinery.
Source: USDA, Agricultural Marketing Service.

Table 9
Weekly barge freight rates: Southbound only

		Twin Cities	Mid-Mississippi	Lower Illinois River	St. Louis	Cincinnati	Lower Ohio	Cairo-Memphis
Rate[1]	4/27/2021	433	350	346	238	271	271	222
	4/20/2021	433	350	345	238	275	275	220
$/ton	4/27/2021	26.80	18.62	16.05	9.50	12.71	10.95	6.97
	4/20/2021	26.80	18.62	16.01	9.50	12.90	11.11	6.91
Current week % change from the same week:								
	Last year	29	26	28	36	44	44	28
	3-year avg. [2]	-12	-19	-16	-23	-20	-21	-24
Rate[1]	May	428	348	342	238	267	267	221
	July	408	335	326	229	253	253	215

[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

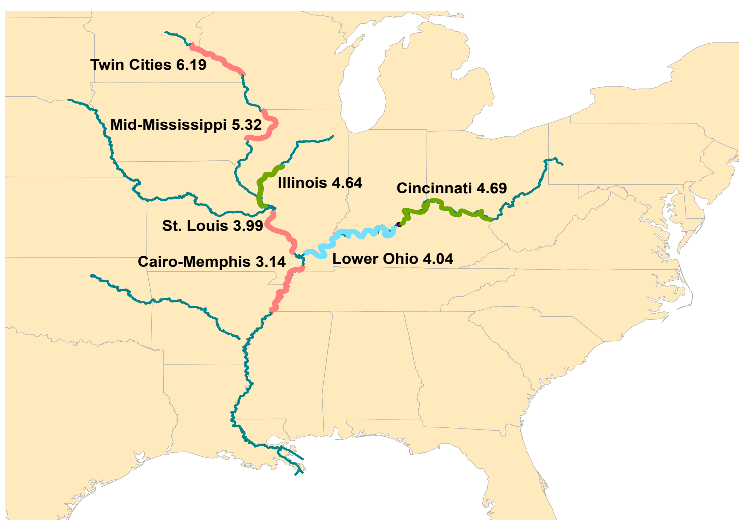
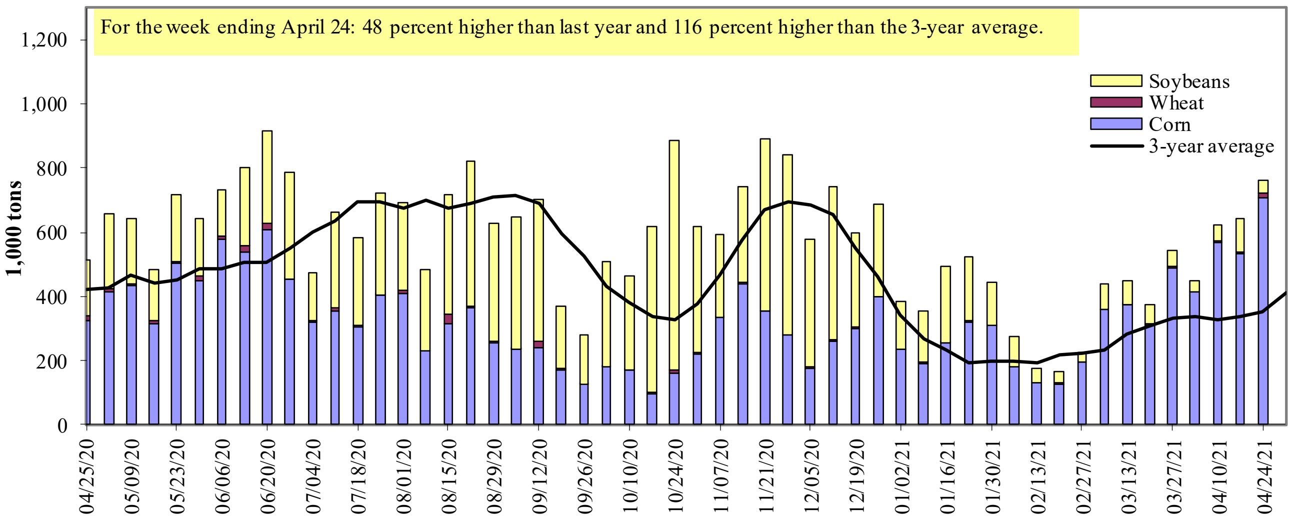


Figure 10

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 04/24/2021	Corn	Wheat	Soybeans	Other	Total
Mississippi River					
Rock Island, IL (L15)	215	3	5	0	223
Winfield, MO (L25)	421	5	33	0	459
Alton, IL (L26)	665	9	29	0	703
Granite City, IL (L27)	708	13	38	0	758
Illinois River (La Grange)	212	5	2	0	218
Ohio River (Olmsted)	89	0	41	10	140
Arkansas River (L1)	0	46	13	0	59
Weekly total - 2021	797	59	92	10	958
Weekly total - 2020	399	22	239	0	659
2021 YTD[1]	9,005	350	3,291	126	12,772
2020 YTD[1]	4,404	489	3,336	13	8,243
2021 as % of 2020 YTD	204	72	99	938	155
Last 4 weeks as % of 2020[2]	192	106	57	432	143
Total 2020	18,942	1,765	19,205	237	40,149

[1] Weekly total, YTD (year-to-date), and calendar year total include MI/27, OH/Olmsted, and AR/1; Other refers to oats, barley, sorghum, and rye.

Total may not add exactly due to rounding.

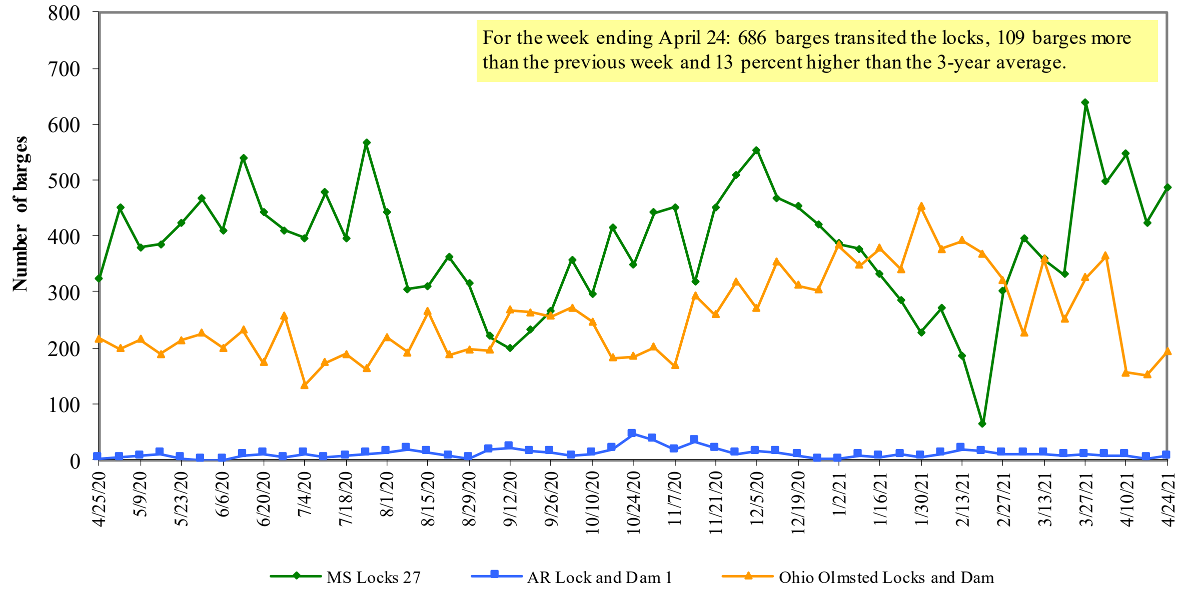
[2] As a percent of same period in 2020.

Note: L (as in "L15") refers to a lock, locks, or locks and dam facility.

Source: U.S. Army Corps of Engineers.

Figure 11

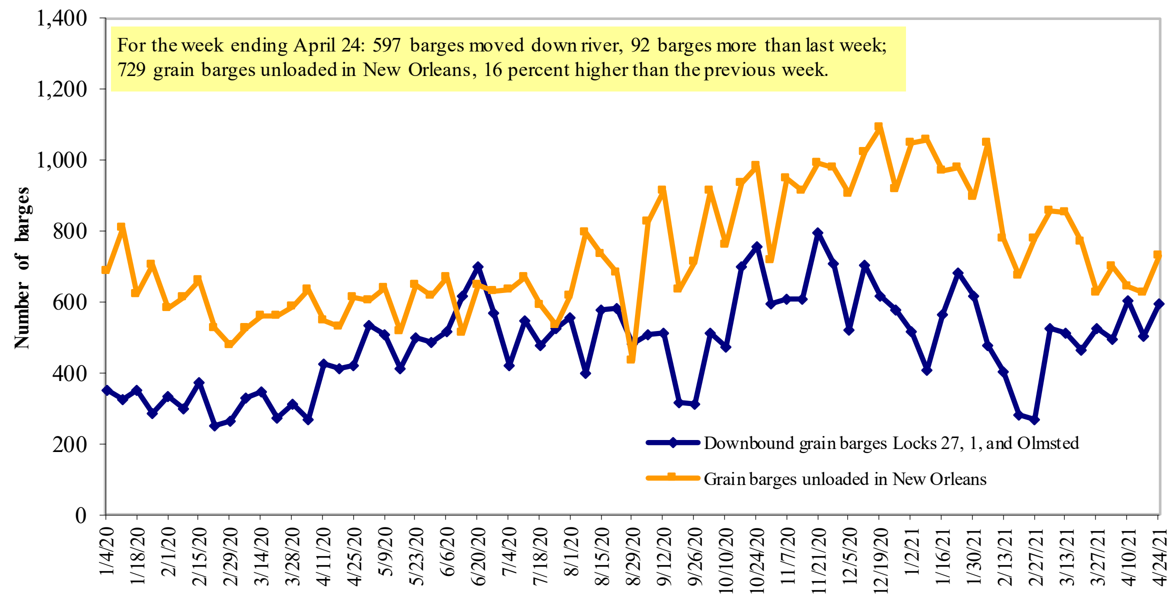
Upbound empty barges transiting Mississippi River Locks 27, Arkansas River Lock and Dam 1, and Ohio River Olmsted Locks and Dam



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 4/26/2021 (U.S. $/gallon)

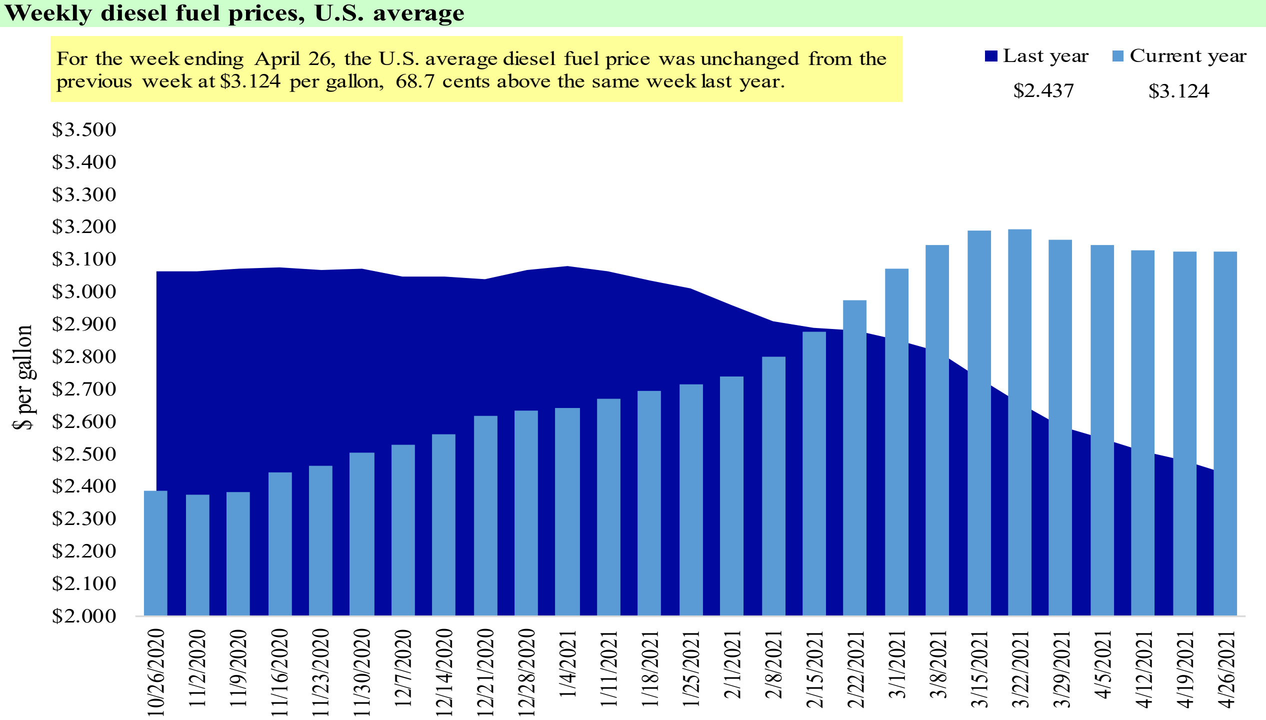
Region	Location	Price	Change from Week ago	Change from Year ago
I	East Coast	3.093	-0.003	0.548
	New England	3.080	0.009	0.403
	Central Atlantic	3.268	0.009	0.557
	Lower Atlantic	2.980	-0.013	0.574
II	Midwest	3.058	0.004	0.771
III	Gulf Coast	2.917	-0.006	0.709
IV	Rocky Mountain	3.228	-0.004	0.794
V	West Coast	3.651	0.006	0.717
	West Coast less California	3.250	0.002	0.657
	California	3.986	0.009	0.772
Total	United States	3.124	0.000	0.687

[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]									
4/15/2021	1,102	246	1,271	1,333	70	4,021	27,805	5,103	36,929
This week year ago	1,501	257	1,269	840	179	4,046	13,740	4,800	22,585
Cumulative exports-marketing year[2]									
2020/21 YTD	7,519	1,529	6,409	5,297	595	21,349	39,393	55,724	116,466
2019/20 YTD	8,135	2,140	6,153	4,250	741	21,419	21,582	33,023	76,024
YTD 2020/21 as % of 2019/20	92	71	104	125	80	100	183	169	153
Last 4 wks. as % of same period 2019/20*	82	111	108	202	43	115	217	114	177
Total 2019/20	9,526	2,318	6,960	4,751	922	24,477	42,622	43,994	111,094
Total 2018/19	8,591	3,204	6,776	5,164	479	24,214	48,924	46,189	119,327

[1] Current unshipped (outstanding) export sales to date.

[2] Shipped export sales to date; 2020/21 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 4/15/2021	Total commitments[2] 2020/21 current MY	2019/20 last MY	% change current MY from last MY	Exports[3] 3-yr. avg. 2017-19
	- 1,000 mt -			
Mexico	13,281	12,257	8	14,869
Japan	9,473	7,861	21	11,221
Columbia	3,434	3,361	2	4,830
Korea	2,914	1,702	71	4,011
China	23,137	880	2,529	909
Top 5 importers	**52,238**	**26,061**	**100**	**35,840**
Total U.S. corn export sales	**67,198**	**35,322**	**90**	**49,983**
% of projected exports	99%	78%		
Change from prior week[2]	**387**	**659**		
Top 5 importers' share of U.S. corn export sales	78%	74%		72%
USDA forecast April 2021	**68,066**	**45,242**	**50**	
Corn use for ethanol USDA forecast, March 2021	**126,365**	**123,368**	**2**	

[1]Based on USDA, Foreign Agricultural Service (FAS) marketing year ranking reports for 2019/20; 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 4/15/2021	Total 2020/21 current MY	commitments[2] 2019/20 last MY	% change current MY from last MY	Exports[3] 3-yr. avg. 2017-19
	1,000 mt -			- 1,000 mt -
China	35,649	12,634	182	19,106
Mexico	4,563	4,103	11	4,591
Egypt	2,619	2,505	5	2,980
Indonesia	1,920	1,614	19	2,360
Japan	1,970	2,120	(7)	2,288
Top 5 importers	**46,720**	**22,977**	**103**	**31,324**
Total U.S. soybean export sales	**60,827**	**37,822**	**61**	**49,352**
% of projected exports	98%	83%		
change from prior week[2]	**64**	**345**		
Top 5 importers' share of U.S. soybean export sales	77%	61%		**63%**
USDA forecast, April 2021	**62,125**	**45,831**	**136**	

[1]Based on USDA, Foreign Agricultural Service (FAS) marketing year ranking reports for 2019/20; 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 4/15/2021	Total Commitments 2020/21 current MY	2019/20 last MY	% change current MY from last MY	Exports[3] 3-yr. avg. 2017-19
	1,000 mt -			- 1,000 mt -
Mexico	3,555	3,741	(5)	3,213
Philippines	3,204	3,275	(2)	2,888
Japan	2,488	2,683	(7)	2,655
Nigeria	1,391	1,533	(9)	1,433
Korea	1,842	1,556	18	1,372
Indonesia	879	1,011	(13)	1,195
Taiwan	1,185	1,293	(8)	1,175
Thailand	807	879	(8)	727
Italy	600	877	(32)	622
Colombia	382	792	(52)	618
Top 10 importers	**16,333**	**17,639**	(7)	**15,897**
Total U.S. wheat export sale	**25,370**	**25,464**	(0)	**23,821**
% of projected exports	95%	97%		
change from prior week[2]	**240**	**245**		
Top 10 importers' share of U.S. wheat export sales	64%	69%		67%
USDA forecast, April 2021	**26,839**	**26,294**	2	

[1] Based on USDA, Foreign Agricultural Service(FAS) marketing year ranking reports for 2019/20; 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 04/22/21	Previous week*	Current week as % of previous	2021 YTD*	2020 YTD*	2021 YTD as % of 2020 YTD	Last 4-weeks as % of: Last year	Prior 3-yr. avg.	2020 total*
Pacific Northwest									
Wheat	487	476	102	5,296	5,044	105	130	131	15,966
Corn	612	436	140	6,322	2,303	275	240	129	9,969
Soybeans	0	0	n/a	3,645	2,423	150	7	5	14,028
Total	**1,099**	**912**	**121**	**15,263**	**9,769**	**156**	**153**	**114**	**39,963**
Mississippi Gulf									
Wheat	51	62	82	659	1,251	53	79	61	3,422
Corn	1,090	878	124	16,271	9,063	180	165	151	28,781
Soybeans	131	96	137	9,284	8,307	112	47	54	38,013
Total	**1,272**	**1,035**	**123**	**26,214**	**18,622**	**141**	**124**	**119**	**70,215**
Texas Gulf									
Wheat	16	77	21	1,104	1,154	96	108	65	4,248
Corn	10	0	n/a	185	213	87	21	20	723
Soybeans	0	0	n/a	656	7	n/a	n/a	n/a	2,098
Total	**26**	**77**	**34**	**1,944**	**1,373**	**142**	**89**	**59**	**7,068**
Interior									
Wheat	40	44	91	834	791	105	122	148	2,263
Corn	197	194	102	2,891	2,448	118	133	125	8,683
Soybeans	101	124	81	2,275	2,165	105	124	102	7,274
Total	**339**	**363**	**93**	**6,001**	**5,404**	**111**	**128**	**119**	**18,220**
Great Lakes									
Wheat	0	1	0	21	110	19	1	2	891
Corn	0	25	0	25	0	n/a	n/a	323	111
Soybeans	0	0	n/a	0	8	0	0	0	1,111
Total	**0**	**26**	**0**	**45**	**118**	**38**	**22**	**28**	**2,113**
Atlantic									
Wheat	0	0	n/a	71	1	n/a	0	0	65
Corn	7	0	n/a	14	0	n/a	n/a	111	33
Soybeans	14	13	103	967	331	292	260	95	1,870
Total	**21**	**13**	**155**	**1,053**	**333**	**317**	**284**	**90**	**1,968**
U.S. total from ports*									
Wheat	594	660	90	7,985	8,351	96	113	104	26,854
Corn	1,917	1,532	125	25,708	14,026	183	173	139	48,301
Soybeans	246	234	105	16,828	13,241	127	62	59	64,394
Total	**2,757**	**2,425**	**114**	**50,520**	**35,618**	**142**	**131**	**113**	**139,548**

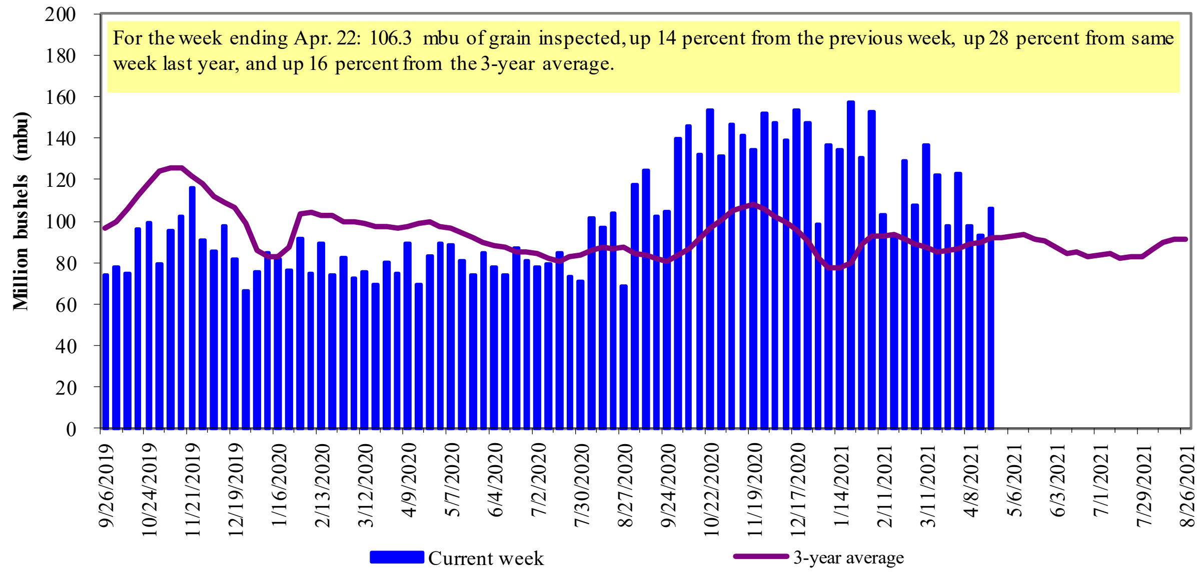
*Data includes revisions from prior weeks; some regional totals may not add exactly due to rounding.

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)

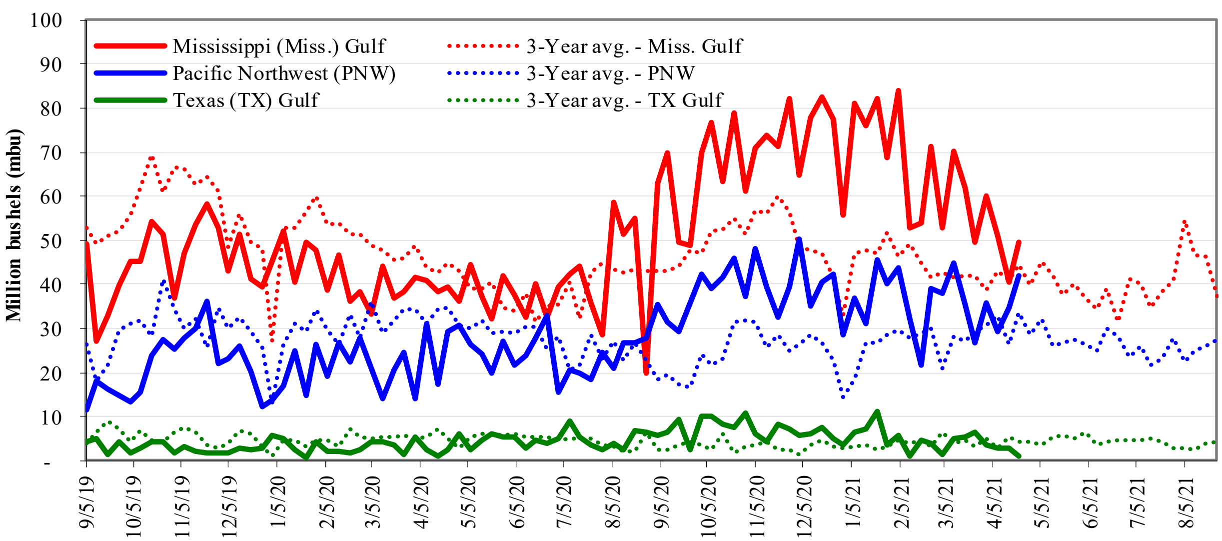


Note: 3-year average consists of 4-week running average.

Source: USDA, Federal Grain Inspection Service.

Figure 15

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



Week ending 04/22/21 inspections (mbu):		Percent change from:	MS Gulf	TX Gulf	U.S. Gulf	PNW
MS Gulf:	49.6	Last wk:	up 23	down 65	up 17	up 21
PNW:	42.0	Last Year (same wk):	up 26	down 62	up 20	up 44
TX Gulf:	1.0	3-yr avg. (4-wk. mov. Avg):	up 19	down 77	up 10	up 36

Source: USDA, Federal Grain Inspection Service.

Ocean Transportation

Table 17

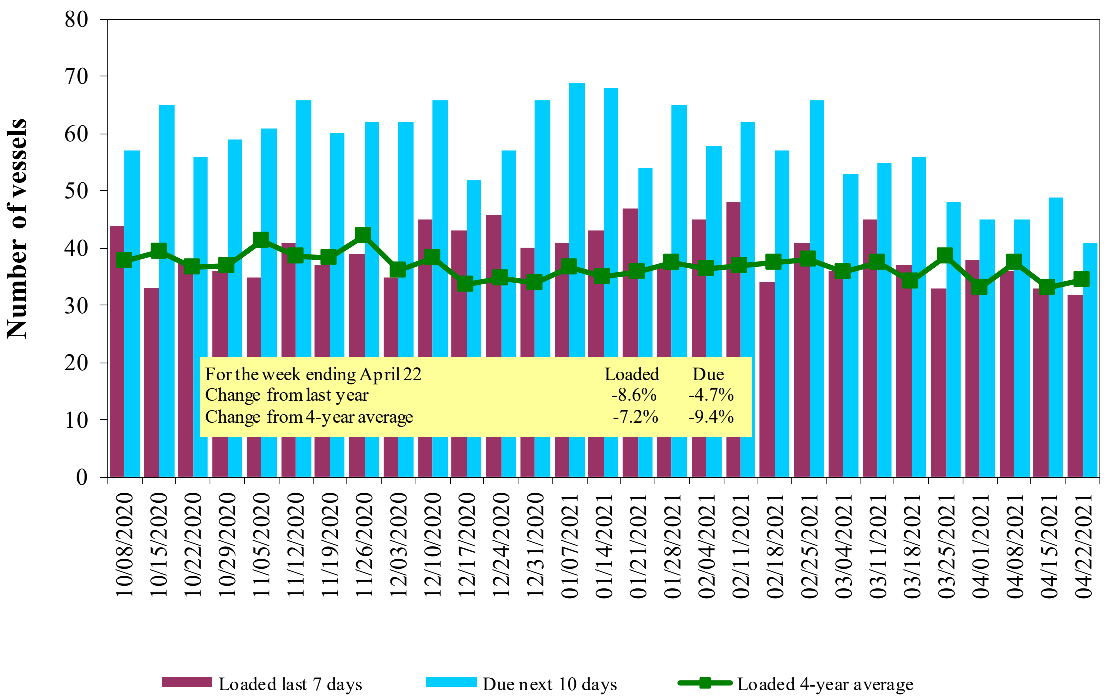
Weekly port region grain ocean vessel activity (number of vessels)

Date	Gulf In port	Gulf Loaded 7-days	Gulf Due next 10-days	Pacific Northwest In port
4/22/2021	35	32	41	22
4/15/2021	29	33	49	24
2020 range	(22…60)	(23...46)	(34...68)	(7…24)
2020 average	37	33	49	15

Note: n/a = not available due to holiday.

Source: USDA, Agricultural Marketing Service.

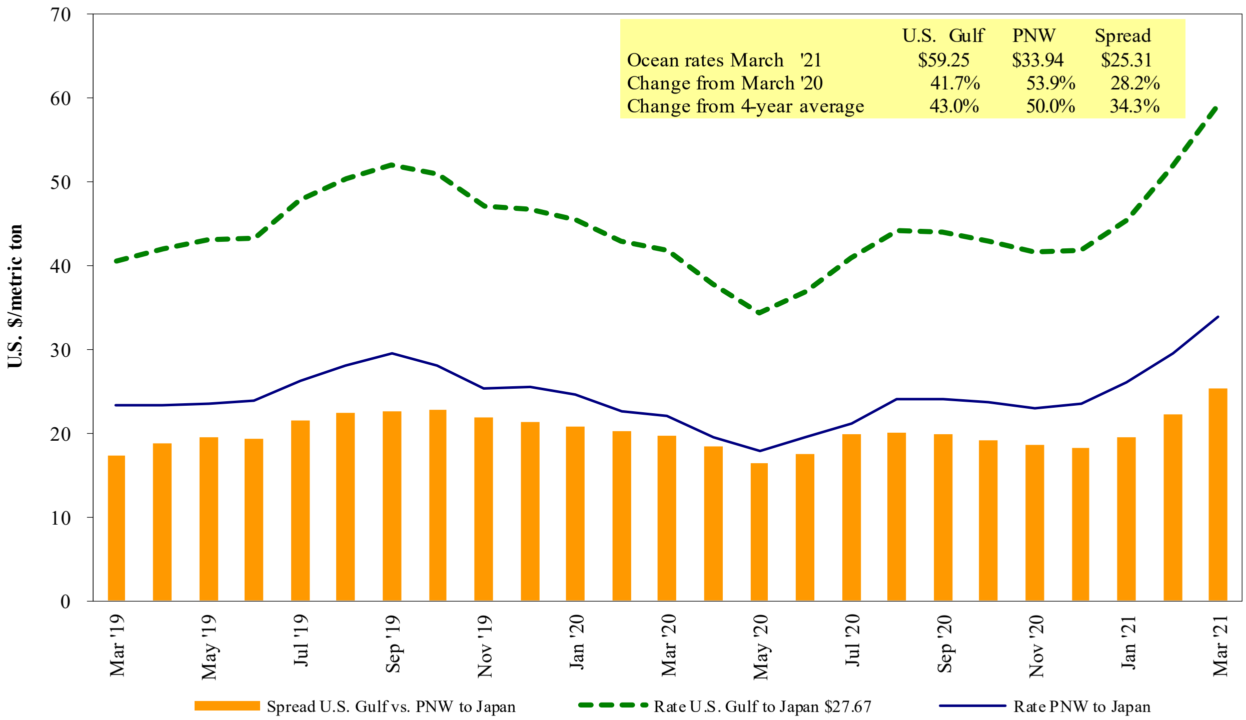
Figure 16
U.S. Gulf[1] vessel loading activity



[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 04/24/2021

Export region	Import region	Grain types	Loading date	Volume loads (metric tons)	Freight rate (US$/metric ton)
U.S. Gulf	Japan	Heavy grain	Aug 21/Sep 9	50,000	60.90
U.S. Gulf	Japan	Grain	May 25/Jun 25	50,000	46.85 op 47.85
U.S. Gulf	Japan	Wheat	May 1/15	31,877	58.33
U.S. Gulf	Japan	Wheat	May 1/14	47,405	67.50
U.S. Gulf	Japan	Heavy grain	Apr 15/May 15	50,000	47.00
U.S. Gulf	Japan	Heavy grain	Apr 1/30	48,000	46.75
U.S. Gulf	China	Heavy grain	Apr 14/29	68,000	63.50
U.S. Gulf	South Korea	Heavy grain	Feb 20/28	51,000	51.50
U.S. Gulf	Sudan	Wheat	May 20/30	48,000	112.75*
U.S. Gulf	Pt Sudan	Sorghum	Feb 15/25	34,860	143.13*
U.S. Gulf	Vietnam	Corn	Feb 5/15	70,000	47.25
PNW	Japan	Grain	Mar 5/14	28,000	48.10
PNW	Taiwan	Wheat	May 29/Jun 12	45,665	48.00
PNW	Taiwan	Corn	Feb 20/Mar 15	65,000	24.90
Brazil	China	Heavy grain	Mar 21/31	66,000	44.00
Brazil	China	Heavy grain	Mar 21/30	66,000	45.50
River Plate	S. Korea	Corn	May 1/31	68,000	52.60*
Ukraine	China	Corn	Feb 10/17	60,000	36.40 op 38.90

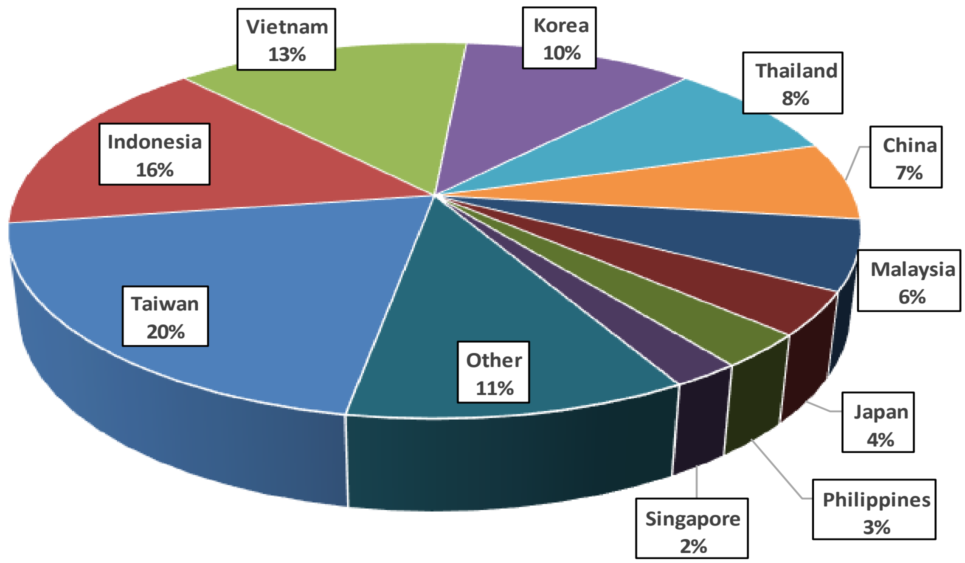
*50 percent of food aid from the United States is required to be shipped on U.S.-flag vessels.

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

Source: Maritime Research, Inc.

In 2019, containers were used to transport 9 percent of total U.S. waterborne grain exports. Approximately 60 percent of U.S. waterborne grain exports in 2019 went to Asia, of which 14 percent were moved in containers. Approximately 94 percent of U.S. waterborne containerized grain exports were destined for Asia.

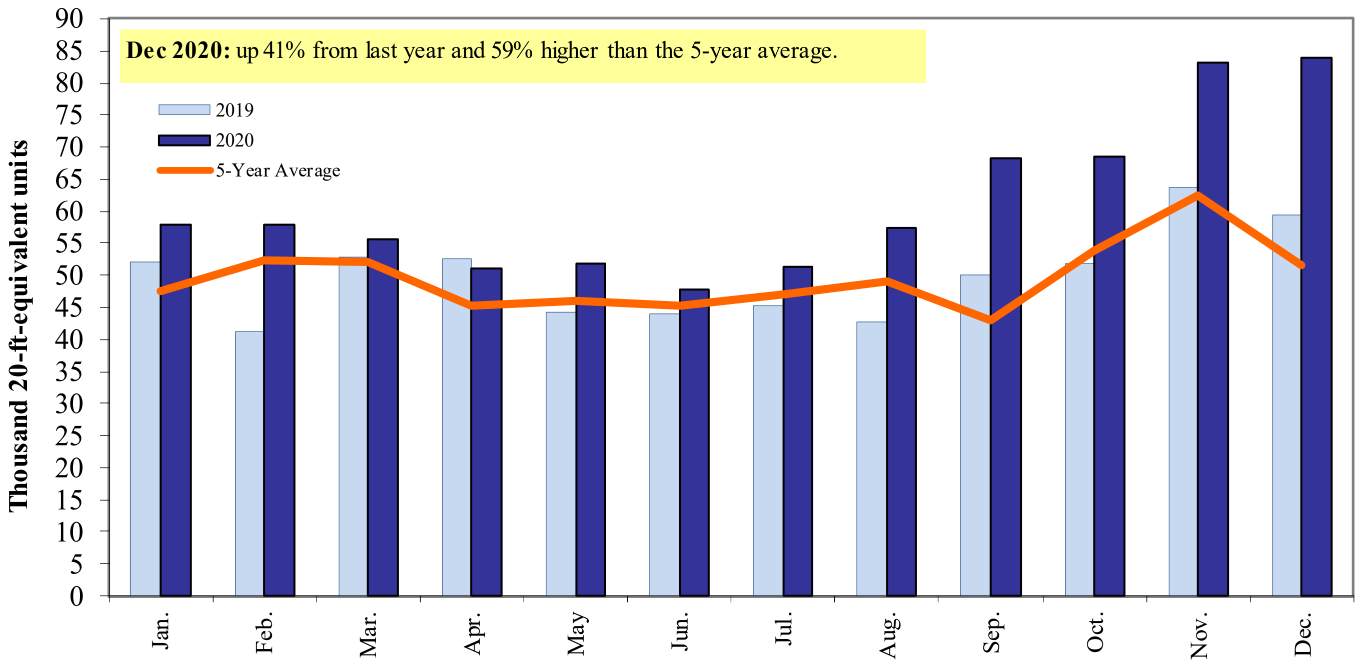
Figure 18
Top 10 destination markets for U.S. containerized grain exports, Jan-Dec 2020



Note: The following Harmonized Tariff Codes are used to calculate containerized grains movements: 1001, 100190, 1002, 1003 100300, 1004, 100400, 1005, 100590, 1007, 100700, 1102, 110100, 230310, 110220, 110290, 1201, 120100, 230210, 230990, 230330, 120810, and 120190.

Source: USDA, Agricultural Marketing Service, Transportation Services Division analysis of PIERS data.

Figure 19
Monthly shipments of containerized grain to Asia



Note: The following Harmonized Tariff Codes are used to calculate containerized grains movements: 100190, 100200, 100300, 100400, 100590, 100700, 110100, 110220, 110290, 1201, 120100, 120190, 120810, 230210, 230310, 230330, and 230990.

Source: USDA, Agricultural Marketing Service, Transportation Services Division analysis of PIERS data.

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
Matt Chang	matt.chang@usda.gov	(202) 720 - 0299
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
Bernadette Winston	bernadette.winston@usda.gov	(202) 690 - 0487
Matt Chang	matt.chang@usda.gov	(202) 720 - 0299
Truck Transportation		
April Taylor	april.taylor@usda.gov	(202) 720 - 7880
Kranti Mulik	kranti.mulik@usda.gov	(202) 756 - 2577
Matt Chang	matt.chang@usda.gov	(202) 720 - 0299
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

Subscription Information: Please sign up to receive regular email announcements of the latest *GTR* issue by entering your email address **here** and selecting your preference to receive Transportation Research and Analysis. For any other information, you may contact us at **GTRContactUs@usda.gov**

Preferred citation: U.S. Department of Agriculture, Agricultural Marketing Service. *Grain Transportation Report.* April 29, 2021. Web: **http://dx.doi.org/10.9752/TS056.04-29-2021**