



# Grain Transportation Report

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

Contact Us

## WEEKLY HIGHLIGHTS

May 5, 2022

### Contents

Article/  
Calendar

Grain  
Transportation  
Indicators

Rail

Barge

Truck

Exports

Ocean

Brazil

Mexico

Grain Truck/Ocean  
Rate Advisory

Datasets

Specialists

Subscription  
Information

-----  
The next  
release is  
May 12, 2022

### Fuel Price Reaches All-Time Record High of \$5.509

For the week ending May 2, 2022, the U.S. average **diesel fuel price** rose to \$5.509 per gallon, 34.9 cents from the previous week and 236.7 cents above the same week last year. Reflecting an increase of 40.8 cents per gallon from 3 weeks ago, this week's diesel price is the highest since March 14's of \$5.25 per gallon. This week's price also marks the highest-ever price on record and contains the second-largest week-to-week increase on record. (The largest week-to-week increase of 74.5 cents occurred just under 2 months ago, on March 7.) In the Midwest—locus of the key grain-producing States—the diesel price rose to \$5.329 per gallon, 34.2 cents per gallon and 224.4 cents above the same time last year. Diesel provides the main fuel for trucks, railroad engines, barges, and oceangoing vessels. A surge in diesel prices directly impacts transportation costs.

### Wheat Inspections Increase Sharply

For the week ending April 28, **total inspections of grain** (corn, wheat, and soybeans) for export from all major U.S. export regions totaled 2.7 million metric tons (mmt), down 13 percent from last year and up 9 percent from the 3-year average. Total grain inspections were also up 4 percent from the previous week, reflecting a 33-percent jump in wheat inspections and a 1-percent increase in corn inspections. Inspections destined to Latin America accounted for most of the wheat increase. Corn accounted for about 49 percent of total grain inspections for the week, while wheat accounted for 15 percent. Inspections of soybeans, however, were down 1 percent from the previous week and accounted for 36 percent of total grain inspections. Pacific Northwest (PNW) grain inspections rose 37 percent from the past week, and Texas Gulf inspections rose 21 percent.

### Maintenance of Panama Canal Locks May Restrict Transit, May 7-19

Several tentatively scheduled outages may affect Panama Canal traffic this month. On May 7, the east lane of the Panama Canal's Gatun Panamax Locks may be out of service for 6 hours on May 7 and 12 hours on May 9 for **maintenance work**. On May 8, the west lane of the Locks may be out of service for 12 hours. During these outages, the locks' daily transit capacity is estimated at 25-27 vessels—down from the normal capacity of 34-36 vessels. From May 10-19, a tentatively scheduled culvert-repair outage at the Gatun Locks is estimated to reduce daily transit capacity to 26-28 vessels (down from 34-36 vessels, normally). No major delays are anticipated. The locks' exact transit capacity depends on vessel mix, transit restrictions, and other factors. A majority of U.S. grain destined to Asia transits the canal.

### Snapshots by Sector

#### Export Sales

For the week ending April 21, **unshipped balances** of wheat, corn, and soybeans for marketing year 2021/22 totaled 32.6 million metric tons (mmt), down 7 percent from the same time last year and down 3 percent from the previous week. Net **corn export sales** were 0.867 mmt, down 1 percent from the previous week. Net **soybean export sales** were 0.481 mmt, up 5 percent from the previous week. Net weekly **wheat export sales** were 0.032 mmt, up 23 percent from the previous week.

#### Rail

U.S. Class I railroads originated 23,106 **grain carloads** during the week ending April 23. This was a 18-percent increase from the previous week, 9 percent fewer than last year, and 3 percent fewer than the 3-year average.

Average May shuttle **secondary railcar** bids/offers (per car) were \$1,525 above tariff for the week ending April 28. This was \$1,021 less than last week and \$1,567 more than this week last year.

#### Barge

For the week ending April 30, **barged grain movements** totaled 790,572 tons. This was 12 percent less than the previous week and 18 percent more than the same period last year.

For the week ending April 30, 493 grain barges **moved down river**—56 fewer barges than the previous week. There were 680 grain barges **unloaded** in the New Orleans region, 7 percent fewer than last week.

#### Ocean

For the week ending April 28, 36 **oceangoing grain vessels** were loaded in the Gulf—3 percent more than the same period last year. Within the next 10 days (starting April 29), 39 vessels were expected to be loaded—25 percent fewer than the same period last year.

As of April 28, the rate for shipping a metric ton (mt) of grain from the U.S. Gulf to Japan was \$79.00. This was unchanged from the previous week. The rate from the PNW to Japan was \$44.25 per mt, 1 percent less than the previous week.

# Feature Article/Calendar

## Third- and Fourth-Quarter 2021 Ethanol Transportation Update

After showing strong growth from first to second quarter 2021, U.S. ethanol production fell 2 percent to 3.7 billion gallons, from the second to third quarter. Exports to major buyers of U.S. ethanol also fell from the second to third quarter. However, both production and exports of ethanol rebounded from the third to fourth quarter, largely driven by rising fuel demand.

For the third and fourth quarters of 2021, this article examines trends in ethanol production and exports, their effects on demand for transporting ethanol, and what lies in store for future transportation demand.

### Ethanol Production and Rail Movements

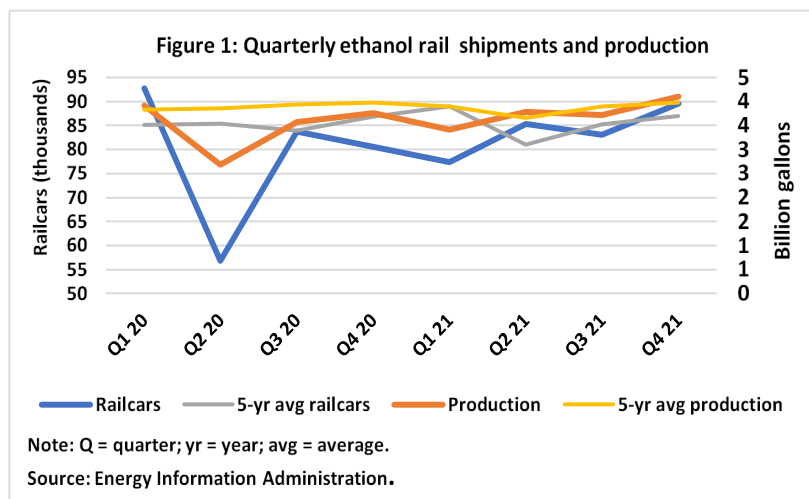
Because of high corn prices, limited feedstock availability, and shrinking margins, ethanol plants were forced to [temporarily reduce their operating capacity](#), from second to third quarter 2021. Reflecting low third-quarter production, Class 1 rail movements of ethanol fell 3 percent, from 85,282 carloads in second quarter 2021 to 83,026 carloads in the third quarter. Third-quarter 2021 carloads were 1 percent below the same time the previous year. However, high ethanol prices, [strong ethanol margins](#), and rising fuel demand all supported higher fourth-quarter ethanol production.<sup>1</sup> As a result, ethanol production rose to 4.1 million gallons—10 percent above the third quarter and 3 percent over the prior-5-year average. At the same time, despite worsening rail service beginning in the fourth quarter, rail shipments of ethanol rose to 89,585 carloads—8 percent above the third quarter, 11 percent higher than fourth quarter 2020 (fig. 1), and 3 percent above the 5-year average.<sup>2</sup>

### Ethanol Export Trends and Effects on Port Activity

Fluctuating demand for U.S. ethanol transportation in 2021 echoed the demand for U.S. ethanol by major importing countries.<sup>3</sup> According to [Foreign Agricultural Service data](#), ethanol exports fell 27 percent from second to third quarter 2021, mainly because of much lower purchases from Brazil, India, and China. Then, from third to fourth quarter 2021—mainly because of higher exports to India and Brazil—ethanol exports rose 79 percent to over 372 million gallons. This was 8 percent above fourth quarter 2020 and 1 percent below the 5-year average.

**Top and emerging ethanol importers.** Together, Canada, Brazil, and India accounted for 55 percent of fourth-quarter U.S. ethanol exports. Top 2021 importers of U.S. ethanol were Canada, India, and South Korea. Meanwhile, the United Kingdom (UK) emerged as a major importer, as it moved to adopt a 10-percent ethanol “E10” blend of gasoline. Brazil remained a key importer in 2021—despite recent fluctuations in Brazilian demand following the end of its tariff-free imports of U.S. ethanol in December 2020. Following very low imports of U.S. ethanol in third quarter 2021 (just over 1,700 gallons), Brazil’s fourth-quarter imports rose sharply, to over 45 million gallons. Exports to Canada were consistently strong, accounting for 48 percent of total U.S ethanol exports in the third quarter and 30 percent in the fourth quarter. India, too, has emerged as a top importer of U.S. ethanol since setting an “E20” goal for its biofuel in 2018. Strong domestic inventories and high U.S. ethanol prices reduced India’s ethanol imports, from almost 24 million gallons, in second quarter 2021, to just over 33,000 gallons in the third quarter.<sup>4</sup> U.S. ethanol exports to India rose sharply in the fourth quarter, to almost 50 million gallons after industrial activity resumed following pandemic lockdowns.

**Market shakeups.** Although U.S. ethanol exports to India and Brazil did recover from third to fourth quarter, demand did not rally from all buyers. Though not historically a major ethanol buyer, China had stronger-than-typical purchases of U.S. ethanol in the first half of 2021, before halting its purchases entirely after June 2021 ([Grain Transportation Report \(GTR\), September 30, 2021](#)). Similarly, after strong imports in second quarter 2021, South Korea’s imports dropped 31 percent in the third quarter and fell 5 percent



<sup>1</sup> Strong margins for ethanol were due to declining corn prices (because of newly harvested corn entering the market) and strong gasoline prices.

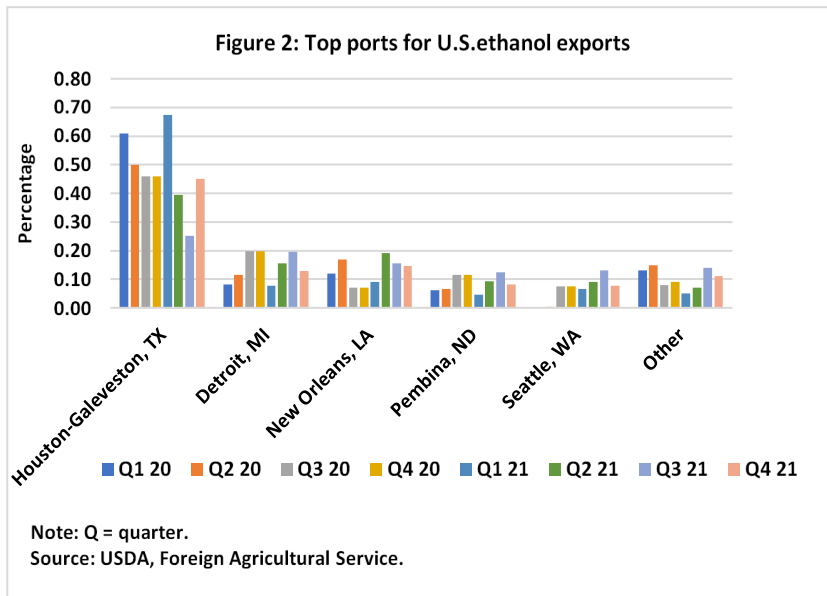
<sup>2</sup> For example, according to the [Surface Transportation Board’s rail service metrics](#), origin dwell times for ethanol trains increased from about 9 hours (on average)—in late September and early October 2021—to 28 hours, in late November.

<sup>3</sup> “Ethanol transportation” refers to transportation used to convey ethanol—not transportation powered by ethanol.

<sup>4</sup> Indian inventories had built up during Covid-19 restrictions, and industrial activity had yet to return to pre-pandemic levels. So, there was little interest from buyers to buy U.S. ethanol at high prices.

in the fourth quarter. Despite these drops—compared to the same periods in 2020—third-quarter imports more than doubled, and fourth-quarter imports were up 9 percent due to increased use of non-fuel-grade ethanol. Export volumes were also weaker in markets that were especially [sensitive to fuel prices](#) in 2021—most notably, Colombia and the Philippines ([USDA, Foreign Agricultural Service](#)). Despite strong exports to Brazil and India (together, accounting for 26 percent of total U.S. ethanol exports), fourth-quarter U.S. exports were still 1 percent below the 5-year average.

**Changing port activity.** The share of ethanol exports through the Port of Houston, TX—the top port of exit for all U.S. ethanol exports—saw its share of exports drop from 40 percent in the second quarter to just 25 percent in the third quarter. The change was mainly due to the steep drop in ethanol imports from India and Brazil and halt of imports from China. However, from third to fourth quarter 2021, Houston’s share rose again—almost doubling from 25 percent to 45 percent—as exports to India and Brazil recovered. Ethanol exports to India and Brazil accounted for 50 percent of the port activity. Fluctuating activity and market share at other ports, too, reflected shifts in importers’ buying patterns (fig. 2).



### Looking Ahead

According to the Energy Information Administration’s [April 2022 Short Term Energy Outlook](#), ethanol production will average 1.01 million barrels per day in 2022, up from 980,000 barrels per day in 2021. In 2023, ethanol production is expected to fall to 1 million barrels per day. From marketing year (MY) 2020/21 to MY 2021/22, corn use for ethanol is projected to increase 7 percent, according to USDA’s April 2022 [World Agricultural Supply and Demand Estimates report](#). According to [USDA’s Economic Research Service](#), for fiscal year (FY) 2022, U.S. ethanol export sales are forecast to reach a record \$2.9 billion, as high U.S. corn and crude oil prices support higher export values.<sup>5</sup> Export volumes are expected to rise modestly, surpassing FY 2021, but remaining well below FY 2018’s peak. This anticipated lackluster growth is mainly due to much lower sales to Brazil and lack of trade with China. From FY 2021 to FY 2022, exports to Brazil are expected to rise because of Brazil’s domestic production; persistently high prices; and suspension of Brazil’s import tariff.<sup>6</sup> On the other hand, high U.S. prices and a strong dollar may moderate the increase.

Strong demand for U.S. ethanol in FY 2022 is expected to come from Canada—as well as the UK, following the introduction of its E10 gasoline. Increases in U.S. ethanol exports to Canada and the UK are expected to raise the demand for transporting ethanol. Additionally, to mitigate fuel supply issues resulting from the Russia-Ukraine war, the U.S. Environmental Protection Agency (EPA) recently issued [an emergency fuel waiver](#) to allow E15 gasoline (i.e., a 15-percent ethanol blend) to be sold during the summer driving season. Effective May 1, EPA’s emergency fuel waiver applies to terminal operators in areas of the country that were not previously allowed to sell E15. For the waiver’s statutory maximum of 20 days, these operators will be permitted to sell E15. EPA expects to issue extensions of the waiver, as necessary, until the crisis passes. The emergency fuel waiver is expected to raise domestic demand for ethanol and, therefore, for rail transportation, as rail moves over 70 percent of ethanol. However, heightened rail service issues in recent months may hinder a rise in ethanol transport ([GTR, April 21, 2022, first highlight](#)).

[Kranti.Mulik@usda.gov](mailto:Kranti.Mulik@usda.gov)

<sup>5</sup> In its report, ERS defines fiscal year as October 1 of the previous year through September 30 of the current year.

<sup>6</sup> On March 21, the Government of Brazil decided to [temporarily suspend](#) the import tariff on ethanol until December 2022 to help moderate rising gasoline prices. This action may benefit U.S. ethanol exports and increase demand for ethanol transportation.

# Grain Transportation Indicators

Table 1

## Grain transport cost indicators<sup>1</sup>

For the week ending	Truck	Rail		Barge	Ocean	
		Non-Shuttle	Shuttle		Gulf	Pacific
05/04/22	370	318	282	307	353	314
04/27/22	346	306	307	315	353	317

<sup>1</sup>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)

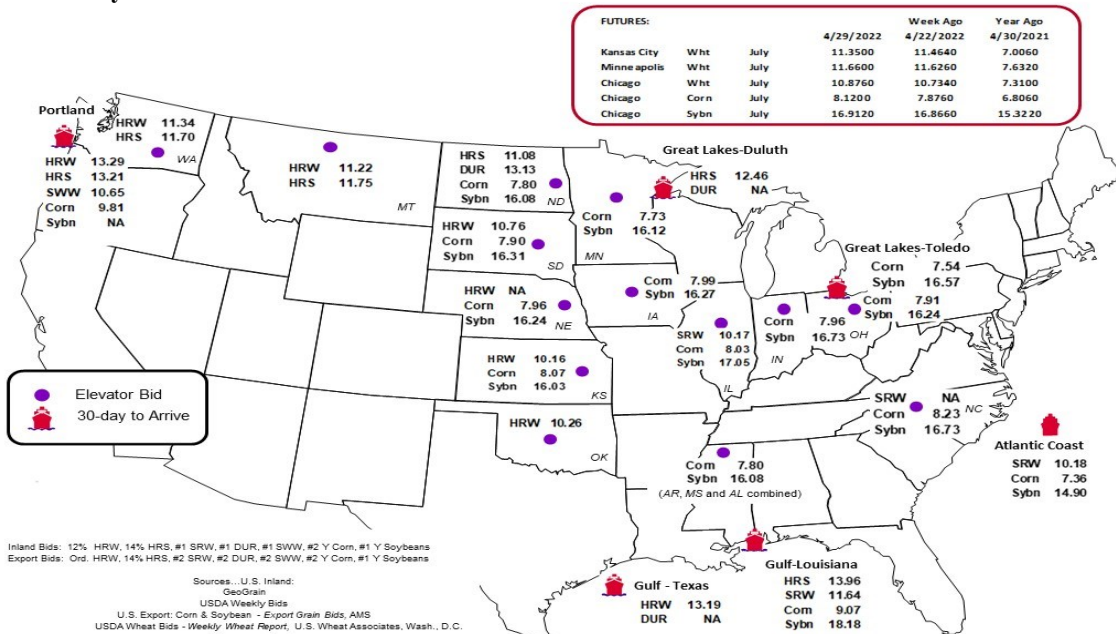
Commodity	Origin-destination	4/29/2022	4/22/2022
Corn	IL-Gulf	-1.04	-1.03
Corn	NE-Gulf	-1.11	-1.12
Soybean	IA-Gulf	-1.91	-2.01
HRW	KS-Gulf	-3.03	-3.02
HRS	ND-Portland	-2.13	-2.19

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)<sup>1</sup>**

For the week ending	Mississippi		Pacific	Atlantic &	Total	Week ending	Cross-border Mexico <sup>3</sup>
	Gulf	Texas Gulf	Northwest	East Gulf			
4/27/2022 <sup>P</sup>	1,620	1,200	5,767	450	9,037	4/23/2022	2,780
4/20/2022 <sup>r</sup>	1,322	1,235	6,057	580	9,194	4/16/2022	3,187
2022 YTD <sup>r</sup>	27,463	17,406	99,824	9,663	154,356	2022 YTD	45,736
2021 YTD <sup>r</sup>	28,049	27,402	107,433	9,122	172,006	2021 YTD	40,931
2022 YTD as % of 2021 YTD	98	64	93	106	90	% change YTD	112
Last 4 weeks as % of 2021 <sup>2</sup>	113	70	93	189	95	Last 4wks. % 2021	90
Last 4 weeks as % of 4-year avg. <sup>2</sup>	211	83	95	129	105	Last 4wks. % 4 yr.	114
Total 2021	54,982	69,213	311,407	22,567	458,169	Total 2021	147,859
Total 2020	45,294	64,116	299,882	24,458	433,750	Total 2020	128,714

<sup>1</sup>Data is incomplete as it is voluntarily provided.

<sup>2</sup> Compared with same 4-weeks in 2021 and prior 4-year average.

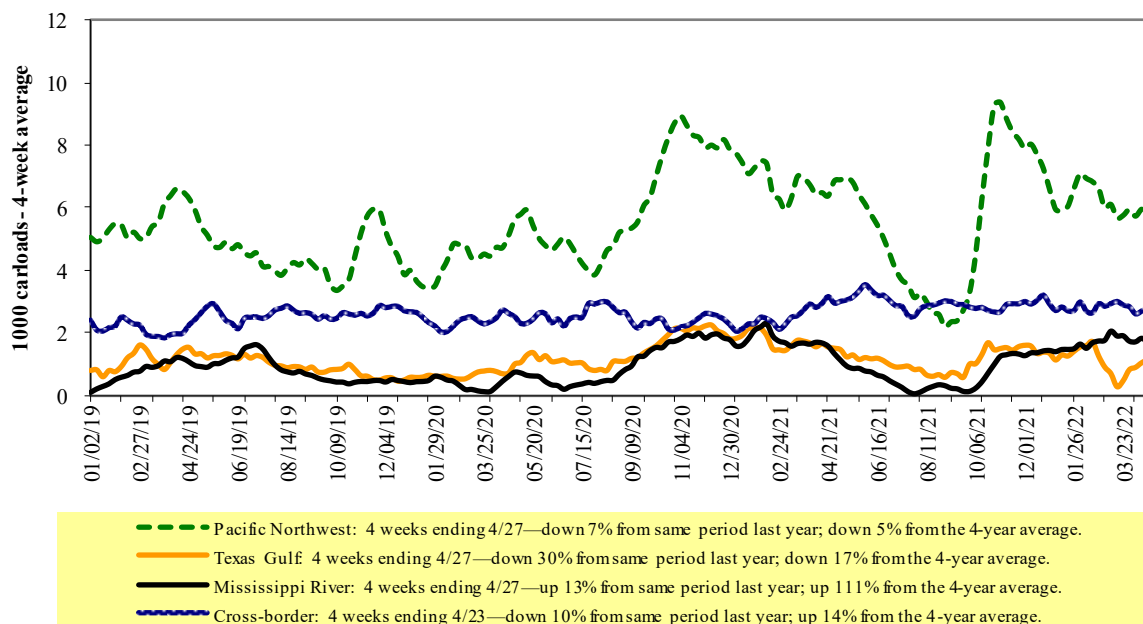
<sup>3</sup> Cross-border weekly data is approximately 15 percent below the Association of American Railroads' reported weekly carloads received by Mexican railroads to reflect switching between Kansas City Southern de Mexico (KCSM) and Grupo Mexico.

**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: 4/23/2022	East		West			U.S. total	Canada	
	CSXT	NS	BNSF	KCS	UP		CN	CP
This week	1,842	2,109	12,798	1,085	5,272	23,106	4,037	4,007
This week last year	1,589	2,668	13,750	900	6,550	25,457	4,039	6,272
2022 YTD	29,730	36,912	187,117	20,197	96,568	370,524	57,397	59,985
2021 YTD	32,034	41,532	209,715	16,480	105,417	405,178	79,035	86,869
2022 YTD as % of 2021 YTD	93	89	89	123	92	91	73	69
Last 4 weeks as % of 2021*	107	91	85	114	82	88	73	61
Last 4 weeks as % of 3-yr. avg.**	103	90	96	108	95	96	73	69
Total 2021	93,935	120,897	609,890	64,818	318,002	1,207,542	210,215	242,533

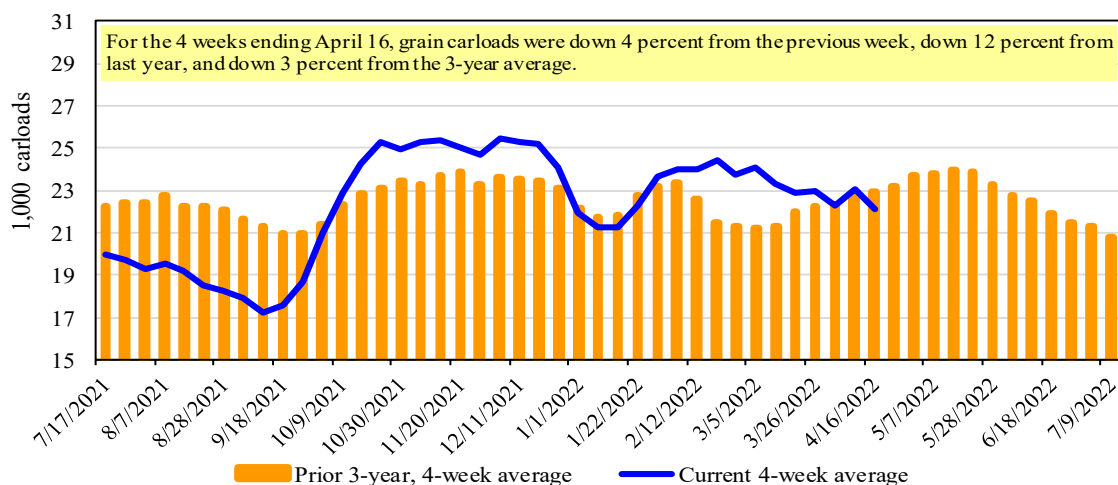
\*The past 4 weeks of this year as a percent of the same 4 weeks last year.

\*\*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<sup>1</sup> (\$/car)<sup>2</sup>**

For the week ending: 4/28/2022		Delivery period							
		May-22	May-21	Jun-22	Jun-21	Jul-22	Jul-21	Aug-22	Aug-21
BNSF <sup>3</sup>	COT grain units	no offer	0	no offer	no bids	0	no bids	0	no bids
	COT grain single-car	no offer	0	no offer	0	0	0	0	0
UP <sup>4</sup>	GCAS/Region 1	no offer	no offer	no offer	no offer	no offer	no offer	n/a	n/a
	GCAS/Region 2	no offer	no offer	no offer	no offer	no offer	no offer	n/a	n/a

<sup>1</sup>Auction offerings are for single-car and unit train shipments only.

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

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

<sup>4</sup>UP - GCAS = Union Pacific Railroad Grain Car Allocation System.

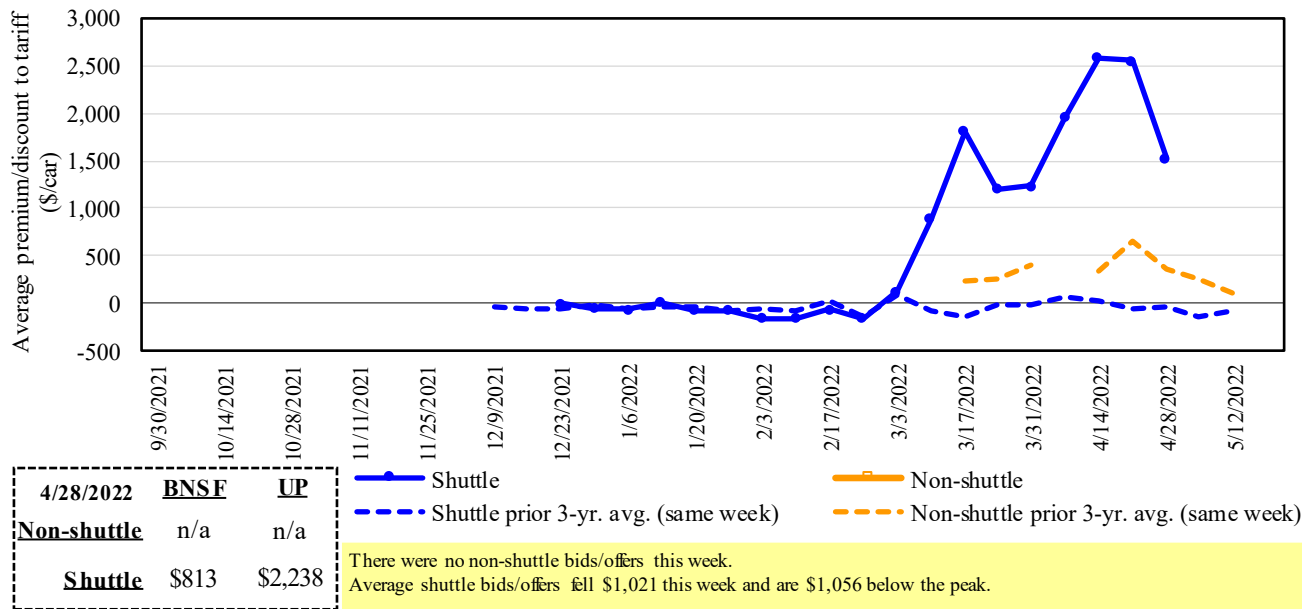
Region 1 includes: AR, IL, LA, MO, NM, OK, TX, WI, and Duluth, MN.

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

Source: USDA, Agricultural Marketing Service.

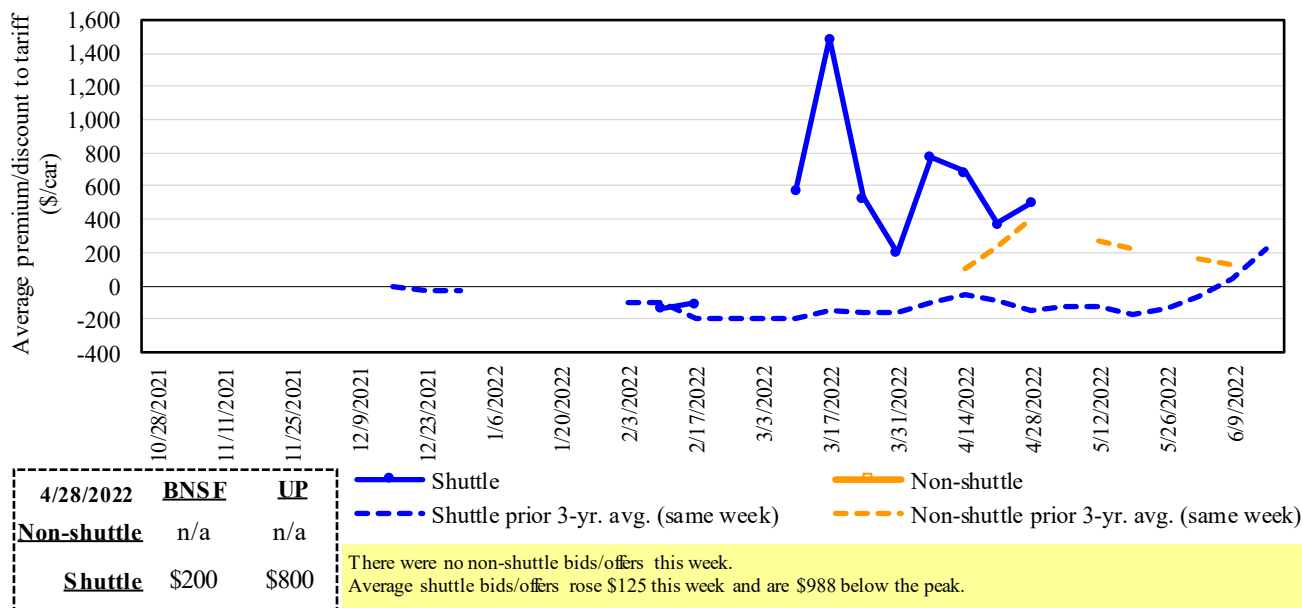
The **secondary rail market** information reflects trade values for service that was originally purchased from the railroad carrier as some form of guaranteed freight. The **auction and secondary rail** values are indicators of rail service quality and demand/supply.

**Figure 4**  
**Secondary market bids/offers for railcars to be delivered in May 2022**



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.

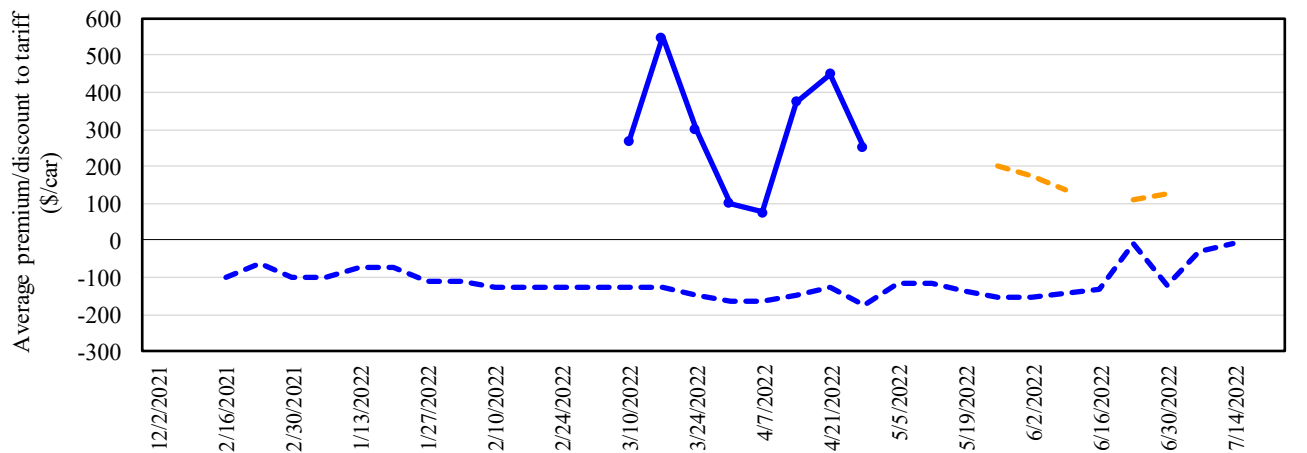
**Figure 5**  
**Secondary market bids/offers for railcars to be delivered in June 2022**



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

Secondary market bids/offers for railcars to be delivered in July 2022



4/28/2022	<b>BNSF</b>	<b>UP</b>
<b>Non-shuttle</b>	n/a	n/a
<b>Shuttle</b>	\$100	\$400

—●— Shuttle - - - Non-shuttle  
- - - Shuttle prior 3-yr. avg. (same week) - - - Non-shuttle prior 3-yr. avg. (same week)

There were no non-shuttle bids/offers this week.  
 Average shuttle bids/offers fell \$200 this week and are \$300 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)<sup>1</sup>

For the week ending: 4/28/2022		Delivery period					
		May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22
Non-shuttle	<b>BNSF-GF</b>	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 2021	n/a	n/a	n/a	n/a	n/a	n/a
	<b>UP-Pool</b>	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 2021	n/a	n/a	n/a	n/a	n/a	n/a	
Shuttle	<b>BNSF-GF</b>	<b>813</b>	<b>200</b>	<b>100</b>	<b>(50)</b>	<b>375</b>	<b>1,200</b>
	Change from last week	(687)	(175)	(100)	(50)	106	0
	Change from same week 2021	944	413	300	167	463	67
	<b>UP-Pool</b>	<b>2,238</b>	<b>800</b>	<b>400</b>	<b>300</b>	<b>n/a</b>	<b>1,050</b>
	Change from last week	(1,354)	n/a	(300)	125	n/a	(50)
Change from same week 2021	2,191	875	550	450	n/a	350	

<sup>1</sup> 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<sup>1</sup>**

May 2022	Origin region <sup>3</sup>	Destination region <sup>3</sup>	Tariff rate/car	Fuel surcharge per car	Tariff plus surcharge per:		Percent change Y/Y <sup>4</sup>
					metric ton	bushel <sup>2</sup>	
<b>Unit train</b>							
Wheat	Wichita, KS	St. Louis, MO	\$3,695	\$309	\$39.76	\$1.08	5
	Grand Forks, ND	Duluth-Superior, MN	\$3,658	\$0	\$36.33	\$0.99	-13
	Wichita, KS	Los Angeles, CA	\$7,290	\$0	\$72.39	\$1.97	2
	Wichita, KS	New Orleans, LA	\$4,436	\$543	\$49.44	\$1.35	5
	Sioux Falls, SD	Galveston-Houston, TX	\$7,026	\$0	\$69.77	\$1.90	3
	Colby, KS	Galveston-Houston, TX	\$4,712	\$595	\$52.70	\$1.43	6
	Amarillo, TX	Los Angeles, CA	\$5,121	\$828	\$59.07	\$1.61	10
Corn	Champaign-Urbana, IL	New Orleans, LA	\$4,000	\$614	\$45.82	\$1.16	12
	Toledo, OH	Raleigh, NC	\$8,130	\$671	\$87.40	\$2.22	12
	Des Moines, IA	Davenport, IA	\$2,505	\$130	\$26.17	\$0.66	5
	Indianapolis, IN	Atlanta, GA	\$6,227	\$504	\$66.84	\$1.70	13
	Indianapolis, IN	Knoxville, TN	\$5,247	\$326	\$55.34	\$1.41	11
	Des Moines, IA	Little Rock, AR	\$4,000	\$382	\$43.51	\$1.11	9
	Des Moines, IA	Los Angeles, CA	\$5,880	\$1,112	\$69.43	\$1.76	13
Soybeans	Minneapolis, MN	New Orleans, LA	\$4,431	\$951	\$53.44	\$1.45	40
	Toledo, OH	Huntsville, AL	\$6,714	\$478	\$71.42	\$1.94	9
	Indianapolis, IN	Raleigh, NC	\$7,422	\$680	\$80.46	\$2.19	14
	Indianapolis, IN	Huntsville, AL	\$5,367	\$323	\$56.50	\$1.54	8
Champaign-Urbana, IL	New Orleans, LA	\$4,665	\$614	\$52.42	\$1.43	8	
<b>Shuttle train</b>							
Wheat	Great Falls, MT	Portland, OR	\$4,193	\$0	\$41.64	\$1.13	4
	Wichita, KS	Galveston-Houston, TX	\$4,411	\$0	\$43.80	\$1.19	4
	Chicago, IL	Albany, NY	\$6,670	\$633	\$72.53	\$1.97	15
	Grand Forks, ND	Portland, OR	\$5,851	\$0	\$58.10	\$1.58	3
	Grand Forks, ND	Galveston-Houston, TX	\$5,199	\$0	\$51.63	\$1.41	-13
	Colby, KS	Portland, OR	\$5,923	\$975	\$68.50	\$1.86	8
Corn	Minneapolis, MN	Portland, OR	\$5,380	\$0	\$53.43	\$1.36	4
	Sioux Falls, SD	Tacoma, WA	\$5,340	\$0	\$53.03	\$1.35	4
	Champaign-Urbana, IL	New Orleans, LA	\$3,920	\$614	\$45.02	\$1.14	12
	Lincoln, NE	Galveston-Houston, TX	\$4,080	\$0	\$40.52	\$1.03	5
	Des Moines, IA	Amarillo, TX	\$4,420	\$480	\$48.66	\$1.24	9
	Minneapolis, MN	Tacoma, WA	\$5,380	\$0	\$53.43	\$1.36	4
	Council Bluffs, IA	Stockton, CA	\$5,300	\$0	\$52.63	\$1.34	4
Soybeans	Sioux Falls, SD	Tacoma, WA	\$6,050	\$0	\$60.08	\$1.64	3
	Minneapolis, MN	Portland, OR	\$6,100	\$0	\$60.58	\$1.65	3
	Fargo, ND	Tacoma, WA	\$5,950	\$0	\$59.09	\$1.61	3
	Council Bluffs, IA	New Orleans, LA	\$4,895	\$708	\$55.64	\$1.51	9
	Toledo, OH	Huntsville, AL	\$4,954	\$478	\$53.94	\$1.47	10
Grand Island, NE	Portland, OR	\$5,280	\$999	\$62.35	\$1.70	12	

<sup>1</sup>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.

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

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

<sup>4</sup>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: December 2021			Tariff rate per car <sup>1</sup>	Fuel surcharge per car <sup>2</sup>	Tariff rate plus fuel surcharge per:		Percent change <sup>4</sup> Y/Y
Commodity	Origin state	Destination region			metric ton <sup>3</sup>	bushel <sup>3</sup>	
Wheat	MT	Chihuahua, CI	\$7,699	\$0	\$78.67	\$2.14	4
	OK	Cuautitlan, EM	\$6,900	\$230	\$72.85	\$1.98	6
	KS	Guadalajara, JA	\$7,619	\$719	\$85.19	\$2.32	7
	TX	Salinas Victoria, NL	\$4,420	\$138	\$46.57	\$1.27	4
Corn	IA	Guadalajara, JA	\$9,102	\$663	\$99.77	\$2.53	6
	SD	Celaya, GJ	\$8,300	\$0	\$84.81	\$2.15	2
	NE	Queretaro, QA	\$8,322	\$462	\$89.75	\$2.28	5
	SD	Salinas Victoria, NL	\$6,905	\$0	\$70.55	\$1.79	0
	MO	Tlalnepantla, EM	\$7,687	\$450	\$83.14	\$2.11	5
	SD	Torreón, CU	\$7,825	\$0	\$79.95	\$2.03	2
Soybeans	MO	Bojay (Tula), HG	\$8,647	\$614	\$94.63	\$2.57	5
	NE	Guadalajara, JA	\$9,207	\$646	\$100.67	\$2.74	5
	IA	El Castillo, JA	\$9,510	\$0	\$97.17	\$2.64	1
	KS	Torreón, CU	\$8,109	\$466	\$87.61	\$2.38	5
Sorghum	NE	Celaya, GJ	\$7,932	\$597	\$87.15	\$2.21	6
	KS	Queretaro, QA	\$8,108	\$287	\$85.77	\$2.18	3
	NE	Salinas Victoria, NL	\$6,713	\$231	\$70.94	\$1.80	3
	NE	Torreón, CU	\$7,225	\$438	\$78.29	\$1.99	6

<sup>1</sup>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.

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

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

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

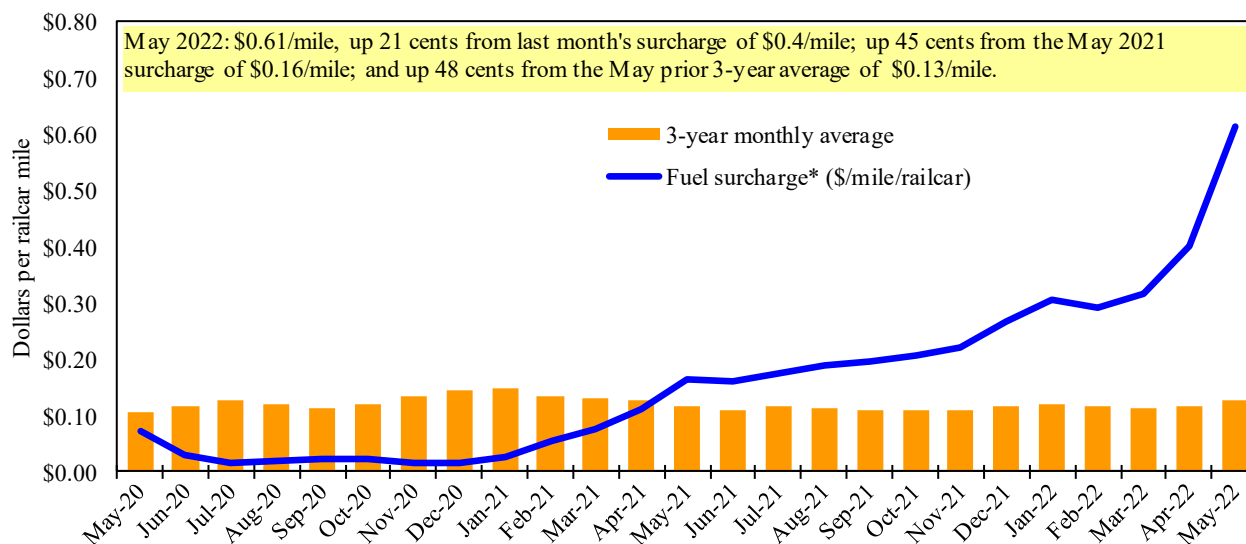
<sup>5</sup> As of January 1, both BNSF and Union Pacific changed their billing and reporting of rates to Mexico.

As we incorporate the change, Table 8 updates will be delayed.

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

Figure 7

**Railroad fuel surcharges, North American weighted average<sup>1</sup>**



<sup>1</sup> 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.

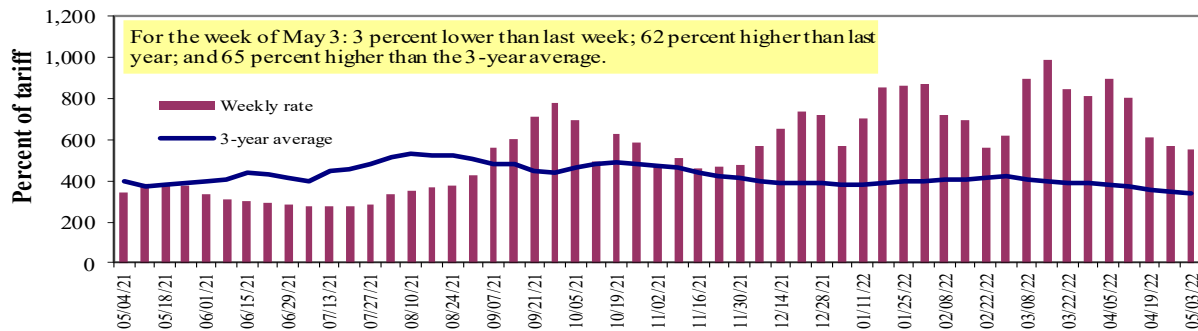
\*\* CSX strike price changed from \$2.00/gal. to \$3.75/gal. starting January 1, 2015.

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<sup>1,2</sup>



<sup>1</sup>Rate = percent of 1976 tariff benchmark index (1976 = 100 percent); <sup>2</sup>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
<b>Rate<sup>1</sup></b>	5/3/2022	664	625	552	402	525	525	390
	4/26/2022	680	633	567	471	563	563	429
<b>\$/ton</b>	5/3/2022	41.10	33.25	25.61	16.04	24.62	21.21	12.25
	4/26/2022	42.09	33.68	26.31	18.79	26.40	22.75	13.47
<b>Current week % change from the same week:</b>								
	Last year	54	75	62	65	100	100	77
	3-year avg. <sup>2</sup>	71	95	65	73	101	101	75
<b>Rate<sup>1</sup></b>	June	605	535	513	402	466	466	362
	August	643	573	581	521	589	589	496

<sup>1</sup>Rate = percent of 1976 tariff benchmark index (1976 = 100 percent); <sup>2</sup>4-week moving average; ton = 2,000 pounds; "-" data not available.  
Source: USDA, Agricultural Marketing Service.

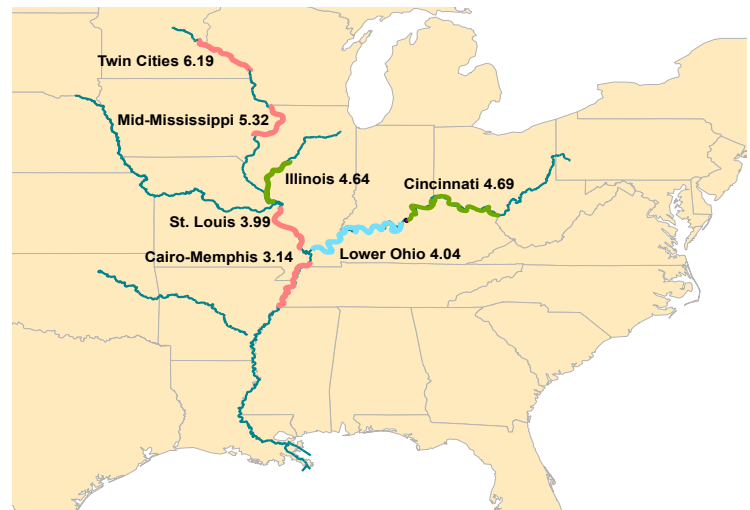
Figure 9

## Benchmark tariff rates

### Calculating barge rate per ton:

$(\text{Rate} * 1976 \text{ tariff benchmark rate per ton}) / 100$

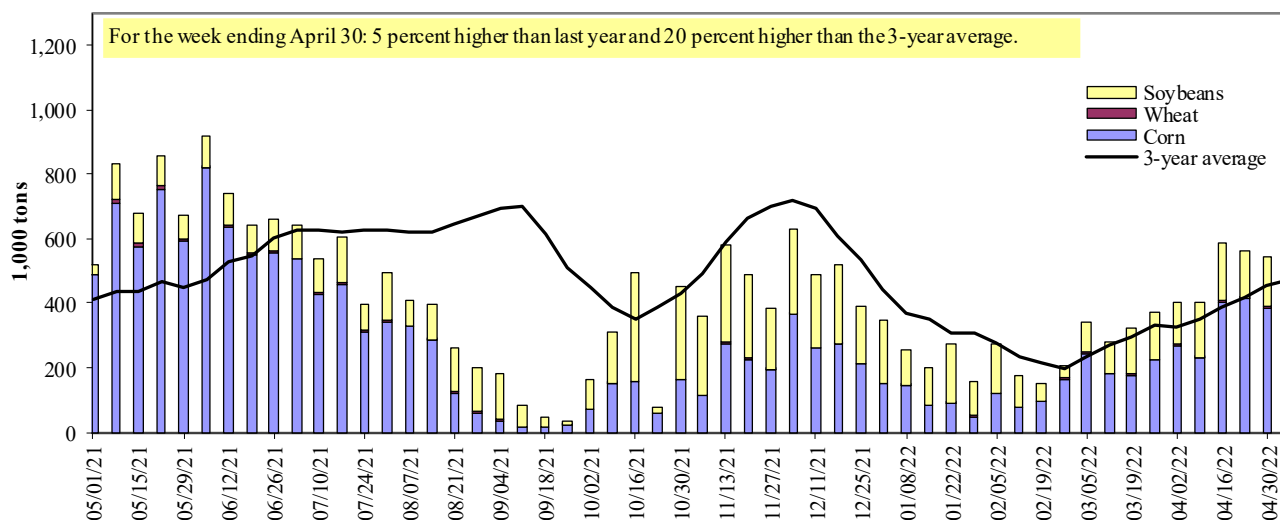
Select applicable index from market quotes are included in tables on this page. The 1976 benchmark rates per ton are provided in map.



Map Credit: USDA, Agricultural Marketing Service

Figure 10

**Barge movements on the Mississippi River<sup>1</sup> (Locks 27 - Granite City, IL)**



<sup>1</sup> 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 04/30/2022	Corn	Wheat	Soybeans	Other	Total
<b>Mississippi River</b>					
Rock Island, IL (L15)	146	0	88	2	235
Winfield, MO (L25)	220	0	120	0	340
Alton, IL (L26)	312	5	174	3	493
Granite City, IL (L27)	387	2	157	2	547
<b>Illinois River (La Grange)</b>	141	5	102	3	251
<b>Ohio River (Olmsted)</b>	138	18	61	11	226
<b>Arkansas River (L1)</b>	0	10	7	0	17
Weekly total - 2022	525	29	225	12	791
Weekly total - 2021	601	21	50	0	672
2022 YTD <sup>1</sup>	6,412	556	3,980	118	11,065
2021 YTD <sup>1</sup>	9,605	371	3,341	126	13,444
2022 as % of 2021 YTD	67	150	119	94	82
Last 4 weeks as % of 2021 <sup>2</sup>	78	131	228	212	100
Total 2021	23,516	1,634	11,325	297	36,772

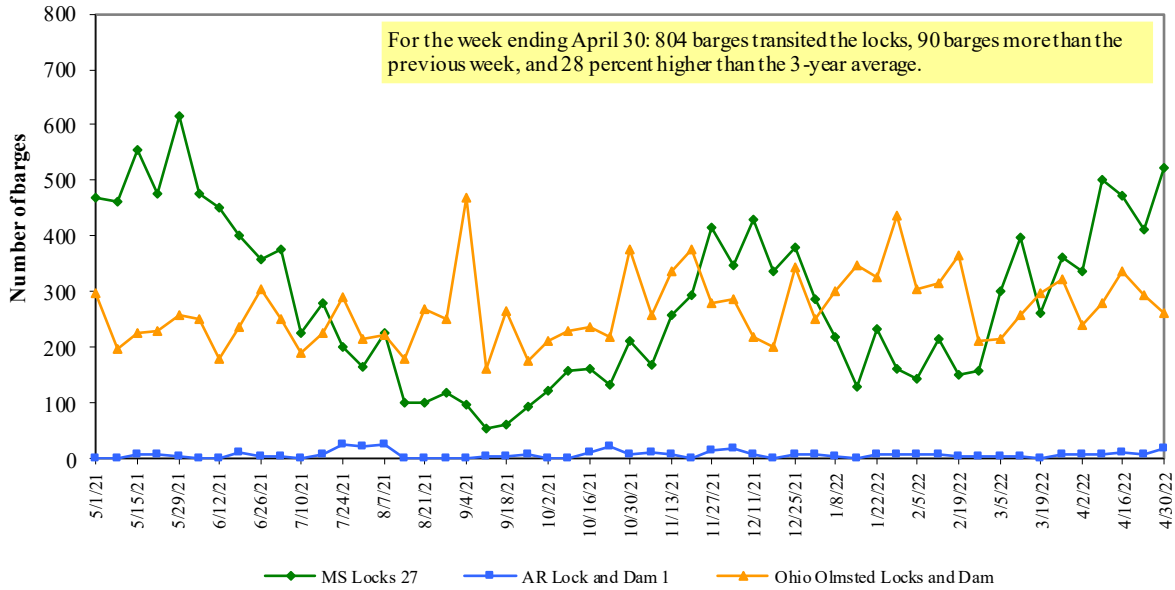
<sup>1</sup> Weekly total, YTD (year-to-date), and calendar year total include MI/27, OH/Olmsted, and AR/1; Other refers to oats, barley, sorghum, and rye. Total may not add exactly due to rounding.

<sup>2</sup> As a percent of same period in 2020.

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

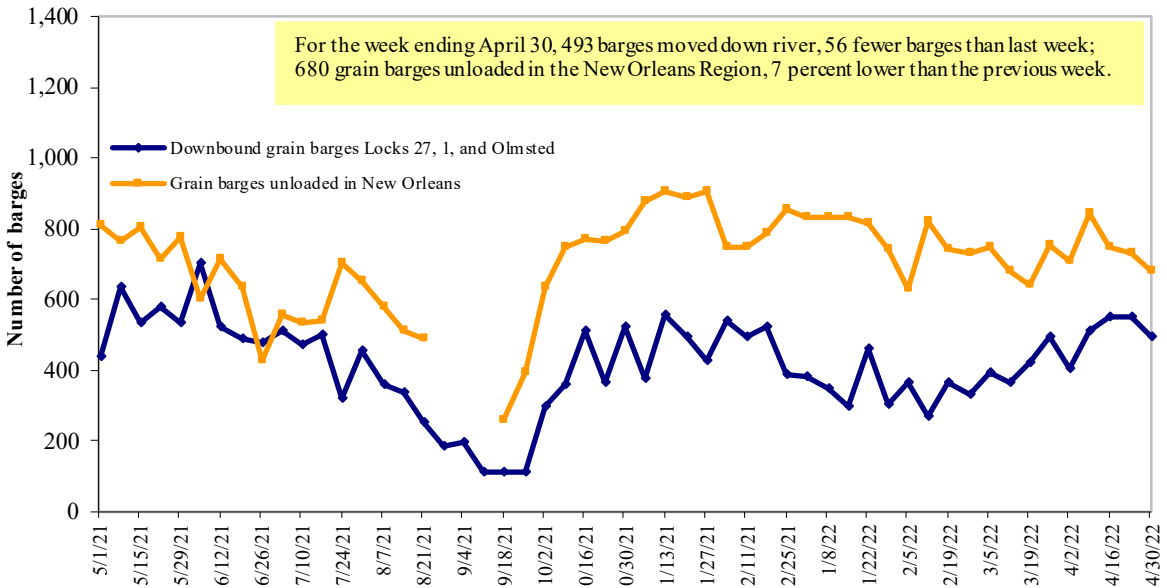
Source: U.S. Army Corps of Engineers.

**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 5/2/2022 (U.S. \$/gallon)

Region	Location	Price	Change from	
			Week ago	Year ago
I	East Coast	5.701	0.492	2.588
	New England	6.101	0.861	3.017
	Central Atlantic	6.080	0.680	2.795
	Lower Atlantic	5.401	0.315	2.397
II	Midwest	5.329	0.342	2.244
III	Gulf Coast	5.210	0.294	2.286
IV	Rocky Mountain	5.406	0.252	2.156
V	West Coast	6.021	0.180	2.357
	West Coast less California	5.577	0.231	2.295
	California	6.412	0.135	2.429
Total	United States	5.509	0.349	2.367

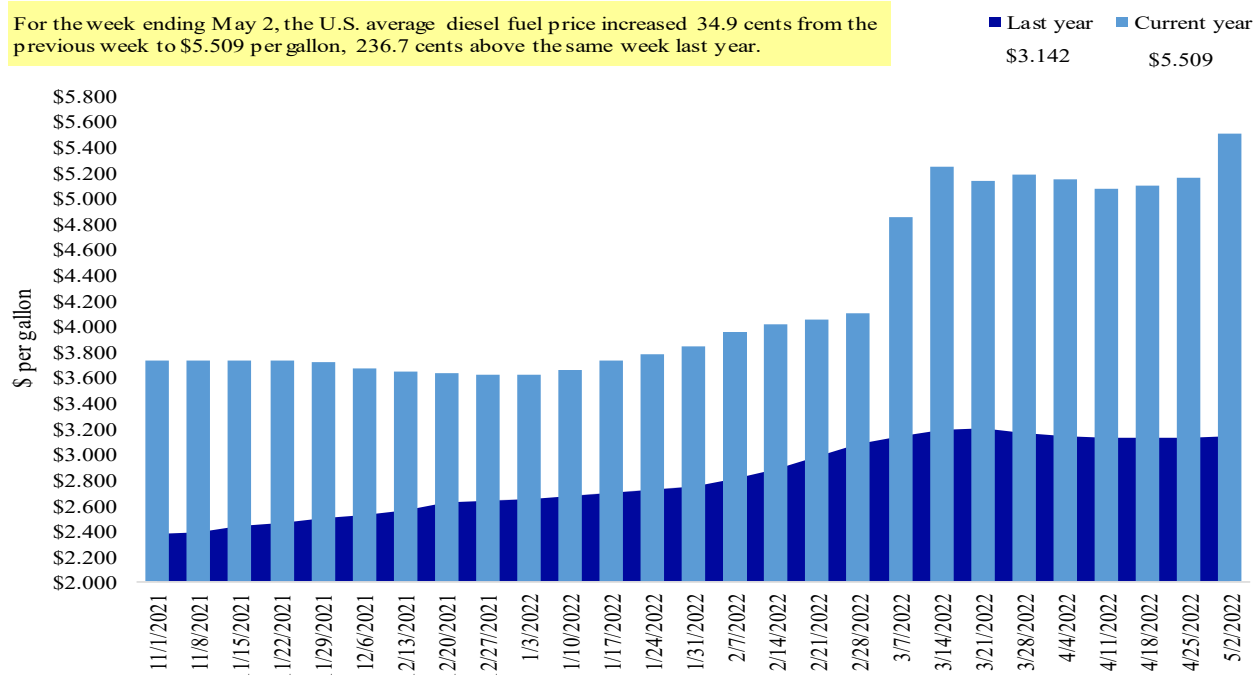
<sup>1</sup>Diesel fuel prices include all taxes. Prices represent an average of all types of diesel fuel.

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

Figure 13

## Weekly diesel fuel prices, U.S. average

For the week ending May 2, the U.S. average diesel fuel price increased 34.9 cents from the previous week to \$5.509 per gallon, 236.7 cents above the same week last year.



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

# Grain Exports

Table 12

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

For the week ending	Wheat					All wheat	Corn	Soybeans	Total
	HRW	SRW	HRS	SWW	DUR				
<b>Export balances<sup>1</sup></b>									
4/21/2022	1,018	370	700	313	1	2,401	19,383	10,849	32,633
This week year ago	1,098	255	1,188	1,084	72	3,696	26,411	5,055	35,162
<b>Cumulative exports-marketing year<sup>2</sup></b>									
2021/22 YTD	6,472	2,484	4,721	3,023	195	16,896	38,132	46,728	101,756
2020/21 YTD	7,627	1,555	6,553	5,568	595	21,897	41,308	56,065	119,270
YTD 2021/22 as % of 2020/21	85	160	72	54	33	77	92	83	85
Last 4 wks. as % of same period 2020/21*	111	170	67	36	16	77	76	224	97
Total 2020/21	8,331	1,744	7,337	6,281	654	24,347	66,702	60,287	151,336
Total 2019/20	9,526	2,318	6,960	4,751	922	24,477	42,622	43,994	111,094

<sup>1</sup> Current unshipped (outstanding) export sales to date.

<sup>2</sup> Shipped export sales to date; 2021/22 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<sup>1</sup> of U.S. corn

For the week ending 04/21/2022	Total commitments <sup>2</sup>		% change current MY from last MY	Exports <sup>3</sup> 3-yr. avg. 2019-21
	2021/22 current MY	2020/21 last MY		
1,000 mt -				
Mexico	15,635	13,578	15	14,817
Japan	8,681	9,530	(9)	11,082
China	14,182	12,479	14	7,920
Columbia	3,918	3,505	12	4,491
Korea	1,128	3,031	(63)	3,302
<b>Top 5 importers</b>	<b>43,544</b>	<b>42,123</b>	<b>3</b>	<b>41,613</b>
<b>Total U.S. corn export sales</b>	<b>57,515</b>	<b>67,720</b>	<b>(15)</b>	<b>53,145</b>
% of projected exports	90%	97%		
Change from prior week <sup>2</sup>	<b>867</b>	<b>521</b>		
<b>Top 5 importers' share of U.S. corn export sales</b>	76%	62%		78%
<b>USDA forecast April 2022</b>	<b>63,613</b>	<b>70,051</b>	<b>(9)</b>	
<b>Corn use for ethanol USDA forecast, April 2022</b>	<b>136,525</b>	<b>127,838</b>	<b>7</b>	

<sup>1</sup> Based on USDA, Foreign Agricultural Service (FAS) marketing year ranking reports for 2020/21; marketing year (MY) = Sep 1 - Aug 31.

<sup>2</sup> 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.

<sup>3</sup> FAS 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.

Source: USDA, Foreign Agricultural Service.

Table 14

**Top 5 importers<sup>1</sup> of U.S. soybeans**

For the week ending 4/21/2022	Total commitments <sup>2</sup>		% change current MY from last MY	Exports <sup>3</sup> 3-yr. avg. 2018-20
	2021/22 current MY	2020/21 last MY		
				- 1,000 mt -
China	29,845	35,711	(16)	21,666
Mexico	5,031	4,679	8	4,754
Egypt	3,656	2,670	37	3,093
Indonesia	1,374	1,943	(29)	2,325
Japan	2,047	1,993	3	2,275
<b>Top 5 importers</b>	<b>41,952</b>	<b>46,996</b>	<b>(11)</b>	<b>34,113</b>
<b>Total U.S. soybean export sales</b>	<b>57,577</b>	<b>61,119</b>	<b>(6)</b>	<b>50,758</b>
% of projected exports	100%	99%		
change from prior week <sup>2</sup>	481	293		
<b>Top 5 importers' share of U.S. soybean export sales</b>	73%	77%		<b>67%</b>
<b>USDA forecast, April 2022</b>	<b>57,629</b>	<b>61,608</b>	<b>(6)</b>	

<sup>1</sup>Based on USDA, Foreign Agricultural Service (FAS) marketing year ranking reports for 2020/21; marketing year (MY) = Sep 1 - Aug 31.

<sup>2</sup>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.

<sup>3</sup>FAS 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.

Source: USDA, Foreign Agricultural Service.

Table 15

**Top 10 importers<sup>1</sup> of all U.S. wheat**

For the week ending 4/21/2022	Total Commitments <sup>2</sup>		% change current MY from last MY	Exports <sup>3</sup> 3-yr. avg. 2018-20
	2021/22 current MY	2020/21 last MY		
				- 1,000 mt -
				- 1,000 mt -
Mexico	3,677	3,620	2	3,388
Philippines	2,724	3,205	(15)	3,121
Japan	2,351	2,490	(6)	2,567
Korea	1,249	1,842	(32)	1,501
Nigeria	1,819	1,413	29	1,490
China	848	3,204	(74)	1,268
Taiwan	951	1,186	(20)	1,187
Indonesia	122	937	(87)	1,131
Thailand	557	808	(31)	768
Italy	263	600	(56)	681
<b>Top 10 importers</b>	<b>14,560</b>	<b>19,306</b>	<b>(25)</b>	<b>17,102</b>
<b>Total U.S. wheat export sales</b>	<b>19,297</b>	<b>25,593</b>	<b>(25)</b>	<b>24,617</b>
% of projected exports	90%	95%		
change from prior week <sup>2</sup>	32	224		
<b>Top 10 importers' share of U.S. wheat export sales</b>	75%	75%		<b>69%</b>
<b>USDA forecast, April 2022</b>	<b>21,390</b>	<b>27,030</b>	<b>(21)</b>	

<sup>1</sup>Based on USDA, Foreign Agricultural Service (FAS) marketing year ranking reports for 2020/21; Marketing year (MY) = Jun 1 - May 31.

<sup>2</sup>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.

<sup>3</sup>FAS marketing year final reports (carry over 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 04/28/22	Previous week*	Current week as % of previous	2022 YTD*	2021 YTD*	2022 YTD as % of 2021 YTD	Last 4-weeks as % of:		2021 total*
							Last year	Prior 3-yr. avg.	
<b>Pacific Northwest</b>									
Wheat	159	79	200	3,329	5,711	58	41	45	13,243
Corn	401	369	109	4,553	7,005	65	59	83	13,420
Soybeans	71	12	614	4,121	3,720	111	n/a	87	14,540
<b>Total</b>	<b>631</b>	<b>460</b>	<b>137</b>	<b>12,003</b>	<b>16,436</b>	<b>73</b>	<b>59</b>	<b>67</b>	<b>41,203</b>
<b>Mississippi Gulf</b>									
Wheat	103	47	221	1,356	744	182	138	101	3,202
Corn	1,052	1,037	101	14,986	17,499	86	87	119	38,498
Soybeans	405	360	113	9,084	9,367	97	403	218	27,159
<b>Total</b>	<b>1,560</b>	<b>1,443</b>	<b>108</b>	<b>25,426</b>	<b>27,611</b>	<b>92</b>	<b>121</b>	<b>138</b>	<b>68,858</b>
<b>Texas Gulf</b>									
Wheat	96	79	121	1,087	1,160	94	153	93	3,888
Corn	11	10	116	235	216	109	228	114	627
Soybeans	0	0	n/a	2	656	0	0	0	1,611
<b>Total</b>	<b>108</b>	<b>89</b>	<b>121</b>	<b>1,324</b>	<b>2,032</b>	<b>65</b>	<b>161</b>	<b>96</b>	<b>6,126</b>
<b>Interior</b>									
Wheat	33	25	132	949	892	106	91	92	2,973
Corn	162	220	73	3,055	3,164	97	91	105	10,157
Soybeans	144	151	95	2,526	2,409	105	126	119	6,525
<b>Total</b>	<b>339</b>	<b>397</b>	<b>86</b>	<b>6,530</b>	<b>6,465</b>	<b>101</b>	<b>102</b>	<b>108</b>	<b>19,656</b>
<b>Great Lakes</b>									
Wheat	13	41	32	84	60	140	146	71	536
Corn	22	0	n/a	39	25	159	159	477	145
Soybeans	0	40	0	90	0	n/a	n/a	611	592
<b>Total</b>	<b>35</b>	<b>81</b>	<b>43</b>	<b>212</b>	<b>84</b>	<b>252</b>	<b>260</b>	<b>164</b>	<b>1,273</b>
<b>Atlantic</b>									
Wheat	0	33	0	37	72	52	n/a	300	128
Corn	7	0	n/a	69	14	493	74	106	85
Soybeans	12	75	17	1,060	980	108	476	369	2,184
<b>Total</b>	<b>19</b>	<b>108</b>	<b>18</b>	<b>1,167</b>	<b>1,066</b>	<b>109</b>	<b>436</b>	<b>329</b>	<b>2,397</b>
<b>U.S. total from ports*</b>									
Wheat	405	304	133	6,842	8,638	79	70	66	23,969
Corn	1,654	1,636	101	22,938	27,922	82	80	107	62,932
Soybeans	633	637	99	16,883	17,133	99	304	174	52,612
<b>Total</b>	<b>2,692</b>	<b>2,577</b>	<b>104</b>	<b>46,662</b>	<b>53,694</b>	<b>87</b>	<b>100</b>	<b>109</b>	<b>139,512</b>

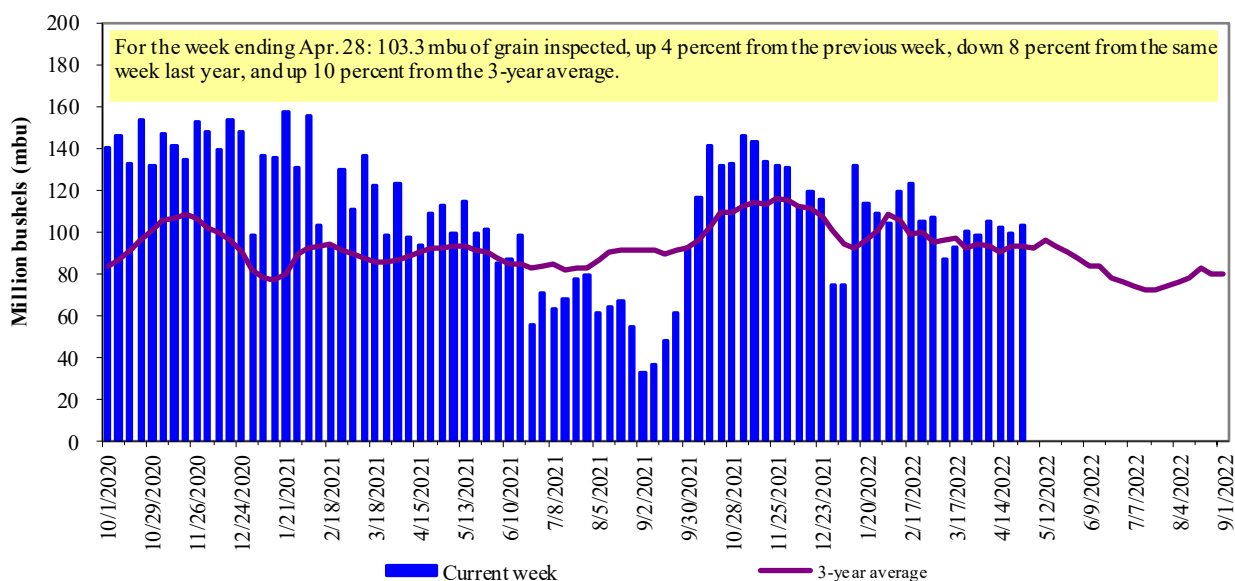
\*Data includes revisions from prior weeks; some regional totals may not add exactly due to rounding.

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)**

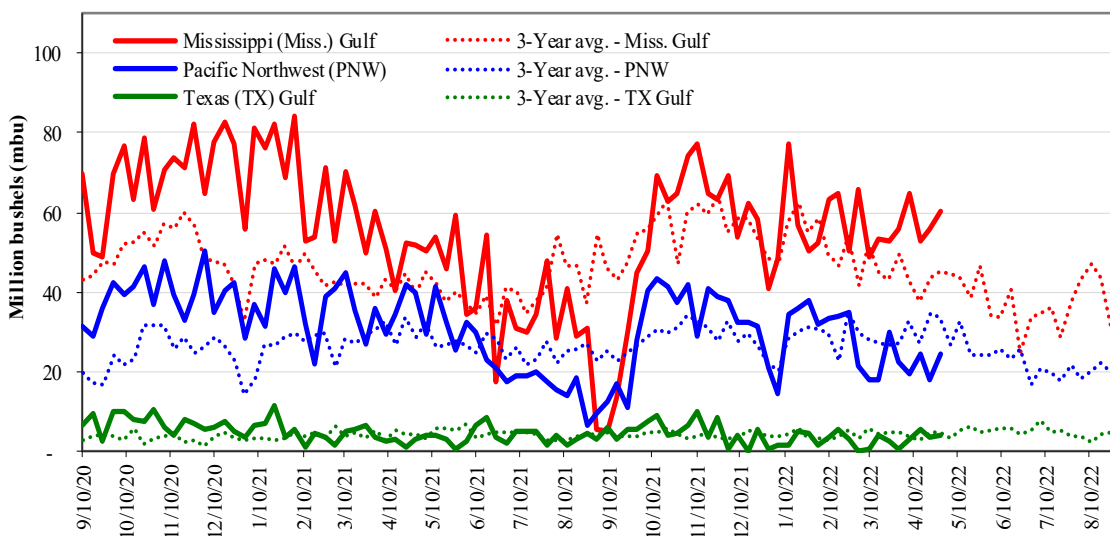


Note: 3-year average consists of 4-week running average.

Source: USDA, Federal Grain Inspection Service.

Figure 15

**U.S. Grain inspections: U.S. Gulf and PNW<sup>1</sup> (wheat, corn, and soybeans)**



<u>Week ending 04/28/22 inspections (mbu):</u>	<u>Percent change from:</u>	<u>MS Gulf</u>	<u>TX Gulf</u>	<u>U.S. Gulf</u>	<u>PNW</u>
MS Gulf: 60.1	Last wk:	up 8	up 21	up 8	up 36
PNW: 24.2	Last Year (same wk):	up 16	up 23	up 16	down 39
TX Gulf: 4.0	3-yr avg. (4-wk. mov. Avg):	up 42	down 2	up 38	down 24

Source: USDA, Federal Grain Inspection Service.

# Ocean Transportation

Table 17

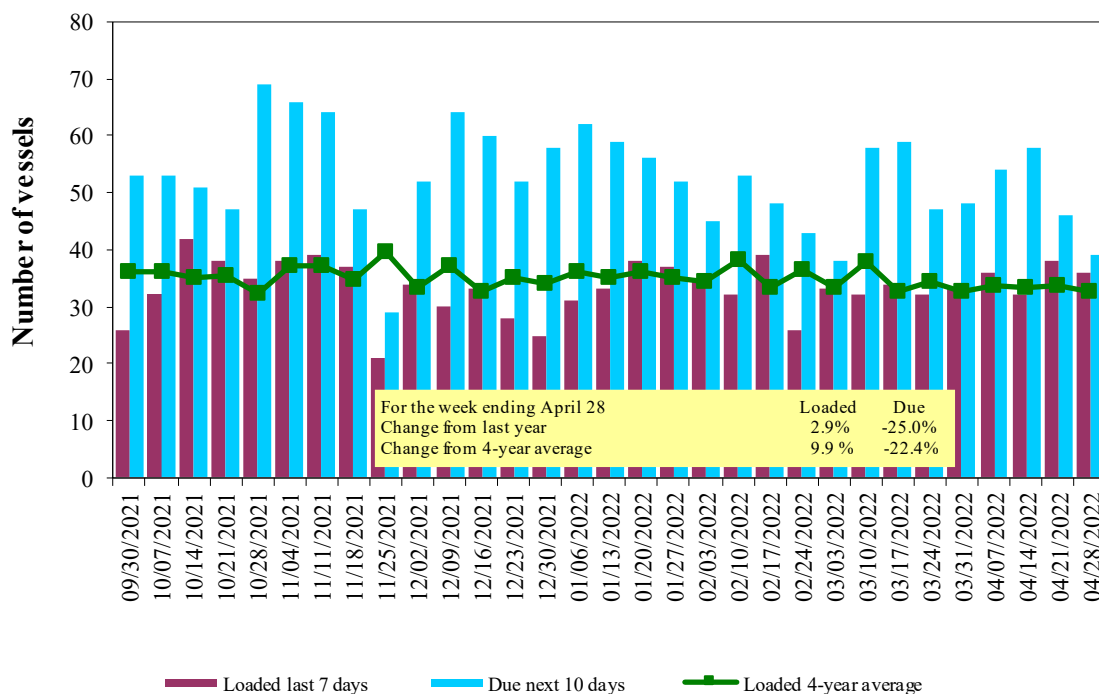
**Weekly port region grain ocean vessel activity (number of vessels)**

Date	In port	Gulf		Pacific Northwest
		Loaded 7-days	Due next 10-days	In port
4/28/2022	25	36	39	9
4/21/2022	24	38	46	11
2021 range	(10...57)	(5...48)	(15...69)	(4...27)
2021 average	34	32	49	15

Source: USDA, Agricultural Marketing Service.

Figure 16

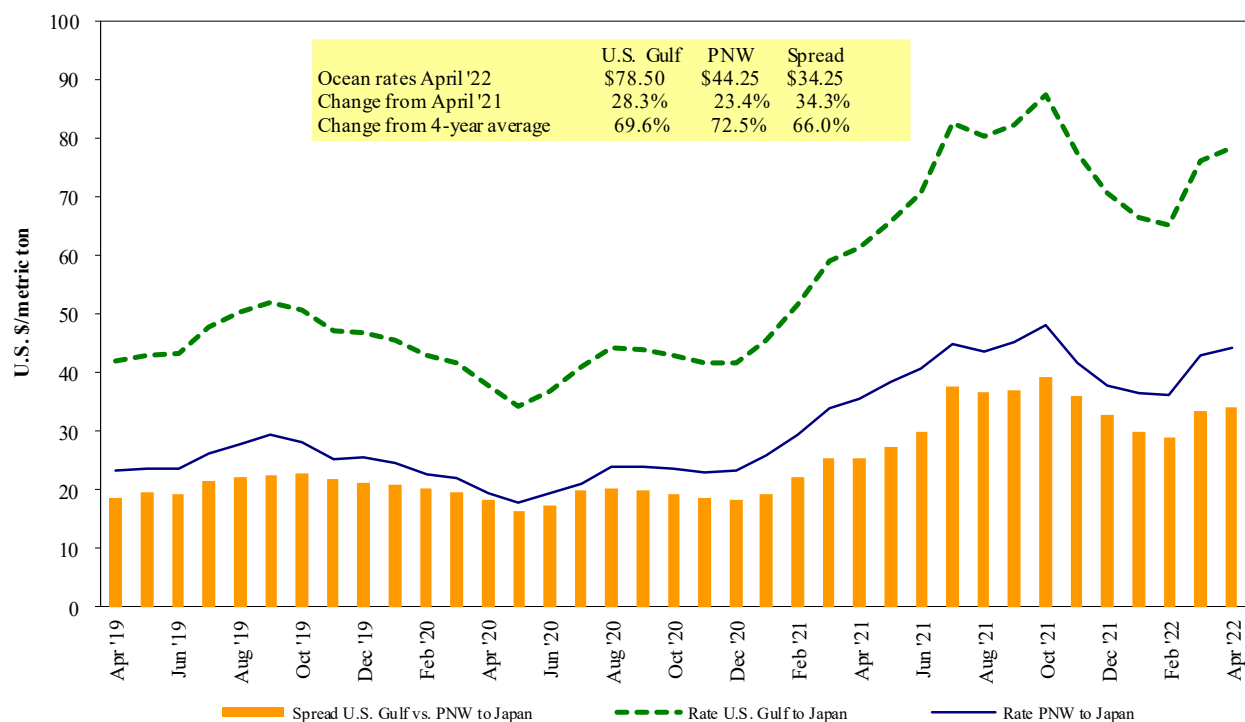
**U.S. Gulf<sup>1</sup> vessel loading activity**



<sup>1</sup>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 04/30/2022

Export region	Import region	Grain types	Loading date	Volume loads (metric tons)	Freight rate (US\$/metric ton)
U.S. Gulf	Japan	Heavy grain	Jun 1/10	50,000	89.65
U.S. Gulf	Japan	Heavy grain	May 1/20, 2022	50,000	78.90
U.S. Gulf	China	Heavy grain	Dec 1/10, 2021	65,000	76.00
U.S. Gulf	China	Heavy grain	Nov 1/10, 2021	66,000	89.00
U.S. Gulf	Djibouti	Sorghum	Mar 1/10, 2022	10,000	209.97*
U.S. Gulf	Honduras	Soybean Meal	Feb 18/28, 2022	7,820	57.15*
U.S. Gulf	S. Korea	Heavy grain	Jun 1/Jul, 2022	55,000	82.75
U.S. Gulf	Sudan	Sorghum	Mar 1/10, 2022	35,790	149.97*
U.S. Gulf	Sudan	Sorghum	Feb 1/10, 2022	35,780	77.60*
PNW	Japan	Wheat	Sep 1, 2021	52,170	56.55*
PNW	Yemen	Wheat	Jan 24/Feb 4, 2022	29,960	124.00*
Brazil	N. China	Heavy grain	Mar 18/27, 2022	64,000	56.85
Brazil	N. China	Heavy grain	Jan 1/5, 2022	64,000	58.25
Argentina	Taiwan	Corn	May 1/Jun, 2022	65,000	85.00
Australia	Japan	Barley	Nov 1/10, 2021	55,000	65.50

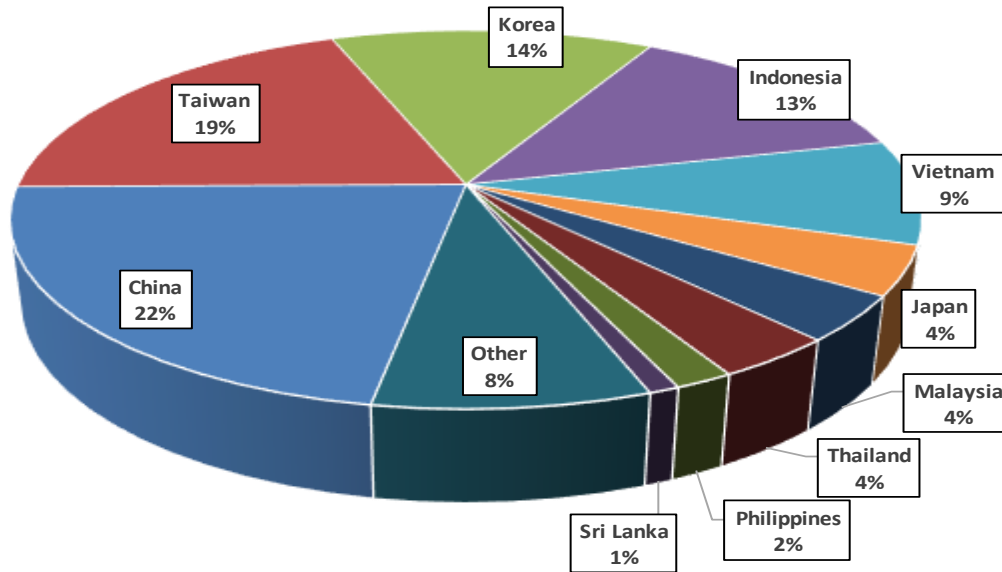
\*50 percent of food aid from the United States is required to be shipped on U.S.-flag vessels.

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 2020, containers were used to transport 10 percent of total U.S. waterborne grain exports. Approximately 66 percent of U.S. waterborne grain exports in 2020 went to Asia, of which 14 percent were moved in containers. Approximately 95 percent of U.S. waterborne containerized grain exports were destined for Asia.

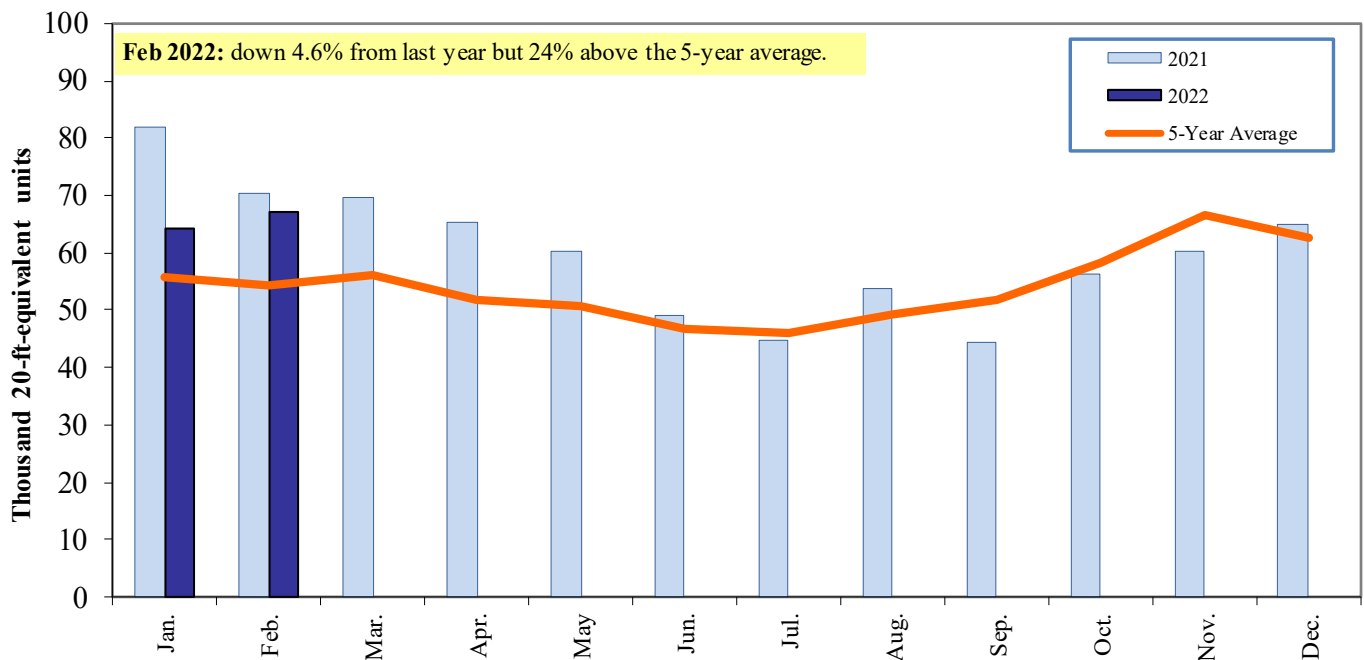
**Figure 18**  
**Top 10 destination markets for U.S. containerized grain exports, Jan-Feb 2022**



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 U.S. containerized grain exports**



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	<a href="mailto:surajudeen.olowolayemo@usda.gov">surajudeen.olowolayemo@usda.gov</a>	(202) 720 - 0119
Maria Williams	<a href="mailto:maria.williams@usda.gov">maria.williams@usda.gov</a>	(202) 690 - 4430
Bernadette Winston	<a href="mailto:bernadette.winston@usda.gov">bernadette.winston@usda.gov</a>	(202) 690 - 0487
Matt Chang	<a href="mailto:matt.chang@usda.gov">matt.chang@usda.gov</a>	(202) 720 - 0299

## Grain Transportation Indicators

Surajudeen (Deen) Olowolayemo	<a href="mailto:surajudeen.olowolayemo@usda.gov">surajudeen.olowolayemo@usda.gov</a>	(202) 720 - 0119
-------------------------------	--	------------------

## Rail Transportation

Jesse Gastelle	<a href="mailto:jesse.gastelle@usda.gov">jesse.gastelle@usda.gov</a>	(202) 690 - 1144
Peter Caffarelli	<a href="mailto:petera.caffarelli@usda.gov">petera.caffarelli@usda.gov</a>	(202) 690 - 3244
Bernadette Winston	<a href="mailto:bernadette.winston@usda.gov">bernadette.winston@usda.gov</a>	(202) 690 - 0487
Rich Henderson	<a href="mailto:richard.henderson2@usda.gov">richard.henderson2@usda.gov</a>	(919) 855 - 7801

## Barge Transportation

April Taylor	<a href="mailto:april.taylor@usda.gov">april.taylor@usda.gov</a>	(202) 720 - 7880
Matt Chang	<a href="mailto:matt.chang@usda.gov">matt.chang@usda.gov</a>	(202) 720 - 0299
Rich Henderson	<a href="mailto:richard.henderson2@usda.gov">richard.henderson2@usda.gov</a>	(919) 855 - 7801

## Truck Transportation

April Taylor	<a href="mailto:april.taylor@usda.gov">april.taylor@usda.gov</a>	(202) 720 - 7880
Kranti Mulik	<a href="mailto:kranti.mulik@usda.gov">kranti.mulik@usda.gov</a>	(202) 756 - 2577
Matt Chang	<a href="mailto:matt.chang@usda.gov">matt.chang@usda.gov</a>	(202) 720 - 0299

## Grain Exports

Kranti Mulik	<a href="mailto:kranti.mulik@usda.gov">kranti.mulik@usda.gov</a>	(202) 756 - 2577
Bernadette Winston	<a href="mailto:bernadette.winston@usda.gov">bernadette.winston@usda.gov</a>	(202) 690 - 0487

## Ocean Transportation

Surajudeen (Deen) Olowolayemo (Freight rates and vessels)	<a href="mailto:surajudeen.olowolayemo@usda.gov">surajudeen.olowolayemo@usda.gov</a>	(202) 720 - 0119
April Taylor (Container movements)	<a href="mailto:april.taylor@usda.gov">april.taylor@usda.gov</a>	(202) 720 - 7880

## Editor

Maria Williams	<a href="mailto:maria.williams@usda.gov">maria.williams@usda.gov</a>	(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](mailto:GTRContactUs@usda.gov)

Preferred citation: U.S. Department of Agriculture, Agricultural Marketing Service. *Grain Transportation Report*. May 5, 2022. Web: <http://dx.doi.org/10.9752/TS056.05-05-2022>

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at How to File a Program Discrimination Complaint and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C.