United States Department of Agriculture

Grain Transportation Report

A weekly publication of the Agricultural Marketing Service

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Contact Us

August 17, 2023

Contents

The next release is August 24, 2023

WEEKLY HIGHLIGHTS

USDA-AMS Launching Redesigned *GTR* Next Week

On August 24, 2023, USDA's Agricultural Marketing Service will launch a redesigned version of the weekly *Grain Transportation Report* (*GTR*). The report's new layout improves readability and accessibility. For example, the images, charts, and maps contain alternative text, which conveys the meaning and context of these objects for our vision-impaired readers. The colors and patterns used in visuals have also been updated to promote understanding for all users. We hope the modern design aids your decision-making with better and faster insights.

Mississippi River Commission Sets Public Meeting Schedule

Last week, the Mississippi River Commission (MRC) announced its schedule of public meetings. Congress charged the MRC with the mission to develop plans to improve the condition of the Mississippi River, foster navigation, promote commerce, and prevent destructive floods. There will be a total of six public meetings: the first was August 15 in Burlington, IA, and the last will be August 25 in Morgan City, LA. Open to the public, the meetings will include (1) a summary report on national and regional issues affecting U.S. Army Corps of Engineers projects on the Mississippi River System; (2) an overview of current projects in each respective area; and (3) presentations from local organizations and members of the public.

California Ports Receive $735 Million To Improve Infrastructure

According to multiple port press releases in July, the California State Transportation Agency has awarded $735 million in grants to reduce emissions and streamline the movement of goods through the State's ports. The Port of Long Beach received $225 million for zero-emissions cargo-moving equipment and supportive infrastructure, and $158.4 million, for construction of an on-dock rail support facility, which will shift more cargo from trucks to on-dock rail. The Port of Oakland received $40 million to convert diesel-powered cargo-handling equipment to zero emissions. The port also received $28 million to repave berths 32-33 and remove grade differentials between adjacent terminals, for greater operational flexibility. The Port of Los Angeles received $149.3 million to expand chassis and container storage for all 12 container terminals for both San Pedro Bay Ports, and $41.79 million, for upgrades to State Route 47. West Coast ports are key agricultural export gateways. Between 2018 and 2022, West Coast ports handled around 56 percent of total U.S. containerized agricultural exports. Soybeans and distillers' dried grains were among the top containerized grain products.

New Interchange Between Texas Shortline and UP

Last month, a new interchange was completed between Union Pacific Railroad (UP) and a shortline railroad, the Texas Gonzales and Northern Railway (TXGN). The nearly $5 million project received funding from TXGN's operator, TNW Corporation (TNW), and a matching grant from the U.S. Department of Transportation's Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program. Operating on about 12 miles of track between Gonzales and Harwood, TX, TXGN has approximately 67 miles of storage and loop track. The new interchange includes technologies such as power switches, welded rail, steel ties, and drainage enhancements. According to TNW, the upgrades will "enhance safe operations while expanding capacity," as well as allow efficient handling of unit trains. Gonzales County, TX, has one of the highest poultry populations in the Nation, and the new interchange is expected to help local livestock producers acquire feed grains.

Snapshots by Sector

Export Sales

For the week ending August 3, **unshipped balances** of wheat, corn, and soybeans for marketing year (MY) 2022/23 totaled 8.82 million metric tons (mmt), down 1 percent from last week and down 37 percent from the same time last year. Net **corn export sales** for MY 2022/23 were 0.151 mmt, up 40 percent from last week. Net **soybean export sales** were 0.407 mmt, up 1,093 percent from last week. Net weekly **wheat export sales** for MY 2023/24, were 0.568 mmt, up 35 percent from last week.

Rail

U.S. Class I railroads originated 15,623 **grain carloads** during the week ending August 5. This was a 4-percent increase from the previous week, 19 percent less than last year, and 18 percent lower than the 3-year average.

Average August **shuttle secondary railcar bids/offers** (per car) were $175 below tariff for the week ending August 10. This was $33 more than last week and $313 lower than this week last year. Average non-shuttle secondary railcar bids/offers per car were $63 above tariff. This was $131 less than last week and $69 lower than this week last year.

Barge

For the week ending August 12, **barged grain movements** totaled 355,204 tons. This was 8 percent more than the previous week and 34 percent less than the same period last year.

For the week ending August 12, 233 grain barges **moved down river**—28 more than last week. There were 427 grain barges **unloaded** in the New Orleans region, 14 percent fewer than last week.

Ocean

For the week ending August 10, 17 **oceangoing grain vessels** were loaded in the Gulf—25 percent fewer than the same period last year. Within the next 10 days (starting August 11), 30 vessels were expected to be loaded—34 percent fewer than the same period last year.

As of August 10, the rate for shipping a metric ton (mt) of grain from the U.S. Gulf to Japan was $48.00. This was 3 percent more than the previous week. The rate from the Pacific Northwest to Japan was $26.00 per mt, unchanged from the previous week.

Fuel

For the week ending August 14, the U.S. average **diesel fuel price** increased 13.9 cents from the previous week to $4.378 per gallon, 53.3 cents below the same week last year.

Preferred citation: U.S. Department of Agriculture, Agricultural Marketing Service. *Grain Transportation Report.* August 17, 2023.
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Feature Article/Calendar

Landed Costs of Grain to Mexico Fell in Second Quarter 2023

Mexico is a major importer of U.S. grain. Low transportation and landed costs for U.S.-Mexico routes are vital to the competitiveness of U.S. grain (corn, soybeans, and wheat) in Mexico and globally. U.S. grain is transported to Mexico either by cross-border land movements or by sea movements to Mexican ports for inland distribution. This article examines the costs of transporting U.S. grain to Mexico over land to Guadalajara (land routes) and by sea to Veracruz (water routes), tracking changes over time (table 1).

Table 1. Quarterly costs of transporting U.S. grain to Veracruz and Guadalajara, Mexico

	Water route (to Veracruz) $/metric ton					Land route (to Guadalajara) $/metric ton				
	2022 2nd qtr.	2023 1st qtr.	2023 2nd qtr.	Percent change Yr. to yr.	Qtr. to qtr.	2022 2nd qtr.	2023 1st qtr.	2023 2nd qtr.	Percent change Yr. to yr.	Qtr. to qtr.
Corn										
Origin		**IL**						**IA**		
Truck	23.40	14.75	14.19	-39.4	-3.8	7.13	5.42	5.82	-18.4	7.4
Rail [1,2]	-	-	-	-	-	102.50	105.98	104.90	2.3	-1.0
Barge	27.98	30.28	17.24	-38.4	-43.1	-	-	-	-	-
Ocean[3]	26.27	18.75	19.14	-27.1	2.1	-	-	-	-	-
Total transportation cost	77.65	63.78	50.57	-34.9	-20.7	109.63	111.40	110.72	1.0	-0.6
Farm value[4]	290.14	257.99	254.32	-12.3	-1.4	287.91	266.00	261.01	-9.3	-1.9
Landed cost[5]	367.79	321.77	304.89	-17.1	-5.2	397.54	377.40	371.73	-6.5	-1.5
Transport % of landed cost	21	20	17	-4.53	-3.24	28	30	30	2.21	0.3
Soybeans										
Origin		**IL**						**NE**		
Truck	23.40	14.75	14.19	-39.4	-3.8	7.13	5.42	5.82	-18.4	7.4
Rail	-	-	-	-	-	103.50	105.21	104.07	0.6	-1.1
Barge	27.98	30.28	17.24	-38.4	-43.1	-	-	-	-	-
Ocean	26.27	18.75	19.14	-27.1	2.1	-	-	-	-	-
Total transportation cost	77.65	63.78	50.57	-34.9	-20.7	110.63	110.63	109.89	-0.7	-0.7
Farm value	601.37	543.81	536.46	-10.8	-1.4	579.33	546.26	520.54	-10.1	-4.7
Landed cost	679.02	607.59	587.03	-13.5	-3.4	689.96	656.89	630.43	-8.6	-4.0
Transport % of landed cost	11	10	9	-2.82	-1.88	16	17	17	1.40	0.6
Wheat										
Origin		**KS**						**KS**		
Truck	7.13	5.42	5.82	-18.4	7.4	7.13	5.42	5.82	-18.4	7.4
Rail	44.47	45.58	45.55	2.4	-0.1	86.09	87.53	87.00	1.1	-0.6
Ocean	26.27	18.75	19.14	-27.1	2.1	-	-	-	-	-
Total transportation cost	77.87	69.75	70.51	-9.5	1.1	93.22	92.95	92.82	-0.4	-0.1
Farm value	370.01	309.99	304.48	-17.7	-1.8	370.01	309.99	304.48	-17.7	-1.8
Landed cost	447.88	379.74	374.99	-16.3	-1.3	463.23	402.94	397.30	-14.2	-1.4
Transport % of landed cost	17	18	19	1	0	20	23	23	3	0.3

[1]Rail tariff rates to Mexico are only estimated values. Due to tax changes in Mexico, all three Class I railroads that ship from the U.S. to Mexico (BNSF, Union Pacific, and Kansas City Southern) are only reporting rates to the border for interchange, called Rule 11 rates. Due to lack of data, Mexico tariff rate changes were estimated using the historical correlation between changes in US tariff rates (GTR Table 6) and Mexico tariff rates. The estimated total includes the estimat tariff through-rate for shuttle train service to Mexico and the reported fuel surcharge. The estimated rate does not include any additional costs for shuttle car service. First quarter rates were revised from what were previously published.

[2]A correction was made to 2022 rail fuel surcharge calculations.

[3]Source for ocean freight rates: O'Neil Commodity Consulting.

[4]Source for farm values: USDA, National Agricultural Statistics Service.

[5]Landed cost is total transportation cost plus farm value.

Note: "-" indicates data not required or applicable. Total may not add exactly because of rounding.

Source: Compiled by the USDA, Agricultural Marketing Service.

Quarter-to-quarter transportation costs. From first quarter 2023 to second quarter 2023 (quarter to quarter), total transportation costs fell for corn and soybeans shipped by the water routes, but rose for waterborne wheat. Total transportation costs fell for U.S.

corn, soybeans, and wheat by the land routes. Falling water-route shipping costs for corn and soybeans mainly reflected lower barge rates.[1]

Barge rates fell in response to low demand for barges, caused by slow export sales (*Grain Transportation Report*, July 20, 2023). Land-route shipping costs decreased with falling rail rates (public tariff, plus fuel surcharge). Rail rates fell in response to the drop in fuel surcharges, amid lower fuel prices.

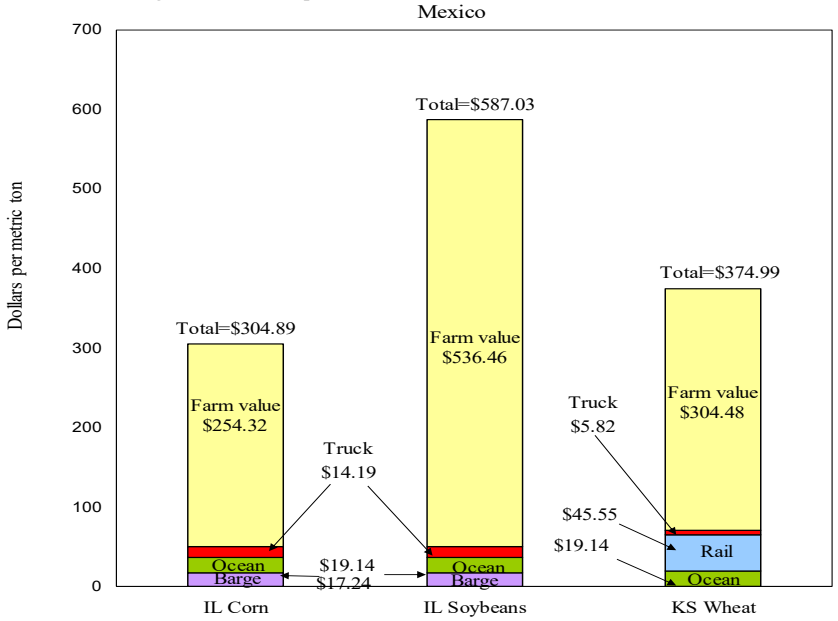
Year-to-year transportation costs. From second quarter 2022 to second quarter 2023 (year to year), total costs of shipping all grain to Mexico by the water routes fell, because of lower truck, barge, and ocean freight rates. A combination of falling truck rates and rising rail rates produced varied costs for land-route shipments. The land-route costs of shipping rose slightly for corn, while falling slightly for soybeans and wheat.

Quarter-to-quarter landed costs. Quarter to quarter, landed costs fell for all grain shipped by water and land routes. For seaborne corn and soybeans, landed costs dropped because of declines in transportation costs and farm values. For seaborne wheat, the dip in landed costs reflected only falling farm values. For all grain shipped by the land routes, landed costs fell because of drops in both transportation costs and farm values (table 1 and figs. 1 and 2).

The share of landed costs comprising transportation ranged from 9 percent to 19 percent for the water routes and from 17 percent to 30 percent for the land routes. For seaborne corn and soybeans, transportation's share of landed costs declined because of a significant drop in transportation costs. For seaborne wheat, falling farm values and an increase in transportation costs caused a marginal rise in transportation's share of landed costs. For all grain shipped by land routes, transportation's share of landed costs remained fairly stable, because falling transportation costs were mostly offset by declining farm values.

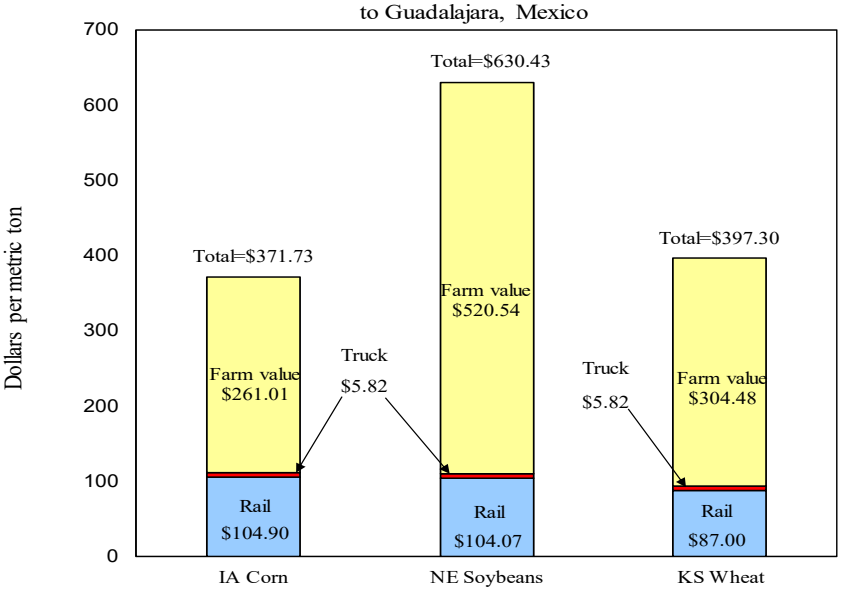
Year-to-year landed costs. Year to year, for all waterborne and land-route grain (except for land-route corn), landed costs fell, because of both lower transportation costs and lower farm values. In the case of land-route corn, lower farm values (but not transportation costs) pushed down landed costs.

Figure 1. Second-quarter 2023 water-route landed costs to Veracruz, Mexico



Note: IL = Illinois; KS = Kansas.
Source: USDA, Agricultural Marketing Service.

Figure 2. Second-quarter 2023 land-route landed costs to Guadalajara, Mexico



Note: IA = Iowa; NE = Nebraska; KS = Kansas.
Source: USDA, Agricultural Marketing Service.

U.S. Exports to Mexico. According to USDA's Federal Grain Inspection Service, in second quarter 2023, the United States exported to Mexico 3.67 million metric tons (mmt) of corn (down 6 percent quarter to quarter); 0.71 mmt of soybeans (down 42 percent quarter to quarter); and 0.70 mmt of wheat (down 12 percent quarter to quarter). Year to year, U.S. inspections destined to Mexico showed declines of 9 percent for corn, 45 percent for soybeans, and 22 percent for wheat.

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

Grain Transportation Indicators

Table 1

Grain transport cost indicators[1]

	Truck	Rail		Barge	Ocean	
For the week ending		Non-Shuttle	Shuttle		Gulf	Pacific
08/16/23	294	322	240	223	215	184
08/09/23	284	329	239	229	208	184

[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 due to holiday.

Source: USDA, Agricultural Marketing Service.

Table 2

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

Commodity	Origin–destination	8/11/2023	8/4/2023
Corn	IL–Gulf	-0.10	-0.09
Corn	NE–Gulf	-0.11	-0.12
Soybean	IA–Gulf	-1.53	-1.69
HRW	KS–Gulf	-1.61	-1.54
HRS	ND–Portland	-1.83	-1.74

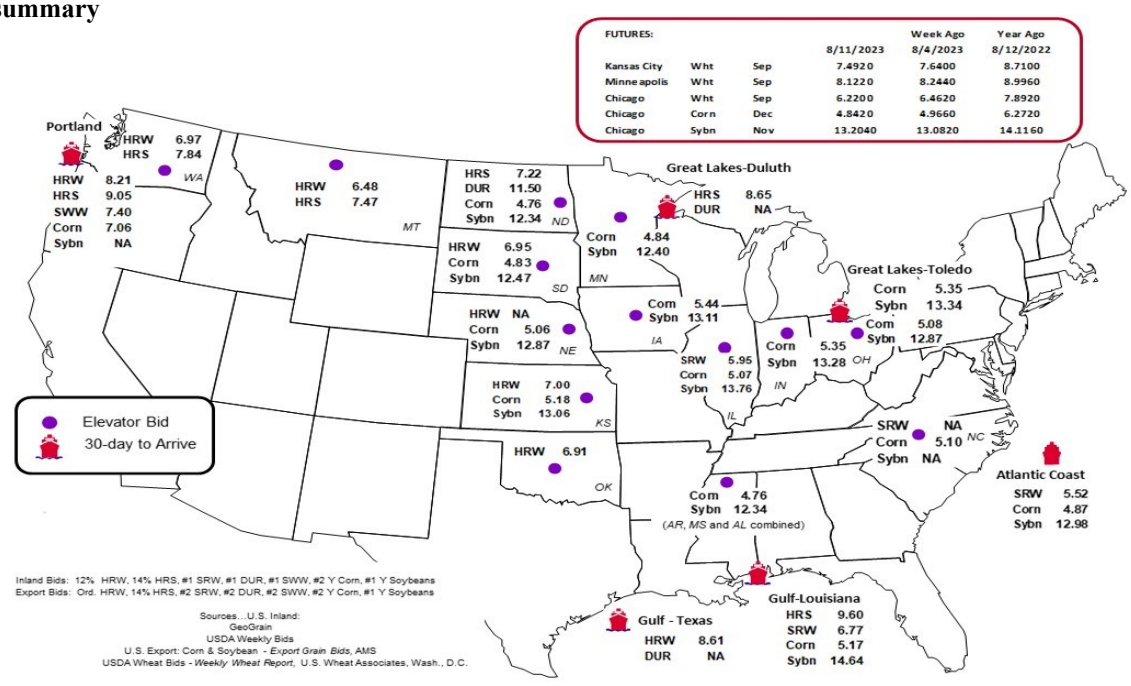
Note: nq = no quote; n/a = not available; HRW = hard red winter wheat; HRS = hard red spring wheat.

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

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

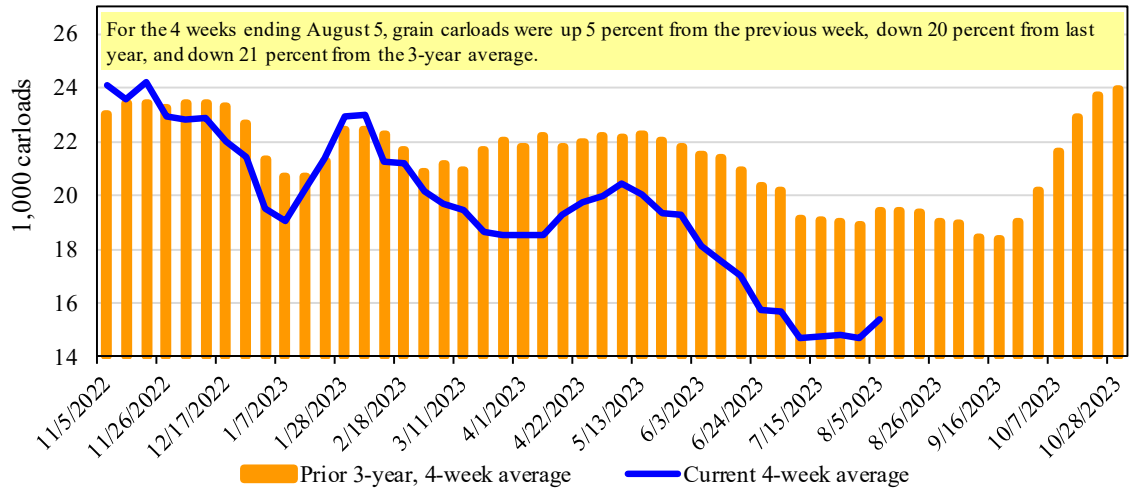
For the week ending: 8/05/2023	East		West		U.S. total	Central U.S./Canada	
	CSXT	NS	BNSF	UP		CPKC	CN
This week	1,448	2,496	6,494	5,185	15,623	4,547	2,769
This week last year	1,679	2,480	9,195	5,927	19,281	7,848	2,510
2023 YTD	56,201	83,204	271,783	164,083	575,271	279,161	137,015
2022 YTD	56,084	76,706	342,446	177,368	652,604	275,622	107,463
2023 YTD as % of 2022 YTD	100	108	79	93	88	101	127
Last 4 weeks as % of 2022	75	89	75	85	80	114	103
Last 4 weeks as % of 3-yr. avg.	81	94	72	86	79	96	102
Total 2022	93,428	130,665	570,232	296,945	1,091,270	538,276	213,916

Note: The last 4-week percentages compare the last 4 weeks of this year to the closest 4 weeks last year, and to the average across the prior 3 years. The U.S. total column excludes CPKC. NS = Norfolk Southern; UP = Union Pacific; CN = Canadian National; CPKC = Canadian Pacific Kansas City; YTD = year-to-date; avg. = average; yr. = year.

Source: Association of American Railroads.

Figure 2

Total weekly U.S. Class I railroad grain carloads



Note: U.S. total excludes Canadian Pacific Kansas City

Source: Association of American Railroads.

Table 4

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

For the week ending: 8/10/2023		Delivery period							
		Aug-23	Aug-22	Sep-23	Sep-22	Oct-23	Oct-22	Nov-23	Nov-22
BNSF	COT grain units	no offer	no bids	0	0	25	3	9	0
	COT grain single-car	no offer	0	2	0	0	218	0	134
UP	GCAS/vouchers	no offer	n/a	no offer	n/a	no offer	n/a	n/a	n/a

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

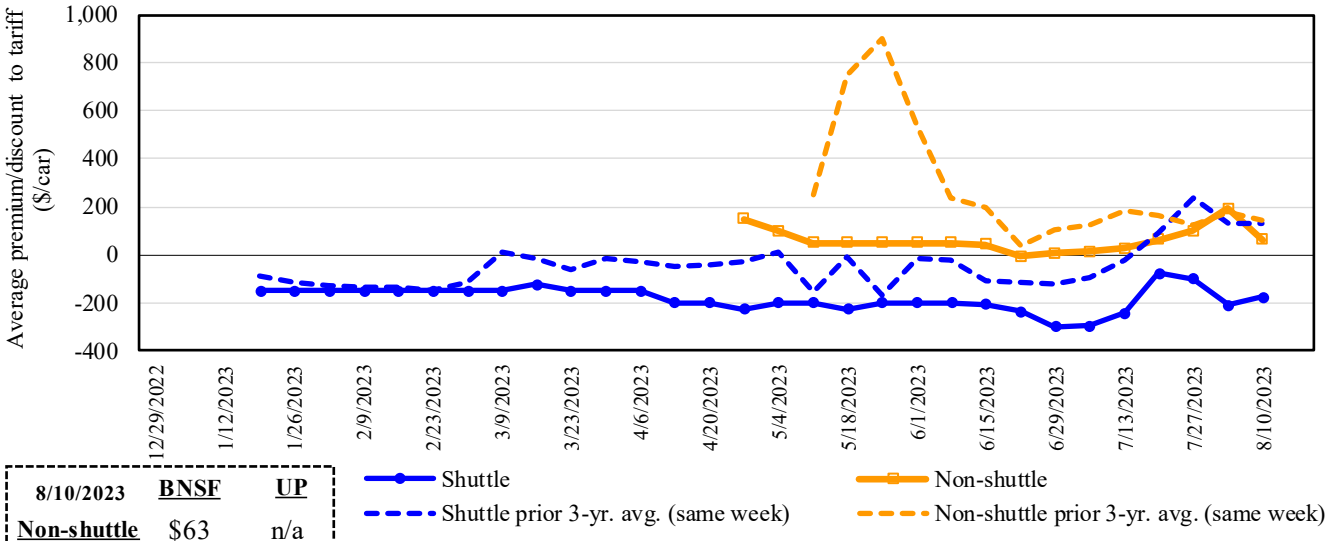
[2]Average premium/discount to tariff, last auction. n/a = not available.

Note: BNSF = BNSF Railway; COT = Certificate of Transportation; UP = Union Pacific Railroad; and GCAS = Grain Car Allocation System. Minimum bids for UP GCAS/vouchers are $10.

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 3
Secondary market bids/offers for railcars to be delivered in August 2023

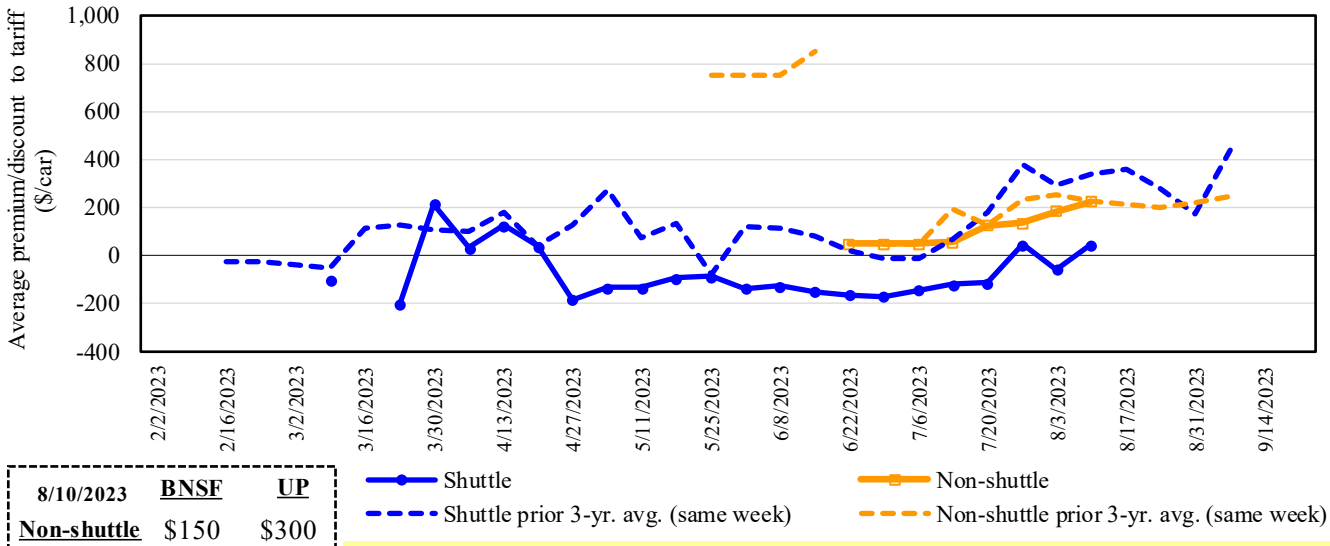


8/10/2023	BNSF	UP
Non-shuttle	$63	n/a
Shuttle	-$25	-$325

Average non-shuttle bids/offers fell $131 this week, and are $131 below the peak.
Average shuttle bids/offers rose $33 this week and are $97 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 4
Secondary market bids/offers for railcars to be delivered in September 2023



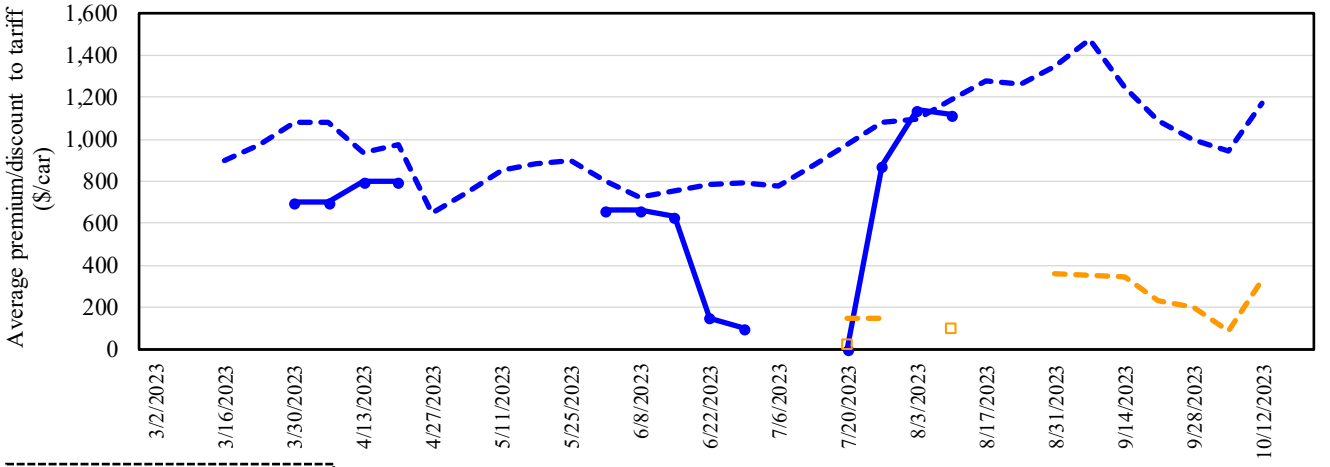
8/10/2023	BNSF	UP
Non-shuttle	$150	$300
Shuttle	$243	-$150

Average non-shuttle bids/offers rose $38 this week, and are at the peak.
Average shuttle bids/offers rose $104 this week and are $170 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

Secondary market bids/offers for railcars to be delivered in October 2023



8/10/2023	BNSF	UP
Non-shuttle	n/a	$100
Shuttle	$1,000	$1,233

There were no non-shuttle bids/offers last week. Average non-shuttle bids/offers this week are at the peak.
Average shuttle bids/offers fell $25 this week and are $25 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 5

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

	For the week ending: 8/10/2023	Delivery period					
		Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24
Non-shuttle	**BNSF-GF**	**63**	**150**	**n/a**	**n/a**	**n/a**	**n/a**
	Change from last week	-25	0	n/a	n/a	n/a	n/a
	Change from same week 2022	50	8	n/a	n/a	n/a	n/a
	UP-Pool	**n/a**	**300**	**100**	**n/a**	**n/a**	**n/a**
	Change from last week	n/a	75	n/a	n/a	n/a	n/a
	Change from same week 2022	n/a	-13	n/a	n/a	n/a	n/a
Shuttle	**BNSF-GF**	**-25**	**243**	**1,000**	**650**	**350**	**500**
	Change from last week	25	158	-350	0	0	-25
	Change from same week 2022	50	-202	-1,131	n/a	-250	n/a
	UP-Pool	**-325**	**-150**	**1,233**	**n/a**	**n/a**	**n/a**
	Change from last week	42	50	300	n/a	n/a	n/a
	Change from same week 2022	-675	-625	-567	n/a	n/a	n/a
	CP-GF	**-100**	**-100**	**850**	**n/a**	**n/a**	**n/a**
	Change from last week	0	75	450	n/a	n/a	n/a
	Change from same week 2022	0	-150	150	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; CP = Canadian Pacific Railway.

Data from The Malsam Co., Tradewest Brokerage Co.

Source: USDA, Agricultural Marketing Service.

Table 6

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

August 2023	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	$4,095	$177	$42.42	$1.15	1
	Grand Forks, ND	Duluth-Superior, MN	$4,008	$42	$40.22	$1.09	0
	Wichita, KS	Los Angeles, CA	$7,340	$214	$75.02	$2.04	-11
	Wichita, KS	New Orleans, LA	$4,825	$312	$51.01	$1.39	-2
	Sioux Falls, SD	Galveston-Houston, TX	$7,111	$176	$72.36	$1.97	-9
	Colby, KS	Galveston-Houston, TX	$5,075	$341	$53.79	$1.46	-3
	Amarillo, TX	Los Angeles, CA	$5,121	$475	$55.57	$1.51	-9
Corn	Champaign-Urbana, IL	New Orleans, LA	$4,000	$352	$43.22	$1.10	-8
	Toledo, OH	Raleigh, NC	$8,551	$396	$88.84	$2.26	0
	Des Moines, IA	Davenport, IA	$2,655	$75	$27.11	$0.69	3
	Indianapolis, IN	Atlanta, GA	$6,593	$297	$68.42	$1.74	1
	Indianapolis, IN	Knoxville, TN	$5,564	$192	$57.16	$1.45	2
	Des Moines, IA	Little Rock, AR	$4,250	$219	$44.38	$1.13	0
	Des Moines, IA	Los Angeles, CA	$6,130	$638	$67.21	$1.71	-6
Soybeans	Minneapolis, MN	New Orleans, LA	$3,472	$513	$39.57	$1.08	-29
	Toledo, OH	Huntsville, AL	$7,037	$282	$72.68	$1.98	0
	Indianapolis, IN	Raleigh, NC	$7,843	$401	$81.87	$2.23	0
	Indianapolis, IN	Huntsville, AL	$5,689	$190	$58.39	$1.59	2
	Champaign-Urbana, IL	New Orleans, LA	$4,865	$352	$51.81	$1.41	-4
Shuttle train							
Wheat	Great Falls, MT	Portland, OR	$4,543	$123	$46.34	$1.26	-6
	Wichita, KS	Galveston-Houston, TX	$4,611	$96	$46.74	$1.27	-7
	Chicago, IL	Albany, NY	$7,090	$374	$74.12	$2.02	0
	Grand Forks, ND	Portland, OR	$6,201	$213	$63.69	$1.73	-8
	Grand Forks, ND	Galveston-Houston, TX	$5,549	$222	$57.31	$1.56	-10
	Colby, KS	Portland, OR	$5,923	$560	$64.38	$1.75	-9
Corn	Minneapolis, MN	Portland, OR	$5,660	$259	$58.78	$1.49	-10
	Sioux Falls, SD	Tacoma, WA	$5,620	$237	$58.17	$1.48	-9
	Champaign-Urbana, IL	New Orleans, LA	$4,170	$352	$44.91	$1.14	-3
	Lincoln, NE	Galveston-Houston, TX	$4,360	$138	$44.67	$1.13	-4
	Des Moines, IA	Amarillo, TX	$4,670	$275	$49.11	$1.25	-1
	Minneapolis, MN	Tacoma, WA	$5,660	$257	$58.76	$1.49	-9
	Council Bluffs, IA	Stockton, CA	$5,580	$266	$58.05	$1.47	-10
Soybeans	Sioux Falls, SD	Tacoma, WA	$6,350	$237	$65.42	$1.78	-7
	Minneapolis, MN	Portland, OR	$6,400	$259	$66.13	$1.80	-8
	Fargo, ND	Tacoma, WA	$6,250	$211	$64.16	$1.75	-6
	Council Bluffs, IA	New Orleans, LA	$5,095	$406	$54.63	$1.49	-4
	Toledo, OH	Huntsville, AL	$5,277	$282	$55.20	$1.50	1
	Grand Island, NE	Portland, OR	$5,730	$573	$62.59	$1.70	-3

[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 7

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

Date: December 2021							
Commodity	Origin state	Destination region	Tariff rate per car[1]	Fuel surcharge per car[2]	Tariff rate plus fuel surcharge per: metric ton[3]	bushel[3]	Percent change[4] Y/Y
Wheat	MT	Chihuahua, CI	$7,699	$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	Torreon, 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	Torreon, 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	Torreon, CU	$7,225	$438	$78.29	$1.99	6

[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.

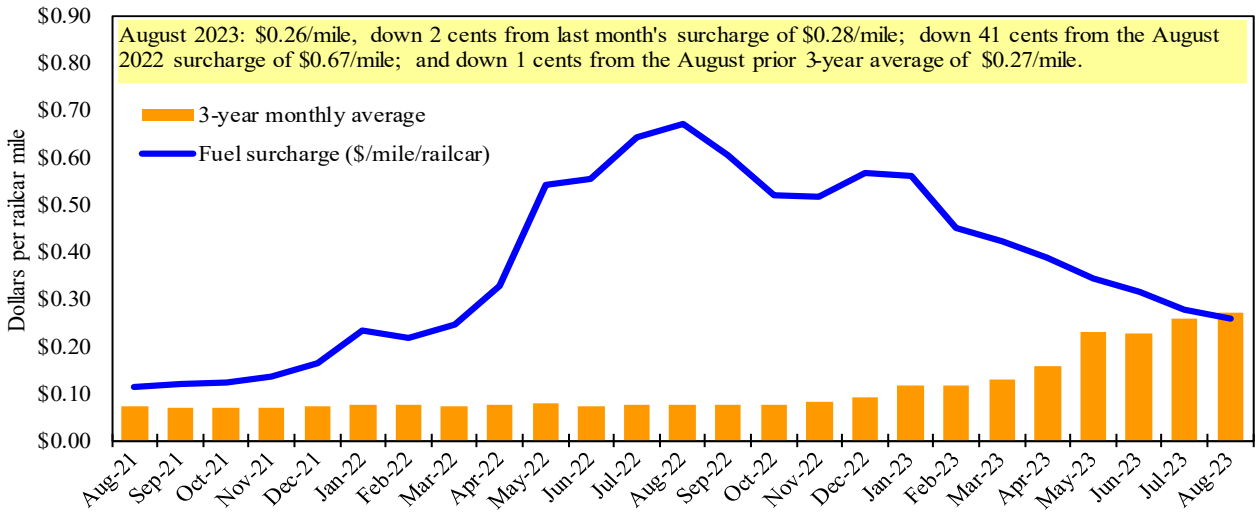
[4]Percentage change calculated using tariff rate plus fuel surchage; Y/Y = year over year.

[5] As of January 1, 2022, both BNSF and Union Pacific changed their billing and reporting of rates to Mexico. As we incorporate the change, Table 7 updates will be delayed.

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

Figure 6

Railroad fuel surcharges, North American weighted average[1]

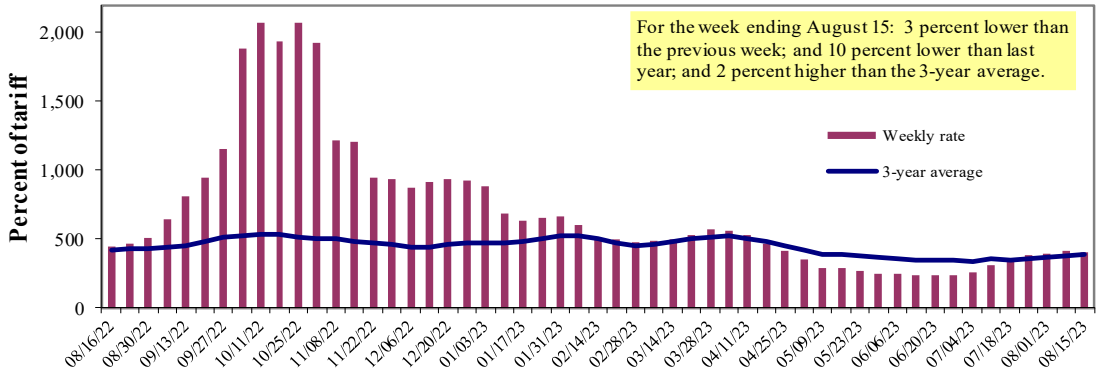


[1] Weighted by each Class I railroad's proportion of grain traffic for the prior year.

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

Barge Transportation

Figure 7
Illinois River barge freight rate[1,2]



[1]Rate = percent of 1976 tariff benchmark index (1976 = 100 percent); [2]4-week moving average of the 3-year average.
Source: USDA, Agricultural Marketing Service.

Table 8
Weekly barge freight rates: Southbound only

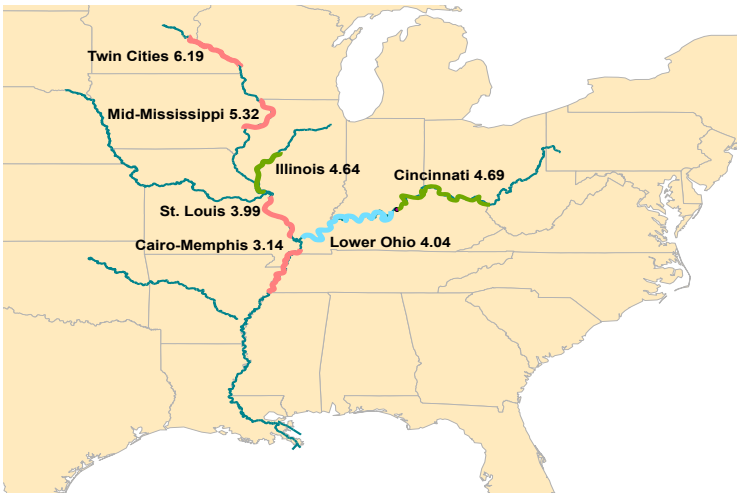
		Twin Cities	Mid-Mississippi	Lower Illinois River	St. Louis	Cincinnati	Lower Ohio	Cairo-Memphis
Rate[1]	8/15/2023	465	402	402	359	396	396	388
	8/8/2023	456	417	413	354	381	381	389
$/ton	8/15/2023	28.78	21.39	18.65	14.32	18.57	16.00	12.18
	8/8/2023	28.23	22.18	19.16	14.12	17.87	15.39	12.21
Current week % change from the same week:								
	Last year	-18	-18	-10	-8	-11	-11	3
	3-year avg. [2]	-3	0	-	21	16	16	36
Rate[1]	September	667	659	652	641	652	652	666
	November	638	586	587	496	563	563	489

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

Figure 8
Benchmark tariff rates

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

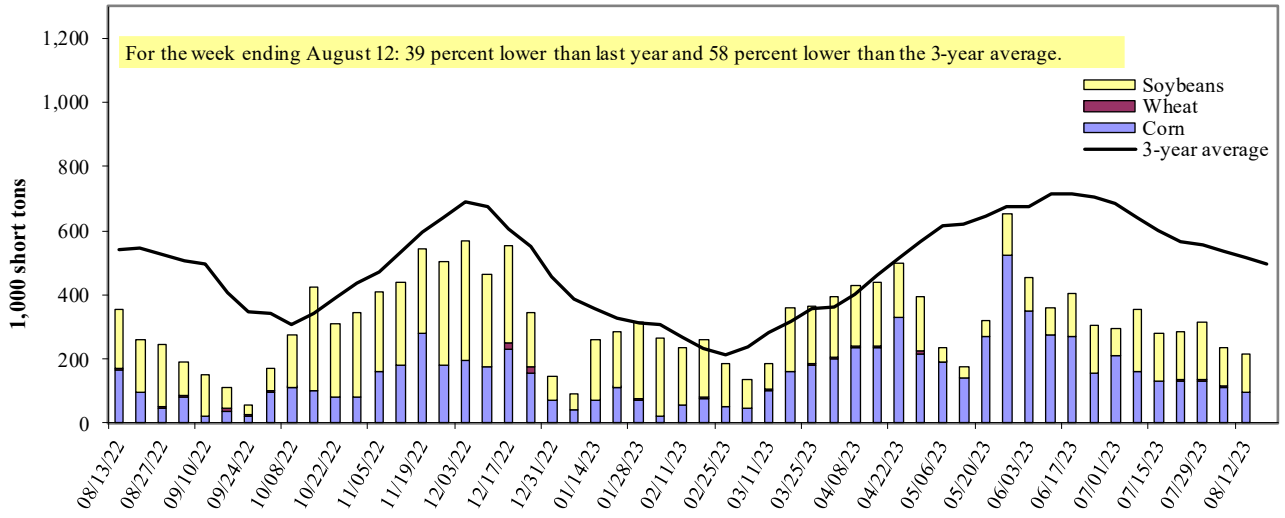
Select applicable index from market quotes are included in tables on this page. The 1976 benchmark rates per ton are provided in map.



Map Credit: USDA, Agricultural Marketing Service

Figure 9

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



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

Note: The U.S. Army Corps of Engineers has recently migrated its lock and vessel database and has noted the latest data may be revised in coming weeks.

Source: U.S. Army Corps of Engineers.

Table 9

Barged grain movements (1,000 tons)

For the week ending 08/12/2023	Corn	Wheat	Soybeans	Other	Total
Mississippi River					
Rock Island, IL (L15)	28	0	99	0	127
Winfield, MO (L25)	87	0	129	0	216
Alton, IL (L26)	91	0	131	0	222
Granite City, IL (L27)	98	0	118	0	216
Illinois River (La Grange)	27	0	30	0	57
Ohio River (Olmsted)	51	31	39	0	121
Arkansas River (L1)	0	18	0	0	18
Weekly total - 2023	149	50	157	0	355
Weekly total - 2022	200	97	232	9	538
2023 YTD[1]	8,673	927	6,879	191	16,671
2022 YTD[1]	12,785	1,282	7,965	180	22,212
2023 as % of 2022 YTD	68	72	86	106	75
Last 4 weeks as % of 2022[2]	49	76	66	176	59
Total 2022	16,437	1,594	14,464	232	32,727

[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.

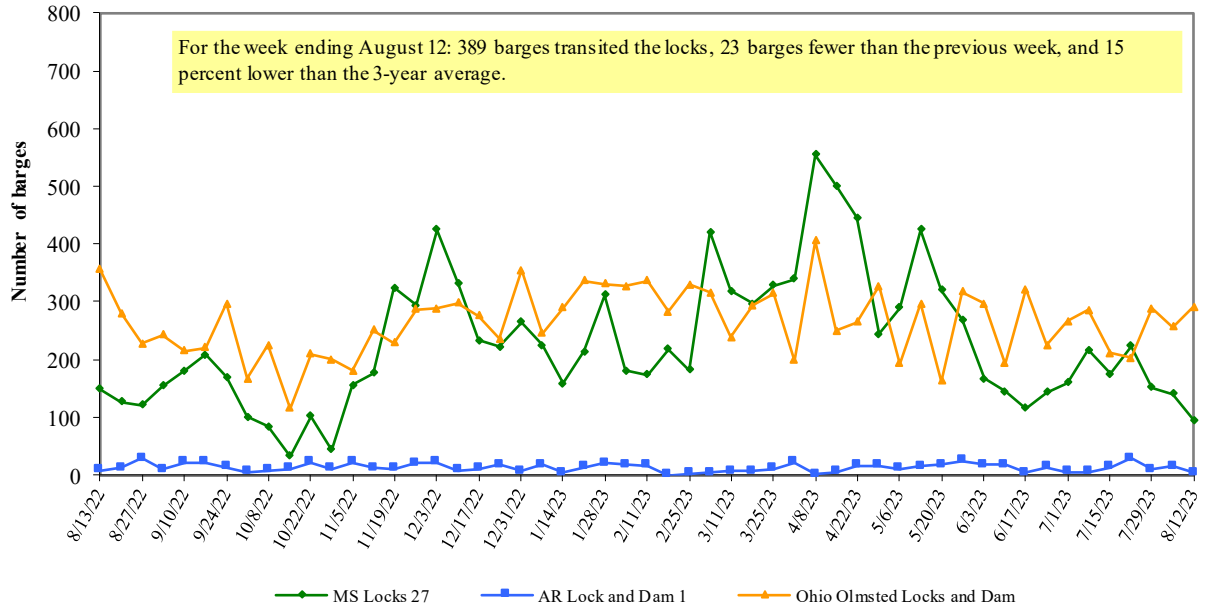
[2] As a percent of same period in 2022.

Note: L (as in "L15") refers to a lock, locks, or locks and dam facility. The U.S. Army Corps of Engineers has recently migrated its lock and vessel database and has noted the latest data may be revised in coming weeks.

Source: U.S. Army Corps of Engineers.

Figure 10

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

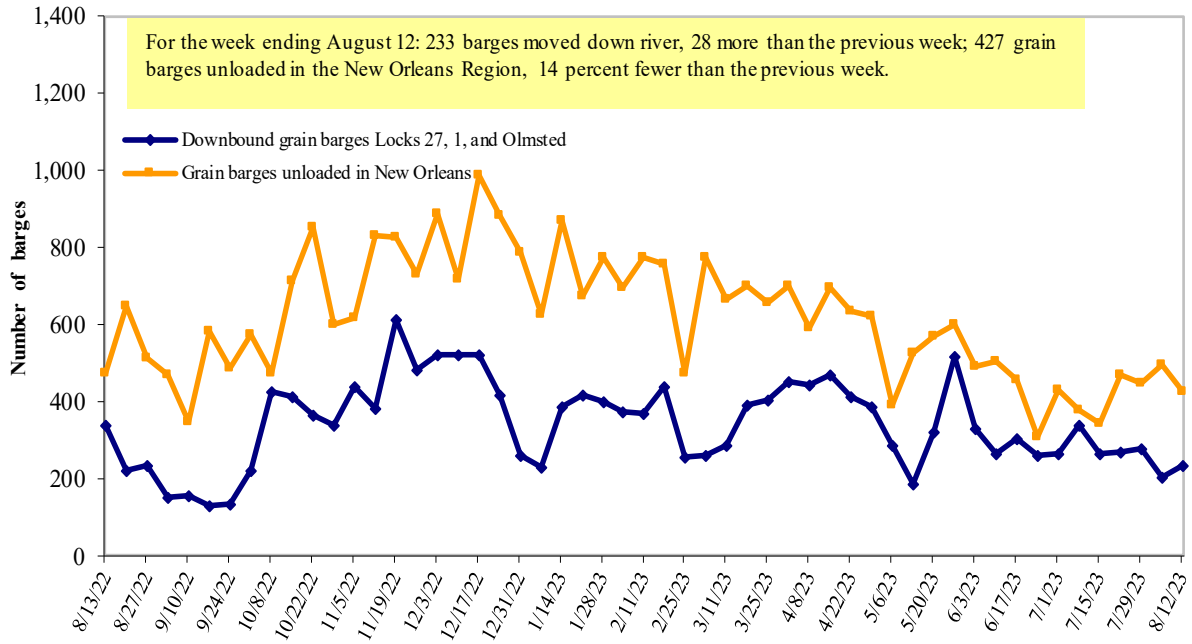


Note: The U.S. Army Corps of Engineers has recently migrated its lock and vessel database and has noted the latest data may be revised in coming weeks.

Source: U.S. Army Corps of Engineers.

Figure 11

Grain barges for export in New Orleans region



Note: Olmsted = Olmsted Locks and Dam. The U.S. Army Corps of Engineers has recently migrated its lock and vessel database and has noted the latest data may be revised in coming weeks.

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 10

Retail on-highway diesel prices, week ending 8/14/2023 (U.S. $/gallon)

Region	Location	Price	Change from Week ago	Change from Year ago
I	East Coast	4.402	0.154	-0.548
	New England	4.370	0.135	-0.805
	Central Atlantic	4.499	0.104	-0.792
	Lower Atlantic	4.371	0.175	-0.431
II	Midwest	4.317	0.122	-0.555
III	Gulf Coast	4.095	0.135	-0.519
IV	Rocky Mountain	4.394	0.106	-0.569
V	West Coast	5.086	0.175	-0.455
	West Coast less California	4.710	0.172	-0.414
	California	5.518	0.179	-0.501
Total	United States	4.378	0.139	-0.533

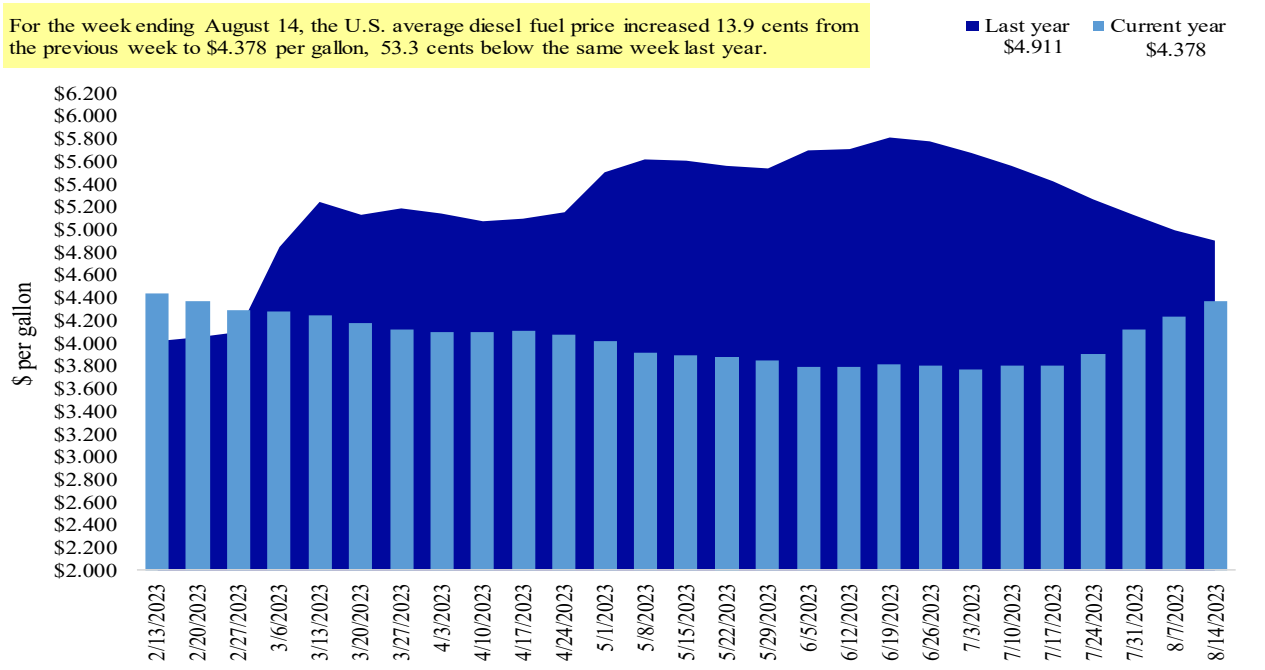
[1]Diesel fuel prices include all taxes. Prices represent an average of all types of diesel fuel.

Note: On June 13, 2022, the Energy Information Administration implemented a new methodology to estimate weekly on-highway diesel fuel prices.

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

Figure 12

Weekly diesel fuel prices, U.S. average



Note: On June 13, 2022 the Energy Information Administration implemented a new methodology to estimate weekly on-highway diesel fuel prices.

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

Grain Exports

Table 11
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]									
8/3/2023	656	707	1,327	712	74	3,475	2,966	2,377	8,818
This week year ago	1,518	905	1,507	1,458	109	5,498	3,732	4,670	13,900
Cumulative exports-marketing year[2]									
2022/23 YTD	536	924	891	567	17	2,935	37,350	50,776	91,060
2021/22 YTD	1,070	659	921	440	18	3,108	57,118	54,791	115,017
YTD 2022/23 as % of 2021/22	50	140	97	129	97	94	65	93	79
Last 4 wks. as % of same period 2021/22	43	92	82	42	64	62	94	54	68
Total 2021/22	7,172	2,786	5,254	3,261	196	18,669	59,764	57,189	135,622
Total 2020/21	8,422	1,790	7,500	6,438	656	24,807	66,958	60,571	152,335

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

[2] Shipped export sales to date.

Note: marketing year: wheat = 6/01-5/31, corn and soybeans = 9/01-8/31. YTD = year-to-date; wks. = weeks; HRW= hard red winter; SRW = soft red winter; HRS= hard red spring; SWW= soft white wheat; DUR= durum.

Source: USDA, Foreign Agricultural Service.

Table 12
Top 5 importers[1] of U.S. corn

For the week ending 8/03/2023	Total commitments[2]			% change	Exports[3]
	2023/24 next MY	2022/23 current MY	2021/22 last MY	current MY from last MY	3-yr. avg. 2019-21
		1,000 mt -			-1,000 mt -
Mexico	3,449	15,279	16,872	(9)	15,227
China	272	7,582	14,724	(49)	12,616
Japan	806	6,841	10,118	(32)	10,273
Columbia	35	2,362	4,390	(46)	4,398
Korea	0	822	1,476	(44)	2,563
Top 5 importers	**4,562**	**32,885**	**47,580**	(31)	**45,077**
Total U.S. corn export sales	**5,974**	**40,315**	**60,850**	(34)	**56,665**
% of YTD current month's export projection	11%	98%	97%		
Change from prior week[2]	**758**	**151**	**192**		
Top 5 importers' share of U.S. corn export sales	76%	82%	78%		80%
USDA forecast August 2023	**52,163**	**41,349**	**62,901**	(34)	
Corn use for ethanol USDA forecast, August 2023	**134,620**	**132,715**	**135,281**	(2)	

[1]Based on USDA, Foreign Agricultural Service (FAS) marketing year ranking reports for 2021/22; 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; YTD = year to date.

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

Source: USDA, Foreign Agricultural Service.

Table 13

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

For the week ending 8/03/2023	Total commitments[2]			% change current MY from last MY	Exports[3] 3-yr. avg. 2019-21
	2023/24 next MY	2022/23 current MY	2021/22 last MY		
	1,000 mt -				-1,000 mt -
China	3,752	31,235	30,534	2	27,283
Mexico	1,121	4,773	5,475	(13)	4,929
Egypt	63	1,148	4,144	(72)	3,553
Japan	178	2,362	2,575	(8)	2,266
Indonesia	75	1,757	1,798	(2)	2,116
Top 5 importers	**5,189**	**41,275**	**44,527**	(7)	**40,147**
Total U.S. soybean export sales	**9,186**	**53,153**	**59,461**	(11)	**54,231**
% of projected exports	18%	99%	101%		
change from prior week[2]	**1,096**	**407**	**(67)**		
Top 5 importers' share of U.S. soybean export sales	56%	78%	75%		**74%**
USDA forecast, August 2023	**49,728**	**53,951**	**58,638**	(8)	

[1]Based on USDA, Foreign Agricultural Service (FAS) marketing year ranking reports for 2021/22; 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; YTD = year to date.

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

Source: USDA, Foreign Agricultural Service.

Table 14

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

For the week ending 8/03/2023	Total commitments[2]		% change current MY from last MY	Exports[3] 3-yr. avg. 2020-22
	2023/24 current MY	2022/23 last MY		
	1,000 mt -			-1,000 mt -
Mexico	1,184	1,486	(20)	3,397
Philippines	1,001	1,171	(14)	2,615
Japan	828	784	6	2,281
China	157	273	(43)	1,740
Korea	384	604	(36)	1,426
Nigeria	104	409	(74)	1,276
Taiwan	452	269	68	944
Thailand	155	182	(15)	643
Colombia	128	309	(59)	537
Indonesia	143	81	77	469
Top 10 importers	**4,536**	**5,568**	(19)	**15,327**
Total U.S. wheat export sales	**6,410**	**8,606**	(26)	**20,411**
% of projected exports	34%	42%		
change from prior week[2]	**568**	**359**		
Top 10 importers' share of U.S. wheat export sales	71%	65%		75%
USDA forecast, August 2023	**19,074**	**20,681**	(8)	

[1] Based on USDA, Foreign Agricultural Service(FAS) marketing year ranking reports for 2022/23; 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 ranking 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 15

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

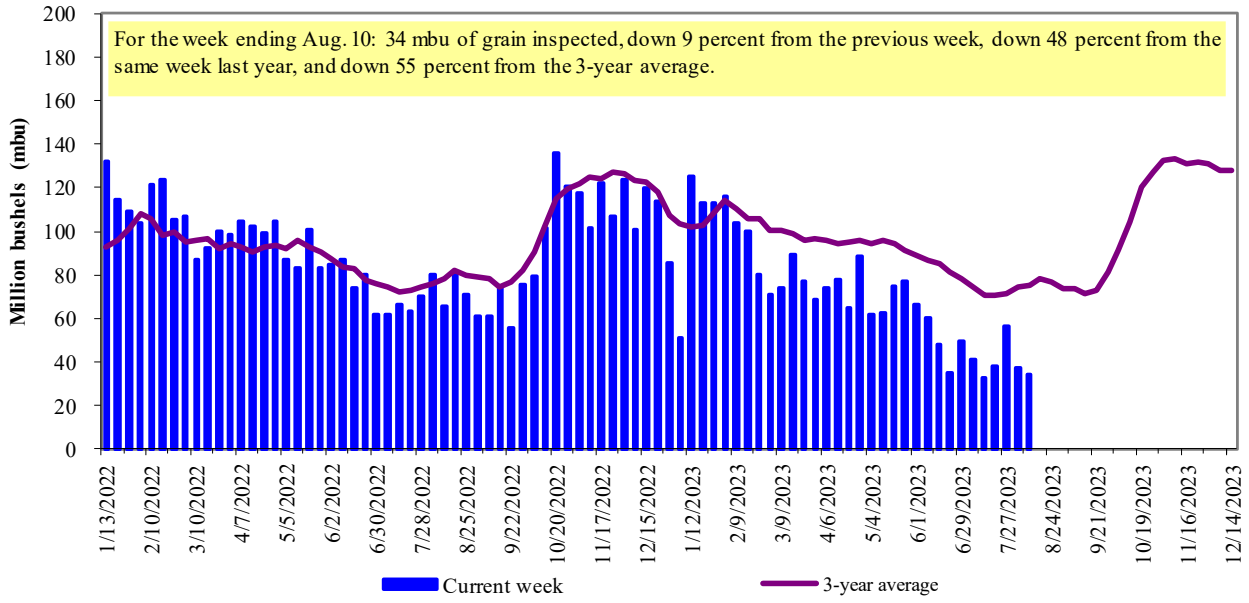
Port regions	For the week ending 08/10/23	Previous week*	Current week as % of previous	2023 YTD*	2022 YTD*	2023 YTD as % of 2022 YTD	Last 4-weeks as % of: Last year	Last 4-weeks as % of: Prior 3-yr. avg.	2022 total*
Pacific Northwest									
Wheat	140	115	121	6,237	5,509	113	114	73	9,836
Corn	0	0	n/a	3,923	8,623	46	0	0	9,615
Soybeans	0	0	n/a	3,533	4,781	74	4	9	14,178
Total	**140**	**115**	**121**	**13,693**	**18,913**	**72**	**57**	**42**	**33,629**
Mississippi Gulf									
Wheat	0	144	0	2,310	2,776	83	98	119	4,053
Corn	207	225	92	15,523	24,000	65	58	43	30,781
Soybeans	258	190	136	14,365	14,388	100	47	59	31,283
Total	**466**	**559**	**83**	**32,199**	**41,165**	**78**	**58**	**57**	**66,116**
Texas Gulf									
Wheat	5	1	n/a	1,309	2,030	64	7	6	3,421
Corn	26	18	144	202	491	41	81	120	648
Soybeans	0	0	n/a	52	2	n/a	n/a	n/a	685
Total	**31**	**18**	**168**	**1,563**	**2,522**	**62**	**21**	**23**	**4,754**
Interior									
Wheat	46	46	98	1,484	1,832	81	61	65	2,912
Corn	156	138	113	5,652	5,693	99	110	91	8,961
Soybeans	48	105	46	3,576	4,397	81	62	71	7,109
Total	**249**	**290**	**86**	**10,712**	**11,922**	**90**	**82**	**80**	**18,982**
Great Lakes									
Wheat	0	0	n/a	171	167	102	0	0	395
Corn	0	0	n/a	23	125	18	0	0	158
Soybeans	0	0	n/a	31	239	13	0	0	760
Total	**0**	**0**	**n/a**	**224**	**531**	**42**	**0**	**0**	**1,312**
Atlantic									
Wheat	2	2	104	76	114	67	15	35	169
Corn	3	0	n/a	81	217	37	13	40	309
Soybeans	7	4	163	1,233	1,569	79	100	82	2,867
Total	**11**	**6**	**193**	**1,390**	**1,899**	**73**	**31**	**55**	**3,345**
U.S. total from ports*									
Wheat	193	308	62	11,587	12,428	93	78	70	20,786
Corn	391	381	103	25,404	39,148	65	60	45	50,471
Soybeans	313	299	105	22,790	25,376	90	46	57	56,882
Total	**897**	**988**	**91**	**59,782**	**76,952**	**78**	**59**	**55**	**128,139**

*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.

Figure 13

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

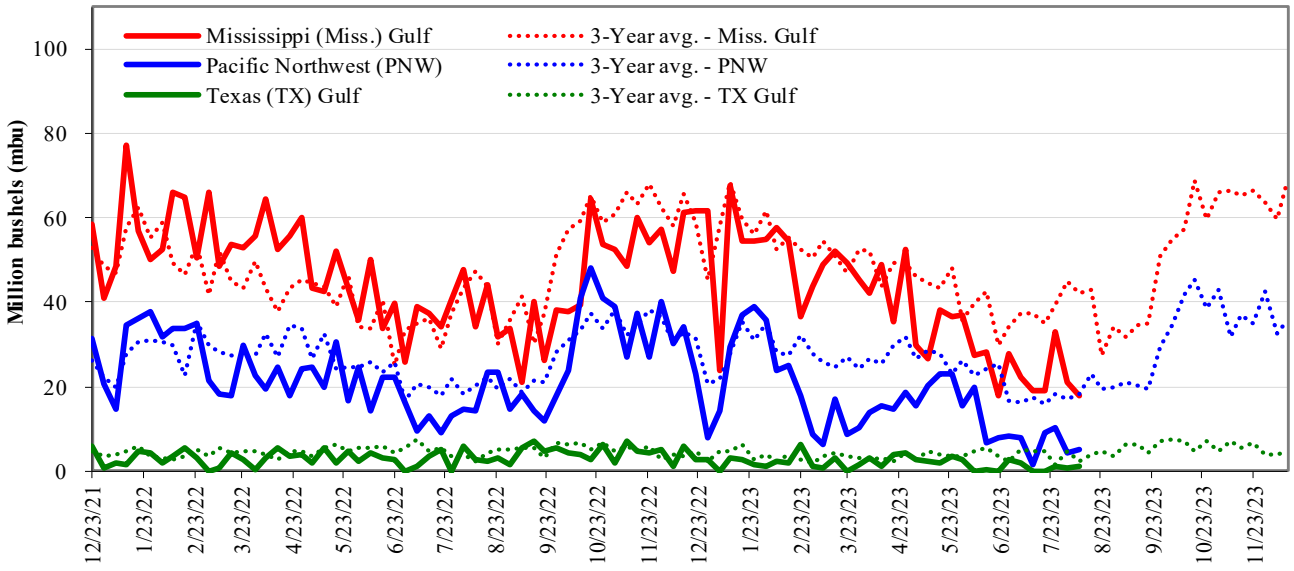


Note: 3-year average consists of 4-week running average.

Source: USDA, Federal Grain Inspection Service.

Figure 14

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



Week ending 08/10/23 inspections (mbu):		Percent change from:	MS Gulf	TX Gulf	U.S. Gulf	PNW
MS Gulf:	17.7	Last wk:	down 16	up 66	down 14	up 21
PNW:	5.1	Last Year (same wk):	down 48	down 57	down 49	down 64
TX Gulf:	1.2	3-yr avg. (4-wk. mov. Avg):	down 56	down 62	down 57	down 70

Source: USDA, Federal Grain Inspection Service.

Table 16

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

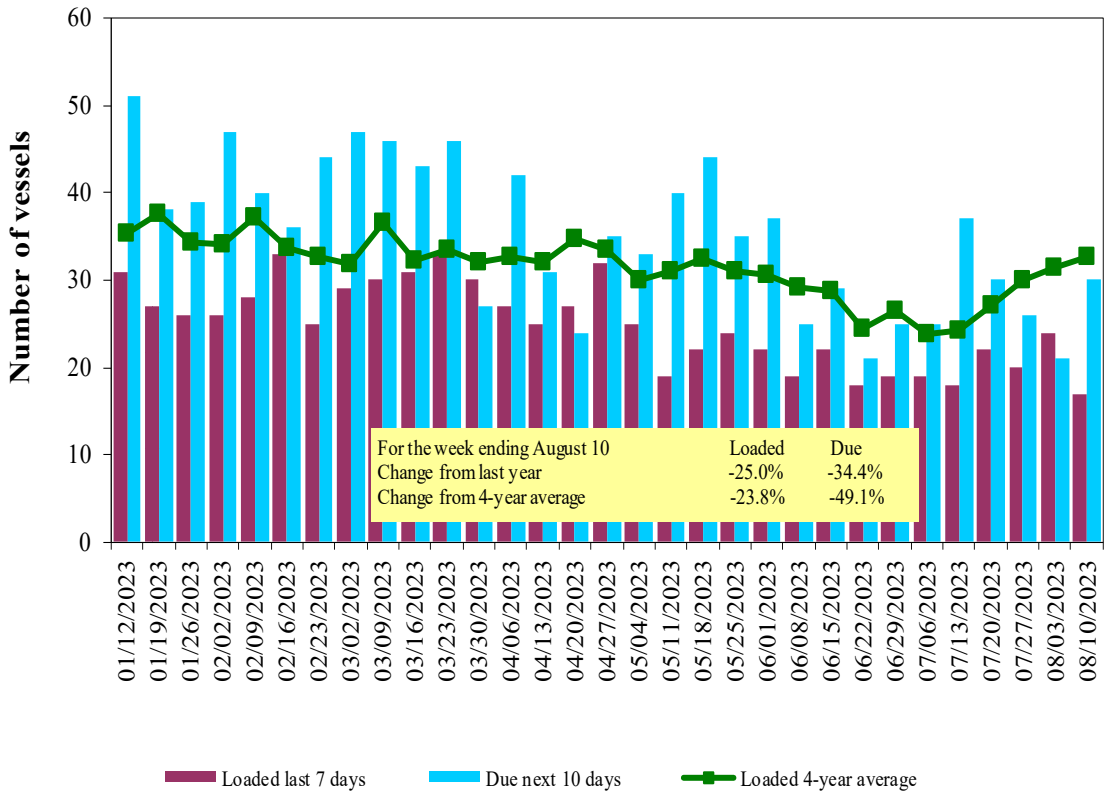
	Gulf			Pacific Northwest
Date	In port	Loaded 7-days	Due next 10-days	In port
8/10/2023	18	17	30	5
8/3/2023	24	24	21	7
2022 range	(14…61)	(18…39)	(28...62)	(5…23)
2022 average	30	28	44	13

Note: The data is voluntarily collected and may not be complete.

Source: USDA, Agricultural Marketing Service.

Figure 15

U.S. Gulf[1] vessel loading activity

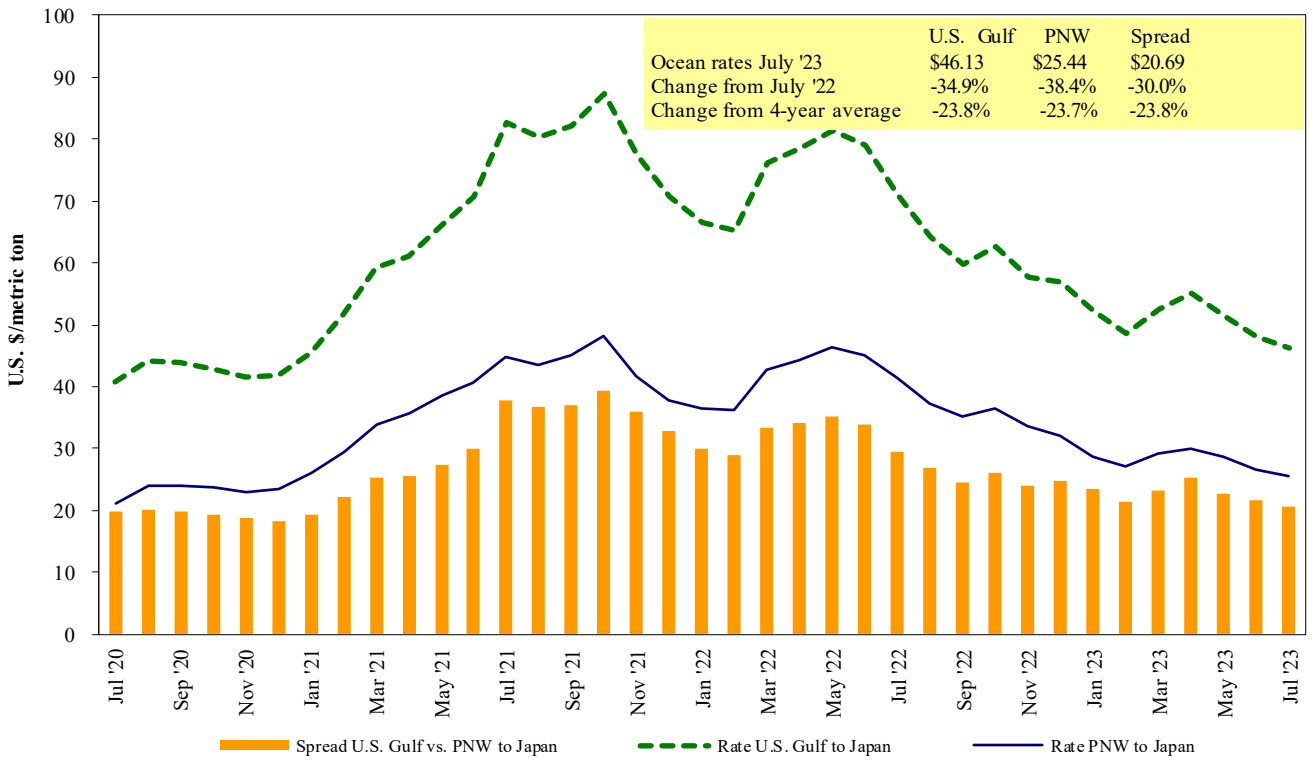


[1]U.S. Gulf includes Mississippi, Texas, and East Gulf.

Source: USDA, Agricultural Marketing Service.

Figure 16

Grain vessel rates, U.S. to Japan



Note: PNW = Pacific Northwest.

Source: O'Neil Commodity Consulting.

Table 17

Ocean freight rates for selected shipments, week ending 08/12/2023

Export region	Import region	Grain types	Loading date	Volume loads (metric tons)	Freight rate (US$/metric ton)
U.S. Gulf	Japan	Heavy grain	May 2, 2023	50,000	56.70
U.S. Gulf	Japan	Heavy grain	May 1, 2023	50,000	54.80
U.S. Gulf	Japan	Heavy grain	Nov 1/10, 2022	50,000	79.25
U.S. Gulf	S. China	Corn	Aug 1/10, 2022	68,000	71.00
U.S. Gulf	Mexico	Soybean Meal	Oct 1/10, 2023	17,250	87.13*
U.S. Gulf	Dominican Republic	Soybean Meal	Oct 1/10, 2023	17,250	87.13*
U.S. Gulf	Jamaica	Wheat	Jun 20/30, 2023	4,400	63.00 op 66.00
PNW	Indonesia	Soybean Meal	Jul 21/31, 2023	35,000	106.00*
PNW	N. China	Heavy grain	Apr 21/27, 2023	63,000	28.00
PNW	N. China	Heavy grain	May 1/4, 2023	66,000	29.00
Brazil	S. Korea	Heavy grain	Jun 15/Jul 15, 2023	68,000	45.15
Brazil	S. Korea	Soybean Meal	Jun 1, 2023	60,000	53.75
Brazil	China	Heavy grain	Jul 1/31, 2023	63,000	41.50
Brazil	China	Heavy grain	May 5/10, 2023	65,000	36.50
Brazil	N. China	Heavy grain	Apr 21/30, 2023	66,000	40.60
Australia	Vietnam	Heavy grain	Feb 24/Apr 9, 2023	60,000	20.80

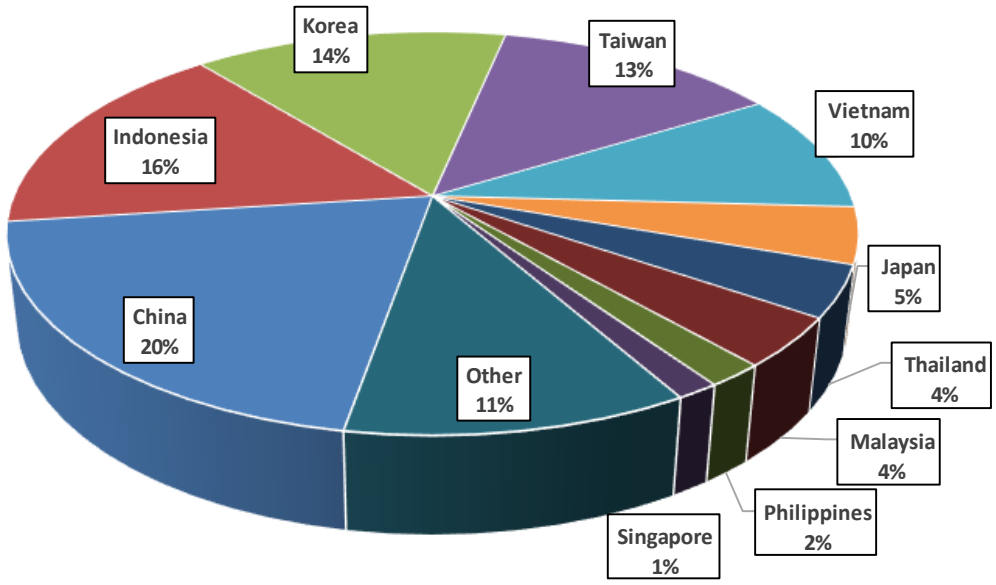
*50 percent of food aid from the United States is required to be shipped on U.S.-flag vessels.

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.

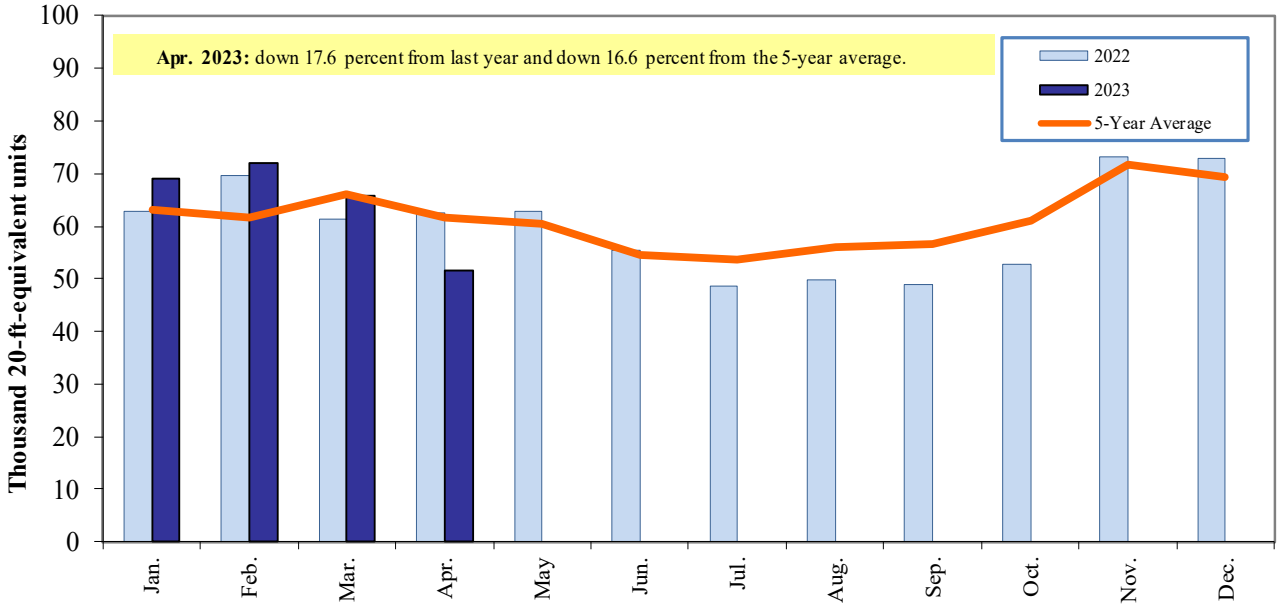
Figure 17
Top 10 destination markets for U.S. containerized grain exports, Jan-Apr 2023



Note: The following Harmonized Tariff Codes are used to calculate containerized grains movements: '1001', '100190', '1002', '100200', '1003', '100300', '1004', '100400', '1005', '100590', '1007', '100700', '110100', '1102', '110220', '110290', '1201', '120100', '120190', '120810', '230210', '230310', '230330', '2304', and '230990'.

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

Figure 18
Monthly shipments of U.S. containerized grain exports



Note: The following Harmonized Tariff Codes are used to calculate containerized grains movements: '1001', '100190', '1002', '100200', '1003', '100300', '1004', '100400', '1005', '100590', '1007', '100700', '110100', '1102', '110220', '110290', '1201', '120100', '120190', '120810', '230210', '230310', '230330', '2304', and '230990'.

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

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