



Grain Transportation Report

Contents

- Weekly Highlights..... 1
- Snapshots by Sector..... 2
- Feature Article..... 3
- Grain Transportation Indicators 6
- Rail Transportation..... 8
- Barge Transportation..... 14
- Truck Transportation 17
- Grain Exports 18
- Ocean Transportation..... 22
- Contacts and Links..... 25

October 26, 2023

A weekly publication of the Agricultural Marketing Service

www.ams.usda.gov/GTR

St. Lawrence Seaway Closes Because of Worker Strike. On Sunday (October 22) at midnight, [a strike by Canadian Seaway workers](#) shut down the St. Lawrence Seaway System (Seaway). The strike comes as the St. Lawrence Seaway Management Corporation (SLSMC) and UNIFOR, the union representing Canadian Seaway workers, failed to reach an agreement on wages. Talks are set to resume Friday (October 27).

Although the strike does not include American Seaway workers, the Seaway's two American locks are also closed to traffic because the locks operate as one system. According to [SLSMC](#), no vessels are waiting to exit the system, but the closures will affect over 100 vessels outside the system. The Seaway is a binational system made up of 15 locks (13 are operated in Canada; 2 in the United States) that connect the Great Lakes to the Atlantic Ocean.

According to SLSMC, [1.3 million metric tons of U.S. grain](#) transited the Seaway in 2022 (about 1 percent of total U.S. grain exports). In terms of volume, more grain is exported out of the Duluth-Superior harbor than any other commodity. Several ships that are scheduled to [pick up grain for export from Duluth](#) this fall will be unable to do so unless the strike ends.

Diesel Price Increases Again After Two Weeks of Decline. After falling for 2 consecutive weeks, the U.S. average [diesel fuel price](#) increased again. For this week (ending October 23), the U.S average diesel price rose 10.1 cents from the previous week, to \$4.545

per gallon—down 76.1 cents from the same time last year. The latest week-to-week rise is the largest since a 9.3-cent gain September 18 and the first double-digit rise since the price surged 13.9 cents on August 14.

From last week to this week, diesel prices rose in 6 of the Energy Information Administration's 10 regions. Of all the regions, the Midwest showed the largest gain, 25 cents per gallon—which was also the Midwest's largest increase since its price rose 29.1 cents per gallon on July 31. The Midwest's per gallon diesel price increased from \$4.304 last week to \$4.554 this current week, 81.5 cents below the same time last year.

USACE Awards \$22.5 Million Contract To Maintain UMR Dam. The U.S. Army Corps of Engineers (USACE), St. Paul District, recently awarded a \$22.5 million contract for gate maintenance on Lock and Dam 5, near Minnesota City, MN, on the Upper Mississippi River (UMR). As performed by Abhe and Svoboda, Inc., of Jordan, MN, the project will focus on the dam roller gates and service bridge, to ensure reliable operation of these structures into the future.

Scheduled for completion in November 2028, the work will affect only components of the dam structure and will not impact navigation. This project is funded under the authority of the Rivers and Harbors Act of 1930. Design funding for this major maintenance effort was specifically provided by the fiscal year 2023 Consolidated Appropriations Act.

As steward of the UMR's waterborne transportation system, USACE's St. Paul District maintains a 9-foot navigation channel and 13 locks and dams from Minneapolis to Guttenberg, IA. Nearly 8 million tons of farm products such as corn and soybeans passed through Lock and Dam 10 in 2022.

Iowa Extends Suspension of Overweight Limits for Transporting Grain. Iowa has extended, until November 11, its [harvest-time suspension](#) of weight limits for vehicles transporting soybeans, corn, hay, straw, silage, stover, fertilizer (dry, liquid and gas) and manure (dry and liquid). The harvest-time rule allows vehicles to be overweight without a permit (up to 90,000 pounds gross weight), when transporting the covered commodities.



Export Sales

For the week ending October 12, **unshipped balances** of wheat, corn, and soybeans for marketing year (MY) 2023/24 totaled 31.71 million metric tons (mmt), unchanged from last week and down 20 percent from the same time last year.

Net **corn export sales** for MY 2023/24 were 0.881 mmt, down 3 percent from last week. Net **soybean export sales** were 1.372 mmt, up 30 percent from last week. Net weekly **wheat export sales** for MY 2023/24 were 0.633 mmt, down 3 percent from last week.

Rail

U.S. Class I railroads originated 22,176 **grain carloads** during the week ending October 14. This was down 5 percent from the previous week, down 8 percent from last year, and down 8 percent from the 3-year average.

Average November **shuttle secondary railcar bids/offers** (per car) were \$208 below tariff for the week ending October 19. This was \$1,797 lower than this week last year. There were no shuttle bids/offers last week. Average non-shuttle secondary railcar bids/offers per car were \$75 above tariff. This was \$31 less than last week and \$275 lower than this week last year.

Barge

For the week ending October 21, **barged grain movements** totaled 562,000 tons. This was 13 percent more than the previous week and 7 percent more than the same period last year.

For the week ending October 21, 356 grain barges **moved down river**—25 more than last week. There were 750 grain barges **unloaded** in the New Orleans region, 13 percent fewer than last week.

Ocean

For the week ending October 19, 33 **oceangoing grain vessels** were loaded in the Gulf—18 percent more than the same period last year. Within the next 10 days (starting October 20), 35 vessels were expected to be loaded—5 percent fewer than the same period last year.

As of October 19, the rate for shipping a metric ton (mt) of grain from the U.S. Gulf to Japan was \$57.00. This was unchanged from the previous week. The rate from the Pacific Northwest to Japan was \$29.75 per mt, 1 percent less than the previous week.



Bulk Ocean Freight Rates Fell in Third Quarter 2023

Ocean freight rates for shipping grain (wheat, corn, and soybeans) were down from second quarter 2023 to third quarter 2023 (quarter to quarter) and down from third quarter 2022 to third quarter 2023 (year to year). Compared to the prior 4-year average, third-quarter 2023 ocean freight rates fell for routes from the U.S. Gulf and Pacific Northwest (PNW) to Japan and rose for routes from the U.S. Gulf to Europe. Both quarter to quarter and year to year, ocean freight rates were volatile, because of extreme weather, the closure of the Ukraine Black Sea grain corridor, and the market’s pessimism about China’s economic recovery.

This article examines many recent past and potential future influences on ocean freight rates for shipping bulk commodities, including grain. Also, third-quarter changes in ocean freight rates are broken down for the benchmark routes for shipping U.S. bulk grain to Japan and to Europe.

Rates to Japan From the U.S. Gulf and Pacific Northwest

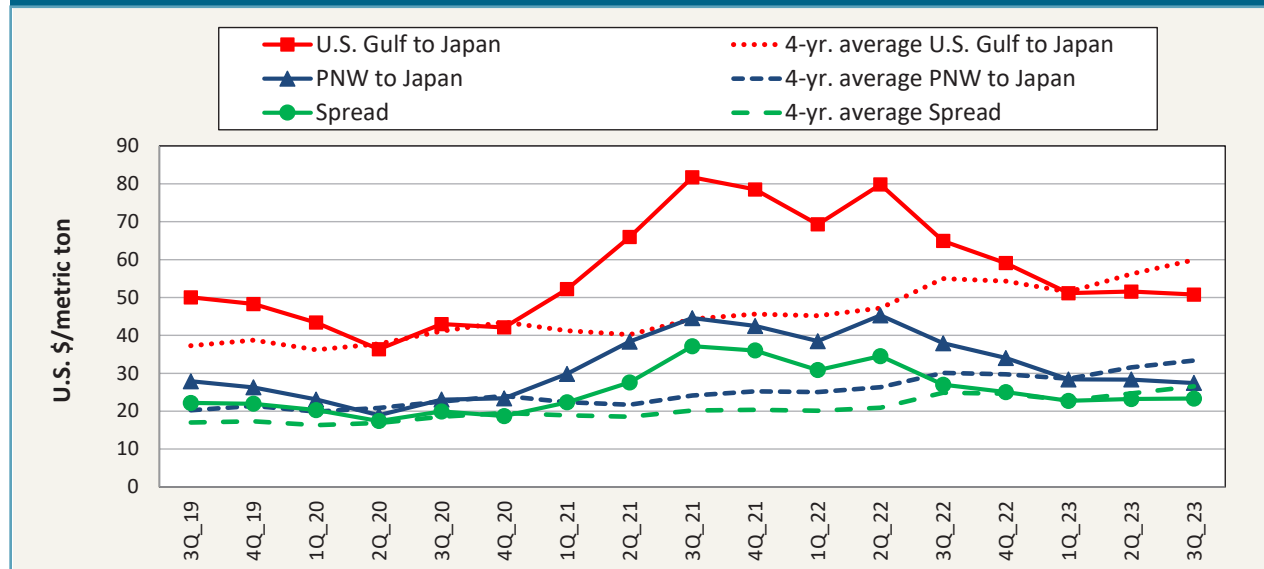
Ocean freight rates for shipping bulk grain from the U.S. Gulf to Japan averaged \$50.76 per metric ton (mt) in third quarter 2023—down 2 percent quarter to quarter, down 22 percent year to year, and down 15 percent from the 4-year average (see table 1 and fig. 1). From the Pacific Northwest (PNW) to Japan, rates averaged \$27.43 per mt—down 3 percent quarter to quarter, down 28 percent year to year, and down 18 percent from the 4-year

Table 1. Ocean freight rates for grain routes during third quarter 2023

Route	Jul.	Aug.	Sep.	3rd quarter 2023	Change from		
	--\$/mt--				2nd qtr. '23	3rd qtr. '22	4-yr. avg.
				--\$/mt--	Percent		
U.S. Gulf to Japan	46.13	50.40	55.75	50.76	-2	-22	-15
PNW to Japan	25.44	27.10	29.75	27.43	-3	-28	-18
Spread	20.69	23.30	26.00	23.33	1	-13	-12
U.S. Gulf to Europe	24.38	25.30	27.94	25.87	-8	-19	4

Note: qtr. = quarter; avg. = average; mt = metric ton; yr. = year; PNW = Pacific Northwest.
Source: O'Neil Commodity Consulting.

Figure 1. Grain vessel rates and spread, United States to Japan, 2019-23



Note: Q = quarter; yr. = year; PNW = Pacific Northwest.
Source: O'Neil Commodity Consulting.

average. From the U.S. Gulf to Europe, rates were \$25.87 per mt—down 8 percent quarter to quarter, down 19 percent year to year, and up 4 percent from the 4-year average.

Third-Quarter Influences on Rates, by Month

July. Rates fell from mid-April through July, as Chinese cargo demand stagnated. China imported 93.4 million tons of iron ore in July—2.1 percent less than in June. At 39.26 million metric tons (mmt), [China's July coal imports](#) were mostly unchanged from June. In addition, the closure of the Ukraine Black Sea grain corridor generated uncertainty in world grain trade.

Further softening ocean freight rates, declining bunker fuel prices of the world's 20 largest ports of very low sulfur fuel oil (International Maritime Organization grade 0.5 percent) averaged \$603.07 per mt in July. This price was down 9 percent from January and down 38 percent from July 2022. ([shipandbunker.com](#)).

August. In August, rates rose because of China's increased demand for [grain](#) and [minerals](#) from Brazil and Australia. Also, low water levels in the Panama Canal expanded vessel wait times, further pushing up rates (*Shipping Insight*, Drewry Maritime Research (Drewry), September 6, 2023). As of the week ending August 24, the Panama Canal wait times were 14-19 days for non-scheduled cargo (*Transportation and Export Report*, O'Neil Commodity Consulting Inc., August 24, 2023).

From July to August, the [average wait time](#) for non-booked vessels at the Panama Canal was up 44 percent for southbound transits and up 59 percent for northbound transits. In August, at 106.42 mmt, [China's iron ore imports](#) were the highest so far in 2023. They were up about 11 percent over the same period in 2022, and up 14 percent over July.

September. China's Purchasing Managers' Index bounced from 49.2 in August to 50.2 in September, signaling stability for the country's manufacturing activity. However, [investors](#) remained cautious, distrusting the Chinese economy would sustainably grow, as the [property sector](#) still faced challenges. Ocean freight rates rose further in September as Chinese [imports of iron ore](#) (101.18 mmt for the month) and coal remained strong. Meanwhile, [extreme weather](#) in India boosted the demand for coal to meet record power generation.

Ocean freight rates continued to rise in the second half of September driven by demand from East Coast South America, as well as port congestion in Brazil from rapidly expanding exports and severe drought in the Amazon. Also boosting rates was optimism generated by the start of North American grain harvest (*Transportation and Export Report*, O'Neil Commodity Consulting Inc., September 21, 2023). According to O'Neil, during the week ending September 21, about 10 ships berthed in PNW waiting to load soybeans destined to China—the same number as in the same

period in 2022. At the Panama Canal, grain vessels continued to wait 10-13 days to transit the old locks.

As of September, the global dry bulk operating fleet capacity was estimated at 994 million deadweight tons (mdwt), versus 875.7 mdwt in December 2019—a 14-percent increase ([table 2 on page 5](#)) (Drewry). The ample capacity may at least slow the rate of increase in ocean rates or even push them down.

Current Market Analysis and Outlook

For the week ending October 19, the rate to ship 1 mt of grain from the U.S. Gulf to Japan was \$57.00—unchanged from the previous week and 10 percent less than the same 2022 period. The rate from PNW to Japan was \$29.75 per mt—1 percent less than the previous week and 20 percent less than the same 2022 period.

Although strong compared to most of the third quarter, the current rates are below the yearly peaks, reached in the week ending September 21, of \$57.50 per metric ton (mt) for U.S. Gulf-to-Japan route and \$30.50 per mt for PNW-to-Japan route. While not certain to continue, the rates have fallen over the last 2 weeks. Amid lower spot prices, China's demand to restock iron ore has been strong for the last 2 months and expected to persist. Iron inventories at Chinese ports are at a 3-year low. Also, a surge in China's electricity demand and rising domestic coal prices have spurred coal imports for the last 2 months.

Extreme heat and high industrial activity have raised China’s demand for power, at the same time low rainfall has reduced hydropower generation: these factors raise demand for coal (Drewry, October 6, 2023). According to Drewry, China’s corn imports are expected to be high. The country’s imports of competitively priced Brazilian corn—as well as large quantities of Ukrainian corn that started to ship in October—are boosting the demand for Panamax vessels.

Starting January 1, a carbon tax will be charged for [all port calls](#) within the European Economic Area (i.e., the European Union, Iceland, Liechtenstein, and Norway). [Research](#) has shown a carbon tax could raise shipping costs by either raising freight rates or increasing transit times ([Grain Transportation Report, August 10, 2023](#)).

Finally, the start of the North American harvest season could boost demand for vessels and push up rates. On the other hand, the market is still hesitant about the global economy’s [slow recovery](#) amid [high inflation](#). The dry bulk market still has an ample supply of vessels. These factors could soften rates.

Surajudeen.Olowolayemo@usda.gov

Table 2. Global dry bulk operating fleet, December 2019-22 and September 2023

Type of vessel	Size (dwt)	2019		2020		2021		2022		As of September 2023		
		No. of Vessels	Capacity mdwt	No. of Vessels	Capacity mdwt	No. of Vessels	Capacity mdwt	No. of Vessels	Capacity mdwt	No. of Vessels	Capacity mdwt	
Handysize	Small Handy	10,000-24,999	1,151	20	1,157	20	1,226	21	1,344	23	1,412	24
	Mid-size Handy	25,000-34,999	1,564	48	1,553	48	1,552	48	1,560	48	1,564	48
	Large Handy	35,000-39,999	939	35	986	37	1,010	38	1,036	39	1,058	40
	Cement Carrier	Cement capable	84	1	86	1	88	1	87	1	85	1
Supramax	Handymax	40,000-49,999	685	32	664	31	684	32	724	33	731	34
	Traditional Supramax	50,000-59,999	2,081	116	2,085	116	2,092	116	2,108	117	2,129	118
	Ultramax	60,000-69,999	915	57	1,039	65	1,116	70	1,198	75	1,272	80
Panamax	Traditional Panamax	60,000-69,999	1,142	85	1,160	86	1,154	86	1,165	86	1,156	86
	Post Panamax	79,000-99,000	487	44	510	47	537	49	580	53	605	55
	Kamsamax	79,000-99,000	1,109	91	1,233	101	1,306	107	1,368	112	1,432	117
Capesize/ VLOC	Mini Capesize	100,000-129,999	137	15	144	16	153	17	155	17	160	18
	Standard Capesize	130,000-199,000	1,081	192	1,086	193	1,091	194	1,091	194	1,109	198
	Large Capesize	200,000+	307	64	363	76	412	86	435	91	457	96
	VLOC	200,000+	247	75	246	76	254	79	259	80	259	80
Total			11,929	876	12,312	912	12,675	943	13,110	971	13,429	994

Note: VLOC = very large ore carrier.
Source: Drewry Shipping Consultants..

Grains are transported to the domestic and international markets via one or a combination of the following modes: truck, rail, barge and ocean-going vessel. Monitoring the cost of transportation for each mode is vital to the marketing decision making process.

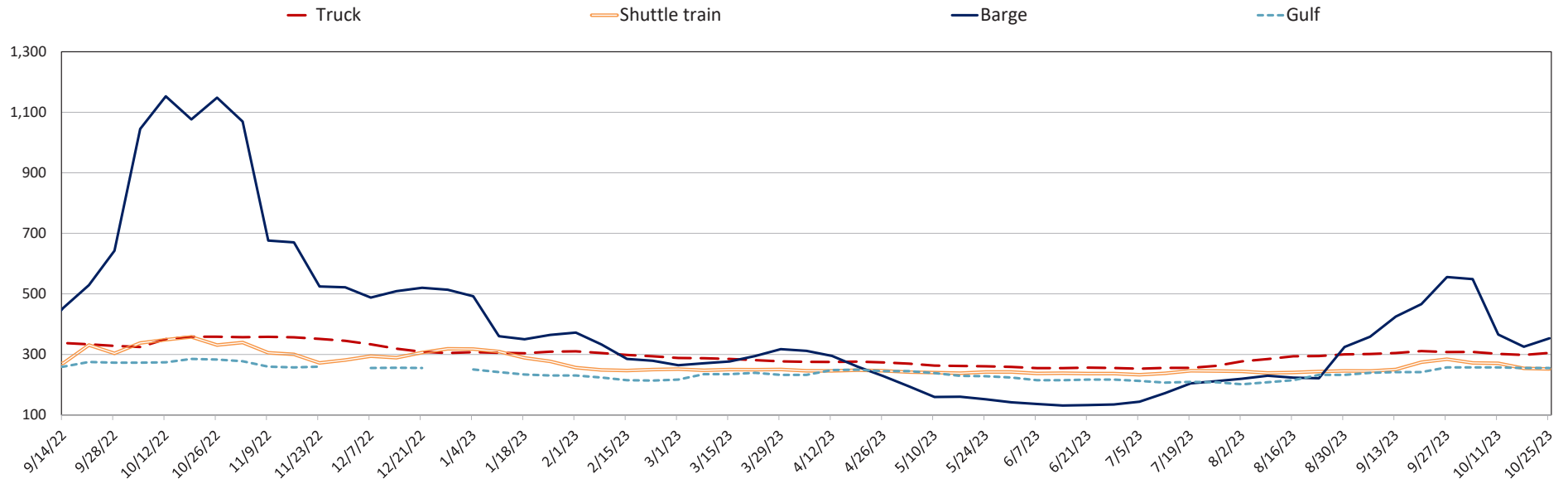
Table 1. Grain transport cost indicators

For the week ending:	Truck	Rail		Barge	Ocean	
		Non-shuttle	Shuttle		Gulf	Pacific
10/25/23	305	336	252	353	255	211
10/18/23	298	332	254	326	255	213
10/26/22	358	352	331	1148	283	303

Note: 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.

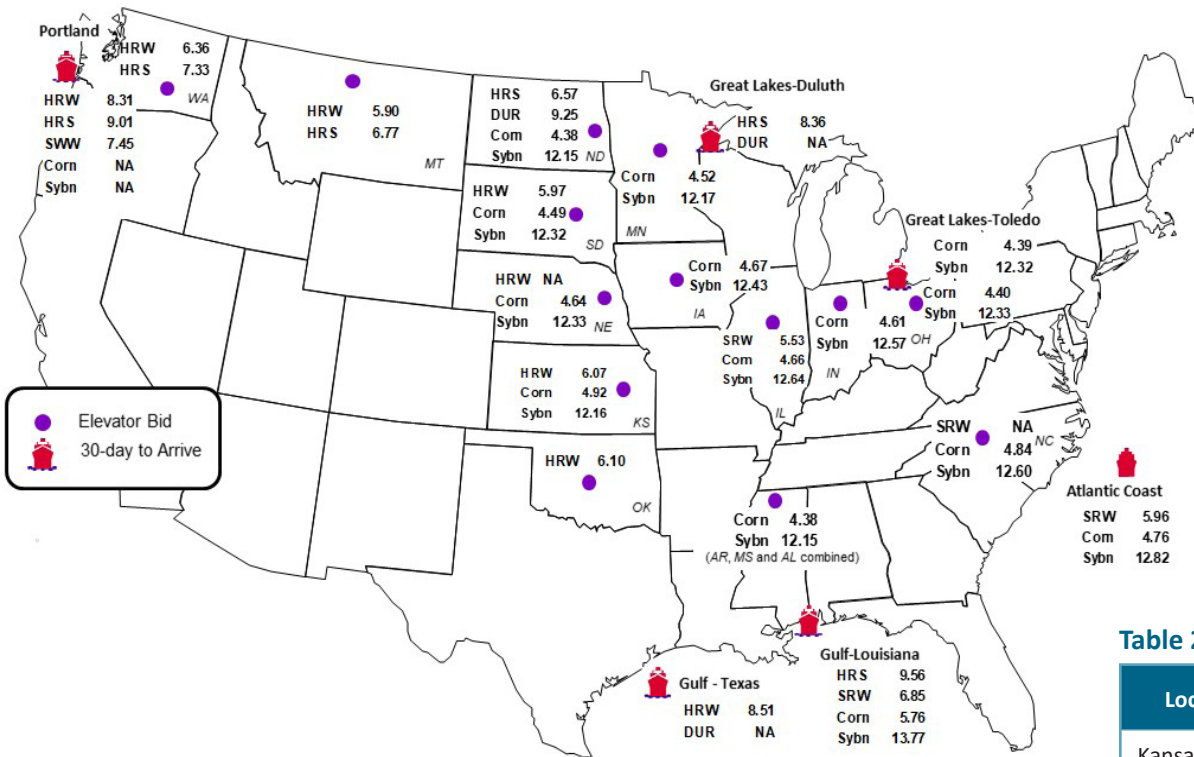
Figure 1. Grain transportation cost indicators as of week ending 10/25/23



Source: USDA, Agricultural Marketing Service.

Figure 2. Grain bid summary

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.



Inland bids: 12% HRW, 14% HRS, #1 SRW, #1 DUR, #1 SWW, #2 Y Corn, #1 Y Soybeans
 Export bids: Ord HRW, 14% HRS, #2 SRW, #2 DUR, #2 SWW, #2 Y Corn, #1 Soybeans
 Note: HRW = Hard red winter wheat, HRS = Hard red spring wheat, SRW = Soft red winter wheat, DUR = Durum, SWW = Soft white winter wheat, Y = Yellow, Ord = Ordinary. Data from tables 2a and 2b derived from map information.
 Sources: U.S. Inland: GeoGrain, USDA Weekly Bids, U.S. Export: Corn & Soybean - Export Grain Bids, AMS, USDA Wheat Bids - Weekly Wheat Report, U.S. Wheat Associates, Washington, DC.

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

Commodity	Origin-destination	10/20/2023	10/13/2023
Corn	IL-Gulf	-1.10	-1.13
Corn	NE-Gulf	-1.12	-1.13
Soybean	IA-Gulf	-1.34	-1.40
HRW	KS-Gulf	-2.44	-2.45
HRS	ND-Portland	-2.44	-2.62

Note: nq = no quote; n/a = not available; HRW = hard red winter wheat; HRS = hard red spring wheat.
 Source: USDA, Agricultural Marketing Service.

Table 2b. Futures

Location	Grain	Month	10/20/2023	Week ago 10/13/2023	Year ago 10/21/2022
Kansas City	Wheat	Dec	6.740	6.674	9.424
Minneapolis	Wheat	Dec	7.306	7.220	9.566
Chicago	Wheat	Dec	5.884	5.824	8.426
Chicago	Corn	Dec	4.942	4.920	6.796
Chicago	Soybean	Nov	13.102	12.806	13.906

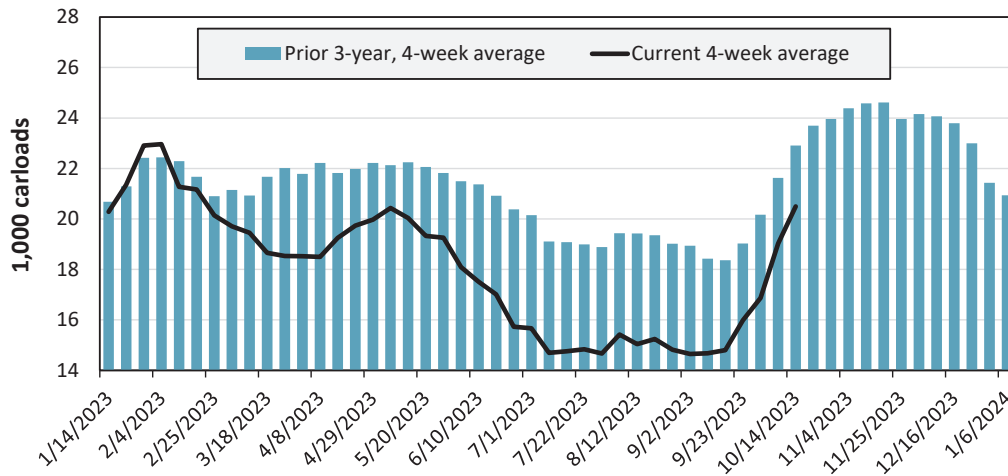
Sources: U.S. Inland: GeoGrain, USDA Weekly Bids, U.S. Export: Corn & Soybean - Export Grain Bids, AMS, USDA Wheat Bids - Weekly Wheat Report, U.S. Wheat Associates, Washington, DC.

Table 3. Class I rail carrier grain car bulletin (grain carloads originated)

For the week ending: 10/14/2023	East		West		U.S. total	Central U.S./Canada	
	CSXT	NS	BNSF	UP		CPKC	CN
This week	2,188	2,165	11,510	6,313	22,176	7,451	5,485
This week last year	2,026	2,477	13,243	6,479	24,225	14,666	6,631
2023 YTD	70,098	101,028	362,839	212,812	746,777	336,620	178,438
2022 YTD	70,673	97,670	446,563	234,891	849,797	386,842	148,146
2023 YTD as % of 2022 YTD	99	103	81	91	88	87	120
Last 4 weeks as % of 2022	113	90	92	102	96	99	94
Last 4 weeks as % of 3-yr. avg.	101	87	86	94	89	103	103
Total 2022	93,428	130,622	570,232	296,945	1,091,227	538,276	213,686

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 3. Total weekly U.S. Class I railroad grain carloads



For the 4 weeks ending October 14, grain carloads were up 8 percent from the previous week, down 4 percent from last year, and down 11 percent from the 3-year average.

Source: Association of American Railroads.

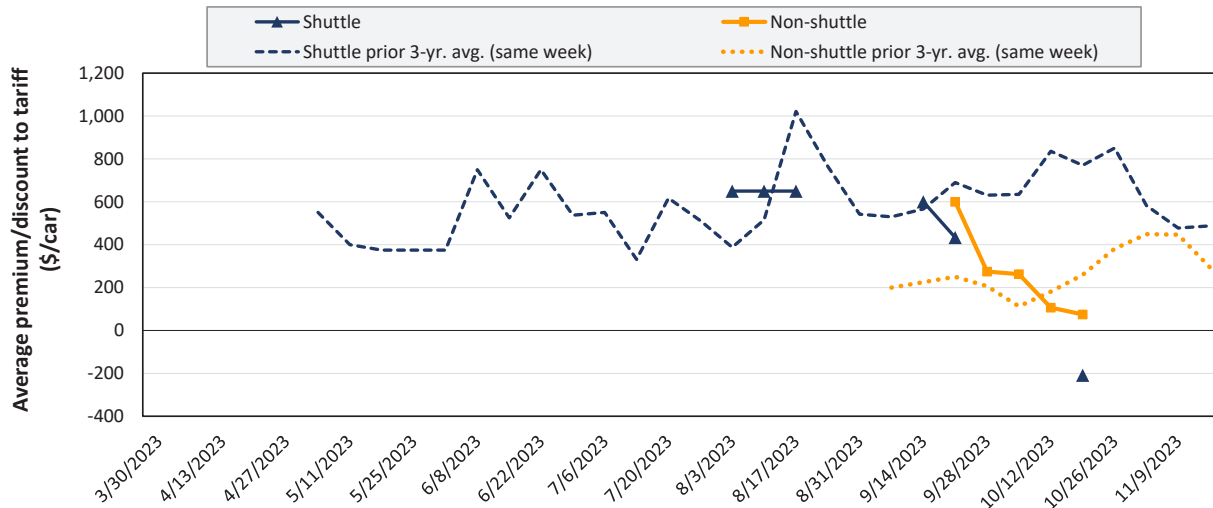
Table 4. Railcar auction offerings (dollars per car)

For the week ending: 10/19/2023		Delivery period							
		Nov-23	Nov-22	Dec-23	Dec-22	Jan-24	Jan-23	Feb-24	Feb-23
BNSF	COT grain units	no offer	no bids	no offer	no bids	no offer	52	no offer	44
	COT grain single-car	n/a	341	n/a	344	157	316	203	225
UP	GCAS/vouchers	n/a	n/a	no offer	n/a	no offer	n/a	no offer	n/a

Note: Auction offerings are for single-car and unit train shipments only. Bids and offers represent a premium/discount to tariff rates. n/a = not available. 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.

Primary auction market rates reflect offers and bids made between railroads and shippers for guaranteed car service. The secondary rail market information reflects trade values for service agreements traded between shippers that were originally purchased from the railroad carrier. The auction and secondary rail values are indicators of rail service quality and demand/supply. Bids and offers listed in the primary and secondary auctions are market indicators only and are not guaranteed prices.

Figure 4: Secondary market bids/offers for railcars to be delivered in November 2023

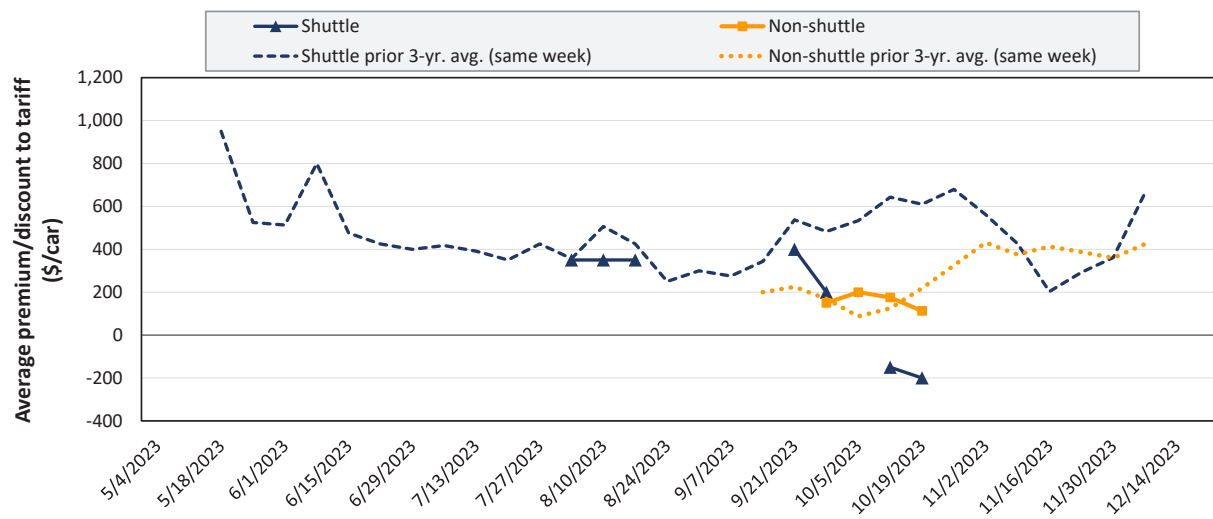


Average non-shuttle bids/offers fell \$31 this week, and are \$525 below the peak.

There were no shuttle bids/offers last week. Average shuttle bids/offers this week are \$858 below the peak.

10/19/2023	BNSF	UP
Non-Shuttle	\$75	n/a
Shuttle	-\$117	-\$300

Figure 5: Secondary market bids/offers for railcars to be delivered in December 2023

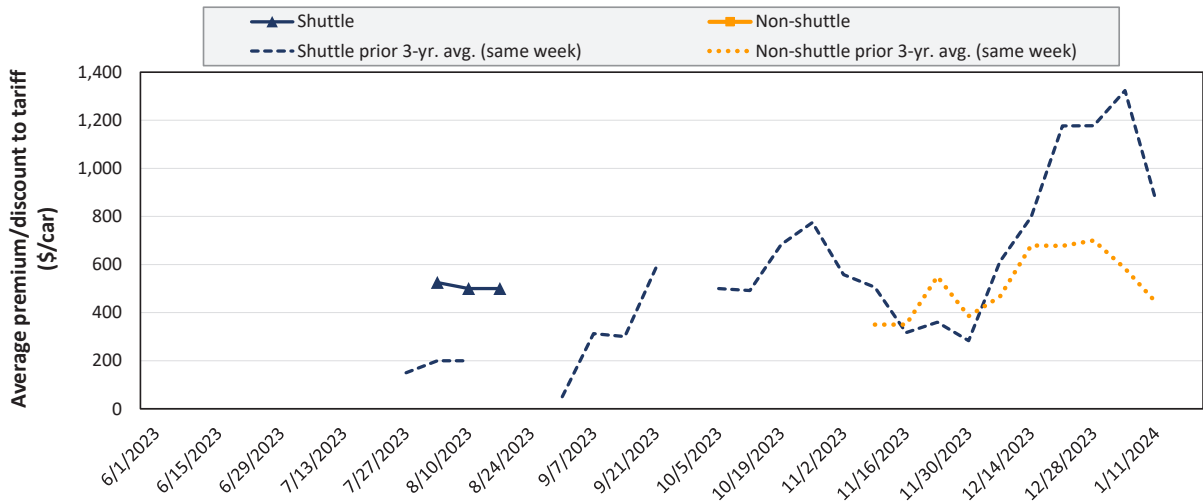


Average non-shuttle bids/offers fell \$63 this week, and are \$88 below the peak.

Average shuttle bids/offers fell \$50 this week and are \$600 below the peak.

10/19/2023	BNSF	UP
Non-Shuttle	\$100	\$125
Shuttle	-\$200	-\$200

Figure 6: Secondary market bids/offers for railcars to be delivered in January 2024



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

There were no shuttle bids/offers this week.

10/19/2023	BNSF	UP
Non-Shuttle	n/a	n/a
Shuttle	n/a	n/a

Table 5. Weekly secondary railcar market (dollars per car)

For the week ending: 10/19/2023		Delivery period					
		Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24
Non-shuttle	BNSF-GF	75	100	n/a	n/a	n/a	n/a
	Change from last week	-25	n/a	n/a	n/a	n/a	n/a
	Change from same week 2022	-400	-300	n/a	n/a	n/a	n/a
	UP-Pool	n/a	125	n/a	n/a	n/a	n/a
	Change from last week	n/a	-50	n/a	n/a	n/a	n/a
	Change from same week 2022	n/a	-125	n/a	n/a	n/a	n/a
Shuttle	BNSF-GF	-117	-200	n/a	n/a	n/a	n/a
	Change from last week	n/a	-50	n/a	n/a	n/a	n/a
	Change from same week 2022	-1,794	-1,813	n/a	n/a	n/a	n/a
	UP-Pool	-300	-200	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 2022	-1,800	-1,100	n/a	n/a	n/a	n/a
	CP-GF	200	200	n/a	n/a	n/a	n/a
	Change from last week	100	-200	n/a	n/a	n/a	n/a
Change from same week 2022	-800	-800	n/a	n/a	n/a	n/a	

Note: Bids and offers represent a premium/discount to tariff rates; n/a = not available; GF = guaranteed freight; Pool = guaranteed pool; BNSF = BNSF Railway; UP = Union Pacific Railroad; CP = Canadian Pacific Railway.

Source: USDA, Agricultural Marketing Service analysis of data from Tradewest Brokerage Company and the Malsam Company.

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 6. Tariff rail rates for unit train shipments

October 2023	Origin region	Destination region	Tariff rate/car	Fuel surcharge per car	Tariff plus surcharge per metric ton	Tariff plus surcharge per bushel	Percent Change Y/Y
Wheat	Wichita, KS	St. Louis, MO	\$4,095	\$233	\$42.98	\$1.17	4
	Grand Forks, ND	Duluth-Superior, MN	\$4,008	\$86	\$40.66	\$1.11	3
	Wichita, KS	Los Angeles, CA	\$7,340	\$444	\$77.30	\$2.10	-5
	Wichita, KS	New Orleans, LA	\$4,825	\$409	\$51.98	\$1.41	2
	Sioux Falls, SD	Galveston-Houston, TX	\$7,111	\$364	\$74.23	\$2.02	-4
	Colby, KS	Galveston-Houston, TX	\$5,075	\$449	\$54.85	\$1.49	2
	Amarillo, TX	Los Angeles, CA	\$5,121	\$624	\$57.05	\$1.55	-3
Corn	Champaign-Urbana, IL	New Orleans, LA	\$4,000	\$463	\$44.32	\$1.13	-3
	Toledo, OH	Raleigh, NC	\$8,877	\$516	\$93.28	\$2.37	2
	Des Moines, IA	Davenport, IA	\$2,830	\$98	\$29.08	\$0.74	5
	Indianapolis, IN	Atlanta, GA	\$6,866	\$388	\$72.03	\$1.83	2
	Indianapolis, IN	Knoxville, TN	\$5,790	\$251	\$59.99	\$1.52	3
	Des Moines, IA	Little Rock, AR	\$4,425	\$288	\$46.80	\$1.19	2
	Des Moines, IA	Los Angeles, CA	\$6,305	\$839	\$70.94	\$1.80	-1
Soybeans	Minneapolis, MN	New Orleans, LA	\$3,556	\$698	\$42.24	\$1.15	-20
	Toledo, OH	Huntsville, AL	\$7,269	\$368	\$75.84	\$2.06	2
	Indianapolis, IN	Raleigh, NC	\$8,169	\$523	\$86.32	\$2.35	2
	Indianapolis, IN	Huntsville, AL	\$5,921	\$248	\$61.27	\$1.67	3
	Champaign-Urbana, IL	New Orleans, LA	\$5,040	\$463	\$54.65	\$1.49	1

Note: 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. The table assumes 111 short tons (100.7 metric tons) per car, 56 pounds per bushel of corn, and 60 pounds per bushel of wheat and soybeans. Percentage change year to year (Y/Y) is calculated using the tariff rate plus fuel surcharge

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

Table 7. Tariff rail rates for shuttle train shipments

October 2023	Origin region	Destination region	Tariff rate/car	Fuel surcharge per car	Tariff plus surcharge per metric ton	Tariff plus surcharge per bushel	Percent Change Y/Y
Wheat	Great Falls, MT	Portland, OR	\$4,543	\$255	\$47.65	\$1.30	0
	Wichita, KS	Galveston-Houston, TX	\$4,611	\$199	\$47.76	\$1.30	4
	Chicago, IL	Albany, NY	\$7,413	\$487	\$78.45	\$2.14	3
	Grand Forks, ND	Portland, OR	\$6,201	\$441	\$65.96	\$1.80	-1
	Grand Forks, ND	Galveston-Houston, TX	\$5,549	\$459	\$59.66	\$1.62	-2
	Colby, KS	Portland, OR	\$5,923	\$736	\$66.12	\$1.80	-3
Corn	Minneapolis, MN	Portland, OR	\$5,660	\$537	\$61.54	\$1.56	-5
	Sioux Falls, SD	Tacoma, WA	\$5,620	\$492	\$60.69	\$1.54	-4
	Champaign-Urbana, IL	New Orleans, LA	\$4,345	\$463	\$47.74	\$1.21	1
	Lincoln, NE	Galveston-Houston, TX	\$4,560	\$287	\$48.13	\$1.22	1
	Des Moines, IA	Amarillo, TX	\$4,845	\$362	\$51.71	\$1.31	1
	Minneapolis, MN	Tacoma, WA	\$5,660	\$532	\$61.49	\$1.56	-5
Soybeans	Council Bluffs, IA	Stockton, CA	\$5,780	\$551	\$62.87	\$1.60	-2
	Sioux Falls, SD	Tacoma, WA	\$6,535	\$492	\$69.78	\$1.90	-1
	Minneapolis, MN	Portland, OR	\$6,585	\$537	\$70.72	\$1.92	-2
	Fargo, ND	Tacoma, WA	\$6,435	\$437	\$68.24	\$1.86	-1
	Council Bluffs, IA	New Orleans, LA	\$5,270	\$534	\$57.63	\$1.57	0
	Toledo, OH	Huntsville, AL	\$5,509	\$368	\$58.36	\$1.59	2
	Grand Island, NE	Portland, OR	\$5,905	\$753	\$66.12	\$1.80	-1

Note: 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. The table assumes 111 short tons (100.7 metric tons) per car, 56 pounds per bushel of corn, and 60 pounds per bushel of wheat and soybeans. Percentage change year to year (Y/Y) is calculated using the tariff rate plus fuel surcharge.

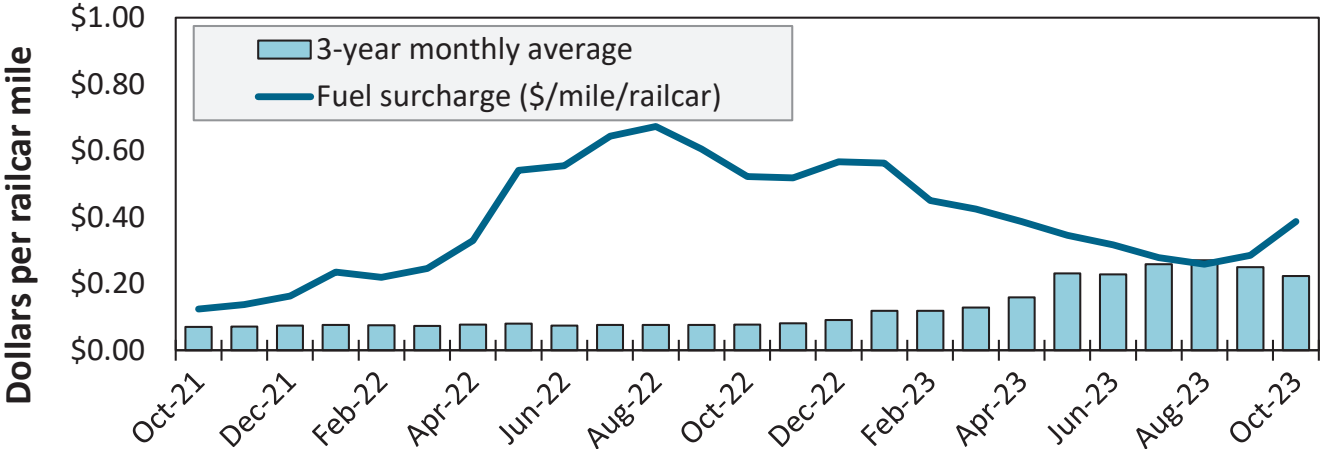
Source: BNSF Railway, Canadian National Railway, CSX Transportation, and Union Pacific Railroad.

Table 8. Tariff rail rates for U.S. bulk grain shipments to Mexico

December 2021	Origin state	Destination region	Tariff rate per car	Fuel surcharge per car	Tariff rate plus fuel surcharge per:		Percent change Y/Y
					metric ton	bushel	
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

Note: Rates are based on published tariff rates for high-capacity shuttle trains. Shuttle trains are available for qualified shipments of 75-110 cars that meet railroad efficiency requirements. The table assumes 97.87 metric tons per car, 56 pounds per bushel for corn and sorghum, and 60 pounds per bushel for wheat and soybeans. Percentage change year over year (Y/Y) is calculated using the tariff rate plus fuel surcharge. **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.** Source: BNSF Railway, Union Pacific Railroad, Kansas City Southern.

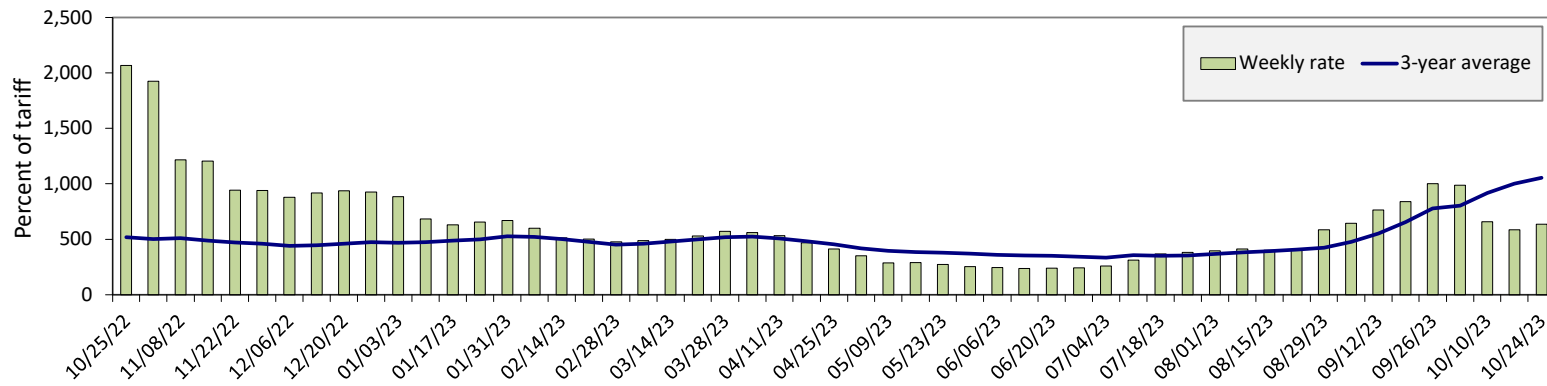
Figure 7. Railroad fuel surcharges, North American weighted average



October 2023: \$0.39/mile, up 10 cents from last month's surcharge of \$0.29/mile; down 13 cents from the October 2022 surcharge of \$0.52/mile; and up 17 cents from the October prior 3-year average of \$0.22/mile.

Note: Weighted by each Class I railroad's proportion of grain traffic for the prior year. Source: BNSF Railway, Canadian National Railway, CSX Transportation, Canadian Pacific Railway, Union Pacific Railroad, Kansas City Southern Railway, Norfolk Southern Corporation.

Figure 8. Illinois River barge freight rate



For the week ending October 24: 9 percent higher than the previous week; and 69 percent lower than last year; and 40 percent lower than the 3-year average.

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

Table 9. Weekly barge freight rates: southbound only

Measure	Date	Twin Cities	Mid-Mississippi	Lower Illinois River	St. Louis	Cincinnati	Lower Ohio	Cairo-Memphis
Rate	10/24/2023	520	581	636	580	709	709	521
	10/17/2023	565	580	586	578	607	607	546
\$/ton	10/24/2023	32.19	30.91	29.51	23.14	33.25	28.64	16.36
	10/17/2023	34.97	30.86	27.19	23.06	28.47	24.52	17.14
Measure	Time Period	Twin Cities	Mid-Mississippi	Lower Illinois River	St. Louis	Cincinnati	Lower Ohio	Cairo-Memphis
Current week % change from the same week	Last year	-69	-71	-69	-74	-71	-71	-72
	3-year avg.	-44	-45	-40	-49	-39	-39	-54
Rate	November	515	508	520	454	493	493	428
	January	-	-	495	404	448	448	373

Note: Rate = percent of 1976 tariff benchmark index (1976 = 100 percent); 3-year avg. = 4-week moving average of the 3-year avg.; ton = 2,000 pounds; "-" = data not available.
Source: USDA, Agricultural Marketing Service.

Figure 9. Benchmark tariff rates



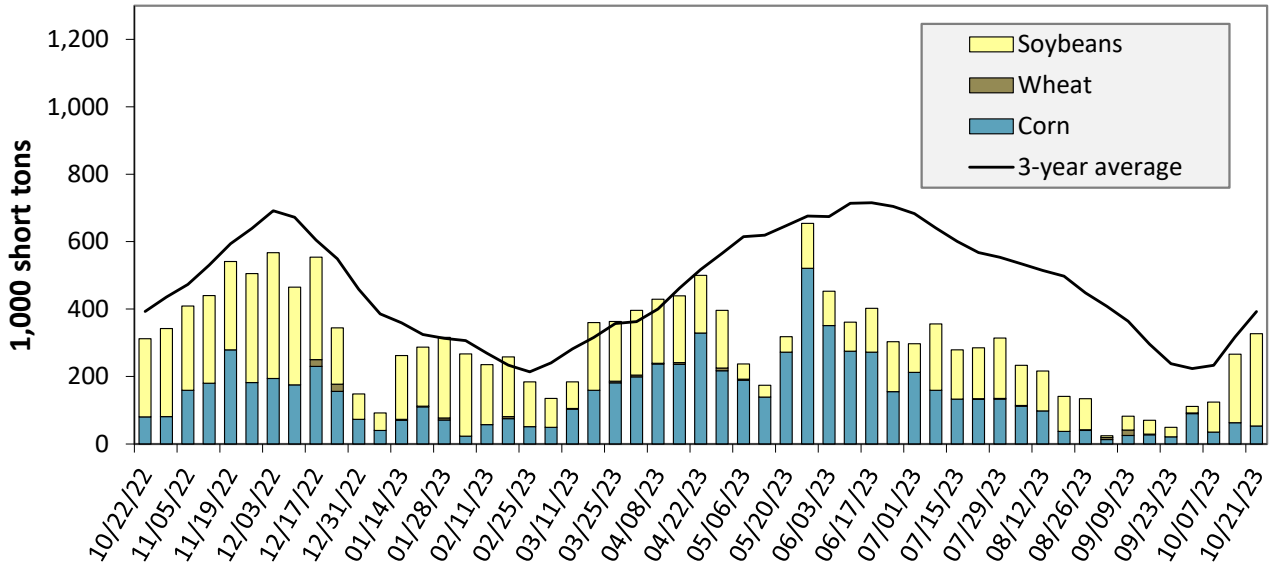
Calculating barge rate per ton:

$$\text{Rate} \times \text{1976 tariff benchmark rate per ton} / 100$$

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

Source: USDA, Agricultural Marketing Service.

Figure 10. Barge movements on the Mississippi River (Locks 27-Granite City, IL)



For the week ending October 21: 5 percent higher than last year and 17 percent lower than the 3-year average.

Note: The 3-year average is a 4-week moving average. 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.

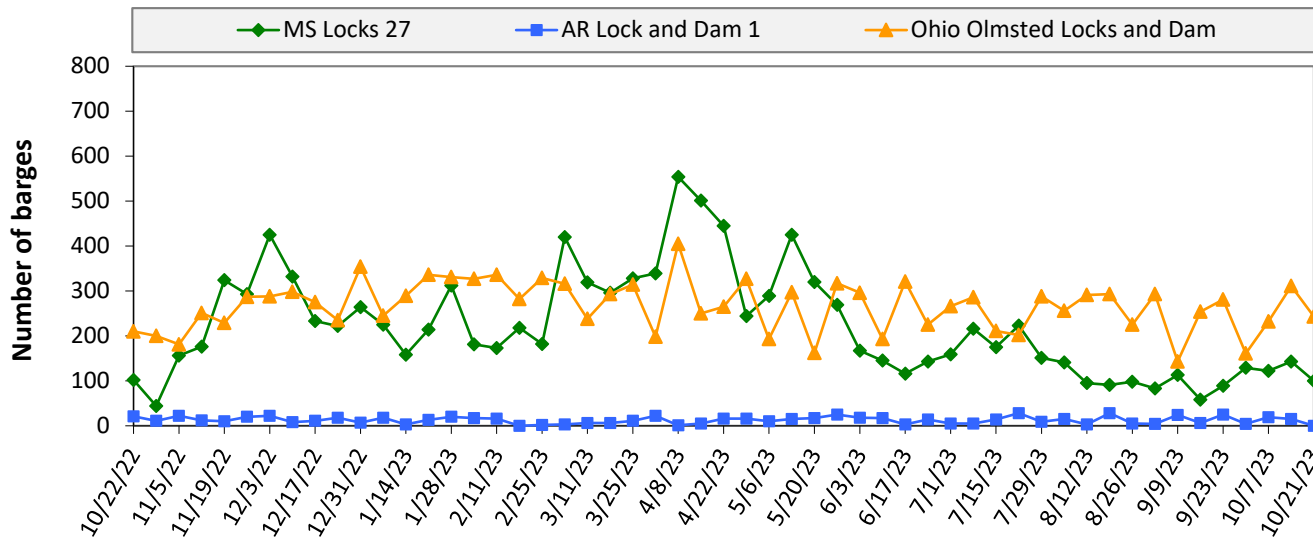
Table 10. Barged grain movements (1,000 tons)

For the week ending 10/21/2023	Corn	Wheat	Soybeans	Other	Total
Mississippi River (Rock Island, IL (L15))	14	0	171	0	186
Mississippi River (Winfield, MO (L25))	32	0	199	0	231
Mississippi River (Alton, IL (L26))	48	0	253	0	301
Mississippi River (Granite City, IL (L27))	53	0	274	0	326
Illinois River (La Grange)	10	0	62	0	72
Ohio River (Olmsted)	98	13	125	0	236
Arkansas River (L1)	0	0	0	0	0
Weekly total - 2023	151	13	399	0	562
Weekly total - 2022	133	1	388	3	526
2023 YTD	9,586	1,165	8,549	205	19,505
2022 YTD	14,021	1,499	10,240	209	25,969
2023 as % of 2022 YTD	68	78	83	98	75
Last 4 weeks as % of 2022	90	154	82	19	85
Total 2022	16,437	1,594	14,464	232	32,727

Note: "Other" refers to oats, barely, sorghum, and rye. Total may not add up due to rounding. YTD = year to date. Weekly total, YTD, and calendar year total include Mississippi River lock 27, Ohio River Olmsted lock, and Arkansas Lock 1. "L" (as in "L15") refers to a lock, locks, or lock 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.

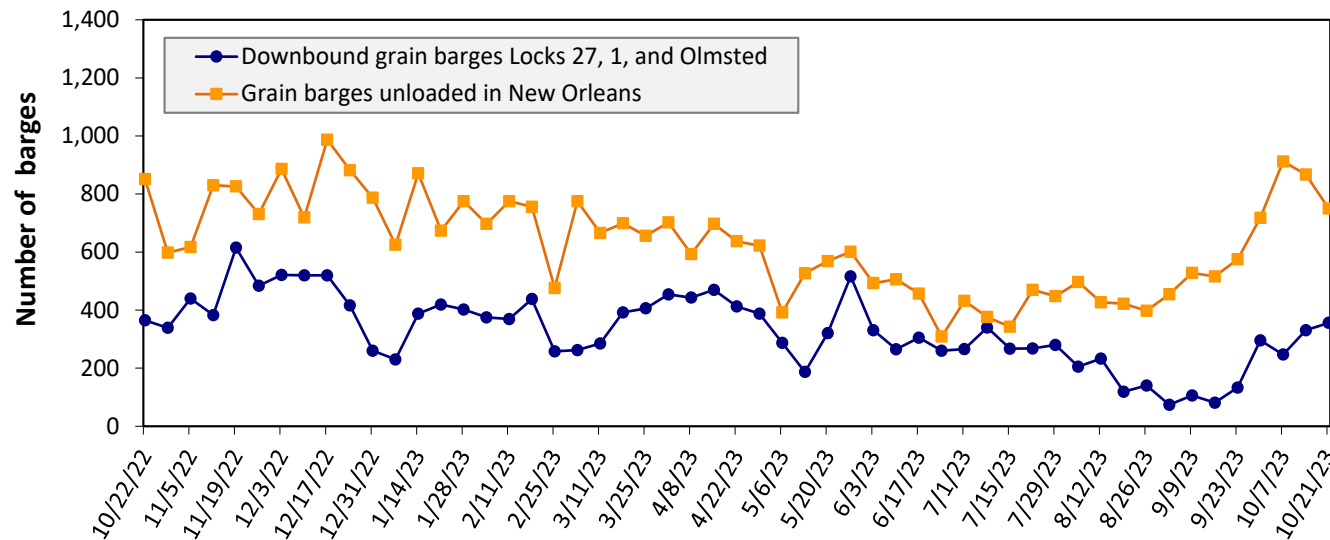
Figure 11. Upbound empty barges transiting Mississippi River Locks 27, Arkansas River Lock and Dam 1, and Ohio River Olmsted Locks and Dam



For the week ending October 21: 343 barges transited the locks, 126 barges fewer than the previous week, and 20 percent lower than the 3-year 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.

Figure 12. Grain barges for export in New Orleans region



For the week ending October 21: 356 barges moved down river, 25 more than the previous week; 750 grain barges unloaded in the New Orleans Region, 13 percent fewer than the previous week.

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.

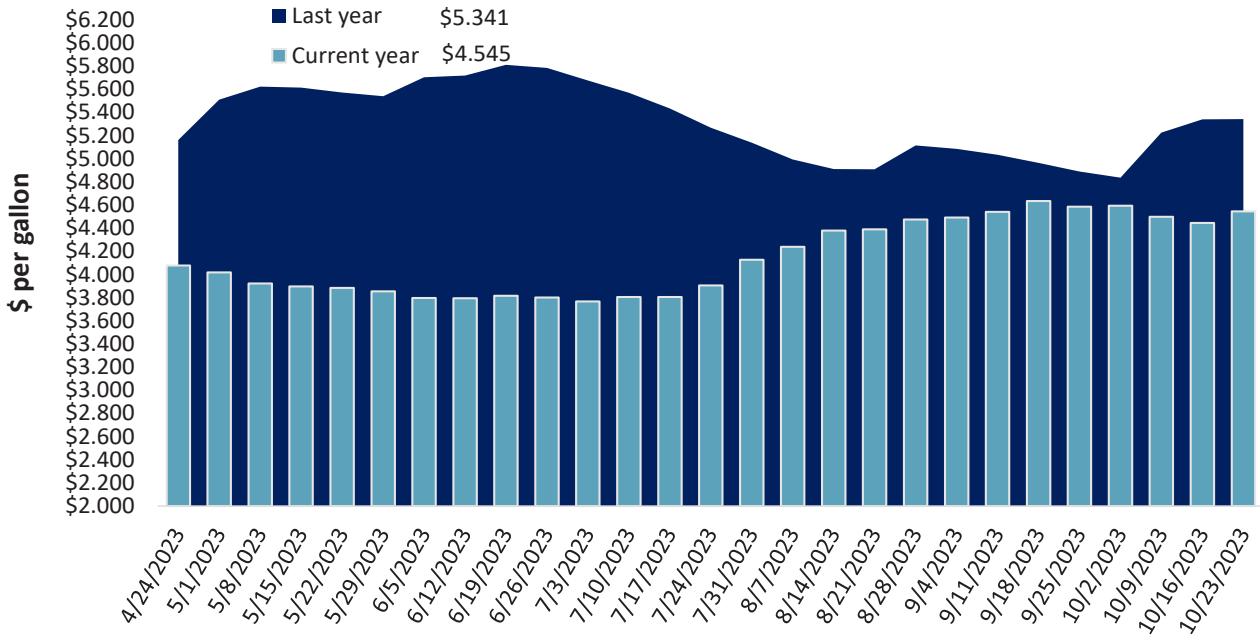
The weekly diesel price provides a proxy for trends in U.S. truck rates as diesel fuel is a significant expense for truck grain movements.

Table 11. Retail on-highway diesel prices, week ending 10/23/2023 (U.S. \$/gallon)

Region	Location	Price	Change from	
			Week ago	Year ago
I	East Coast	4.408	0.004	-0.971
	New England	4.551	-0.006	-1.222
	Central Atlantic	4.668	-0.004	-1.153
	Lower Atlantic	4.299	0.009	-0.883
II	Midwest	4.554	0.250	-0.815
III	Gulf Coast	4.186	0.072	-0.801
IV	Rocky Mountain	4.754	0.090	-0.584
V	West Coast	5.468	-0.060	-0.408
	West Coast less California	4.988	-0.022	-0.491
	California	6.016	-0.103	-0.315
Total	United States	4.545	0.101	-0.796

Note: Diesel fuel prices include all taxes. Prices represent an average of all types of diesel fuel. 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 13. Weekly diesel fuel prices, U.S. average



For the week ending October 23, the U.S. average diesel fuel price increased 10.1 cents from the previous week to \$4.545 per gallon, 79.6 cents below the same week last year.

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.

Table 12. U.S. export balances and cumulative exports (1,000 metric tons)

Grain Exports		Wheat					Corn	Soybeans	Total	
		Hard red winter (HRW)	Soft red winter (SRW)	Hard red spring (HRS)	Soft white wheat (SWW)	Durum				All wheat
Current unshipped (outstanding) export sales	For the week ending 10/12/2023	647	1,024	1,324	1,000	140	4,136	12,176	15,394	31,706
	This week year ago	704	454	909	602	62	2,730	10,755	25,951	39,436
	Last 4 wks. as % of same period 2022/23	93	174	143	151	278	140	107	62	80
Current shipped (cumulative) exports sales	2023/24 YTD	1,203	1,576	2,329	1,338	141	6,588	4,000	5,487	16,075
	2022/23 YTD	2,496	1,628	2,418	1,941	78	8,560	3,074	4,490	16,124
	YTD 2023/24 as % of 2022/23	48	97	96	69	182	77	130	122	100
	Total 2022/23	4,872	2,695	5,382	4,414	395	17,759	39,469	52,208	109,435
	Total 2021/22	7,172	2,786	5,254	3,261	196	18,669	59,764	57,189	135,622

Note: The marketing year for wheat is Jun. 1 to May 31 and, for corn and soybeans, Sep. 1 to Aug. 31. YTD = year-to-date; wks. = weeks.

Source: USDA, Foreign Agricultural Service.

Table 13. Top 5 importers of U.S. corn

For the week ending 10/12/2023	Total commitments (1,000 mt)		% change current MY from last MY	Exports 3-year average 2020-22 (1,000 mt)
	YTD MY 2023/24	YTD MY 2022/23		
Mexico	8,319	5,594	49	15,227
China	929	3,396	-73	12,616
Japan	1,718	1,251	37	10,273
Columbia	1,117	313	257	4,398
Korea	76	14	435	2,563
Top 5 importers	12,159	10,568	15	45,077
Total U.S. corn export sales	16,176	13,828	17	56,665
% of YTD current month's export projection	31%	33%		
Change from prior week	881	408		
Top 5 importers' share of U.S. corn export sales	75%	76%		80%
USDA forecast October 2023	51,527	42,265	22	
Corn use for ethanol USDA forecast, October 2023	134,620	131,496	2	

Note: The top 5 importers are based on USDA, Foreign Agricultural Service (FAS) marketing year ranking reports for marketing year (MY) 2022/23 (Sep. 1 – Aug. 31). "Total commitments" = cumulative exports (shipped) + outstanding sales (unshipped), from 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. In rightmost column, "Exports" = carryover plus accumulated exports (as defined in FAS marketing year ranking reports). mt = metric ton; yr. = year; avg. = average; YTD = year to date.

Source: USDA, Foreign Agricultural Service.

Table 14. Top 5 importers of U.S. soybeans

For the week ending 10/12/2023	Total commitments (1,000 mt)		% change current MY from last MY	Exports 3-year average 2020-22 (1,000 mt)
	YTD MY 2023/24	YTD MY 2022/23		
China	9,878	16,630	-41	32,321
Mexico	2,172	2,108	3	4,912
Egypt	130	655	-80	2,670
Japan	758	674	12	2,259
Indonesia	380	295	29	1,973
Top 5 importers	13,318	20,361	-35	44,133
Total U.S. soybean export sales	20,881	30,441	-31	56,656
% of YTD current month's export projection	44%	56%		
Change from prior week	1,372	2,253		
Top 5 importers' share of U.S. soybean export sales	64%	67%		78%
USDA forecast, October 2023	47,820	54,278	-12	

Note: The top 5 importers are based on USDA, Foreign Agricultural Service (FAS) marketing year ranking reports for marketing year (MY) 2022/23 (Sep. 1 – Aug. 31). “Total commitments” = cumulative exports (shipped) + outstanding sales (unshipped), from 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. In rightmost column, “Exports” = carryover plus accumulated export (as defined in FAS marketing year ranking reports). mt = metric ton; yr. = year; avg. = average; YTD = year to date.

Source: USDA, Foreign Agricultural Service.

Table 15. Top 10 importers of all U.S. wheat

For the week ending 10/12/2023	Total commitments (1,000 mt)		% change current MY from last MY	Exports 3-year average 2020-22 (1,000 mt)
	YTD MY 2023/24	YTD MY 2022/23		
Mexico	1,741	2,020	-14	3,397
Philippines	1,642	1,494	10	2,615
Japan	1,097	1,170	-6	2,281
China	748	616	21	1,740
Korea	726	626	16	1,426
Nigeria	189	584	-68	1,276
Taiwan	653	417	57	944
Thailand	224	344	-35	643
Columbia	180	405	-56	537
Indonesia	256	236	8	469
Top 10 importers	7,455	7,913	-6	15,327
Total U.S. wheat export sales	10,723	11,290	-5	20,411
% of YTD current month's export projection	56%	55%		
Change from prior week	633	163		
Top 10 importers' share of U.S. wheat export sales	70%	70%		75%
USDA forecast, October 2023	19,074	20,681	-8	

Note: The top 5 importers are based on USDA, Foreign Agricultural Service (FAS) marketing year ranking reports for marketing year (MY) 2022/23 (Sep. 1 – Aug. 31). “Total commitments” = cumulative exports (shipped) + outstanding sales (unshipped), from 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. In rightmost column, “Exports” = carryover plus accumulated export (as defined in FAS marketing year ranking reports). mt = metric ton; yr. = year; avg. = average; YTD = year to date.

Source: USDA, Foreign Agricultural Service.

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

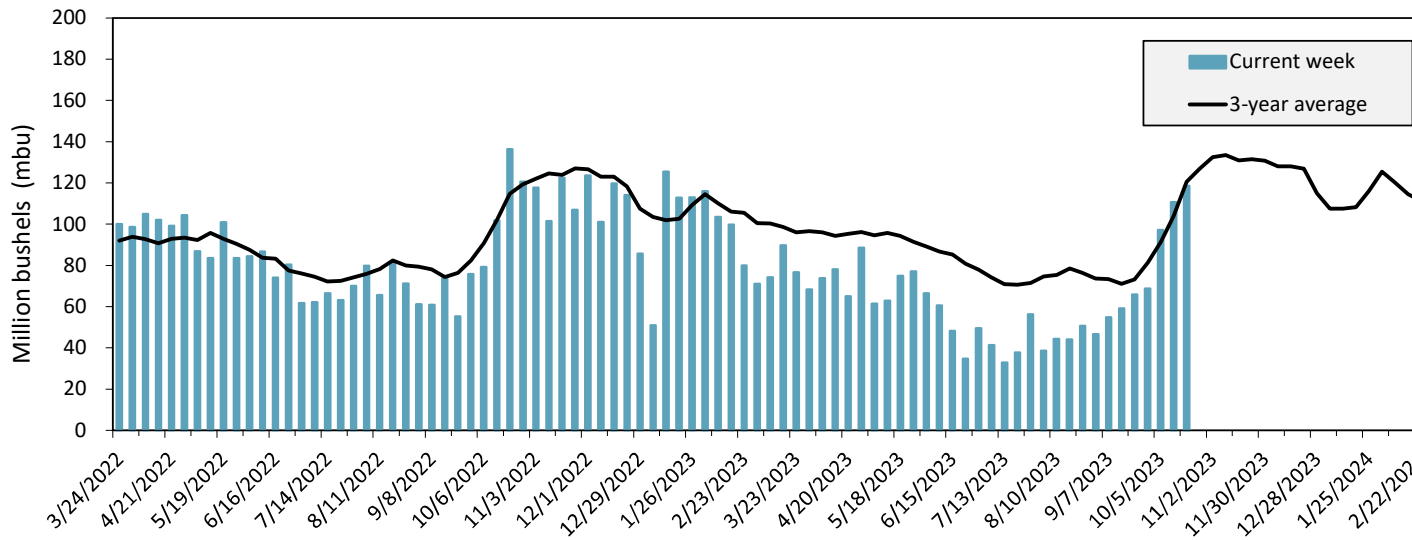
Port regions	Commodity	For the week ending 10/19/2023	Previous week*	Current week as % of previous	2023 YTD*	2022 YTD*	2023 YTD as % of 2022 YTD	Last 4-weeks as % of:		2022 total*
								Last year	Prior 3-yr. avg.	
Pacific Northwest	Wheat	58	201	29	8,380	8,597	97	67	73	9,836
	Corn	0	0	n/a	3,925	8,953	44	n/a	5	9,615
	Soybeans	847	701	121	5,791	7,783	74	88	71	14,178
	Total	905	903	100	18,097	25,333	71	82	71	33,629
Mississippi Gulf	Wheat	83	53	155	3,142	3,922	80	121	129	4,053
	Corn	222	310	72	19,397	27,632	70	107	70	30,781
	Soybeans	1,254	1,070	117	19,972	19,591	102	114	94	31,283
	Total	1,559	1,433	109	42,510	51,145	83	112	87	66,116
Texas Gulf	Wheat	0	50	0	1,536	2,941	52	36	30	3,421
	Corn	13	12	111	269	564	48	489	162	648
	Soybeans	54	55	97	164	111	148	100	37	685
	Total	67	117	57	1,969	3,616	54	59	37	4,754
Interior	Wheat	16	35	45	1,985	2,422	82	86	89	2,912
	Corn	191	135	142	7,635	7,178	106	131	110	8,961
	Soybeans	254	258	98	4,840	5,525	88	113	110	7,109
	Total	460	427	108	14,459	15,124	96	118	109	18,982
Great Lakes	Wheat	19	34	56	340	283	120	714	251	395
	Corn	0	0	n/a	23	148	15	0	0	158
	Soybeans	59	0	n/a	122	366	33	47	45	760
	Total	78	34	231	485	797	61	117	98	1,312
Atlantic	Wheat	3	2	153	106	169	63	20	52	169
	Corn	3	1	228	106	284	37	101	98	309
	Soybeans	121	62	196	1,440	1,774	81	110	84	2,867
	Total	127	65	195	1,652	2,227	74	95	84	3,345
U.S. total from ports*	Wheat	178	375	47	15,488	18,333	84	76	77	20,786
	Corn	430	458	94	31,354	44,759	70	115	80	50,471
	Soybeans	2,588	2,146	121	32,330	35,150	92	102	84	56,882
	Total	3,196	2,979	107	79,172	98,243	81	100	82	128,139

*Note: Data include revisions from prior weeks; some regional totals may not add exactly because of rounding. YTD = year-to-date; n/a = not applicable or no change.

Source: USDA, Federal Grain Inspection Service.

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.

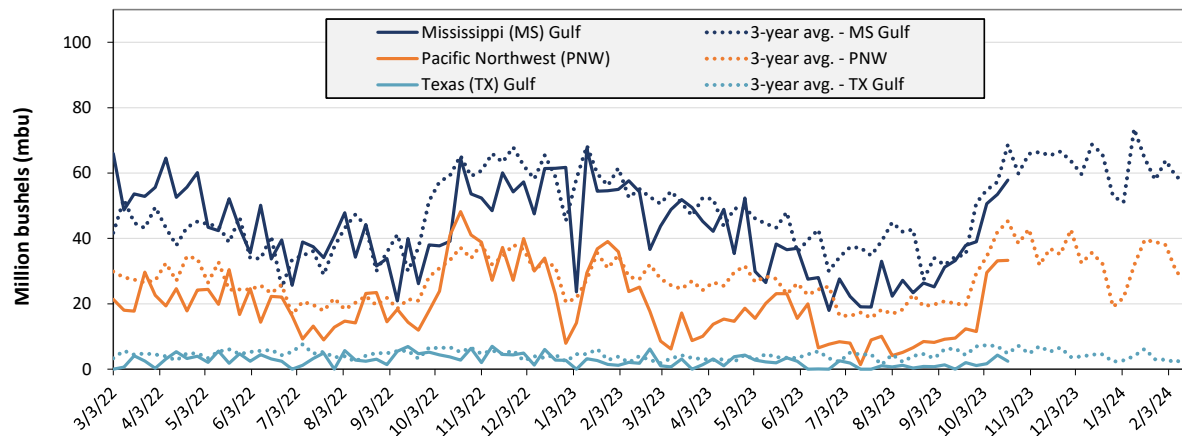
Figure 14. U.S. grain inspected for export (wheat, corn, and soybeans)



For the week ending October 19: 118.6 mbu of grain inspected, up 7 percent from the previous week, down 13 percent from the same week last year, and down 2 percent from the 3-year average.

Note: 3-year average consists of 4-week running average.
Source: USDA, Federal Grain Inspection Service.

Figure 15. U.S. grain inspections for U.S. Gulf and PNW (wheat, corn, and soybeans)



Week ending 10/19/23 inspections (mbu):

MS Gulf: 57.9

PNW: 33.3

TX Gulf: 2.5

Percent change from	MS Gulf	TX Gulf	U.S. Gulf	PNW
Last week	up 8	down 42	up 4	no change
Last year (same week)	down 10	down 13	down 10	down 31
3-year average (4-week moving average)	no change	down 62	down 6	down 12

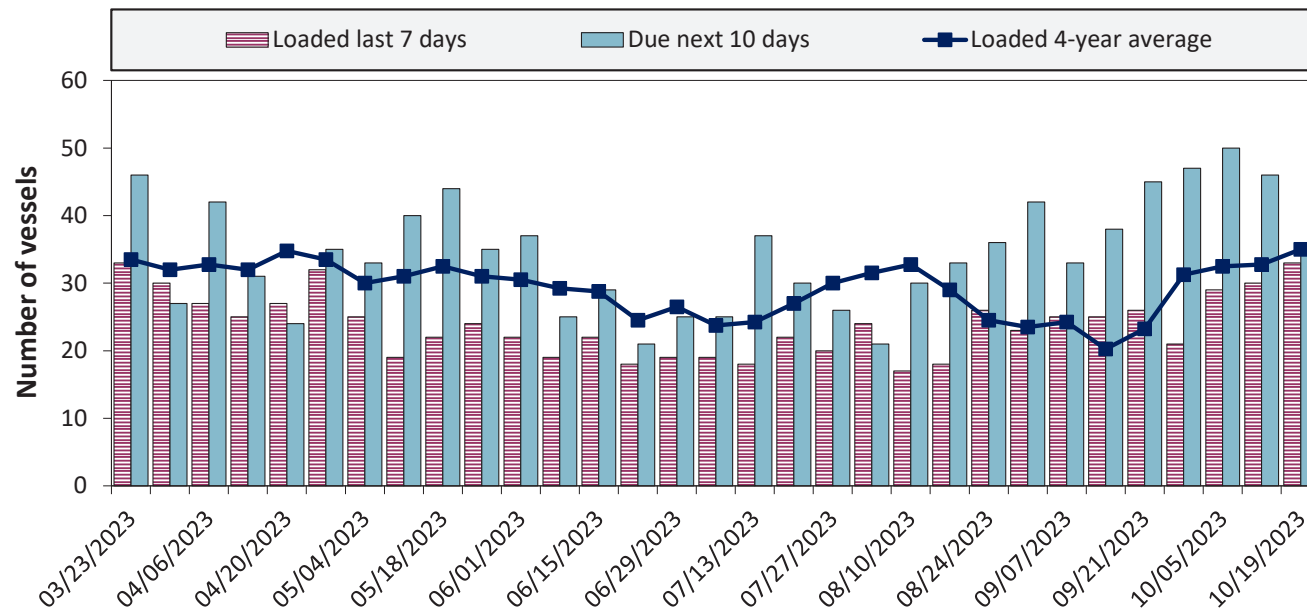
Source: USDA, Federal Grain Inspection Service.

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

Date	Gulf			Pacific Northwest
	In port	Loaded 7-days	Due next 10-days	In port
10/19/2023	36	33	35	17
10/12/2023	27	30	46	19
2022 range	(14...61)	(18...39)	(28...62)	(5...23)
2022 average	30	28	44	13

Note: The data are voluntarily submitted and may not be complete.
 Source: USDA, Agricultural Marketing Service.

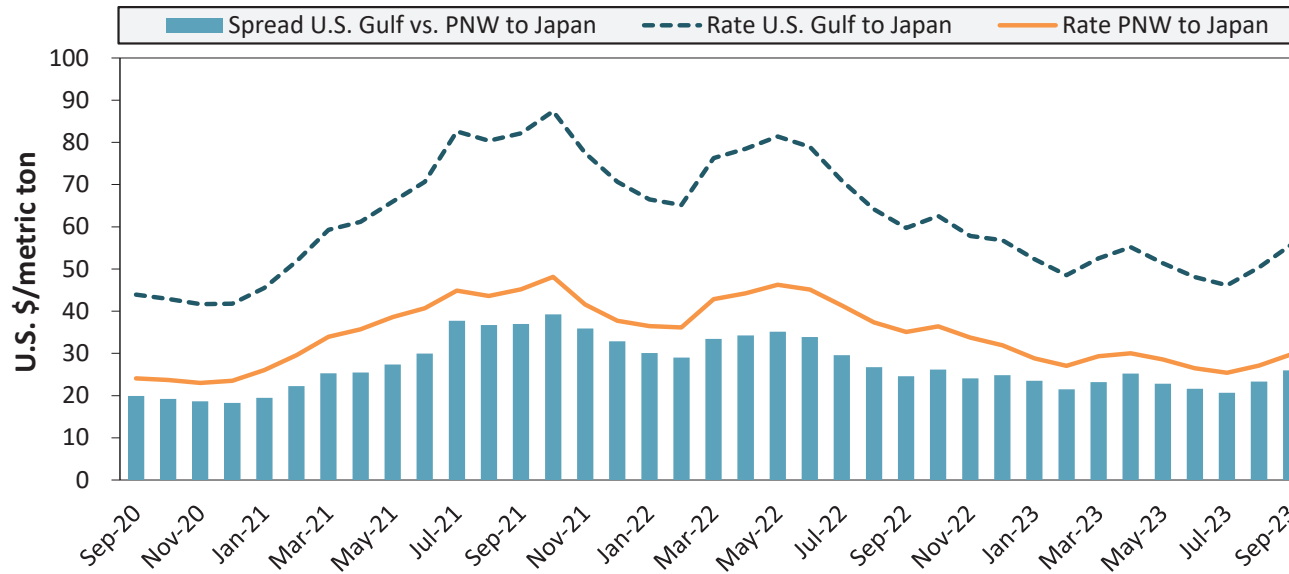
Figure 16. U.S . Gulf vessel loading activity



Week ending 10/19/23, number of vessels	Loaded	Due
Change from last year	17.9%	-5.4%
Change from 4-year average	-5.7%	-26.7%

Note: U.S. Gulf includes Mississippi, Texas, and east Gulf
 Source: USDA, Agricultural Marketing Service.

Figure 17. U.S. Grain vessel rates, U.S. to Japan



Ocean rates	U.S. Gulf	PNW	Spread
September 2023	\$55.75	\$29.75	\$26.00
Change from September 2022	-6.6%	-15.2%	5.7%
Change from 4-year average	-6.2%	-11.1%	0.0%

Note: PNW = Pacific Northwest
Source: O'Neil Commodity Consulting.

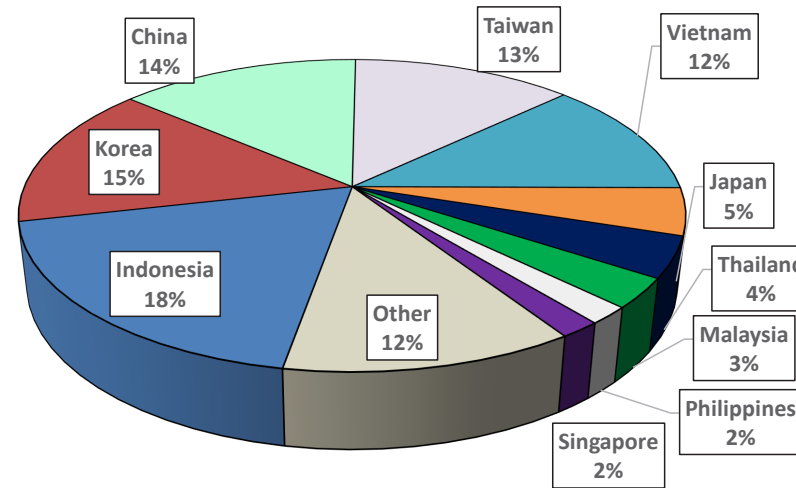
Table 18. Ocean freight rates for selected shipments, week ending 10/21/2023

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	China	Heavy grain	Oct 1/Nov 1, 2023	66,000	54.50
U.S. Gulf	China	Heavy grain	Oct 1/10, 2023	68,000	55.00
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	S. Korea	Heavy grain	Nov 25/Dec 5, 2023	58,000	65.35
U.S. Gulf	S. Korea	Heavy grain	Oct 25/Nov 5, 2023	57,000	64.85
U.S. Gulf	S. Korea	Heavy grain	Nov 1/15, 2023	58,000	64.50
U.S. Gulf	S. Korea	Heavy grain	Oct 1/20, 2023	57,000	58.30
PNW	N. China	Heavy grain	Nov 16/22, 2023	66,000	28.00
PNW	Thailand	Heavy grain	Dec 5/15, 2023	66,000	22.50
PNW	Yemen	Wheat	Nov 5/15, 2023	30,000	74.43
PNW	Yemen	Wheat	Nov 5/15, 2023	24,740	91.89
River Plate	China	Soybeans	Oct 15/30, 2023	65,000	46.75

Note: 50 percent of food aid from the United States is required to be shipped on U.S.-flag vessels. Rates shown are per metric ton (1 metric ton = 2,204.62 pounds), 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.

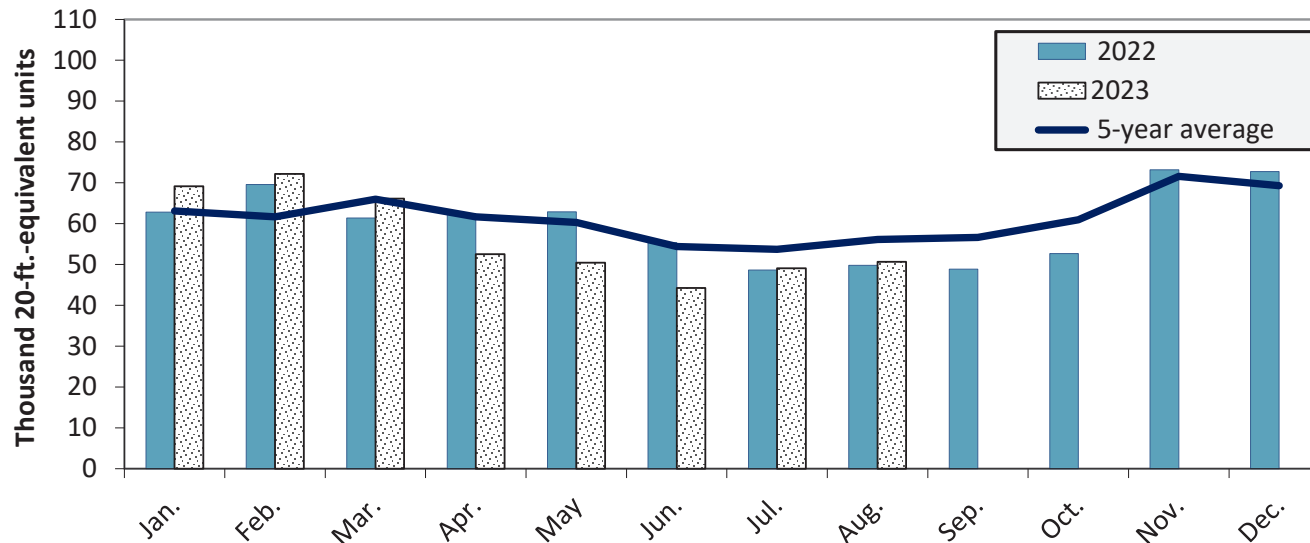
Figure 18. Top 10 destination markets for U.S. containerized grain exports, Jan-Aug 2023



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: Source: USDA, Agricultural Marketing Service analysis of PIERS data, S&P Global.

Figure 19. Monthly shipments of U.S. containerized grain exports



Containerized grain shipments were up 1.8 percent from last year but down 9.7 percent from the 5-year average.

Note: ft. = foot. 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: Source: USDA, Agricultural Marketing Service analysis of PIERS data, S&P Global.

Title	Name	Email	Phone
Coordinators	Surajudeen (Deen) Olowolayemo	surajudeen.olowolayemo@ams.usda.gov	(202) 720-0119
	Maria Williams	maria.williams@usda.gov	(202) 690-4430
	Bernadette Winston	bernadette.winston@usda.gov	(202) 690-0487
Grain Transportation Indicators	Surajudeen (Deen) Olowolayemo	surajudeen.olowolayemo@ams.usda.gov	(202) 720-0119
Rail Transportation	Jesse Gastelle	jesse.gastelle@ams.usda.gov	(202) 690-1144
	Peter Caffarelli	petera.caffarelli@ams.usda.gov	(202) 690-3244
	Rich Henderson	richard.henderson2@usda.gov	(919) 855-7801
	Austin Hunt	austin.hunt@usda.gov	(540) 681-2596
Barge Transportation	Rich Henderson	richard.henderson2@usda.gov	(919) 855-7801
	Alexis Heyman	alexis.heyman@usda.gov	(847) 699-2414
Truck Transportation	Kranti Mulik	kranti.mulik@usda.gov	(202) 756-2577
	April Taylor	april.taylor@ams.usda.gov	(202) 720-7880
	Alexis Heyman	alexis.heyman@usda.gov	(847) 699-2414
Grain Exports	Alexis Heyman	alexis.heyman@usda.gov	(847) 699-2414
	Kranti Mulik	kranti.mulik@usda.gov	(202) 756-2577
	Bernadette Winston	bernadette.winston@usda.gov	(202) 690-0487
Ocean Transportation	Surajudeen (Deen) Olowolayemo (Freight rates and vessels)	surajudeen.olowolayemo@ams.usda.gov	(202) 720-0119
	April Taylor (Container movements)	april.taylor@ams.usda.gov	(202) 720-7880
Editor	Maria Williams	maria.williams@usda.gov	(202) 690-4430

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

Preferred citation: U.S. Department of Agriculture, Agricultural Marketing Service. *Grain Transportation Report*. October 26, 2023.
Web: <http://dx.doi.org/10.9752/TS056.10-26-2023>

Additional Transportation Research and Analysis resources include the [Grain Truck and Ocean Rate Advisory \(GTOR\)](#), the [Mexico Transport Cost Indicator Report](#), and the [Brazil Soybean Transportation Report](#).

Photo Credit: Adobe Stock

USDA is an equal opportunity provider, employer, and lender.