

United States Department of Agriculture



# **Grain Transportation Report**

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

WEEKLY HIGHLIGHTS

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# September 22, 2022

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The next release is September 29, 2022

#### FHWA Invests \$10 Million To Reduce Highway and Port Congestion

Under its Advanced Transportation and Congestion Management Technologies Deployment program, the Federal Highway Administration (FHWA) recently awarded nearly \$10 million for trucking-related projects in California and Kansas. On U.S. Route 83, a two-lane corridor critical to freight transport in Kansas, <u>a \$6.7 million grant</u> will help install 100 miles of fiber-optic cable and advanced technologies. The technologies will provide traffic, weather, and other information to optimize truck-freight routing and improve economic productivity. At the Port of Los Angeles's Gateway project, <u>a \$3 million FHWA grant</u> will help implement cloud-based artificial intelligence (AI) to streamline the staging of cargo and empty returns. The AI application introduces a new approach to reducing port congestion by helping to direct cargo owners, truckers, and drayage drivers.

#### DOT Funds Road-Railway Separation at Port of Los Angeles

The U.S. Department of Transportation (DOT) recently <u>awarded a \$20 million grant</u> for a critical, four-lane road-railway grade separation project at the Port of Los Angeles. The new roadway configuration will streamline truck access to a key 80-acre marine support facility (MSF) on the port's terminal island. Serving all terminals in the San Pedro Bay port complex, the MSF is used to store chassis and empty shipping containers. However, access to the MSF is currently impeded by several heavily used rail tracks and a tunnel with low vertical clearance. The new rail-roadway project will remove these obstacles and connect trucks directly to the highway system in two directions. The completed project will result in a reduction of 2,500 truck-hour delays daily; a decrease of more than 3,000 metric tons of emissions per year; and a reduction of 1,200 truck miles traveled per day (which will also improve safety in the area).

#### Panama Canal Tentatively Schedules Locks' Closure

On September 26, the Panama Canal Authority tentatively plans to close the west lane of the Canal's Gatun Panamax Locks for 3 hours to perform scheduled <u>maintenance work</u>. During the outage, the locks' daily transit capacity is estimated at 31-33 vessels—down from the normal capacity of 34-36 vessels. On September 27, the west lane of the Pedro Miguel Locks is tentatively scheduled to close for 5 hours, reducing the locks' daily transit capacity to 30-32 vessels (down from the normal capacity of 34-36 vessels per day). On September 28, the lane is tentatively scheduled to close for 4 hours, reducing capacity to 31-33 vessels. No major delays are anticipated. The locks' exact transit capacity depends on vessel mix, transit restrictions, and other factors. The majority of U.S. grain destined to Asia transits the canal.

#### **Snapshots by Sector**

#### Export Sales

For the week ending September 8, **unshipped balances** of wheat, corn, and soybeans for marketing year 2022/23 totaled 41.09 million metric tons (mmt) down 18 percent from the same time last year. For the new corn and soybean marketing year (begun September 1), net **corn export sales** were 0.583 mmt, and net **soybean export sales** were 0.843 mmt. Net weekly **wheat export sales** were 0.217 mmt down 44 percent from last week.

#### Rail

U.S. Class I railroads originated 18,214 grain carloads during the week ending September 10. This was a 10-percent decrease from the previous week, 9 percent more than last year, and 2 percent fewer than the 3-year average.

Average October shuttle secondary railcar bids/offers (per car) were \$1,575 above tariff for the week ending September 15. This was \$550 less than last week and \$620 more than this week last year.

#### Barge

For the week ending September 17, **barged grain movements** totaled 209,600 tons. This was 16 percent lower than the previous week and 24 percent higher than the same period last year.

For the week ending September 17, 130 grain barges **moved down river**—25 fewer barges than last week. There were 583 grain barges **unloaded** in the New Orleans region, 68 percent more than last week.

#### Ocean

For the week ending September 15, 22 oceangoing grain vessels were loaded in the Gulf—214 percent more than the same period last year. Within the next 10 days (starting September 16), 38 vessels were expected to be loaded—36 percent more than the same period last year. At this time last year, vessel loadings were low due to Hurricane Ida.

As of September 15, the rate for shipping a metric ton (mt) of grain from the U.S. Gulf to Japan was \$61.50. This was 6 percent more than the previous week. The rate from the Pacific Northwest to Japan was \$36.50 per mt, up 9 percent from the previous week.

#### Fuel

For the week ending September 19, the U.S. average **diesel fuel price** decreased 6.9 cents from the previous week to \$4.964 per gallon, 157.9 cents above the same week last year.

# **Feature Article/Calendar**

Date	Event	Location	Website for More Information
	The following list contains information and links to upcoming e	events in 2022 and	2023.
Sep. 26-28	JOC Inland Distribution Conference This Journal of Commerce (JOC) event—this year, themed "Finding Common Ground"—brings together shippers, freight carriers, and logistics and technology providers from throughout North America.	Chicago, IL	https://events.joc.com/inland/index.html
Sep. 28-30	ASBA Annual Cargo Conference The Association of Ship Brokers and Agents' (ASBA) Annual Cargo Conference convenes participants from across the industry to discuss the major issues affecting bulk shipping. Participants include ship owners, ship brokers, shippers and carriers, researchers and analysts, private and government officials, and others.	Miami, FL	https://www.asba.org/annual-cargo- conference
Sep. 28-30	<b>STB Public Hearing To Review CP/KCS Merger</b> The Surface Transportation Board (STB) will hold a 3-day public hearing on the proposed merger between Canadian Pacific Railway (CP) and Kansas City Southern Railway. If approved, the deal will be the first Class I railroad merger in over 20 years and the first to offer single-line service connecting Canada to Mexico.	Virtual and Washington, DC	https://www.stb.gov/news- communications/latest-news/pr-22-38/
Oct. 12-14	Export Exchange 2022 The biennial event is co-sponsored by the U.S. Grains Council, Renewable Fuel Association and Growth Energy. It is expected to attract 200 international buyers and end users of coarse grains and co-products—including distillers' dried grains with solubles—and roughly 300 U.S. suppliers and agribusiness representatives. Speakers will highlight global agricultural exports and supply chains.	Minneapolis, MN	https://grains.org/exportexchange/
Oct. 26-28	<b>2022 NWC Annual Meeting</b> The National Waterways Conference aims to engender policies and programs that recognize the public value of the Nation's waterways, including the waterways' contribution to public safety, a competitive economy, national security, environmental quality, and energy conservation.	Houston, TX	https://waterways.org/2022-annual- meeting/
Nov. 15-17	<b>Global Grain Geneva 2022</b> At this conference, industry experts will provide insight into the new trade routes that will emerge while access to Black Sea ports remains challenged.	Geneva, Switzerland	https://events.fastmarkets.com/event/86 3ed713-9b65-48af-8423- 34ba3bde85db/summary
Dec. 6-8	NGFA 51st Annual Country Elevator Conference and Trade Show The National Grain and Feed Association's (NGFA) Country Elevator Conference and Tradeshow (CEC) is an annual gathering of more than 450 country elevator managers and their key decisionmakers.	St. Louis, MO	https://www.world- grain.com/events/204-ngfa-country- elevator-conference-and-trade-show
Dec. 7-8	Annual Waterways Symposium Organized by the Waterways Council, Inc., the symposium will discuss the state of the Nation's inland waterways. The Council advocates for modern, efficient, and well-maintained inland waterways, including lock, dam, and channel infrastructure.	Paducah, KY	https://waterwayscouncil.org/get- involved/annual-waterways-symposium
Dec. 14	<i>FreightWaves</i> Domestic Supply Chain Summit This event focuses on navigating the supply chains of the future while confronting recent developments to today's supply chains: the pandemic's lasting impacts; geopolitical developments (Brexit, U.SChina trade relations, U.SMexico-Canada Agreement, etc.); import/export restrictions; and more.	Virtual	https://live.freightwaves.com/domestic- supply-chain-summit-2022
Jan. 8-12	TRB's Annual Meeting Expected to attract thousands of transportation professionals from around the world, the annual meeting of the Transportation Research Board (TRB) covers all transportation modes. TRB's sessions and workshops address topics that interest participants from government, industry, and academic institutions.	Washington, DC	https://www.trb.org/AnnualMeeting/An nualMeeting.aspx

# **Grain Transportation Indicators**

Table 1

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

	Truck	Rai	il	Barge	Ocean	
For the week ending		Non-Shuttle	Shuttle		Gulf	Pacific
09/21/22	333	335	326	529	275	259
09/14/22	338	335	271	454	259	238

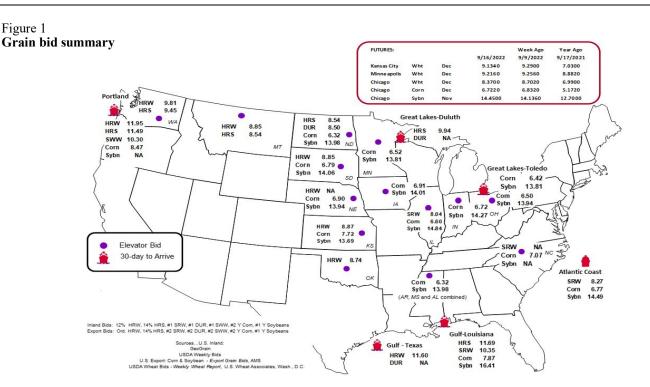
<sup>1</sup>Indicator: Base year 2000 = 100. Weekly updates include truck = diesel ( $\beta$ gallon); rail = near-month secondary rail market bid and monthly tariff rate with fuel surcharge ( $\beta$ /car); barge = Illinois River barge rate (index = percent of tariff rate); ocean = routes to Japan ( $\beta$ /metric ton); n/a = not available.

Source: USDA, Agricultural Marketing Service.

Table 2 Market Upda	ate: U.S. origins to export pos	sition price spreads (\$/bu	ıshel)
Commodity	Origin-destination	9/16/2022	9/9/2022
Corn	IL–Gulf	-1.27	-1.13
Corn	NE–Gulf	-0.97	-0.99
Soybean	IA–Gulf	-2.40	-2.31
HRW	KS–Gulf	-2.73	-2.78
HRS	ND–Portland	-2.95	-2.87

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.



# Table 3Rail deliveries to port (carloads)

	Mississippi		Pacific	Atlantic &			Cross-border
For the week ending	Gulf	Texas Gulf	Northwest	East Gulf	Total	Week ending	Mexico <sup>3</sup>
9/14/2022 <sup>p</sup>	318	572	1,800	95	2,785	9/10/2022	2,775
9/7/2022 <sup>r</sup>	329	360	3,015	119	3,823	9/3/2022	2,738
2022 YTD <sup>r</sup>	41,710	29,833	177,556	15,643	264,742	2022 YTD	99,550
2021 YTD <sup>r</sup>	37,095	47,112	195,143	10,406	289,756	2021 YTD	102,743
2022 YTD as % of 2021 YTD	112	63	91	150	91	% of 2021 YTD	97
Last 4 weeks as $\%$ of $2021^2$	166	57	107	194	102	Last 4wks. % 2021	96
Last 4 weeks as % of 4-year avg. <sup>2</sup>	53	50	59	55	57	Last 4wks. % 4 yr.	110
Total 2021	53,554	68,335	305,865	21,913	449,667	Total 2021	145,883
Total 2020	45,177	63,348	296,060	24,202	428,787	Total 2020	126,407

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

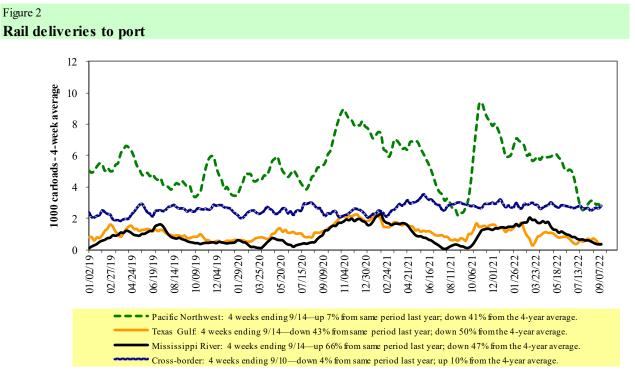
<sup>2</sup> Compared with same 4-weeks in 2021 and prior 4-year average.

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

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

Source: USDA, Agricultural Marketing Service.

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



Source: USDA, Agricultural Marketing Service.

#### Table 4

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

For the week ending:	E	ast		West		U.S. total	Ca	nada
9/10/2022	CSXT	NS	BNSF	KCS	UP	0.5. 10141	CN	СР
This week	946	1,859	9,412	1,165	4,832	18,214	3,648	4,687
This week last year	1,146	1,181	8,733	1,314	4,345	16,719	3,676	3,543
2022 YTD	63,297	86,758	389,879	43,914	206,149	789,997	121,490	123,486
2021 YTD	64,153	87,437	413,361	41,375	218,945	825,271	147,125	172,278
2022 YTD as % of 2021 YTD	99	99	94	106	94	96	83	72
Last 4 weeks as % of 2021*	112	131	119	90	111	115	86	108
Last 4 weeks as % of 3-yr. avg.**	103	99	95	107	107	100	80	82
Total 2021	93,935	120,651	609,890	64,818	318,002	1,207,296	210,009	242,533

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

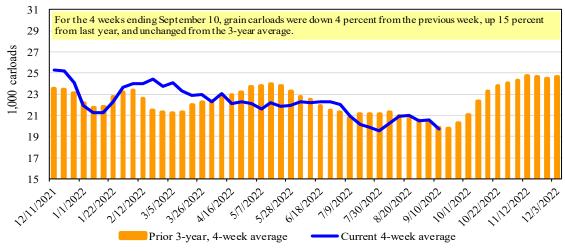
\*\*The past 4 weeks as a percent of the same period from the prior 3-year average. YTD = year-to-date; avg. = average; yr. = year.

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

Source: Association of American Railroads.

Figure 3





Source: Association of American Railroads.

#### Table 5

### Railcar auction offerings $(\frac{1}{\sqrt{car}})^2$

Fo	or the week ending:				<u>Deliver</u>	<u>y period</u>			
	9/15/2022	Oct-22	Oct-21	Nov-22	Nov-21	Dec-22	Dec-21	Jan-23	Jan-22
BNSF <sup>3</sup>	COTgrain units	0	0	no bids	0	0	0	no bids	0
	COTgrain single-car	201	75	84	25	1	0	no bids	0
UP <sup>4</sup>	GCAS/Region 1	no offer	n/a	no offer	n/a	no offer	n/a	n/a	n/a
	GCAS/Region 2	no offer	n/a	no offer	n/a	no offer	n/a	n/a	n/a

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

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

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

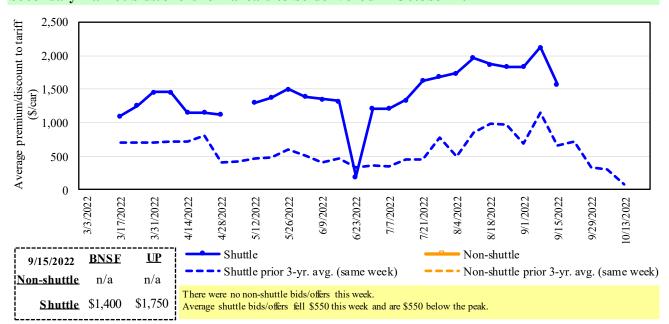
 $^{4}$ UP - GCAS = Unio n P acific Railro ad Grain Car Allo catio n System.

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

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

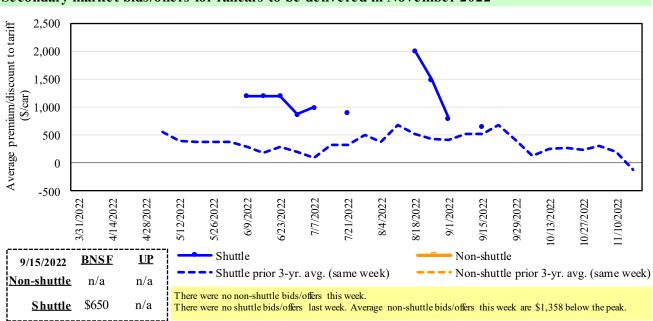
Source: USDA, Agricultural Marketing Service.

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



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

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



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

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

Figure 4

Figure 5

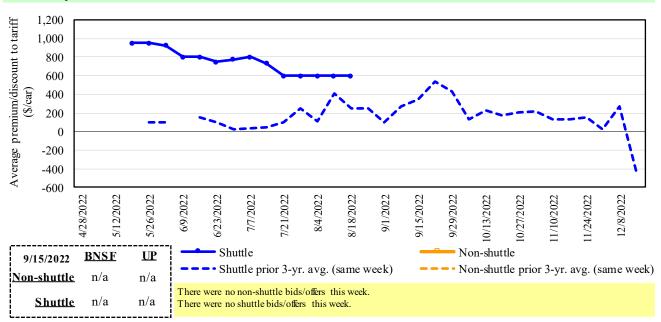


Figure 6 Secondary market bids/offers for railcars to be delivered in December 2022

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

#### Table 6

### Weekly secondary railcar market (\$/car)<sup>1</sup>

	For the week ending:	Ì	,	Del	ivery period		
	9/15/2022	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23
	BNSF-GF	n/a	n/a	n/a	n/a	n/a	n/a
e	Change from last week	n/a	n/a	n/a	n/a	n/a	n/a
shuttle	Change from same week 2021	n/a	n/a	n/a	n/a	n/a	n/a
Non-sł	UP-Pool	n/a	n/a	n/a	n/a	n/a	n/a
ž	Change from last week	n/a	n/a	n/a	n/a	n/a	n/a
	Change from same week 2021	n/a	n/a	n/a	n/a	n/a	n/a
	BNSF-GF	1,400	650	n/a	n/a	n/a	n/a
	Change from last week	(413)	n/a	n/a	n/a	n/a	n/a
ttle	Change from same week 2021	614	150	n/a	n/a	n/a	n/a
Shuttle	UP-Pool	1,750	n/a	n/a	n/a	n/a	n/a
	Change from last week	(688)	n/a	n/a	n/a	n/a	n/a
	Change from same week 2021	625	n/a	n/a	n/a	n/a	n/a

<sup>1</sup>Average premium/discount to tariff, \$/car-last week.

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

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

Source: USDA, Agricultural Marketing Service.

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

#### Table 7

#### Tariff rail rates for unit and shuttle train shipments<sup>1</sup>

				Fuel			Percent
~	o	<b>.</b>	Tariff	surcharge	Tariff plus surc	~ ~	change
September 2022	Origin region <sup>3</sup>	Destination region <sup>3</sup>	rate/car	per car	metric ton	bushel <sup>2</sup>	Y/Y <sup>4</sup>
<u>Unit train</u>		a. t. 1. 140	\$2.50 F	<b>\$2.11</b>	<b></b>	<b>\$1.00</b>	
Wheat	Wichita, KS	St. Louis, MO	\$3,695	\$344	\$40.11	\$1.09	6
	Grand Forks, ND	Duluth-Superior, MN	\$3,858	\$167	\$39.97	\$1.09	10
	Wichita, KS	Los Angeles, CA	\$7,490	\$857	\$82.89	\$2.26	17
	Wichita, KS	New Orleans, LA	\$4,600	\$605	\$51.69	\$1.41	10
	Sioux Falls, SD	Galveston-Houston, TX	\$7,226	\$703	\$78.74	\$2.14	16
	Colby, KS	Galveston-Houston, TX	\$4,850	\$663	\$54.75	\$1.49	9
	Amarillo, TX	Los Angeles, CA	\$5,121	\$923	\$60.02	\$1.63	11
Corn	Champaign-Urbana, IL	New Orleans, LA	\$4,000	\$684	\$46.52	\$1.18	13
	Toledo, OH	Raleigh, NC	\$8,551	\$757	\$92.43	\$2.35	19
	Des Moines, IA	Davenport, IA	\$2,505	\$145	\$26.31	\$0.67	6
	Indianapolis, IN	Atlanta, GA	\$6,593	\$568	\$71.12	\$1.81	20
	Indianapolis, IN	Knoxville, TN	\$5,564	\$368	\$58.91	\$1.50	18
	Des Moines, IA	Little Rock, AR	\$4,000	\$426	\$43.95	\$1.12	9
	Des Moines, IA	Los Angeles, CA	\$5,880	\$1,240	\$70.70	\$1.80	14
Soybeans	Minneapolis, MN	New Orleans, LA	\$4,431	\$1,077	\$54.70	\$1.49	41
	Toledo, OH	Huntsville, AL	\$7,037	\$539	\$75.24	\$2.05	15
	Indianapolis, IN	Raleigh, NC	\$7,843	\$767	\$85.51	\$2.33	21
	Indianapolis, IN	Huntsville, AL	\$5,689	\$364	\$60.11	\$1.64	15
	Champaign-Urbana, IL	New Orleans, LA	\$4,865	\$684	\$55.11	\$1.50	13
<u>Shuttle train</u>							
Wheat	Great Falls, MT	Portland, OR	\$4,393	\$493	\$48.52	\$1.32	17
	Wichita, KS	Galveston-Houston, TX	\$4,611	\$384	\$49.60	\$1.35	18
	Chicago, IL	Albany, NY	\$7,090	\$715	\$77.50	\$2.11	22
	Grand Forks, ND	Portland, OR	\$6,051	\$851	\$68.54	\$1.87	18
	Grand Forks, ND	Galveston-Houston, TX	\$5,399	\$886	\$62.42	\$1.70	10
	Colby, KS	Portland, OR	\$5,923	\$1,087	\$69.62	\$1.89	9
Corn	Minneapolis, MN	Portland, OR	\$5,380	\$1,037	\$63.72	\$1.62	24
	Sioux Falls, SD	Tacoma, WA	\$5,340	\$949	\$62.45	\$1.59	22
	Champaign-Urbana, IL	New Orleans, LA	\$3,920	\$684	\$45.72	\$1.16	13
	Lincoln, NE	Galveston-Houston, TX	\$4,080	\$553	\$46.01	\$1.17	19
	Des Moines, IA	Amarillo, TX	\$4,420	\$535	\$49.21	\$1.25	10
	Minneapolis, MN	Tacoma, WA	\$5,380	\$1,028	\$63.64	\$1.62	24
	Council Bluffs, IA	Stockton, CA	\$5,300	\$1,063	\$63.19	\$1.61	25
Soybeans	Sioux Falls, SD	Tacoma, WA	\$6,350	\$949	\$72.48	\$1.97	21
J	Minneapolis, MN	Portland, OR	\$6,400	\$1,037	\$73.85	\$2.01	22
	Fargo, ND	Tacoma, WA	\$6,250	\$844	\$70.45	\$1.92	19
	Council Bluffs, IA	New Orleans, LA	\$5,095	\$789	\$58.43	\$1.59	19
	Toledo, OH	Huntsville, AL	\$4,797	\$539	\$52.99	\$1.44	8
	Grand Island, NE	Portland, OR	\$5,730	\$1,113	\$67.96	\$1.85	21

<sup>1</sup>A unit train refers to shipments of at least 25 cars. Shuttle train rates are generally available for qualified shipments of

75-120 cars that meet railroad efficiency requirements.

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

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

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

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

Date	: December	r 2021		Fuel	Tarif	ff rate plus	Percent
	Origin		Tariff rate	surcharge	fuel surc	harge per:	change <sup>4</sup>
Commodity	state	<b>Destination region</b>	per car <sup>1</sup>	per car <sup>2</sup>	metric ton <sup>3</sup>	bushel <sup>3</sup>	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
	ΤX	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	МО	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

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

<sup>1</sup>Rates are based upon published tariff rates for high-capacity shuttle trains. Shuttle trains are available for qualified

shipments of 75-110 cars that meet railroad efficiency requirements.

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

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

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

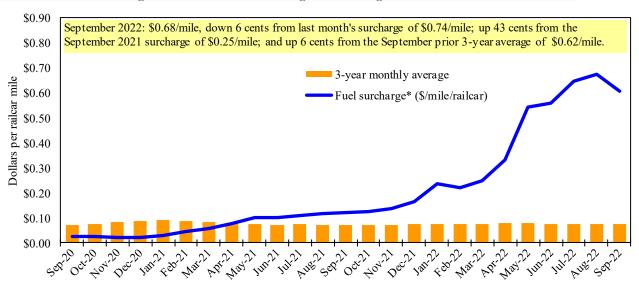
<sup>5</sup> As of January 1, both BNSF and Union Pacific changed their billing and reporting of rates to Mexico.

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

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

#### Figure 7

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



<sup>1</sup> Weighted by each Class I railroad's proportion of grain traffic for the prior year.

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

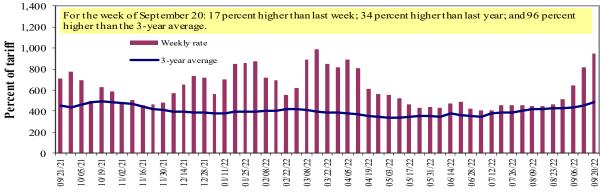
\*\*CSX strike price changed from \$2.00/gal. to \$3.75/gal. starting January 1,2015.

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

# **Barge Transportation**

Figure 8

### Illinois River barge freight rate<sup>1,2</sup>



<sup>1</sup>Rate = percent of 1976 tariff benchmark index (1976 = 100 percent); <sup>2</sup>4-week moving average of the 3-year average. \*Source: USDA, Agricultural Marketing Service.

# Table 9Weekly barge freight rates:Southbound only

		Twin Cities	Mid- Mississippi	Lower Illinois River	St. Louis	Cincinnati	Lower Ohio	Cairo- Memphis
Rate <sup>1</sup>	9/20/2022	972	959	952	955	980	980	925
	9/13/2022	846	858	817	694	792	792	657
\$/ton	9/20/2022	60.17	51.02	44.17	38.10	45.96	39.59	29.05
	9/13/2022	52.37	45.65	37.91	27.69	37.14	32.00	20.63
Curren	t week % change	e from the sa	me week:					
	Last year	47	33	34	39	36	36	5
	3-year avg. <sup>2</sup>	106	108	-	138	125	125	112
Rate <sup>1</sup>	October	983	988	978	952	967	967	925
	December	-	-	683	566	638	638	527

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

#### Figure 9 Benchmark tariff rates

# Calculating barge rate per ton:

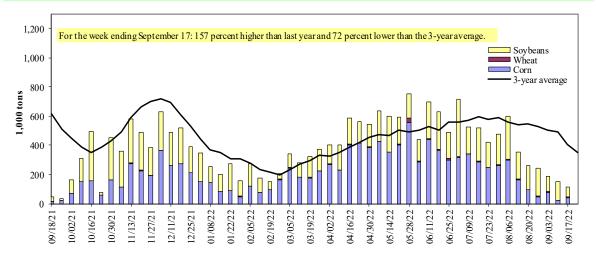
(Rate \* 1976 tariff benchmark rate per ton)/100

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

Map Credit: USDA, Agricultural Marketing Service



#### Figure 10 Barge movements on the Mississippi River<sup>1</sup> (Locks 27 - Granite City, IL)



<sup>1</sup> 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 10

#### Barge grain movements (1,000 tons)

For the week ending 09/17/2022	Corn	Wheat	Soybeans	Other	Total
Mississippi River					
Rock Island, IL (L15)	0	0	25	3	28
Winfield, MO (L25)	11	5	33	3	52
Alton, IL (L26)	13	3	61	3	81
Granite City, IL (L27)	39	6	68	3	117
Illinois River (La Grange)	10	0	18	0	27
Ohio River (Olmsted)	32	13	26	0	71
Arkansas River (L1)	11	11	0	0	22
Weekly total - 2022	82	30	94	3	210
Weekly total - 2021	48	55	62	5	169
$2022 \text{ YTD}^1$	13,191	1,461	8,777	188	23,618
2021 YTD <sup>1</sup>	18,860	1,388	6,037	221	26,507
2022 as % of 2021 YTD	70	105	145	85	89
Last 4 weeks as % of 2021 <sup>2</sup>	140	55	125	151	111
Total 2021	23,516	1,634	11,325	297	36,772

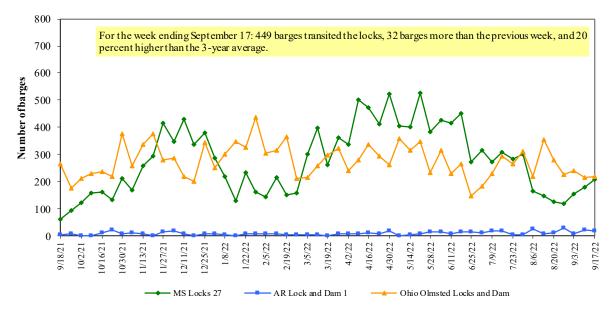
<sup>1</sup> Weekly total, YTD (year-to-date), and calendar year total include MI/27, OH/Olmsted, and AR/1; Other refers to oats, barley, sorghum, and rye. Total may not add exactly due to rounding.

<sup>2</sup> As a percent of same period in 2021.

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 database and has noted the latest data may be revised in coming weeks.

Source: U.S. Army Corps of Engineers.

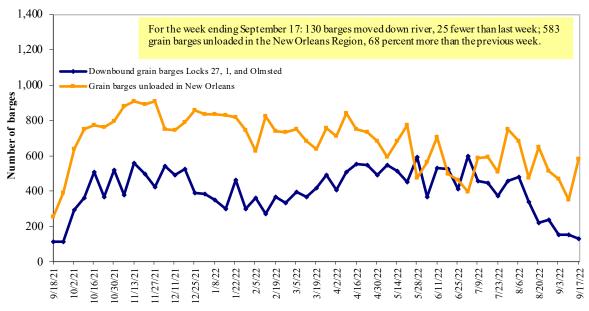
#### Figure 11 Upbound empty barges transiting Mississippi River Locks 27, Arkansas River Lock and Dam 1, and Ohio River Olmsted Locks and Dam



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



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**

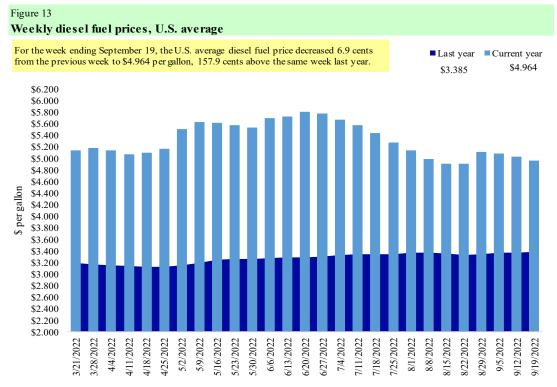
The weekly diesel price provides a proxy for trends in U.S. truck rates as diesel fuel is a significant expense for truck grain movements.

			Chang	e from
Region	Location	Price	Week ago	Year ago
Ι	East Coast	4.889	-0.060	1.537
	New England	5.011	-0.076	1.711
	Central Atlantic	5.093	-0.041	1.597
	Lower Atlantic	4.800	-0.065	1.534
II	Midwest	4.995	-0.090	1.705
III	Gulf Coast	4.690	-0.070	1.571
IV	Rocky Mountain	4.932	-0.029	1.303
V	West Coast	5.612	-0.046	1.586
	West Coast less California	5.144	-0.073	1.481
	California	6.149	-0.015	1.820
Total	United States	4.964	-0.069	1.579

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

Note: On June 13, 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.



Note: On June 13, 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 12

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

			Who	eat			Corn	Soybeans	Total
For the week ending	HRW	SRW	HRS	SWW	DUR	All wheat			
Export balances <sup>1</sup>									
9/8/2022	1,234	697	1,157	1,211	94	4,394	11,838	24,859	41,090
This week year ago	1,743	763	994	569	27	4,096	24,213	22,031	50,340
Cumulative exports-marketing year <sup>2</sup>									
2022/23 YTD	1,746	1,201	1,765	1,082	34	5,829	464	423	6,715
2021/22 YTD	2,333	908	1,807	1,242	43	6,333	360	258	6,951
YTD 2022/23 as % of 2021/22	75	132	98	87	79	92	129	164	97
Last 4 wks. as % of same period 2021/22	75	99	133	224	343	116	35	79	61
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

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

<sup>2</sup> 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; SRW

HRS = hard red s pring; SWW = s o ft white wheat; DUR = durum.

Source: USDA, Foreign Agricultural Service.

#### Table 13

### Top 5 importers<sup>1</sup> of U.S. corn

For the week ending 09/8/2022	Total comm	nitments <sup>2</sup>	% change	Exports <sup>3</sup>
	2022/23	2021/22	current MY	3-yr. avg.
	current MY	last MY	from last MY	2018-20
		1,000 mt -		
Mexico	4914	5,247	(6)	14,817
Japan	909	1,687	(46)	11,082
China	3361	11,901	(72)	7,920
Columbia	193	854	(77)	4,491
Korea	7	72	(91)	3,302
Top 5 importers	9,383	19,760	(53)	41,613
Total U.S. corn export sales	12,301	24,573	(50)	53,145
% of projected exports	21%	39%		
Change from prior week <sup>2</sup>	583	247		
Top 5 importers' share of U.S. corn				
export sales	76%	80%		78%
USDA forecast September 2022	57,888	62,977	(8)	
Corn use for ethanol USDA forecast,				
September 2022	135,255	135,382	(0)	

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

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

<sup>3</sup>FAS marketing year ranking reports (carryover plus accumulated export); yr. = year; avg. = average.

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

Source: USDA, Foreign Agricultural Service.

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#### Table 14

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

For the week ending 09/8/2022	Total commitme	ents <sup>2</sup>	% change	Exports <sup>3</sup>
	2022/23	2021/22	current MY	3-yr. avg.
	current MY	last MY	from last MY	2018-20
				- 1,000 mt -
China	13,173	10,368	27	21,666
Mexico	1,564	1,533	2	4,754
Egypt	400	434	(8)	3,093
Indonesia	165	143	15	2,325
Japan	531	506	5	2,275
Top 5 importers	15,833	12,983	22	34,113
Total U.S. soybean export sales	25,281	22,290	13	50,758
% of projected exports	44%	38%		
change from prior week <sup>2</sup>	843	1,264		
Top 5 importers' share of U.S.				
soybean export sales	63%	58%		67%
USDA forecast, September 2022	56,812	58,447	(3)	

<sup>1</sup>Based on USDA, Foreign Agricultural Service (FAS) marketing year ranking reports for 2020/2 l; marketing year (MY) = Sep 1 - Aug 31. <sup>2</sup>Cumulative exports (shipped) + outstanding sales (unshipped), FAS weekly export sales report, or export sales query. The total commitments change (net sales) from prior week could include revisions from previous week's outstanding sales and/or accumulated sales.

 ${}^{3}FAS$  marketing year ranking reports (carryover plus accumulated export); yr. = year; avg. = average.

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

Source: USDA, Foreign Agricultural Service.

-2.80%

#### Table 15

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

For the week ending 9/8/2022	Total Commi	tments <sup>2</sup>	% change	Exports <sup>3</sup>
	2022/23 current MY	2021/22 last MY	current MY from last MY	3-yr. avg. 2018-20
		1,000 mt -		- 1,000 mt -
Mexico	1,873	1,786	5	3,388
Philippines	1,363	1,500	(9)	3,121
Japan	1,003	1,037	(3)	2,567
Korea	607	658	(8)	1,501
Nigeria	487	1,141	(57)	1,490
China	475	843	(44)	1,268
Taiwan	325	400	(19)	1,187
Indonesia	95	0	47150	1,131
Thailand	243	281	(13)	768
Italy	178	103	73	681
Top 10 importers	6,649	7,750	(14)	17,102
Total U.S. wheat export sales	10,223	10,429	(2)	24,617
% of projected exports	45%	48%		
change from prior week <sup>2</sup>	217	617		
Top 10 importers' share of U.S.				
wheat export sales	65%	74%		69%
USDA forecast, September 2022	22,480	21,798	3	

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

 $^{2}$ Cumulative exports (shipped)+outstanding sales (unshipped), FAS weekly export sales report, or export sales query. The total commitments change (net sales) from prior week could include revisions from the previous week's outstanding and/or accumulated sales.

 $^{3}$  FAS marketing year final reports (carryover plus accumulated export); yr. = year; avg. = average.

Note: A red number in parentheses indicates a negative number.

Source: USDA, Foreign Agricultural Service.

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

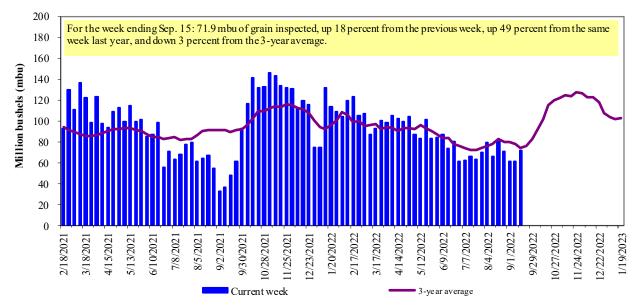
	For the week ending	Previous	Current week			2022 YTD as	Last 4-we	eks as % of:	
Port regions	09/15/22	week*	as % of previous	2022 YTD*	2021 YTD*	% of 2021 YTD	Last year	Prior 3-yr. avg.	2021 total*
Pacific Northwest									
Wheat	345	353	98	7,232	11,285	64	117	107	13,243
Corn	0	67	0	8,952	12,322	73	n/a	99	13,420
Soybeans	0	73	0	5,212	3,892	134	215	41	14,540
Total	345	494	70	21,396	27,499	78	149	85	41,203
Mississippi Gulf					,.,				,
Wheat	205	114	180	3,571	2,339	153	543	216	3,202
Corn	390	207	188	25,877	31,117	83	172	110	38,498
Soybeans	465	233	200	16,149	11,829	137	249	64	27,159
Total	1,060	554	191	45,597	45,286	101	234	92	68,858
Texas Gulf	)			- )	-)				)
Wheat	190	151	126	2,487	2,994	83	106	112	3,888
Corn	0	0	n/a	557	428	130	70	47	627
Soybeans	0	0	n/a	2	656	0	n/a	0	1,611
Total	190	151	126	3,046	4,078	75	102	81	6,126
Interior									
Wheat	78	113	69	2,239	2,349	95	96	162	2,973
Corn	129	189	68	6,391	6,864	93	93	97	10,157
Soybeans	76	49	154	4,725	4,117	115	91	64	6,525
Total	283	352	80	13,354	13,330	100	93	98	19,656
Great Lakes									
Wheat	10	64	16	242	316	77	242	76	536
Corn	0	0	n/a	141	94	150	41	72	145
Soybeans	0	0	n/a	239	67	357	n/a	0	592
Total	10	64	16	622	476	131	131	50	1,273
Atlantic									
Wheat	4	2	277	129	123	105	32	78	128
Corn	20	3	700	240	42	573	282	387	85
Soybeans	4	4	108	1,593	1,085	147	324	39	2,184
Total	29	8	341	1,961	1,250	157	126	69	2,397
U.S. total from ports*									
Wheat	832	798	104	15,900	19,406	82	137	127	23,969
Corn	540	466	116	42,157	50,867	83	150	103	62,932
Soybeans	546	360	152	27,920	21,646	129	197	56	52,612
Total	1,917	1,624	118	85,977	91,919	94	154	89	139,512

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

Source: USDA, Federal Grain Inspection Service; YTD= year-to-date; n/a = not applicable or no change.

The United States exports approximately one-quarter of the grain it produces. On average, this includes nearly 45 percent of U.S.-grown wheat, 50 percent of U.S.-grown soybeans, and 20 percent of the U.S.-grown corn. Approximately 55 percent of the U.S. export grain shipments departed through the U.S. Gulf region in 2019.

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

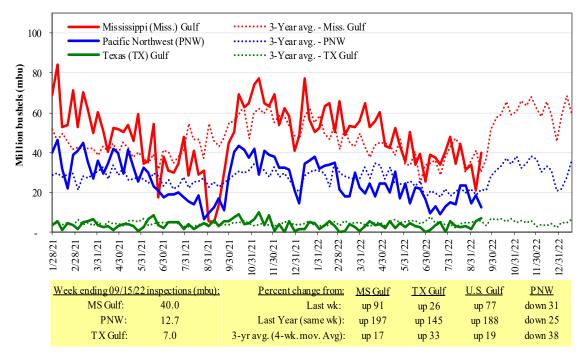


Note: 3-year average consists of 4-week running average.

Source: USDA, Federal Grain Inspection Service.

#### Figure 15

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



Source: USDA, Federal Grain Inspection Service.

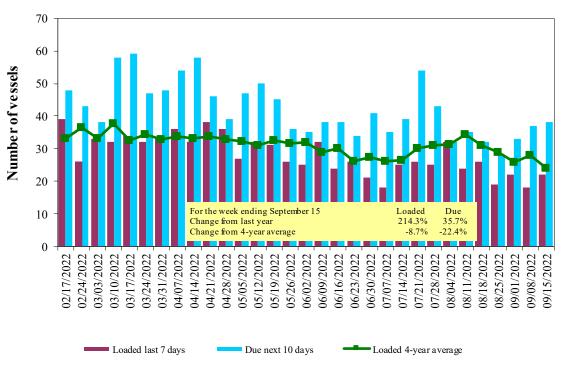
### Table 17

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

				Pacific
		Gulf		Northwest
		Loaded	Due next	
Date	In port	7-days	10-days	In port
9/15/2022	32	22	38	11
9/8/2022	22	18	37	11
2021 range	(1057)	(548)	(1569)	(427)
2021 average	34	32	49	15

Source: USDA, Agricultural Marketing Service.

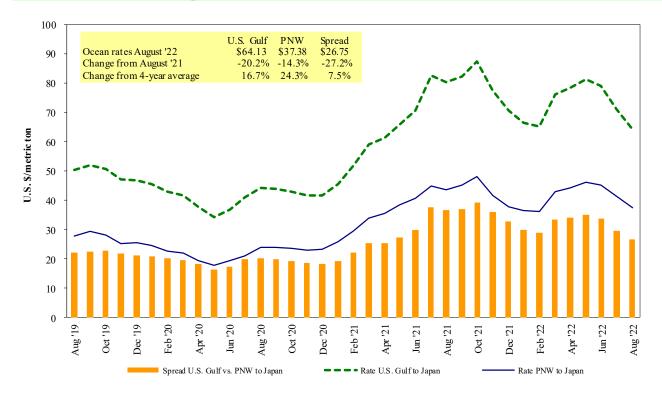




<sup>1</sup>U.S. Gulf includes Mississippi, Texas, and East Gulf Source:USDA, Agricultural Marketing Service.

### Figure 17

#### Grain vessel rates, U.S. to Japan



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

#### Table 18

#### Ocean freight rates for selected shipments, week ending 09/17/2022

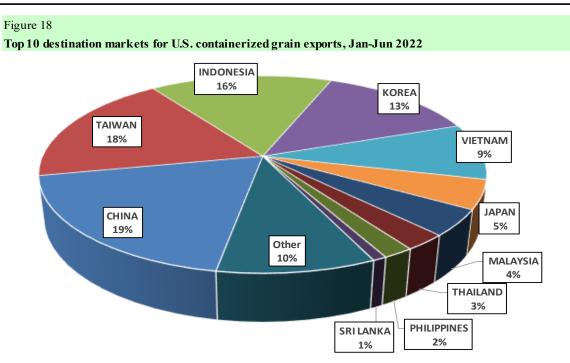
Export	Import	Grain	Loading	Volume loads	Freight rate
region	region	types	date	(metric tons)	(US \$/metric ton)
U.S. Gulf	Japan	Heavy grain	Jul 20/30, 2022	50,000	81.50
U.S. Gulf	Japan	Heavy grain	Jun 1/10, 2022	50,000	89.65
U.S. Gulf	Japan	Heavy grain	May 1/20, 2022	50,000	78.90
U.S. Gulf	S. China	Corn	Aug 1/10, 2022	68,000	71.00
U.S. Gulf	Djibouti	Sorghum	Oct 5/15, 2022	13,920	94.08*
U.S. Gulf	Djibouti	Wheat	Sep 7/17, 2022	31,800	66.10*
U.S. Gulf	Honduras	Soybean Meal	Feb 18/28, 2022	7,820	57.15*
U.S. Gulf	S. Korea	Heavy grain	Jun 1/Jul, 2022	55,000	82.75
U.S. Gulf	Sudan	Sorghum	Mar 1/10, 2022	35,790	149.97*
PNW	Yemen	Wheat	Jul 10/20, 2022	27,000	169.50*
Brazil	N. China	Heavy grain	Mar 18/27, 2022	64,000	56.85
Argentina	Taiwan	Corn	May 1/Jun, 2022	65,000	85.00

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

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

Source: Maritime Research, Inc.

In 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.



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',

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





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.

#### Source: USDA, Agricultural Mark

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