

U.S. DEPARTMENT OF AGRICULTURE



Grain Transportation Report

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

Contact Us

	WEEKLY HIGHLIGH IS	
November 18, 2021	New Infrastructure Bill Provides \$2.5 Billion For Inland Waterways Construction and Major Rehabilitat Signed into law by the President on November 15, the Infrastructure Investment and Jobs Act would invest roug	
<u>Contents</u>	waterways infrastructure. About two-thirds of this funding is expected to be used toward construction and major projects, and the rest toward operations/maintenance and other projects. This law includes a total of \$2.5 billion funding for authorized U.S. Army Corps of Engineers (USACE) construction and major rehabilitation projects of	habitat restoration of 100 percent Federal
Article/	Projects will receive priority based on the recommendations included in the USACE 2020 Capital Investment St	
Calendar	Operations and Maintenance account under the Civil Works mission is expected to receive \$4 billion. Within 60 enactment, USACE's Chief of Engineers must submit a project-specific spending plan to House and Senate appr	days of the bill's
Grain		
Transportation Indicators	The Bill Also Funds Safety and Research and Enables Younger Truck Drivers The Infrastructure Investment and Jobs Act also includes \$11 billion for transportation safety (more than double contains various provisions affecting trucking. One such provision makes 18–21-year-olds newly eligible for int	erstate truck driving and
Rail	creates a training and apprenticeship program for this age group. Other trucking-related provisions include autor	
	performance requirements, underride/side protection, truck broker/truck dispatcher guidance, and an exemption	
Barge	hours-of-service requirements. Regarding research, the newly enacted funding legislation authorizes a truck-cras data generated by electronic logging devices. The law also establishes several new government bodies (task forc subcommittee) dedicated to addressing issues of truck leasing, women in trucking, and the needs of small-busine Department of Transportation is tasked with restoring and maintaining the solvency of the Highway Trust Fund vehicle-miles-traveled (VMT) pilot program.	e, advisory board, and ess truckers. The U.S.
Truck	venier-nines-travered (v w r) prot program.	
	Port of Savannah Offers Fixed "Earliest" Dates for Receiving Export Cargo	
	The Port of Savannah recently began offering fixed earliest receiving dates (ERD) for export cargo through its to	erminals. The ERD is the
Exports	earliest date a loaded export container can arrive at the port in advance of the ship's arrival. ERDs have been vol	
L	receive little to no notice when they change. The new policy will help relieve accumulating storage fees (detenti	
	amassing containers on dock, and prevent multiple truck trips to the terminal for the same load. The port is also	
Ocean	carriers to align cutoff dates-the latest date by which a loaded export container must arrive to make the vessel	
	have been an excessive number of "rolled" containers-i.e., that carriers delay (sometimes, for weeks) past their	
	shipments to wait for a later vessel. The port hopes the work with ocean carriers will reduce the number of rolled	l containers.
Brazil		
	Snapshots by Sector	
	Export Sales	
Mexico	For the week ending November 4, unshipped balances of wheat, corn, and soybeans for marketing year 2021/2	2 totaled 48.8 million
	metric tons (mmt), down 22 percent from same time last year and down 4 percent from the previous week. Net of	
	1.067 mmt, down 13 percent from the previous week. Net soybean export sales were 1.289 mmt, down 31 perc	
Grain Truck/Ocean	week. Net weekly wheat export sales were 0.286 mmt, down 29 percent from the previous week.	ent nom me previous
Rate Advisory		
	Rail	
Datasets	U.S. Class I railroads originated 25,386 grain carloads during the week ending November 6. This was a 3-perce	ent increase from the
	previous week, 7 percent less than last year, and 9 percent more than the 3-year average.	
Specialists		I
	Average November shuttle secondary railcar bids/offers (per car) were \$488 above tariff for the week ending N \$112 more than last week and \$425 more than this week last year. There were no non-shuttle hids/offers this week	
	\$113 more than last week and \$425 more than this week last year. There were no non-shuttle bids/offers this we	σк.
Subscription	Barge	
Information	For the week ending November 13, barged grain movements totaled 888,754 tons. This was 45 percent higher	than the previous week
	and 4 percent lower than the same period last year.	
The next	For the week ending November 13, 557 grain barges moved down river—180 barges more than the previous w	eek. There were 908 grain
The next	barges unloaded in the New Orleans region, 3 percent more than last week.	
release is		
November 25, 2021	Ocean For the work or direc Neuerther, 11, 20 coording grain words were loaded in the Culf. 5 correct forces the	
	For the week ending November 11, 39 oceangoing grain vessels were loaded in the Gulf—5 percent fewer than Within the next 10 days (starting November 5), 64 vessels were expected to be loaded—3 percent fewer than the	
	winnin me next to days (starting rovenider 5), of vessels were expected to be toaded—5 percent fewer than the	, same perioù last year.
	As of November 11, the rate for shipping a metric ton (mt) of grain from the U.S. Gulf to Japan was \$78.00. This	s was 8 percent lower
	than the previous week. The rate from the Pacific Northwest to Japan was \$42.00 per mt, 7 percent lower than the	
	Fuel	
	For the week ending November 15, the U.S. average diesel fuel price increased by 0.4 cents from the previous v	
	\$1.29 above the same week last year. This is the 9th consecutive week that the national average diesel price has	increased.

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Transportation of U.S. Grains: A Modal Share Analysis, 1978-2019 Update

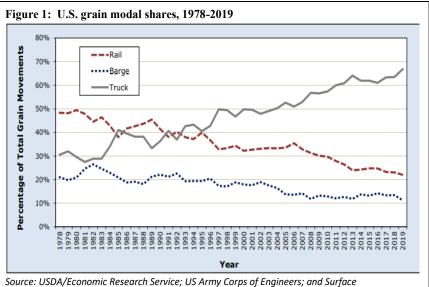
On October 25, 2021, USDA's Agricultural Marketing Service issued an updated modal share report. <u>*Transportation of U.S. Grains: A Modal Share Analysis, 1978-2019 Update.*</u> This report provides estimates of the volumes of corn, wheat, soybeans, sorghum, and barley moved to either the domestic market or to U.S. ports/border points for export between 1978 and 2019 via rail, barge, and truck. The report, part of a continuing series of modal share reports, examines trends in the type of transportation used to move grains grown for the food, feed, and, more recently, the biofuel industry. The update provides new data for 2018 and 2019. The data shed light in the supply and demand of transportation for grain. This article presents key findings of the updated modal share data and discusses the implications for grain transportation.

Trucks continued growing share

One of the main findings of the modal share analysis was the continued increase in the percent of grain moved by trucks (fig. 1). In terms of percent of total movements, truck's share became the dominant mode in 1993 and since then its share has continued to increase over rail and barge. The share of truck movements has increased from 50 percent in 2000 to 67 percent in 2019, a 34-percent increase in two decades. Over the past two decades, new markets have emerged, such as local ethanol facilities and crush plants, giving farmers more options for selling grain locally to improve profits. Indeed, truck's share of total domestic grain movements increased from 68 percent in 2000 to 82 percent in 2019, while the share of rail dropped from 30 percent to 17 percent for the same time.

Domestic and export grain movements

The availability of modal share data for domestic and export movements provides insight on grain transportation demand. Table 1 shows a summary of modal shares for each of the three major grains for 2019 compared with the average for the 5 years from 2015– 2019. The leading mode of transport for corn and soybeans



Transportation Board

able 1	able 1: Modal Share Summary: 2019 and 5-year average, percent											
Mode/	Corn			Wheat			Soybeans			All grains		
Year	Exports	Domestic	All corn	Exports	Domestic	All wheat	Exports	Domestic	All soybeans	Exports	Domestic	All grains
Rail												
2019	33	15	17	60	49	54	29	12	20	38	17	22
5-yr avg	34	16	19	57	54	56	27	14	20	37	19	24
Barge												
2019	48	0	6	28	1	14	62	2	27	47	1	11
5-yr avg	53	0	9	31	1	15	54	3	27	47	1	13
Truck												
2019	19	85	77	11	50	32	9	86	53	14	82	67
5-yr avg	13	84	73	12	44	29	19	84	53	16	80	63

Note: Percentages may not total 100 due to rounding.

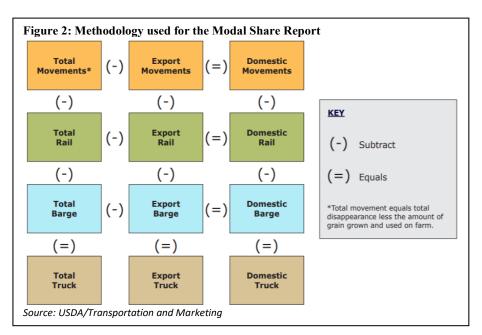
Source: USDA/Economic Research Service; US Army Corps of Engineers; and Surface Transportation Board destined for export markets is barge. Corn and soybeans move by barge to port for eventual overseas transport to foreign markets. While more than half of the export wheat is transported by rail, the share of trucks in moving wheat to the export markets has increased. For domestic traffic of corn and soybeans, trucks continue to be the principal mode of transport. On the other hand, trucks have surpassed rail to be the primary mode of transportation for domestic wheat movements.

An increase in corn exports will generally cause an increase in the volume of barge movements and an increase in the percentage of corn moved by barge. An increase in wheat destined for the export markets will probably show increases of volumes both in wheat truck and rail shipments. Since 2010, barge has become the leading mode of transportation for moving soybeans to export markets. In 2019, barge's share of soybean export movements was 62 percent, 15 percent higher than the 5-year average. Trucks, on the other hand, continued to serve as the leading mode of transportation for moving soybeans domestically.

Overall, the report shows total U.S. grain movement has enjoyed stable growth. The total volume grew from 403 million tons in 2000 to 575 million tons in 2019, 43-percent growth in the past 20 years. The tonnage destined to export markets experienced a 29 percent growth in the past 20 years, except for a 20.5-million-ton drop in 2019 due to the trade interruption with China in 2018/19. Domestic grain movements reached 444 million tons, 59-percent growth since 2000.

Methodology used in report

This analysis uses the Waterborne Commerce Statistics of the U.S. Army Corps of Engineers to calculate tonnages of barged grain and the Carload Waybill Sample from the Surface Transportation Board to provide the amount of railed grain. Trucking data are the residual quantity derived from subtracting the estimates of the railed and barged volumes from known grain disappearance data (fig. 2). This report includes minor revisions to past years' data based on updates to underlying source data since the last update in 2019.



The latest report with the 1978–2019 data, the previous version containing the complete methodology, and accompanying datasets can be viewed at <u>Transportation of U.S. Grains: A Modal Share Analysis, 1978-2019</u> <u>Update</u>. In addition, USDA's <u>Agricultural Transportation Open Data Platform</u> provides an interactive format that allows readers to view, access, and download data included in this report.

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Grain Transportation Indicators

Table 1

Grain transport cost indicators¹

	Truck	Ra	Rail		Oc	ean
For the week ending		Non-Shuttle	Shuttle		Gulf	Pacific
11/17/21	251	297	250	254	349	298
11/10/21	250	297	245	282	378	321

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

Source: USDA, Agricultural Marketing Service.

Market Update: U.S. origins to export position price spreads (\$/bushel)										
Commodity	Origin-destination	11/12/2021	11/5/2021							
Corn	IL–Gulf	-0.72	-0.78							
Corn	NE–Gulf	-0.79	-0.85							
Soybean	IA–Gulf	-1.06	-1.08							
HRW	KS–Gulf	-2.72	-2.75							
HRS	ND–Portland	-2.37	-2.49							

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

Source: USDA, Agricultural Marketing Service.

The grain bid summary illustrates the market relationships for commodities. Positive and negative adjustments in differential between terminal and futures markets, and the relationship to inland market points, are indicators of changes in fundamental market supply and demand. The map may be used to monitor market and time differentials.

Figure 1 Grain bid summary

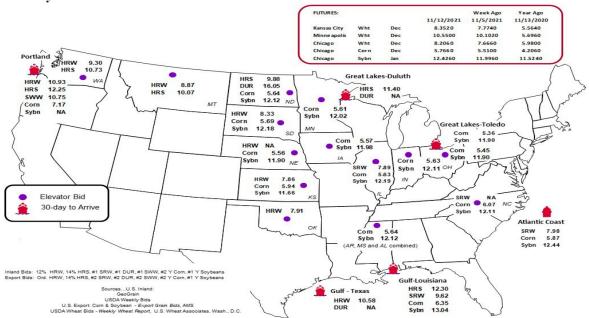


Table 3Rail deliveries to port (carloads)1

For the week ending	Mississippi Gulf	Texas Gulf	Pacific Northwest	Atlantic & East Gulf	Total	Week ending	Cross-border Mexico ³
For the week ending	Gull	Texas Guil	Northwest	East Guil	Total	week ending	MEXICO
11/10/2021 ^p	1,227	1,824	7,621	659	11,331	11/6/2021	3,127
11/03/2021 ^r	1,539	1,319	8,390	850	12,098	10/30/2021	2,950
2021 YTD ^r	44,008	58,405	255,548	16,167	374,128	2021 YTD	125,487
2020 YTD ^r	30,943	48,075	236,786	16,190	331,994	2020 YTD	109,263
2021 YTD as % of 2020 YTD	142	121	108	100	113	% change YTD	115
Last 4 weeks as $\%$ of 2020^2	72	72	99	72	89	Last 4wks. % 2020	134
Last 4 weeks as % of 4-year avg. ²	219	161	183	310	189	Last 4wks. % 4 yr.	119
Total 2020	45,294	64,116	299,882	24,458	433,750	Total 2020	126,407
Total 2019	40,974	51,167	251,181	16,192	359,514	Total 2019	127,622

¹Data is incomplete as it is voluntarily provided.

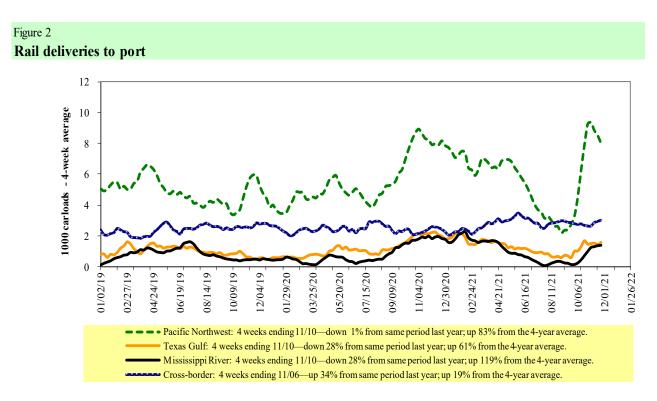
 2 Compared with same 4-weeks in 2020 and prior 4-year average.

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

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

Source: USDA, Agricultural Marketing Service.

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



Source: USDA, Agricultural Marketing Service.

Table 4 Class I rail carrier grain car bulletin (grain carloads originated)

For the week ending:	Ea	nst		West		U.S. total	Ca	nada
11/6/2021	CSXT	NS	BNSF	KCS	UP	U.S. 101ai	CN	СР
This week	1,992	2,071	13,126	1,306	6,891	25,386	3,979	5,080
This week last year	1,650	3,383	14,181	1,110	7,101	27,425	6,188	6,693
2021 YTD	78,183	103,668	511,388	53,619	271,095	1,017,953	180,572	209,212
2020 YTD	74,993	107,976	506,472	48,954	243,021	981,416	194,795	214,975
2021 YTD as % of 2020 YTD	104	96	101	110	112	104	93	97
Last 4 weeks as % of 2020*	108	72	96	122	97	95	72	81
Last 4 weeks as % of 3-yr. avg.**	103	84	107	136	119	108	86	92
Total 2020	91,659	129,812	613,630	57,782	296,701	1,189,584	238,145	261,778

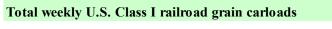
*The past 4 weeks of this year as a percent of the same 4 weeks last year.

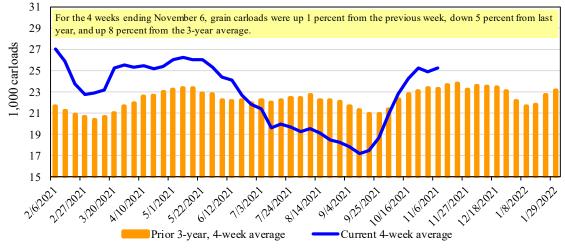
**The past 4 weeks as a percent of the same period from the prior 3-year average. YTD = year-to-date; avg. = average; yr. = year.

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

Source: Association of American Railroads.

Figure 3





Source: Association of American Railroads.

Table 5

Railcar auction offerings¹ (\$/car)²

Fo	or the week ending:		Delivery period							
	11/11/2021	Nov-21	Nov-20	Dec-21	Dec-20	Jan-22	Jan-21	Feb-22	Feb-21	
BNSF ³	COT grain units	n/a	no offer	0	no bids	0	no bids	n/a	no bids	
	COT grain single-car	n/a	no offer	100	3	0	8	0	0	
UP ⁴	GCAS/Region 1	no offer	no offer	no offer	no offer	no offer	no offer	n/a	n/a	
	GCAS/Region 2	no offer	no offer	no offer	no offer	no offer	no offer	n/a	n/a	

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

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

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

⁴UP - GCAS = Union Pacific Railroad Grain Car Allocation System.

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

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

Source: USDA, Agricultural Marketing Service.

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

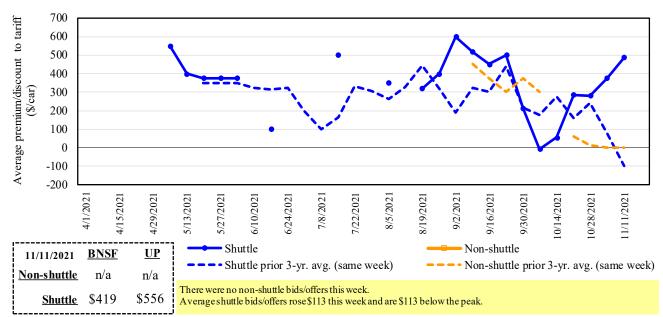


Figure 4 Bids/offers for railcars to be delivered in November 2021, secondary market

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

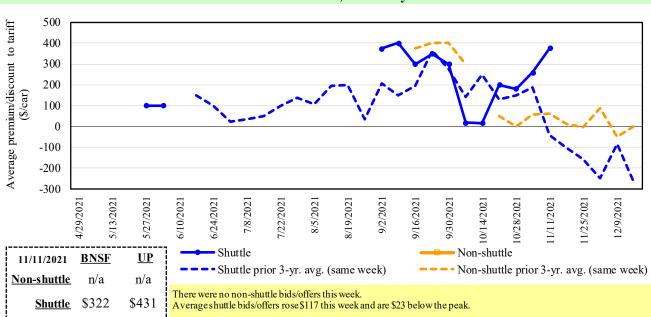


Figure 5 Bids/offers for railcars to be delivered in December 2021, secondary market

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

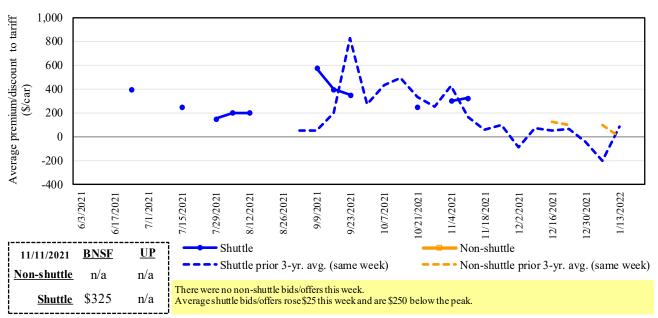


Figure 6 Bids/offers for railcars to be delivered in January 2022, secondary market

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

Table 6

Weekly secondary railcar market (\$/car)¹

	For the week ending:			De	livery period		
	11/11/2021	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22
	BNSF-GF	n/a	n/a	n/a	n/a	n/a	n/a
le	Change from last week	n/a	n/a	n/a	n/a	n/a	n/a
shutt	Change from same week 2020	n/a	n/a	n/a	n/a	n/a	n/a
Non-shuttle	UP-Pool	n/a	n/a	n/a	n/a	n/a	n/a
Z	Change from last week	n/a	n/a	n/a	n/a	n/a	n/a
	Change from same week 2020	n/a	n/a	n/a	n/a	n/a	n/a
	BNSF-GF	419	322	325	325	n/a	(200)
	Change from last week	(56)	16	25	25	n/a	0
Shuttle	Change from same week 2020	369	222	n/a	n/a	n/a	n/a
Shu	UP-Pool	556	431	n/a	250	300	n/a
	Change from last week	281	218	n/a	n/a	n/a	n/a
	Change from same week 2020	481	231	n/a	(75)	250	n/a

¹Average 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 shipments¹

			Tariff	Fuel	Tariff plus surch		Percent change
November 2021	Origin region ³	Destination region ³	rate/car	surcharge _ per car	metric ton	bushel ²	Y/Y ⁴
Unit train	····		Tate/cai	per cu	incure ton		-, -
Wheat	Wichita, KS	St. Louis, MO	\$3,695	\$132	\$38.00	\$1.03	3
	Grand Forks, ND	Duluth-Superior, MN	\$3,658	\$0	\$36.33	\$0.99	-13
	Wichita, KS	Los Angeles, CA	\$7,290	\$0	\$72.39	\$1.97	2
	Wichita, KS	New Orleans, LA	\$4,525	\$231	\$47.23	\$1.29	4
	Sioux Falls, SD	Galveston-Houston, TX	\$7,026	\$0	\$69.77	\$1.90	3
	Colby, KS	Galveston-Houston, TX	\$4,801	\$254	\$50.19	\$1.37	4
	Amarillo, TX	Los Angeles, CA	\$5,121	\$353	\$54.36	\$1.48	5
Corn	Champaign-Urbana, IL	New Orleans, LA	\$4,000	\$262	\$42.32	\$1.07	7
com	Toledo, OH	Raleigh, NC	\$8,130	\$202	\$80.73	\$2.05	4
	Des Moines, IA	Davenport, IA	\$2,505	\$55	\$25.43	\$0.65	4
	Indianapolis, IN	Atlanta, GA	\$6,227	\$0	\$61.84	\$1.57	4
	Indianapolis, IN	Knoxville, TN	\$5,247	\$0	\$52.11	\$1.32	4
	Des Moines, IA	Little Rock, AR	\$4,000	\$163	\$41.34	\$1.05	6
	Des Moines, IA	Los Angeles, CA	\$5,880	\$474	\$63.10	\$1.60	8
Soybeans	Minneapolis, MN	New Orleans, LA	\$3,631	\$342	\$39.45	\$1.07	9
	Toledo, OH	Huntsville, AL	\$6,714	\$0	\$66.67	\$1.81	2
	Indianapolis, IN	Raleigh, NC	\$7,422	\$0	\$73.70	\$2.01	4
	Indianapolis, IN	Huntsville, AL	\$5,367	\$0	\$53.30	\$1.45	2
	Champaign-Urbana, IL	New Orleans, LA	\$4,745	\$262	\$49.72	\$1.35	6
Shuttle train	1 8)	,	*)				
Wheat	Great Falls, MT	Portland, OR	\$4,193	\$0	\$41.64	\$1.13	4
	Wichita, KS	Galveston-Houston, TX	\$4,411	\$0	\$43.80	\$1.19	4
	Chicago, IL	Albany, NY	\$6,670	\$0	\$66.24	\$1.80	5
	Grand Forks, ND	Portland, OR	\$5,851	\$0	\$58.10	\$1.58	3
	Grand Forks, ND	Galveston-Houston, TX	\$5,721	\$0	\$56.81	\$1.55	-5
	Colby, KS	Portland, OR	\$6,012	\$416	\$63.83	\$1.74	5
Corn	Minneapolis, MN	Portland, OR	\$5,380	\$0	\$53.43	\$1.36	4
	Sioux Falls, SD	Tacoma, WA	\$5,340	\$0	\$53.03	\$1.35	4
	Champaign-Urbana, IL	New Orleans, LA	\$3,920	\$262	\$41.52	\$1.05	7
	Lincoln, NE	Galveston-Houston, TX	\$4,080	\$0	\$40.52	\$1.03	5
	Des Moines, IA	Amarillo, TX	\$4,420	\$205	\$45.92	\$1.17	6
	Minneapolis, MN	Tacoma, WA	\$5,380	\$0	\$53.43	\$1.36	4
	Council Bluffs, IA	Stockton, CA	\$5,300	\$0	\$52.63	\$1.34	4
Soybeans	Sioux Falls, SD	Tacoma, WA	\$6,050	\$0	\$60.08	\$1.64	3
	Minneapolis, MN	Portland, OR	\$6,100	\$0	\$60.58	\$1.65	3
	Fargo, ND	Tacoma, WA	\$5,950	\$0	\$59.09	\$1.61	3
	Council Bluffs, IA	New Orleans, LA	\$4,975	\$302	\$52.40	\$1.43	6
	Toledo, OH	Huntsville, AL	\$4,954	\$0	\$49.20	\$1.34	0
	Grand Island, NE	Portland, OR	\$5,360	\$426	\$57.45	\$1.56	8

¹A 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.

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

⁴Percentage 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	: Novembe	r 2021		Fuel	Tari	ff rate plus	Percent
	Origin		Tariff rate	surcharge		harge per:	change ⁴
Commodity	state	Destination region	per car ¹	per car ²	metric ton ³	bus hel ³	Y/Y
Wheat	MT	Chihuahua, CI	\$7,699	\$0	\$78.67	\$2.14	4
	OK	Cuautitlan, EM	\$6,900	\$181	\$72.35	\$1.97	5
	KS	Guadalajara, JA	\$7,619	\$711	\$85.11	\$2.31	6
	TX	Salinas Victoria, NL	\$4,420	\$111	\$46.30	\$1.26	4
Corn	IA	Guadalajara, JA	\$9,102	\$632	\$99.46	\$2.52	6
	SD	Celaya, GJ	\$8,300	\$0	\$84.81	\$2.15	2
	NE	Queretaro, QA	\$8,322	\$384	\$88.95	\$2.26	4
	SD	Salinas Victoria, NL	\$6,905	\$0	\$70.55	\$1.79	0
	MO	Tlalnepantla, EM	\$7,687	\$374	\$82.37	\$2.09	4
	SD	Torreon, CU	\$7,825	\$0	\$79.95	\$2.03	2
Soybeans	MO	Bojay (Tula), HG	\$8,647	\$588	\$94.35	\$2.57	5
	NE	Guadalajara, JA	\$9,207	\$611	\$100.31	\$2.73	4
	IA	El Castillo, JA	\$9,510	\$0	\$97.17	\$2.64	1
	KS	Torreon, CU	\$8,109	\$431	\$87.26	\$2.37	4
Sorghum	NE	Celaya, GJ	\$7,932	\$562	\$86.79	\$2.20	6
	KS	Queretaro, QA	\$8,108	\$226	\$85.15	\$2.16	2
	NE	Salinas Victoria, NL	\$6,713	\$182	\$70.44	\$1.79	2
	NE	Torreon, CU	\$7,225	\$399	\$77.90	\$1.98	5

 Table 8

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

¹Rates 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.

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

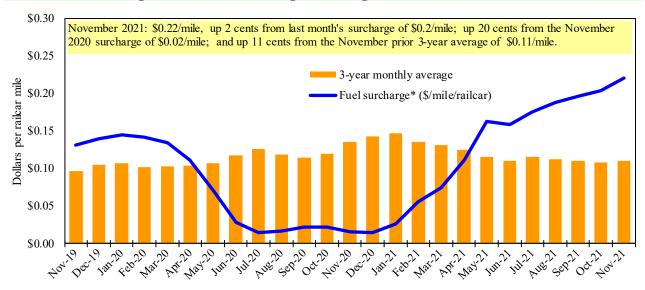
³Approximate load per car = 97.87 metric tons: Corn & Sorghum 56 lbs/bu, Wheat & Soybeans 60 lbs/bu.

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

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

Figure 7

Railroad fuel surcharges, North American weighted average¹



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

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

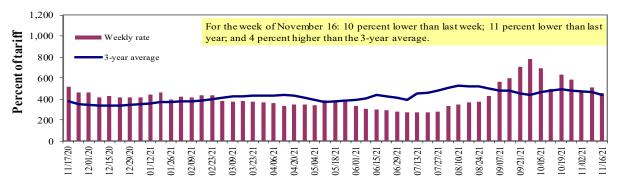
**CSX strike price changed from \$2.00/gal. to \$3.75/gal. starting January 1, 2015.

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

Barge Transportation

Figure 8

Illinois River barge freight rate^{1,2}



¹Rate = percent of 1976 tariff benchmark index (1976 = 100 percent); ²4-week moving average of the 3-year average. *Source: USDA, Agricultural Marketing Service.

Table 9 Weekly barge freight rates: Southbound only

		Twin Cities	Mid- Mississippi	Lower Illinois River	St. Louis	Cincinnati	Lower Ohio	Cairo- Memphis
Rate ¹	11/16/2021	439	462	457	362	460	460	327
	11/9/2021	445	500	508	416	498	498	390
\$/ton	11/16/2021	27.17	24.58	21.20	14.44	21.57	18.58	10.27
	11/9/2021	27.55	26.60	23.57	16.60	23.36	20.12	12.25
Curren	t week % chang	e from the s	ame week:					
	Last year	-20	-11	-11	-13	-14	-14	-14
	3-year avg. ²	-9	2	4	2	21	21	-2
Rate ¹	December February	-	-	408 420	317 302	349 326	349 326	287 267

¹Rate = percent of 1976 tariff benchmark index (1976 = 100 percent); ²4-week moving average; ton = 2,000 pounds; "-" not available due to lock closure. Source: USDA, A gricultural Marketing Service.

Figure 9 Benchmark tariff rates

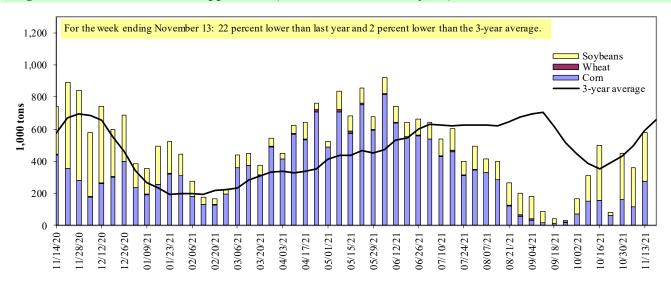
Calculating barge rate per ton: (Rate * 1976 tariff benchmark rate per ton)/100

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 River¹ (Locks 27 - Granite City, IL)



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

Source: U.S. Army Corps of Engineers.

Table 10

Barge grain movements (1,000 tons)

For the week ending 11/13/2021	Corn	Wheat	Soybe ans	Other	Total
Mississippi River					
Rock Island, IL (L15)	71	5	111	0	187
Winfield, MO (L25)	213	2	220	0	434
Alton, IL (L26)	279	2	270	0	551
Granite City, IL (L27)	275	2	302	0	578
Illinois River (La Grange)	34	0	24	0	57
Ohio River (Olmsted)	86	5	169	0	260
Arkansas River (L1)	0	10	41	0	50
Weekly total - 2021	361	17	511	0	889
Weekly total - 2020	470	9	416	30	926
2021 YTD ¹	21,089	1,518	8,643	245	31,496
2020 YTD ¹	15,684	1,642	14,468	203	31,997
2021 as % of 2020 YTD	134	92	60	121	98
Last 4 weeks as % of 2020^2	75	68	70	36	72
Total 2020	18,942	1,765	19,205	237	40,149

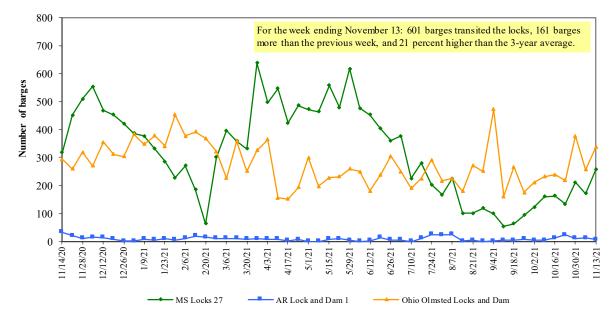
¹ Weekly total, YTD (year-to-date), and calendar year total include MI/27, OH/Olmsted, and AR/1; Other refers to oats, barley, sorghum, and rye. Total may not add exactly due to rounding.

² As a percent of same period in 2020.

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

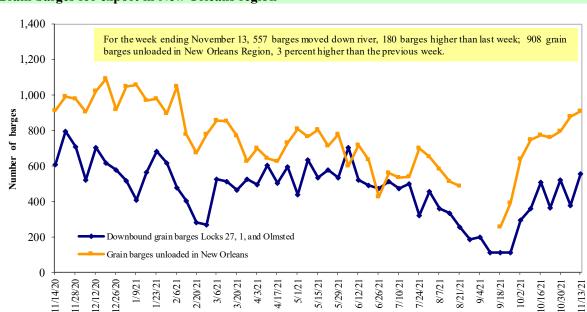
Source: U.S. Army Corps of Engineers.

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



Source: U.S. Army Corps of Engineers.

Figure 12



Grain barges for export in New Orleans region

Note: Olmsted = Olmsted Locks and Dam.

Source: U.S. Army Corps of Engineers and USDA, Agricultural Marketing Service.

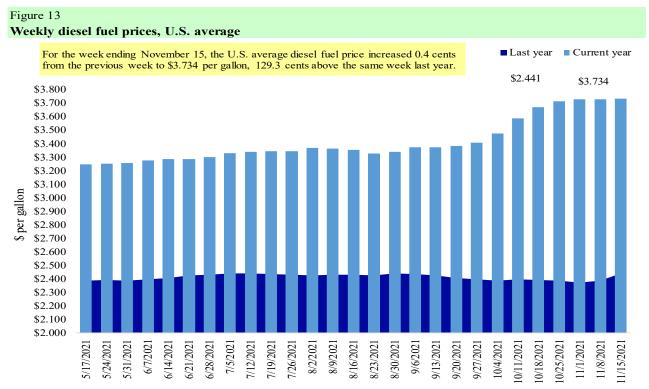
Grain Transportation Report

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.

	way diesel prices, week ending	5 11/13/2021	Change from		
Region	Location	Price	Week ago	Year ago	
Ι	East Coast	3.707	-0.005	1.220	
	New England	3.657	0.001	1.105	
	Central Atlantic	3.852	-0.006	1.168	
	Lower Atlantic	3.620	-0.004	1.283	
II	Midwest	3.631	-0.002	1.292	
III	Gulf Coast	3.474	-0.008	1.294	
IV	Rocky Mountain	3.838	0.005	1.348	
V	West Coast	4.424	0.053	1.434	
	West Coast less California	4.009	0.035	1.323	
	California	4.769	0.068	1.529	
Total	United States	3.734	0.004	1.293	

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

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



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)

			Whe	eat			Corn	Soybe ans	Total
For the week ending	HRW	SRW	HRS	SWW	DUR	All wheat			
Export balances ¹									
11/4/2021	1,854	533	1,142	748	52	4,330	25,464	19,010	48,804
This week year ago	1,601	421	1,554	1,973	203	5,751	26,583	30,112	62,445
Cumulative exports-marketing year ²									
2021/22 YTD	3,366	1,383	2,468	1,650	97	8,964	6,612	14,283	29,858
2020/21 YTD	4,585	945	3,275	2,162	340	11,306	7,585	19,720	38,611
YTD 2021/22 as % of 2020/21	73	146	75	76	28	79	87	72	77
Last 4 wks. as % of same period 2020/21*	111	139	67	35	30	72	94	71	81
Total 2020/21	8,331	1,744	7,337	6,281	654	24,347	66,702	60,287	151,336
Total 2019/20	9,526	2,318	6,960	4,751	922	24,477	42,622	43,994	111,094

¹ Current unshipped (outstanding) export sales to date.

² Shipped export sales to date; 2021/22 marketing year now in effect for wheat, corn and soybeans.

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

HRS= hard red spring; SWW= soft white wheat; DUR= durum.

Source: USDA, Foreign Agricultural Service.

Table 13

Top 5 importers¹ of U.S. corn

For the week ending 11/4/2021		Total commitments ²	% change	Exports ³
	2021/22	2020/21	current MY	3-yr. avg.
	current MY	last MY	from last MY	2019-21
	1,000 mt -			
Mexico	8,884	7,078	26	14,817
Japan	2,642	4,592	(42)	11,082
China	11,925	10,774	11	7,920
Columbia	1,685	1,654	2	4,491
Korea	72	600	(88)	3,302
Top 5 importers	25,208	24,698	2	41,613
Total U.S. corn export sales	32,076	34,168	(6)	53,145
% of projected exports	50%	49%		
Change from prior week ²	1,067	978		
Top 5 importers' share of U.S. corn				
export sales	79%	72%		78%
USDA forecast November 2021	63,613	70,051	(9)	
Corn use for ethanol USDA forecast,				
November 2021	133,350	127,711	4	

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

²Cumulative 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. ³FAS marketing year ranking reports (carry over plus accumulated export); yr. = year; avg. = average.

r AS marketing year ranking reports (carry over plus accumulated export); yr. = year; avg. = averag

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

Source: USDA, Foreign Agricultural Service.

Table 14

Top 5 importers¹ of U.S. soybeans

For the week ending 11/4/2021	Total commit	tments ²	% change	Exports ³
	2021/22	2020/21	current MY	3-yr. avg.
	current MY	last MY	from last MY	2018-20
				- 1,000 mt -
China	18,191	27,553	(34)	21,666
Mexico	2,299	2,721	(16)	4,754
Egypt	1,216	1,332	(9)	3,093
Indonesia	402	773	(48)	2,325
Japan	836	837	(0)	2,275
Top 5 importers	22,944	33,216	(31)	34,113
Total U.S. soybean export sales	33,293	49,832	(33)	50,758
% of projected exports	60%	81%		
change from prior week ²	1,289	1,400		
Top 5 importers' share of U.S.				
soybean export sales	69%	67%		67%
USDA forecast, November 2021	55,858	61,717	(9)	

¹Based on USDA, Foreign Agricultural Service (FAS) marketing year ranking reports for 2020/21; marketing year (MY) = Sep 1 - Aug 31. ²Cumulative 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. ³FAS marketing year ranking reports (carry over plus accumulated export); yr. = year; avg. = average.

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

Source: USDA, Foreign Agricultural Service.

Table 15

Top 10 importers¹ of all U.S. wheat

For the week ending 11/4/2021	Total C	ommitments ²	% change	Exports ³
C C	2021/22	2020/21	current MY	3-yr. avg.
	current MY	last MY	from last MY	2018-20
		1,000 mt -		- 1,000 mt -
Mexico	2,392	2,249	6	3,388
Philippines	2,039	2,373	(14)	3,121
Japan	1,360	1,571	(13)	2,567
Korea	818	1,166	(30)	1,501
Nigeria	1,379	791	74	1,490
China	848	1,598	(47)	1,268
Taiwan	549	769	(29)	1,187
Indonesia	59	606	(90)	1,131
Thailand	375	495	(24)	768
Italy	184	487	(62)	681
Top 10 importers	10,003	12,105	(17)	17,102
Total U.S. wheat export sales	13,293	17,058	(22)	24,617
% of projected exports	57%	63%		
change from prior week ²	286	301		
Top 10 importers' share of U.S.				
wheat export sales	75%	71%		69%
USDA forecast, November 2021	23,433	27,030	(13)	

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

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

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

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

Source: USDA, Foreign Agricultural Service.

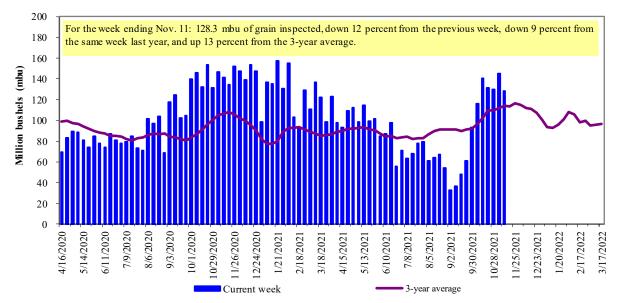
Table 16 Grain inspections for export by U.S. port region (1,000 metric tons)

	For the week ending	Previous	Current week			2021 YTD as	Last 4-we	eeks as % of:	
Port regions	11/11/21	week*	as % of previous	2021 YTD*	2020 YTD*	% of 2020 YTD	Last year	Prior 3-yr. avg.	2020 total*
Pacific Northwest									
Wheat	90	71	126	12,324	13,960	88	29	28	15,966
Corn	0	0	n/a	12,369	8,589	144	0	0	9,969
Soybeans	700	1,065	66	10,137	10,198	99	111	188	14,028
Total	790	1,136	70	34,829	32,748	106	87	116	39,963
Mississippi Gulf	.,,,	-,		• 1,022	•_,/ 10	100	01		•,,, ••
Wheat	79	108	73	2,996	3,271	92	266	152	3,422
Corn	561	440	128	35,409	25,052	141	100	107	28,781
Soybeans	1,048	1,445	72	19,078	28,220	68	87	116	38,013
Total	1,687	1,993	85	57,484	56,543	102	93	115	70,215
Texas Gulf	,	,		,	,				,
Wheat	184	7	n/a	3,614	4,025	90	119	82	4,248
Corn	27	0	n/a	532	650	82	103	118	723
Soybeans	54	168	32	1,356	1,222	111	76	229	2,098
Total	265	175	152	5,502	5,897	93	87	142	7,068
nterior				,	,				,
Wheat	30	55	55	2,617	1,874	140	89	117	2,263
Corn	232	198	117	8,609	7,546	114	123	121	8,683
Soybeans	190	180	105	5,453	6,135	89	104	117	7,274
Total	452	433	104	16,679	15,556	107	110	118	18,220
Great Lakes									
Wheat	27	24	110	422	717	59	169	81	891
Corn	20	0	n/a	114	61	187	279	105	111
Soybeans	124	12	n/a	424	771	55	97	159	1,111
Total	171	36	474	960	1,549	62	108	135	2,113
Atlantic									
Wheat	0	0	n/a	125	35	354	0	0	65
Corn	0	0	n/a	81	33	246	n/a	472	33
Soybeans	67	138	49	1,557	1,163	134	96	148	1,870
Total	67	138	49	1,763	1,231	143	101	154	1,968
U.S. total from ports	*								
Wheat	409	265	155	22,097	23,882	93	72	62	26,854
Corn	841	638	132	57,115	41,932	136	95	93	48,301
Soybeans	2,182	3,008	73	38,005	47,708	80	96	140	64,394
Total	3,432	3,910	88	117,217	113,523	103	93	118	139,548

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

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

The United States exports approximately one-quarter of the grain it produces. On average, this includes nearly 45 percent of U.S.-grown wheat, 50 percent of U.S.-grown soybeans, and 20 percent of the U.S.-grown corn. Approximately 55 percent of the U.S. export grain shipments departed through the U.S. Gulf region in 2020.

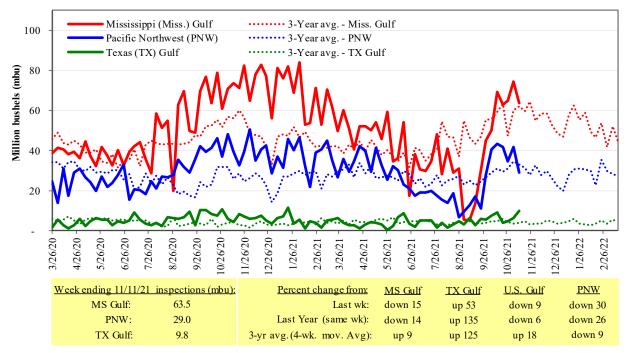




Note: 3-year average consists of 4-week running average.

Source: USDA, Federal Grain Inspection Service.





Source: USDA, Federal Grain Inspection Service.

Table 17

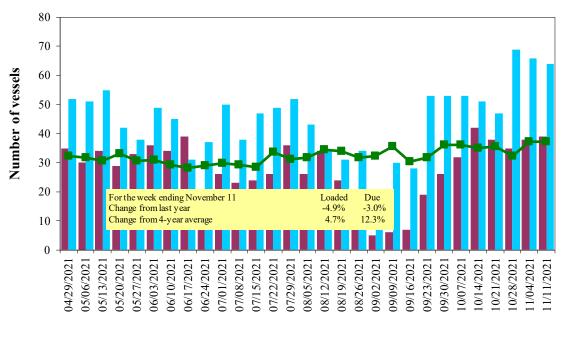
Weekly port region grain ocean vessel activity (number of vessels)

				Pacific
		Gulf		Northwest
		Loaded	Due next	
Date	In port	7-days	10-days	In port
11/11/2021	49	39	64	19
11/4/2021	44	38	66	14
2020 range	(2260)	(2346)	(3468)	(724)
2020 average	37	33	49	15

Note: n/a = not available due to holiday; *Incomplete data due to Hurricane Ida

Source: USDA, Agricultural Marketing Service.





Loaded last 7 days

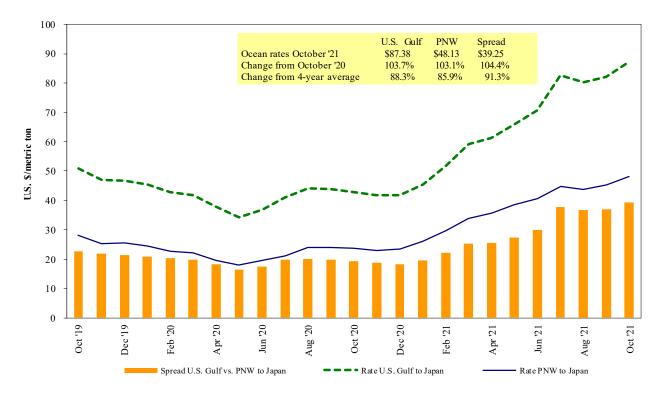
Due next 10 days

Loaded 4-year average

¹U.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 11/13/2021

Export	Import	Grain	Loading	Volume loads	Freight rate
region	region	types	date	(metric tons)	(US\$/metric ton)
U.S. Gulf	Japan	Heavy grain	Oct 1/10, 2021	48,000	70.10
U.S. Gulf	Japan	Heavy grain	Aug 21/Sep 9, 2021	50,000	60.90
U.S. Gulf	Japan	Heavy grain	Aug 1/10, 2021	50,000	69.75
U.S. Gulf	Sudan	Wheat	Sep 1/10, 2021	49,000	79.12*
U.S. Gulf	China	Heavy grain	Nov 1/10, 2021	66,000	89.00
U.S. Gulf	China	Heavy grain	Oct 1/10, 2021	55,000	81.50
U.S. Gulf	Djibouti	Wheat	Jul 6/16, 2021	5,880	85.70*
U.S. Gulf	S. Korea	Heavy grain	Dec 1/10, 2021	51,000	940.00
PNW	Japan	Wheat	Sep 1, 2021	52,170	56.55*
PNW	Japan	Wheat	Jul 25/ Aug 5, 2021	32,590	64.00
PNW	Taiwan	Wheat	Nov 1/10, 2021	49,580	67.30
PNW	Taiwan	Heavy grain	Aug 20/30, 2021	35,000	64.20*
PNW	Taiwan	Wheat	Aug 1/10, 2021	55,000	54.95
Brazil	N. China	Heavy grain	Jan 1/5, 2022	64,000	58.25
Australia	Japan	Barley	Nov 1/10, 2021	55,000	65.50
River Plate	South Korea	Corn	Oct 21, 2021	67,000	79.80

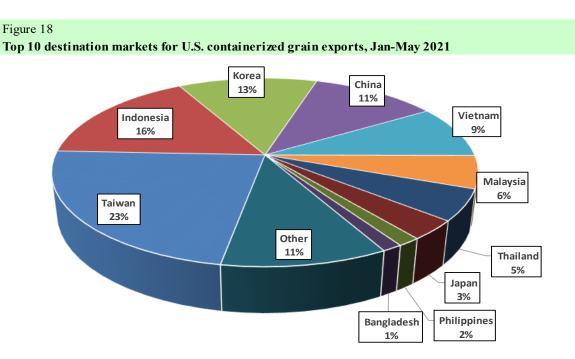
*50 percent of food aid from the United States is required to be shipped on U.S.-flag vessels.

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

Source: Maritime Research, Inc.

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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, 1003 100300, 1004, 100400, 1005, 100590, 1007, 100700, 1102, 110100, 230310, 110220, 110290, 1201, 120100, 230210, 230990, 230330, 120810, and 120190.

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

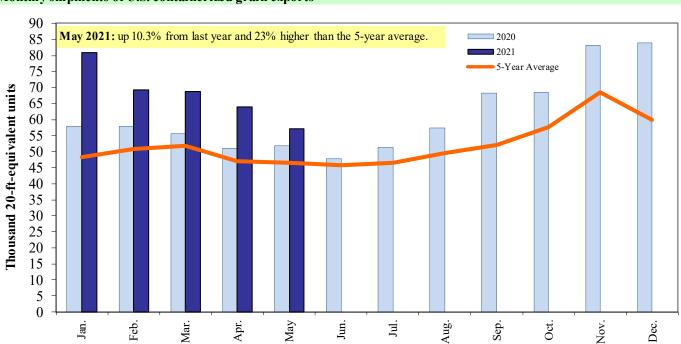


Figure 19 Monthly shipments of U.S. containerized grain exports

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

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

Grain Transportation Report

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