

**U.S. DEPARTMENT OF AGRICULTURE** 



# **Grain Transportation Report**

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

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July 29, 2021	
	STB Asks Class I Railroads To Provide Information on Container Congestion
	On July 22, the Surface Transportation Board (STB) <u>asked Class I railroads</u> to provide information on congestion at key container terminals. STB also requested the railroads' policies and practices for assessing storage charges. These requests come in response to
<b>Contents</b>	concerns over persistent intermodal congestion and significant container storage fees some shippers must pay to receive their containers.
	STB hopes to better understand the magnitude of container congestion, the purpose and effect of storage fees, and whether there is relief
Article/	for receivers who cannot facilitate the release of their containers. Tracking just one of several affected grain commodities, the Soybean
Calendar	Transportation Coalition expects "supply chain issues for exporters to continue for the foreseeable future, including the container squeeze
	and rail availability, as well as the nationwide shortage of truck drivers." Soybeans are the largest U.S. containerized grain export,
Grain	representing more than 40 percent of the market on average.
Transportation	Minnesota Approves Over \$800 Million for Road Projects
Indicators	Minnesota State lawmakers recently approved a transportation budget bill to provide over \$800 million for State roads and bridges. As
D!	part of the budget, the State's trunk highway system will receive \$413 million in trunk highway bonds, including \$200 million for the
Rail	Corridors of Commerce program, \$100 million for general State road construction, and \$113 million for State road construction projects
	under the Minnesota Department of Transportation's Regional and Community Investment planning category. As a major producer of
Barge	corn and soybeans, Minnesota depends on the condition and performance of its roads for grain transportation. As of 2019, 4.7 percent
Darge	(13,346) of bridges in Minnesota were structurally deficient, and in 2018, 16 percent of roads in the State were in poor condition— according to the American Society of Civil Engineers. The new funding is expected to boost highway capacity and improve freight
	movement statewide, which can benefit grain transportation.
Truck	
	Panama Canal Makes Way for Larger Vessels
_	As of May 21, the maximum allowable length for vessels transiting the Panama Canal's Neopanamax Locks has increased from 367.28
Exports	meters (1,205 feet) to 370.33 meters (1,215 feet). With this increase, 96.8 percent of the world's container fleet can now transit the Canal, thereby shortening routes and benefiting economies around the world. The Panama Canal Authority also increased the maximum
	allowable draft to 15.24 meters (50 feet). By offering larger capacity along with shorter travel distances, the Canal reduces vessels' fuel
0	consumption and emissions and helps reduce global greenhouse gases. The changes in allowable vessel length and draft were made in
Ocean	anticipation of the fifth anniversary of the Canal's expansion, on June 26. The Panama Canal is an important outlet for containerized grain
	shipped from the U.S. East and Gulf Coasts destined for China and other Asian countries.
Brazil	Snapshots by Sector
	Export Sales
Mexico	For the week ending July 15, <b>unshipped balances</b> of wheat, corn, and soybeans totaled 17.4 million metric tons (mmt). This was 6
	percent lower than last week and 13 percent lower than the same time last year. Net <b>corn export sales</b> were -0.089 mmt, significantly lower than the past week. Net <b>soybean export sales</b> were 0.062 mmt, significantly higher from the previous week. Net weekly <b>wheat</b>
	export sales were 0.473 mmt, up 11 percent from last week.
Grain Truck/Ocean	
Rate Advisory	Rail
Datasata	U.S. Class I railroads originated 20,964 grain carloads during the week ending July 17. This was a 22-percent increase from the previous
Datasets	week, 6 percent fewer than last year, and 10 percent fewer than the 3-year average.
Specialists	Average August shuttle secondary railcar bids/offers (per car) were \$117 below tariff for the week ending July 22. This was \$108 more
Specialists	than last week and \$389 lower than this week last year. There were no non-shuttle bids/offers this week.
Subscription	Barge
Information	For the week ending July 24, <b>barged grain movements</b> totaled 511,872 tons. This was 32 percent less than the previous week and 31 percent less than the same period last year.
	percent less than the same period last year.
	For the week ending July 24, 322 grain barges moved down river—177 fewer barges than the previous week. There were 701 grain
The next	barges unloaded in New Orleans, 30 percent more than the previous week.
release is	Osser
August 5, 2021	Ocean For the week ending July 22, 26 oceangoing grain vessels were loaded in the Gulf—unchanged from the same period last year. Within
11u5u50, 2021	the next 10 days (starting July 23), 49 vessels were expected to be loaded—36 percent more than the same period last year.
	As of July 22, the rate for shipping a metric ton (mt) of grain from the U.S. Gulf to Japan was \$81.00. This was 4 percent less than the
	previous week. The rate from the Pacific Northwest to Japan was \$44.00 per mt, 2 percent less than the previous week.
	Fuel
	For the week ending July 26, the U.S. average <b>diesel fuel price</b> decreased .2 cents from the previous week to \$3.342 per gallon, 91.5

cents above the same week last year. This is the first time in 13 weeks that the national average diesel price has decreased.

### **Feature Article/Calendar**

#### AgTransport 3.0: USDA Upgraded Its Agricultural Transportation Open Data Platform

On July 13, the Transportation Services Division of USDA's Agricultural Marketing Service launched an upgraded version—"AgTransport 3.0"—of its <u>Agricultural Transportation Open Data Platform</u>. This free tool was first introduced in June 2019 and assists USDA customers in making data-driven decisions about transporting agricultural goods domestically and internationally.

The platform's interactive format allows customers to view, access, and download data related to several transportation reports, including the weekly *Grain Transportation Report*. It is an alternative to static Adobe PDF files and Excel versions of USDA data on transporting agricultural products by rail, truck, barge, and ocean.

This article provides a brief description of the platform's functionalities, as well as new upgrades and features added to the platform.

The upgrades to the platform include:

- New grain transportation cost indicators and a global competitiveness dashboard with data on Brazil, Mexico, and Japan;
- An interactive report and datasets added on *The Importance of Highways to U.S. Agriculture;*
- A new agricultural rail service metrics dashboard;
- An upgraded port profile dashboard with additional, more granular data;
- An upgraded barge dashboard and additional data on rivers and locks;
- A web version of the new 2021 Agricultural Transportation Research Compendium;
- New bulk and container fleet data;
- A new biofuels dashboard, including new biodiesel datasets; and
- A new grain truck indicators dashboard.

With only a few easy clicks, the platform gives greater functionality with the ability to:

- View interactive dashboards on agricultural transportation modes and markets, updated weekly;
- Access data in eight different formats, accommodating users' unique needs;
- Effortlessly access application programming interface (API)-enabled data, for developing mobile and web apps and interacting programmatically with the data;
- Easily filter and aggregate data before downloading;
- With little effort, create visualizations and maps from datasets; and
- Save personalized dataset views and visualizations—these are automatically updated to show the latest insights, and they are easily embedded into other websites and applications.

The port profiles and rail service dashboards also take advantage of the new "global filter" feature. This feature allows all the dashboard's charts to be filtered simultaneously to show the same slice of the data, such as a particular port or a particular railroad.

USDA's transportation data reports inform the businesses of 30,000 subscribers, including farmers, commodity analysts, elevator operators, shippers, and other stakeholders. AgTransport 3.0—with its improved customer experience—will further enhance customers' relationship with the data.

USDA will continue to look for ways to expand and improve the offerings on AgTransport 3.0 to ensure that its data are accessible—easily conceptualized and acted on. The platform aims to help USDA customers optimize decision making to deliver farm and food products efficiently and economically. If you have any thoughts or suggestions, we welcome your feedback. Please write to us at the link below. <u>AgTransport@usda.gov</u>

### **Grain Transportation Indicators**

#### Table 1

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

	Truck	Ra	Rail		00	ean
For the week ending		Non-Shuttle	Shuttle		Gulf	Pacific
07/28/21	224	292	218	156	362	312
07/21/21	224	292	217	153	376	319

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

Source: USDA, Agricultural Marketing Service.

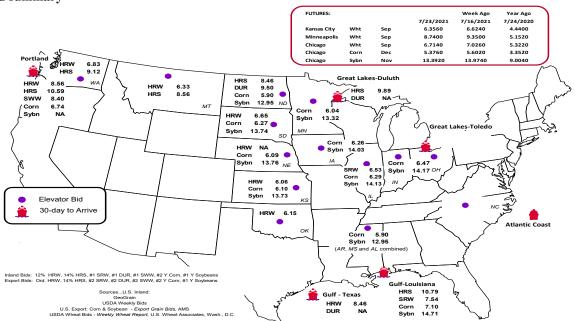
Table 2 Market Updat	e: U.S. origins to export posi	tion price spreads (\$/bush	nel)
Commodity	Origin-destination	7/23/2021	7/16/2021
Corn	IL–Gulf	-0.81	-0.62
Corn	NE–Gulf	-1.01	-0.71
Soybean	IA–Gulf	-0.68	-0.63
HRW	KS–Gulf	-2.40	-2.51
HRS	ND–Portland	-2.13	-2.01

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 <sup>3</sup>
7/21/2021 <sup>p</sup>	5	865	4.012	0	4,882	7/17/2021	2,360
7/14/2021 <sup>r</sup>	22	1,218	3,405	0	4,645	7/10/2021	2,812
2021 YTD <sup>r</sup>	35,105	41,848	175,138	9,887	261,978	2021 YTD	79,738
2020 YTD <sup>r</sup>	11,982	25,351	133,222	5,615	176,170	2020 YTD	69,577
2021 YTD as % of 2020 YTD	293	165	131	176	149	% change YTD	115
Last 4 weeks as % of $2020^2$	33	91	84	0	79	Last 4wks. % 2020	102
Last 4 weeks as % of 4-year avg. <sup>2</sup>	25	107	73	0	70	Last 4wks. % 4 yr.	96
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

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

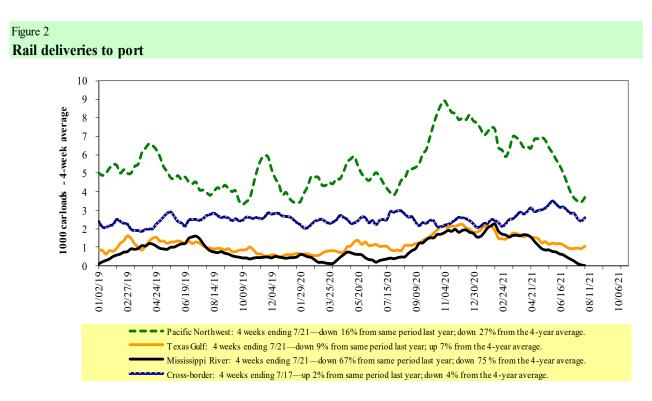
 $^{2}$  Compared with same 4-weeks in 2020 and prior 4-year average.

<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)

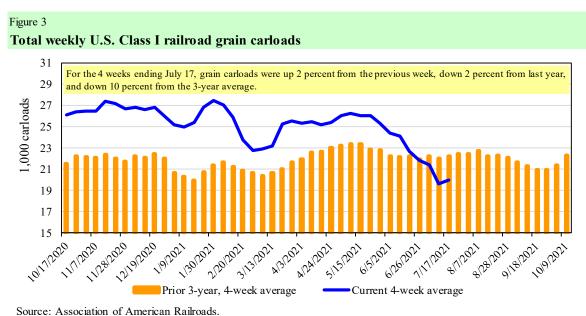
For the week ending:	Ea	East		West			Canada	
7/17/2021	CSXT	NS	BNSF	KCS	UP	U.S. total	CN	СР
This week	1,294	2,361	10,489	1,051	5,769	20,964	2,376	3,841
This week last year	1,497	2,576	11,427	1,052	5,796	22,348	4,445	5,311
2021 YTD	53,290	71,735	346,080	31,024	177,938	680,067	123,064	144,568
2020 YTD	47,419	68,071	309,319	30,018	144,830	599,657	115,930	129,991
2021 YTD as % of 2020 YTD	112	105	112	103	123	113	106	111
Last 4 weeks as % of 2020*	114	91	94	111	102	98	61	80
Last 4 weeks as % of 3-yr. avg.**	94	83	85	104	101	90	68	85
Total 2020	91,659	130,288	613,630	57,782	296,701	1,190,060	238,467	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.



#### Table 5

### **Railcar auction offerings**<sup>1</sup> (\$/car)<sup>2</sup>

Fo	or the week ending:		Delivery period						
7/22/2021		Aug-21	Aug-20	Sep-21	Sep-20	Oct-21	Oct-20	Nov-21	Nov-20
BNSF <sup>3</sup>	COT grain units	0	0	no bids	0	no bids	0	no bids	0
	COT grain single-car	0	0	0	20	0	10	0	5
UP <sup>4</sup>	GCAS/Region 1	no offer	no offer	no offer	no offer	no offer	no offer	n/a	n/a
	GCAS/Region 2	no offer	10	no offer	no bid	no offer	no offer	n/a	n/a

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

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

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

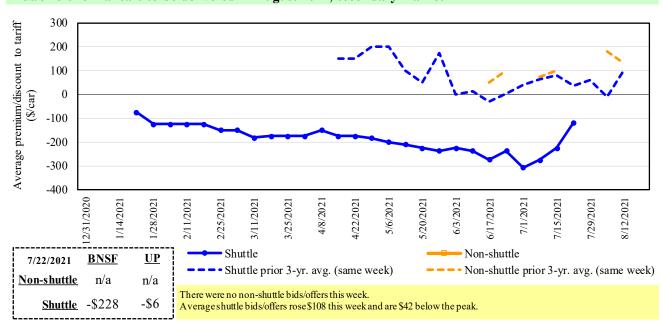
<sup>4</sup>UP - GCAS = Union Pacific Railroad Grain Car Allocation System.

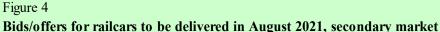
Region 1 includes: AR, IL, LA, MO, NM, OK, TX, WI, and Duluth, MN.

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

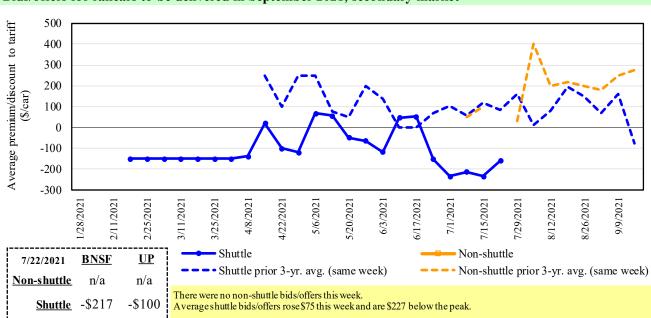
Source: USDA, Agricultural Marketing Service.

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



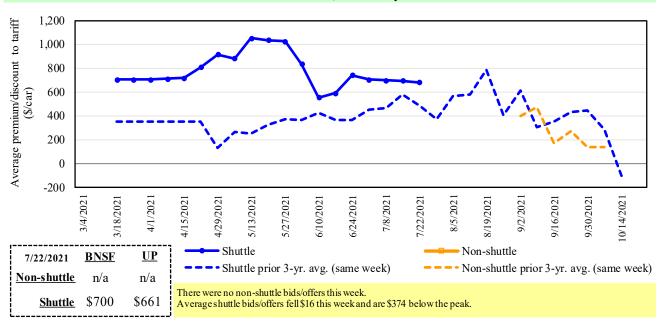


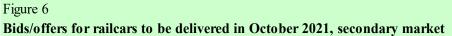
Note: Non-shuttle bids include unit-train and single-car bids. n/a = not available; avg. = average; yr. = year; BNSF = BNSF Railway; UP = Union Pacific Railroad. Source: USDA, Agricultural Marketing Service.



#### Figure 5 Bids/offers for railcars to be delivered in September 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.





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:			De	livery period		
	7/22/2021	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-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
2	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	(228)	(217)	700	n/a	n/a	n/a
	Change from last week	60	50	6	n/a	n/a	n/a
Shuttle	Change from same week 2020	(528)	(567)	0	n/a	n/a	n/a
Shu	UP-Pool	(6)	(100)	661	n/a	n/a	n/a
	Change from last week	157	100	(39)	n/a	n/a	n/a
	Change from same week 2020	(250)	(225)	111	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.

7

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>

			Tr <b>:</b> Cr	Fuel	T		Percent
July 2021	Origin region <sup>3</sup>	Destination region <sup>3</sup>	Tariff rate/car	surcharge _ per car	Tariff plus surch metric ton	bushel <sup>2</sup>	change Y/Y <sup>4</sup>
Unit train	ongin region	Destination region	rate/car	per cai	metric ton	busiter	1/1
Wheat	Wichita, KS	St. Louis, MO	\$3,695	\$116	\$37.85	\$1.03	5
·· iicut	Grand Forks, ND	Duluth-Superior, MN	\$4,208	\$0	\$41.79	\$1.14	-3
	Wichita, KS	Los Angeles, CA	\$7,115	\$0 \$0	\$70.66	\$1.92	-2
	Wichita, KS	New Orleans, LA	\$4,525	\$205	\$46.97	\$1.92	-2
	Sioux Falls, SD	Galveston-Houston, TX	\$6,851	\$203 \$0	\$68.03	\$1.23	-2
	Colby, KS Amarillo, TX	Galveston-Houston, TX	\$4,801 \$5,121	\$224 \$212	\$49.90 \$52.05	\$1.36 \$1.47	3
Corn	· · · · · · · · · · · · · · · · · · ·	Los Angeles, CA New Orleans, LA	\$5,121 \$2,000	\$312 \$231	\$53.95 \$41.03	\$1.47 \$1.04	4 4
Com	Champaign-Urbana, IL Toledo, OH	Raleigh, NC	\$3,900 \$7,833	\$231 \$0	\$41.03 \$77.79	\$1.04 \$1.98	15
	Des Moines, IA	Davenport, IA		\$0 \$49	\$24.87	\$0.63	
	Indianapolis, IN	Atlanta, GA	\$2,455 \$5,979	\$49 \$0	\$24.87 \$59.37	\$0.63 \$1.51	3
	-						
	Indianapolis, IN Des Moines, IA	Knoxville, TN Little Rock, AR	\$5,040 \$2,000	\$0 \$144	\$50.05 \$40.16	\$1.27 \$1.02	3 5
			\$3,900 \$5,780				
C 1	Des Moines, IA	Los Angeles, CA	\$5,780	\$419 \$241	\$61.56	\$1.56	7
Soybeans	Minneapolis, MN	New Orleans, LA	\$3,631	\$241	\$38.45	\$1.05	6
	Toledo, OH	Huntsville, AL	\$6,595	\$0	\$65.49	\$1.78	17
	Indianapolis, IN	Raleigh, NC	\$7,125	\$0	\$70.75	\$1.93	3
	Indianapolis, IN	Huntsville, AL	\$5,247	\$0	\$52.11	\$1.42	3
	Champaign-Urbana, IL	New Orleans, LA	\$4,645	\$231	\$48.42	\$1.32	4
Shuttle train	Curvet Felle MT	De utleur 1 OD	¢4.010	¢0.	\$20.00	¢1.00	2
Wheat	Great Falls, MT	Portland, OR	\$4,018	\$0	\$39.90	\$1.09	-3
	Wichita, KS	Galveston-Houston, TX	\$4,236	\$0 \$0	\$42.07	\$1.14	-3
	Chicago, IL	Albany, NY	\$6,376	\$0	\$63.32	\$1.72	-10
	Grand Forks, ND	Portland, OR	\$5,676	\$0	\$56.37	\$1.53	-2
	Grand Forks, ND	Galveston-Houston, TX	\$5,996	\$0	\$59.54	\$1.62	-2
~	Colby, KS	Portland, OR	\$6,012	\$368	\$63.35	\$1.72	4
Corn	Minneapolis, MN	Portland, OR	\$5,180	\$0	\$51.44	\$1.31	0
	Sioux Falls, SD	Tacoma, WA	\$5,140	\$0	\$51.04	\$1.30	0
	Champaign-Urbana, IL	New Orleans, LA	\$3,820	\$231	\$40.23	\$1.02	4
	Lincoln, NE	Galveston-Houston, TX	\$3,880	\$0	\$38.53	\$0.98	0
	Des Moines, IA	Amarillo, TX	\$4,320	\$181	\$44.70	\$1.14	5
	Minneapolis, MN	Tacoma, WA	\$5,180	\$0	\$51.44	\$1.31	0
	Council Bluffs, IA	Stockton, CA	\$5,100	\$0	\$50.65	\$1.29	2
Soybeans	Sioux Falls, SD	Tacoma, WA	\$5,850	\$0	\$58.09	\$1.58	0
	Minneapolis, MN	Portland, OR	\$5,900	\$0	\$58.59	\$1.59	0
	Fargo, ND	Tacoma, WA	\$5,750	\$0	\$57.10	\$1.55	0
	Council Bluffs, IA	New Orleans, LA	\$4,875	\$267	\$51.06	\$1.39	4
	Toledo, OH	Huntsville, AL	\$4,945	\$0	\$49.11	\$1.34	3
	Grand Island, NE	Portland, OR	\$5,260	\$377	\$55.97	\$1.52	5

<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	e: July 2021	U		Fuel	Tari	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>	bus hel <sup>3</sup>	Y/Y
Wheat	MT	Chihuahua, CI	\$7,384	\$0	\$75.45	\$2.05	-2
	OK	Cuautitlan, EM	\$6,813	\$160	\$71.25	\$1.94	2
	KS	Guadalajara, JA	\$7,531	\$703	\$84.13	\$2.29	4
	TX	Salinas Victoria, NL	\$4,347	\$97	\$45.41	\$1.23	2
Corn	IA	Guadalajara, JA	\$8,902	\$604	\$97.13	\$2.46	3
	SD	Celaya, GJ	\$8,140	\$0	\$83.17	\$2.11	0
	NE	Queretaro, QA	\$8,300	\$330	\$88.18	\$2.24	3
	SD	Salinas Victoria, NL	\$6,905	\$0	\$70.55	\$1.79	0
	MO	Tlalnepantla, EM	\$7,665	\$322	\$81.61	\$2.07	3
	SD	Torreon, CU	\$7,690	\$0	\$78.57	\$1.99	0
Soybeans	MO	Bojay (Tula), HG	\$8,547	\$567	\$93.12	\$2.53	3
	NE	Guadalajara, JA	\$9,157	\$593	\$99.61	\$2.71	3
	IA	El Castillo, JA	\$9,410	\$0	\$96.15	\$2.61	-1
	KS	Torreon, CU	\$8,014	\$411	\$86.08	\$2.34	3
Sorghum	NE	Celaya, GJ	\$7,772	\$535	\$84.88	\$2.15	3
	KS	Queretaro, QA	\$8,108	\$200	\$84.88	\$2.15	2
	NE	Salinas Victoria, NL	\$6,713	\$161	\$70.23	\$1.78	2
	NE	Torreon, CU	\$7,092	\$376	\$76.31	\$1.94	3

 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.

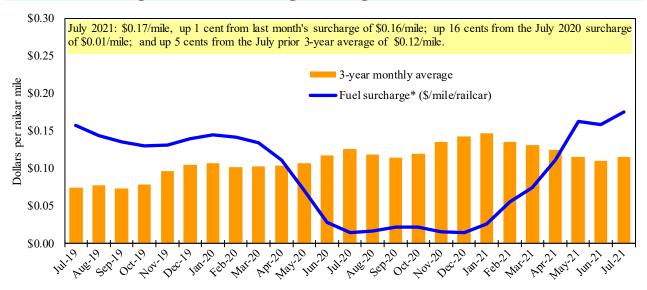
<sup>3</sup>Approximate load per car = 97.87 metric tons: Corn & Sorghum 56 lbs/bu, Wheat & Soybeans 60 lbs/bu.

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

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.

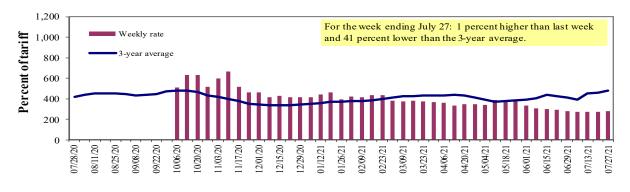
\*\*CSX strike price changed from \$2.00/gal. to \$3.75/gal. starting January 1, 2015.

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>1,2,3</sup>



 $^{1}$ Rate = percent of 1976 tariff benchmark index (1976 = 100 percent);  $^{2}$ 4-week moving average of the 3-year average.  $^{3}$ No rates data from 06/23/20 to 9/29/20 due to the lock closure for rehabilitation and replacement of lock machinery.

The 3-yr avg counts the avearge of MY2018 and MY2019. MY2020 data is not available. \*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 <sup>1</sup>	7/27/2021	352	281	280	202	209	209	191
	7/20/2021	356	281	276	203	204	204	188
\$/ton	7/27/2021	21.79	14.95	12.99	8.06	9.80	8.44	6.00
	7/20/2021	22.04	14.95	12.81	8.10	9.57	8.24	5.90
Curren	t week % chang	e from the s	ame week:					
	Last year	-25	-25	-	-22	-34	-34	-20
	3-year avg. <sup>2</sup>	-25	-36	-41	-35	-29	-29	-29
Rate <sup>1</sup>	August	394	319	314	254	262	262	244
	October	581	546	542	428	533	533	420

 $^{1}$ Rate = percent of 1976 tariff benchmark index (1976 = 100 percent);  $^{2}$ 4-week moving average; ton = 2,000 pounds; "-" not available due to lock closure. ILL River 3-year avg. is the 4-week moving average of MY18 and MY19. Data for MY20 is unavailable. Source: USDA, Agricultural Marketing Service.

#### Figure 9 Benchmark tariff rates

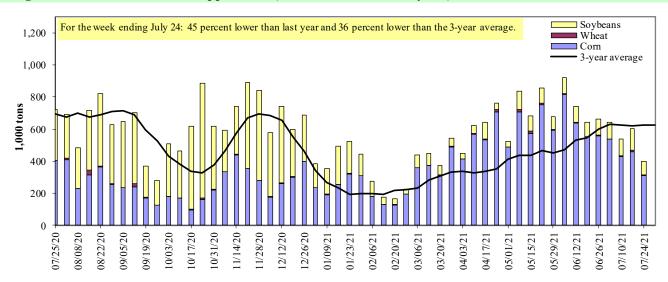
### **Calculating barge rate per ton:** (Rate \* 1976 tariff benchmark rate per ton)/100

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.

Source: U.S. Army Corps of Engineers.

#### Table 10

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

For the week ending 07/24/2021	Corn	Wheat	Soybe ans	Other	Total
Mississippi River					
Rock Island, IL (L15)	225	0	70	0	295
Winfield, MO (L25)	223	0	52	0	274
Alton, IL (L26)	348	3	98	0	449
Granite City, IL (L27)	311	3	85	0	399
Illinois River (La Grange)	88	0	29	0	116
Ohio River (Olmsted)	28	20	20	0	68
Arkansas River (L1)	0	45	0	0	45
Weekly total - 2021	339	68	105	0	512
Weekly total - 2020	343	64	336	5	747
2021 YTD <sup>1</sup>	17,411	901	4,916	198	23,427
2020 YTD <sup>1</sup>	10,583	1,083	6,905	97	18,668
2021 as % of 2020 YTD	165	83	71	204	125
Last 4 weeks as $\%$ of $2020^2$	127	93	42	103	89
Total 2020	18,942	1,765	19,205	237	40,149

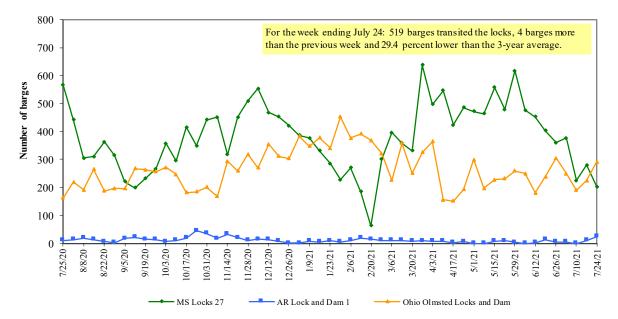
<sup>1</sup> Weekly total, YTD (year-to-date), and calendar year total include MI/27, OH/Olmsted, and AR/1; Other refers to oats, barley, sorghum, and rye. Total may not add exactly due to rounding.

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

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

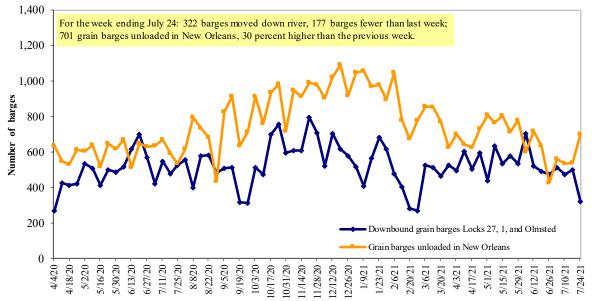
Source: U.S. Army Corps of Engineers.

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



Source: U.S. Army Corps of Engineers.





Note: Olmsted = Olmsted Locks and Dam.

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

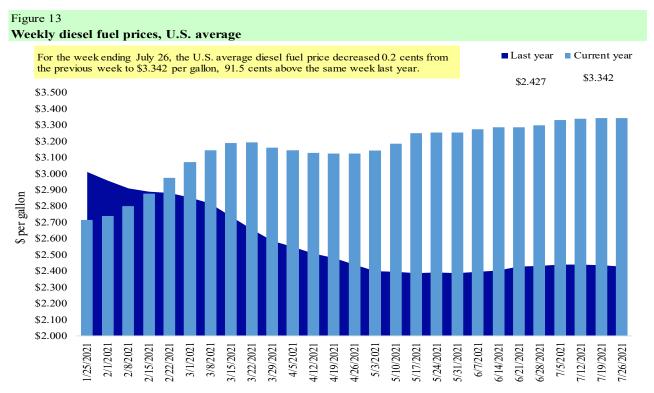
#### Grain Transportation Report

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.

ble 11 e <b>tail on-high</b> y	way diesel prices, week ending	g 7/26/2021 (	U.S. \$/gallon	)
0		· · · · · · · · · · · · · · · · · · ·	Change	e from
Region	Location	Price	Week ago	Year ago
Ι	East Coast	3.311	-0.001	0.792
	New England	3.252	0.001	0.620
	Central Atlantic	3.473	-0.005	0.776
	Lower Atlantic	3.213	0.002	0.838
II	Midwest	3.258	-0.006	0.957
III	Gulf Coast	3.079	-0.004	0.896
IV	Rocky Mountain	3.647	0.013	1.305
V	West Coast	3.934	0.005	0.980
	West Coast less California	3.610	0.012	1.024
	California	4.204	-0.001	0.948
Total	United States	3.342	-0.002	0.915

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

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



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	Soybeans	Total
For the week ending	HRW	SRW	HRS	SWW	DUR	All wheat			
Export balances <sup>1</sup>									
7/15/2021	1,631	967	1,533	1,065	8	5,205	9,019	3,132	17,357
This week year ago	1,696	676	1,770	1,172	203	5,517	6,678	7,865	20,060
Cumulative exports-marketing year <sup>2</sup>									
2020/21 YTD	859	333	742	408	42	2,384	60,751	58,856	121,991
2019/20 YTD	1,618	214	838	496	159	3,325	37,032	38,529	78,886
YTD 2020/21 as % of 2019/20	53	156	89	82	26	72	164	153	155
Last 4 wks. as % of same period 2019/20*	93	142	89	92	4	94	158	42	95
Total 2019/20	9,526	2,318	6,960	4,751	922	24,477	42,622	43,994	111,094
Total 2018/19	8,591	3,204	6,776	5,164	479	24,214	48,924	46,189	119,327

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

<sup>2</sup> Shipped export sales to date; 2021/22 marketing year now in effect for wheat while corn and soybeans remain in effect for the 2020/21 marketing year.

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

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

Source: USDA, Foreign Agricultural Service.

#### Table 13

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

For the week ending 07/15/2021		Total commitments <sup>2</sup>		% change	Exports <sup>3</sup>
	2021/22	2020/21	2019/20	current MY	3-yr. avg.
	next MY	current MY	last MY	from last MY	2017-19
			- 1,000 mt -		
Mexico	2,053	15,086	14,368	5	14,869
Japan	882	10,916	9,802	11	11,221
Columbia	5	3,893	4,539	(14)	4,830
Korea	65	3,527	2,566	37	4,011
China	10,744	23,101	2,133	983	909
Top 5 importers	13,749	56,523	33,408	69	35,840
Total U.S. corn export sales	16,127	69,771	43,710	60	49,983
% of projected exports	25%	96%	97%		
Change from prior week <sup>2</sup>	48	(89)	221		
Top 5 importers' share of U.S. corn					
export sales	85%	81%	76%		72%
USDA forecast July 2021	63,613	72,519	45,216	60	
Corn use for ethanol USDA forecast,					
July 2021	132,080	128,270	123,368	4	

<sup>1</sup>Based on USDA, Foreign Agricultural Service (FAS) marketing year ranking reports for 2019/20; marketing year (MY) = Sep 1 - Aug 31.

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

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

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

Source: USDA, Foreign Agricultural Service.

#### Table 14

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

For the week ending 07/15/2021		Total commitme	% change	Exports <sup>3</sup>	
	2021/22	2020/21	2019/20	current MY	3-yr. avg.
	next MY	current MY	last MY	from last MY	2017-19
			1,000 mt -		- 1,000 mt -
China	4,136	35,826	16,441	118	19,106
Mexico	879	4,798	4,713	2	4,591
Egypt	0	2,777	3,603	(23)	2,980
Indonesia	10	2,318	2,166	7	2,360
Japan	170	2,411	2,397	1	2,288
Top 5 importers	5,195	48,131	29,319	64	31,324
Total U.S. soybean export sales	9,865	61,988	46,395	34	49,352
% of projected exports	17%	100%	101%		
change from prior week <sup>2</sup>	176	62	307		
Top 5 importers' share of U.S.					
soybean export sales	53%	78%	63%		63%
USDA forecast, July 2021	56,540	61,853	45,749	135	

<sup>1</sup>Based on USDA, Foreign Agricultural Service (FAS) marketing year ranking reports for 2019/20; marketing year (MY) = Sep 1 - Aug 31.

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

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

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

Source: USDA, Foreign Agricultural Service.

#### Table 15

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

For the week ending 07/15/2021	Total Co	ommitments <sup>2</sup>	% change	Exports <sup>3</sup>	
	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	1,271	889	43	3,388	
Philippines	1,204	1,212	(1)	3,121	
Japan	813	885	(8)	2,567	
Korea	451	573	(21)	1,501	
Nigeria	560	437	28	1,490	
China	483	1,012	(52)	1,268	
Taiwan	239	359	(33)	1,187	
Indonesia	2	269	(99)	1,131	
Thailand	124	199	(38)	768	
Italy	54	283	(81)	681	
Top 10 importers	5,201	6,118	(15)	17,102	
Total U.S. wheat export sales	7,589	8,841	(14)	24,617	
% of projected exports	32%	33%			
change from prior week <sup>2</sup>	473	587			
Top 10 importers' share of					
U.S. wheat export sales	69%	69%		69%	
USDA forecast, July 2021	23,842	27,030	(12)		

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

<sup>2</sup>Cumulative exports (shipped) + outstanding sales (unshipped), FAS weekly export sales report, or export sales query. The total commitments change (net sales) from prior

week could include revisions from the previous week's outstanding and/or accumulated sales.

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

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

Source: USDA, Foreign Agricultural Service.

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

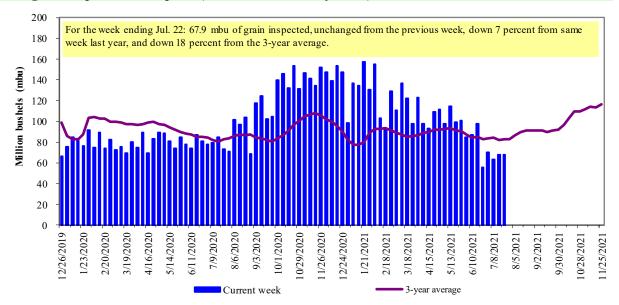
	For the week ending	the week ending Previous	Current week			2021 YTD as	Last 4-we	eks as % of:	
Port regions	07/22/21	week*	as % of previous	2021 YTD*	2020 YTD*	% of 2020 YTD	Last year	Prior 3-yr. avg.	2020 total*
Pacific Northwest									
Wheat	174	230	76	8,740	8,968	97	69	76	15,966
Corn	327	264	124	11,992	6,181	194	133	111	9,969
Soybeans	0	0	n/a	3,758	2,759	136	22	1	14,028
Total	501	494	102	24,490	17,908	137	99	78	39,963
Mississippi Gulf				)	j	-		-	
Wheat	83	136	61	1,646	2,264	73	115	146	3,422
Corn	468	564	83	27,507	17,212	160	104	111	28,781
Soybeans	127	69	183	10,700	12,072	89	30	29	38,013
Total	678	769	88	39,854	31,549	126	76	80	70,215
Texas Gulf				,	,				,
Wheat	138	81	170	2,383	2,641	90	71	89	4,248
Corn	0	51	0	322	459	70	103	89	723
Soybeans	0	0	n/a	656	7	n/a	n/a	0	2,098
Total	138	132	105	3,361	3,107	108	73	89	7,068
nterior				,	*				,
Wheat	100	89	113	1,659	1,292	128	188	196	2,263
Corn	214	179	120	5,446	4,838	113	93	99	8,683
Soybeans	100	78	128	3,455	3,624	95	68	56	7,274
Total	414	346	120	10,560	9,754	108	96	93	18,220
Great Lakes									
Wheat	0	25	0	253	388	65	28	36	891
Corn	9	0	n/a	48	0	n/a	n/a	34	111
Soybeans	22	0	n/a	56	61	92	n/a	44	1,111
Total	32	25	128	357	448	80	72	39	2,113
Atlantic									
Wheat	8	1	698	86	7	n/a	689	661	65
Corn	0	0	n/a	14	8	174	n/a	0	33
Soybeans	5	4	134	1,066	426	250	79	15	1,870
Total	13	5	269	1,166	441	264	119	23	1,968
U.S. total from ports	*								
Wheat	503	561	90	14,767	15,561	95	85	99	26,854
Corn	1,019	1,058	96	45,329	28,697	158	109	108	48,301
Soybeans	254	152	168	19,691	18,949	104	40	29	64,394
Total	1,776	1,770	100	79,788	63,207	126	85	80	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 2019.

16

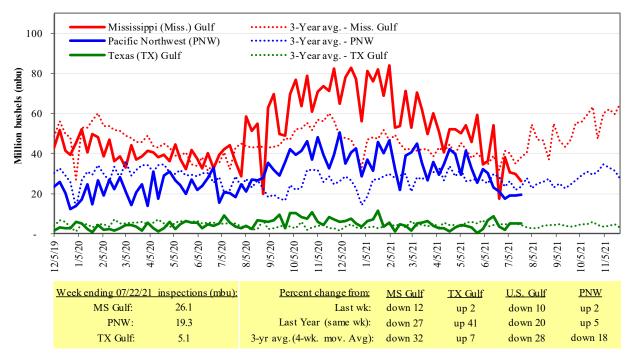


#### Figure 14 U.S. grain inspected for export (wheat, corn, and soybeans)

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

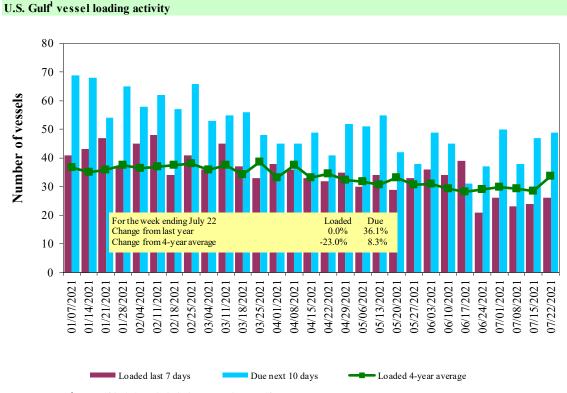
Figure 16

#### 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
7/22/2021	29	26	49	12
7/15/2021	27	24	47	9
2020 range	(2260)	(2346)	(3468)	(724)
2020 average	37	33	49	15

Note: n/a = not available due to holiday.

Source: USDA, Agricultural Marketing Service.

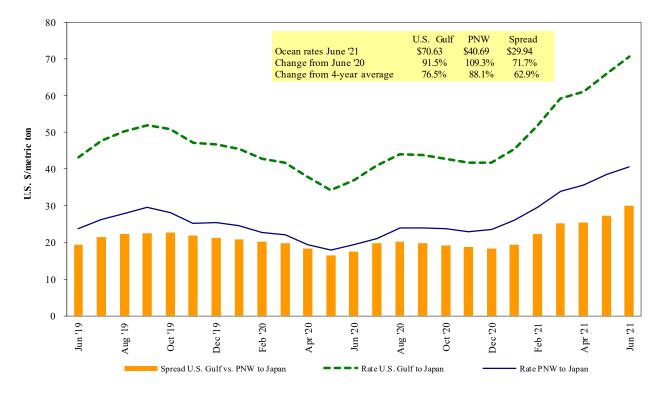


<sup>1</sup>U.S. Gulf includes Mississippi, Texas, and East Gulf.

Source:USDA, Agricultural Marketing Service.

#### Figure 17





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

Table 18

#### Ocean freight rates for selected shipments, week ending 07/24/2021

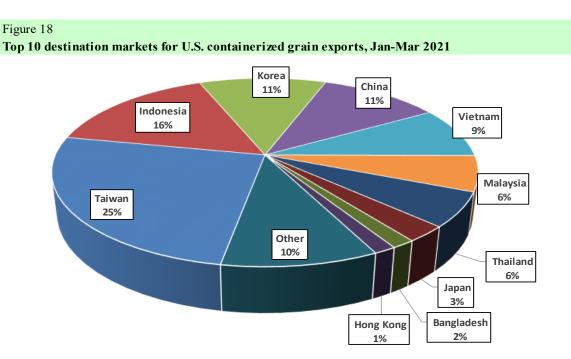
Export	Import	Grain	Loading	Volume loads	Freight rate
region	region	types	date	(metric tons)	(US\$/metric ton)
U.S. Gulf	Japan	Heavy grain	Oct 1/10	48,000	70.10
U.S. Gulf	Japan	Heavy grain	Aug 21/Sep 9	50,000	60.90
U.S. Gulf	Japan	Heavy grain	Aug 1/10	50,000	69.75
U.S. Gulf	Japan	Heavy grain	Jul 1/15	50,000	64.10
U.S. Gulf	Japan	Grain	May 25/Jun 25	50,000	46.85 op 47.85
U.S. Gulf	Japan	Heavy grain	Apr 15/May 15	50,000	47.00
U.S. Gulf	Sudan	Wheat	Sep 1/10	49,000	79.12*
U.S. Gulf	Djibouti	Wheat	Jul 6/16	5,880	85.70*
PNW	Japan	Wheat	Sep 1	52,170	56.55*
PNW	Japan	Wheat	Jul 25/ Aug 5	32,590	64.00
PNW	Japan	Wheat	Jul 16/31	30,250	64.35
PNW	Japan	Wheat	Jun 5/15	50,600	49.30
PNW	Yemen	Wheat	Jun 10/20	22,230	132.25*
PNW	Taiwan	Heavy grain	Aug 20/30	35,000	64.20*
PNW	Taiwan	Wheat	Aug 1/10	55,000	54.95
PNW	Taiwan	Wheat	May 29/Jun 12	45,665	48.00

\*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 2019, containers were used to transport 9 percent of total U.S. waterborne grain exports. Approximately 60 percent of U.S. waterborne grain exports in 2019 went to Asia, of which 14 percent were moved in containers. Approximately 94 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, 1201900, 1201900, 120190, 1201900, 120190, 120190, 1201900, 12

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

#### Grain Transportation Report

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Preferred citation: U.S. Department of Agriculture, Agricultural Marketing Service. *Grain Transportation Report.* July 29, 2021. Web: <u>http://dx.doi.org/10.9752/TS056.07-29-2021</u>

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