



# **Grain Transportation Report**

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

Contact Us

March 4, 2021

### WEEKLY HIGHLIGHTS

### **Contents**

Article/ Calendar

Grain Transportation Indicators

Rail

Barge

Truck

Exports

Ocean

Brazil

Mexico

Grain Truck/Ocean Rate Advisory

**Datasets** 

**Specialists** 

Subscription Information

The next release is March 11, 2021

### Grain Inspections Increase After 2-Week Decline

For the week ending February 25, **total inspections of grain** (corn, wheat, and soybeans) for export from all major U.S. export regions totaled 2.8 million metric tons (mmt). Total grain inspections were up 14 percent from the previous week, up 28 percent from last year, and up 16 percent from the 3-year average. The increase from the previous week was driven mainly by a 29-percent jump in corn inspections and a 178-percent rebound in corn shipments to Asia. Also, from the previous week, soybean inspections increased 4 percent, and wheat inspections decreased 16 percent. In the Pacific Northwest, total grain inspections jumped 75 percent from the previous week, but in the Mississippi Gulf, they decreased 6 percent. In the last 4 weeks, inspections were 41 percent above the same period last year and 23 percent above the prior-3-year average.

### USDA Cooperative Research Examines Brazil's Evolving Transportation for Corn and Soybeans

USDA's Agricultural Marketing Service has published a new report and summary for research conducted in cooperation with the University of Sao Paolo. The study examines how Brazil's modal shares of truck, barge, and rail for transporting corn and soybeans have evolved over the last decade. Despite significant upgrades to Brazilian infrastructure, which spurred domestic production of corn and soybeans, several challenges persist. One issue is the long distances between major production regions and terminals for barge and rail. Another challenge is the country's limited rail and inland waterway infrastructure capacity. In 2019, trucks shipped most corn and soybeans from the farm to major destinations, accounting for nearly 69 percent of total movements of corn and 67 percent of total movements of soybeans.

### FMCSA Extends Emergency Hours-of-Service Waiver for Feed

On February 17, the Federal Motor Carrier Safety Administration (FMCSA) extended the waiver on hours-of-service (HOS) requirements for trucks transporting feed. The waiver is based on the national emergency declared for COVID-19, and the extension is valid through May 31, 2021. The agency also emphasized that the declaration does not empower motor carriers to make truckers haul a load when they say they are tired.

### **Snapshots by Sector**

### Export Sales

For the week ending February 18, **unshipped balances** of wheat, corn, and soybeans totaled 49.5 mmt. This was 4 percent lower than last week, but still represented a significant increase in outstanding sales from the same time last year. Net **corn export sales** were 0.453 mmt, down 55 percent from the past week. Net **soybean export sales** were 0.168 mmt, down 63 percent from the previous week. Net **wheat export sales** were 0.168 mmt, down 58 percent from the previous week.

#### Rai

U.S. Class I railroads originated 18,860 grain carloads during the week ending February 20. This was a 17-percent decrease from the previous week, 1 percent less than last year, and 9 percent lower than the 3-year average.

Average March shuttle **secondary railcar** bids/offers (per car) were \$0 for the week ending February 25. This was \$223 less than last week and \$160 more than this week last year. There were no non-shuttle bids/offers this week.

### Barge

For the week ending February 27, barge grain movements totaled 439,100 tons. This was 10 percent lower than the previous week and 11 percent higher than the same period last year.

For the week ending February 27, 267 grain barges **moved down river**—16 barges fewer than the previous week. There were 779 grain barges **unloaded in New Orleans**, 16 percent higher than the previous week.

### Ocean

For the week ending February 25, 41 occangoing grain vessels were loaded in the Gulf—32 percent more than the same period last year. Within the next 10 days (starting February 26, 2021), 66 vessels were expected to be loaded—69 percent more than the same period last year.

As of February 25, the rate for shipping a metric ton of grain from the U.S. Gulf to Japan was \$57.50. This was 6 percent more than the previous week. The rate from PNW to Japan was \$32.25 per metric ton, unchanged from the previous week.

#### Fuel

For the week ending March 1, the U.S. average **diesel fuel price** increased 9.9 cents from the previous week to \$3.072 per gallon, 22.1 cents above the same week last year.

### Feature Article/Calendar

### U.S. and Brazilian Soybean Landed Costs Increased in the Fourth Quarter

As the world's leading producers and exporters of soybeans, the United States and Brazil compete for key foreign soybean markets. According to USDA's January *World Agriculture Supply and Demand Estimates (WASDE)*, Brazil exported 92.13 million metric tons (mmt) in marketing year (MY) 2019/20, versus 45.78 mmt exported by the United States. For MY 2020/21, *WASDE* projects Brazil will export 85.0 mmt of soybeans and the United States, 60.69 mmt.

China and Europe (European Union-27 + United Kingdom) are the world's two leading soybean importers. Given the value of these markets, low transportation and landed costs of soybeans to China and Europe are essential to the competitiveness of both the United States and Brazil. This article compares quarterly and yearly changes in the costs of moving soybeans from the United States and Brazil to Shanghai, China (table 1) and to Hamburg, Germany (table 2).

Table 1-Quarterly costs of transporting soybeans from United States and Brazil to Shanghai, China

Table 1-Qu	arterly cos	is of trails	porting se	bybeans ii	om omteu	States and	DIAZII to S	mangnai	, Сппа	
	2019	2020	2020	Percent	change	2019	2020	2020	Percen	t change
	4 <sup>th</sup> qtr.	3 <sup>rd</sup> qtr.	4 <sup>th</sup> qtr.	Yr. to yr.	Qtr. to qtr.	4 <sup>th</sup> qtr.	3 <sup>rd</sup> qtr.	4 <sup>th</sup> qtr.	Yr. to yr.	Qtr. to qtr.
						s (via U.S. Gu				
			nneapolis	, MN				nport, IA		
		\$/mt					\$/mt			
Truck	11.46	12.38	11.38	-0.70	-8.08	11.46	12.38	11.38	-0.70	-8.08
Rail <sup>1</sup>										
Barge	26.54	29.89	41.35	55.80	38.34	22.93	21.58	32.31	40.91	49.72
Ocean <sup>2</sup>	47.05	42.14	40.79	-13.30	-3.20	47.05	42.14	40.79	-13.30	-3.20
Total transportation	85.05	84.41	93.52	9.96	10.79	81.44	76.10	84.48	3.73	11.01
Farm value <sup>3</sup>	309.50	331.43	364.86	17.89	10.09	314.65	322.85	377.11	19.85	16.81
Landed cost <sup>4</sup>	394.55	415.84	458.38	16.18	10.23	396.09	398.95	461.59	16.54	15.70
Transport % of landed cost	21.56	20.30	20.40			20.56	19.08	18.30		
					Via	PNW				
		F	argo, ND			S	ioux Falls,	SD		
Truck	11.46	12.38	11.38	-0.70	-8.08	11.46	12.38	11.38	-0.70	-8.08
Rail <sup>1</sup>	57.10	57.10	57.10	0.00	0.00	58.09	58.09	58.09	0.00	0.00
Ocean	25.71	22.37	22.65	-11.90	1.25	25.71	22.37	22.65	-11.90	1.25
Total transportation	94.27	91.85	91.13	-3.33	-0.78	95.26	92.84	92.12	-3.30	-0.78
Farm value	293.09	305.83	352.13	20.14	15.14	306.69	310.36	356.29	16.17	14.80
Landed cost	387.36	397.68	443.26	14.43	11.46	401.95	403.20	448.41	11.56	11.21
Transport % of landed cost	24.34	23.10	20.56			23.70	23.03	20.54		
			5	6	В	razil		5	- 6	
		Norti \$/mt	n MT <sup>5</sup> - Sai	ntos			South	GO <sup>5</sup> - Par	anagua	
Truck	72.86	60.52	54.20	-25.61	-10.44	42.16	35.57	30.89	-26.73	-13.16
Ocean <sup>7</sup>	38.17	31.33	31.67	-17.03	1.09	39.50	33.08	33.42	-15.39	1.03
Total transportation	111.03	91.85	85.87	-22.66	-6.51	81.66	68.65	64.31	-21.25	-6.32
Farm Value <sup>8</sup>	307.47	367.89	490.89	59.65	33.43	301.77	333.45	442.13	46.51	32.59
Landed Cost	418.50	459.74	576.76	37.82	25.45	383.43	402.10	506.44	32.08	25.95
Transport % of landed cost	26.53	19.98	14.89	27.02	20.10	21.30	17.07	12.70	22.00	20.90

<sup>&</sup>lt;sup>1</sup>Rail rates include fuel surcharges, but do not include the cost of purchasing empty rail cars in the secondary rail markets, which could exceed the rail tariff rate plus fuel surcharge shown in the table.

Note: qtr. = quarter; yr. = year; mt = metric ton; total may not add exactly because of rounding.

Source: Compiled by the USDA, Agricultural Marketing Service.

**Quarter-to-quarter transportation costs.** From third quarter to fourth quarter 2020 (quarter to quarter), costs increased for exporting U.S. soybeans through the U.S. Gulf to China (table 1) and Germany (table 2). This increase was due to rising

<sup>&</sup>lt;sup>2</sup>Source for the U.S. Ocean freight rates: O'Neil Commodity Consulting.

<sup>&</sup>lt;sup>3</sup>Source for the U.S farm values: USDA, National Agricultural Statistivs Service.

<sup>&</sup>lt;sup>4</sup>Landed cost is transportation cost plus farm value.

<sup>&</sup>lt;sup>5</sup>Producing regions: MT= Mato Grosso, GO = Goiás.

<sup>&</sup>lt;sup>6</sup>Export ports

<sup>&</sup>lt;sup>7</sup>Source for Brazil's ocean freight rates: University of São Paulo, Brazil and USDA, Agricultural Marketing Service.

<sup>&</sup>lt;sup>8</sup>Source for Brazil's farm values: Companhia Nacional de Abastecimento.

barge rates in response to strong demand and an unstable supply of barges in the fourth quarter (*Grain Transportation Report* (*GTR*), January 28, 2021). In contrast to rising U.S. Gulf costs, costs for exporting U.S. soybeans through the Pacific Northwest (PNW) to China (table 2) decreased. From Brazil to China (table 1) and Germany (table 2), shipping costs also decreased. In both Brazil and the United States, transportation costs fell in response to falling truck rates. Also, in both countries, drops in truck rates more than offset increases in ocean rates.

**Year-to-year transportation costs.** From fourth quarter 2019 to fourth quarter 2020 (year to year), transportation costs for both the United States and Brazil showed essentially the same trends as the quarter-to-quarter changes. That is, costs increased for exports through the Gulf and decreased for exports through PNW and from Brazil.

Table 2-Quarterly costs of transporting soybeans from United States and Brazil to Hamburg, Germany

	2019	2020	2020		cent change	2019	2020	2020		ent change
	4 <sup>th</sup> qtr.	3 <sup>rd</sup> qtr.					3 <sup>rd</sup> qtr.			_
	4 qtr.	o qtr.	4 qtr.		Qtr. to qtr.	(via U.S. Gulf		4 qtr.	Yr. to yr.	Qtr. to qtr.
		M:	1:- MAN		nited States	(via U.S. Guii		-4 TA		
		Minneapo	ons, win				Davenpor	rt, IA		
		\$/mt					\$/mt			
Truck	11.46	12.38	11.38	-0.70	-8.08	11.46	12.38	11.38	-0.70	-8.08
Rail <sup>1</sup>										
Barge	26.54	29.89	41.35	55.80	38.34	22.93	21.58	32.31	40.91	49.72
Ocean <sup>2</sup>	19.02	19.41	19.02	0.00	-2.01	19.02	19.41	19.02	0.00	-2.01
Total transportation	57.02	61.68	71.75	25.83	16.33	53.41	53.37	62.71	17.41	17.50
Farm value <sup>3</sup>	309.50	331.43	364.86	17.89	10.09	314.65	322.85	377.11	19.85	16.81
Landed cost <sup>4</sup>	366.52	393.11	436.61	19.12	11.07	368.06	376.22	439.82	19.50	16.91
Transport % of landed cost	15.56	15.69	16.43			14.51	14.19	14.26		
					Bı	azil				
		North	MT <sup>5</sup> - Sa	ntos <sup>6</sup>			South G	O <sup>5</sup> - Paran	agua <sup>6</sup>	
		\$/mt					\$/mt			
Truck	72.86	60.52	54.20	-25.61	-10.44	42.16	35.57	30.89	-26.73	-13.16
Ocean <sup>7</sup>	31.00	24.00	25.25	-18.55	5.21	30.75	25.00	25.35	-17.56	1.40
Total transportation	103.86	84.52	79.45	-23.50	-6.00	72.91	60.57	56.24	-22.86	-7.15
Farm value <sup>8</sup>	307.47	367.89	490.89	59.65	33.43	301.77	333.43	442.13	46.51	32.60
Landed cost	411.33	452.41	570.34	38.66	26.07	374.68	394.00	498.37	33.01	26.49
Transport % of landed cost	25.25	18.68	13.93			19.46	15.37	11.28		

<sup>&</sup>lt;sup>1</sup>Rail rates include fuel surcharges, but do not include the cost of purchasing empty rail cars in the secondary rail markets, which could exceed the rail tariff rate plus fuel surcharge shown in the table.

Note: qtr. = quarter; yr. = year; mt = metric ton; total may not add exactly because of rounding.

Source: Compiled by the USDA, Agricultural Marketing Service.

**Quarter-to-quarter landed costs.** Landed costs increased in both Brazil and the United States from quarter to quarter. For shipments through the U.S. Gulf, landed cost increases reflected both rising transportation costs and rising farm values. For exports through PNW and from Brazil, landed costs rose mainly because of increased farm values. In fourth quarter 2020, the share of U.S. landed costs comprising transportation was 18-21 percent for shipments to China (table 1) and 14-16 percent for shipments to Germany (table 2). The share of Brazil's total landed costs comprising transportation was 13-15 percent for shipments to China (table 1) and 11-14 percent for shipments to Germany (table 2).

**Year-to-year landed costs. Year to year**, landed costs rose in both countries, though the reasons somewhat varied by region. For exports through PNW and from Brazil, the increase mainly reflected higher soybean farm values. However, for shipments out of the U.S. Gulf, landed costs rose because of both higher transportation costs and higher farm values.

**U.S. Exports to China.** According to USDA's Federal Grain Inspection Service, China imported 24.38 mmt of U.S. soybeans in fourth quarter 2020 versus 6.30 mmt in the previous quarter and 8.17 mmt in fourth quarter 2019. Lower U.S. transportation and landed costs to China could boost soybean exports to China. For more on soybean transportation, see *Brazil Soybean Transportation.* surajudeen.olowlayemo@usda.gov

<sup>&</sup>lt;sup>2</sup>Source for the U.S. ocean rates: O'Neil Commodity Consulting.

<sup>&</sup>lt;sup>3</sup>Source for the U.S. farm values: USDA/National Agrocultural Statistics Service

<sup>&</sup>lt;sup>4</sup>Landed cost is total cost plus farm value.

<sup>&</sup>lt;sup>5</sup>Producing regions: MT= Mato Grosso, GO = Goiás.

<sup>&</sup>lt;sup>6</sup>Export ports.

<sup>&</sup>lt;sup>7</sup>Source for Brazil's ocean rates:University of São Paulo, Brazil and USDA/Agricultural Marketing Service.

<sup>&</sup>lt;sup>8</sup>Source for Brazil's farm values: Companhia Nacional de Abastecimento.

## **Grain Transportation Indicators**

Table 1 **Grain transport cost indicators**<sup>1</sup>

Grain transport co	ot marcators					
_	Truck	Rail		Barge	Oc	cean
For the week ending		Unit train	Shuttle		Gulf	Pacific
03/03/21	206	301	222	212	257	229
02/24/21	200	324	230	241	242	229

<sup>&</sup>lt;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

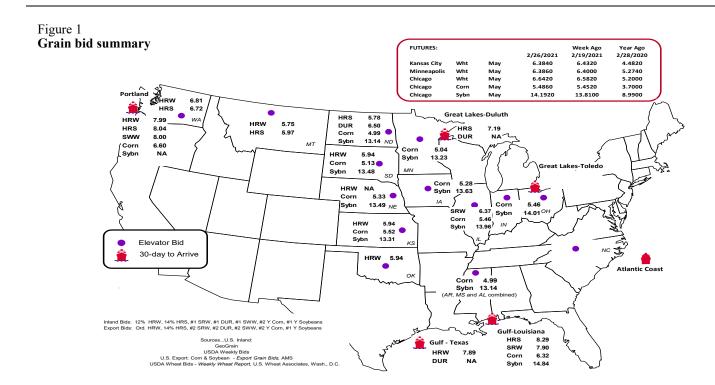
Market Update: U.S. origins to export position price spreads (\$/bushel)

Commodity	Origin-destination	2/26/2021	2/19/2021
Corn	IL-Gulf	-0.86	-0.84
Corn	NE-Gulf	-0.99	-0.97
Soybean	IA-Gulf	-1.21	-1.21
HRW	KS-Gulf	-1.95	-1.96
HRS	ND-Portland	-2.26	-2.29

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.



4

## Rail Transportation

Table 3

Rail deliveries to port (carloads)<sup>1</sup>

real deliveries to port (carroa							
	Mississippi		Pacific	Atlantic &			Cross-border
For the week ending	Gulf	Texas Gulf	Northwest	East Gulf	Total	Week ending	Mexico <sup>3</sup>
2/24/2021 <sup>p</sup>	1,497	1,412	7,176	284	10,369	2/20/2021	1,612
2/17/2021 <sup>r</sup>	1,171	960	3,222	731	6,084	2/13/2021	2,522
2021 YTD <sup>r</sup>	15,147	14,347	54,158	6,566	90,218	2021 YTD	17,557
2020 YTD <sup>r</sup>	3,748	4,805	33,040	1,445	43,038	2020 YTD	18,102
2021 YTD as % of 2020 YTD	404	299	164	454	210	% change YTD	97
Last 4 weeks as % of 2020 <sup>2</sup>	534	274	130	340	172	Last 4wks. % 2020	88
Last 4 weeks as % of 4-year avg. <sup>2</sup>	306	102	113	175	128	Last 4wks. % 4 yr.	99
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

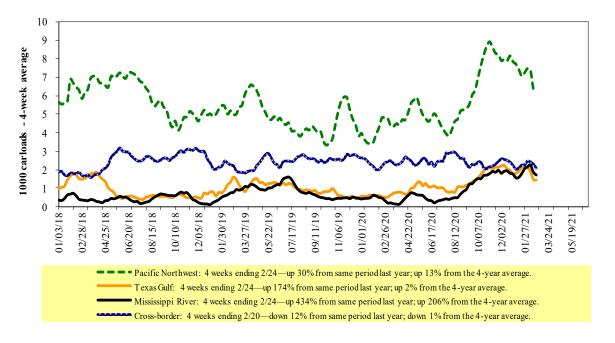
<sup>&</sup>lt;sup>1</sup>Data is incomplete as it is voluntarily provided.

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

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.

Figure 2 Rail deliveries to port



Source: USDA, Agricultural Marketing Service.

<sup>&</sup>lt;sup>2</sup> Compared with same 4-weeks in 2020 and prior 4-year average.

<sup>&</sup>lt;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.

Table 4

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

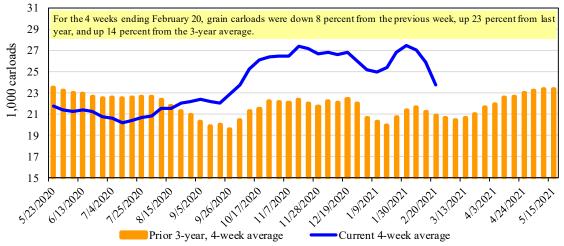
For the week ending:	Ea	ıst	,	West		U.S. total	Cai	nada
2/20/2021	CSXT	NS	BNSF	KCS	UP	U.S. total	CN	CP
This week	2,202	1,971	9,581	735	4,371	18,860	3,271	3,706
This week last year	2,066	2,357	9,448	976	4,109	18,956	3,041	3,932
2021 YTD	14,969	19,322	90,925	6,766	45,692	177,674	34,276	32,421
2020 YTD	14,040	17,859	81,026	8,420	34,954	156,299	26,147	28,943
2021 YTD as % of 2020 YTD	107	108	112	80	131	114	131	112
Last 4 weeks as % of 2020*	113	123	123	82	138	123	146	113
Last 4 weeks as % of 3-yr. avg.**	107	109	114	81	126	114	131	110
Total 2020	91,659	130,933	613,630	57,782	296,701	1,190,705	239,124	261,778

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

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

Source: Association of American Railroads.





Source: Association of American Railroads.

Table 5
Railcar auction offerings<sup>1</sup> (\$/car)<sup>2</sup>

Fo	or the week ending:		<b>Delivery period</b>							
	2/25/2021	Mar-21	Mar-20	Apr-21	Apr-20	May-21	May-20	Jun-21	Jun-20	
BNSF <sup>3</sup>	COT grain units	no bids	no bid	0	0	no bids	no bid	no bids	no bid	
	COT grain single-car	25	0	no bids	0	no bids	0	no bids	0	
UP <sup>4</sup>	GCAS/Region 1	no offer	no bid	no offer	no offer	no offer	no offer	n/a	n/a	
	GCAS/Region 2	no offer	no bid	no offer	no bid	no offer	no bid	n/a	n/a	

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

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.

<sup>\*\*</sup>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.

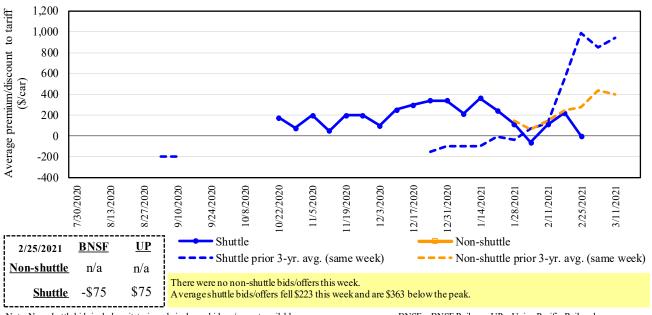
<sup>&</sup>lt;sup>2</sup>Average premium/discount to tariff, last auction. n/a = not available.

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

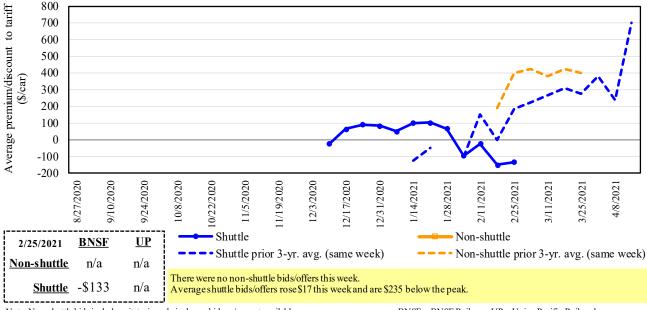
The **secondary rail market** information reflects trade values for service that was originally purchased from the railroad carrier as some form of guaranteed freight. The **auction and secondary rail** values are indicators of rail service quality and demand/ supply.

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



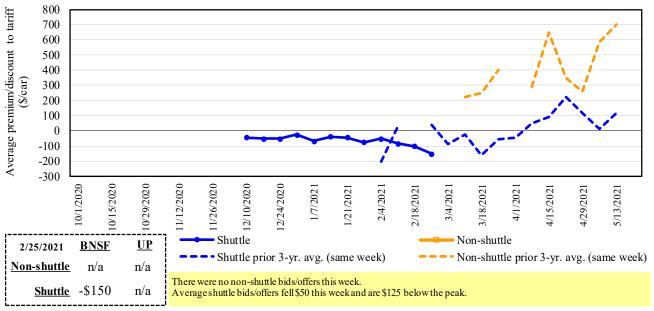
Note: Non-shuttle bids include unit-train and single-car bids. n/a = not available; avg. = average; yr. = y ear; BNSF = BNSF Railway; UP = Union Pacific Railroad. Source: USDA, Agricultural Marketing Service.

Figure 5
Bids/offers for railcars to be delivered in April 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 May 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.

Table 6

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

	For the week ending:			De	livery period		
	2/25/2021	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21
	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
-shuttle	Change from same week 2020	n/a	n/a	n/a	n/a	n/a	n/a
Non-s	UP-Pool	n/a	n/a	n/a	n/a	n/a	n/a
_	Change from last week	n/a	n/a	n/a	n/a	n/a	n/a
	Change from same week 2020	n/a	n/a	n/a	n/a	n/a	n/a
	BNSF-GF	(75)	(133)	(150)	(200)	(150)	(150)
	Change from last week	(308)	17	(50)	0	0	0
Shuttle	Change from same week 2020	96	n/a	n/a	n/a	n/a	n/a
Shu	UP-Pool	75	n/a	n/a	n/a	(100)	(150)
	Change from last week	(138)	n/a	n/a	n/a	0	(50)
	Change from same week 2020	225	n/a	n/a	n/a	n/a	n/a

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

 $Note: Bids\ listed\ are\ market\ indicators\ only\ and\ are\ not\ guaranteed\ prices.\ n/a=not\ available; GF=guaranteed\ freight; Pool=guaranteed\ pool; and are not\ guaranteed\ prices.\ n/a=not\ available; GF=guaranteed\ freight; Pool=guaranteed\ pool; and are not\ guaranteed\ prices.\ n/a=not\ available; GF=guaranteed\ freight; Pool=guaranteed\ pool; and guaranteed\ prices.\ n/a=not\ available; GF=guaranteed\ freight; Pool=guaranteed\ pool; and guaranteed\ prices.\ n/a=not\ available; GF=guaranteed\ prices.$ 

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
	0.:-:-3	D	Tariff	surcharge_	Tariff plus surch		change
March 2021	Origin region <sup>3</sup>	Destination region <sup>3</sup>	rate/car	per car	metric ton	bus hel <sup>2</sup>	Y/Y <sup>4</sup>
Unit train	Wishits KG	St. Lawin MO	¢2.002	0.61	640.16	¢1.00	1
Wheat	Wichita, KS	St. Louis, MO	\$3,983	\$61	\$40.16	\$1.09	-1
	Grand Forks, ND	Duluth-Superior, MN	\$4,208	\$0	\$41.79	\$1.14	-3
	Wichita, KS	Los Angeles, CA	\$7,115	\$0	\$70.66	\$1.92	-2
	Wichita, KS	New Orleans, LA	\$4,525	\$107	\$46.00	\$1.25	-1
	Sioux Falls, SD	Galveston-Houston, TX	\$6,851	\$0	\$68.03	\$1.85	-2
	Colby, KS	Galveston-Houston, TX	\$4,801	\$117	\$48.84	\$1.33	-1
	Amarillo, TX	Los Angeles, CA	\$5,121	\$163	\$52.47	\$1.43	-2
Corn	Champaign-Urbana, IL	New Orleans, LA	\$3,900	\$121	\$39.93	\$1.01	-2
	Toledo, OH	Raleigh, NC	\$7,833	\$0	\$77.79	\$1.98	15
	Des Moines, IA	Davenport, IA	\$2,455	\$26	\$24.63	\$0.63	1
	Indianapolis, IN	Atlanta, GA	\$5,979	\$0	\$59.37	\$1.51	3
	Indianapolis, IN	Knoxville, TN	\$5,040	\$0	\$50.05	\$1.27	3
	Des Moines, IA	Little Rock, AR	\$3,900	\$75	\$39.47	\$1.00	1
	Des Moines, IA	Los Angeles, CA	\$5,780	\$219	\$59.57	\$1.51	0
Soybeans	Minneapolis, MN	New Orleans, LA	\$5,246	\$97	\$53.06	\$1.44	40
	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	\$121	\$47.33	\$1.29	-1
Shuttle train							
Wheat	Great Falls, MT	Portland, OR	\$4,018	\$0	\$39.90	\$1.09	-3
	Wichita, KS	Galveston-Houston, TX	\$4,236	\$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	\$192	\$61.61	\$1.68	-2
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	\$121	\$39.13	\$0.99	-2
	Lincoln, NE	Galveston-Houston, TX	\$3,880	\$0	\$38.53	\$0.98	0
	Des Moines, IA	Amarillo, TX	\$4,320	\$94	\$43.84	\$1.11	1
	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	\$139	\$49.79	\$1.36	-2
	Toledo, OH	Huntsville, AL	\$4,945	\$0	\$49.11	\$1.34	3
	Grand Island, NE	Portland, OR	\$5,260	\$196	\$54.19	\$1.47	-2

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

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

<sup>75-120</sup> cars that meet railroad efficiency requirements.

<sup>&</sup>lt;sup>2</sup>Approximate load per car = 111 short tons (100.7 metric tons): com 56 pounds per bushel (lbs/bu), wheat and soybeans 60 lbs/bu.

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

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

Table 8

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

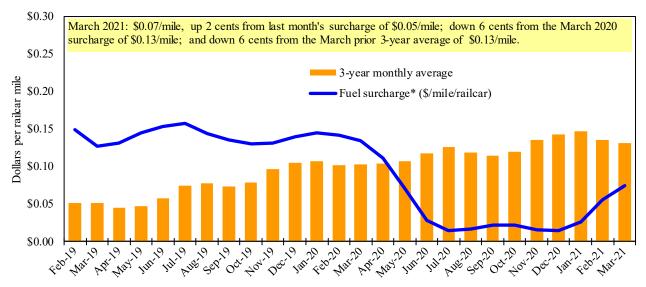
Date	: March 20	)21		Fuel	Tari	ff rate plus	Percent
	Origin		Tariff rate	surcharge		harge per:	change <sup>4</sup>
Commodity	state	<b>Destination region</b>	per car <sup>1</sup>	per car <sup>2</sup>	metric ton <sup>3</sup>	bus hel <sup>3</sup>	Y/Y
Wheat	MT	Chihuahua, CI	\$7,384	\$0	\$75.45	\$2.05	-2
	OK	Cuautitlan, EM	\$6,713	\$84	\$69.44	\$1.89	-2
	KS	Guadalajara, JA	\$7,471	\$611	\$82.58	\$2.25	0
	TX	Salinas Victoria, NL	\$4,347	\$51	\$44.93	\$1.22	0
Corn	IA	Guadalajara, JA	\$8,902	\$496	\$96.02	\$2.44	0
	SD	Celaya, GJ	\$8,140	\$0	\$83.17	\$2.11	0
	NE	Queretaro, QA	\$8,300	\$172	\$86.56	\$2.20	-1
	SD	Salinas Victoria, NL	\$6,905	\$0	\$70.55	\$1.79	0
	MO	Tlalnepantla, EM	\$7,665	\$167	\$80.03	\$2.03	-1
	SD	Torreon, CU	\$7,690	\$0	\$78.57	\$1.99	0
Soybeans	MO	Bojay (Tula), HG	\$8,547	\$467	\$92.10	\$2.50	0
	NE	Guadalajara, JA	\$9,157	\$481	\$98.48	\$2.68	0
	IA	El Castillo, JA	\$9,410	\$0	\$96.15	\$2.61	-1
	KS	Torreon, CU	\$8,014	\$321	\$85.16	\$2.32	0
Sorghum	NE	Celaya, GJ	\$7,772	\$430	\$83.80	\$2.13	0
	KS	Queretaro, QA	\$8,108	\$104	\$83.91	\$2.13	-1
	NE	Salinas Victoria, NL	\$6,713	\$84	\$69.44	\$1.76	-1
	NE	Torreon, CU	\$7,092	\$286	\$75.39	\$1.91	-1

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

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

Figure 7

Railroad fuel surcharges, North American weighted average 1



 $<sup>^{\</sup>rm I}$  Weighted by each Class I railroad's proportion of grain traffic for the prior year.

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

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

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

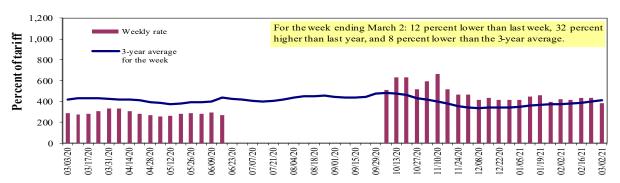
<sup>&</sup>lt;sup>4</sup>Percentage change calculated using tariff rate plus fuel surchage; Y/Y = year over year.

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

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

## **Barge Transportation**

Figure 8
Illinois River barge freight rate 1,2,3



 $<sup>^{1}</sup>$ Rate = percent of 1976 tariff benchmark index (1976 = 100 percent);  $^{2}$ 4-week moving average of the 3-year average.

Source: USDA, Agricultural Marketing Service.

Table 9
Weekly barge freight rates: Southbound only

	, <u>,</u>	Twin Cities	Mid- Mississippi	Lower Illinois River	St. Louis	Cincinnati	Lower Ohio	Cairo- Memphis
Rate <sup>1</sup>	3/2/2021	-	-	381	265	298	298	240
	2/23/2021	-	-	434	271	311	311	248
\$/ton	3/2/2021	-	-	17.68	10.57	13.98	12.04	7.54
	2/23/2021	-	-	20.14	10.81	14.59	12.56	7.79
Curren	t week % chang	e from the sa	me week:					
	Last year	-	-	32	43	50	50	34
	3-year avg. <sup>2</sup>	-	-	-8	-15	-13	-14	-14
Rate <sup>1</sup>	April	490	408	374	264	285	285	236
	June	474	383	365	259	270	270	231

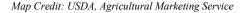
<sup>&</sup>lt;sup>1</sup>Rate = percent of 1976 tariff benchmark index (1976 = 100 percent); <sup>2</sup>4-week moving average; ton = 2,000 pounds; "-" not available due to closure. Source: USDA, Agricultural Marketing Service.

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.

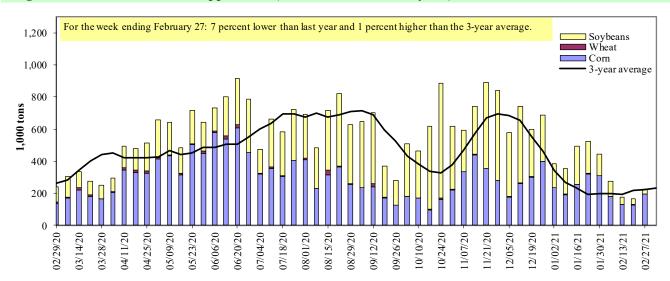




 $<sup>^{3}</sup>$ No rates data from 06/23/20 to 9/29/20 due to the lock closure for rehabilitation and replacement of lock machinery.

Figure 10

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



<sup>&</sup>lt;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)** 

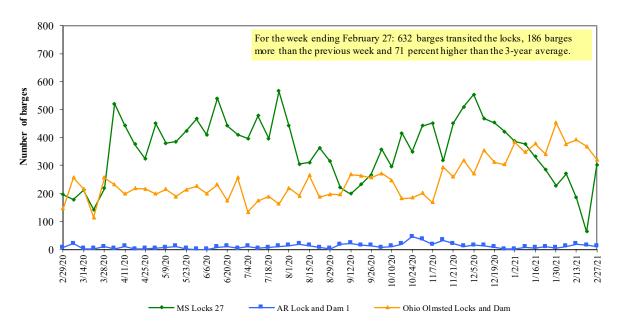
For the week ending 02/27/2021	Corn	Wheat	Soybe ans	Other	Total
Mississippi River					
Rock Island, IL (L15)	0	0	0	0	0
Winfield, MO (L25)	0	0	0	0	0
Alton, IL (L26)	228	0	36	0	264
Granite City, IL (L27)	195	0	29	0	224
Illinois River (La Grange)	175	0	29	0	204
Ohio River (Olmsted)	145	0	52	0	197
Arkansas River (L1)	0	7	11	0	18
Weekly total - 2021	340	7	92	0	439
Weekly total - 2020	219	50	128	0	397
2021 YTD <sup>1</sup>	3,677	110	2,232	85	6,105
2020 YTD <sup>1</sup>	1,854	219	1,963	6	4,041
2021 as % of 2020 YTD	198	51	114	1,522	151
Last 4 weeks as % of 2020 <sup>2</sup>	168	37	100	408	168
Total 2020	18,942	1,765	19,205	237	40,149

<sup>&</sup>lt;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.

Note: L (as in "L15") refers to a lock, locks, or locks and dam facility. Olmsted = Olmsted Locks and Dam. La Grange = La Grange Lock and Dam. Source: U.S. Army Corps of Engineers.

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

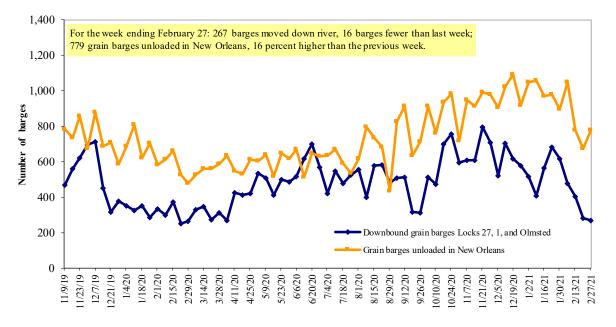
Figure 11
Upbound empty barges transiting Mississippi River Locks 27, Arkansas River Lock and Dam 1, and Ohio River Olmsted Locks and Dam



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.

## **Truck Transportation**

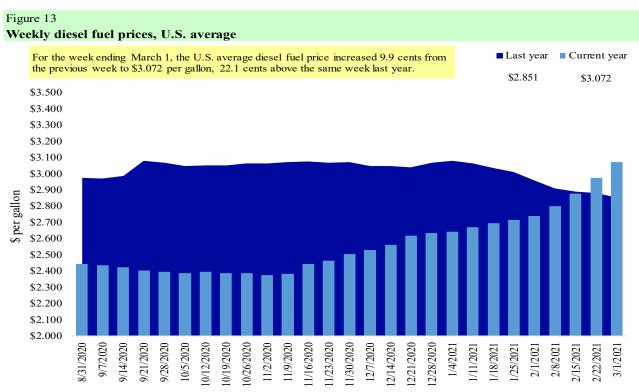
The weekly diesel price provides a proxy for trends in U.S. truck rates as diesel fuel is a significant expense for truck grain movements.

Table 11 Retail on-highway diesel prices, week ending 3/1/2021 (U.S. \$/gallon)

	<b>v</b> 1 / c	<del>,</del> (	Change	e from
Region	Location	Price	Week ago	Year ago
I	East Coast	3.083	0.082	0.185
	New England	3.014	0.052	-0.009
	Central Atlantic	3.200	0.068	0.119
	Lower Atlantic	3.018	0.097	0.270
II	Midwest	3.041	0.096	0.316
III	Gulf Coast	2.837	0.115	0.210
IV	Rocky Mountain	2.983	0.127	0.157
V	West Coast	3.541	0.109	0.117
	West Coast less California	3.174	0.111	0.120
	California	3.846	0.107	0.118
Total	United States	3.072	0.099	0.221

<sup>&</sup>lt;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)

- 1.5. c.									
	Whe at						Corn	Soybe ans	Total
For the week ending	HRW	SRW	HRS	SWW	DUR	All wheat			
Export balances <sup>1</sup>									
2/18/2021	1,384	448	2,021	2,354	144	6,351	34,848	8,293	49,492
This week year ago	1,860	364	1,537	1,110	148	5,019	12,377	4,783	22,179
Cumulative exports-marketing year <sup>2</sup>									
2020/21 YTD	6,535	1,277	5,003	3,887	518	17,220	24,160	51,660	93,040
2019/20 YTD	6,587	1,874	5,051	3,426	680	17,618	13,496	28,920	60,033
YTD 2020/21 as % of 2019/20	99	68	99	113	76	98	179	179	155
Last 4 wks. as % of same period 2019/20*	75	125	133	217	109	129	288	200	233
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>&</sup>lt;sup>1</sup> Current unshipped (outstanding) export sales to date.

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

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

Source: USDA, Foreign Agricultural Service.

Table 13 **Top 5 importers**<sup>1</sup> **of U.S. corn** 

For the week ending 2/18/2021	Total commi	tments <sup>2</sup>	% change	Exports <sup>3</sup>
	2020/21	2019/20	current MY	3-yr. avg.
	current MY	last MY	from last MY	2017-19
		- 1,000 mt -		
Mexico	11,853	10,463	13	14,869
Japan	8,289	5,127	62	11,221
Columbia	2,620	2,511	4	4,830
Korea	1,525	537	184	4,011
China	17,676	61	28,829	909
Top 5 importers	41,963	18,700	124	35,840
Total U.S. corn export sales	59,008	25,873	128	49,983
% of projected exports	89%	57%		
Change from prior week <sup>2</sup>	453	865		
Top 5 importers' share of U.S. corn				
export sales	71%	72%		72%
USDA forecast February 2021	66,158	45,242	46	·
Corn use for ethanol USDA forecast,				
February 2021	125,730	123,241	2	

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

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

Source: USDA, Foreign Agricultural Service.

<sup>&</sup>lt;sup>2</sup> Shipped export sales to date; 2020/21 marketing year now in effect for wheat, corn, and soybeans.

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

Table 14

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

For the week ending 2/18/2021	Total	commitments <sup>2</sup>	% change	Exports <sup>3</sup>
	2020/21	2019/20	current MY	3-yr. avg.
	current MY	last MY	from last MY	2017-19
		1,000 mt -		- 1,000 mt -
China	35,824	12,222	193	19,106
Mexico	4,214	3,320	27	4,591
Egypt	2,270	1,988	14	2,980
Indonesia	1,597	1,190	34	2,360
Japan	1,598	1,706	(6)	2,288
Top 5 importers	45,503	20,426	123	31,324
Total U.S. soybean export sales	59,953	33,702	78	49,352
% of projected exports	98%	74%		
change from prior week <sup>2</sup>	168	339		
Top 5 importers' share of U.S.				
soybean export sales	76%	61%		63%
USDA forecast, February 2021	61,308	45,831	134	

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

Source: USDA, Foreign Agricultural Service.

Table 15

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

For the week ending 2/18/2021	Total con 2020/21	nmitments <sup>2</sup> 2019/20	% change current MY	Exports <sup>3</sup> 3-yr. avg.
	current MY	last MY	from last MY	2017-19
		1,000 mt -		- 1,000 mt -
Mexico	3,093	3,193	(3)	3,213
Philippines	2,921	2,912	0	2,888
Japan	2,249	2,361	(5)	2,655
Nigeria	1,292	1,324	(2)	1,433
Korea	1,597	1,189	34	1,372
Indonesia	989	894	11	1,195
Taiwan	1,031	1,061	(3)	1,175
Thailand	700	850	(18)	727
Italy	570	768	(26)	622
Colombia	350	638	(45)	618
Top 10 importers	14,793	15,190	(3)	15,897
Total U.S. wheat export sales	23,572	22,637	4	23,821
% of projected exports	88%	86%		
change from prior week <sup>2</sup>	168	382		
Top 10 importers' share of U.S.				
wheat export sales	63%	67%		67%
USDA forecast, February 2021	26,839	26,294	2	

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

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

Source: USDA, Foreign Agricultural Service.

<sup>&</sup>lt;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>&</sup>lt;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.

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

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

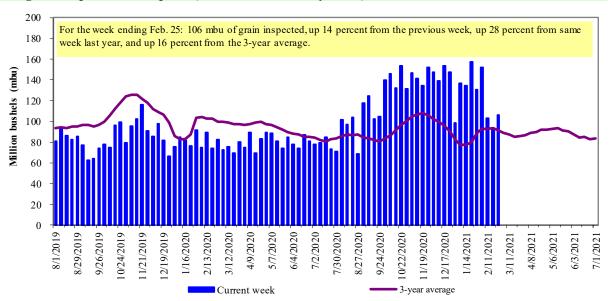
	For the week ending	Previous	Current week			2021 YTD as	Last 4-we	eeks as % of:	
Port regions	02/25/21	week*	as % of previous	2021 YTD*	2020 YTD*	% of 2020 YTD	Last year	Prior 3-yr. avg.	2020 total*
Pacific Northwest									
Wheat	179	211	85	2,070	2,794	74	72	87	15,966
Corn	558	172	325	2,350	602	391	235	149	9,969
Soybeans	281	199	142	3,317	1,821	182	220	125	14,028
Total	1,018	582	175	7,737	5,217	148	140	117	39,963
Mississippi Gulf	1,010	002	170	1,101	0,217	110	110	111	07,700
Wheat	18	19	98	291	655	44	27	30	3,422
Corn	890	949	94	6,774	4,065	167	177	180	28,781
Soybeans	411	429	96	7,415	5,745	129	142	101	38,013
Total	1,320	1,397	94	14,480	10,465	138	150	131	70,215
Texas Gulf	1,020	1,077	71	14,400	10,100	100	150	101	70,213
Wheat	0	77	0	395	603	65	82	39	4,248
Corn	31	0	n/a	92	98	93	203	174	723
Soybeans	0	50	0	619	6	n/a	n/a	n/a	2,098
Total	31	128	24	1,106	708	156	151	77	7,068
Interior				,					,
Wheat	55	35	159	375	409	92	89	133	2,263
Corn	129	123	105	1,201	1,197	100	95	102	8,683
Soybeans	100	132	76	1,196	1,271	94	95	105	7,274
Total	284	289	98	2,772	2,876	96	94	107	18,220
Great Lakes									
Wheat	1	0	n/a	17	1	n/a	n/a	391	891
Corn	0	0	n/a	0	0	n/a	n/a	n/a	111
Soybeans	0	0	n/a	0	0	n/a	n/a	n/a	1,111
Total	1	0	n/a	17	1	n/a	n/a	391	2,113
Atlantic									
Wheat	35	0	n/a	35	0	n/a	n/a	n/a	65
Corn	0	0	n/a	0	0	n/a	n/a	0	33
Soybeans	83	36	233	718	216	333	404	284	1,870
Total	118	36	329	753	216	349	446	307	1,968
U.S. total from ports	¥								
Wheat	287	342	84	3,184	4,462	71	69	74	26,854
Corn	1,608	1,244	129	10,417	5,961	175	171	160	48,301
Soybeans	875	846	104	13,265	9,059	146	161	117	64,394
Total	2,771	2,432	114	26,865	19,483	138	141	123	139,548

<sup>\*</sup>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.

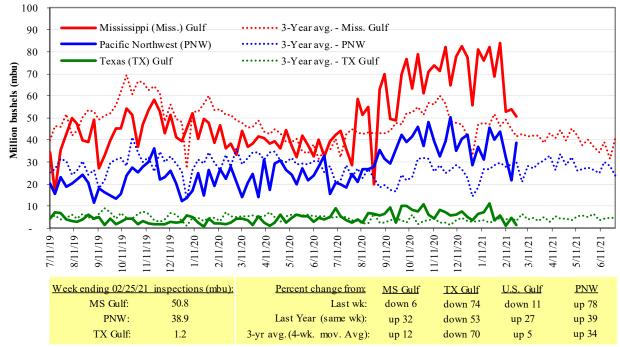
Figure 14
U.S. grain inspected for export (wheat, corn, and soybeans)



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)



18

Source: USDA, Federal Grain Inspection Service.

## **Ocean Transportation**

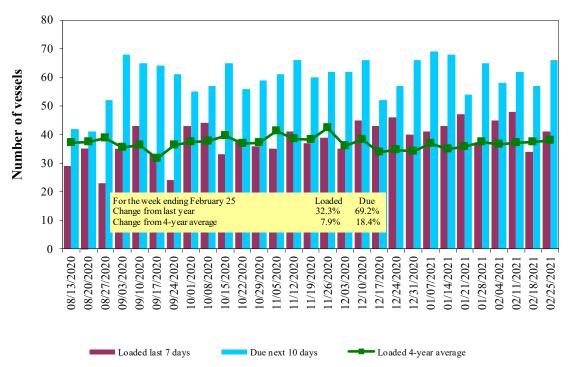
Table 17
Weekly port region grain ocean vessel activity (number of vessels)

				Pacific
		Gulf		Northwest
		Loaded	Due next	
Date	In port	7-days	10-days	In port
2/25/2021	41	41	66	27
2/18/2021	44	34	57	26
2020 range	(2260)	(2346)	(3468)	(724)
2020 average	37	33	49	15

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

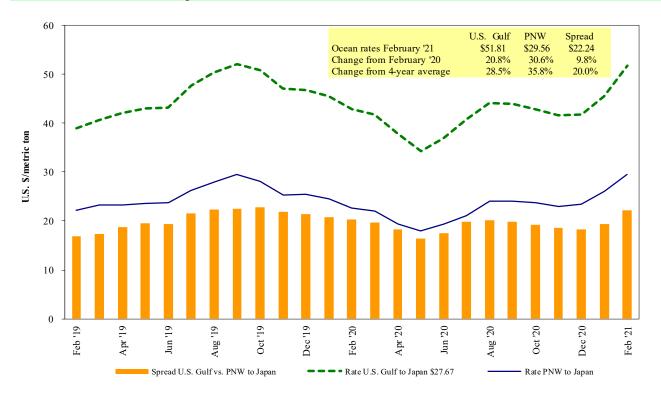
Source: USDA, Agricultural Marketing Service.

Figure 16
U.S. Gulf<sup>l</sup> vessel loading activity



<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 02/27/2021

Export	Import	Grain	Loading	Volume loads	Freight rate
region	region	types	date	(metric tons)	(US\$/metric ton)
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	Japan	Heavy grain	Apr 1/30	48,000	46.75
U.S. Gulf	South Korea	Heavy grain	Feb 20/28	51,000	51.50
U.S. Gulf	Pt Sudan	Sorghum	Feb 15/25	34,860	143.13*
U.S. Gulf	Vietnam	Corn	Feb 5/15	70,000	47.25
PNW	Japan	Grain	Mar 5/14	28,000	48.10
PNW	Taiwan	Wheat	Feb 18/Mar 4	40,925	35.24*
PNW	Taiwan	Corn	Feb 20/Mar 15	65,000	24.90
Brazil	China	Heavy grain	Mar 21/31	66,000	44.00
Brazil	China	Heavy grain	Mar 21/30	66,000	45.50
Ukraine	China	Corn	Feb 10/17	60,000	36.40 op 38.90

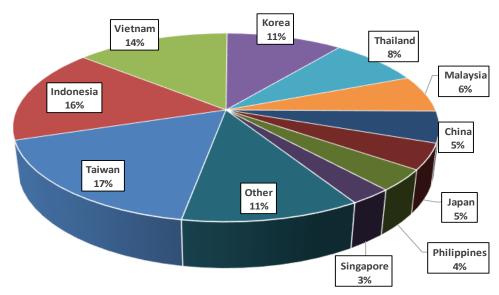
\*50 percent of food aid from the United States is required to be shipped on U.S.-flag vessels.

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.

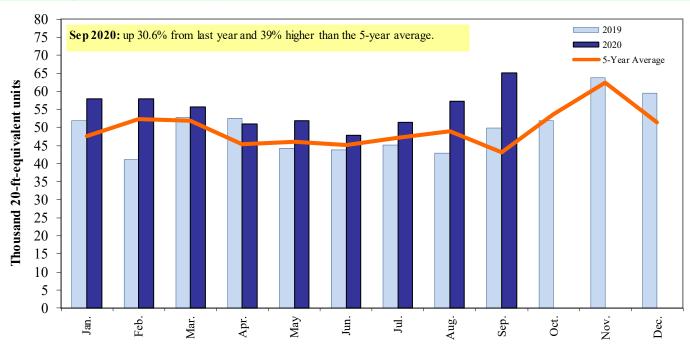
Figure 18
Top 10 destination markets for U.S. containerized grain exports, Jan-Sep 2020



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 containerized grain to Asia



Note: The following Harmonized Tariff Codes are used to calculate containerized grains movements: 100190, 100200, 100300, 100400, 100590, 100700, 110100, 110220, 110290, 12010, 120100, 120190, 120810, 230210, 230310, 230330, and 230990.

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

### Contacts and Links

Coordinators Surajudeen (Deen) Olowolayemo Maria Williams Bernadette Winston	surajudeen.olowolayemo@usda.gov maria.williams@usda.gov bernadette.winston@usda.gov	(202) 720 - 0119 (202) 690 - 4430 (202) 690 - 0487
Matt Chang	matt.chang@usda.gov	(202) 720 - 0299
Grain Transportation Indicators Surajudeen (Deen) Olowolayemo	surajudeen.olowolayemo@usda.gov	(202) 720 - 0119
Rail Transportation Johnny Hill	johnny.hill@usda.gov	(202) 690 - 3295
Jesse Gastelle Peter Caffarelli	jesse.gastelle@usda.gov petera.caffarelli@usda.gov	(202) 690 - 1144 (202) 690 - 3244
Barge Transportation		( 1 ) 11 1
April Taylor Bernadette Winston	april.taylor@usda.gov bernadette.winston@usda.gov	(202) 720 - 7880 (202) 690 - 0487
Matt Chang	matt.chang@usda.gov	(202) 720 - 0299
Truck Transportation		(202) 522 5022
April Taylor Kranti Mulik	april.taylor@usda.gov kranti.mulik@usda.gov	(202) 720 - 7880 (202) 756 - 2577
Matt Chang	matt.chang@usda.gov	(202) 720 - 0299
Grain Exports		
Johnny Hill Kranti Mulik	johnny.hill@usda.gov kranti.mulik@usda.gov	(202) 690 - 3295 (202) 756 - 2577
Ocean Transportation		
Surajudeen (Deen) Olowolayemo	surajudeen.olowolayemo@usda.gov	(202) 720 - 0119
(Freight rates and vessels) April Taylor (Container movements)	april.taylor@usda.gov	(202) 720 - 7880
Editor		
Maria Williams	maria.williams@usda.gov	(202) 690-4430

**Subscription Information:** Please sign up to receive regular email announcements of the latest *GTR* issue by entering your email address **here** and selecting your preference to receive Transportation Research and Analysis. For any other information, you may contact us at <a href="mailto:GTRContactUs@usda.gov">GTRContactUs@usda.gov</a>

Preferred citation: U.S. Department of Agriculture, Agricultural Marketing Service. *Grain Transportation Report.* March 4, 2021. Web: <a href="http://dx.doi.org/10.9752/TS056.03-04-2021">http://dx.doi.org/10.9752/TS056.03-04-2021</a>

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at How to File a Program Discrimination Complaint and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C.