



# Grain Transportation Report

A weekly publication of the Agricultural Marketing Service  
[www.ams.usda.gov/GTR](http://www.ams.usda.gov/GTR)

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## WEEKLY HIGHLIGHTS

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### Grain Inspections Decrease

For the week ending November 24, total inspections of grain (corn, wheat, and soybeans) for export from major U.S. export regions reached 3.17 million metric ton (mmt), down 21 percent from the previous week, up 14 percent from last year, and unchanged from the 3-year average. Inspections of wheat, corn, and soybeans decreased from the previous week, due in part to the holiday slowdown period. Pacific Northwest (PNW) grain inspections dropped 44 percent from the previous week, but Mississippi Gulf inspections increased 1 percent. Outstanding export sales (unshipped) of grain were up for wheat and corn, but sales decreased for soybeans.

### Truck Indices Continue Falling

Last week, the American Trucking Association reported that its indices measuring demand, pricing and tonnage for total freight trucking continued to decline during October, but at a slower rate. Nonetheless, grain shippers in recent surveys report that truck availability has become increasingly difficult during the third quarter of the year, compared to the previous quarter and same period last year (see [Grain Truck and Ocean Rate Advisory](#)); likely due to the rise in truck demand during harvest and strong grain exports during the year.

### USDA to Conduct Final Survey of 2016 Crop

During the first 2 weeks of December, USDA's National Agricultural Statistics Service will survey approximately 90,000 U.S. producers. One of USDA's largest survey efforts, the responses will provide the final information about the 2016 U.S. row crops focusing on harvested acreage, production, and storage. Grain storage is an important link between the production and transportation of grain. The availability of storage gives farmers and elevators the ability to determine when to sell and move product, rather than being tied to whenever the grain is harvested.

### Several Upper Mississippi River Locks Scheduled for Closure to Accommodate Repairs

In order to conduct repairs, the U.S. Army Corps of Engineers has scheduled several lock closures on the Upper Mississippi River during the upcoming winter season. Mississippi River Locks 15 (Rock Island, IL), Lock 16 (Muscatine, IL), and Lock 17 (New Boston, IL) will be closed from December 13 to March 3, 2017. In addition, Mississippi River Lock 22 will be closed for repairs from January 2 to January 24, 2017. During the winter, much of the Upper Mississippi River is frozen or has ice accumulations that limit or stop barge traffic. Typically, the Corps will use this period to conduct repairs and maintenance to minimize the impact of barge traffic.

## Snapshots by Sector

### Export Sales

During the week ending November 17, **unshipped balances** of wheat, corn, and soybeans totaled 43.1 mmt, up 47 percent from the same time last year. Net weekly **wheat export sales** were .712 mmt, up 19 percent from the previous week. Net **corn export sales** were 1.69 mmt, up 2 percent from the previous week, and net **soybean export sales** were 1.89 mmt, up 33 percent from the past week.

### Rail

U.S. Class I railroads originated 25,916 **grain carloads** for the week ending November 19, down 3 percent from the previous week, up 20 percent from last year, and up 13 percent from the 3-year average.

Average December shuttle **secondary railcar bids/offers** per car were \$51 below tariff for the week ending November 24, down \$21 from last week, and \$199 higher than last year. Average non-shuttle secondary railcar bids/offers per car were \$84 below tariff, down \$3 from last week, and \$10 higher than last year.

### Barge

For the week ending November 26, **barge grain movements** totaled 1,248,198 tons, 10 percent higher than last week, and up 13 percent from the same period last year.

For the week ending November 26, 801 grain barges **moved down river**, up 12 percent from last week, 1,038 grain barges were **unloaded in New Orleans**, down 2 percent from the previous week.

### Ocean

For the week ending November 24, 51 **ocean-going grain vessels** were loaded in the Gulf, 24 percent more than the same period last year. Seventy-nine vessels are expected to be loaded within the next 10 days, 34 percent more than the same period last year. For the week ending November 24, the ocean freight rate for shipping bulk grain from the Gulf to Japan was \$35.50 per metric ton, 11 percent more than the previous week. The cost of shipping from the PNW to Japan was \$19.25 per metric ton, 4 percent less than the previous week.

### Fuel

During the week ending November 28, the U.S. average **diesel fuel price** was \$2.42 per gallon, unchanged from the previous week and the same week last year.

# Feature Article/Calendar

## Despite Increased Landed Costs, U.S. Soybean Shipments Up

Total transportation and landed costs for shipping soybeans from the United States to Europe and China increased during the third quarter of 2016. However, soybean shipments from the United States to Europe and China also increased compared to the same period a year earlier, despite the rise in the transportation and landed costs.

More specifically, total transportation costs of shipping soybeans from Minneapolis, MN and Davenport, IA to Hamburg, Germany through the U.S. Gulf both increased 17 percent from the previous quarter (Table 1). Similarly, the costs of shipping from the same origins to Shanghai, China both increased 18 percent during the quarter (Table 2). The costs of shipping soybeans from Fargo, ND and Sioux Falls, SD to Shanghai through the Pacific Northwest increased by just 1 percent (Table 2). In Brazil, it cost 3 percent more to ship soybeans from North Mato Grosso (North MT) to Hamburg and 1 percent less from the same origin to Shanghai. It cost 1 and 7 percent less to transport soybeans from South Goiás (South GO) to Hamburg and China, respectively.

**Table 1-Quarterly costs of transporting soybeans from U.S. and Brazil to Hamburg, Germany**

	2015 3 <sup>rd</sup> qtr.	2016 2 <sup>nd</sup> qtr.	2016 3 <sup>rd</sup> qtr.	Percent change		2015 3 <sup>rd</sup> qtr.	2016 2 <sup>nd</sup> qtr.	2016 3 <sup>rd</sup> qtr.	Percent change	
	United States (via U.S. Gulf)									
	Minneapolis, MN --\$/mt--					Davenport, IA --\$/mt--				
Truck	8.50	12.10	10.58	24.47	-12.56	8.50	12.10	10.58	24.47	-12.56
Barge	31.32	24.43	32.96	5.24	34.92	24.81	17.83	25.45	2.58	42.74
Ocean <sup>1</sup>	15.48	13.72	15.10	-2.45	10.06	15.48	13.75	15.10	-2.45	9.82
Total transportation	55.30	50.25	58.64	6.04	16.70	48.79	43.68	51.13	4.80	17.06
Farm Value <sup>2</sup>	344.90	349.92	353.84	2.59	1.12	346.86	349.56	359.48	3.64	2.84
Landed Cost <sup>3</sup>	400.20	400.17	412.48	3.07	3.08	395.65	393.24	410.61	3.78	4.42
Transport % of landed cost	13.82	12.56	14.22			12.33	11.11	12.45		
	Brazil									
	North MT <sup>4</sup> - Santos <sup>5</sup> --\$/mt--					South GO <sup>4</sup> - Paranagua <sup>5</sup> --\$/mt--				
Truck	81.46	81.75	85.01	4.36	3.99	46.89	48.04	47.61	1.54	-0.90
Ocean <sup>6</sup>	19.00	17.00	16.50	-13.16	-2.94	19.00	17.00	16.50	-13.16	-2.94
Total transportation	100.46	98.75	101.51	1.05	2.79	65.89	65.04	64.11	-2.70	-1.43
Farm Value <sup>7</sup>	285.95	347.59	367.25	28.43	5.66	287.19	337.86	359.07	25.03	6.28
Landed Cost	386.41	446.34	468.76	21.31	5.02	353.08	402.90	423.18	19.85	5.03
Transport % of landed cost	26.00	22.12	21.66			18.66	16.14	15.15		

<sup>1</sup>Source: O'Neil Commodity Consulting

<sup>2</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.

<sup>3</sup>Source: USDA/NASS

<sup>4</sup>Landed cost is total cost plus farm value

<sup>5</sup>Producing regions: MT= Mato Grosso, GO = Goiás

<sup>6</sup>Export ports

<sup>7</sup>Source: ESALQ/ USP (University of São Paulo, Brazil) and USDA/AMS

<sup>8</sup>Source: Companhia Nacional de Abastecimento (CONAB) [www.conab.gov.br](http://www.conab.gov.br)

Note: Total may not add exactly due to rounding

Increases in barge, rail, and ocean rates accounted for the increased U.S. transportation costs during the quarter. Barge rates increased in response to a sell-off of old crop commodities in anticipation of upcoming large harvests for corn and soybeans (see [11/17/16 Grain Transportation Report \(GTR\)](#)). Increased grain and soybean exports boosted the rail tariff rate during the quarter. In addition to the grain trade, strong iron ore movements pushed up the ocean freight rates for shipping bulk commodities, including grain during the quarter (see [10/20/16 GTR](#)). There were increases in quarter-to-quarter and year-to-year landed costs in both the United States and Brazil. The increases in U.S. landed costs consisted of an increase in either, or both, transportation costs and farm values.

With the exception of shipments from North MT to Hamburg, Brazil's landed costs were pushed up mostly by an increase in the farm values. The U.S. landed costs ranged from \$411 to \$426 per metric ton (mt) (Tables 1 and 2), and Brazil's landed costs ranged from \$421 to \$469 per mt (Tables 1 and 2). The transportation share of the landed costs ranged from 12 to 19 percent in the United States and 15 to 22 percent in Brazil.

**Table 2-Quarterly costs of transporting soybeans from U.S. and Brazil to Shanghai, China**

	2015	2016	2016	Percent change		2015	2016	2016	Percent change	
	3 <sup>rd</sup> qtr.	2 <sup>nd</sup> qtr.	3 <sup>rd</sup> qtr.	Yr. to Yr.	Qtr. to Qtr.	3 <sup>rd</sup> qtr.	2 <sup>nd</sup> qtr.	3 <sup>rd</sup> qtr.	Yr. to Yr.	Qtr. to Qtr.
<b>United States (via U.S. Gulf)</b>										
<b>Minneapolis, MN</b>						<b>Davenport, IA</b>				
	--\$/mt--					--\$/mt--				
Truck	8.50	12.10	10.58	24.47	-12.56	8.50	12.10	10.58	24.47	-12.56
Barge	31.32	24.43	32.96	5.24	34.92	24.81	17.83	25.45	2.58	42.74
Ocean <sup>1</sup>	32.65	24.37	28.27	-13.42	16.00	32.65	24.37	28.27	-13.42	16.00
Rail <sup>2</sup>					-					-
Total transportation	72.47	60.90	71.81	-0.91	17.91	65.96	54.30	64.30	-2.52	18.42
Farm Value <sup>2</sup>	344.90	349.92	353.84	2.59	1.12	346.86	349.56	359.48	3.64	2.84
Landed Cost <sup>3</sup>	417.37	410.82	425.65	1.98	3.61	412.82	403.86	423.78	2.65	4.93
Transport % of landed cost	17.36	14.82	16.87			15.98	13.45	15.17		
<b>Via PNW</b>										
<b>Fargo, ND</b>						<b>Sioux Falls, SD</b>				
	--\$/mt--					--\$/mt--				
Truck	8.50	12.10	10.58	24.47	-12.56	8.50	12.40	10.58	24.47	-14.68
Ocean	17.57	14.26	15.53	-11.61	8.91	17.57	14.26	15.33	-12.75	7.50
Rail <sup>4</sup>	56.81	51.93	53.08	-6.57	2.21	58.08	52.84	54.13	-6.80	2.44
Total transportation	82.88	78.29	79.19	-4.45	1.15	84.15	79.50	80.04	-4.88	0.68
Farm Value	326.16	339.02	342.70	5.07	1.09	329.35	336.33	344.04	4.46	2.29
Landed Cost	409.04	417.31	421.89	3.14	1.10	413.50	415.83	424.08	2.56	1.98
Transport % of landed cost	20.26	18.76	18.77			20.35	19.12	18.87		
<b>Brazil</b>										
<b>North MT<sup>5</sup> - Santos<sup>6</sup></b>						<b>South GO<sup>5</sup> - Paranagua<sup>6</sup></b>				
	--\$/mt--					--\$/mt--				
Truck	81.46	81.75	85.01	4.36	3.99	46.89	48.04	47.61	1.54	-0.90
Ocean <sup>7</sup>	23.25	16.50	12.50	-46.24	-24.24	24.18	18.50	14.50	-40.03	-21.62
Total transportation	104.71	98.25	97.51	-6.88	-0.75	71.07	66.54	62.11	-12.61	-6.66
Farm Value <sup>8</sup>	285.95	347.59	367.25	28.43	5.66	287.19	337.86	359.07	25.03	6.28
Landed Cost	390.66	445.84	464.76	18.97	4.24	358.26	404.40	421.18	17.56	4.15
Transport % of landed cost	26.80	22.04	20.98			19.84	16.45	14.75		

<sup>1</sup>Source: O'Neil Commodity Consulting

<sup>2</sup>Source: USDA/NASS

<sup>3</sup>Landed cost is transportation cost plus farm value

<sup>4</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.

<sup>5</sup>Producing regions: MT = Mato Grosso, GO = Goiás

<sup>6</sup>Export ports

<sup>7</sup>Source: ESALQ/ USP (University of São Paulo, Brazil) and USDA/AMS

<sup>8</sup>Source: Companhia Nacional de Abastecimento (CONAB) [www.conab.gov.br](http://www.conab.gov.br)

Note: Total may not add exactly due to rounding

## Market Analysis and Outlook

Despite the increase in landed costs, the United States exported more soybeans to Europe and China during the third quarter of this year, compared to last year. From July to September, 2016, the United States exported 1.43 million metric tons (mmt) of soybeans to Europe—114 percent more than the same period last year (USDA Foreign Agricultural Service Global Agricultural Trade System (FAS GATS) data). During the same period, it also exported 5.45 mmt of soybeans to China—403 percent more than the same period last year. From July to September, the United States exported 22 percent more soybeans to Europe and 50 percent more to China, compared to the same period last year (FAS GATS data). Chinese imports of U.S. soybeans are expected to remain strong during the 2016/17 marketing year (MY). According to USDA's Foreign Agricultural Service, China's soybean imports are forecast at a record 86 mmt for MY 16/17 ([USDA, FAS GAIN Report #: CH16038](#)). This is in anticipation of higher demand for industry feed and protein meal due to a recovery in swine production and steady growth in China's poultry sector. Although the demand for soybeans in China is expected to remain strong, transportation and landed costs will remain an essential component of U.S. grain's competitiveness overseas.

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# Grain Transportation Indicators

Table 1

**Grain Transport Cost Indicators<sup>1</sup>**

For the week ending	Truck	Rail		Barge	Ocean	
		Unit Train	Shuttle		Gulf	Pacific
11/30/16	162	256	205	133	159	137
11/23/16	162	256	206	136	159	142

<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); and ocean = routes to Japan (\$/metric ton)

Source: Transportation & Marketing Programs/AMS/USDA

Table 2

**Market Update: U.S. Origins to Export Position Price Spreads (\$/bushel)**

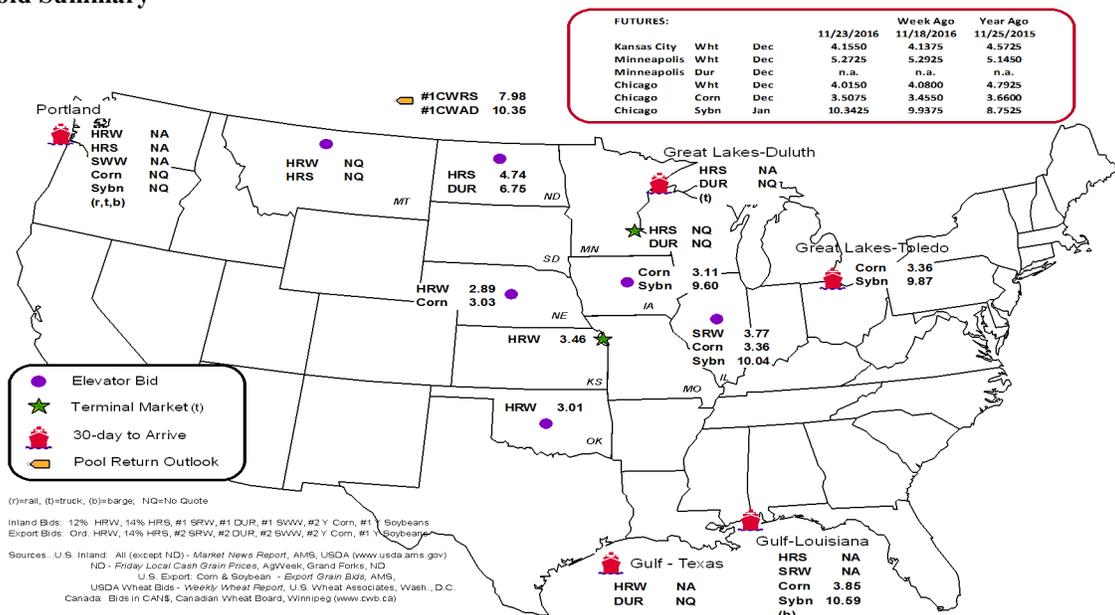
Commodity	Origin--Destination	11/23/2016	11/18/2016
Corn	IL--Gulf	-0.49	-0.52
Corn	NE--Gulf	-0.82	-0.84
Soybean	IA--Gulf	-0.99	-1.07
HRW	KS--Gulf	n/a	-1.90
HRS	ND--Portland	n/a	-2.11

Note: nq = no quote

Source: Transportation & Marketing Programs/AMS/USDA

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**



# Rail Transportation

Table 3

## Rail Deliveries to Port (carloads)<sup>1</sup>

For the Week Ending	Mississippi		Pacific	Atlantic &	Total	Week ending	Cross-Border Mexico <sup>3</sup>
	Gulf	Texas Gulf	Northwest	East Gulf			
11/23/2016 <sup>p</sup>	1,332	1,179	7,808	1,012	11,331	11/19/2016	2,916
11/16/2016 <sup>r</sup>	1,284	2,033	7,316	1,557	12,190	11/12/2016	2,433
2016 YTD <sup>r</sup>	32,927	75,290	266,746	23,712	398,675	2016 YTD	98,136
2015 YTD <sup>r</sup>	27,795	53,273	212,485	23,735	317,288	2015 YTD	89,635
2016 YTD as % of 2015 YTD	118	141	126	100	126	% change YTD	109
Last 4 weeks as % of 2015 <sup>2</sup>	179	153	117	120	128	Last 4wks % 2015	95
Last 4 weeks as % of 4-year avg. <sup>2</sup>	115	173	121	112	125	Last 4wks % 4 yr	124
Total 2015	29,054	60,819	239,029	26,730	355,632	Total 2015	97,736
Total 2014	44,617	83,674	256,670	32,107	417,068	Total 2014	98,422

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

<sup>2</sup> Compared with same 4-weeks in 2015 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 KCSM and FerroMex.

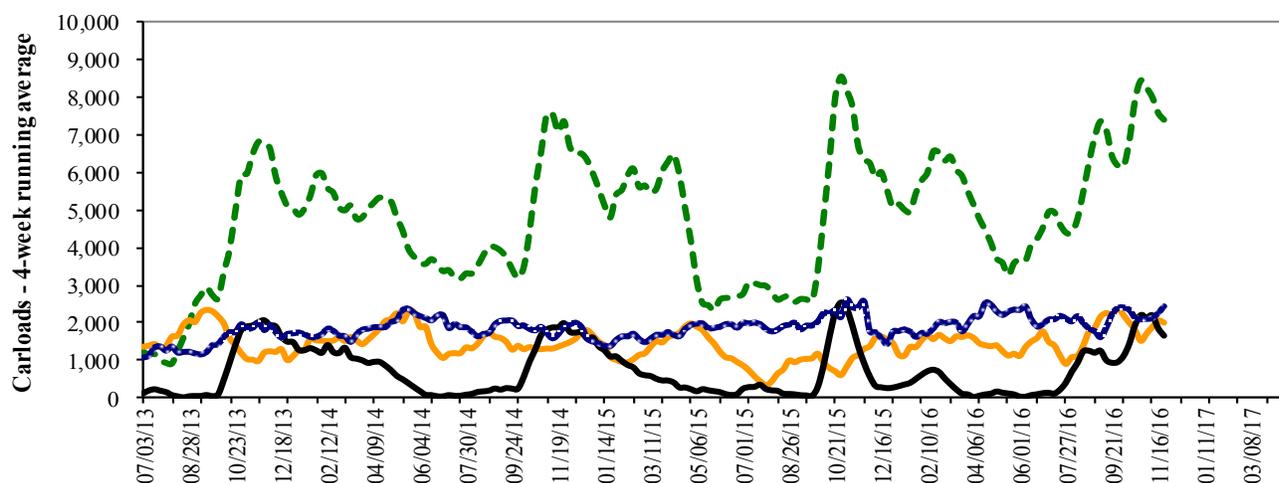
**YTD = year-to-date; p = preliminary data; r = revised data; n/a = not available**

Source: Transportation & Marketing Programs/AMS/USDA

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



--- Pacific Northwest: 4 wks. ending 11/23--up 17% from same period last year; up 21% from 4-year average  
--- Texas Gulf: 4 wks. ending 11/23--up 53% from same period last year; up 73% from 4-year average  
--- Miss. River: 4 wks. ending 11/23--up 79% from same period last year; up 15% from 4-year average  
--- Cross-border: 4 wks. ending 11/19--down 5% from same period last year; up 24% from 4-year average

Source: Transportation & Marketing Programs/AMS/USDA

Table 4

**Class I Rail Carrier Grain Car Bulletin (grain carloads originated)**

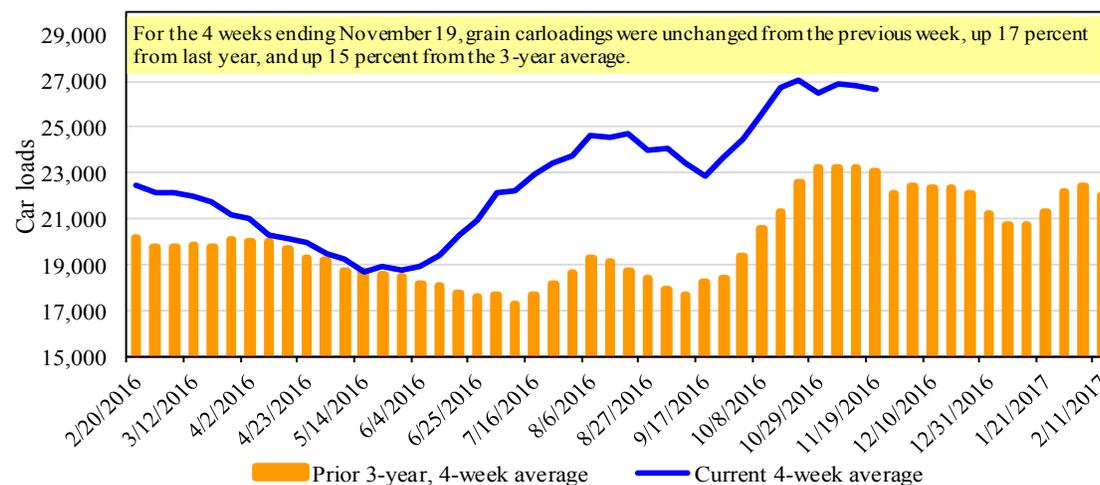
For the week ending: 11/19/2016	East		West			U.S. total	Canada	
	CSXT	NS	BNSF	KCS	UP		CN	CP
This week	2,326	3,792	12,250	1,171	6,377	25,916	5,203	6,022
This week last year	1,893	2,904	10,772	735	5,317	21,621	4,331	4,448
2016 YTD	84,219	133,558	520,453	40,330	265,872	1,044,432	169,966	206,462
2015 YTD	92,886	133,776	471,658	41,233	238,803	978,356	188,112	208,809
2016 YTD as % of 2015 YTD	91	100	110	98	111	107	90	99
Last 4 weeks as % of 2015*	129	134	107	110	126	117	102	98
Last 4 weeks as % of 3-yr avg**	104	113	119	91	119	115	95	96
Total 2015	104,039	149,174	536,173	45,445	267,720	1,102,551	210,959	236,263

\*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.

Source: Association of American Railroads (www.aar.org)

Figure 3

**Total Weekly U.S. Class I Railroad Grain Car Loadings**

Source: Association of American Railroads

Table 5

**Railcar Auction Offerings<sup>1</sup> (\$/car)<sup>2</sup>**

For the week ending: 11/24/2016		Delivery period							
		Dec-16	Dec-15	Jan-17	Jan-16	Feb-17	Feb-16	Mar-17	Mar-16
BNSF <sup>3</sup>	COT grain units	no bids	no bids	no bids	no bids	no bids	no bids	no bids	no bids
	COT grain single-car <sup>5</sup>	no bids	no bids	1	no bids	no bids	no bids	no bids	no bids
UP <sup>4</sup>	GCAS/Region 1	no bids	no bids	no bids	no bids	no offer	no bids	n/a	n/a
	GCAS/Region 2	no bids	no bids	no bids	no bids	no offer	no bids	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

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

<sup>4</sup>UP - GCAS = Grain Car Allocation System

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

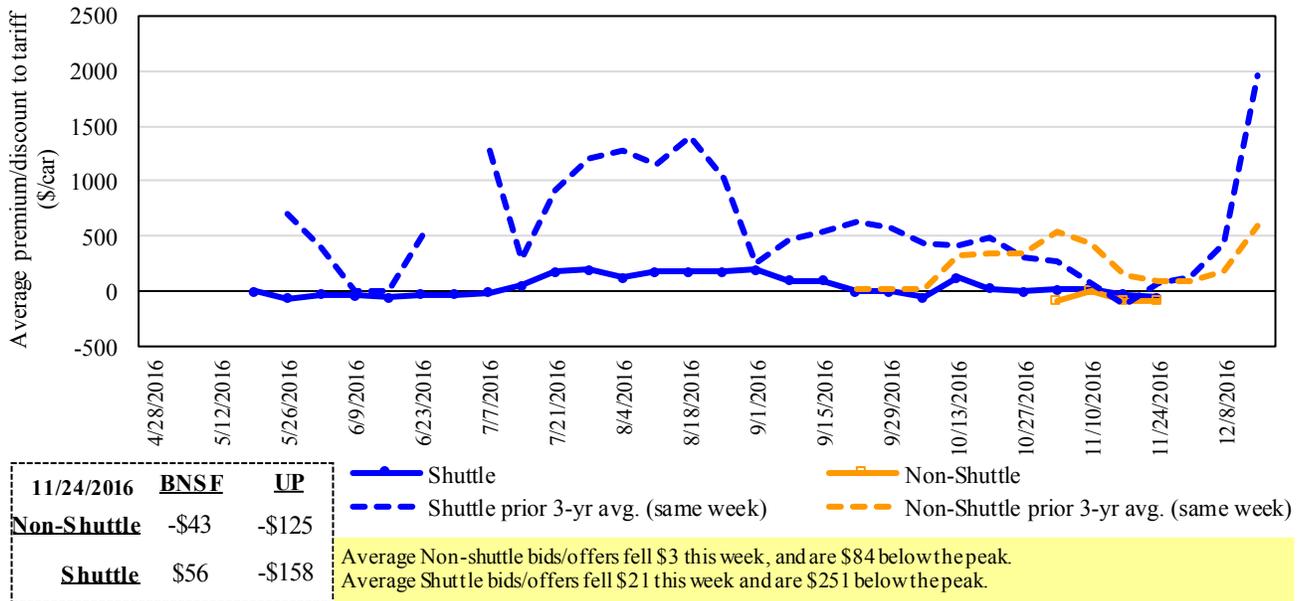
Region 2 includes: CO, IA, KS, MN, NE, WY, and Kansas City and St. Joseph, MO.

<sup>5</sup>Range is shown because average is not available. Not available = n/a.

Source: Transportation & Marketing Programs/AMS/USDA.

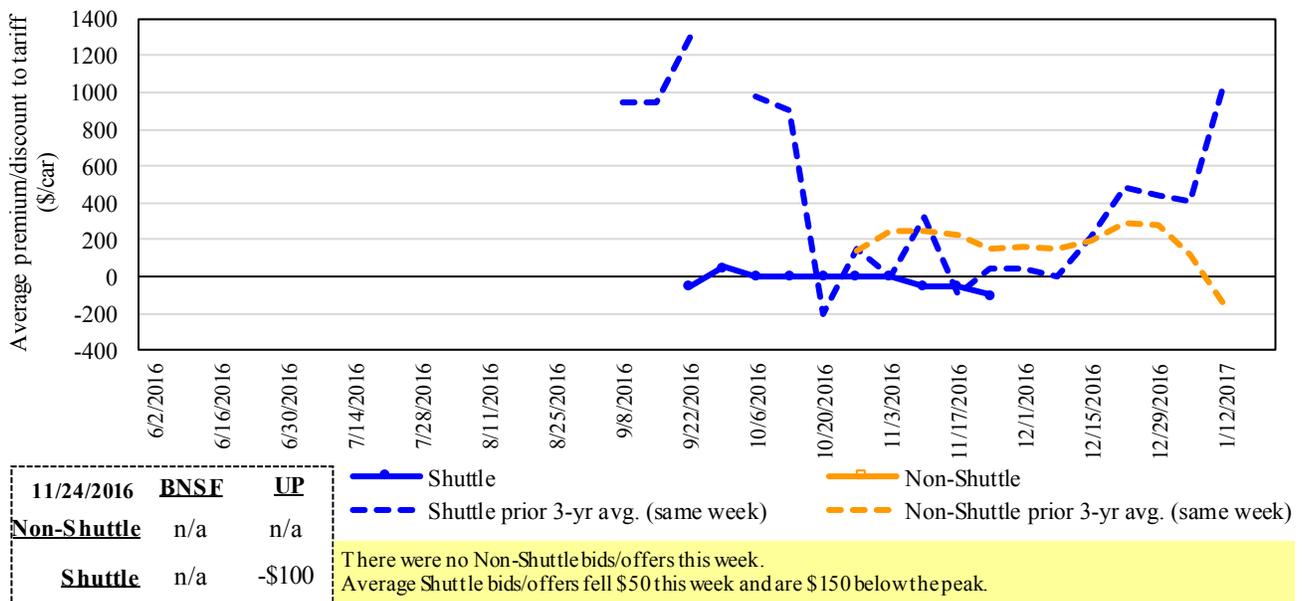
The **secondary rail market** information reflects trade values for service that was originally purchased from the railroad carrier as some form of guaranteed freight. The **auction and secondary rail** values are indicators of rail service quality and demand/supply.

**Figure 4**  
**Bids/Offers for Railcars to be Delivered in December 2016, Secondary Market**



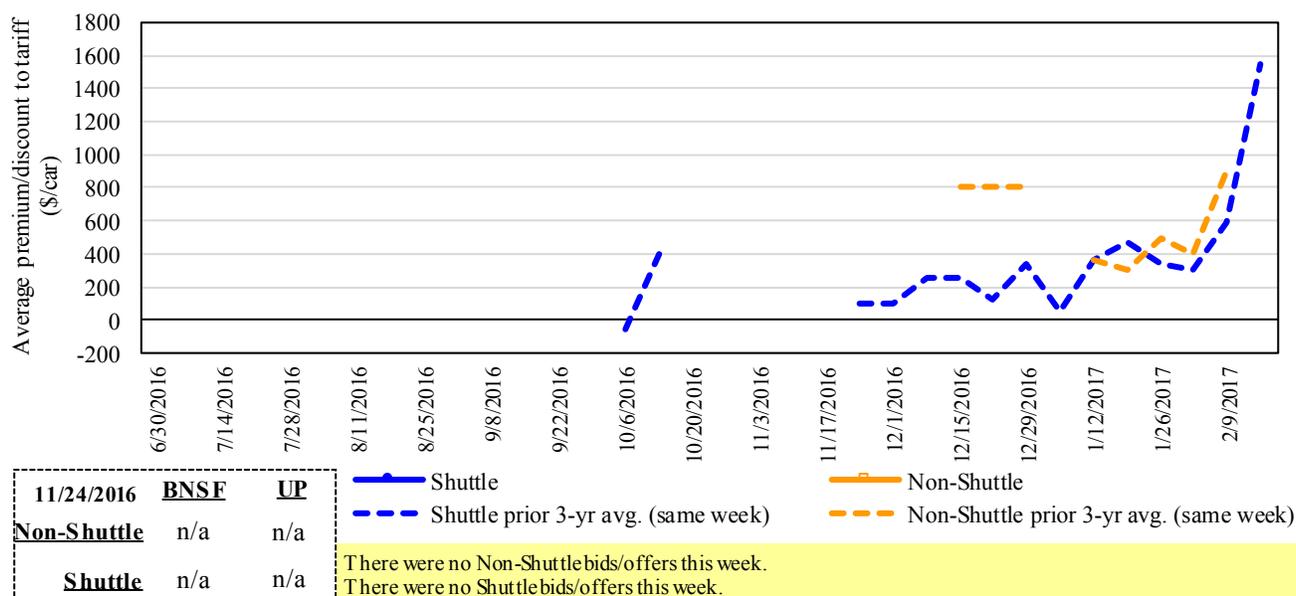
Non-shuttle bids include unit-train and single-car bids. n/a = not available.  
 Source: Transportation & Marketing Programs/AMS/USDA

**Figure 5**  
**Bids/Offers for Railcars to be Delivered in January 2017, Secondary Market**



Non-shuttle bids include unit-train and single-car bids. n/a = not available.  
 Source: Transportation & Marketing Programs/AMS/USDA

**Figure 6**  
**Bids/Offers for Railcars to be Delivered in February 2017, Secondary Market**



<b>11/24/2016</b>	<b>BNSF</b>	<b>UP</b>
<b>Non-Shuttle</b>	n/a	n/a
<b>Shuttle</b>	n/a	n/a

—●— Shuttle  
- - - Shuttle prior 3-yr avg. (same week)  
—■— Non-Shuttle  
- - - Non-Shuttle prior 3-yr avg. (same week)

There were no Non-Shuttle bids/offers this week.  
There were no Shuttle bids/offers this week.

Non-shuttle bids include unit-train and single-car bids. n/a = not available.  
 Source: Transportation & Marketing Programs/AMS/USDA

**Table 6**  
**Weekly Secondary Railcar Market (\$/car)<sup>1</sup>**

For the week ending:		Delivery period					
		11/24/2016	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17
Non-shuttle	<b>BNSF-GF</b>	<b>(43)</b>	n/a	n/a	n/a	n/a	n/a
	Change from last week	18	n/a	n/a	n/a	n/a	n/a
	Change from same week 2015	8	n/a	n/a	n/a	n/a	n/a
	<b>UP-Pool</b>	<b>(125)</b>	n/a	n/a	n/a	n/a	n/a
	Change from last week	(25)	n/a	n/a	n/a	n/a	n/a
Change from same week 2015	13	n/a	n/a	n/a	n/a	n/a	
Shuttle	<b>BNSF-GF</b>	<b>56</b>	n/a	n/a	n/a	n/a	n/a
	Change from last week	42	n/a	n/a	n/a	n/a	n/a
	Change from same week 2015	256	n/a	n/a	n/a	n/a	n/a
	<b>UP-Pool</b>	<b>(158)</b>	<b>(100)</b>	n/a	n/a	n/a	n/a
	Change from last week	(83)	(50)	n/a	n/a	n/a	n/a
Change from same week 2015	142	n/a	n/a	n/a	n/a	n/a	

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

Note: Bids listed are market INDICATORS only & are NOT guaranteed prices,

n/a = not available; GF = guaranteed freight; Pool = guaranteed pool

Sources: Transportation and Marketing Programs/AMS/USDA

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

The **tariff rail rate** is the base price of freight rail service, and together with **fuel surcharges** and any **auction and secondary rail** values constitute 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. High auction and secondary rail values, during times of high rail demand or short supply, 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>**

December, 2016	Origin region*	Destination region*	Tariff rate/car	Fuel surcharge per car	Tariff plus surcharge per:		Percent change Y/Y <sup>3</sup>
					metric ton	bushel <sup>2</sup>	
<b>Unit train</b>							
Wheat	Wichita, KS	St. Louis, MO	\$3,770	\$40	\$37.84	\$1.03	4
	Grand Forks, ND	Duluth-Superior, MN	\$4,143	-\$3	\$41.11	\$1.12	16
	Wichita, KS	Los Angeles, CA	\$6,950	-\$15	\$68.86	\$1.87	0
	Wichita, KS	New Orleans, LA	\$4,408	\$71	\$44.48	\$1.21	4
	Sioux Falls, SD	Galveston-Houston, TX	\$6,486	-\$13	\$64.28	\$1.75	0
	Northwest KS	Galveston-Houston, TX	\$4,676	\$78	\$47.21	\$1.28	3
	Amarillo, TX	Los Angeles, CA	\$4,875	\$109	\$49.49	\$1.35	3
Corn	Champaign-Urbana, IL	New Orleans, LA	\$3,681	\$80	\$37.35	\$0.95	0
	Toledo, OH	Raleigh, NC	\$6,061	\$0	\$60.19	\$1.53	0
	Des Moines, IA	Davenport, IA	\$2,258	\$17	\$22.59	\$0.57	4
	Indianapolis, IN	Atlanta, GA	\$5,191	\$0	\$51.55	\$1.31	4
	Indianapolis, IN	Knoxville, TN	\$4,311	\$0	\$42.81	\$1.09	0
	Des Moines, IA	Little Rock, AR	\$3,534	\$50	\$35.59	\$0.90	2
	Des Moines, IA	Los Angeles, CA	\$5,202	\$146	\$53.11	\$1.35	3
Soybeans	Minneapolis, MN	New Orleans, LA	\$3,639	\$45	\$36.58	\$1.00	-2
	Toledo, OH	Huntsville, AL	\$5,051	\$0	\$50.16	\$1.37	0
	Indianapolis, IN	Raleigh, NC	\$6,178	\$0	\$61.35	\$1.67	0
	Indianapolis, IN	Huntsville, AL	\$4,529	\$0	\$44.98	\$1.22	0
Champaign-Urbana, IL	New Orleans, LA	\$4,495	\$80	\$45.44	\$1.24	2	
<b>Shuttle Train</b>							
Wheat	Great Falls, MT	Portland, OR	\$3,953	-\$9	\$39.17	\$1.07	0
	Wichita, KS	Galveston-Houston, TX	\$3,871	-\$7	\$38.37	\$1.04	-2
	Chicago, IL	Albany, NY	\$5,492	\$0	\$54.54	\$1.48	0
	Grand Forks, ND	Portland, OR	\$5,611	-\$15	\$55.57	\$1.51	-1
	Grand Forks, ND	Galveston-Houston, TX	\$5,931	-\$16	\$58.74	\$1.60	-1
	Northwest KS	Portland, OR	\$5,643	\$128	\$57.31	\$1.56	3
Corn	Minneapolis, MN	Portland, OR	\$5,000	-\$19	\$49.47	\$1.26	-1
	Sioux Falls, SD	Tacoma, WA	\$4,960	-\$17	\$49.09	\$1.25	-1
	Champaign-Urbana, IL	New Orleans, LA	\$3,481	\$80	\$35.37	\$0.90	0
	Lincoln, NE	Galveston-Houston, TX	\$3,700	-\$10	\$36.64	\$0.93	2
	Des Moines, IA	Amarillo, TX	\$3,895	\$63	\$39.30	\$1.00	2
	Minneapolis, MN	Tacoma, WA	\$5,000	-\$18	\$49.47	\$1.26	-1
	Council Bluffs, IA	Stockton, CA	\$4,740	-\$19	\$46.88	\$1.19	1
Soybeans	Sioux Falls, SD	Tacoma, WA	\$5,600	-\$17	\$55.44	\$1.51	1
	Minneapolis, MN	Portland, OR	\$5,650	-\$19	\$55.92	\$1.52	2
	Fargo, ND	Tacoma, WA	\$5,500	-\$15	\$54.47	\$1.48	2
	Council Bluffs, IA	New Orleans, LA	\$4,525	\$93	\$45.86	\$1.25	2
	Toledo, OH	Huntsville, AL	\$4,226	\$0	\$41.97	\$1.14	0
Grand Island, NE	Portland, OR	\$5,460	\$131	\$55.52	\$1.51	2	

<sup>1</sup>A unit train refers to shipments of at least 25 cars. Shuttle train rates are available for qualified shipments of 75-120 cars that meet railroad efficiency requirements.

<sup>2</sup>Approximate load per car = 111 short tons (100.7 metric tons): corn 56 lbs./bu., wheat & soybeans 60 lbs./bu.

<sup>3</sup>Percentage change year over year calculated using tariff rate plus fuel surcharge

Sources: www.bnsf.com, www.cpr.ca, www.csx.com, www.uprr.com

\*Regional economic areas defined by the Bureau of Economic Analysis (BEA)

Table 8

**Tariff Rail Rates for U.S. Bulk Grain Shipments to Mexico**

Commodity	Origin state	Destination region	Tariff rate/car <sup>1</sup>	Fuel surcharge per car <sup>2</sup>	Tariff plus surcharge per:		Percent change <sup>4</sup> Y/Y
					metric ton <sup>3</sup>	bushel <sup>3</sup>	
Date: December, 2016							
Wheat	MT	Chihuahua, CI	\$7,459	\$0	\$76.21	\$2.07	0
	OK	Cuautitlan, EM	\$6,596	\$56	\$67.97	\$1.85	1
	KS	Guadalajara, JA	\$7,077	\$143	\$73.77	\$2.01	1
	TX	Salinas Victoria, NL	\$4,197	\$32	\$43.21	\$1.17	1
Corn	IA	Guadalajara, JA	\$8,187	\$127	\$84.95	\$2.16	-2
	SD	Celaya, GJ	\$7,580	\$0	\$77.45	\$1.97	-4
	NE	Queretaro, QA	\$7,909	\$105	\$81.89	\$2.08	0
	SD	Salinas Victoria, NL	\$6,635	\$0	\$67.79	\$1.72	1
	MO	Tlalnepantla, EM	\$7,268	\$102	\$75.31	\$1.91	0
	SD	Torreon, CU	\$7,180	\$0	\$73.36	\$1.86	-1
Soybeans	MO	Bojay (Tula), HG	\$8,647	\$131	\$89.69	\$2.44	0
	NE	Guadalajara, JA	\$8,942	\$136	\$92.75	\$2.52	-2
	IA	El Castillo, JA	\$8,960	\$0	\$91.55	\$2.49	-6
	KS	Torreon, CU	\$7,489	\$96	\$77.49	\$2.11	1
Sorghum	NE	Celaya, GJ	\$7,164	\$117	\$74.39	\$1.89	-3
	KS	Queretaro, QA	\$7,608	\$70	\$78.44	\$1.99	0
	NE	Salinas Victoria, NL	\$6,213	\$56	\$64.05	\$1.63	0
	NE	Torreon, CU	\$6,607	\$90	\$68.43	\$1.74	-3

<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

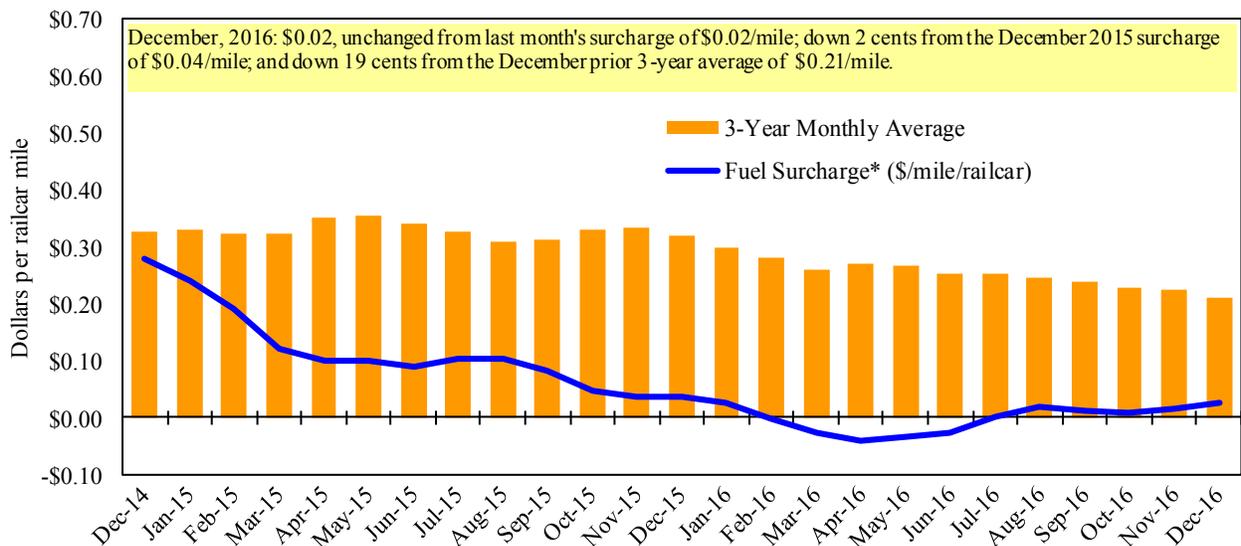
<sup>3</sup>Approximate load per car = 97.87 metric tons: Corn & Sorghum 56 lbs/bu, Wheat & Soybeans 60 lbs/bu

<sup>4</sup>Percentage change calculated using tariff rate plus fuel surcharge

Sources: www.bnsf.com, www.uprr.com, www.kcsouthern.com

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.

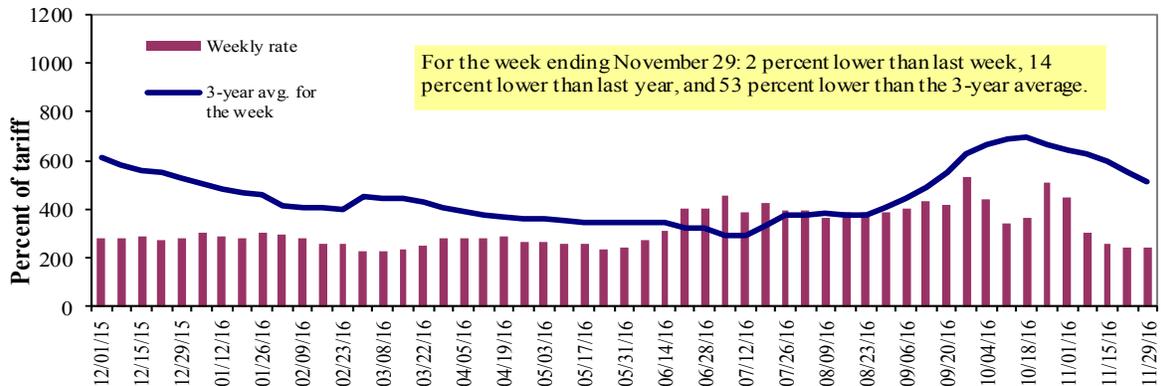
\*\*CSX strike price changed from \$2.00/gal. to \$3.75/gal. starting January 1, 2015.

Sources: www.bnsf.com, www.cn.ca, www.cpr.ca, www.csx.com, www.kcsi.com, www.nscorp.com, www.uprr.com

# Barge Transportation

Figure 8

**Illinois River Barge Freight Rate<sup>1,2</sup>**



<sup>1</sup>Rate = percent of 1976 tariff benchmark index (1976 = 100 percent); <sup>2</sup>4-week moving average of the 3-year average.  
Source: Transportation & Marketing Programs/AMS/USDA

Table 9

**Weekly Barge Freight Rates: Southbound Only**

		Twin Cities	Mid-Mississippi	Lower Illinois River	St. Louis	Cincinnati	Lower Ohio	Cairo-Memphis
<b>Rate<sup>1</sup></b>	11/29/2016	-	-	240	183	200	200	163
	11/22/2016	367	273	245	195	220	220	163
<b>\$/ton</b>	11/29/2016	-	-	11.14	7.30	9.38	8.08	5.12
	11/22/2016	22.72	14.52	11.37	7.78	10.32	8.89	5.12
<b>Current week % change from the same week:</b>								
	Last year	-	-	-14	-4	3	3	-4
	3-year avg. <sup>2</sup>	-	-	-53	-56	-59	-59	-55
<b>Rate<sup>1</sup></b>	December	-	-	245	188	200	200	163
	February	-	-	255	188	195	195	163

<sup>1</sup>Rate = percent of 1976 tariff benchmark index (1976 = 100 percent); <sup>2</sup>4-week moving average; ton = 2,000 pounds; - closed for winter  
Source: Transportation & Marketing Programs/AMS/USDA

Figure 9

**Benchmark tariff rates**

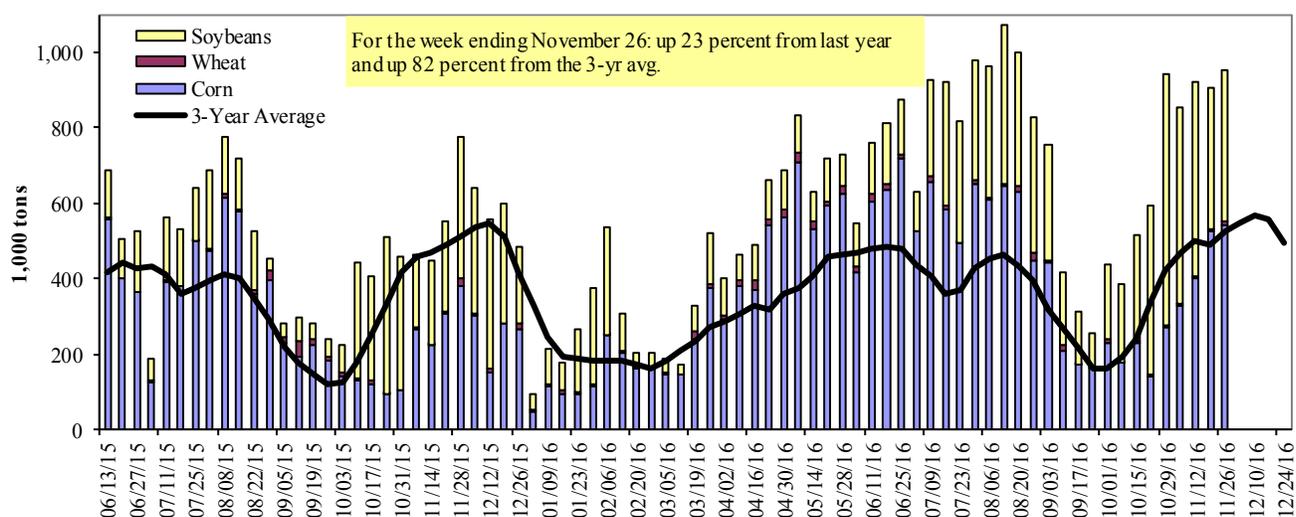
**Calculating barge rate per ton:**

$$(\text{Rate} * 1976 \text{ tariff benchmark rate per ton}) / 100$$

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



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 11/26/2016	Corn	Wheat	Soybeans	Other	Total
<b>Mississippi River</b>					
Rock Island, IL (L15)	369	3	190	0	562
Winfield, MO (L25)	420	11	302	0	733
Alton, IL (L26)	553	9	344	0	906
Granite City, IL (L27)	544	11	398	0	953
<b>Illinois River (L8)</b>	97	0	52	0	149
<b>Ohio River (L52)</b>	44	2	172	0	217
<b>Arkansas River (L1)</b>	1	1	75	0	78
Weekly total - 2016	589	14	646	0	1,248
Weekly total - 2015	444	28	610	17	1,100
2016 YTD <sup>1</sup>	22,049	1,895	14,625	315	38,884
2015 YTD	17,836	1,606	11,955	327	31,724
2016 as % of 2015 YTD	124	118	122	96	123
Last 4 weeks as % of 2015 <sup>2</sup>	138	107	147	20	140
Total 2015	19,215	1,686	14,191	359	35,451

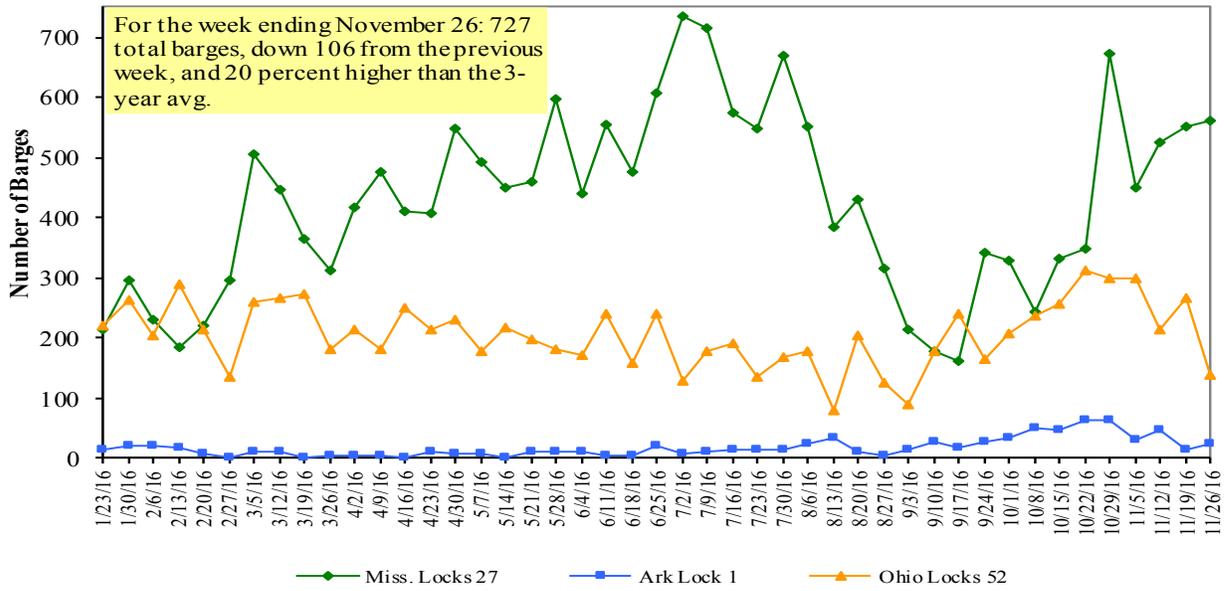
<sup>1</sup> Weekly total, YTD (year-to-date) and calendar year total includes Miss/27, Ohio/52, and Ark/1; "Other" refers to oats, barley, sorghum, and rye.

<sup>2</sup> As a percent of same period in 2015.

Note: Total may not add exactly, due to rounding

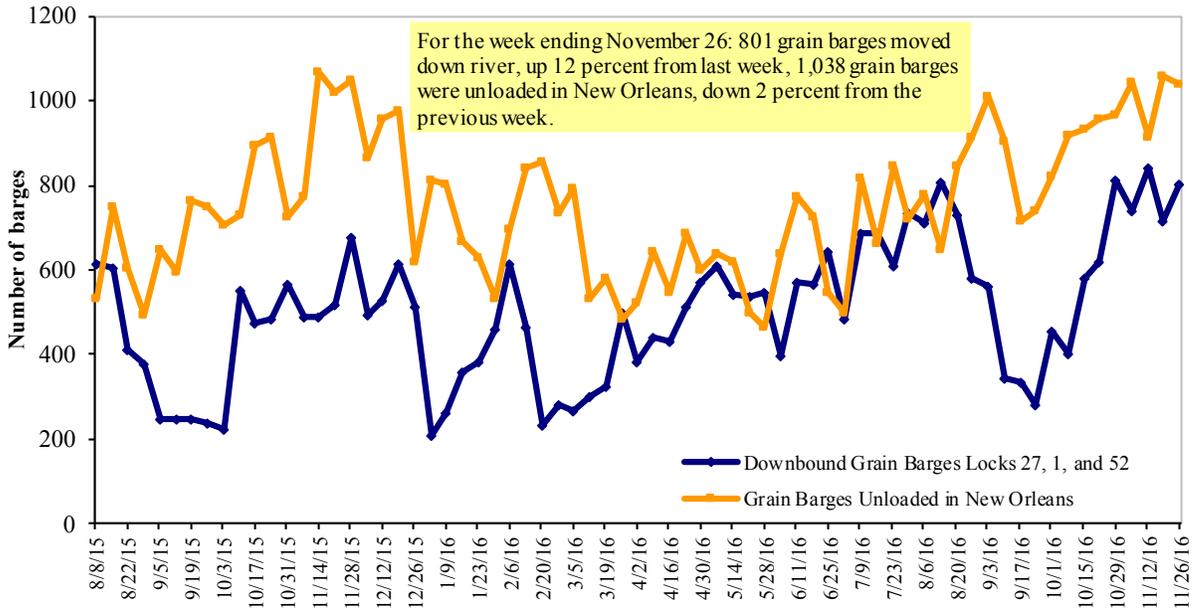
Source: U.S. Army Corps of Engineers

**Figure 11**  
**Upbound Empty Barges Transiting Mississippi River Locks 27, Arkansas River Lock and Dam 1, and Ohio River Locks and Dam 52**



Source: U.S. Army Corps of Engineers

**Figure 12**  
**Grain Barges for Export in New Orleans Region**



Source: U.S. Army Corps of Engineers and GIPSA

# 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<sup>1</sup>, Week Ending 11/28/2016 (US \$/gallon)

Region	Location	Price	Change from	
			Week ago	Year ago
I	East Coast	2.446	0.004	-0.009
	New England	2.472	0.001	-0.055
	Central Atlantic	2.549	0.000	-0.018
	Lower Atlantic	2.361	0.006	0.006
II	Midwest <sup>2</sup>	2.356	0.000	-0.055
III	Gulf Coast <sup>3</sup>	2.290	-0.006	0.036
IV	Rocky Mountain	2.450	-0.005	-0.001
V	West Coast	2.727	-0.003	0.103
	West Coast less California	2.635	-0.002	0.125
	California	2.800	-0.004	0.083
Total	U.S.	2.420	-0.001	-0.001

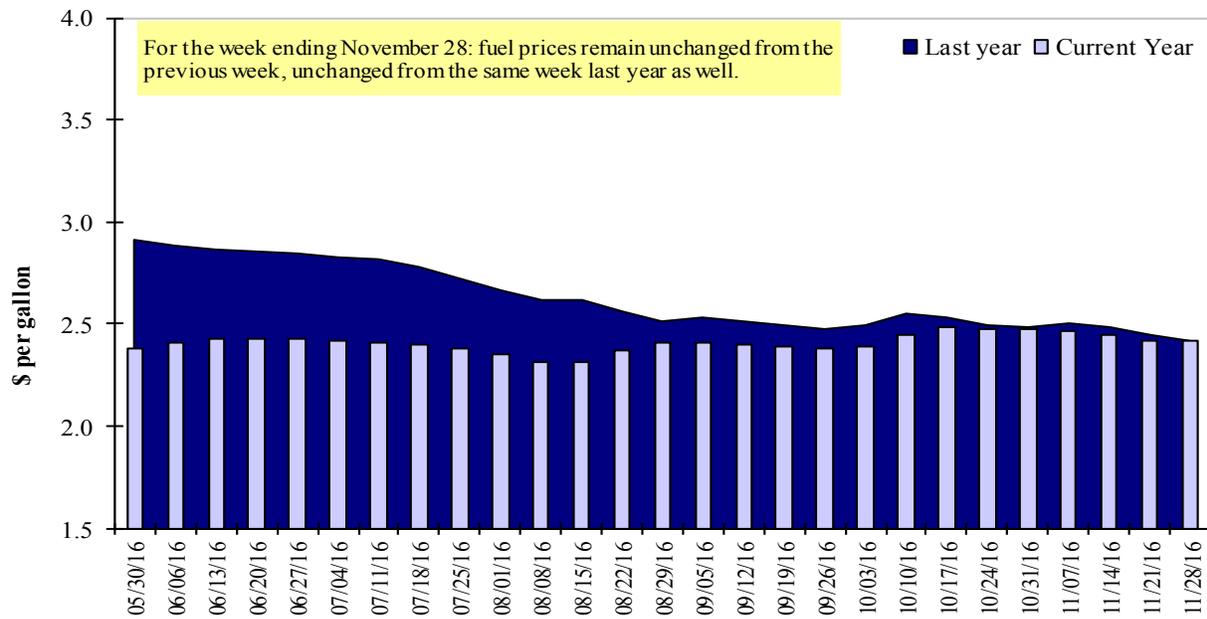
<sup>1</sup>Diesel fuel prices include all taxes. Prices represent an average of all types of diesel fuel.

<sup>2</sup>Same as North Central <sup>3</sup>Same as South Central

Source: Energy Information Administration/U.S. Department of Energy (www.eia.doe.gov)

Figure 13

## Weekly Diesel Fuel Prices, U.S. Average



Source: Retail On-Highway Diesel Prices, Energy Information Administration, Dept. of Energy

# Grain Exports

Table 12

## U.S. Export Balances and Cumulative Exports (1,000 metric tons)

For the week ending	Wheat						Corn	Soybeans	Total
	HRW	SRW	HRS	SWW	DUR	All wheat			
<b>Export Balances<sup>1</sup></b>									
11/17/2016	2,064	552	2,138	1,219	155	6,128	18,402	18,553	43,082
This week year ago	1,225	629	1,592	1,035	49	4,529	10,272	14,495	29,297
<b>Cumulative exports-marketing year<sup>2</sup></b>									
2016/17 YTD	5,514	1,015	3,618	1,936	174	12,256	10,933	21,817	45,007
2015/16 YTD	2,695	1,776	2,918	1,633	481	9,502	6,307	17,479	33,289
YTD 2016/17 as % of 2015/16	205	57	124	119	36	129	173	125	135
Last 4 wks as % of same period 2015/16	165	85	117	105	352	125	165	141	147
2015/16 Total	5,538	3,057	6,285	3,551	670	19,101	45,564	49,821	114,487
2014/15 Total	7,009	3,654	7,250	3,758	665	22,336	45,205	49,614	117,155

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

<sup>2</sup> Shipped export sales to date; new marketing year now in effect for wheat; new marketing year now in effect for corn and soybeans

Note: YTD = year-to-date. Marketing Year: wheat = 6/01-5/31, corn & soybeans = 9/01-8/31

Source: Foreign Agricultural Service/USDA ([www.fas.usda.gov](http://www.fas.usda.gov))

Table 13

## Top 5 Importers<sup>1</sup> of U.S. Corn

For the week ending 11/17/2016	Total Commitments <sup>2</sup>		% change current MY from last MY	Exports <sup>3</sup> 3-year avg 2013-2015
	2016/17 Current MY	2015/16 Last MY		
	- 1,000 mt -			- 1,000 mt -
Japan	3,626	2,549	42	11,284
Mexico	8,453	6,773	25	11,204
Korea	2,019	262	671	3,931
Colombia	1,812	1,352	34	4,134
Taiwan	1,309	341	284	1,912
<b>Top 5 Importers</b>	<b>17,220</b>	<b>11,276</b>	<b>53</b>	<b>32,465</b>
<b>Total US corn export sales</b>	<b>29,335</b>	<b>16,580</b>	<b>77</b>	<b>46,633</b>
% of Projected	52%	34%		
Change from prior week	<b>1,689</b>	<b>2,036</b>		
<b>Top 5 importers' share of U.S. corn export sales</b>	59%	68%		70%
<b>USDA forecast, November 2016</b>	<b>56,616</b>	<b>48,295</b>	<b>17</b>	
<b>Corn Use for Ethanol USDA forecast, November 2016</b>	<b>134,620</b>	<b>132,233</b>	<b>2</b>	

(n) indicates negative number.

<sup>1</sup> Based on FAS Marketing Year Ranking Reports - [www.fas.usda.gov](http://www.fas.usda.gov); 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--<http://www.fas.usda.gov/esrquery/>. Total commitments change from prior week could include revisions from previous week's outstanding sales or accumulated sales.

<sup>3</sup> FAS Marketing Year Ranking Reports - <http://apps.fas.usda.gov/export-sales/myrkaug.htm>; 3-yr average

Table 14

**Top 5 Importers<sup>1</sup> of U.S. Soybeans**

For the week ending 11/17/2016	Total Commitments <sup>2</sup>		% change current MY from last MY	Exports <sup>3</sup> 3-yr avg. 2013-2015
	2016/17 Current MY	2015/16 Last MY		
	- 1,000 mt -			- 1,000 mt -
China	24,672	18,441	34	29,033
Mexico	1,713	1,537	11	3,295
Indonesia	672	489	38	2,065
Japan	1,080	1,062	2	1,994
Taiwan	796	606	31	1,226
<b>Top 5 importers</b>	<b>28,932</b>	<b>22,134</b>	<b>31</b>	<b>37,614</b>
<b>Total US soybean export sales</b>	<b>40,370</b>	<b>31,974</b>	<b>26</b>	<b>48,389</b>
% of Projected	72%	61%		
Change from prior week	<b>1,886</b>	<b>1,078</b>		
<b>Top 5 importers' share of U.S. soybean export sales</b>	72%	69%		<b>78%</b>
<b>USDA forecast, November 2016</b>	<b>55,858</b>	<b>52,752</b>	<b>6</b>	

(n) indicates negative number.

<sup>1</sup> Based on FAS Marketing Year Ranking Reports - [www.fas.usda.gov](http://www.fas.usda.gov); 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--  
<http://www.fas.usda.gov/esrquery/>. Total commitments change from prior week could include revisions from previous week's outstanding sales and/or accumulated sales<sup>3</sup> FAS Marketing Year Final Reports - [www.fas.usda.gov/export-sales/myfi\\_rpt.htm](http://www.fas.usda.gov/export-sales/myfi_rpt.htm). (Carry over plus Accumulated Exports)

Table 15

**Top 10 Importers<sup>1</sup> of All U.S. Wheat**

For the week ending 11/17/2016	Total Commitments <sup>2</sup>		% change current MY from last MY	Exports <sup>3</sup> 3-yr avg 2013-2015
	2016/17 Current MY	2015/16 Last MY		
	- 1,000 mt -			- 1,000 mt -
Japan	1,686	1,401	20	2,743
Mexico	1,723	1,419	21	2,660
Nigeria	774	1,098	(29)	1,978
Philippines	1,884	1,500	26	2,156
Brazil	1,053	338	212	2,076
Korea	920	842	9	1,170
Taiwan	608	606	0	1,005
Indonesia	514	193	166	776
Colombia	544	446	22	679
Thailand	552	379	46	618
<b>Top 10 importers</b>	<b>9,706</b>	<b>7,842</b>	<b>24</b>	<b>15,861</b>
<b>Total US wheat export sales</b>	<b>18,384</b>	<b>14,032</b>	<b>31</b>	<b>24,485</b>
% of Projected	69%	66%		
Change from prior week	<b>712</b>	<b>304</b>		
<b>Top 10 importers' share of U.S. wheat export sales</b>	53%	56%		65%
<b>USDA forecast, November 2016</b>	<b>26,567</b>	<b>21,117</b>	<b>26</b>	

(n) indicates negative number.

<sup>1</sup> Based on FAS Marketing Year Ranking Reports - [www.fas.usda.gov](http://www.fas.usda.gov); Marketing year = Jun 1 - May 31.<sup>2</sup> Cumulative Exports (shipped) + Outstanding Sales (unshipped), FAS Weekly Export Sales Report, or Export Sales Query--  
<http://www.fas.usda.gov/esrquery/>. Total commitments change from prior week could include revisions from the previous week's outstanding and/or accumulated sales<sup>3</sup> FAS Marketing Year Final Reports - [www.fas.usda.gov/export-sales/myfi\\_rpt.htm](http://www.fas.usda.gov/export-sales/myfi_rpt.htm).

Table 16

## Grain Inspections for Export by U.S. Port Region (1,000 metric tons)

Port Regions	For the Week Ending 11/24/16	Previous Week*	Current Week as % of Previous	2016 YTD*	2015 YTD*	2016 YTD as % of 2015 YTD	Last 4-weeks as % of:		2015 Total*
							Last Year	Prior 3-yr. avg.	
<b>Pacific Northwest</b>									
Wheat	163	208	79	11,108	9,938	112	105	111	10,985
Corn	61	246	25	10,990	7,086	155	40635	287	7,232
Soybeans	420	693	61	11,847	9,778	121	129	112	11,809
<b>Total</b>	<b>644</b>	<b>1,147</b>	<b>56</b>	<b>33,944</b>	<b>26,802</b>	<b>127</b>	<b>141</b>	<b>121</b>	<b>30,027</b>
<b>Mississippi Gulf</b>									
Wheat	5	39	14	3,158	4,179	76	37	43	4,504
Corn	513	385	133	28,811	24,820	116	174	131	26,701
Soybeans	1,482	1,561	95	29,995	24,628	122	118	111	29,593
<b>Total</b>	<b>2,001</b>	<b>1,985</b>	<b>101</b>	<b>61,963</b>	<b>53,627</b>	<b>116</b>	<b>123</b>	<b>113</b>	<b>60,797</b>
<b>Texas Gulf</b>									
Wheat	57	115	50	5,364	3,347	160	228	155	3,724
Corn	62	38	160	1,562	564	277	n/a	1134	596
Soybeans	0	112	0	890	737	121	173	157	864
<b>Total</b>	<b>119</b>	<b>265</b>	<b>45</b>	<b>7,816</b>	<b>4,649</b>	<b>168</b>	<b>228</b>	<b>175</b>	<b>5,184</b>
<b>Interior</b>									
Wheat	7	63	11	1,409	1,279	110	173	224	1,388
Corn	149	171	88	6,590	5,626	117	159	128	6,201
Soybeans	103	133	78	4,125	3,270	126	166	124	3,518
<b>Total</b>	<b>260</b>	<b>366</b>	<b>71</b>	<b>12,123</b>	<b>10,175</b>	<b>119</b>	<b>164</b>	<b>132</b>	<b>11,106</b>
<b>Great Lakes</b>									
Wheat	1	32	2	978	935	105	87	101	997
Corn	0	19	0	519	485	107	n/a	2436	485
Soybeans	0	111	0	741	637	116	214	154	733
<b>Total</b>	<b>1</b>	<b>162</b>	<b>0</b>	<b>2,238</b>	<b>2,057</b>	<b>109</b>	<b>188</b>	<b>156</b>	<b>2,216</b>
<b>Atlantic</b>									
Wheat	0	1	n/a	289	493	59	365	812	520
Corn	0	0	n/a	293	275	107	n/a	121	277
Soybeans	141	87	162	1,802	1,634	110	103	115	2,053
<b>Total</b>	<b>141</b>	<b>87</b>	<b>162</b>	<b>2,384</b>	<b>2,402</b>	<b>99</b>	<b>118</b>	<b>125</b>	<b>2,850</b>
<b>U.S. total from ports**</b>									
Wheat	234	457	51	22,306	20,170	111	115	116	22,118
Corn	785	858	92	48,765	38,857	125	218	151	41,492
Soybeans	2,146	2,696	80	49,398	40,685	121	125	115	48,570
<b>Total</b>	<b>3,165</b>	<b>4,012</b>	<b>79</b>	<b>120,469</b>	<b>99,712</b>	<b>121</b>	<b>136</b>	<b>121</b>	<b>112,180</b>

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

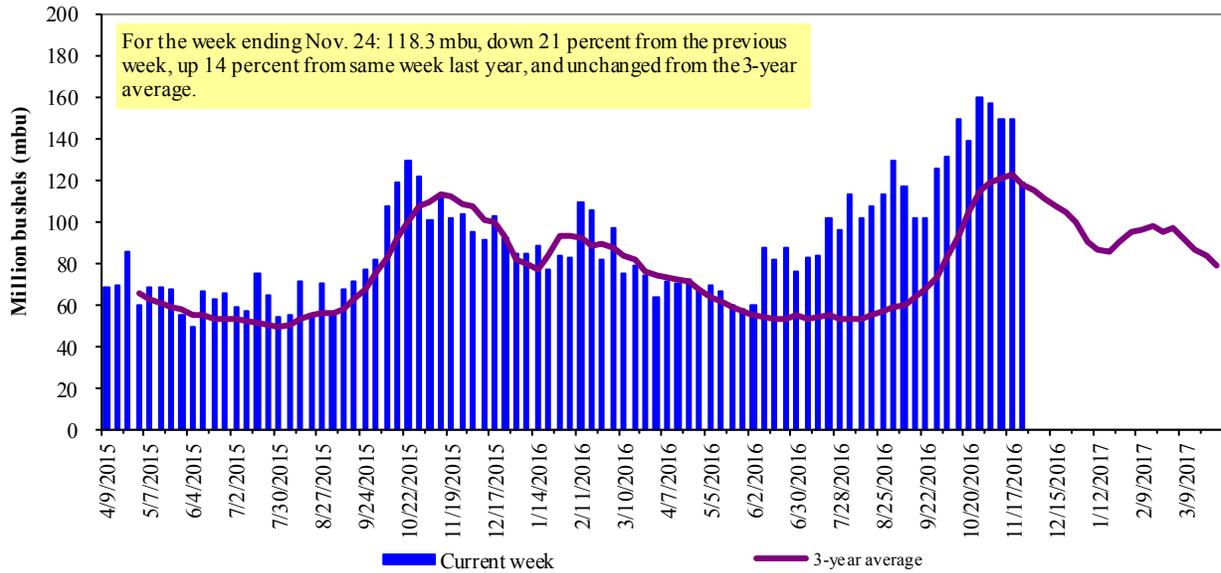
\*\*Total only includes regions shown above

Source: Grain Inspection, Packers and Stockyards Administration/USDA ([www.gipsa.usda.gov](http://www.gipsa.usda.gov)); YTD= year-to-date; n/a = not applicable

The United States exports approximately one-quarter of the grain it produces. On average, this includes nearly 45 percent of U.S.-grown wheat, 35 percent of U.S.-grown soybeans, and 20 percent of the U.S.-grown corn. Approximately 59 percent of the U.S. export grain shipments departed through the U.S. Gulf region in 2015.

Figure 14

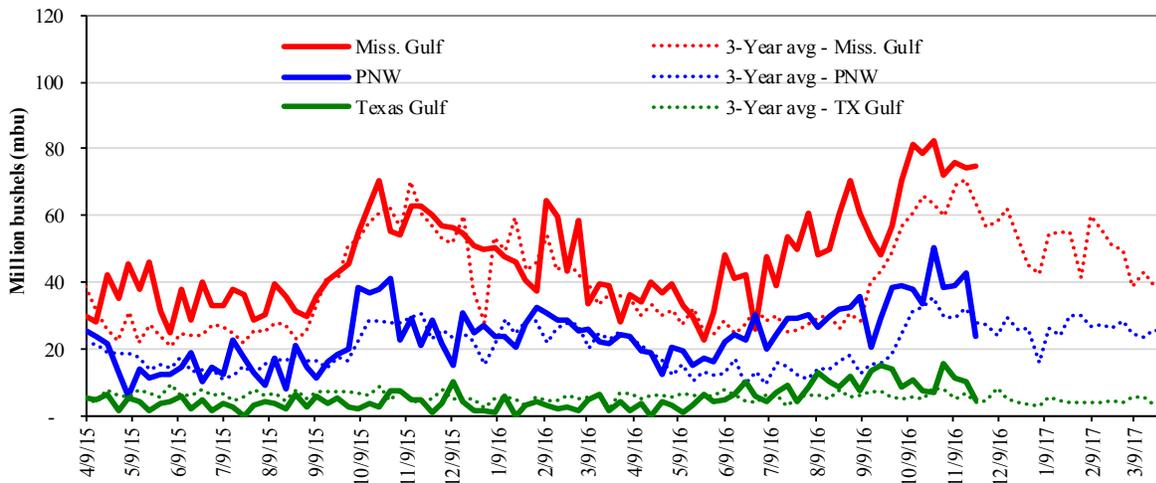
**U.S. grain inspected for export (wheat, corn, and soybeans)**



Source: Grain Inspection, Packers and Stockyards Administration/USDA (www.gipsa.usda.gov)  
 Note: 3-year average consists of 4-week running average

Figure 15

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



Week ending 11/24/16 inspections (mbu):	Percent change from:	MS Gulf	TX Gulf	U.S. Gulf	PNW
Mississippi Gulf: 74.9	Last Week:	up 1	down 54	down 5	down 44
PNW: 23.8	Last Year (same week):	up 25	up 580	up 31	down 16
Texas Gulf: 4.5	3-yr avg. (4-wk. mov. Avg):	up 14	down 22	up 11	down 20

Source: Grain Inspection, Packers and Stockyards Administration/USDA (www.gipsa.usda.gov)

# Ocean Transportation

Table 17

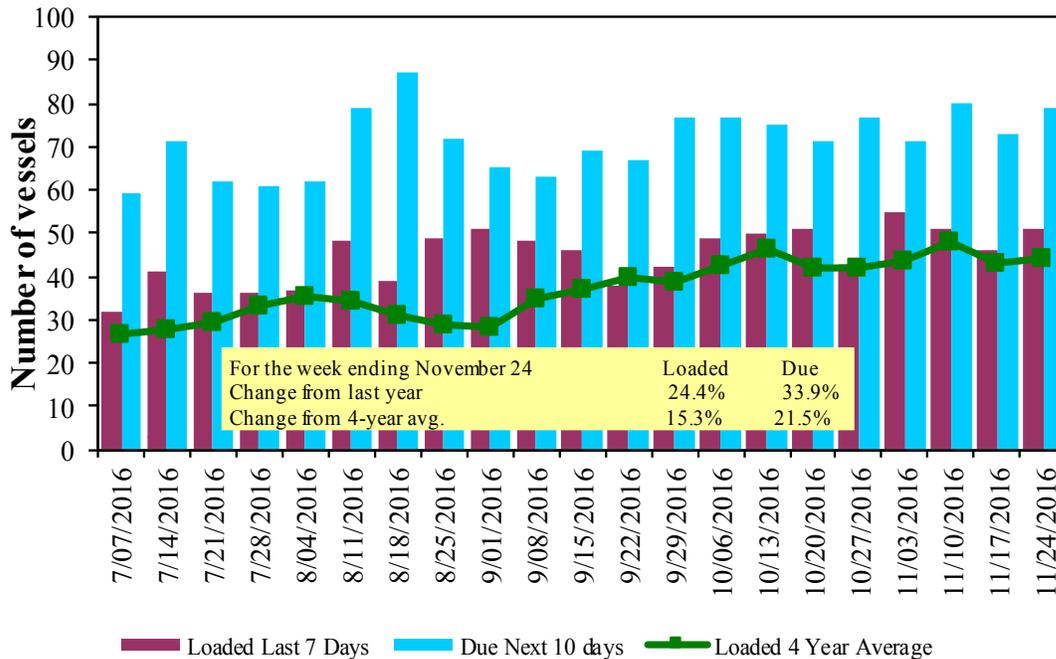
**Weekly Port Region Grain Ocean Vessel Activity (number of vessels)**

Date	Gulf			Pacific Northwest	Vancouver B.C.
	In port	Loaded 7-days	Due next 10-days	In port	In port
11/24/2016	39	51	79	n/a	n/a
11/17/2016	52	46	73	19	n/a
2015 range	(25..54)	(28..54)	(36..80)	(3..26)	n/a
2015 avg	42	38	56	11	n/a

Source: Transportation & Marketing Programs/AMS/USDA

Figure 16

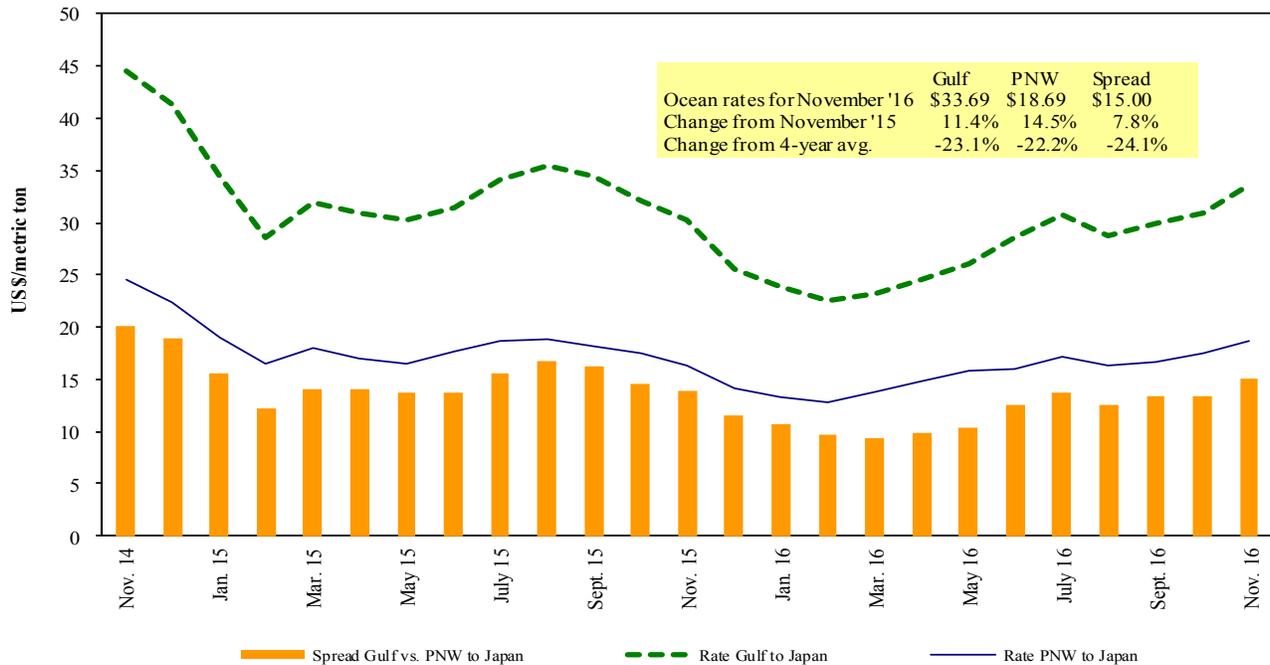
**U.S. Gulf Vessel Loading Activity**



Source: Transportation & Marketing Programs/AMS/USDA

Figure 17

## Grain Vessel Rates, U.S. to Japan



Data Source: O'Neil Commodity Consulting

Table 18

### Ocean Freight Rates For Selected Shipments, Week Ending 11/26/2016

Export region	Import region	Grain types	Loading date	Volume loads (metric tons)	Freight rate (US\$/metric ton)
U.S. Gulf	China	Heavy Grain	Dec 14/20	53,000	34.00
U.S. Gulf	China	Heavy Grain	Dec 5/15	60,000	35.75
U.S. Gulf	China	Heavy Grain	Dec 1/10	60,000	35.35
U.S. Gulf	China	Heavy Grain	Nov 20/30	50,000	31.00
U.S. Gulf	China	Heavy Grain	Nov 15/25	50,000	29.00
U.S. Gulf	China	Heavy Grain	Oct 20/30	65,000	27.50
U.S. Gulf	China	Heavy Grain	Oct 10/20	60,000	28.25
U.S. Gulf	China	Heavy Grain	Oct 5/15	66,000	28.00
U.S. Gulf	China	Heavy Grain	Sep 20/25	60,000	27.75
PNW	Bangladesh	Wheat	Dec 1/10	12,500	160.33*
Vancouver	China	Heavy Grain	Nov 1/10	50,000	31.50
PNW	Bangladesh	Wheat	Nov 1/10	12,500	163.55*
PNW	Taiwan	Wheat	Sep 8/22	54,000	21.10
Black Sea	Spanish Mediterranean	Heavy Grain	Oct 14/18	60,000	9.35
River Plate	South Africa	Soybeans	Nov 1/14	25,000	24.00
River Plate	Algeria	Corn	Sep 24/28	40,000	19.50
Ukraine	Iran	Wheat	Oct 10/17	60,000	22.25

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

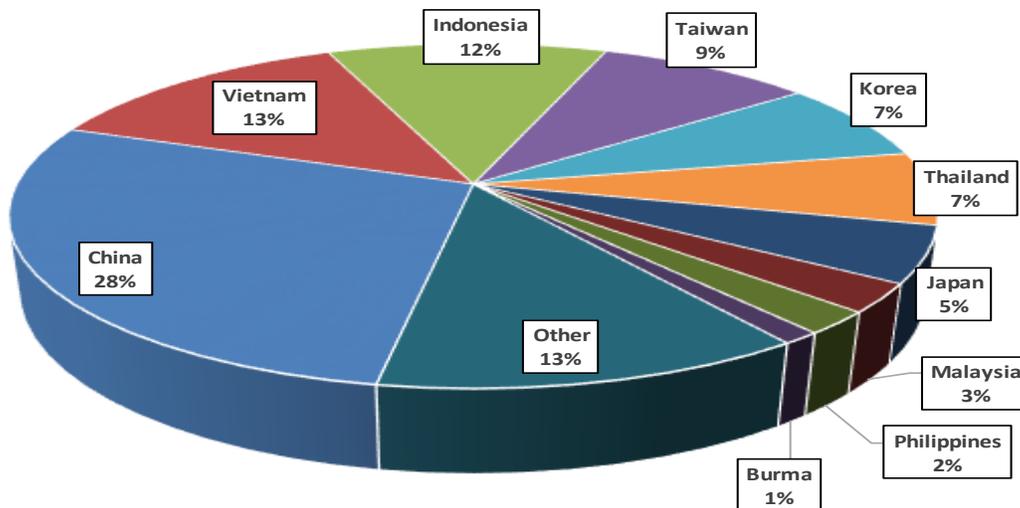
\*50 percent of food aid from the United States is required to be shipped on U.S.-flag vessels.

Source: Maritime Research Inc. ([www.maritime-research.com](http://www.maritime-research.com))

In 2015, containers were used to transport 8 percent of total U.S. waterborne grain exports. Approximately 64 percent of U.S. waterborne grain exports in 2015 went to Asia, of which 12 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, January-August 2016**

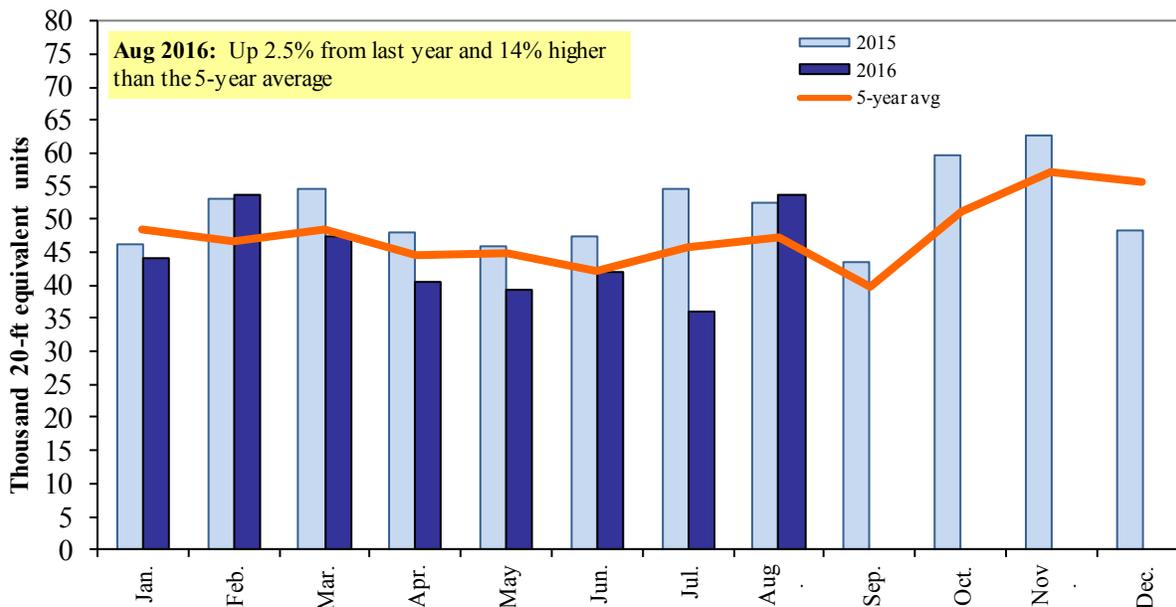


Source: USDA/Agricultural Marketing Service/Transportation Services Division analysis of Port Import Export Reporting Service (PIERS) data

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

Figure 19

**Monthly Shipments of Containerized Grain to Asia**



Source: USDA/Agricultural Marketing Service/Transportation Services Division analysis of Port Import Export Reporting Service (PIERS) data.

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

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