USDA United States Department of Agriculture

Grain Transportation Report

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

Contact Us

November 24, 2016

Contents

The next release is Dec 1, 2016

WEEKLY HIGHLIGHTS

Continued High Grain Carloads by Rail
U.S. Class I railroads originated 26,817 **grain carloads** for the week ending November 12, down 6 percent from the previous week, up 23 percent from last year, and up 17 percent from the 3-year average. The prior week (ending November 5) saw a record 28,655 grain carloads, the highest number since 2007 when they peaked at 28,760. Exceptional grain shipments have characterized railroads for months. The average weekly rail grain car loadings have been well-above the prior 3-year average every month since June (see **GTR Figure 3**). These trends are likely the result of a combination of a record grain harvest and an especially accessible rail network, as railroads have had much lower total traffic volume compared to previous years, primarily due to declines in coal shipments.

Grain Inspections Remain Unchanged; Wheat and Corn Higher
For the week ending November 17, **total inspections of grain** (corn, wheat, and soybeans) for export from major U.S. export regions reached 4.0 million metric ton (mmt), unchanged from the previous week, up 47 percent from last year, and 22 percent above the 3-year average. Wheat and corn inspections increased 54 and 28 percent from the previous week as shipments of each increased to Asia and Latin America. Pacific Northwest (PNW) grain inspections increased 9 percent from the previous week, but Mississippi Gulf inspections decreased 3 percent. Outstanding export sales (unshipped) of grain increased for corn and wheat, while sales continued to fall for soybeans.

Corn Barge Tonnages Increase as Winter Closure Approaches
For the week ending November 19, corn shipments on the locking portions of the Upper Mississippi, Ohio, and Arkansas Rivers were 585 thousand tons, the highest volume in 14 weeks. The corn volume represented 52 percent of the total grain shipments for the week, while the soybean volume was 47 percent of the total. Based upon the 3-year average during November, soybean shipments typically represent 61 percent of total tonnages, while corn shipments represents 37 percent. Barge shippers in the upper Midwest are moving corn downriver before late November, when the northern most reaches of the Upper Mississippi River begin to shut down for the winter. In addition, low river levels are beginning to be a concern on the lower Mississippi River. On November 19, a tow of 42 grain barges ran aground near Memphis, TN, temporarily closing the river there. Without additional rainfall in the near future, barge operators are likely to lighten their loads until there are better navigation conditions.

Snapshots by Sector

Export Sales
During the week ending November 10, **unshipped balances** of wheat, corn, and soybeans totaled 42.6 mmt, up 49 percent from the same time last year. Net weekly **wheat export sales** were .598 mmt, down 22 percent from the previous week. Net **corn export sales** were 1.66 mmt, up 35 percent from the previous week, and net **soybean export sales** were 1.42 mmt, up 51 percent from the past week.

Rail
Average December shuttle **secondary railcar bids/offers** per car were $31 below tariff for the week ending November 17, down $58 from last week, and $319 higher than last year. Average non-shuttle secondary railcar bids/offers per car were $81 below tariff, down $81 from last week, and $63 higher than last year.

Barge
For the week ending November 19, **barge grain movements** totaled 1,129,970 tons, 14 percent lower than last week, and up 37 percent from the same period last year.

For the week ending November 19, 716 grain barges **moved down river**, down 15 percent from last week, 1,058 grain barges were **unloaded in New Orleans**, up 16 percent from the previous week.

Ocean
For the week ending November 17, 46 **ocean-going grain vessels** were loaded in the Gulf, 5 percent more than the same period last year. Seventy-three vessels are expected to be loaded within the next 10 days, 9 percent more than the same period last year.

For the week ending November 17, 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 $20 per metric ton, 13 percent more than the previous week.

Fuel
During the week ending November 21, U.S. average **diesel fuel prices** decreased 2 cents from the previous week at $2.42 per gallon, 2 cents below the same week last year.

Preferred citation: U.S. Dept. of Agriculture, Agricultural Marketing Service. *Grain Transportation Report.* November 24, 2016.
Web: **http://dx.doi.org/10.9752/TS056.11-24-2016**

Feature Article/Calendar

Corn and Soybean Transportation Costs Up in the Gulf and Pacific Northwest

U.S. Gulf Costs: Transportation costs for shipping corn and soybeans from Minneapolis, MN, through the U.S. Gulf to Japan during the third quarter 2016 continued to increase from the second quarter as barge and ocean rates increased notably (*see table 1*). The costs for transporting corn and soybeans to the Gulf increased 16 percent quarter to quarter, but dropped 2 percent from last year. Ocean rates increased 13 percent from the second quarter in the Gulf due to increased grain and iron ore production (***GTR 10/20/16***). Ocean rates, however, were down 14 percent from last year as vessel supplies remained higher than normal. Barge rates for shipping grain to the Gulf jumped 32 percent from quarter to quarter as the record harvest increased demand for barge services. Barge rates increased 5 percent from year to year. Truck rates decreased 13 percent from quarter to quarter, but increased 24 percent from year to year as trucking activity increased.

Third quarter total landed costs (farm value plus transportation costs) for shipping grain from Minneapolis, MN, to Japan through the U.S. Gulf decreased slightly for corn but increased for soybeans, ranging from $198 to $427 per metric ton (mt). Quarter-to-quarter landed costs for shipping grain from Minneapolis to Japan through the Gulf decreased 2 percent for corn but increased 3 percent for soybeans (*see table 1*). Lower truck rates and farm values help push the quarter-to-quarter landed cost down for corn, while higher barge and ocean rates caused the soybean landed cost to increase. Year-to-year landed costs for shipping grain through the Gulf to Japan decreased 7 percent for corn due to lower ocean rates and farm values, but costs increased 2 percent for soybeans primarily because of higher truck and barge rates. The farm value of corn decreased 10 percent from the previous quarter and from last year. The farm value of soybeans increased 1 percent from the previous quarter, and increased 3 percent from last year. The transportation cost for shipping corn from the Gulf to Japan accounted for 37 percent of the total landed cost during the third quarter, above the past quarter but below last year. The transportation cost share of the total landed cost for soybeans was 17 percent, above the previous quarter but below last year (*see table 1*).

Table 1: Cost of Shipping Corn and Soybeans from Minneapolis to Japan through the U.S. Gulf

	Corn					Soybeans				
	$/metric ton			Percent change		$/metric ton			Percent Change	
	3rdQtr 15	2ndQtr 16	3rdQtr 16	Yr. to Yr.	Qtr to Qtr	3rdQtr 15	2ndQtr 16	3rdQtr 16	Yr. to Yr.	Qtr to Qtr
Truck	8.50	12.10	10.58	24.47	-12.56	8.50	12.10	10.58	24.47	-12.56
Barge	31.33	24.89	32.93	5.11	32.30	31.33	24.89	32.93	5.11	32.30
Ocean	34.71	26.40	29.92	-13.80	13.33	34.71	26.40	29.92	-13.80	13.33
Total Transportation Cost	74.54	63.39	73.43	-1.49	15.84	74.54	63.39	73.43	-1.49	15.84
Farm Value [2]	138.31	137.92	124.27	-10.15	-9.90	344.90	350.04	353.84	2.59	1.09
Total Landed Cost	212.85	201.31	197.7	-7.12	-1.79	419.44	413.43	427.27	1.87	3.35
Transportation % Landed Cost	35.02	31.49	37.14			17.77	15.33	17.19		

Table 2: Cost of Shipping Corn and Soybeans from Minneapolis to Japan through the U.S. PNW

	Corn					Soybeans				
	$/metric ton			Percent change		$/metric ton			Percent Change	
	3rdQtr 15	2ndQtr 16	3rdQtr 16	Yr. to Yr.	Qtr to Qtr	3rdQtr 15	2ndQtr 16	3rdQtr 16	Yr. to Yr.	Qtr to Qtr
Truck	8.50	12.10	10.58	24.47	-12.56	8.50	12.10	10.58	24.47	-12.56
Rail[1]	53.16	47.81	49.23	-7.39	2.97	58.42	52.88	54.29	-7.07	2.67
Ocean	18.57	15.50	16.61	-10.55	7.16	18.57	15.50	16.61	-10.55	7.16
Total Transportation Cost	80.23	75.41	76.42	-4.75	1.34	85.49	80.48	81.48	-4.69	1.24
Farm Value [2]	138.31	137.92	124.27	-10.15	-9.90	344.90	350.04	353.84	2.59	1.09
Total Landed Cost	218.54	213.33	200.69	-8.17	-5.93	430.39	430.52	435.32	1.15	1.11
Transportation % Landed Cost	36.71	35.35	38.08			19.86	18.69	18.72		

Source: USDA/AMS/TMP

[1] Rail tariffs include fuel surcharges and revisions for heavy axle rail cars and shuttle trains. The rail tariff rate is a base price of rail freight rates, but during periods of high rail demand or car shortages, high auction and secondary market rates could exceed the base rail tariffs per car

Pacific Northwest Costs: Quarter-to-quarter transportation costs for shipping corn and soybeans from Minneapolis, MN to Japan via the Pacific Northwest (PNW) increased 1 percent, due to higher rail and ocean rates (*see table 2*). Year-to-year transportation costs, however, were down 8 percent for corn due to lower rail and ocean rates, but up 1 percent for soybeans. Quarter-to-quarter rail rates for shipping grain to the PNW increased 3 percent for corn and soybeans, but year-to-year rail rates for shipping grain to the PNW were down 7 percent for corn and soybeans, as demand for rail service decreased. PNW ocean rates were up 7 percent quarter to quarter, and up 11 percent year to year.

PNW landed costs decreased 6 percent for corn from quarter to quarter, but increased 1 percent for soybeans (*see table 2*). Quarter-to-quarter total landed costs for shipping corn through the PNW increased as truck rates and farm values declined. Lower truck rates caused the landed costs for shipping soybeans to decrease slightly. Landed costs for shipping corn and soybeans through the PNW to Japan ranged from $201 to $435 per mt. Year-to-year PNW landed costs decreased 8 percent for corn but increased 1 percent for soybeans. The transportation costs for corn shipped through the PNW to Japan accounted for about 38 percent of the total landed costs during the third quarter, greater than the previous quarter and last year. The third quarter transportation cost for soybeans shipped through the PNW to Japan accounted for 19 percent of the total landed costs, unchanged from the previous quarter but below last year. The farm value of corn accounted for 62 percent of the total landed costs for shipping to Japan from the PNW during the third quarter, while soybean farm value accounted for 81 percent of the total landed costs.

Outlook: USDA's November *World Agricultural Supply and Demand Estimates* (WASDE) report projects 2016/17 corn exports to increase 18 percent from last year. The estimate was increased amidst a 12 percent increase in projected corn production. The November WASDE 2016/17 soybean exports projection is 2 percent above the October estimate but 6 percent above last year. According to USDA, soybean production for 2016/17 is estimated to reach 4.36 million bushels, surpassing the record 2015/16 crop.
Johnny.Hill@ams.usda.gov

Grain Transportation Indicators

Table 1

Grain Transport Cost Indicators[1]

	Truck	Rail		Barge	Ocean	
For the week ending		Unit Train	Shuttle		Gulf	Pacific
11/23/16	162	256	206	136	159	142
11/16/16	164	255	208	143	143	126

[1]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	11/18/2016	11/10/2016
Corn	IL--Gulf	-0.52	-0.57
Corn	NE--Gulf	-0.84	-0.90
Soybean	IA--Gulf	-1.07	-0.96
HRW	KS--Gulf	-1.90	-2.07
HRS	ND--Portland	-2.11	-2.12

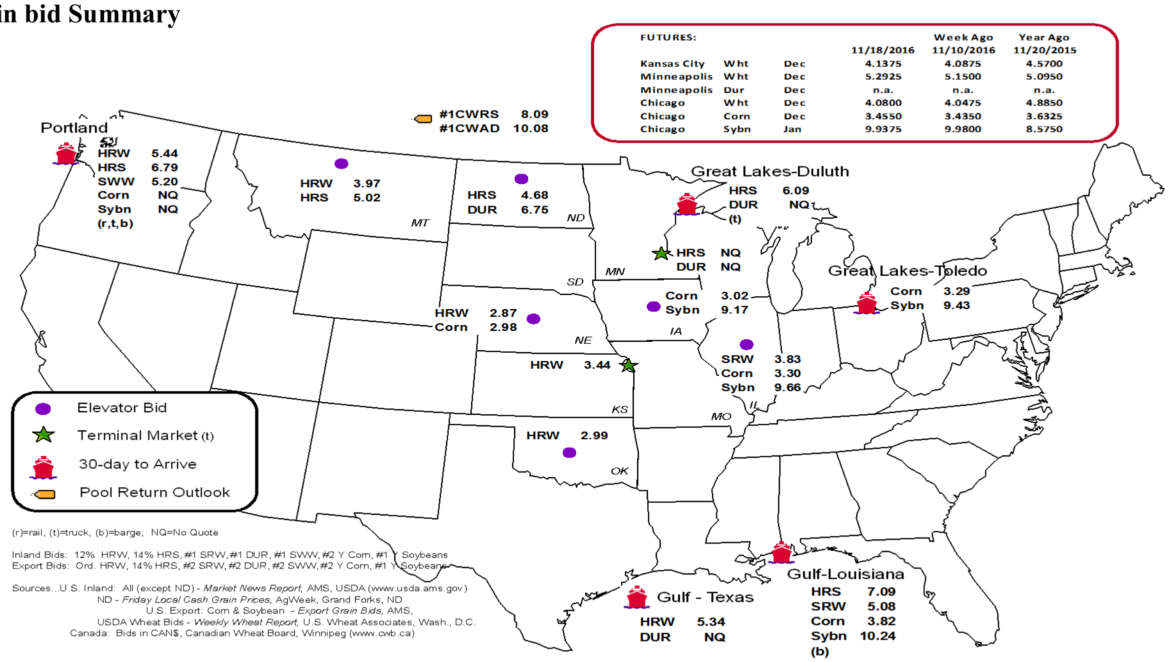
Note: nq = no quote

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)[1]

For the Week Ending	Mississippi Gulf	Texas Gulf	Pacific Northwest	Atlantic & East Gulf	Total	Week ending	Cross-Border Mexico[3]
11/16/2016[p]	1,284	2,033	7,206	1,557	12,080	11/12/2016	2,433
11/09/2016[r]	2,306	2,404	7,296	1,008	13,014	11/5/2016	2,374
2016 YTD[r]	31,595	74,111	258,828	22,700	387,234	2016 YTD	95,220
2015 YTD[r]	27,473	51,933	206,038	22,582	308,026	2015 YTD	87,373
2016 YTD as % of 2015 YTD	115	143	126	101	126	% change YTD	109
Last 4 weeks as % of 2015[2]	136	179	113	139	126	Last 4wks % 2015	94
Last 4 weeks as % of 4-year avg.[2]	126	195	124	124	132	Last 4wks % 4 yr	117
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

[1] Data is incomplete as it is voluntarily provided

[2] Compared with same 4-weeks in 2015 and prior 4-year average.

[3] Cross-border weekly data is approximately 15 percent below the Association of American Railroads' reported weekly carloads received by Mexican railroads to reflect switching between KCSM and FerroMex.

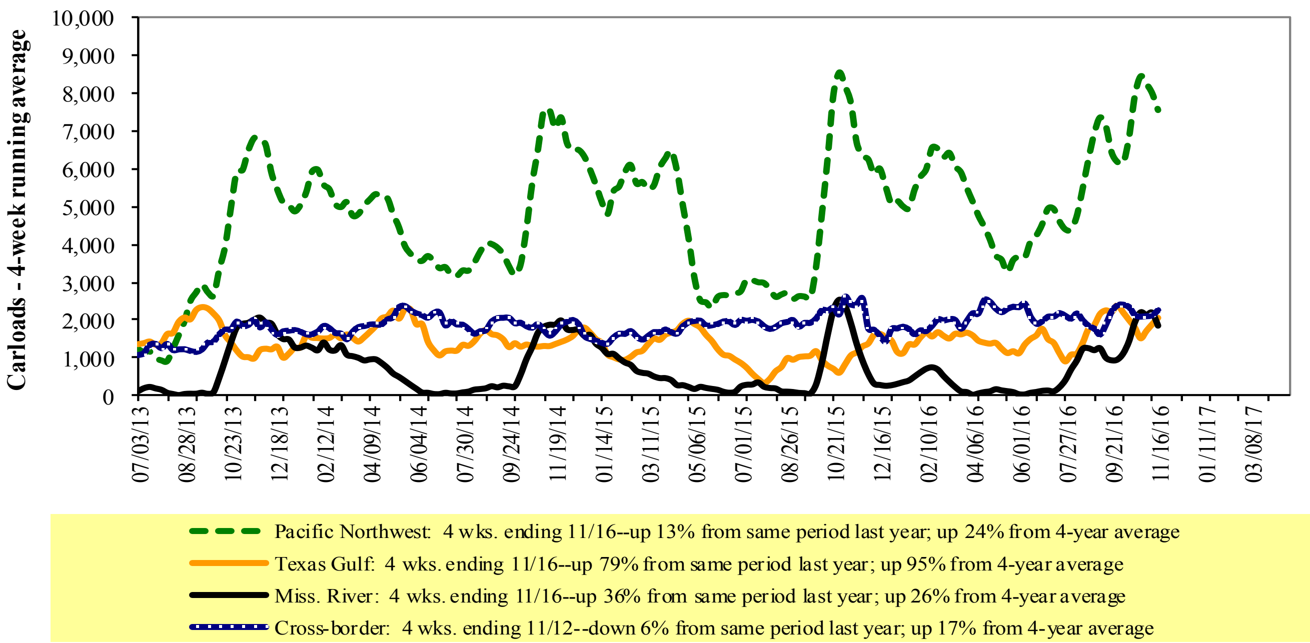
YTD = year-to-date; p = preliminary data; r = revised data; n/a = not available

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



Source: Transportation & Marketing Programs/AMS/USDA

Table 4

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

For the week ending:	East		West			U.S. total	Canada	
11/12/2016	CSXT	NS	BNSF	KCS	UP		CN	CP
This week	1,959	3,658	14,027	744	6,429	26,817	4,564	4,502
This week last year	1,600	3,142	11,226	945	4,893	21,806	4,733	5,148
2016 YTD	81,893	129,766	508,203	39,159	259,495	1,018,516	164,763	200,440
2015 YTD	90,993	130,872	460,886	40,498	233,486	956,735	183,781	204,361
2016 YTD as % of 2015 YTD	90	99	110	97	111	106	90	98
Last 4 weeks as % of 2015*	128	130	101	107	123	113	102	91
Last 4 weeks as % of 3-yr avg.**	108	115	116	87	124	115	98	88
Total 2015	104,039	149,172	536,173	45,445	267,720	1,102,549	210,996	236,263

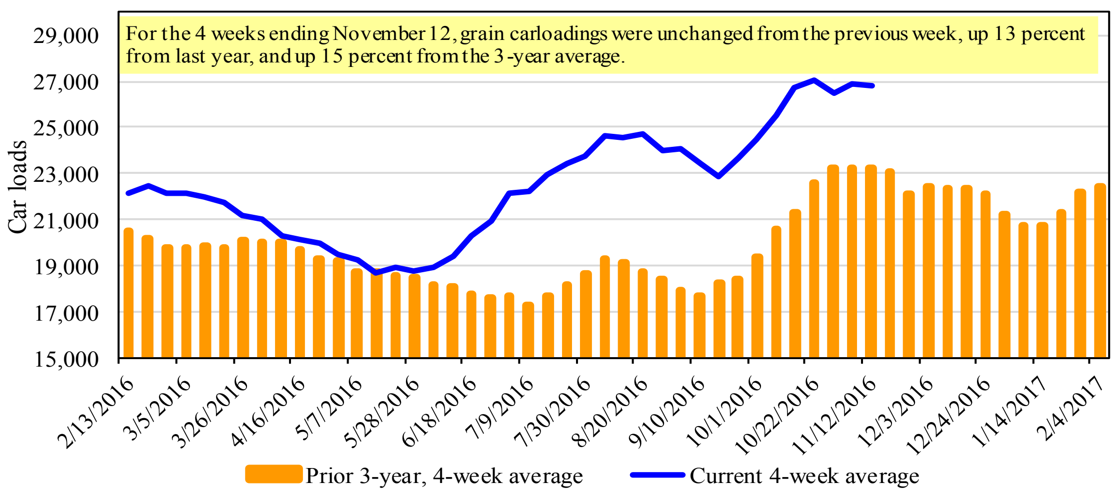
*The past 4 weeks of this year as a percent of the same 4 weeks last year.

**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[1] ($/car)[2]

For the week ending: 11/17/2016		Dec-16	Dec-15	Jan-17	Jan-16	Feb-17	Feb-16	Mar-17	Mar-16
BNSF[3]	COT grain units	no bids	no bids	no bids	no bids	no bids	no bids	no bids	no bids
	COT grain single-car[5]	27	0	0	no bids	no bids	no bids	no bids	no bids
UP[4]	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

Delivery period: Dec-16 through Mar-16

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

[2]Average premium/discount to tariff, last auction

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

[4]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.

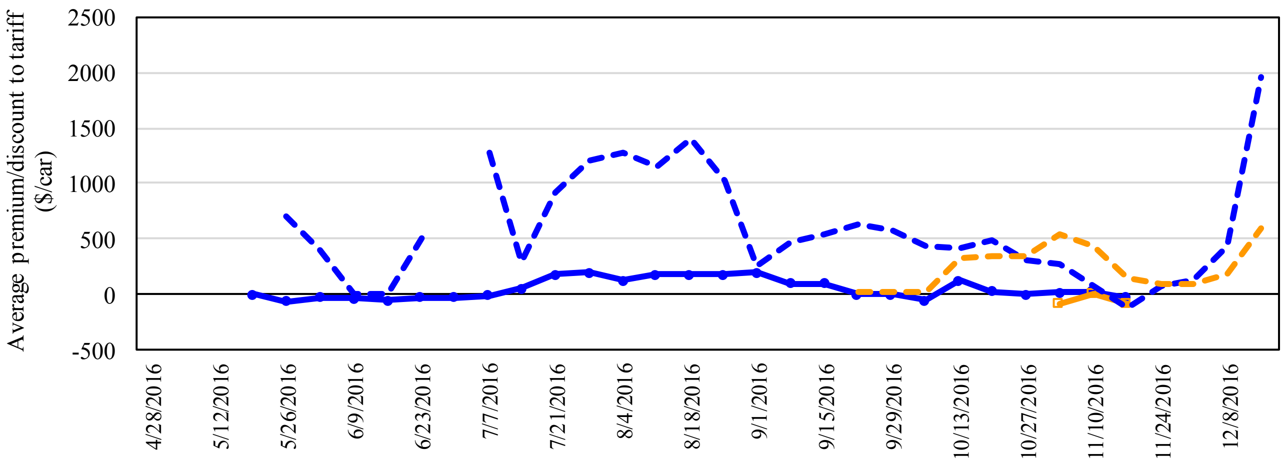
[5]Range is shown because average is not available. Not available = n/a.

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



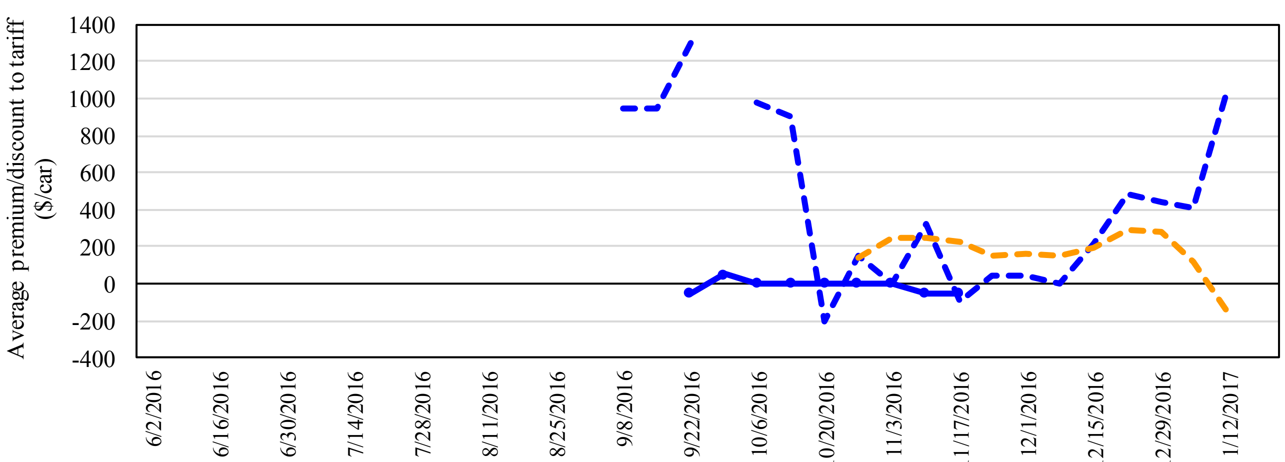
11/17/2016	BNSF	UP
Non-Shuttle	-$61	-$100
Shuttle	$14	-$75

Average Non-shuttle bids/offers fell $81 this week, and are $81 below the peak.
Average Shuttle bids/offers fell $58 this week and are $231 below the peak.

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

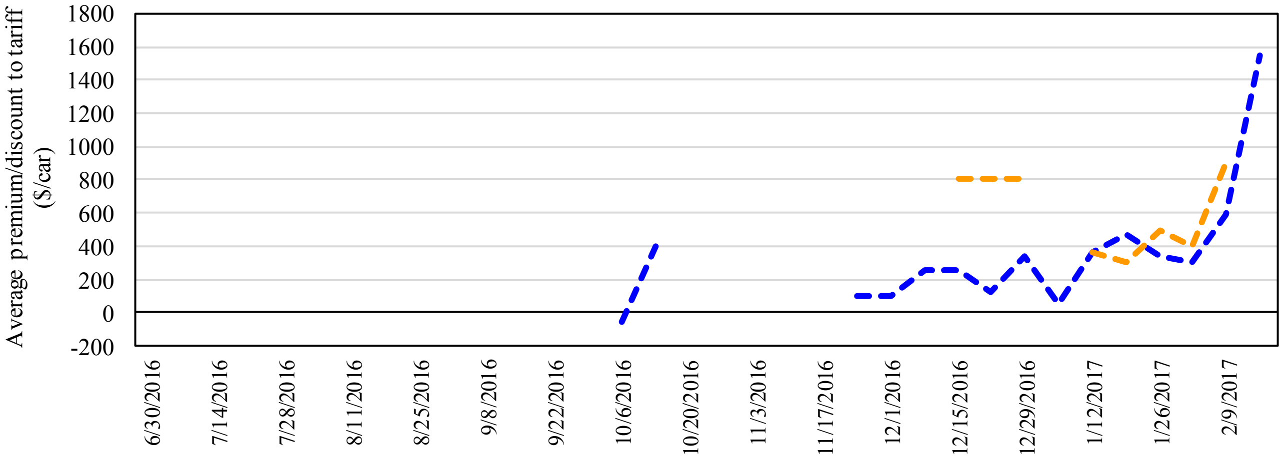


11/17/2016	BNSF	UP
Non-Shuttle	n/a	n/a
Shuttle	n/a	-$50

There were no Non-Shuttle bids/offers this week.
Average Shuttle bids/offers are unchanged this week and are $100 below the peak.

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



11/17/2016	BNSF	UP
Non-Shuttle	n/a	n/a
Shuttle	n/a	n/a

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)[1]

	For the week ending: 11/17/2016	Delivery period Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17
Non-shuttle	**BNSF-GF**	**(61)**	**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 2015	64	n/a	n/a	n/a	n/a	n/a
	UP-Pool	**(100)**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**
	Change from last week	(100)	n/a	n/a	n/a	n/a	n/a
	Change from same week 2015	63	n/a	n/a	n/a	n/a	n/a
Shuttle	**BNSF-GF**	**14**	**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	364	n/a	n/a	n/a	n/a	n/a
	UP-Pool	**(75)**	**(50)**	**n/a**	**n/a**	**n/a**	**n/a**
	Change from last week	(75)	0	n/a	n/a	n/a	n/a
	Change from same week 2015	275	n/a	n/a	n/a	n/a	n/a

[1]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[1]

November, 2016	Origin region*	Destination region*	Tariff rate/car	Fuel surcharge per car	Tariff plus surcharge per: metric ton	Tariff plus surcharge per: bushel[2]	Percent change Y/Y[3]
Unit train							
Wheat	Wichita, KS	St. Louis, MO	$3,770	$30	$37.74	$1.03	4
	Grand Forks, ND	Duluth-Superior, MN	$4,143	-$6	$41.08	$1.12	16
	Wichita, KS	Los Angeles, CA	$6,950	-$31	$68.71	$1.87	-1
	Wichita, KS	New Orleans, LA	$4,408	$53	$44.30	$1.21	3
	Sioux Falls, SD	Galveston-Houston, TX	$6,486	-$25	$64.16	$1.75	-1
	Northwest KS	Galveston-Houston, TX	$4,676	$59	$47.02	$1.28	3
	Amarillo, TX	Los Angeles, CA	$4,875	$81	$49.22	$1.34	3
Corn	Champaign-Urbana, IL	New Orleans, LA	$3,681	$60	$37.15	$0.94	9
	Toledo, OH	Raleigh, NC	$6,061	$0	$60.19	$1.53	0
	Des Moines, IA	Davenport, IA	$2,258	$13	$22.55	$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	$38	$35.47	$0.90	2
	Des Moines, IA	Los Angeles, CA	$5,202	$109	$52.74	$1.34	2
Soybeans	Minneapolis, MN	New Orleans, LA	$3,639	$30	$36.43	$0.99	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	$60	$45.24	$1.23	12
Shuttle Train							
Wheat	Great Falls, MT	Portland, OR	$3,953	-$18	$39.08	$1.06	-1
	Wichita, KS	Galveston-Houston, TX	$3,871	-$14	$38.30	$1.04	-2
	Chicago, IL	Albany, NY	$5,492	$0	$54.54	$1.48	0
	Grand Forks, ND	Portland, OR	$5,611	-$30	$55.42	$1.51	-1
	Grand Forks, ND	Galveston-Houston, TX	$5,931	-$32	$58.58	$1.59	-10
	Northwest KS	Portland, OR	$5,643	$96	$56.99	$1.55	2
Corn	Minneapolis, MN	Portland, OR	$5,000	-$37	$49.28	$1.25	-1
	Sioux Falls, SD	Tacoma, WA	$4,960	-$34	$48.92	$1.24	-1
	Champaign-Urbana, IL	New Orleans, LA	$3,481	$60	$35.17	$0.89	9
	Lincoln, NE	Galveston-Houston, TX	$3,700	-$20	$36.55	$0.93	2
	Des Moines, IA	Amarillo, TX	$3,895	$47	$39.15	$0.99	2
	Minneapolis, MN	Tacoma, WA	$5,000	-$37	$49.29	$1.25	-1
	Council Bluffs, IA	Stockton, CA	$4,740	-$38	$46.69	$1.19	1
Soybeans	Sioux Falls, SD	Tacoma, WA	$5,600	-$34	$55.27	$1.50	1
	Minneapolis, MN	Portland, OR	$5,650	-$37	$55.74	$1.52	2
	Fargo, ND	Tacoma, WA	$5,500	-$30	$54.32	$1.48	1
	Council Bluffs, IA	New Orleans, LA	$4,525	$70	$45.63	$1.24	1
	Toledo, OH	Huntsville, AL	$4,226	$0	$41.97	$1.14	0
	Grand Island, NE	Portland, OR	$5,460	$98	$55.20	$1.50	1

[1]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.

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

[3]Percentage change year over year calculated using tariff rate plus fuel surchage

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[1]	Fuel surcharge per car[2]	Tariff plus surcharge per: metric ton[3]	Tariff plus surcharge per: bushel[3]	Percent change[4] Y/Y
Date: November, 2016							
Wheat	MT	Chihuahua, CI	$7,459	$0	$76.21	$2.07	0
	OK	Cuautitlan, EM	$6,596	$42	$67.82	$1.84	1
	KS	Guadalajara, JA	$7,077	$17	$72.48	$1.97	0
	TX	Salinas Victoria, NL	$4,197	$25	$43.14	$1.17	1
Corn	IA	Guadalajara, JA	$8,187	$34	$84.00	$2.13	-4
	SD	Celaya, GJ	$7,580	$0	$77.45	$1.97	-4
	NE	Queretaro, QA	$7,909	$86	$81.69	$2.07	0
	SD	Salinas Victoria, NL	$6,635	$0	$67.79	$1.72	1
	MO	Tlalnepantla, EM	$7,268	$84	$75.12	$1.91	0
	SD	Torreon, CU	$7,180	$0	$73.36	$1.86	-1
Soybeans	MO	Bojay (Tula), HG	$8,647	$31	$88.66	$2.41	0
	NE	Guadalajara, JA	$8,942	$37	$91.74	$2.49	-3
	IA	El Castillo, JA	$8,960	$0	$91.55	$2.49	-6
	KS	Torreon, CU	$7,489	$34	$76.87	$2.09	0
Sorghum	NE	Celaya, GJ	$7,164	$37	$73.57	$1.87	-4
	KS	Queretaro, QA	$7,608	$52	$78.26	$1.99	0
	NE	Salinas Victoria, NL	$6,213	$42	$63.91	$1.62	0
	NE	Torreon, CU	$6,607	$37	$67.89	$1.72	-4

[1]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.

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

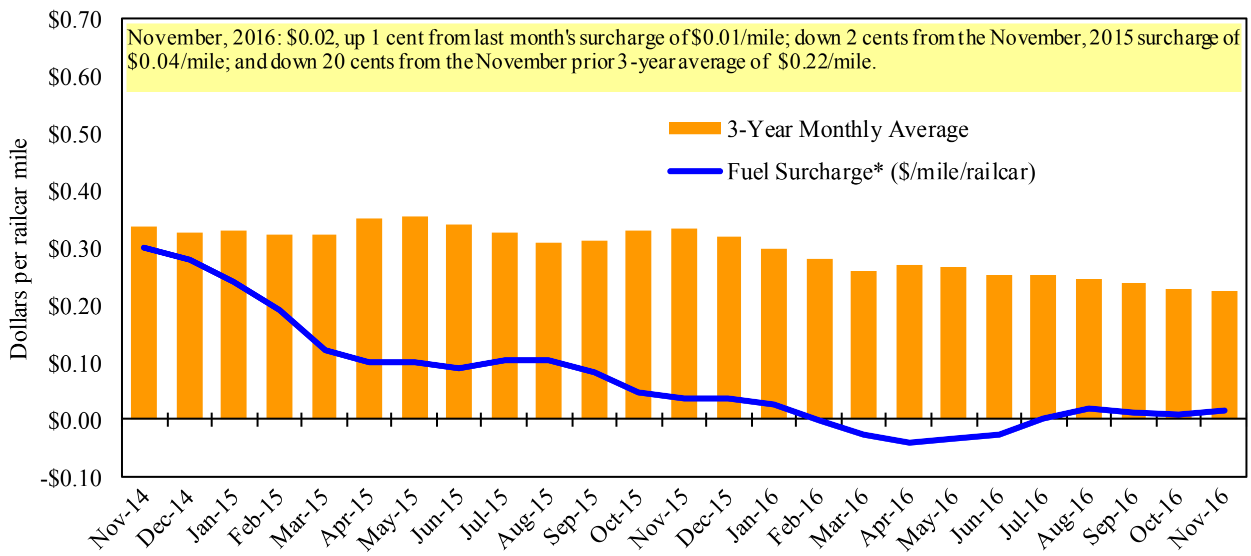
[3]Approximate load per car = 97.87 metric tons: Corn & Sorghum 56 lbs/bu, Wheat & Soybeans 60 lbs/bu

[4]Percentage change calculated using tariff rate plus fuel surchage

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

Figure 7

Railroad Fuel Surcharges, North American Weighted Average[1]



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

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

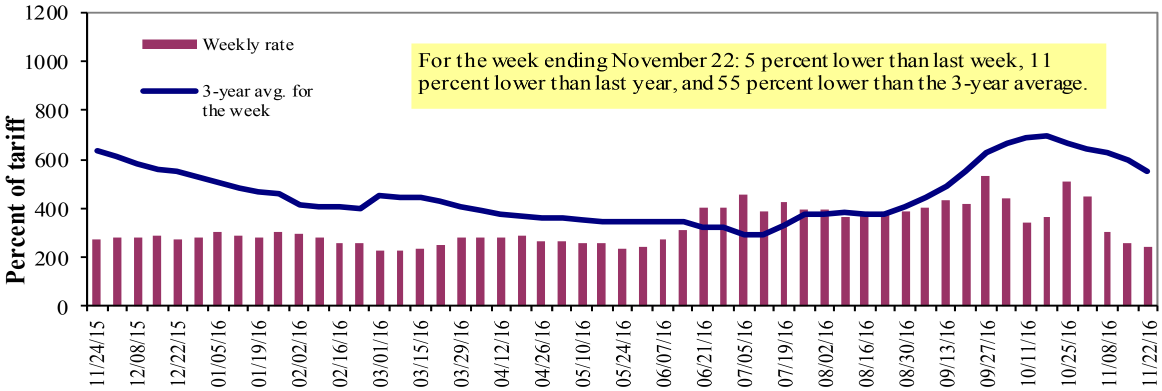
**CSX strike price changed from $2.00/gal. to $3.75/gal. starting January 1, 2015.

Sources: 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[1,2]



[1]Rate = percent of 1976 tariff benchmark index (1976 = 100 percent); [2]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
Rate[1]	11/22/2016	367	273	245	195	220	220	163
	11/15/2016	405	298	258	200	238	243	163
$/ton	11/22/2016	22.72	14.52	11.37	7.78	10.32	8.89	5.12
	11/15/2016	25.07	15.85	11.97	7.98	11.16	9.82	5.12
Current week % change from the same week:								
	Last year	-	-11	-11	3	11	11	-6
	3-year avg. [2]	-31	-50	-55	-57	-60	-60	-59
Rate[1]	December	-	-	250	195	205	205	160
	February	-	-	250	190	200	200	158

[1]Rate = percent of 1976 tariff benchmark index (1976 = 100 percent); [2]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:

(Rate * 1976 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.

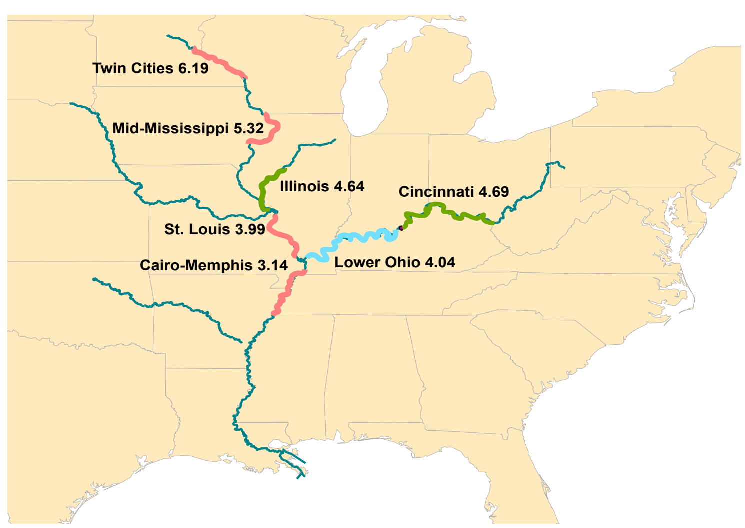
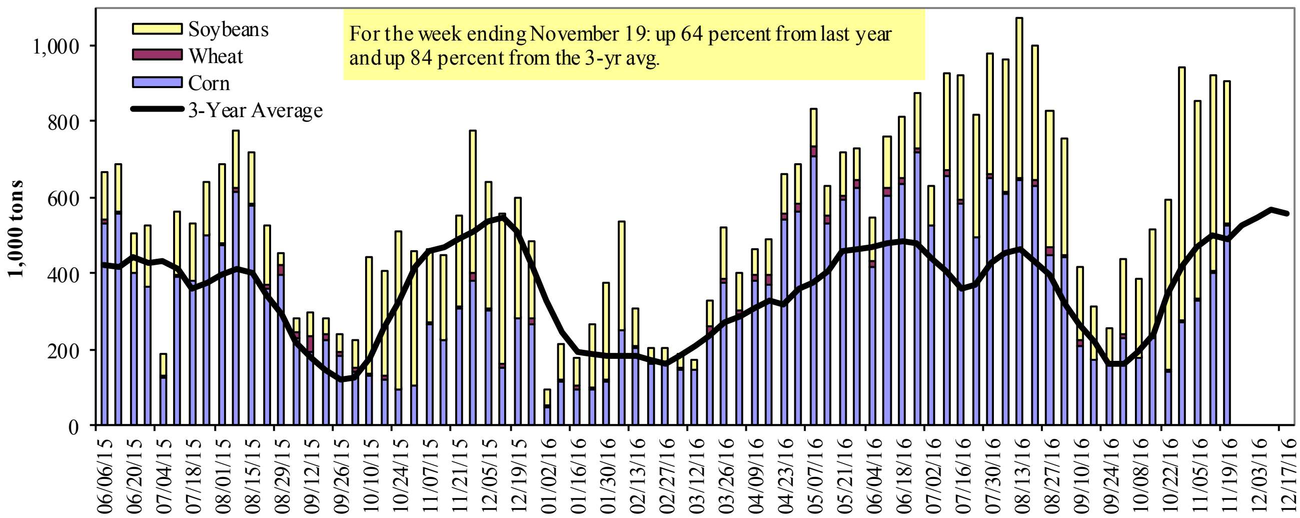


Figure 10

Barge Movements on the Mississippi River[1] (Locks 27 - Granite City, IL)



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

Source: U.S. Army Corps of Engineers

Table 10

Barge Grain Movements (1,000 tons)

For the week ending 11/19/2016	Corn	Wheat	Soybeans	Other	Total
Mississippi River					
Rock Island, IL (L15)	250	0	178	3	430
Winfield, MO (L25)	385	2	325	3	715
Alton, IL (L26)	526	5	349	3	884
Granite City, IL (L27)	527	5	373	5	910
Illinois River (L8)	133	5	23	0	160
Ohio River (L52)	58	0	96	0	154
Arkansas River (L1)	0	4	62	0	66
Weekly total - 2016	585	9	531	5	1,130
Weekly total - 2015	371	11	433	11	827
2016 YTD[1]	21,460	1,881	13,979	315	37,635
2015 YTD	17,392	1,578	11,344	310	30,625
2016 as % of 2015 YTD	123	119	123	101	123
Last 4 weeks as % of 2015[2]	144	251	149	33	147
Total 2015	19,215	1,686	14,191	359	35,451

[1] 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.

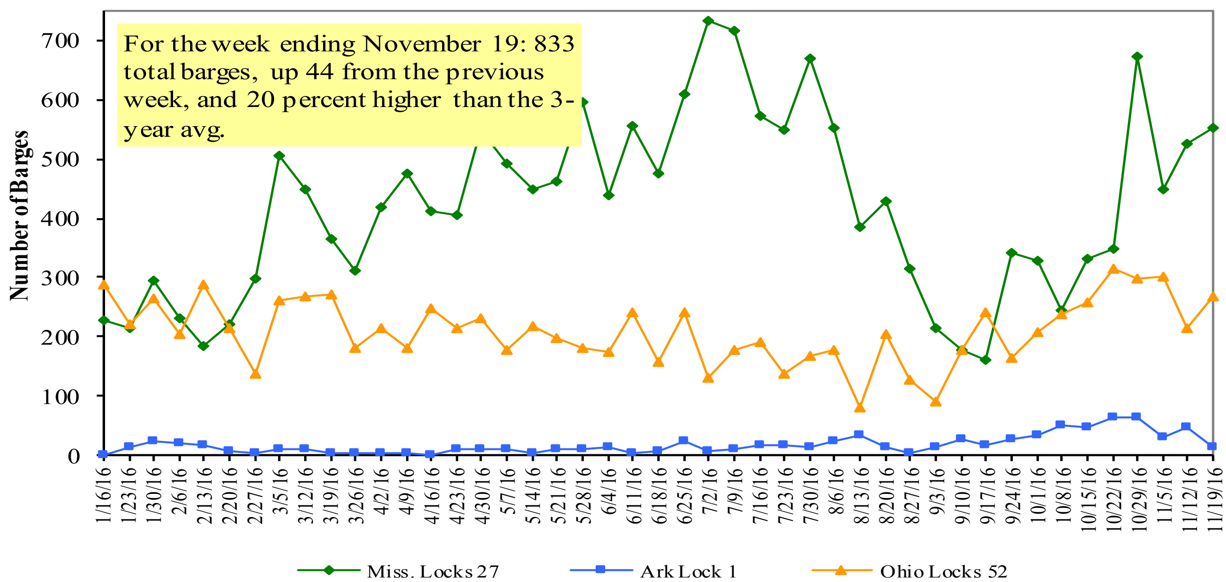
[2] As a percent of same period in 2015.

Note: Total may not add exactly, due to rounding

Source: U.S. Army Corps of Engineers

Figure 11

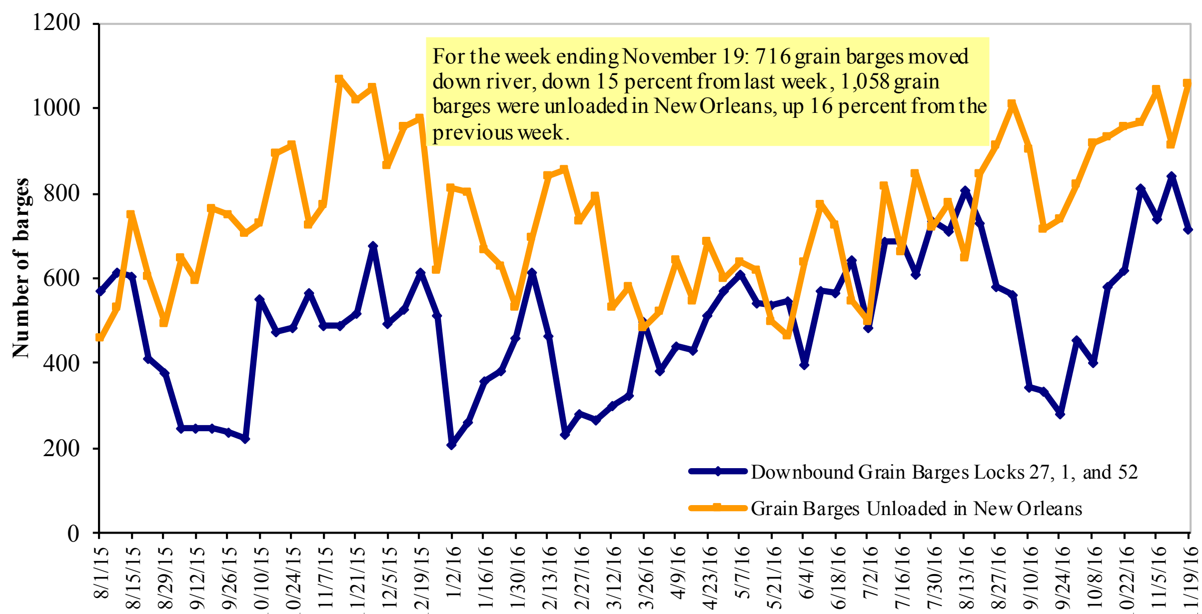
Upbound Empty Barges Transiting Mississippi River Locks 27, Arkansas River Lock and Dam 1, and Ohio River Locks and Dam 52



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[1], Week Ending 11/21/2016 (US $/gallon)

Region	Location	Price	Change from Week ago	Change from Year ago
I	East Coast	2.442	-0.011	-0.027
	New England	2.471	-0.011	-0.053
	Central Atlantic	2.549	-0.015	-0.036
	Lower Atlantic	2.355	-0.008	-0.015
II	Midwest[2]	2.356	-0.031	-0.085
III	Gulf Coast[3]	2.296	-0.020	0.016
IV	Rocky Mountain	2.455	-0.037	-0.019
V	West Coast	2.730	-0.027	0.077
	West Coast less California	2.637	-0.020	0.082
	California	2.804	-0.033	0.071
Total	U.S.	2.421	-0.022	-0.024

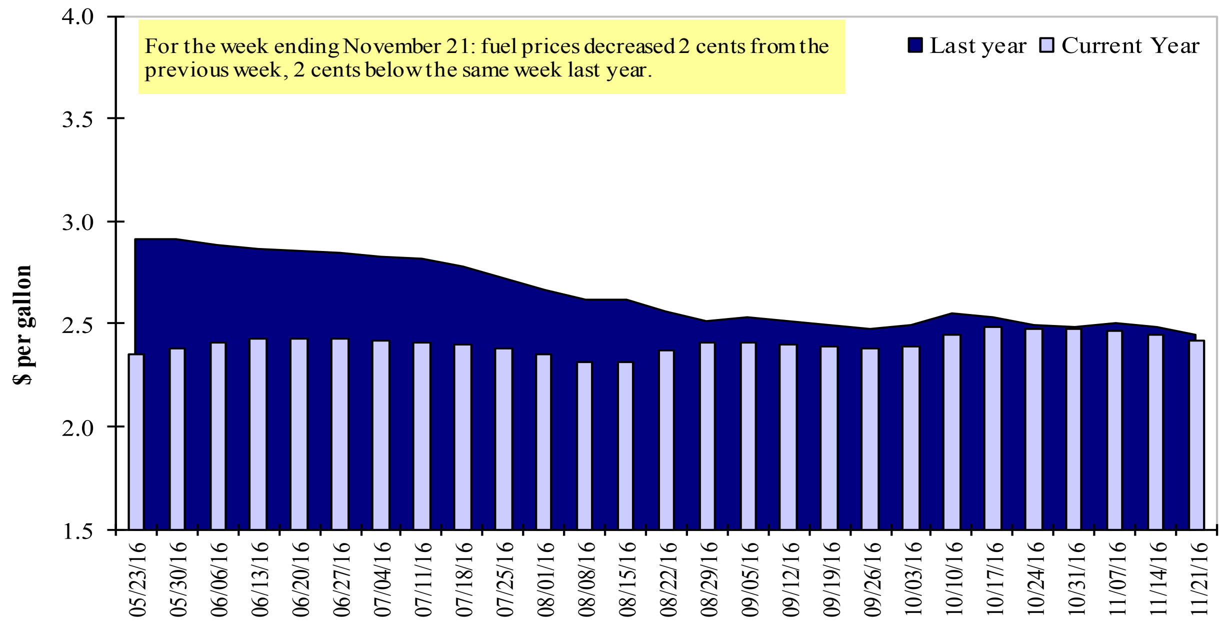
[1]Diesel fuel prices include all taxes. Prices represent an average of all types of diesel fuel.

[2]Same as North Central [3]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)

	Wheat						Corn	Soybeans	Total
For the week ending	HRW	SRW	HRS	SWW	DUR	All wheat			
Export Balances[1]									
11/10/2016	1,960	547	1,914	1,114	260	5,795	17,305	19,462	42,562
This week year ago	1,202	627	1,604	1,002	48	4,484	8,768	15,234	28,486
Cumulative exports-marketing year[2]									
2016/17 YTD	5,318	974	3,530	1,904	151	11,877	10,341	19,022	41,240
2015/16 YTD	2,614	1,717	2,861	1,571	481	9,244	5,776	15,662	30,682
YTD 2016/17 as % of 2015/16	203	57	123	121	31	128	179	121	134
Last 4 wks as % of same period 2015/16	164	85	110	105	331	112	184	142	150
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

[1] Current unshipped (outstanding) export sales to date

[2] 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)

Table 13

Top 5 Importers[1] of U.S. Corn

For the week ending 11/10/2016	Total Commitments[2] 2016/17 Current MY	2015/16 Last MY	% change current MY from last MY	Exports[3] 3-year avg 2013-2015
	- 1,000 mt -			- 1,000 mt -
Japan	3,497	2,352	49	11,284
Mexico	7,964	5,661	41	11,204
Korea	1,817	189	863	3,931
Colombia	1,751	1,263	39	4,134
Taiwan	1,232	272	353	1,912
Top 5 Importers	**16,261**	**9,737**	**67**	**32,465**
Total US corn export sales	**27,646**	**14,543**	**90**	**46,633**
% of Projected	49%	30%		
Change from prior week	**1,661**	**780**		
Top 5 importers' share of U.S. corn export sales	59%	67%		70%
USDA forecast, November 2016	**56,616**	**48,295**	**17**	
Corn Use for Ethanol USDA forecast, November 2016	**134,620**	**132,233**	**2**	

(n) indicates negative number.

[1]Based on FAS Marketing Year Ranking Reports - www.fas.usda.gov; Marketing year (MY) = Sep 1 - Aug 31.

[2]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 outastanding sales or accumulated sales.

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

Table 14

Top 5 Importers[1] of U.S. Soybeans

For the week ending 11/10/2016	Total Commitments[2] 2016/17 Current MY	2015/16 Last MY	% change current MY from last MY	Exports[3] 3-yr avg. 2013-2015
	- 1,000 mt -			- 1,000 mt -
China	22,493	17,689	27	29,033
Mexico	1,646	1,507	9	3,295
Indonesia	581	458	27	2,065
Japan	1,046	985	6	1,994
Taiwan	757	543	39	1,226
Top 5 importers	**26,523**	**21,182**	**25**	**37,614**
Total US soybean export sales	**38,484**	**30,897**	**25**	**48,389**
% of Projected	69%	59%		
Change from prior week	**1,419**	**1,798**		
Top 5 importers' share of U.S. soybean export sales	69%	69%		**78%**
USDA forecast, November 2016	**55,858**	**52,752**	**6**	

(n) indicates negative number.

[1]Based on FAS Marketing Year Ranking Reports - www.fas.usda.gov; Marketing year (MY) = Sep 1 - Aug 31.

[2]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 reivisions from previous week's outstanding sales and/or accumulated sales

[3] FAS Marketing Year Final Reports - www.fas.usda.gov/export-sales/myfi_rpt.htm. (Carryover plus Accumulated Exports)

Table 15

Top 10 Importers[1] of All U.S. Wheat

For the week ending 11/10/2016	Total Commitments[2] 2016/17 Current MY	2015/16 Last MY	% change current MY from last MY	Exports[3] 3-yr avg 2013-2015
	- 1,000 mt -			- 1,000 mt -
Japan	1,550	1,350	15	2,743
Mexico	1,698	1,355	25	2,660
Nigeria	764	1,098	(30)	1,978
Philippines	1,884	1,497	26	2,156
Brazil	1,023	338	203	2,076
Korea	881	842	5	1,170
Taiwan	581	606	(4)	1,005
Indonesia	483	193	150	776
Colombia	544	422	29	679
Thailand	551	378	46	618
Top 10 importers	**9,958**	**8,078**	23	**15,861**
Total US wheat export sales	**17,671**	**13,728**	**29**	**24,485**
% of Projected	67%	65%		
Change from prior week	**598**	**722**		
Top 10 importers' share of U.S. wheat export sales	56%	59%		65%
USDA forecast, November 2016	**26,567**	**21,117**	**26**	

(n) indicates negative number.

[1] Based on FAS Marketing Year Ranking Reports - www.fas.usda.gov; Marketing year = Jun 1 - May 31.

[2] 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

[3] FAS Marketing Year Final Reports - 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 11/17/16	Previous Week*	Current Week as % of Previous	2016 YTD*	2015 YTD*	2016 YTD as % of 2015 YTD	Last 4-weeks as % of: Last Year	Prior 3-yr. avg.	2015 Total*
Pacific Northwest									
Wheat	208	48	434	10,945	9,731	112	144	128	10,985
Corn	246	119	206	10,929	7,086	154	1674	570	7,232
Soybeans	693	882	79	11,427	9,215	124	133	123	11,809
Total	**1,147**	**1,049**	**109**	**33,300**	**26,032**	**128**	**149**	**134**	**30,027**
Mississippi Gulf									
Wheat	39	31	126	3,153	4,093	77	50	60	4,504
Corn	385	356	108	28,298	24,528	115	181	140	26,701
Soybeans	1,555	1,659	94	28,507	23,395	122	122	111	29,593
Total	**1,979**	**2,045**	**97**	**59,957**	**52,016**	**115**	**129**	**115**	**60,797**
Texas Gulf									
Wheat	115	133	86	5,306	3,329	159	247	154	3,724
Corn	38	32	122	1,501	564	266	348	1044	596
Soybeans	112	136	82	890	737	121	135	140	864
Total	**265**	**301**	**88**	**7,697**	**4,631**	**166**	**178**	**156**	**5,184**
Interior									
Wheat	58	28	209	1,397	1,256	111	228	236	1,388
Corn	171	143	120	6,440	5,593	115	131	125	6,201
Soybeans	133	176	76	4,021	3,193	126	164	127	3,518
Total	**361**	**346**	**104**	**11,859**	**10,041**	**118**	**152**	**131**	**11,106**
Great Lakes									
Wheat	32	22	149	978	899	109	153	116	997
Corn	19	19	100	519	485	107	n/a	1257	485
Soybeans	111	67	165	741	589	126	161	135	733
Total	**162**	**108**	**151**	**2,238**	**1,973**	**113**	**178**	**144**	**2,216**
Atlantic									
Wheat	1	32	2	289	480	60	3543	2420	520
Corn	0	0	n/a	293	275	106	17480	215	277
Soybeans	86	125	69	1,661	1,465	113	107	116	2,053
Total	**87**	**158**	**55**	**2,243**	**2,220**	**101**	**135**	**135**	**2,850**
U.S. total from ports**									
Wheat	452	294	154	22,068	19,787	112	147	129	22,118
Corn	858	668	128	47,980	38,531	125	203	161	41,492
Soybeans	2,690	3,045	88	47,246	38,595	122	128	117	48,570
Total	**4,001**	**4,007**	**100**	**117,293**	**96,913**	**121**	**140**	**125**	**112,180**

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

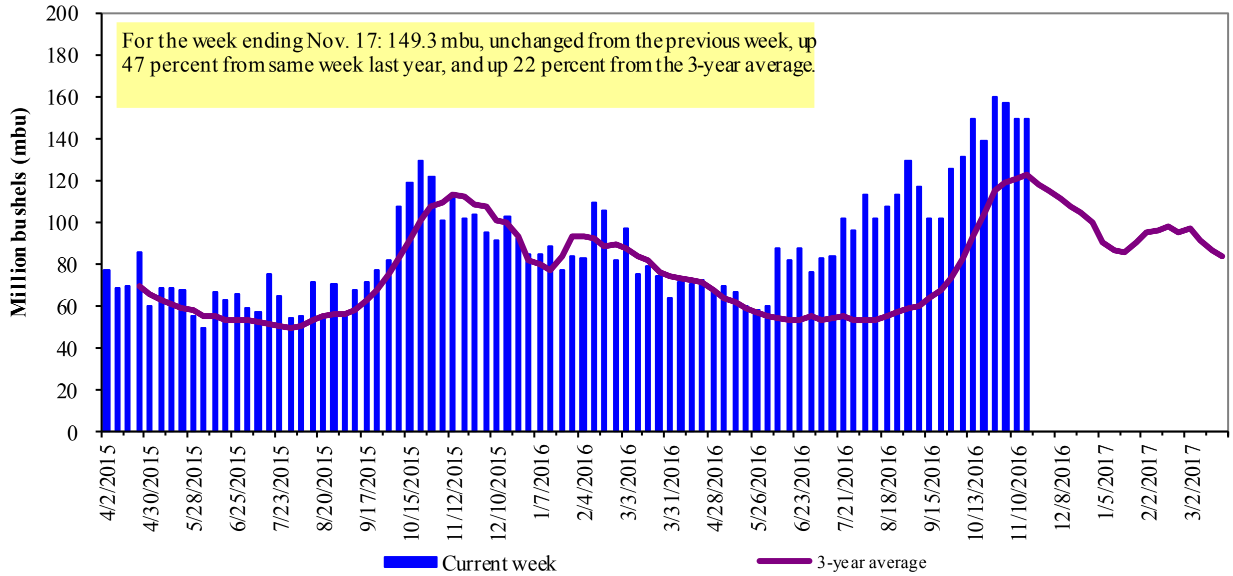
**Total only includes regions shown above

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

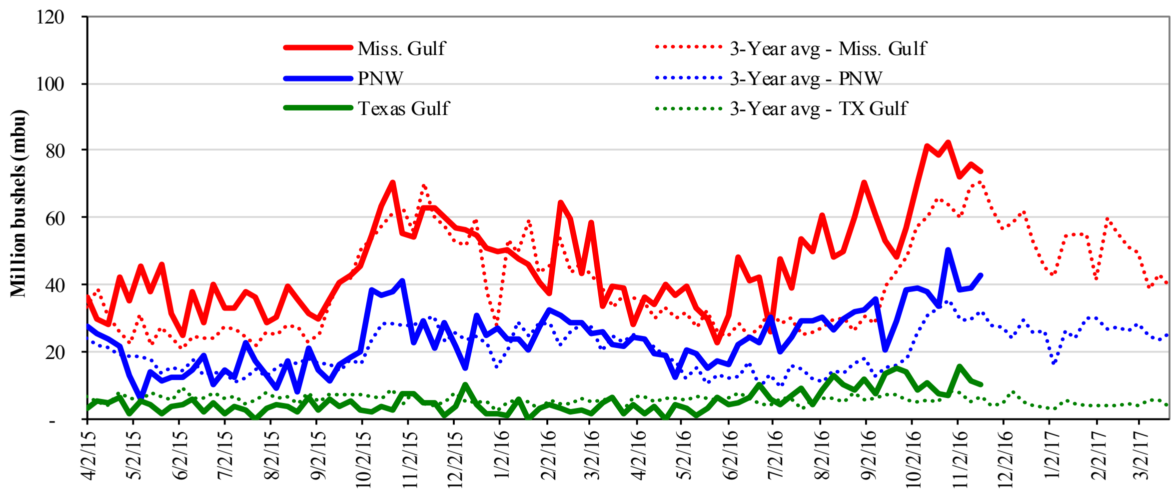
U.S. grain inspected for export (wheat, corn, and soybeans)



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[1] (wheat, corn, and soybeans)



Week ending 11/17/16 inspections (mbu):		Percent change from:	MS Gulf	TX Gulf	U.S. Gulf	PNW
Mississippi Gulf:	73.7	Last Week:	down 3	down 12	down 4	up 10
PNW:	42.8	Last Year (same week):	up 17	up 101	up 23	up 102
Texas Gulf:	9.8	3-yr avg. (4-wk. mov. Avg):	up 12	up 42	up 15	up 36

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

Ocean Transportation

Table 17

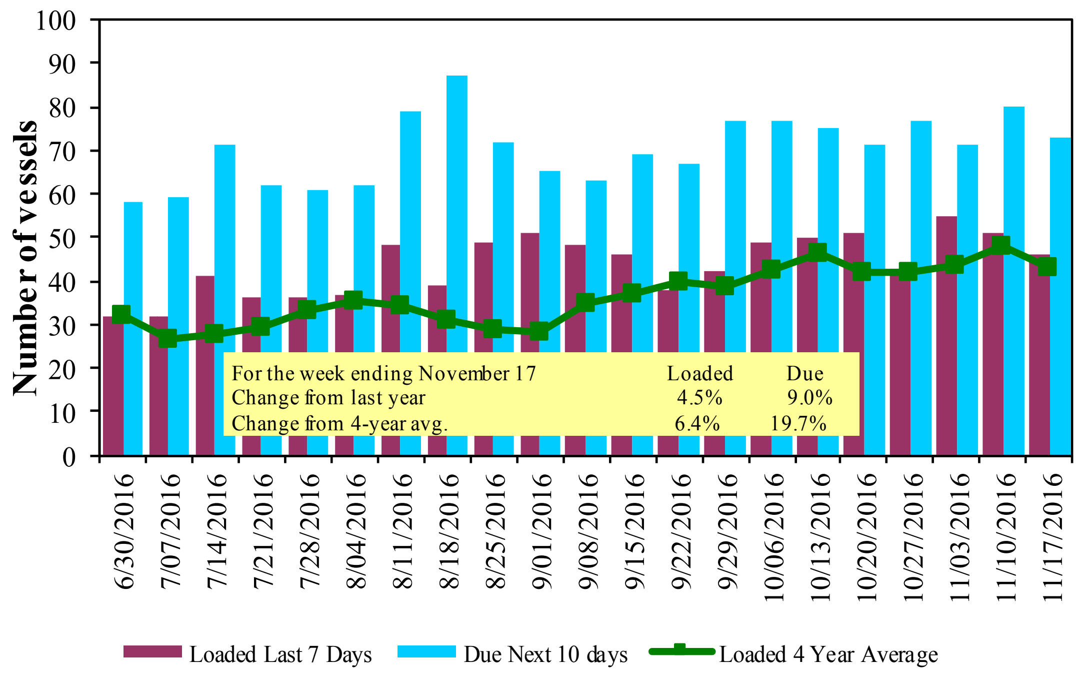
Weekly Port Region Grain Ocean Vessel Activity (number of vessels)

	Gulf			Pacific Northwest	Vancouver B.C.
Date	In port	Loaded 7-days	Due next 10-days	In port	In port
11/17/2016	52	46	73	19	n/a
11/10/2016	37	51	80	17	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

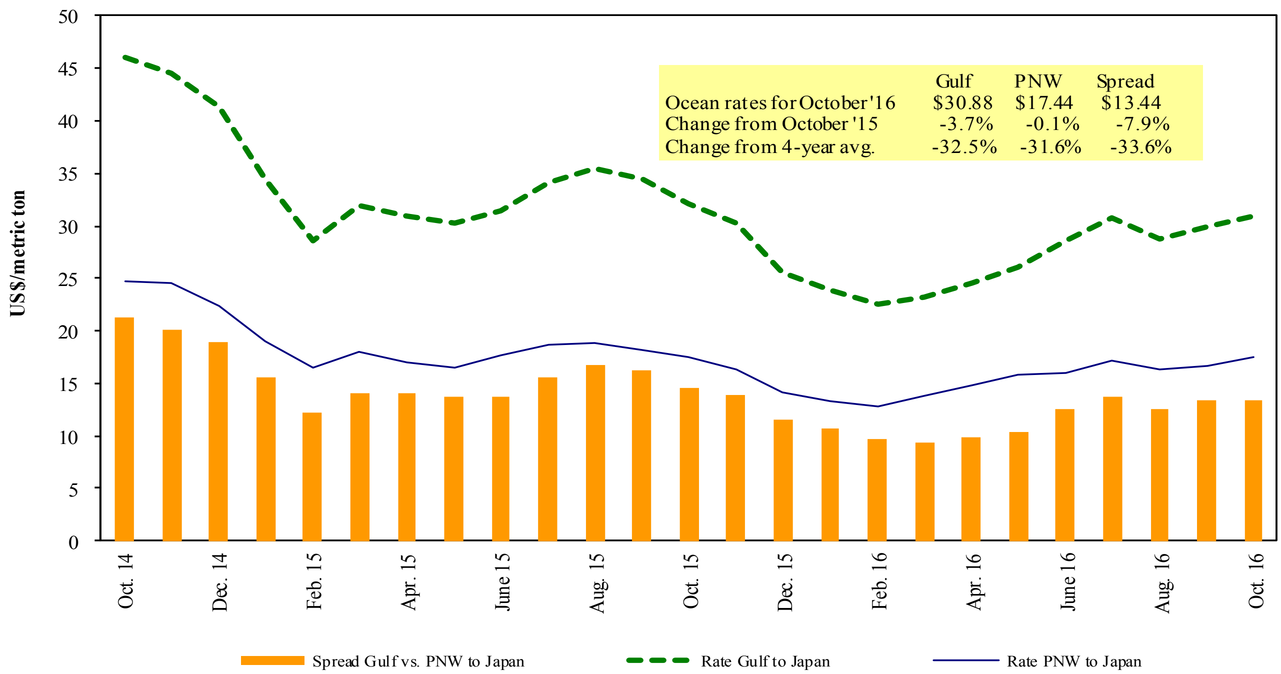
U.S. Gulf Vessel Loading Activity



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 11/19/2016

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	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
U.S. Gulf	China	Heavy Grain	Sep 1/10	60,000	27.00
U.S. Gulf	China	Heavy Grain	Aug 25/Sep 5	66,000	26.25
U.S. Gulf	South Africa	Sorghum	Sep 15/25	20,000	63.50*
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
Brazil	Japan	Heavy Grain	Sep 1/30	62,000	19.00
Brazil	Malaysia	Heavy Grain	Sep 1/30	65,000	17.00
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
Ukraine	Morocco	Heavy Grain	Aug 29/Sep 3	30,000	16.00

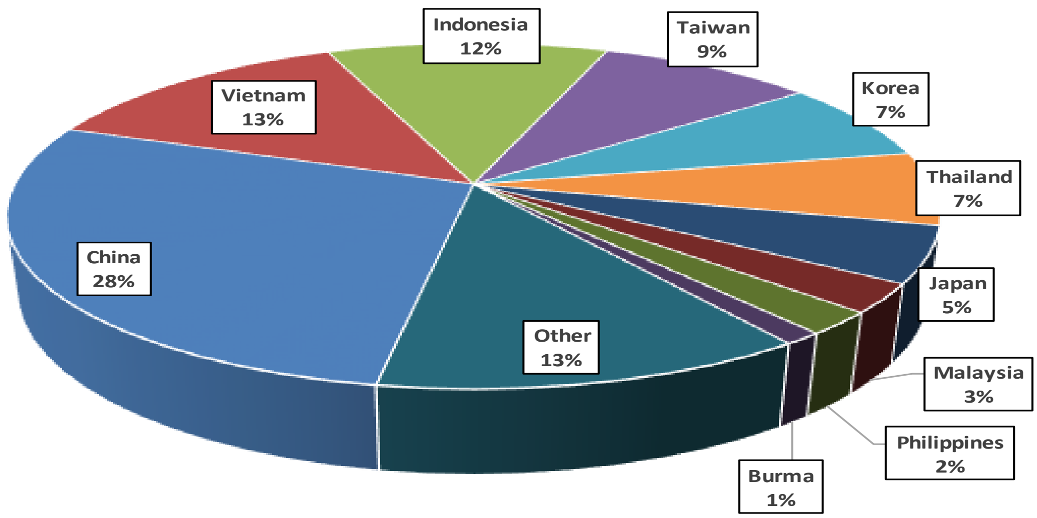
Rates shown are per metric ton (2,204.62 lbs. = 1 metric ton), F.O.B., except where otherwise indicated; op = option

*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)

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.

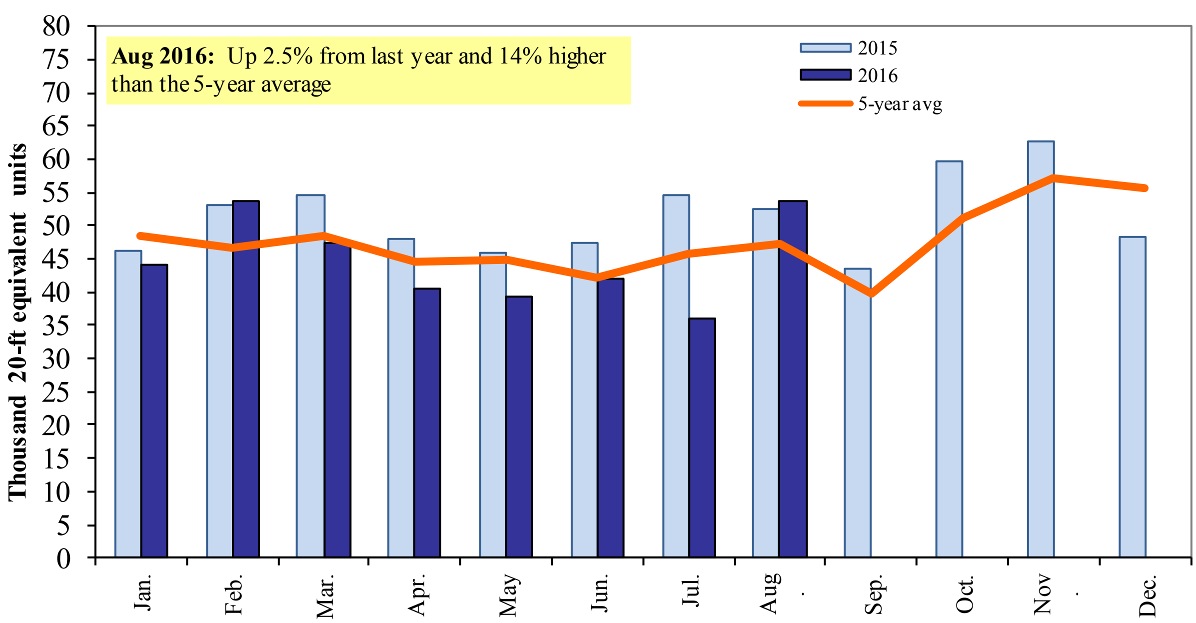
Figure 18
Top 10 Destination Markets for U.S. Containerized Grain Exports, January-August 2016



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.

Contacts and Links

Coordinators		
Surajudeen (Deen) Olowolayemo	surajudeen.olowolayemo@ams.usda.gov	(202) 720 - 0119
Pierre Bahizi	pierre.bahizi@ams.usda.gov	(202) 690 - 0992
Weekly Highlight Editors		
Surajudeen (Deen) Olowolayemo	surajudeen.olowolayemo@ams.usda.gov	(202) 720 - 0119
April Taylor	april.taylor@ams.usda.gov	(202) 720 - 7880
Nicholas Marathon	nick.marathon@ams.usda.gov	(202) 690 - 4430
Grain Transportation Indicators		
Surajudeen (Deen) Olowolayemo	surajudeen.olowolayemo@ams.usda.gov	(202) 720 - 0119
Rail Transportation		
Johnny Hill	johnny.hill@ams.usda.gov	(202) 690 - 3295
Jesse Gastelle	jesse.gastelle@ams.usda.gov	(202) 690 - 1144
Peter Caffarelli	petera.caffarelli@ams.usda.gov	(202) 690 - 3244
Barge Transportation		
Nicholas Marathon	nick.marathon@ams.usda.gov	(202) 690 - 4430
April Taylor	april.taylor@ams.usda.gov	(202) 720 - 7880
Matt Chang	matt.chang@ams.usda.gov	(202) 720 - 0299
Truck Transportation		
April Taylor	april.taylor@ams.usda.gov	(202) 720 - 7880
Grain Exports		
Johnny Hill	johnny.hill@ams.usda.gov	(202) 690 - 3295
Ocean Transportation		
Surajudeen (Deen) Olowolayemo (Freight rates and vessels)	surajudeen.olowolayemo@ams.usda.gov	(202) 720 - 0119
April Taylor (Container movements)	april.taylor@ams.usda.gov	(202) 720 - 7880
Contributing Analysts		
Sergio Sotelo	sergioa.sotelo@ams.usda.gov	(202) 756 - 2577

Subscription Information: Send relevant information to **GTRContactUs@ams.usda.gov** for an electronic copy *(printed copies are also available upon request)*.

Preferred citation: U.S. Dept. of Agriculture, Agricultural Marketing Service. *Grain Transportation Report.* November 24, 2016. Web: **http://dx.doi.org/10.9752/TS056.11-24-2016**