USDA United States Department of Agriculture

Grain Transportation Report

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

Contact Us

December 22, 2016

Contents

The next release is Dec 29, 2016

WEEKLY HIGHLIGHTS

Recent Hike in Ocean Freight Rates May be Losing Steam

Ocean freight rates for shipping bulk commodities, including grains, have increased slightly in recent weeks. Since November 3, the rate for shipping bulk grains from the U.S. Gulf to Japan increased 19 percent to $37.50 per metric ton (mt) for the week ending December 8. The rate from the Pacific Northwest (PNW) to Japan increased 13 percent to $20 per mt during the same period. However, during the week ending December 15, the ocean freight rate for shipping bulk grain from the Gulf to Japan was $36.75 per metric ton, 2 percent less 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. According to a December 15 *Transportation and Export Report* by O'Neil Commodity Consulting, the market could not sustain the rally of the past month as more vessel tonnage entered the market due to too much owner optimism over the market rally.

Grain Inspections Continue to Fall

For the week ending December 15, **total inspections of grain** (corn, wheat, and soybeans) for export from major U.S. export regions reached 3.08 million metric ton (mmt), down 4 percent from the previous week, up 12 percent from last year, and 7 percent above the 3-year average. Wheat inspections increased 7 percent from the previous week, but corn and soybeans decreased 12 and 3 percent, respectively, for the same period. Grain inspections in the PNW decreased 6 percent from the previous week, and Mississippi Gulf inspections decreased 1 percent from the previous week. Currently, outstanding export sales (unshipped) are up slightly for corn, wheat, and soybeans.

Cold Weather Slowing Barge Logistics

Much of the United States east of the Rocky Mountains is experiencing extremely cold weather and sub-freezing temperatures are forming significant ice accumulations on the Upper Mississippi and Illinois Rivers. The ice formations restrict lock transit and narrow navigation channels. River levels have dropped, especially at St. Louis, MO, where the river gage dropped 9 feet from December 14 to December 20. Mississippi River Locks 24 and 25 are experiencing slow logistics due to ice. The Illinois River has had similar problems and portions of Peoria Lake (a slow moving section of the Illinois River) has had traffic delays. As of December 17, down-bound tonnages at Mississippi River Locks 27 were down 28 percent compared to last week. So far, barge operators have not reported significant freight increases because of the icy conditions.

Snapshots by Sector

Export Sales

During the week ending December 8, **unshipped balances** of wheat, corn, and soybeans totaled 42.9 mmt, up 53 percent from the same time last year. Net weekly **wheat export sales** were .531 mmt, up 6 percent from the previous week. Net **corn export sales** were 1.52 mmt, up 1 percent from the previous week, and net **soybean export sales** were 1.94 mmt, up 39 percent from the past week.

Rail

U.S. Class I railroads originated 24,618 **grain carloads** for the week ending December 10, down 2 percent from the previous week, up 8 percent from last year, and up 9 percent from the 3-year average.

Average January shuttle **secondary railcar bids/offers** per car were $150 above tariff for the week ending December 15, up $163 from last week, and $322 higher than last year. There were no non-shuttle secondary railcar bids/offers this week.

Barge

For the week ending December 17, **barge grain movements** totaled 765,764 tons, 28 percent lower than the last week, and down 21 percent from the same period last year.

For the week ending December 17, 483 grain barges **moved down river**, down 28 percent from last week, 866 grain barges were **unloaded in New Orleans**, down 6 percent from the previous week.

Ocean

For the week ending December 15, 49 **ocean-going grain vessels** were loaded in the Gulf, unchanged from the same period last year. Seventy-three vessels are expected to be loaded within the next 10 days, 6 percent more than the same period last year.

Fuel

During the week ending December 19, U.S. average **diesel fuel prices** were up 3 cents from the previous week at $2.53 per gallon, 24 cents higher than the same week last year.

Preferred citation: U.S. Dept. of Agriculture, Agricultural Marketing Service. *Grain Transportation Report.* December 22, 2016.
Web: **http://dx.doi.org/10.9752/TS056.12-22-2016**

Feature Article/Calendar

Jan 6-7, 2017	Cascadia Grains Conference	Olympia, WA	http://extension.wsu.edu/jefferson/event/cascadia-grains-conference/2017-01-07/
Jan 6-11, 2017	AFBF Annual Convention 2017	Phoenix, Arizona	http://annualconvention.fb.org/
Jan 7-14, 2017	Pennsyvania Farm Show	Harrisburg, PA	https://www.everfest.com/e/pennsylvania-farm-show-harrisburg-pa
Jan 10, 2017	Oregon Seed Association - Mid-Winter Meeting 2017	Salem, OR	http://www.oregonseed.org/
Jan 14-17, 2017	Southern Seed Association Annual Convention	San Antonio, TX	http://www.southernseed.net/
Jan 15-17, 2017	North Dakota Grain Dealers Association	Fargo, ND	http://www.ndgda.org
Jan 24, 2017	AgTC/USDA Ag Shipper Workshop	Tacoma, WA	www.agtrans.org
Feb 7-8, 2017	Iowa Soybean Association Research Conference	Des Moines, IA	http://www.isafarmnet.com/
Feb 8, 2017	AgTC/USDA Ag Shipper Workshop	Fresno, CA	www.agtrans.org
Feb 9, 2017	AgTC/USDA Ag Shipper Workshop	Sacramento, CA	www.agtrans.org
Feb 10, 2017	AgTC/USDA Ag Shipper Workshop	Boise, ID	www.agtrans.org
Feb 25-26, 2017	USDA Agricultural Outlook Forum	Arlington, VA	https://www.usda.gov/oce/forum/
Feb 25 -28, 2017	Grain and Feed Association of Illinois Annual Convention	St. Louis, MO	https://www.ngfa.org/
Feb 25 -28, 2017	GEAPS Exchange Expo 2017	Kansas City, MO	http://s23.a2zinc.net/clients/GEAPS/GEAPS17/
Feb 28, 2017	Prairie Grain Development (PGDC) Committee, Annual Meeting 2017	Winnipeg, MB, Canada	http://www.pgdc.ca/
March 6-8, 2017	National Waterways Conference 2017 Legislative Summit	Washington, DC	https://waterways.org/2017-legislative-summit/
Mar 19 -20, 2017	National Grain and Feed Association Convention	New Orleans, LA	https://www.ngfa.org/
Mar 20-22, 2017	Waterways Council Washington Meeting	Washington, DC	http://waterwayscouncil.org/
May 27, 2017	International Grain Summit 2017	Milan, Italy	http://www.internationalgrainsummit.net/en/international-grain-summit-2017

Grain Transportation Indicators

Table 1

Grain Transport Cost Indicators [1]

For the week ending	Truck	Rail		Barge	Ocean	
		Unit Train	Shuttle		Gulf	Pacific
12/21/16	170	261	215	154	164	137
12/14/16	167	258	215	144	168	142

[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

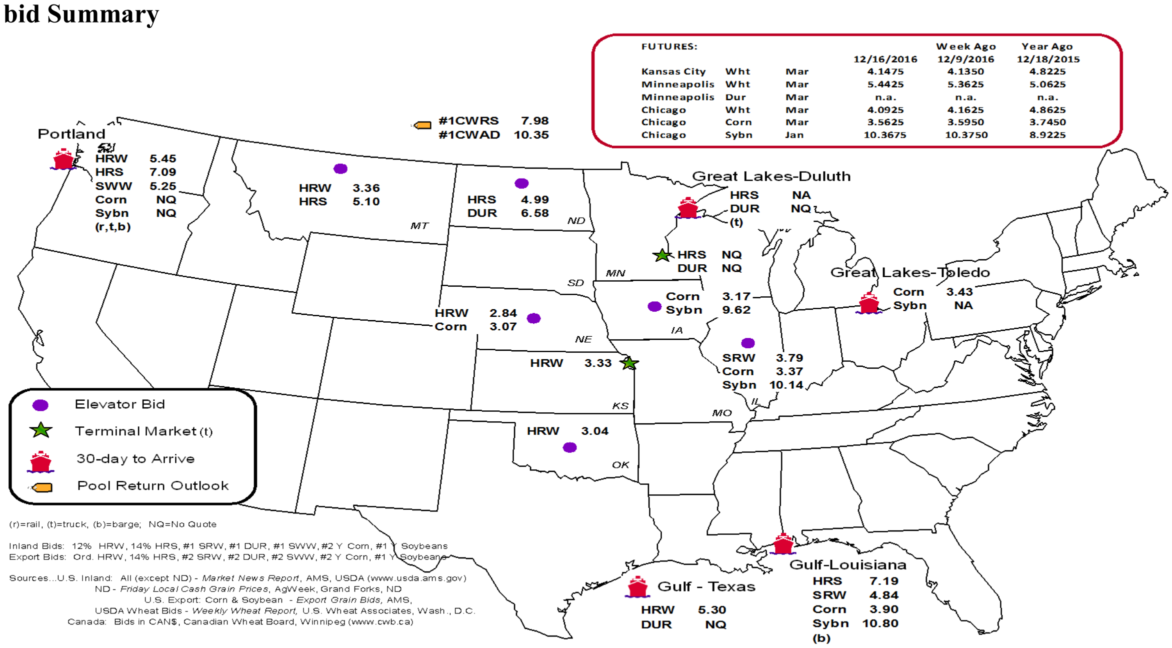
Market Update: U.S. Origins to Export Position Price Spreads ($/bushel)

Commodity	Origin--Destination	12/16/2016	12/9/2016
Corn	IL--Gulf	-0.53	-0.56
Corn	NE--Gulf	-0.83	-0.84
Soybean	IA--Gulf	-1.18	-1.10
HRW	KS--Gulf	-1.97	-1.92
HRS	ND--Portland	-2.10	-2.07

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]
12/14/2016[p]	803	2,373	5,664	972	9,812	12/10/2016	1,600
12/07/2016[r]	723	2,530	7,136	1,081	11,470	12/3/2016	1,884
2016 YTD[r]	35,434	83,674	287,587	26,940	433,635	2016 YTD	103,554
2015 YTD[r]	28,551	58,530	230,024	25,948	343,053	2015 YTD	93,733
2016 YTD as % of 2015 YTD	124	143	125	104	126	% change YTD	110
Last 4 weeks as % of 2015[2]	356	141	119	126	131	Last 4wks % 2015	131
Last 4 weeks as % of 4-year avg.[2]	79	171	132	103	128	Last 4wks % 4 yr	131
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.

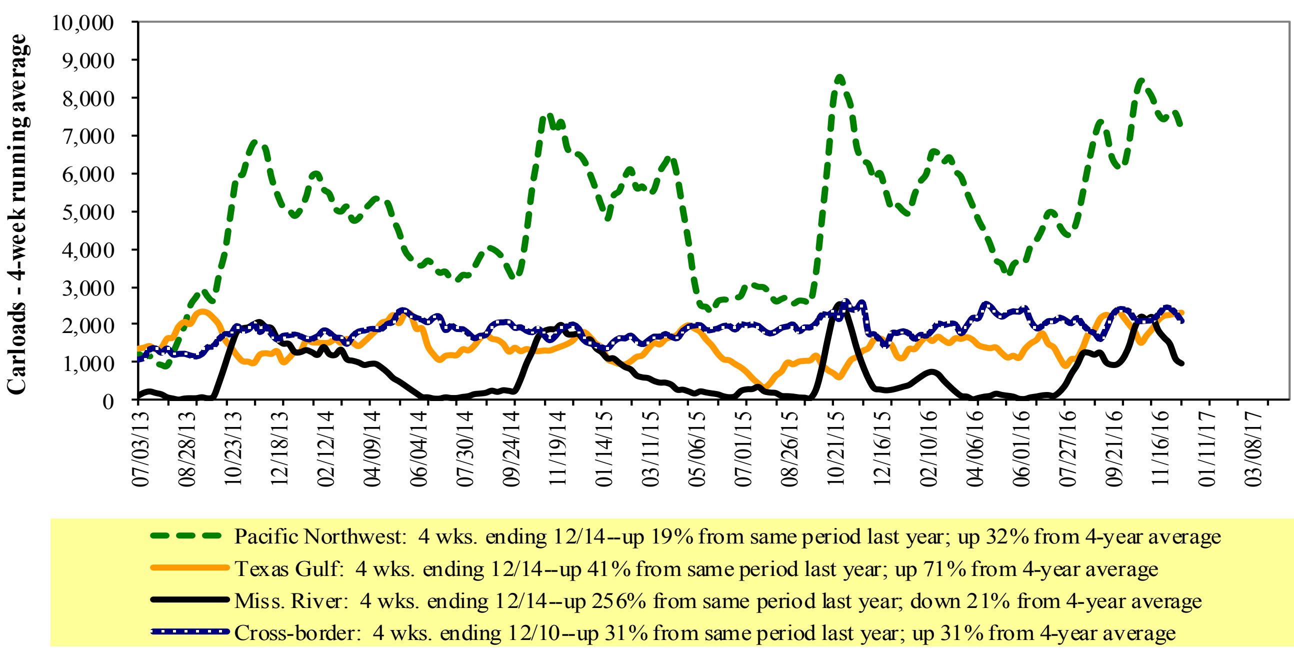
YTD = year-to-date; p = preliminary data; r = revised data; n/a = not available

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: 12/10/2016	East		West			U.S. total	Canada	
	CSXT	NS	BNSF	KCS	UP		CN	CP
This week	1,814	3,172	11,961	1,407	6,264	24,618	4,232	3,876
This week last year	2,166	2,414	12,226	841	5,066	22,713	4,956	4,877
2016 YTD	89,136	143,059	557,358	43,073	283,864	1,116,490	183,121	221,013
2015 YTD	98,512	141,537	505,911	43,399	253,411	1,042,770	201,048	223,531
2016 YTD as % of 2015 YTD	90	101	110	99	112	107	91	99
Last 4 weeks as % of 2015*	96	125	109	135	122	114	106	107
Last 4 weeks as % of 3-yr avg.**	79	103	119	113	109	110	95	98
Total 2015	104,039	149,184	536,173	45,445	267,720	1,102,561	210,904	236,263

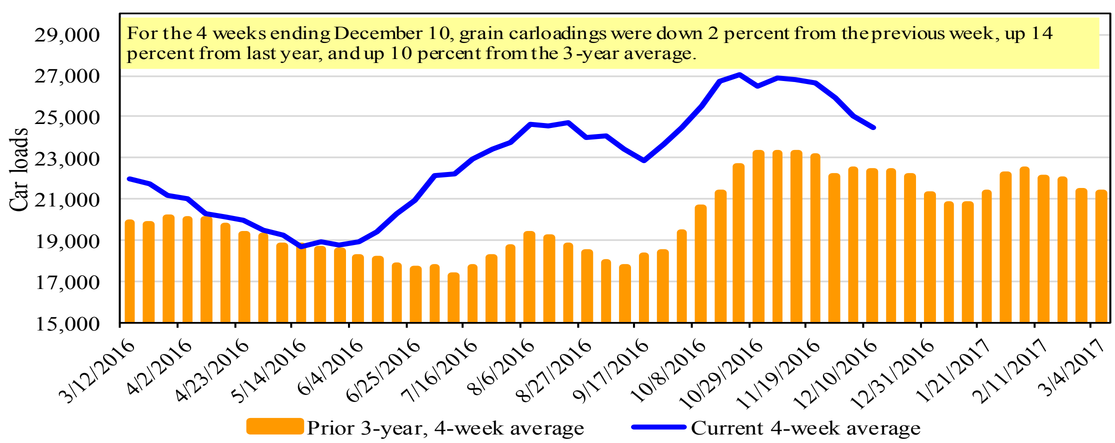
*The past 4 weeks of this year as a percent of the same 4 weeks last year.

**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: 12/15/2016		Delivery period							
		Jan-17	Jan-16	Feb-17	Feb-16	Mar-17	Mar-16	Apr-17	Apr-16
BNSF[3]	COT grain units	5	0	0	0	no bids	no bids	no bids	no bids
	COT grain single-car[5]	43	0	13	0	13	0	2	0
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

[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.

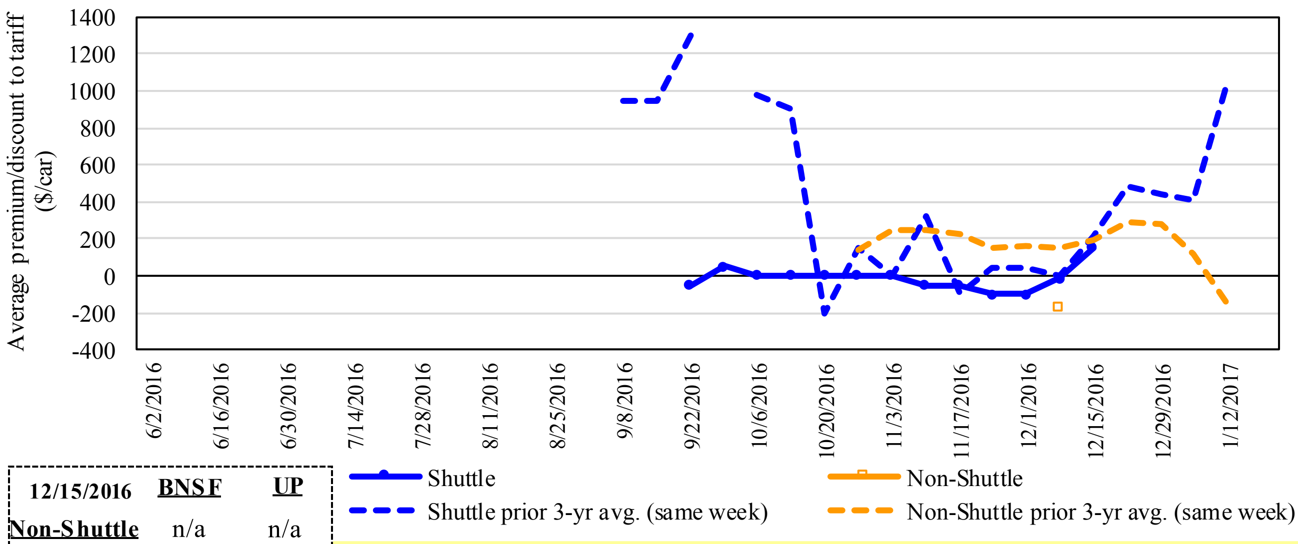
Region 2 includes: CO, IA, KS, MN, NE, WY, and Kansas City and St. Joseph, MO.

[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 January 2017, Secondary Market

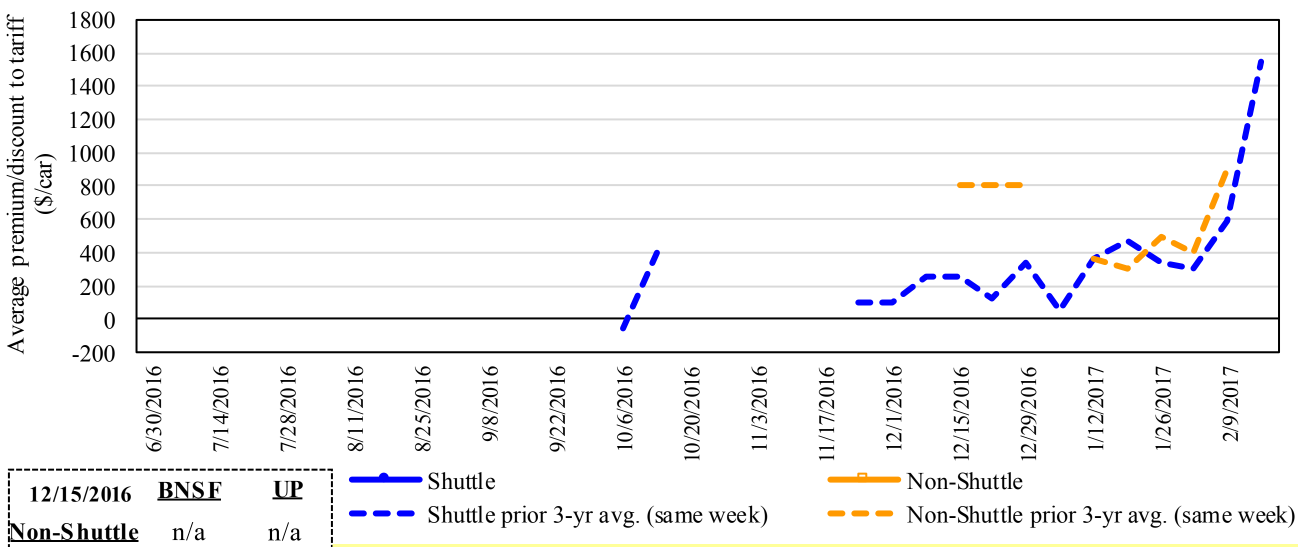


12/15/2016	BNSF	UP
Non-Shuttle	n/a	n/a
Shuttle	$300	$0

There were no Non-Shuttle bids/offers this week.
Average Shuttle bids/offers rose $163 this week and are at 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 February 2017, Secondary Market



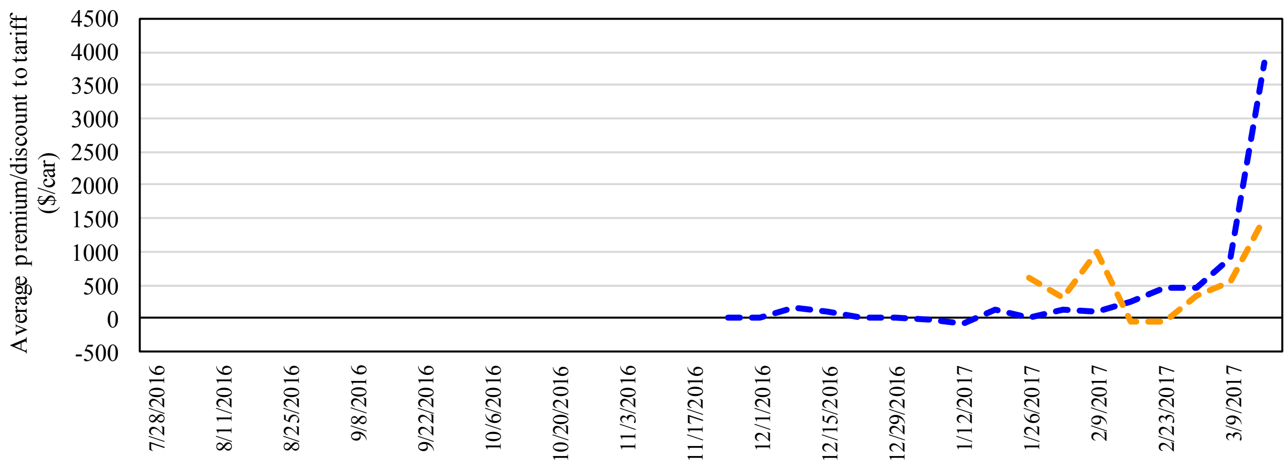
12/15/2016	BNSF	UP
Non-Shuttle	n/a	n/a
Shuttle	n/a	n/a

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

Figure 6

Bids/Offers for Railcars to be Delivered in March 2017, Secondary Market



12/15/2016	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: 12/15/2016	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17
Non-shuttle	**BNSF-GF**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**
	Change from last week	n/a	n/a	n/a	n/a	n/a	n/a
	Change from same week 2015	n/a	n/a	n/a	n/a	n/a	n/a
	UP-Pool	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**
	Change from last week	n/a	n/a	n/a	n/a	n/a	n/a
	Change from same week 2015	n/a	n/a	n/a	n/a	n/a	n/a
Shuttle	**BNSF-GF**	**300**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**
	Change from last week	300	n/a	n/a	n/a	n/a	n/a
	Change from same week 2015	494	n/a	n/a	n/a	n/a	n/a
	UP-Pool	**0**	**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	150	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]

					Tariff plus surcharge per:		
December, 2016	**Origin region***	**Destination region***	**Tariff rate/car**	**Fuel surcharge per car**	**metric ton**	**bushel [2]**	**Percent change Y/Y [3]**
Unit train							
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
Shuttle Train							
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

[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]	bushel[3]	Percent change[4] Y/Y
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

[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

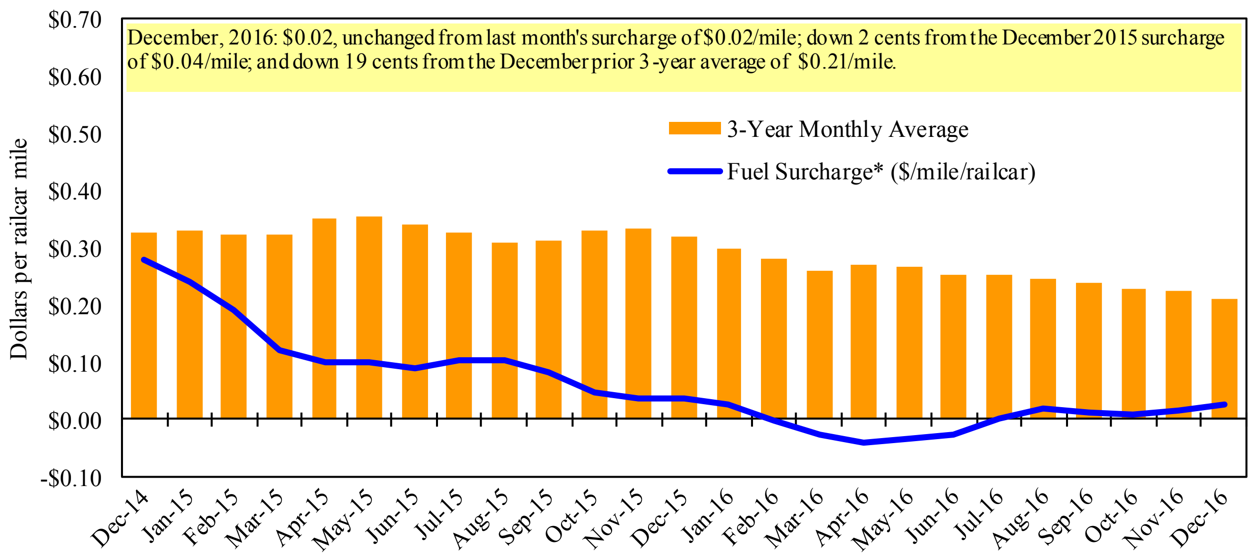
[3]Approximate load per car = 97.87 metric tons: Corn & Sorghum 56 lbs/bu, Wheat & Soybeans 60 lbs/bu

[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.

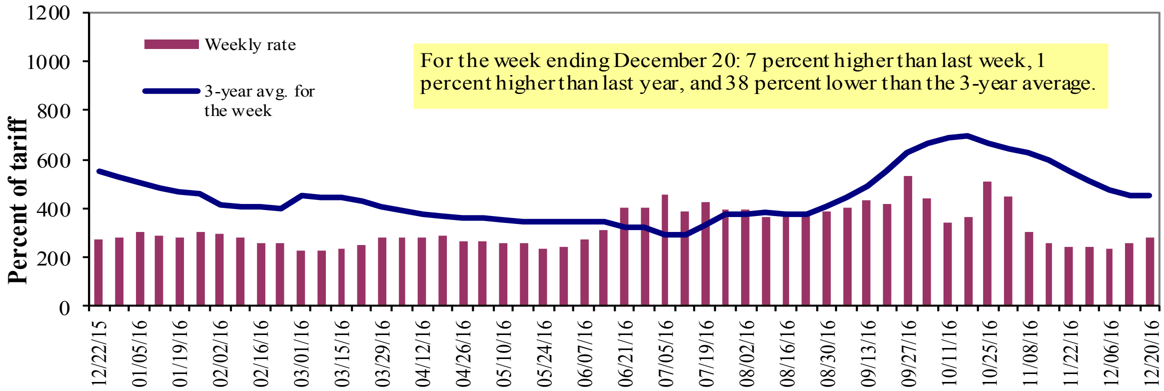
**CSX strike price changed from $2.00/gal. to $3.75/gal. starting January 1, 2015.

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]	12/20/2016	-	-	278	188	220	220	168
	12/13/2016	-	-	260	187	222	222	170
$/ton	12/20/2016	-	-	12.90	7.50	10.32	8.89	5.28
	12/13/2016	-	-	12.06	7.46	10.41	8.97	5.34
Current week % change from the same week:								
	Last year	-	-	1	-8	13	13	2
	3-year avg. [2]	-	-	-38	-44	-40	-40	-37
Rate[1]	January	-	-	280	198	205	205	165
	March	-	275	270	180	190	190	168

[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.

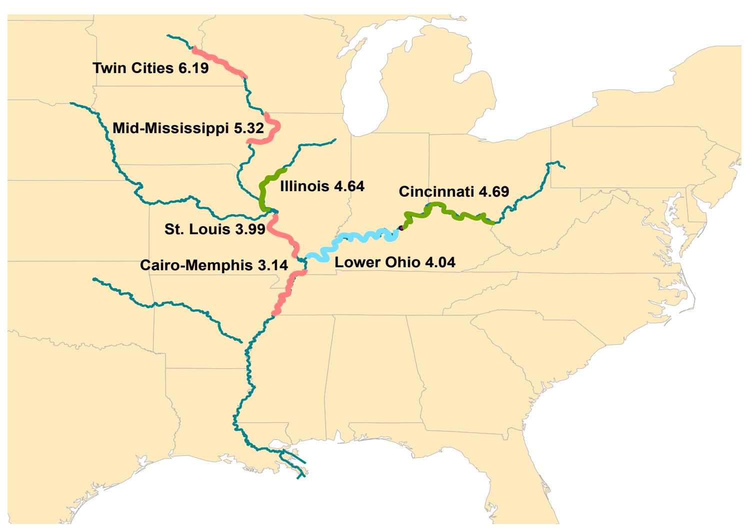
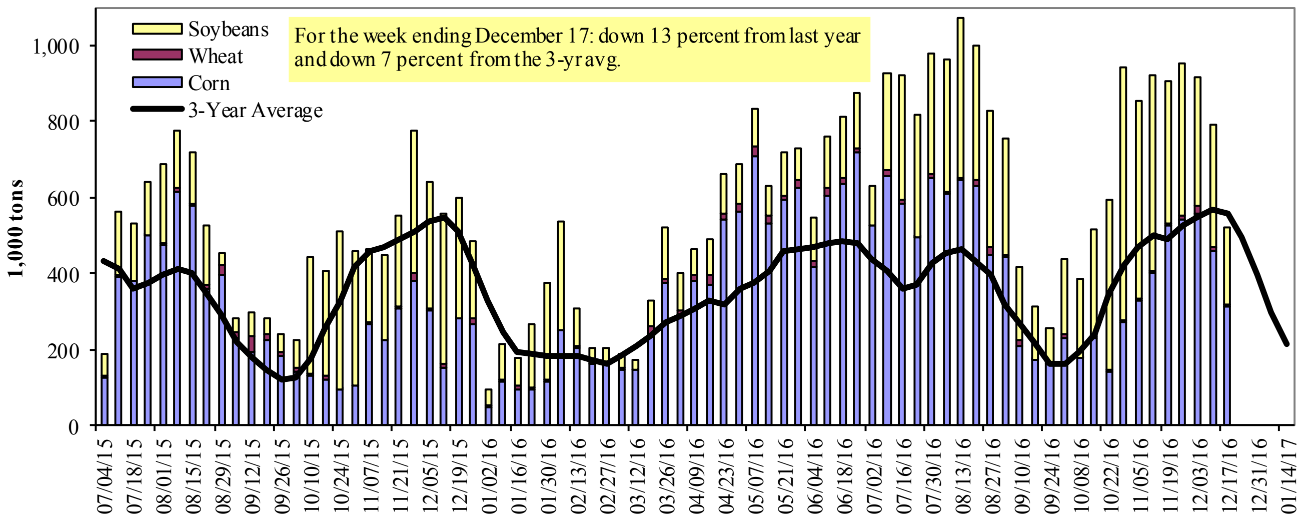


Figure 10

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 12/17/2016	Corn	Wheat	Soybeans	Other	Total
Mississippi River					
Rock Island, IL (L15)	6	0	0	0	6
Winfield, MO (L25)	98	2	149	6	255
Alton, IL (L26)	297	3	209	15	525
Granite City, IL (L27)	313	3	203	15	535
Illinois River (L8)	146	2	51	9	208
Ohio River (L52)	46	4	133	2	185
Arkansas River (L1)	0	10	36	0	46
Weekly total - 2016	359	17	373	17	766
Weekly total - 2015	365	21	564	12	963
2016 YTD[1]	23,496	1,963	15,971	335	41,765
2015 YTD	18,736	1,648	13,539	358	34,280
2016 as % of 2015 YTD	125	119	118	94	122
Last 4 weeks as % of 2015[2]	152	117	91	43	113
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.

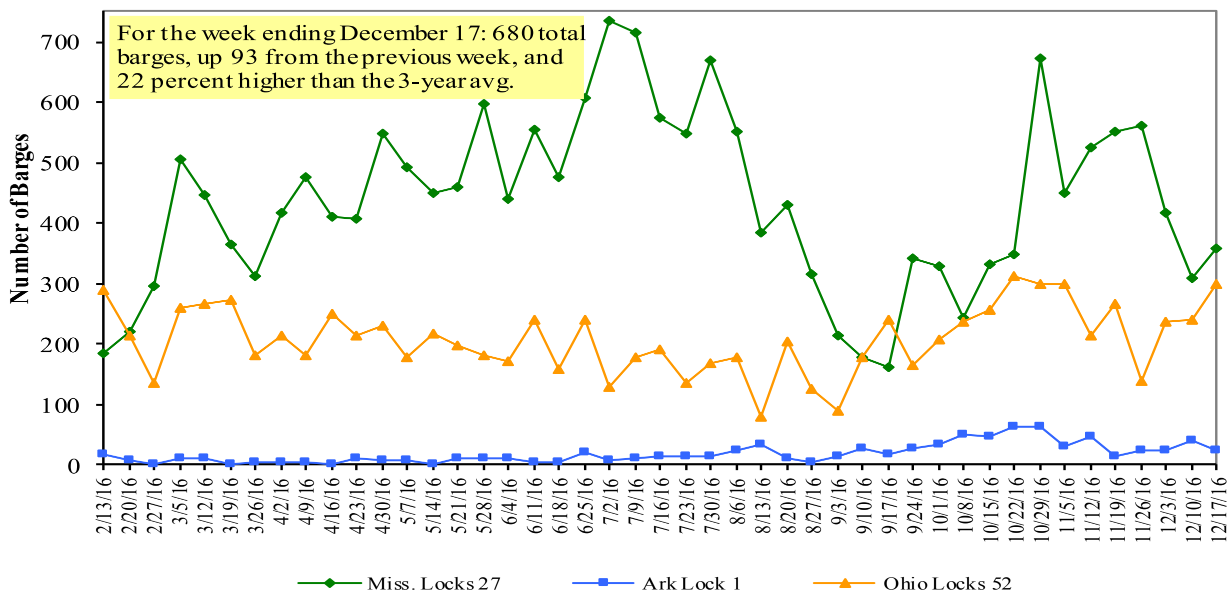
[2] As a percent of same period in 2015.

Note: Total may not add exactly, due to rounding

Source: U.S. Army Corps of Engineers

Figure 11

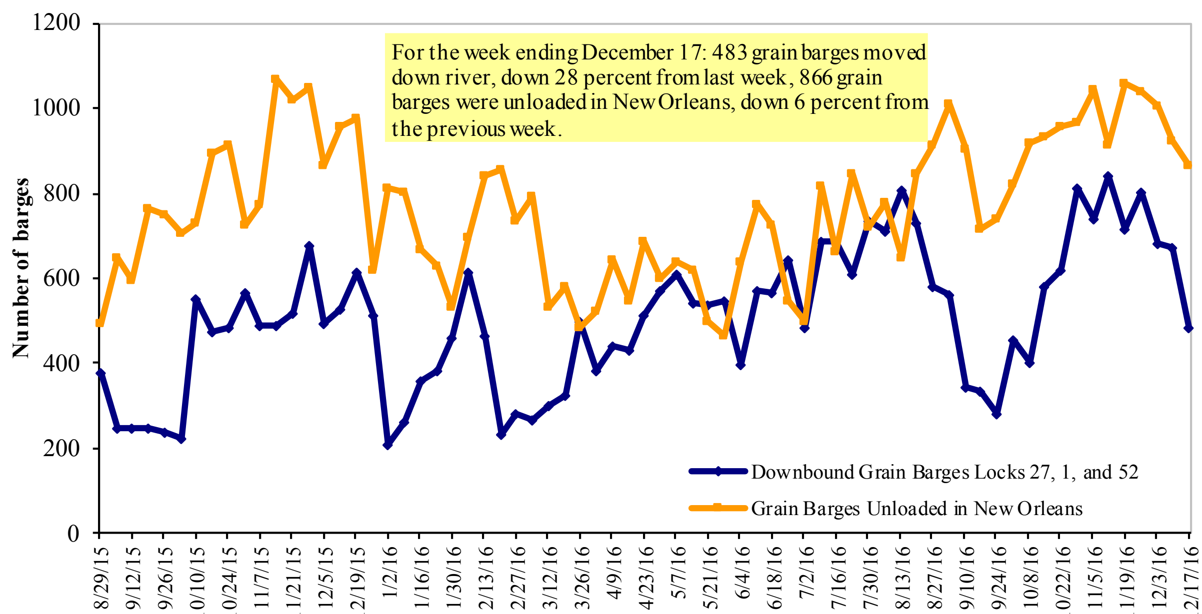
Upbound Empty Barges Transiting Mississippi River Locks 27, Arkansas River Lock and Dam 1, and Ohio River Locks and Dam 52



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 12/19/2016 (US $/gallon)

Region	Location	Price	Change from Week ago	Change from Year ago
I	East Coast	2.559	0.039	0.241
	New England	2.587	0.040	0.190
	Central Atlantic	2.667	0.034	0.229
	Lower Atlantic	2.470	0.041	0.260
II	Midwest[2]	2.479	0.033	0.252
III	Gulf Coast[3]	2.410	0.039	0.229
IV	Rocky Mountain	2.490	0.043	0.186
V	West Coast	2.788	0.016	0.283
	West Coast less California	2.705	0.015	0.332
	California	2.854	0.017	0.243
Total	U.S.	2.527	0.034	0.243

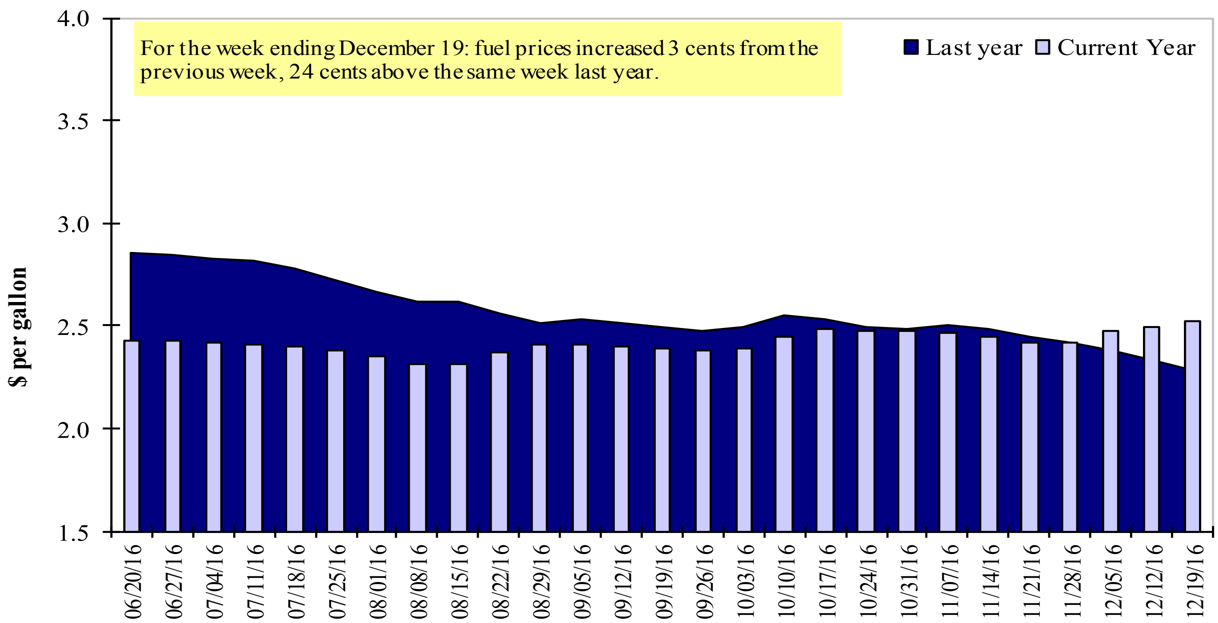
[1]Diesel fuel prices include all taxes. Prices represent an average of all types of diesel fuel.

[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]									
12/8/2016	2,001	626	2,442	1,192	169	6,430	19,164	17,279	42,872
This week year ago	1,206	619	1,546	1,081	69	4,520	11,028	12,528	28,076
Cumulative exports-marketing year[2]									
2016/17 YTD	5,967	1,120	3,978	2,207	200	13,471	13,930	27,820	55,220
2015/16 YTD	3,003	1,992	3,243	1,730	481	10,449	7,663	22,385	40,497
YTD 2016/17 as % of 2015/16	199	56	123	128	42	129	182	124	136
Last 4 wks as % of same period 2015/16	171	94	148	113	245	140	169	141	152
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 12/08/2016	Total Commitments[2]		% change	Exports[3]
	2016/17	2015/16	current MY	3-year avg
	Current MY	Last MY	from last MY	2013-2015
	- 1,000 mt -			- 1,000 mt -
Japan	4,347	2,842	53	11,284
Mexico	9,093	7,325	24	11,204
Korea	2,904	452	542	3,931
Colombia	2,070	1,643	26	4,134
Taiwan	1,671	349	379	1,912
Top 5 Importers	**20,085**	**12,611**	**59**	**32,465**
Total US corn export sales	**33,094**	**18,691**	**77**	**46,633**
% of Projected	58%	39%		
Change from prior week	**1,516**	**580**		
Top 5 importers' share of U.S. corn export sales	61%	67%		70%
USDA forecast, December 2016	**56,616**	**48,295**	**17**	
Corn Use for Ethanol USDA forecast, December 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 12/08/2016	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	28,572	20,677	38	29,033
Mexico	1,914	1,775	8	3,295
Indonesia	876	547	60	2,065
Japan	1,148	1,127	2	1,994
Taiwan	1,148	1,127	2	1,226
Top 5 importers	**33,657**	**25,253**	**33**	**37,614**
Total US soybean export sales	**45,098**	**34,913**	**29**	**48,389**
% of Projected	81%	66%		
Change from prior week	**1,938**	**833**		
Top 5 importers' share of U.S. soybean export sales	75%	72%		**78%**
USDA forecast, December 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 12/08/2016	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	1,847	1,554	19	2,743
Mexico	1,910	1,513	26	2,660
Nigeria	952	1,248	(24)	1,978
Philippines	1,946	1,536	27	2,156
Brazil	1,081	359	201	2,076
Korea	1,012	958	6	1,170
Taiwan	734	787	(7)	1,005
Indonesia	657	194	238	776
Colombia	610	479	27	679
Thailand	607	379	60	618
Top 10 importers	**10,748**	**8,628**	25	**15,861**
Total US wheat export sales	**19,900**	**14,969**	**33**	**24,485**
% of Projected	75%	71%		
Change from prior week	**531**	**320**		
Top 10 importers' share of U.S. wheat export sales	54%	58%		65%
USDA forecast, December 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 12/15/16	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	250	151	166	11,843	10,411	114	132	131	10,985
Corn	167	186	90	11,700	7,232	162	528	169	7,232
Soybeans	487	625	78	13,584	10,977	124	122	122	11,809
Total	**904**	**962**	**94**	**37,128**	**28,620**	**130**	**148**	**132**	**30,027**
Mississippi Gulf									
Wheat	37	50	73	3,374	4,465	76	60	71	4,504
Corn	426	512	83	30,365	26,026	117	138	120	26,701
Soybeans	1,081	988	109	33,201	27,614	120	111	107	29,593
Total	**1,543**	**1,551**	**99**	**66,940**	**58,104**	**115**	**115**	**109**	**60,797**
Texas Gulf									
Wheat	149	146	102	5,749	3,692	156	122	118	3,724
Corn	36	0	n/a	1,626	596	273	393	230	596
Soybeans	55	65	86	1,083	829	131	210	133	864
Total	**241**	**210**	**115**	**8,458**	**5,117**	**165**	**156**	**132**	**5,184**
Interior									
Wheat	16	32	50	1,476	1,349	109	79	91	1,388
Corn	121	129	94	6,987	5,993	117	136	129	6,201
Soybeans	98	115	85	4,434	3,416	130	185	118	3,518
Total	**235**	**275**	**85**	**12,897**	**10,758**	**120**	**144**	**121**	**11,106**
Great Lakes									
Wheat	52	90	58	1,146	988	116	189	126	997
Corn	0	26	0	584	485	120	n/a	2785	485
Soybeans	0	65	0	868	711	122	104	57	733
Total	**52**	**181**	**29**	**2,598**	**2,184**	**119**	**171**	**101**	**2,216**
Atlantic									
Wheat	0	0	n/a	289	520	56	0	0	520
Corn	0	0	n/a	293	276	106	73	14	277
Soybeans	101	28	367	2,064	1,861	111	102	97	2,053
Total	**101**	**28**	**367**	**2,646**	**2,658**	**100**	**92**	**94**	**2,850**
U.S. total from ports**									
Wheat	503	468	107	23,878	21,424	111	110	112	22,118
Corn	751	853	88	51,556	40,609	127	172	135	41,492
Soybeans	1,822	1,885	97	55,234	45,409	122	117	109	48,570
Total	**3,076**	**3,207**	**96**	**130,668**	**107,442**	**122**	**127**	**116**	**112,180**

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

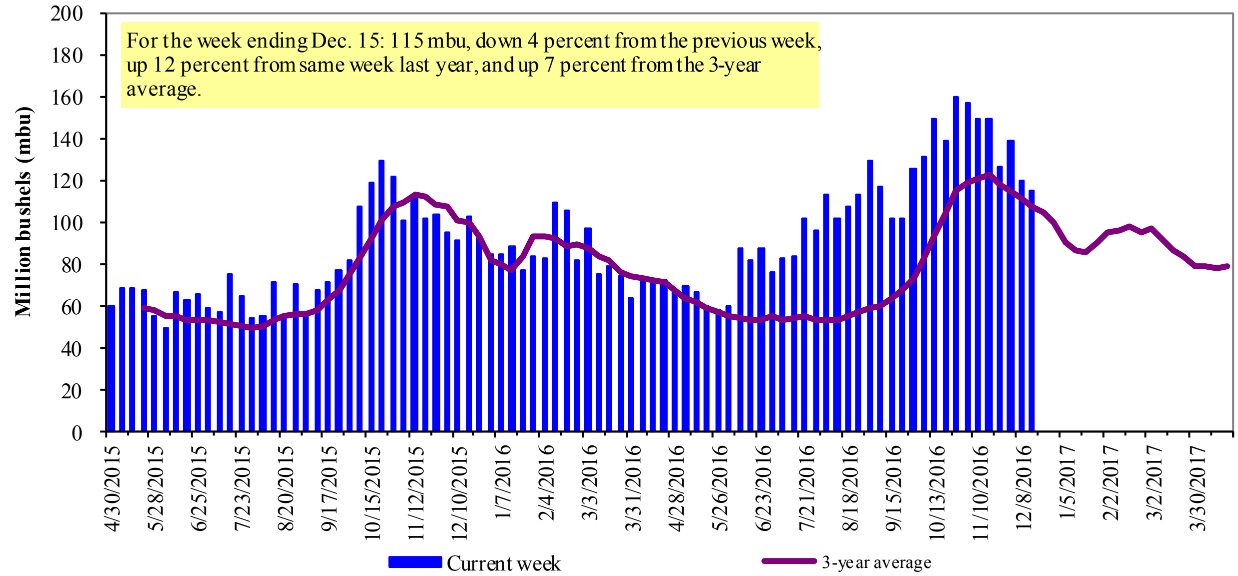
**Total only includes regions shown above

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

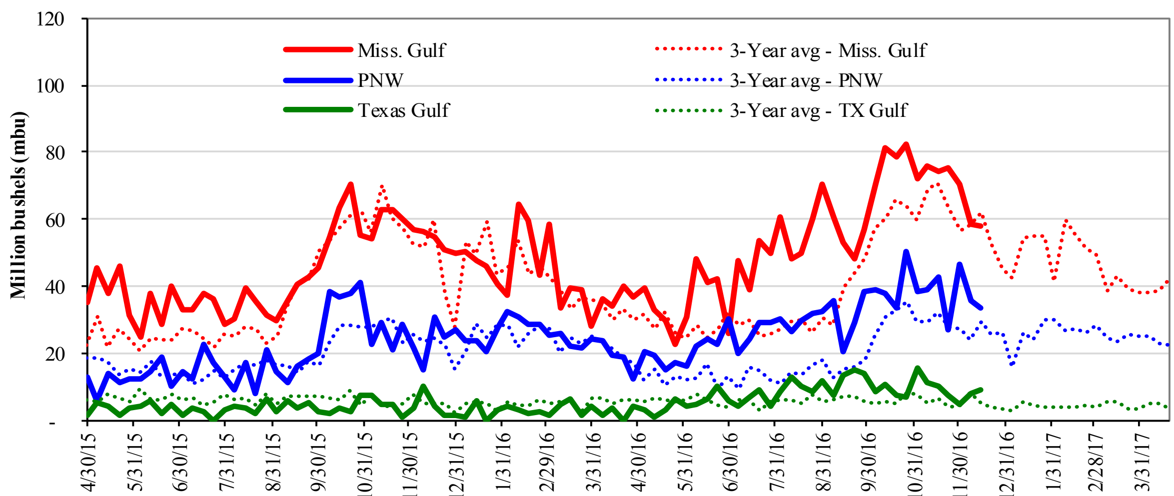
U.S. grain inspected for export (wheat, corn, and soybeans)



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 12/15/16 inspections (mbu):		Percent change from:	MS Gulf	TX Gulf	U.S. Gulf	PNW
Mississippi Gulf:	57.8	Last Week:	unchanged	up 16	up 1	down 6
PNW:	33.6	Last Year (same week):	up 5	up 120	up 13	up 10
Texas Gulf:	8.9	3-yr avg. (4-wk. mov. Avg):	down 4	up 68	up 2	up 24

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

Ocean Transportation

Table 17

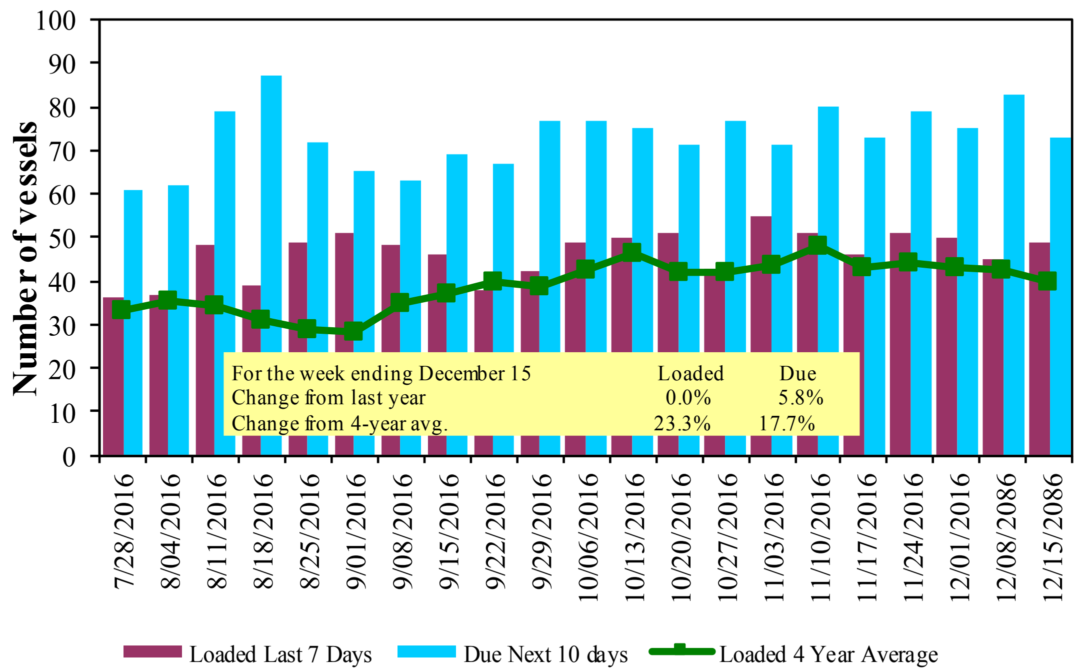
Weekly Port Region Grain Ocean Vessel Activity (number of vessels)

	Gulf			Pacific Northwest	Vancouver B.C.
Date	In port	Loaded 7-days	Due next 10-days	In port	In port
12/15/2016	54	49	73	25	n/a
12/8/2016	38	45	83	24	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

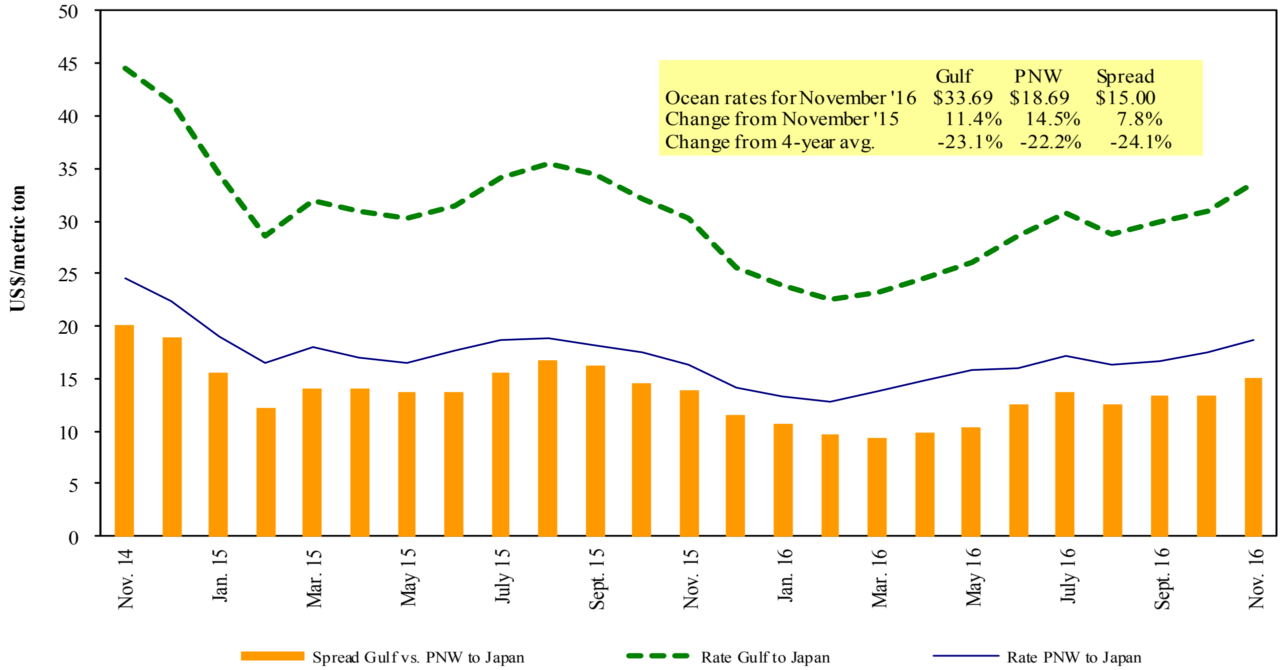
U.S. Gulf Vessel Loading Activity



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 12/17/2016

Export region	Import region	Grain types	Loading date	Volume loads (metric tons)	Freight rate (US$/metric ton)
U.S. Gulf	China	Heavy Grain	Dec 19/24	66,000	33.90
U.S. Gulf	China	Heavy Grain	Dec 15/24	65,000	34.50
U.S. Gulf	China	Heavy Grain	Dec 14/20	53,000	34.00
U.S. Gulf	China	Heavy Grain	Dec 12/20	63,000	36.00
U.S. Gulf	China	Heavy Grain	Dec 10/20	63,000	35.75
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
Brazil	South Korea	Heavy Grain	Mar 15/Apr 15	65,000	23.50
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

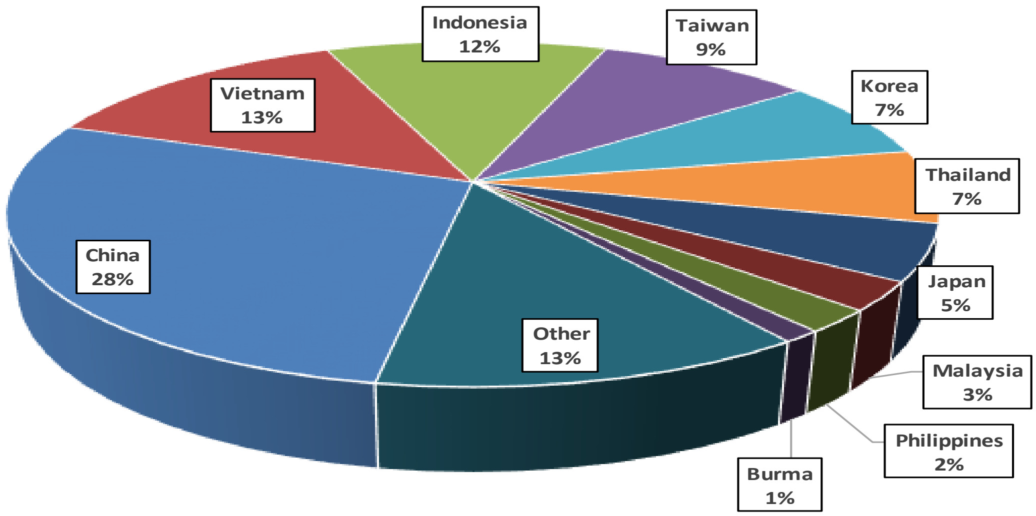
Rates shown are per metric ton (2,204.62 lbs. = 1 metric ton), F.O.B., except where otherwise indicated; op = option

*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)

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.

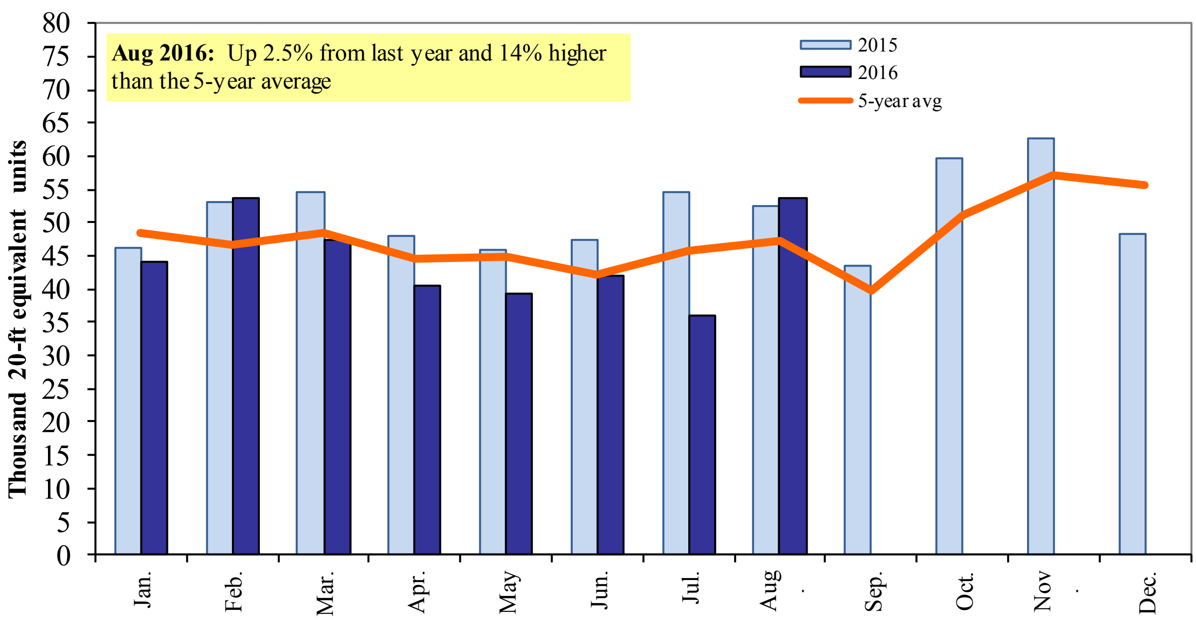
Figure 18
Top 10 Destination Markets for U.S. Containerized Grain Exports, January-August 2016



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.* December 22, 2016. Web: **http://dx.doi.org/10.9752/TS056.12-22-2016**