United States Department of Agriculture

Grain Transportation Report

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

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February 9, 2017

Contents

The next release is Feb. 16, 2017

WEEKLY HIGHLIGHTS

Railroads Announce 2017 Capital Plans

On February 1, the Association of American Railroads (AAR) projected that U.S. freight railroads will spend an estimated $22 billion in capital expenditures and maintenance in 2017. Railroad investment spending is down from $29 billion in 2015 and $26 billion in 2016, which AAR attributed to the "decline in coal production." The freight railroads have spent more than $600 billion since 1980, with record amounts in recent years. According to AAR, these investments in track, locomotives, and technology improve safety and enable railroads to meet demand. Of the seven Class I railroads in 2016, BNSF originated the greatest share of grain carloads, at 37 percent, followed by Union Pacific (UP) with 19 percent. UP announced a $3.1 billion capital plan for 2017. BNSF plans to spend $3.4 billion in 2017 investments, including (in millions) $225 in Texas, $190 in Illinois, $175 in Washington, $170 in California, $125 in Kansas, $120 in Missouri, $100 in Montana, and $100 in Nebraska.

Grain Inspections Continue to Increase

For the week ending February 2, **total inspections of grain** (corn, wheat, and soybeans) for export from major U.S. export regions reached 3.46 million metric tons (mmt), up 13 percent from the previous week, up 57 percent from last year, and 37 percent above the 3-year average. Total wheat inspections reached .651 mmt, up 86 percent from last year; the highest since late September 2016. Wheat shipments rebounded to Asia and Latin America. Corn and soybean inspections increased 5 and 4 percent from the previous week. Pacific Northwest (PNW) grain inspections increased 27 percent from the past week, and Mississippi Gulf inspections increased 13 percent for the same period. Outstanding export sales (unshipped) continued to increase for corn and wheat, but soybean exports sales decreased.

Effective Date of Rule for Entry-Level Commercial Drivers' Training Delayed

The Federal Motor Carrier Safety Administration (FMCSA) has temporarily extended the effective date of its final rule on Minimum Training Requirements for Entry-Level Commercial Motor Vehicle Operators to March 21, 2017 in response to a White House memorandum; but the rule's compliance date remains unchanged (February 7, 2020). Custom harvesters of grain requested an exception from the proposed rule in March 2008 and March 2016. FMCSA provided its response to the custom harvesters' requests on page 88472 of the final rule. The Government Accountability Office reviewed FMCSA's efforts to "enhance safety of Commercial Motor Vehicles operations in public highways by establishing a minimum standard for Entry-Level Driver Training (ELDT) and increasing the number of drivers who receive ELDT." Several groups filed a petition with FMCSA to reconsider the lack of minimum behind-the-wheel provisions in the final rule.

Snapshots by Sector

Export Sales

For the week ending January 26 **unshipped balances** of wheat, corn, and soybeans totaled 39 mmt, up 59 percent from the same time last year. Net weekly **wheat export sales** were .451 mmt, down 47 percent from the previous week. Net **corn export sales** were 1.14 mmt, down 17 percent from the previous week, and net **soybean export sales** were .624 mmt, up 16 percent from the past week.

Rail

U.S. Class I railroads originated 22,773 **grain carloads** for the week ending January 28, down 7 percent from the previous week, unchanged from last year, and down 3 percent from the 3-year average.

Average February shuttle **secondary railcar bids/offers** per car were $1,117 above tariff for the week ending February 2, up $42 from last week, and $1,246 higher than last year. Average non-shuttle secondary railcar bids/offers were $250 above tariff. There were no non-shuttle bids/offers last week or this week last year.

Barge

For the week ending February 4, **barge grain movements** totaled 741,596 tons, 3 percent higher than the last week, and down 24 percent from the same period last year.

For the week ending February 4, 456 grain barges **moved down river**, up 3 percent from last week, 947 grain barges were **unloaded in New Orleans**, down 6 percent from the previous week.

Ocean

For the week ending February 2, 47 **ocean-going grain vessels** were loaded in the Gulf, 47 percent more than the same period last year. Sixty-five vessels are expected to be loaded within the next 10 days, 16 percent more than the same period last year.

For the week ending February 2, the ocean freight rate for shipping bulk grain from the Gulf to Japan was $35.25 per metric ton, 1 percent less than the previous week. The cost of shipping from the PNW to Japan was $17.75 per metric ton, 1 percent less than the previous week.

Fuel

During the week ending February 6, U.S. average **diesel fuel prices** remain unchanged from the previous week at $2.56 per gallon, 55 cents higher than the same week last year.

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Feature Article/Calendar

Fourth Quarter Wheat Transportation Costs Increase

During the fourth quarter of calendar year 2016, transportation costs for shipping wheat to Japan from Kansas and North Dakota through the Pacific Northwest (PNW) and U.S. Gulf increased from the third quarter and last year. Higher ocean freight and rail rates contributed to the increase in overall transportation costs for shipping wheat from the PNW and Gulf. Increasing ocean freight rates were due in part to higher demand for wheat, and other minor grains, and increased demand for iron ore and coal, especially from China, (see *Grain Transportation Report (GTR) 1-19-17*). Trucking rates were unchanged from quarter to quarter, but were noticeably up year to year (see Tables 1 and 2). Although quarter-to-quarter export inspections of wheat decreased, year-to-year inspections increased 15 percent during the fourth quarter *(GTR) 1-12-17*).

Fourth quarter transportation costs to ship wheat from Kansas and North Dakota through the PNW to Japan reached $86 and $84 per metric ton (mt), respectively, both up 3 percent from the third quarter due primarily to higher ocean rates (see Table 1). Year-to-year transportation costs to ship wheat through the PNW increased 9 percent for Kansas and 5 percent for North Dakota because of higher trucking and ocean rates. The cost of shipping from Kansas and North Dakota to Japan through the Gulf increased 5 and 4 percent quarter to quarter, averaging $83 and $103 per mt, respectively (see Table 2). Year-to-year Gulf transportation costs for shipping wheat were up 8 percent from Kansas and 2 percent from North Dakota because of higher trucking and ocean rates. Fourth quarter wheat transportation costs represented 33 to 45 percent of the landed cost (see Tables 1 and 2).

Table 1: Quarterly rate comparisons for shipping Kansas & North Dakota wheat to Japan through the PNW

	Kansas					North Dakota				
Mode	2015 4th qtr	2016 3rd qtr	2016 4th qtr	Year-to-Year change	Quarterly change	2015 4th qtr	2016 3rd qtr	2016 4th qtr	Year-to-Year change	Quarterly change
			$/metric ton	%	%			$/metric ton	%	%
Truck	8.38	10.58	10.58	26.25	0.00	8.38	10.58	10.58	26.25	0.00
Rail[1]	54.93	56.43	57.20	4.13	1.36	55.97	55.04	55.42	-0.98	0.69
Ocean vessel	15.97	16.61	18.43	15.40	10.96	15.97	16.61	18.43	15.40	10.96
Transportation Costs	79.28	83.62	86.21	8.74	3.10	80.32	82.23	84.43	5.12	2.68
Farm Value[2]	156.65	111.09	106.92	-31.75	-3.75	180.53	161.30	170.74	-5.42	5.85
Total Landed Cost	235.93	194.71	193.13	-18.14	-0.81	260.85	243.53	255.17	-2.18	4.78
Transport % of landed cost	33.60	42.95	44.64			30.79	33.77	33.09		

Table 2: Quarterly rate comparisons for shipping Kansas & North Dakota wheat to Japan through the Gulf

	Kansas					North Dakota				
Mode	2015 4th qtr	2016 3rd qtr	2016 4th qtr	Year-to-Year change	Quarterly change	2015 4th qtr	2016 3rd qtr	2016 4th qtr	Year-to-Year change	Quarterly change
			$/metric ton	%	%			$/metric ton	%	%
Truck	8.38	10.58	10.58	26.25	0.00	8.38	10.58	10.58	26.25	0.00
Rail[1]	38.99	38.38	38.30	-1.77	-0.21	63.14	58.20	58.58	-7.22	0.65
Ocean vessel	29.31	29.92	33.67	14.88	12.53	29.31	29.92	33.67	14.88	12.53
Transportation Costs	76.68	78.88	82.55	7.66	4.65	100.83	98.70	102.83	1.98	4.18
Farm Value[2]	156.65	111.09	106.92	-31.75	-3.75	180.53	161.30	170.74	-5.42	5.85
Total Landed Cost	233.33	189.97	189.47	-18.80	-0.26	281.36	260.00	273.57	-2.77	5.22
Transport % of landed cost	32.86	41.52	43.57			35.84	37.96	37.59		

Source: USDA/AMS/TMP

[1] Rail tariff rates include fuel surcharges and revisions for heavy axle railcars 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

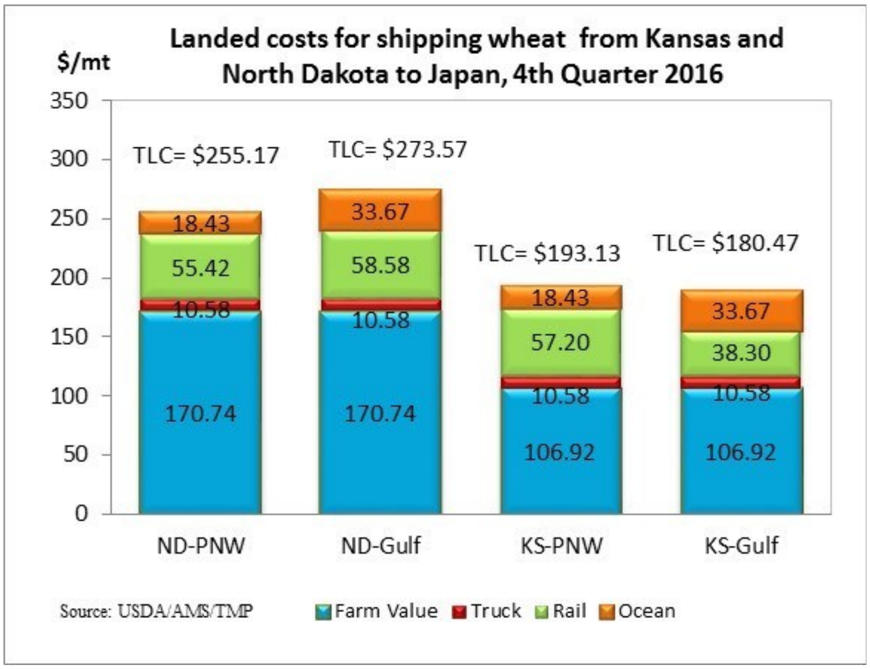
[2] Source: USDA/NASS, wheat prices for North Dakota (mainly HRS) and Kansas (mainly HRW)

The total landed cost (TLC) for shipping wheat to Japan ranged from $189 to $274 per mt (see Figure). Total landed costs for shipping wheat from Kansas to Japan were down slightly from quarter to quarter but significantly down year to year due to a large drop in the farm value for wheat. Landed costs for shipping wheat from North Dakota were up quarter to quarter but slightly down year to year. The landed cost per route for shipping wheat from Kansas through the PNW was down 1 percent from the previous quarter, but increased 5 percent from North Dakota (see Table 2). Although quarter-to-quarter landed costs for shipping wheat from Kansas to Japan through the Gulf were down slightly, North Dakota increased 5 percent (see

Table 2) because of increased transportation cost and farm value. Overall, however, lower year-to-year wheat farm values impelled year-to-year landed costs down 18 and 19 percent from Kansas through the PNW and Gulf, respectively, and down 2 and 3 percent from North Dakota through the same respective locations.

Fourth quarter ocean rates for wheat shipped from the PNW to Japan increased 11 percent from the third quarter and 15 percent from the same time last year (see Table 1). Ocean rates for wheat shipped from the Gulf to Japan increased 13 percent quarter to quarter and 15 percent from year to year. Ocean rates increased due to higher global demand for bulk products.

Fourth quarter rail rates for shipping wheat from Kansas and North Dakota to the PNW increased 1 percent quarter to quarter. Year-to-year rail rates increased 4 percent from Kansas to the PNW, but rates decreased 1 percent from North Dakota. Quarter-to-quarter rail rates for moving wheat from Kansas to the Gulf remained unchanged, and North Dakota rail rates increased 1 percent for the same time. Year-to-year Gulf rail rates decreased 2 percent from Kansas and 7 percent from North Dakota.



Fourth quarter truck rates for moving wheat from each State by truck to a rail-served grain elevator were unchanged from the third quarter. However, from year to year, truck rates were up 26 percent, as demand for wheat increased and trucking activity rose.

Wheat Market Outlook

According to the USDA's Foreign Agricultural Service, fourth quarter exports of wheat destined to Japan reached .749 million metric tons (mmt), which is up 40 percent from last year and accounts for 15 percent of total U.S. wheat inspections in the fourth quarter. The total amount of wheat exported to Japan for calendar year 2016 totaled 2.7 mmt, which is down 1 percent from last year and accounts for 12 percent of total U.S. wheat exports.

In the calendar year 2016, total U.S. wheat exports reached 23.8 mmt, up 12 percent from the past year due in part to ample supplies of wheat. For the 2016/17 marketing year, year-to-date cumulative export sales (shipped) of all wheat are up 25 percent from last year (see ***GTR Table 12***). The USDA's *World Agricultural Supply and Demand Estimates* report in January forecast 2016/17 wheat exports to increase 26 percent from 2015/16. 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
02/08/17	172	276	257	192	158	126
02/01/17	172	262	255	171	159	128

[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)

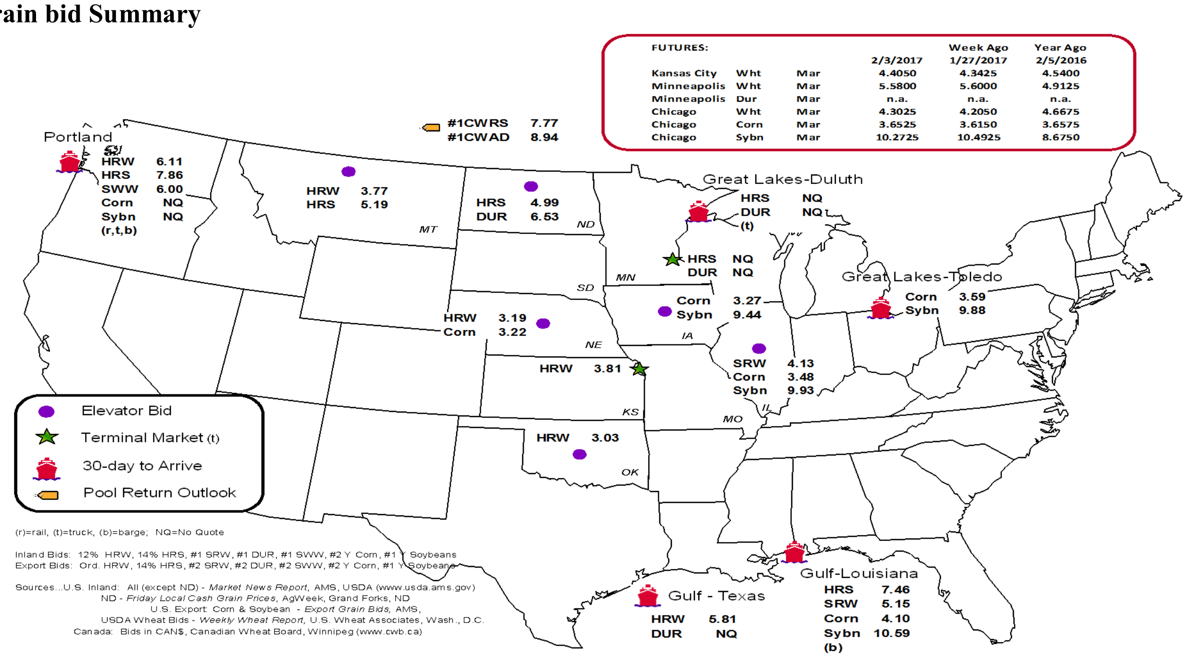
Commodity	Origin--Destination	2/3/2017	1/27/2017
Corn	IL--Gulf	-0.62	-0.62
Corn	NE--Gulf	-0.88	-0.88
Soybean	IA--Gulf	-1.15	-1.23
HRW	KS--Gulf	-2.00	-1.85
HRS	ND--Portland	-2.87	-2.85

Note: nq = no quote; n/a = not available
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]
02/01/2017[p]	926	1,565	7,597	635	10,723	1/28/2017	2,814
01/25/2017[r]	872	1,571	6,140	973	9,556	1/21/2017	1,640
2017 YTD[r]	4,227	8,697	30,139	4,051	47,114	2017 YTD	8,141
2016 YTD[r]	2,773	7,290	28,716	3,548	42,327	2016 YTD	8,334
2017 YTD as % of 2016 YTD	152	119	105	114	111	% change YTD	98
Last 4 weeks as % of 2016[2]	138	109	108	107	110	Last 4wks % 2016	118
Last 4 weeks as % of 4-year avg.[2]	86	142	114	100	113	Last 4wks % 4 yr	133
Total 2016	36,925	86,992	299,932	28,728	452,577	Total 2016	92,982
Total 2015	29,054	60,819	239,029	26,730	355,632	Total 2015	97,736

[1] Data is incomplete as it is voluntarily provided

[2] Compared with same 4-weeks in 2016 and prior 4-year average.

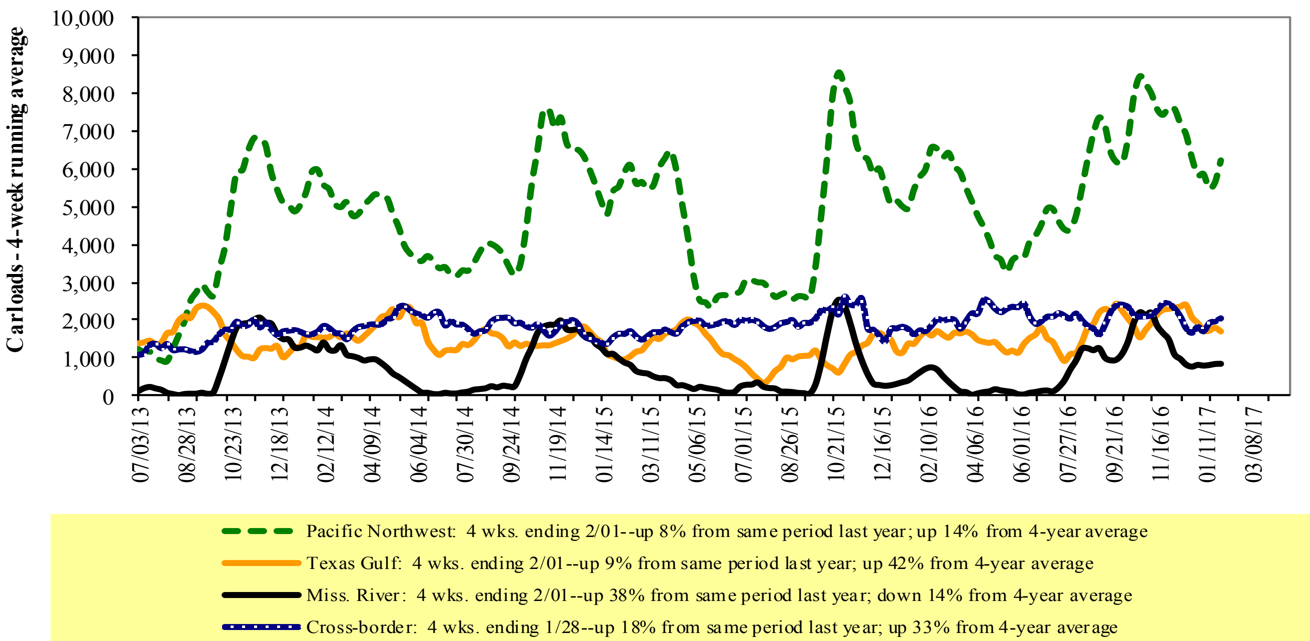
[3] Cross-border weekly data is approximately 15 percent below the Association of American Railroads' reported weekly carloads received by Mexican railroads to reflect switching between KCSM and FerroMex.

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	
1/28/2017	CSXT	NS	BNSF	KCS	UP		CN	CP
This week	1,898	2,993	10,757	1,197	5,928	22,773	3,944	4,607
This week last year	1,865	3,201	10,925	939	5,915	22,845	3,196	3,976
2017 YTD	7,990	12,364	44,978	4,332	23,487	93,151	14,610	16,082
2016 YTD	8,174	11,306	44,260	3,683	21,158	88,581	14,108	16,873
2017 YTD as % of 2016 YTD	98	109	102	118	111	105	104	95
Last 4 weeks as % of 2016*	98	109	102	118	111	105	104	95
Last 4 weeks as % of 3-yr avg.**	88	100	111	117	102	105	96	91
Total 2016	95,179	151,006	590,779	45,246	300,836	1,183,046	194,029	234,738

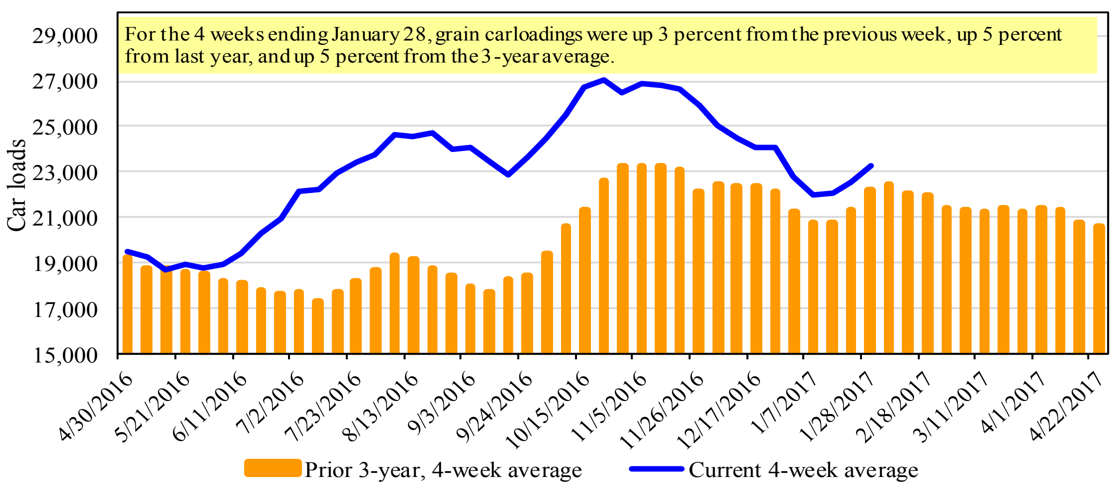
*The past 4 weeks of this year as a percent of the same 4 weeks last year.

**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:		Delivery period							
2/2/2017		Feb-17	Feb-16	Mar-17	Mar-16	Apr-17	Apr-16	May-17	May-16
BNSF[3]	COT grain units	181	no bids	86	no bids	0	no bids	0	no bids
	COT grain single-car[5]	435	0	203	0	36	0	27	0
UP[4]	GCAS/Region 1	no bids	no bids	no bids	no bids	no bids	no bids	n/a	n/a
	GCAS/Region 2	no bids	no bids	no bids	no bids	no bids	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.

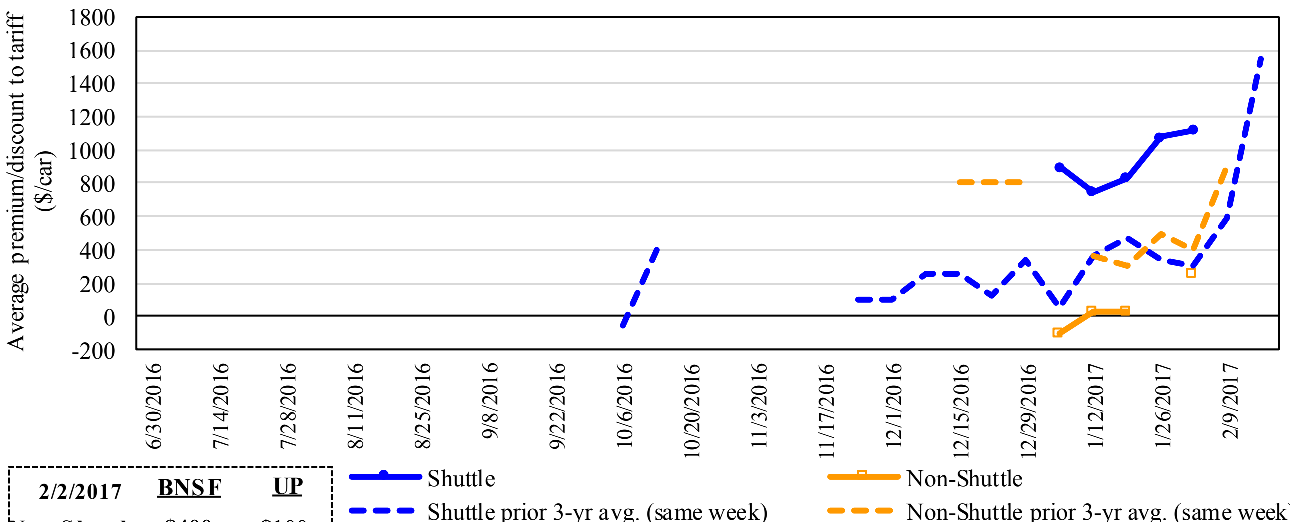
Region 2 includes: CO, IA, KS, MN, NE, WY, and Kansas City and St. Joseph, MO.

[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 February 2017, Secondary Market

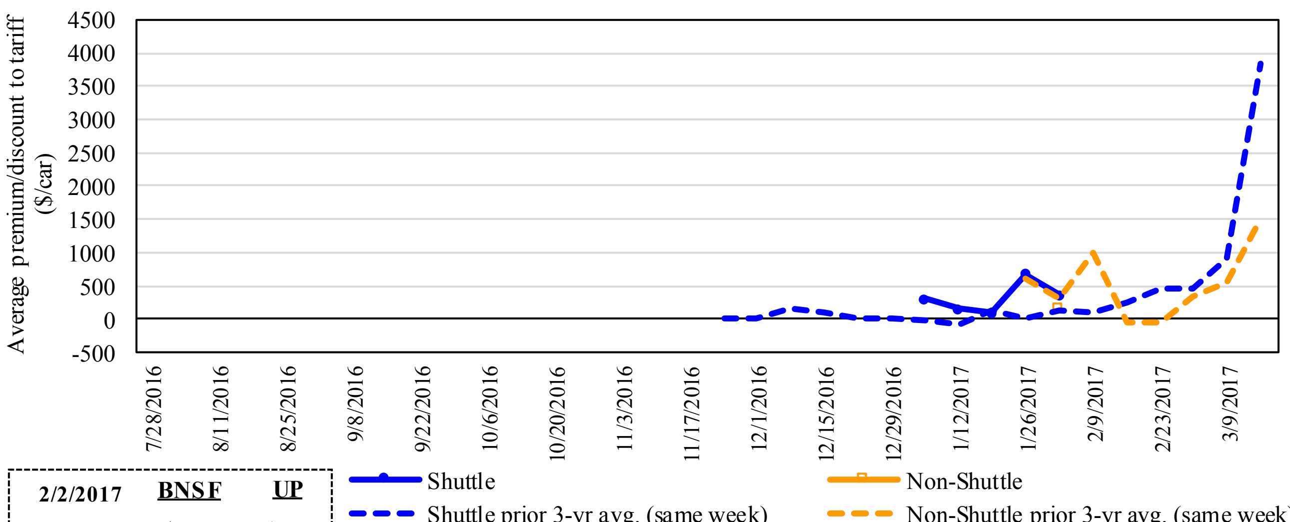


2/2/2017	BNSF	UP
Non-Shuttle	$400	$100
Shuttle	$2,000	$233

There were no Non-Shuttle bids/offers last week. Average Non-Shuttle bids/offers this week are at the peak. Average Shuttle bids/offers rose $42 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 March 2017, Secondary Market



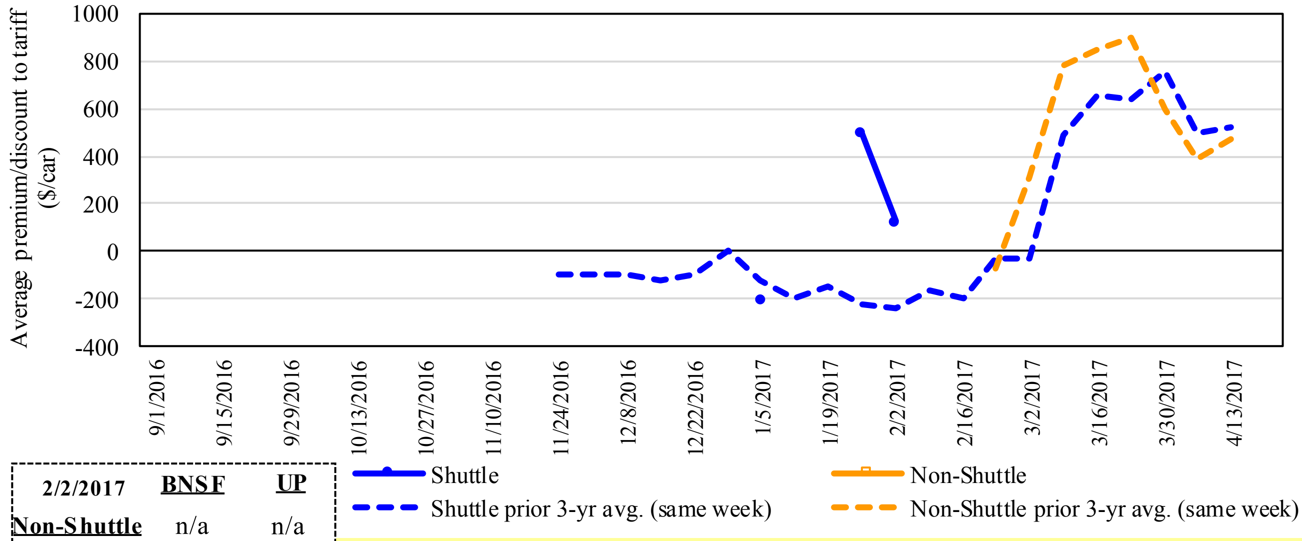
2/2/2017	BNSF	UP
Non-Shuttle	$325	$25
Shuttle	$778	-$50

There were no Non-Shuttle bids/offers last week. Average Non-Shuttle bids/offers this week are at the peak. Average Shuttle bids/offers fell $311 this week and are $311 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 April 2017, Secondary Market



2/2/2017	BNSF	UP
Non-Shuttle	n/a	n/a
Shuttle	$125	n/a

There were no Non-Shuttle bids/offers this week.
Average Shuttle bids/offers fell $375 this week and are $375 below the peak.

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: 2/2/2017	Delivery period: Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17
Non-shuttle	**BNSF-GF**	**400**	**325**	**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 2016	n/a	n/a	n/a	n/a	n/a	n/a
	UP-Pool	**100**	**25**	**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 2016	n/a	n/a	n/a	n/a	n/a	n/a
Shuttle	**BNSF-GF**	**2000**	**778**	**125**	**n/a**	**n/a**	**n/a**
	Change from last week	250	(372)	(375)	n/a	n/a	n/a
	Change from same week 2016	2108	n/a	325	n/a	n/a	n/a
	UP-Pool	**233**	**(50)**	**n/a**	**n/a**	**n/a**	**n/a**
	Change from last week	(167)	(250)	n/a	n/a	n/a	n/a
	Change from same week 2016	383	113	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]

February, 2017	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	$46	$37.89	$1.03	5
	Grand Forks, ND	Duluth-Superior, MN	$4,143	$3	$41.17	$1.12	17
	Wichita, KS	Los Angeles, CA	$6,950	$15	$69.17	$1.88	1
	Wichita, KS	New Orleans, LA	$4,408	$80	$44.57	$1.21	5
	Sioux Falls, SD	Galveston-Houston, TX	$6,686	$13	$66.52	$1.81	4
	Northwest KS	Galveston-Houston, TX	$4,676	$88	$47.31	$1.29	4
	Amarillo, TX	Los Angeles, CA	$4,875	$122	$49.62	$1.35	5
Corn	Champaign-Urbana, IL	New Orleans, LA	$3,681	$91	$37.45	$0.95	1
	Toledo, OH	Raleigh, NC	$6,061	$0	$60.19	$1.53	0
	Des Moines, IA	Davenport, IA	$2,258	$19	$22.61	$0.57	5
	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	$56	$35.65	$0.91	3
	Des Moines, IA	Los Angeles, CA	$5,202	$164	$53.29	$1.35	4
Soybeans	Minneapolis, MN	New Orleans, LA	$3,639	$60	$36.73	$1.00	-8
	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	$91	$45.54	$1.24	3
Shuttle Train							
Wheat	Great Falls, MT	Portland, OR	$3,953	$9	$39.34	$1.07	1
	Wichita, KS	Galveston-Houston, TX	$4,071	$7	$40.50	$1.10	5
	Chicago, IL	Albany, NY	$5,492	$0	$54.54	$1.48	0
	Grand Forks, ND	Portland, OR	$5,611	$15	$55.87	$1.52	1
	Grand Forks, ND	Galveston-Houston, TX	$5,931	$16	$59.05	$1.61	1
	Northwest KS	Portland, OR	$5,643	$144	$57.47	$1.56	4
Corn	Minneapolis, MN	Portland, OR	$5,000	$19	$49.84	$1.27	2
	Sioux Falls, SD	Tacoma, WA	$4,960	$17	$49.42	$1.26	2
	Champaign-Urbana, IL	New Orleans, LA	$3,481	$91	$35.47	$0.90	1
	Lincoln, NE	Galveston-Houston, TX	$3,700	$10	$36.84	$0.94	4
	Des Moines, IA	Amarillo, TX	$3,895	$71	$39.38	$1.00	3
	Minneapolis, MN	Tacoma, WA	$5,000	$18	$49.83	$1.27	2
	Council Bluffs, IA	Stockton, CA	$4,740	$19	$47.26	$1.20	4
Soybeans	Sioux Falls, SD	Tacoma, WA	$5,600	$17	$55.78	$1.52	4
	Minneapolis, MN	Portland, OR	$5,650	$19	$56.29	$1.53	4
	Fargo, ND	Tacoma, WA	$5,500	$15	$54.77	$1.49	4
	Council Bluffs, IA	New Orleans, LA	$4,525	$104	$45.97	$1.25	3
	Toledo, OH	Huntsville, AL	$4,226	$0	$41.97	$1.14	0
	Grand Island, NE	Portland, OR	$5,460	$147	$55.68	$1.52	3

[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: February, 2017							
Wheat	MT	Chihuahua, CI	$7,459	$0	$76.21	$2.07	0
	OK	Cuautitlan, EM	$6,638	$63	$68.47	$1.86	2
	KS	Guadalajara, JA	$7,180	$265	$76.07	$2.07	5
	TX	Salinas Victoria, NL	$4,258	$37	$43.89	$1.19	3
Corn	IA	Guadalajara, JA	$8,187	$215	$85.84	$2.18	-1
	SD	Celaya, GJ	$7,580	$0	$77.45	$1.97	-3
	NE	Queretaro, QA	$7,909	$125	$82.09	$2.08	1
	SD	Salinas Victoria, NL	$6,635	$0	$67.79	$1.72	1
	MO	Tlalnepantla, EM	$7,293	$122	$75.76	$1.92	2
	SD	Torreon, CU	$7,180	$0	$73.36	$1.86	-1
Soybeans	MO	Bojay (Tula), HG	$8,647	$227	$90.67	$2.47	2
	NE	Guadalajara, JA	$8,942	$229	$93.70	$2.55	-1
	IA	El Castillo, JA	$8,960	$0	$91.55	$2.49	-5
	KS	Torreon, CU	$7,489	$152	$78.07	$2.12	2
Sorghum	NE	Celaya, GJ	$7,164	$191	$75.15	$1.91	-1
	KS	Queretaro, QA	$7,608	$78	$78.53	$1.99	1
	NE	Salinas Victoria, NL	$6,213	$63	$64.12	$1.63	1
	NE	Torreon, CU	$6,607	$138	$68.91	$1.75	0

[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

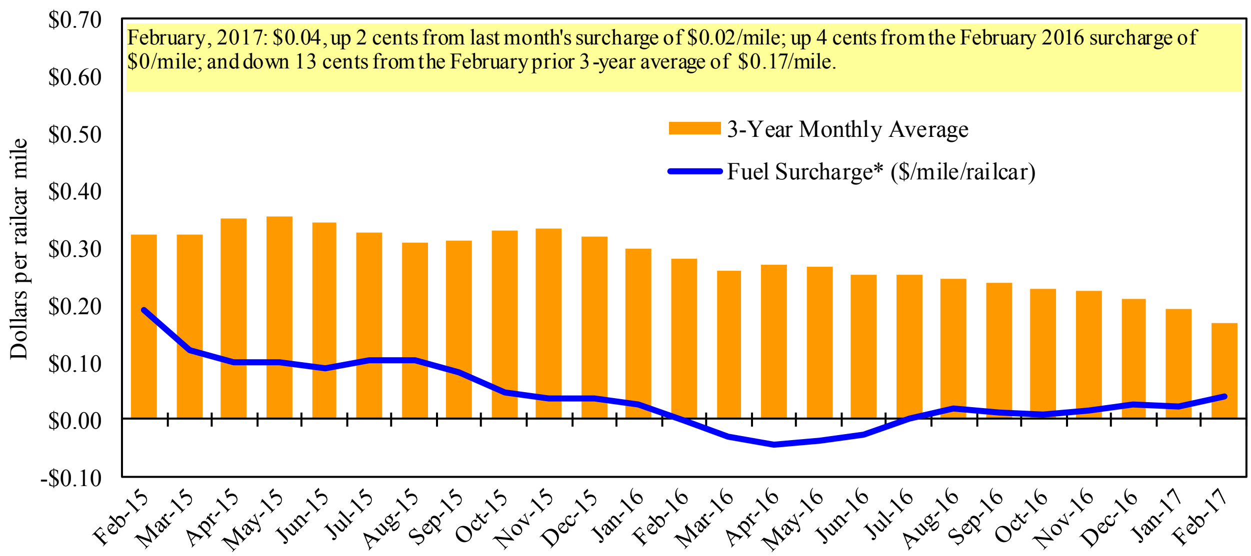
[3]Approximate load per car = 97.87 metric tons: Corn & Sorghum 56 lbs/bu, Wheat & Soybeans 60 lbs/bu

[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.

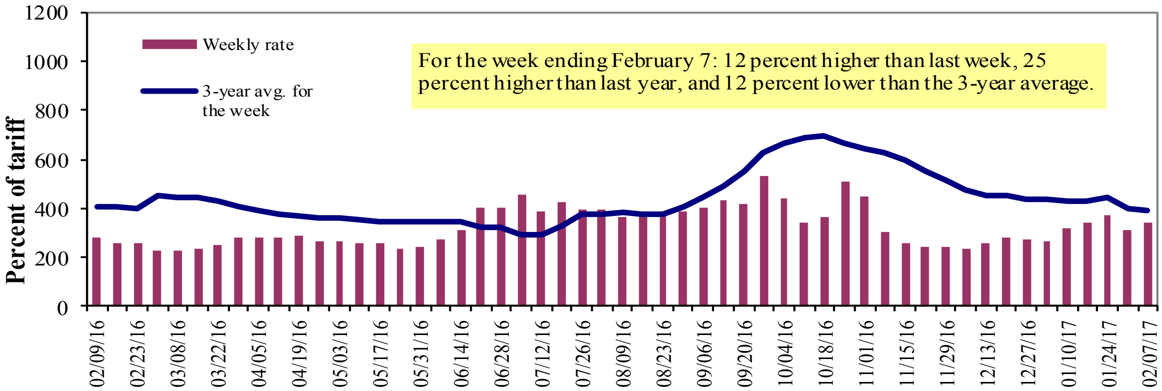
* Beginning January 2009, the Canadian Pacific fuel surcharge is computed by a monthly average of the bi-weekly fuel surcharge.

**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]	2/7/2017	-	-	345	243	270	275	200
	1/31/2017	-	-	308	222	280	280	212
$/ton	2/7/2017	-	-	16.01	9.70	12.66	11.11	6.28
	1/31/2017	-	-	14.29	8.86	13.13	11.31	6.66
Current week % change from the same week:								
	Last year	-	-	25	28	24	26	15
	3-year avg. [2]	-	-	-12	-28	-23	-22	-21
Rate[1]	March	-	290	283	203	210	210	185
	May	325	278	263	195	203	203	175

[1]Rate = percent of 1976 tariff benchmark index (1976 = 100 percent); [2]4-week moving average; ton = 2,000 pounds; - closed for winter or flooding
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.

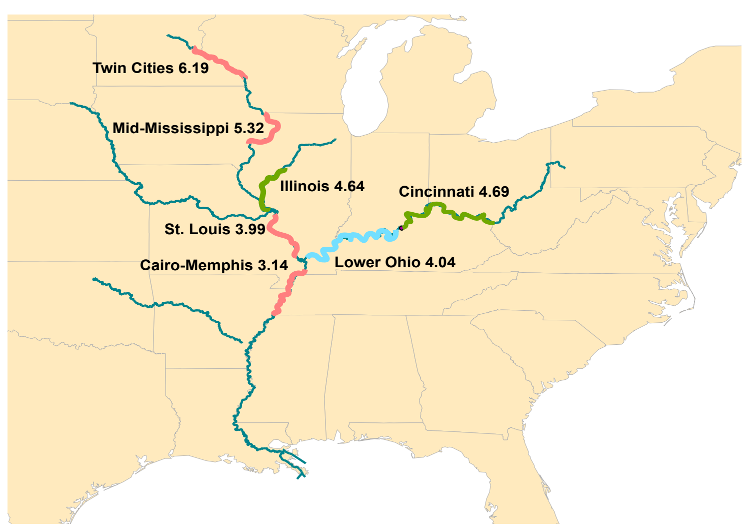
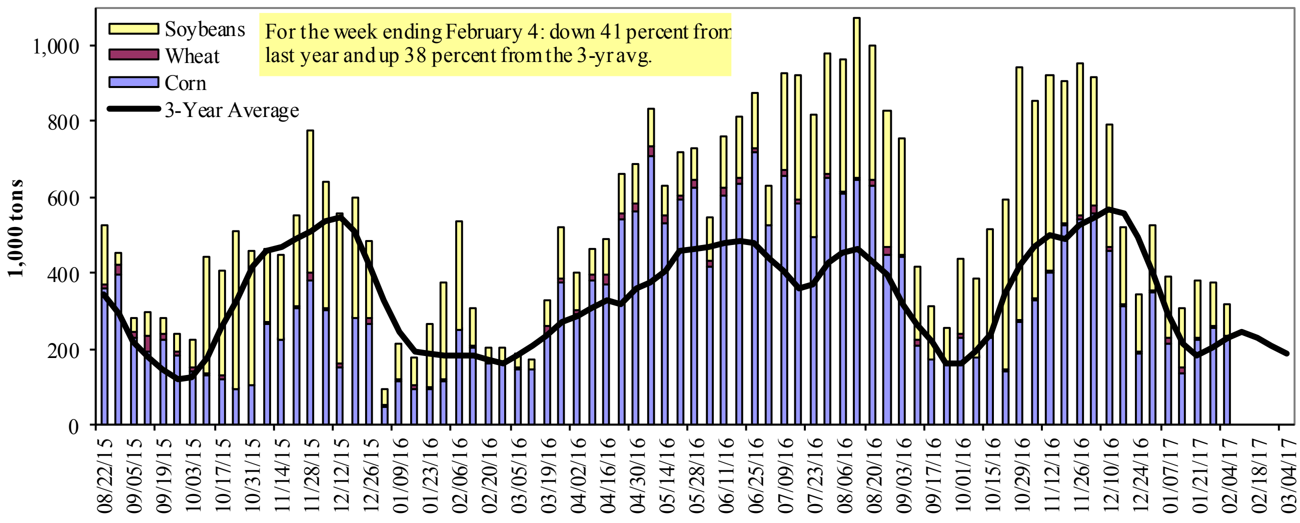


Figure 10

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 2/4/2017	Corn	Wheat	Soybeans	Other	Total
Mississippi River					
Rock Island, IL (L15)	0	0	0	0	0
Winfield, MO (L25)	3	0	0	0	3
Alton, IL (L26)	203	11	102	3	319
Granite City, IL (L27)	223	11	83	3	319
Illinois River (L8)	166	11	60	3	240
Ohio River (L52)	153	7	191	3	354
Arkansas River (L1)	0	15	53	0	69
Weekly total - 2017	376	33	326	7	742
Weekly total - 2016	417	18	533	4	972
2017 YTD[1]	1,600	170	1,703	77	3,550
2016 YTD	1,439	67	1,835	5	3,347
2017 as % of 2016 YTD	111	252	93	1,433	106
Last 4 weeks as % of 2016[2]	104	200	88	1,036	99
Total 2016	24,136	2,030	16,668	344	43,178

[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.

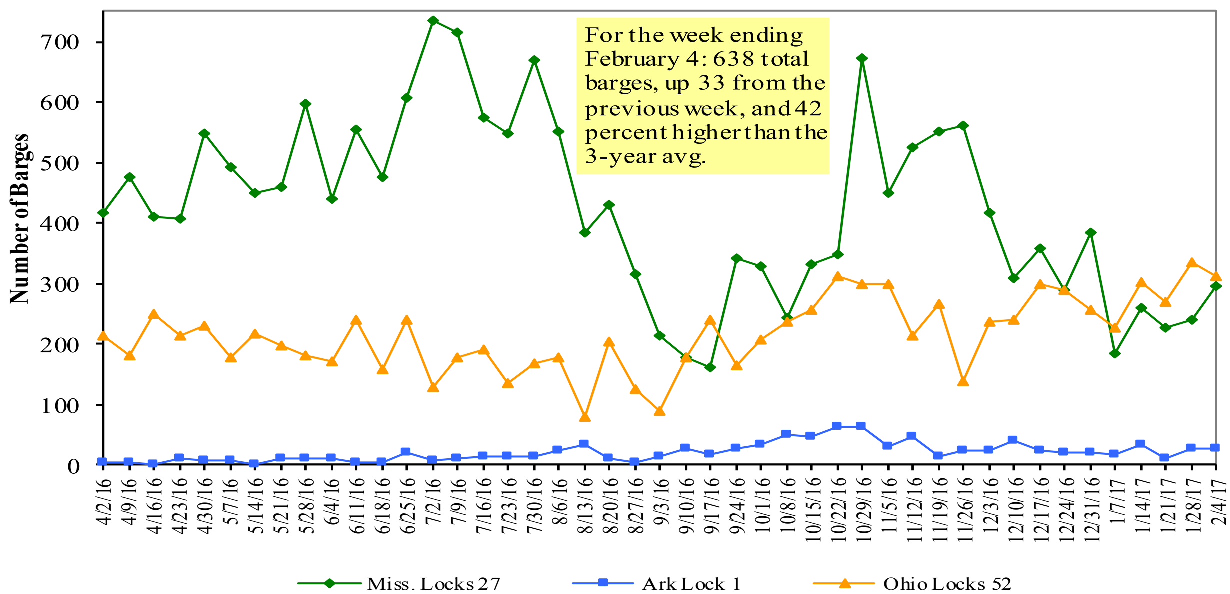
[2] As a percent of same period in 2016.

Note: Total may not add exactly, due to rounding

Source: U.S. Army Corps of Engineers

Figure 11

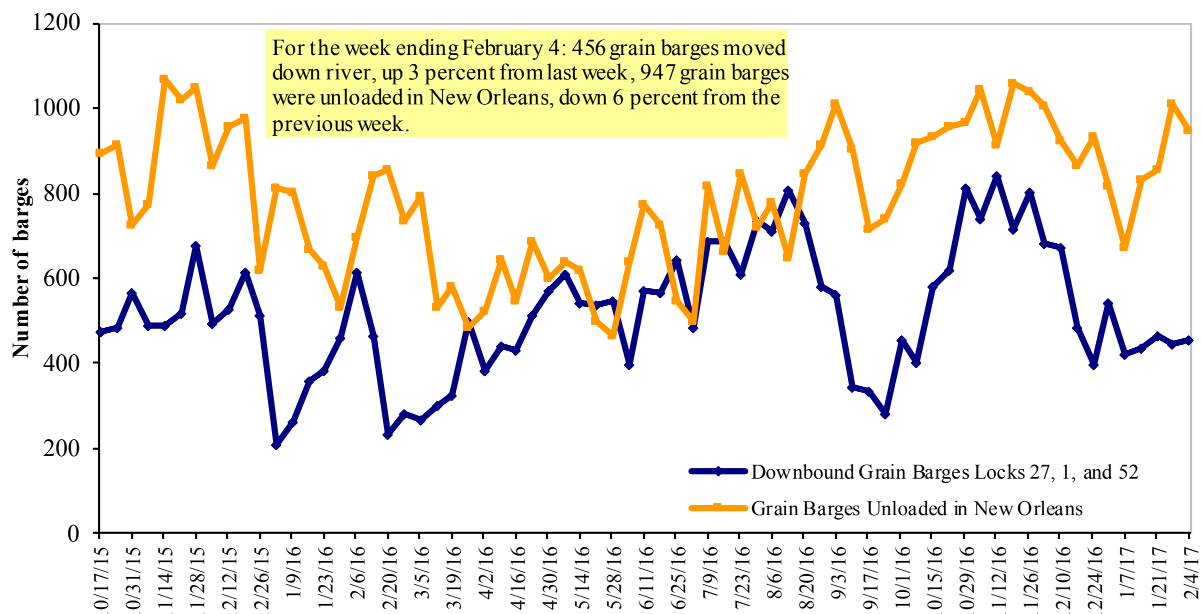
Upbound Empty Barges Transiting Mississippi River Locks 27, Arkansas River Lock and Dam 1, and Ohio River Locks and Dam 52



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 2/06/2017(US $/gallon)

Region	Location	Price	Change from Week ago	Change from Year ago
I	East Coast	2.618	-0.004	0.531
	New England	2.661	-0.001	0.460
	Central Atlantic	2.763	-0.007	0.539
	Lower Atlantic	2.508	-0.002	0.549
II	Midwest[2]	2.492	-0.008	0.563
III	Gulf Coast[3]	2.403	-0.005	0.507
IV	Rocky Mountain	2.515	-0.001	0.601
V	West Coast	2.856	0.011	0.620
	West Coast less California	2.748	0.004	0.675
	California	2.944	0.017	0.575
Total	U.S.	2.558	-0.004	0.550

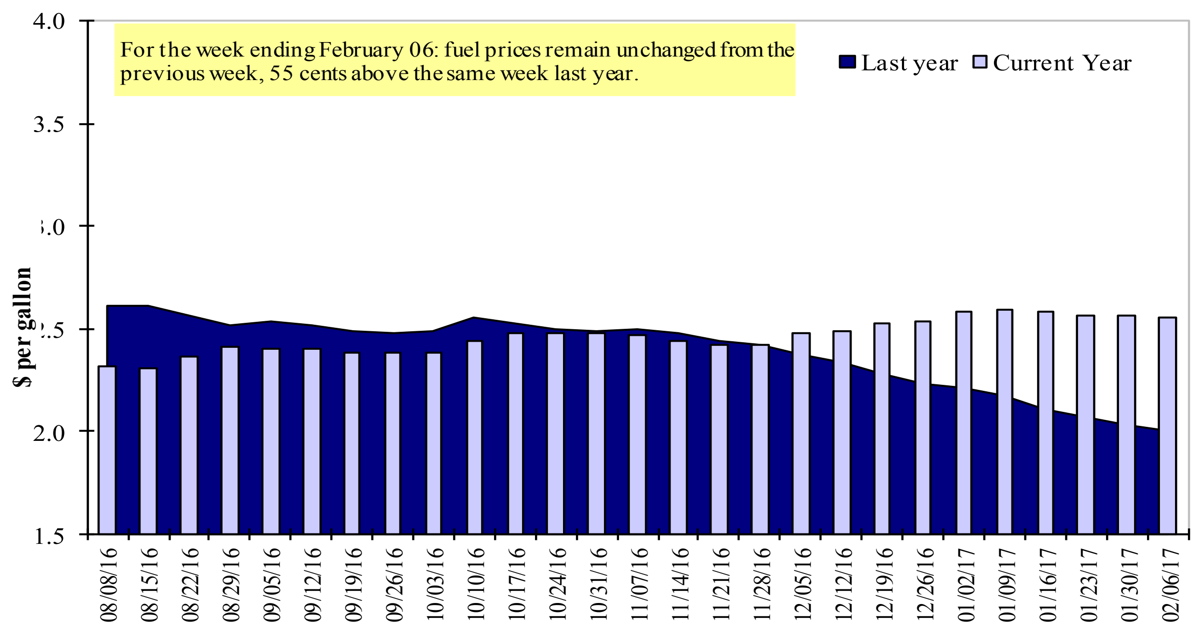
[1]Diesel fuel prices include all taxes. Prices represent an average of all types of diesel fuel.

[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)

For the week ending	HRW	SRW	HRS	SWW	DUR	All wheat	Corn	Soybeans	Total
	Wheat								
Export Balances[1]									
1/26/2017	2,245	640	2,553	1,335	137	6,910	20,541	11,563	39,014
This week year ago	1,121	507	1,403	933	76	4,040	12,305	8,241	24,587
Cumulative exports-marketing year[2]									
2016/17 YTD	6,977	1,336	4,786	2,614	265	15,978	19,677	38,901	74,556
2015/16 YTD	3,601	2,285	4,051	2,252	547	12,736	11,920	32,275	56,932
YTD 2016/17 as % of 2015/16	194	58	118	116	49	125	165	121	131
Last 4 wks as % of same period 2015/16	190	124	177	125	162	150	162	155	158
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 1/26/2017	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 -
Mexico	10,302	9,159	12	11,204
Japan	6,185	3,940	57	11,284
Korea	3,306	711	365	3,931
Colombia	2,722	2,422	12	4,134
Peru	1,934	947	104	2,109
Top 5 Importers	**24,449**	**17,179**	**42**	**32,662**
Total US corn export sales	**40,218**	**24,225**	**66**	**46,633**
% of Projected	71%	50%		
Change from prior week	**1,144**	**1,129**		
Top 5 importers' share of U.S. corn export sales	61%	71%		70%
USDA forecast, January 2017	**56,616**	**48,295**	**17**	
Corn Use for Ethanol USDA forecast, January 2017	**135,255**	**132,233**	**2**	

(n) indicates negative number.

[1]Based on FAS Marketing Year Ranking Reports for 2015/16 - 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 1/26/2017	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	33,254	25,133	32	29,033
Mexico	2,506	2,090	20	3,295
Indonesia	1,239	800	55	2,065
Japan	1,480	1,324	12	1,994
Netherlands	1,105	955	16	1,644
Top 5 importers	**39,584**	**30,301**	**31**	**38,032**
Total US soybean export sales	**50,464**	**40,517**	**25**	**48,389**
% of Projected	90%	77%		
Change from prior week	**624**	**(117)**		
Top 5 importers' share of U.S. soybean export sales	78%	75%		**79%**
USDA forecast, January 2017	**55,858**	**52,752**	**6**	

(n) indicates negative number.

[1]Based on FAS Marketing Year Ranking Reports for 2015/16 - 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 1/26/2017	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	2,036	1,948	5	2,743
Mexico	2,404	1,812	33	2,660
Philippines	2,149	1,775	21	2,156
Brazil	1,122	369	204	2,076
Nigeria	1,153	1,365	(16)	1,978
Korea	1,118	1,055	6	1,170
China	1,023	514	99	1,770
Taiwan	889	829	7	1,005
Indonesia	848	353	140	776
Colombia	677	521	30	679
Top 10 importers	**13,417**	**10,540**	27	**17,013**
Total US wheat export sales	**22,888**	**16,776**	**36**	**24,485**
% of Projected	86%	79%		
Change from prior week	**451**	**66**		
Top 10 importers' share of U.S. wheat export sales	59%	63%		69%
USDA forecast, January 2017	**26,567**	**21,117**	**26**	

(n) indicates negative number.

[1] Based on FAS Marketing Year Ranking Reports for 2015/16 - 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 02/02/17	Previous Week[1]	Current Week as % of Previous	2017 YTD*	2016 YTD*	2017 YTD as % of 2016 YTD	Last 4-weeks as % of: Last Year	Last 4-weeks as % of: Prior 3-yr. avg.	2016 Total*
Pacific Northwest									
Wheat	372	228	163	994	1,054	94	113	103	12,325
Corn	124	109	114	917	387	237	227	210	12,009
Soybeans	458	416	110	1,713	2,005	85	84	80	14,447
Total	**954**	**753**	**127**	**3,624**	**3,446**	**105**	**108**	**102**	**38,782**
Mississippi Gulf									
Wheat	101	48	208	319	280	114	118	87	3,480
Corn	784	755	104	2,931	1,923	152	168	145	31,420
Soybeans	1,119	965	116	4,626	3,685	126	141	117	35,278
Total	**2,003**	**1,768**	**113**	**7,876**	**5,887**	**134**	**149**	**124**	**70,178**
Texas Gulf									
Wheat	128	29	443	423	239	177	183	137	6,019
Corn	28	31	92	144	65	223	181	168	1,669
Soybeans	0	0	n/a	0	63	0	0	0	1,105
Total	**156**	**59**	**263**	**567**	**366**	**155**	**150**	**110**	**8,792**
Interior									
Wheat	15	44	33	181	92	197	230	173	1,543
Corn	151	145	104	597	485	123	135	129	7,197
Soybeans	100	142	70	520	414	126	129	120	4,577
Total	**265**	**330**	**80**	**1,298**	**991**	**131**	**139**	**129**	**13,317**
Great Lakes									
Wheat	0	0	n/a	0	0	n/a	n/a	n/a	1,186
Corn	0	0	n/a	0	0	n/a	n/a	n/a	584
Soybeans	0	0	n/a	0	0	n/a	n/a	n/a	910
Total	**0**	**0**	**n/a**	**0**	**0**	**n/a**	**n/a**	**n/a**	**2,681**
Atlantic									
Wheat	35	0	n/a	35	32	109	1045	313	315
Corn	0	0	n/a	0	0	n/a	n/a	0	294
Soybeans	45	140	32	389	382	102	112	108	2,269
Total	**80**	**140**	**57**	**425**	**415**	**102**	**122**	**115**	**2,878**
U.S. total from ports[2]									
Wheat	651	350	186	1,954	1,697	115	134	111	24,867
Corn	1,087	1,039	105	4,588	2,859	160	171	152	53,173
Soybeans	1,721	1,662	104	7,248	6,549	111	118	103	58,587
Total	**3,459**	**3,050**	**113**	**13,790**	**11,105**	**124**	**134**	**117**	**136,627**

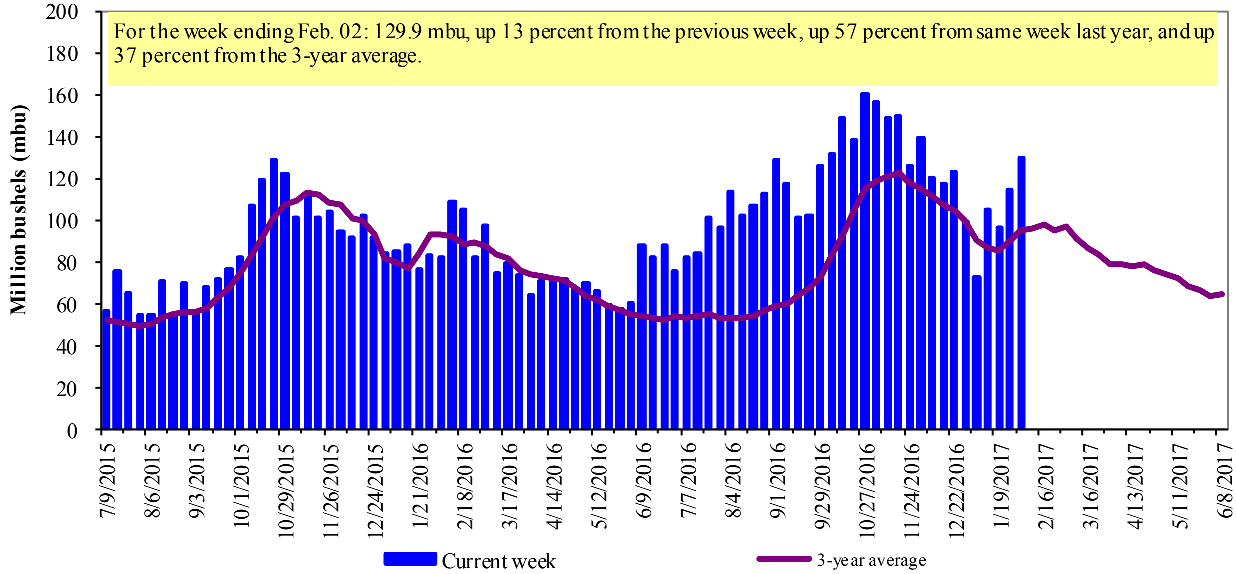
[1] Data includes revisions from prior weeks; some regional totals may not add exactly due to rounding.

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 58 percent of the U.S. export grain shipments departed through the U.S. Gulf region in 2016.

Figure 14

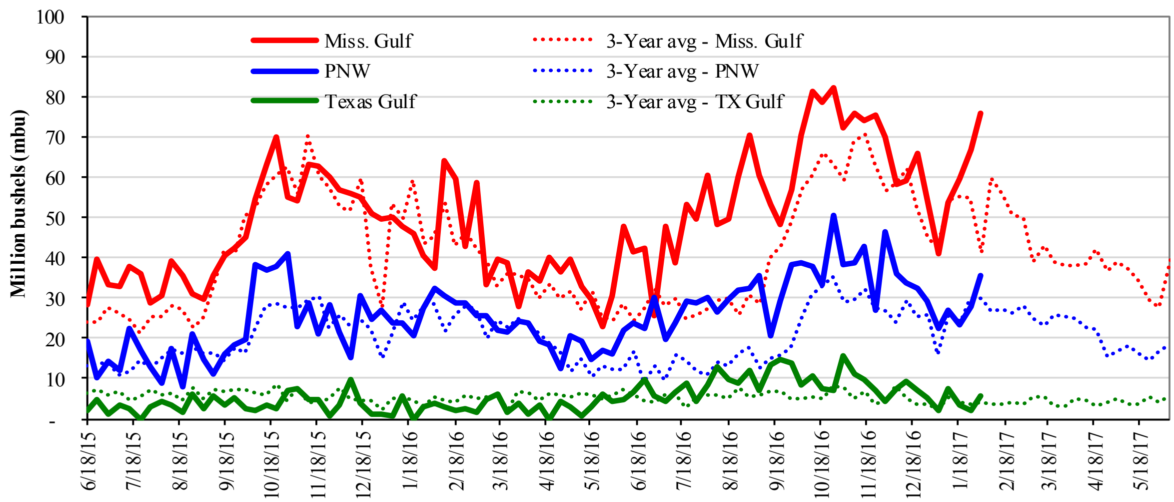
U.S. grain inspected for export (wheat, corn, and soybeans)



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 02/02/17 inspections (mbu):		Percent change from:	MS Gulf	TX Gulf	U.S. Gulf	PNW
Mississippi Gulf:	75.7	Last Week:	up 13	up 157	up 18	up 27
PNW:	35.4	Last Year (same week):	up 102	up 44	up 97	up 10
Texas Gulf:	5.8	3-yr avg. (4-wk. mov. Avg):	up 47	up 35	up 46	up 29

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

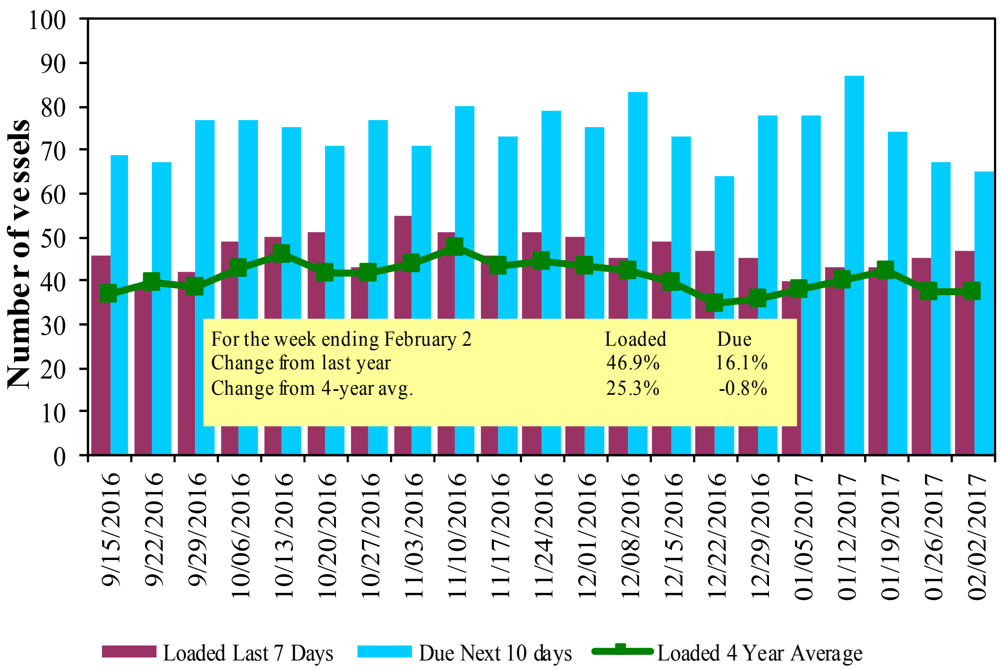
Ocean Transportation

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
2/2/2017	66	47	65	34	n/a
1/26/2017	65	45	67	37	n/a
2016 range	(21..62)	(27..55)	(40..87)	(6..27)	n/a
2016 avg.	43	40	62	15	n/a

Source: Transportation & Marketing Programs/AMS/USDA

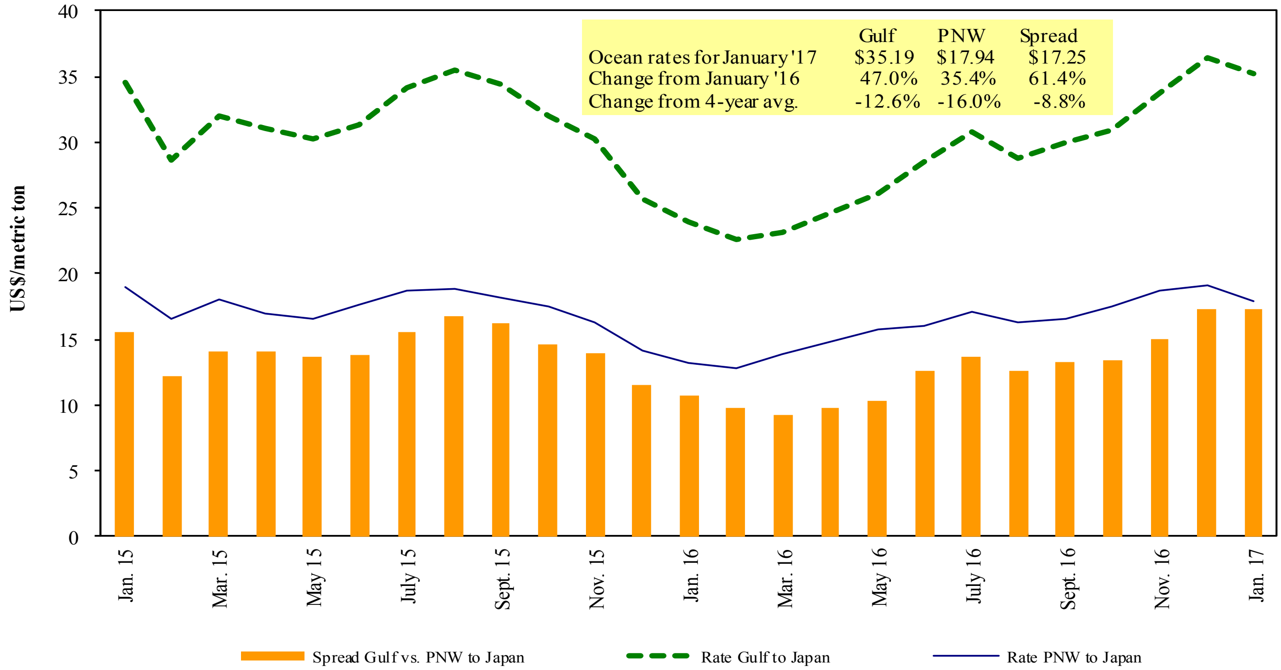
Figure 16
U.S. Gulf Vessel Loading Activity



Source:Transportation & Marketing Programs/AMS/USDA
[1]U.S. Gulf includes Mississippi, Texas, and East Gulf.

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 2/4/2017

Export region	Import region	Grain types	Loading date	Volume loads (metric tons)	Freight rate (US$/metric ton)
U.S. Gulf	China	Heavy Grain	Feb 15/28	60,000	23.50
U.S. Gulf	China	Heavy Grain	Jan 15/25	55,000	34.00
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	Djibouti	Sorghum	Feb 20/28	29,210	53.39*
Vancouver	China	Heavy Grain	Nov 1/10	50,000	31.50
Brazil	China	Heavy Grain	May 1/5	60,000	23.50
Brazil	China	Heavy Grain	Feb 20/28	60,000	22.50
Brazil	China	Heavy Grain	Feb 8/18	60,000	23.85
Brazil	China	Soybeans	Feb 1/10	60,000	24.20
Brazil	South Korea	Heavy Grain	Mar 15/Apr 15	65,000	23.50
EC S, America	China	Heavy Grain	Feb 1/10	60,000	24.00

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

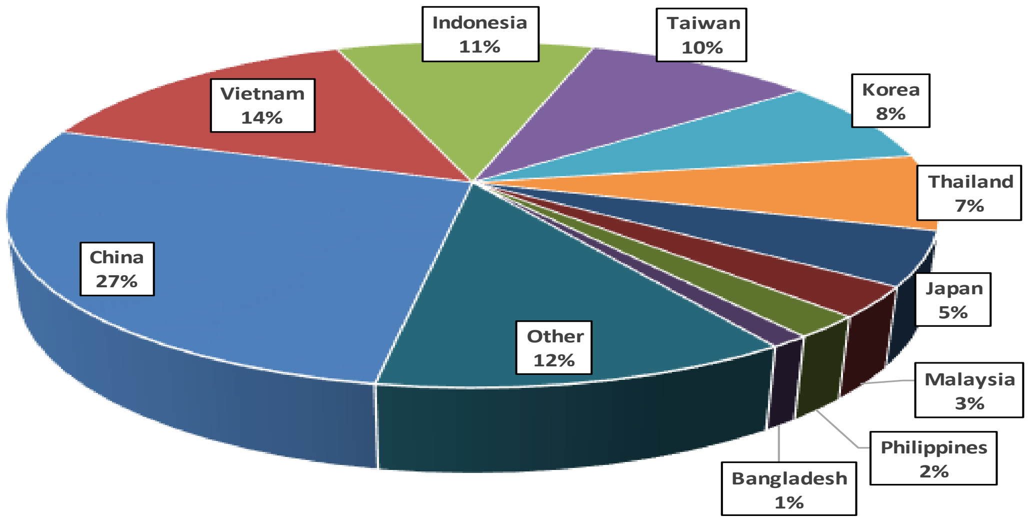
*50 percent of food aid from the United States is required to be shipped on U.S.-flag vessels.

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-October 2016

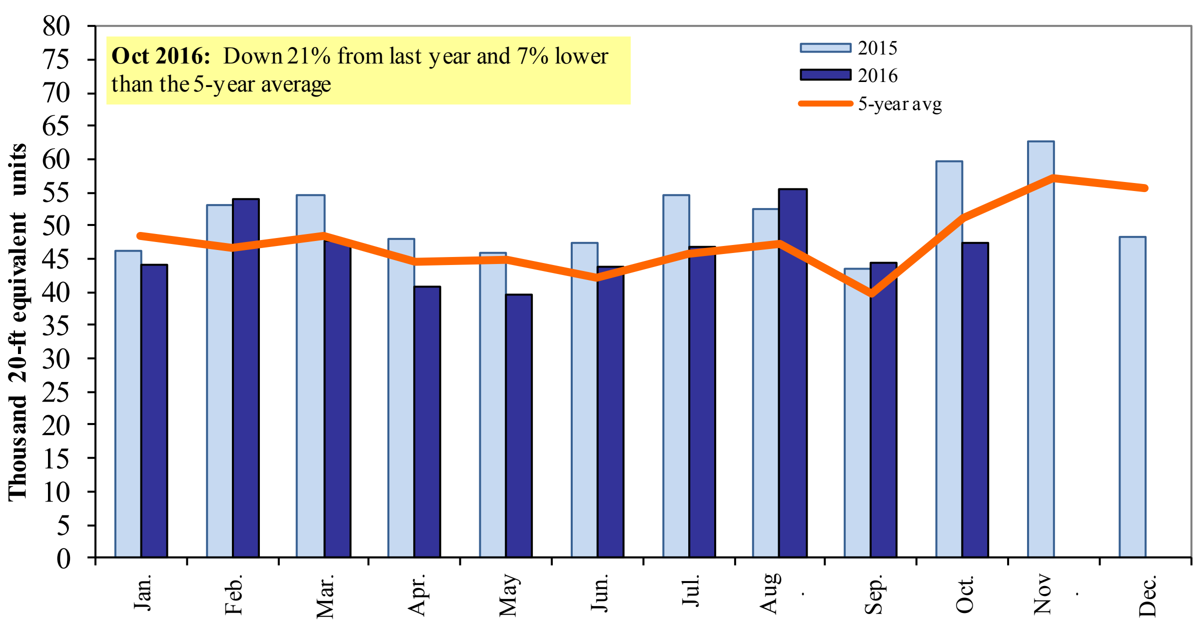


Source: USDA/Agricultural Marketing Service/Transportation Services Division analysis of Port Import Export Reporting Service (PIERS) data

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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