United States Department of Agriculture

Grain Transportation Report

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

Contact Us

September 15, 2016

Contents

The next release is Sep 22, 2016

WEEKLY HIGHLIGHTS

STB Reviewing Grain Rate Regulation

On August 31, 2016, the Surface Transportation Board (STB) requested comments and suggestions on "procedures that could comprise a new rate reasonableness methodology for use in very small disputes." In the Advance Notice of Proposed Rulemaking, the Board recognized shipper complaints that the current rate review process is cost-prohibitive and therefore unusable for many shippers. The Board proposed various potential methodologies and procedures with the goal of providing meaningful access to regulatory relief in those cases where existing rate relief procedures are too costly. The STB also proposed to make this process available to shippers of all commodities with small disputes, not just grain. Comments are due by November 14, and reply comment are due by December 19.

Grain Inspections Remain Above Averages

For the week ending September 8, **total inspections of grain** (corn, wheat, soybeans) for export from all major export regions reached 3.1 million metric tons (mmt), down 10 percent from the previous week, up 72 percent from last year, and 96 percent above the 3-year average. Grain inspections are up16 percent year to date, and are up 88 percent from last year during the last 4 weeks. Grain inspections decreased 15 percent in the Mississippi Gulf, but increased 8 percent in the Pacific Northwest (PNW). Wheat inspections increased 12 percent from the previous week as demand from Asia increased. Inspections of corn and soybeans, however, decreased 9 percent and 23 percent from the previous week. Outstanding export sales (unshipped) are up from the previous week for wheat, and are normally up this time of the year for corn and soybeans due to the beginning of the new marketing year.

September Supply and Demand Estimates Likely Make Grain Transportation Demand Stable

The demand for grain transportation will likely remain stable in the near term. According to the latest World Agricultural Supply and Demand Estimates (WASDE) report published on September 12, oilseed and soybean production are projected to increase, corn production is projected to fall, while wheat supply and demand estimates, on the other hand, are unchanged. Corn production is projected to be 61 million bushels lower than last month at 15.09 billion bushels, and corn supplies are predicted to be lower but still at a record 16.859 billion bushels. Corn exports are unchanged from last month. Oilseed production for 2016/17 is predicted to be 4.1 million bushels higher at 124.3 million. Soybean production is projected to increase 141 million bushels at 4,201 million bushels. The projection of 2016/17 wheat supply and demand estimates is unchanged.

Snapshots by Sector

Rail

U.S. Class I railroads originated 24,455 **grain carloads** for the week ending September 3, up 13 percent from the previous week, up 30 percent from last year, and up 37 percent from the 3-year average.

Average September shuttle **secondary railcar bids/offers** per car were $125 above tariff for the week ending September 8, down $546 from last week, and $254 higher than last year. Average non-shuttle secondary railcar bids/offers were $263 above tariff, down $34 from last week, and $378 higher than last year.

Barge

For the week ending September 10, **barge grain movements** totaled 529,235 tons, 38 percent lower than last week, and up 29 percent from the same period last year.

For the week ending September 10, 344 grain barges **moved down river**, down 38 percent from last week; 904 grain barges were **unloaded in New Orleans**, down 10 percent from the previous week.

Ocean

For the week ending September 8, 48 **ocean-going grain vessels** were loaded in the Gulf, 20 percent more than the same period last year. Sixty-three vessels are expected to be loaded within the next 10 days, 19 percent more than the same period last year.

For the week ending September 8, the ocean freight rate for shipping bulk grain from the Gulf to Japan was $30.50 per metric ton, 2 percent more than the previous week. The cost of shipping from the PNW to Japan was $16.50 per metric ton, unchanged from the previous week.

Fuel

During the week ending September 12, U.S. average **diesel fuel prices** decreased 1 cent from the previous week at $2.40 per gallon, down $0.12 from the same week last year.

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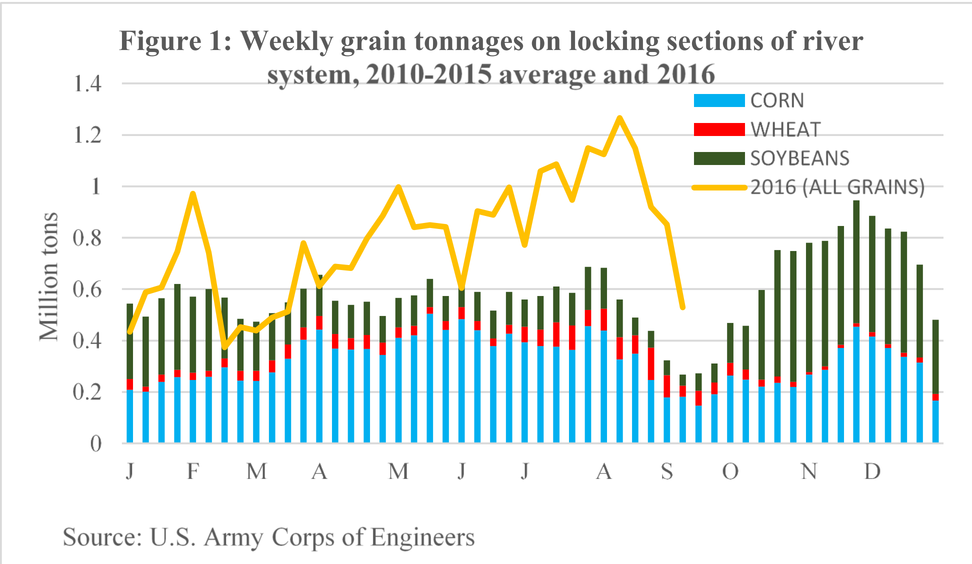
Feature Article/Calendar

Grain Barge Tonnages Continue to Remain Above Average

As of September 10, total calendar year-to-date grain barge tonnages on the locking portion of the Mississippi River system have reached 28.6 million tons, 23 percent higher than last year and 43 percent higher than the 5-year average for the comparable period (see figure 1).[1] With the September 12 USDA's *World Agricultural Supply and Demand Estimates* projecting 2016/17 corn exports at 2.175 billion bushels and soybean exports at a record high 1.985 billion bushels, barge tonnages can be expected to remain above average for the remainder of the year. Typically, grain barge tonnages on the locking section of the river gradually increase throughout the year until August, when shipping volumes decrease in anticipation of newly harvested corn and soybeans during late summer. During the active harvest season, tonnages usually increase until late November, and drop off in December (figure 1).



On average, about 55 percent of the annual barge tonnages on the locking portion of the river system are corn, 7 percent are wheat, 37 percent are soybeans, and a small amount of other grains.[2]

During a typical fourth quarter (October to December), soybeans become the predominate commodity shipped, representing 56 percent of the quarterly locking tonnages. With expectations of record soybean exports, there will likely be continued growth in barged soybean tonnages for the first half of the new crop year.

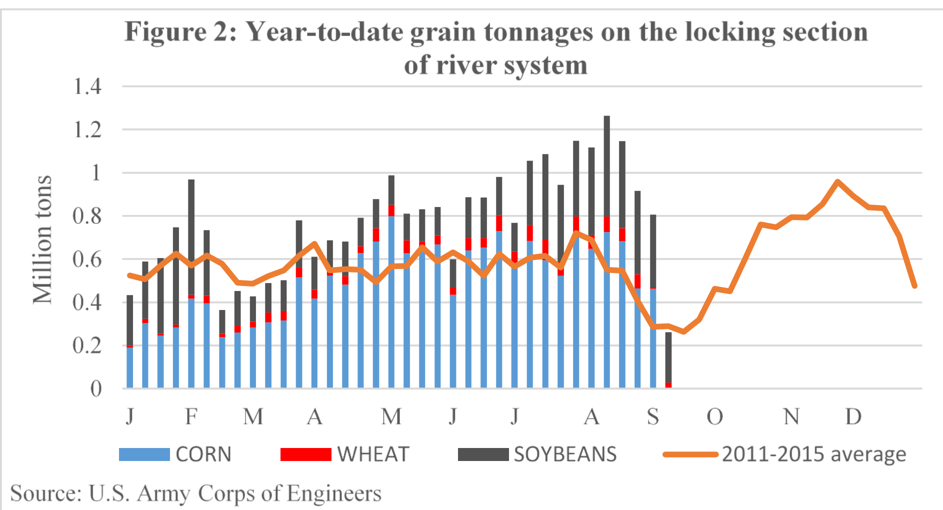


Figure 2 shows the 2016 weekly barge locking tonnages by grain as of September 10 compared to the 5-year average for total grains. As of September 10, year-to-date corn tonnages were 18.0 million tons, 47 percent higher than the 5-year average. Year-to-date soybean tonnages are 8.7 million tons, 53 percent higher than the 5-year average.

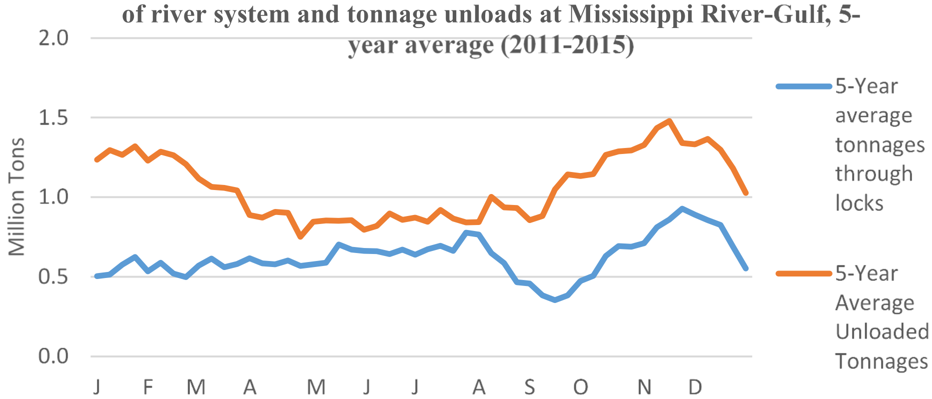
[1] Barge shipments for this analysis are the sum of the down-bound grain through the locking portions of the Mississippi, Ohio, and Arkansas Rivers. Weekly tonnages are provided by the U.S. Army Corps of Engineers.

[2] Other refers to oats, barley, sorghum and rye.

For most of 2016, the barge supply has been adequate despite the increased demand while barge freight rates have generally been below average. While it is not known, a portion of weekly grain shipments are moving under contracted rates and may or may not reflect the weekly spot rate. As of September 13, grain export spot rates from Minneapolis-St. Paul were 473 percent of tariff ($29.28 per ton), 10 percent lower than the 5-year average. Grain barge rates on the Illinois River are 20 percent below the 5-year average and St. Louis rates are even lower at 37 percent below average.

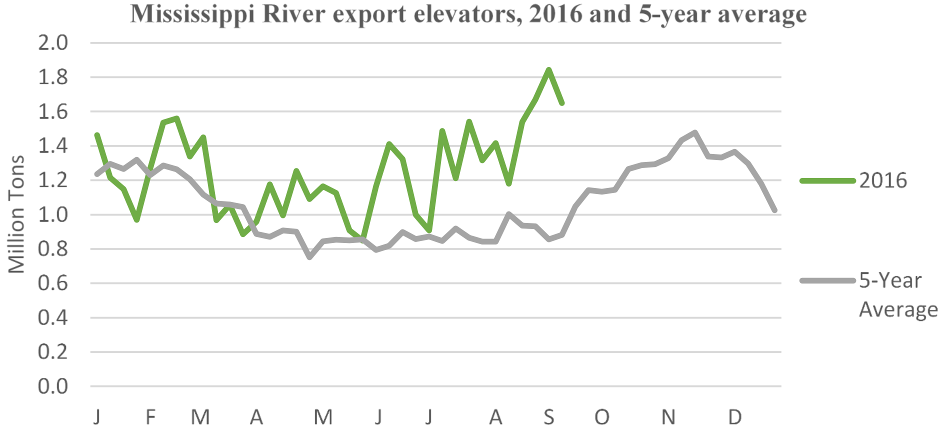
The tonnages from the locking segment of the river system do not account for the total of all grain tonnages arriving at Mississippi River export elevators because the data does not count grain that enters the system below the last locks on the Upper Mississippi, Ohio or Arkansas Rivers. The Grain Inspections Packers and Stockyards Administration (GIPSA) collects the number of unloaded barges inspected at the Mississippi River between Baton Rouge and New Orleans, LA, for export through the Gulf of Mexico.[1]

Figure 3: A comparison of barge shipments for locking portion of river system and tonnage unloads at Mississippi River-Gulf, 5-year average (2011-2015)



Source: USDA/Grain Inspection, Packers & Stockyards Administration

Figure 4: Weekly tonnages of grain unloaded by barge at Mississippi River export elevators, 2016 and 5-year average



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

On an annual basis, from 2011 to 2015, the locking portion of the river system provided an average of 54.3 percent of total unloaded barge tonnages, ranging from 33.5 percent to 83.4 percent. To meet export demand, grain exporters source from the least expensive areas. Figure 3 shows the seasonal impact that lower Mississippi River barge shipments have on export deliveries (barge unloads) to Mississippi River export elevators. The difference in barge tonnages between the locking portion and total Mississippi River Gulf deliveries at elevators becomes larger as more grain originates on the lower Mississippi River. As harvest begins, especially in the southern States, the difference between the unloaded tonnage and locking tonnage remains consistent until harvest is over. From January to August, the difference between the locking tonnages and the unloaded tonnages becomes smaller as less lower Mississippi River grain is delivered to the Gulf.

Figure 4 shows the 2016 weekly tonnages of grain barges unloaded at Mississippi River export elevators have been almost always above the 5-year average.[2] For the week ending September 10, the total year-to-date tonnages of grain unloaded by barge reached 45 million tons, 11 percent higher than the same week last year, and 28 percent higher than the 5-year average for the comparable period. The unloaded tonnages will likely continue to rise as southern grain begins to be harvested.

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[1] The number of barges is converted to tons based upon a standard weight per barge of 1,824 tons.

[2] Barges unloads are provided by GIPSA does not differentiate by grain.

Grain Transportation Indicators

Table 1

Grain Transport Cost Indicators[1]

	Truck	Rail		Barge	Ocean	
For the week ending		Unit Train	Shuttle		Gulf	Pacific
09/14/16	161	272	211	241	136	117
09/07/16	162	274	234	225	134	117

[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	9/9/2016	9/2/2016
Corn	IL--Gulf	-0.69	-0.72
Corn	NE--Gulf	-0.92	-0.96
Soybean	IA--Gulf	-1.36	-1.34
HRW	KS--Gulf	-1.87	-1.81
HRS	ND--Portland	-2.37	-2.42

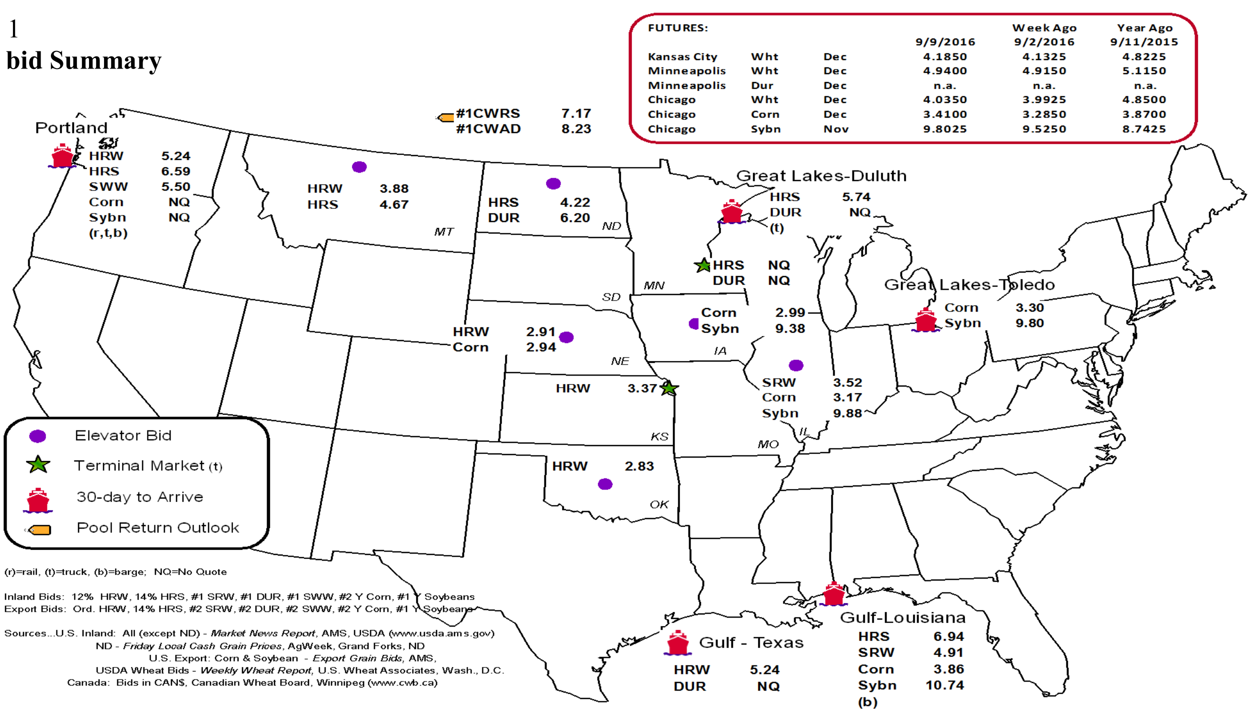
Note: nq = no quote

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]
9/07/2016[p]	1,298	2,122	7,999	173	11,592	9/3/2016	1,842
8/31/2016[r]	972	1,836	7,484	362	10,654	8/27/2016	1,769
2016 YTD[r]	15,101	53,570	186,813	12,424	267,908	2016 YTD	72,495
2015 YTD[r]	12,870	40,790	139,368	15,032	208,060	2015 YTD	64,258
2016 YTD as % of 2015 YTD	117	131	134	83	129	% change YTD	113
Last 4 weeks as % of 2015[2]	2,124	203	279	199	283	Last 4wks % 2015	89
Last 4 weeks as % of 4-year avg.[2]	917	147	228	194	223	Last 4wks % 4 yr	99
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.

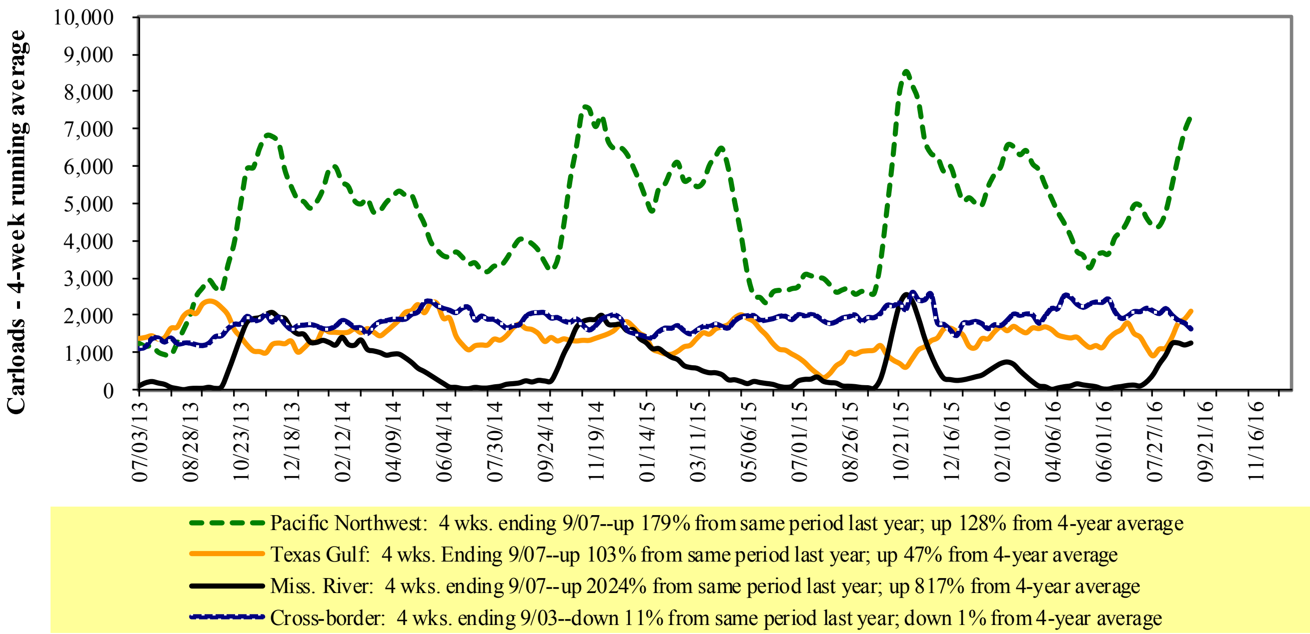
YTD = year-to-date; p = preliminary data; r = revised data; n/a = not available

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	
9/3/2016	CSXT	NS	BNSF	KCS	UP		CN	CP
This week	1,210	2,418	13,468	796	6,563	24,455	3,471	3,993
This week last year	1,184	2,404	9,649	1,028	4,515	18,780	2,988	4,386
2016 YTD	59,180	97,073	383,643	29,501	189,937	759,334	116,081	152,400
2015 YTD	69,307	101,987	343,568	30,387	178,208	723,457	139,882	156,256
2016 YTD as % of 2015 YTD	85	95	112	97	107	105	83	98
Last 4 weeks as % of 2015*	99	107	139	83	135	128	106	97
Last 4 weeks as % of 3-yr avg.**	106	120	145	83	138	135	95	91
Total 2015	104,039	149,043	536,173	45,445	267,720	1,102,420	211,868	236,263

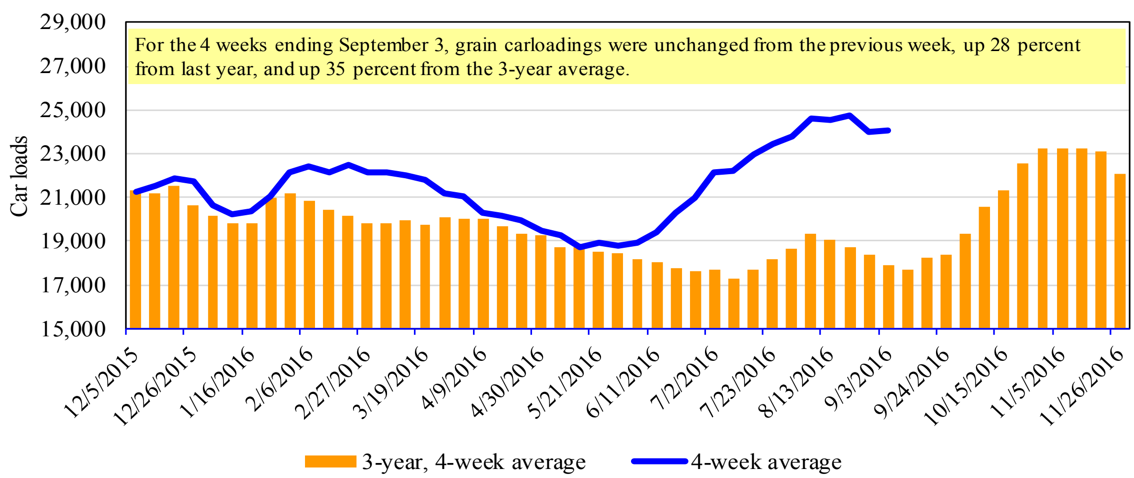
*The past 4 weeks of this year as a percent of the same 4 weeks last year.

**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:		Delivery period							
9/8/2016		Sep-16	Sep-15	Oct-16	Oct-15	Nov-16	Nov-15	Dec-16	Dec-15
BNSF[3]	COT grain units	no offer	no bids	97	no bids	82	no bids	52	no bids
	COT grain single-car[5]	no offer	no offer	177 . . 450	2	0 . . 350	0	0 . . 200	0 . . 1
UP[4]	GCAS/Region 1	no offer	no bids	no offer	no bids	no offer	no bids	n/a	n/a
	GCAS/Region 2	no offer	10	no offer	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.

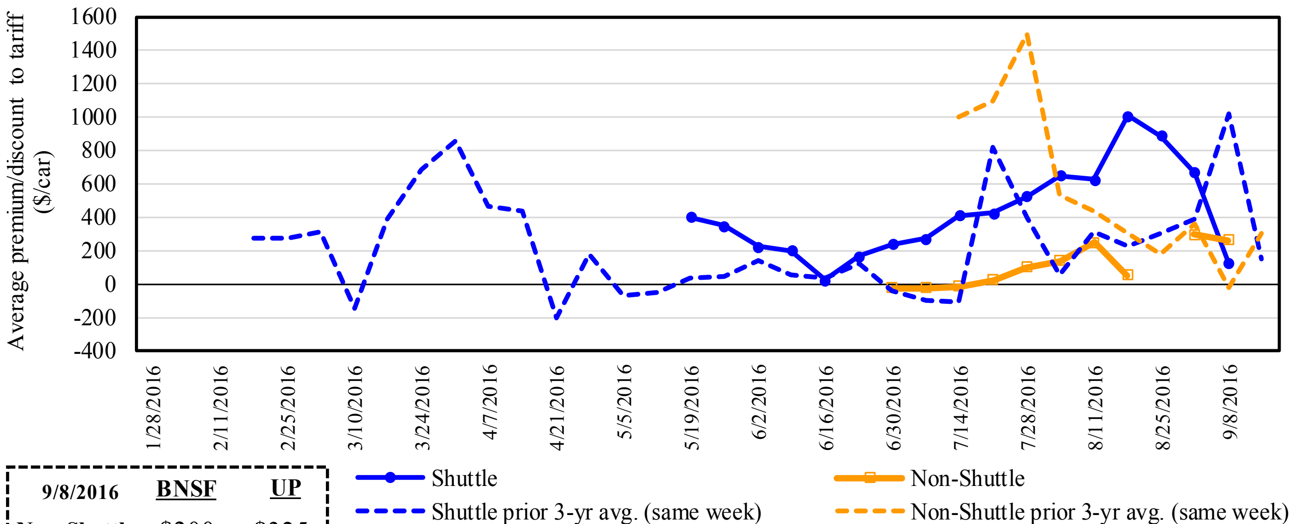
Region 2 includes: CO, IA, KS, MN, NE, WY, and Kansas City and St. Joseph, MO.

[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 September 2016, Secondary Market

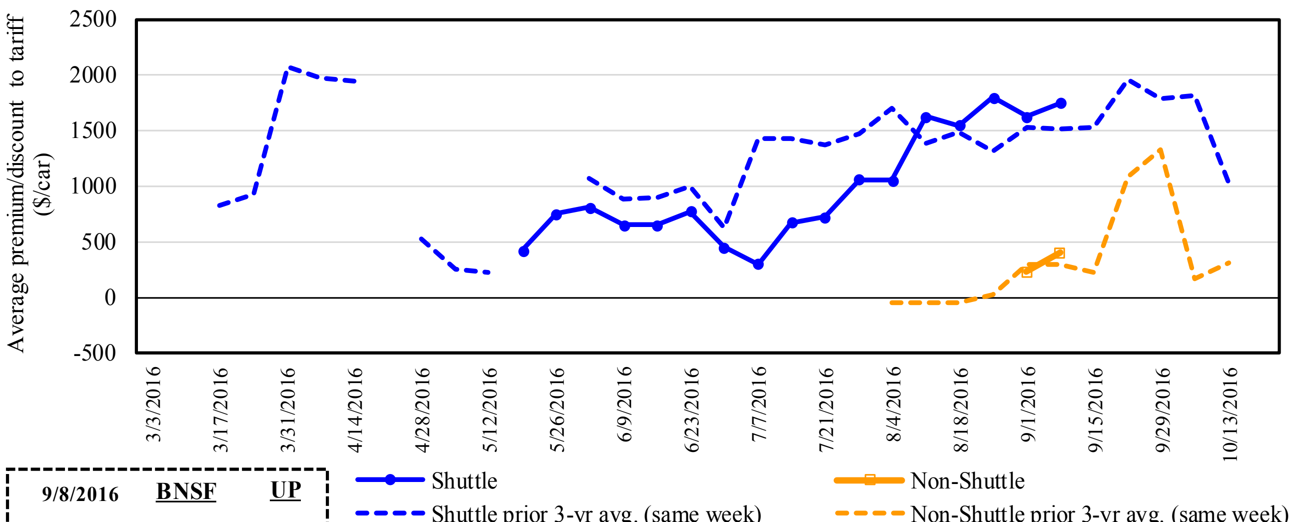


9/8/2016	BNSF	UP
Non-Shuttle	$200	$325
Shuttle	$100	$150

Average Non-shuttle bids/offers fell $34 this week, and are $34 below the peak.
Average Shuttle bids/offers fell $546 this week and are $881 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 October 2016, Secondary Market



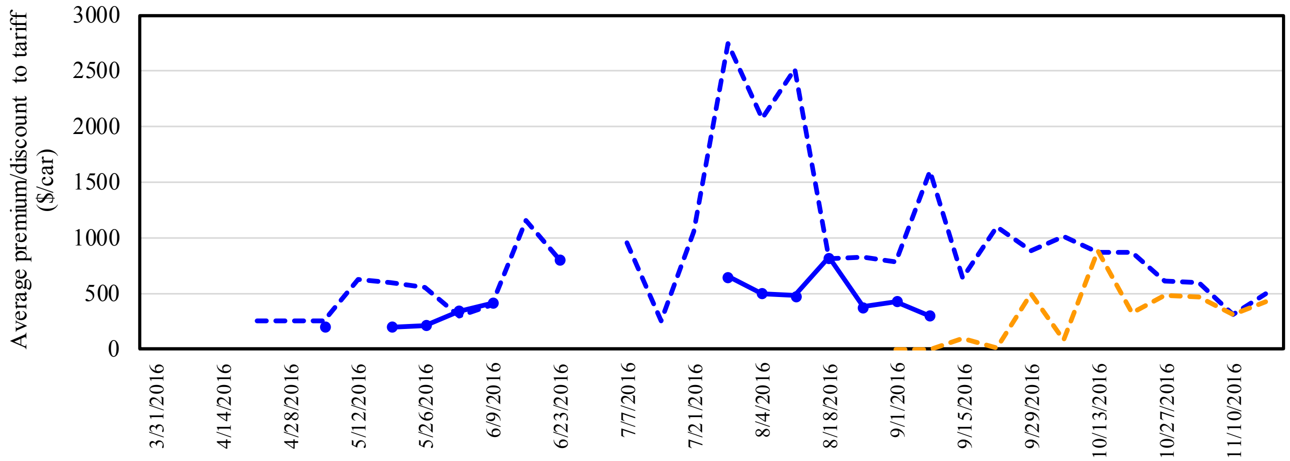
9/8/2016	BNSF	UP
Non-Shuttle	$200	$600
Shuttle	$2,000	$1,500

Average Non-shuttle bids/offers rose $175 this week, and are at the peak.
Average Shuttle bids/offers rose $125 this week and are $50 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 November 2016, Secondary Market



9/8/2016	BNSF	UP
Non-Shuttle	n/a	n/a
Shuttle	n/a	$300

There were no Non-Shuttle bids/offers this week.
Average Shuttle bids/offers fell $125 this week and are $525 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: 9/8/2016	Delivery period: Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17
Non-shuttle	**BNSF-GF**	**200**	**200**	**n/a**	**n/a**	**n/a**	**n/a**
	Change from last week	(113)	(25)	n/a	n/a	n/a	n/a
	Change from same week 2015	331	n/a	n/a	n/a	n/a	n/a
	UP-Pool	**325**	**600**	**n/a**	**n/a**	**n/a**	**n/a**
	Change from last week	44	n/a	n/a	n/a	n/a	n/a
	Change from same week 2015	425	n/a	n/a	n/a	n/a	n/a
Shuttle	**BNSF-GF**	**100**	**2000**	**n/a**	**n/a**	**n/a**	**n/a**
	Change from last week	(1017)	(50)	n/a	n/a	n/a	n/a
	Change from same week 2015	225	1437	n/a	n/a	n/a	n/a
	UP-Pool	**150**	**1500**	**300**	**100**	**n/a**	**n/a**
	Change from last week	(75)	300	(125)	(100)	n/a	n/a
	Change from same week 2015	283	1250	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]

Effective date: 9/1/2016	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	$3,605	$35	$36.15	$0.98	-1
	Grand Forks, ND	Duluth-Superior, MN	$4,143	-$6	$41.08	$1.12	15
	Wichita, KS	Los Angeles, CA	$6,950	-$31	$68.71	$1.87	-2
	Wichita, KS	New Orleans, LA	$4,243	$62	$42.75	$1.16	-1
	Sioux Falls, SD	Galveston-Houston, TX	$6,486	-$25	$64.16	$1.75	-2
	Northwest KS	Galveston-Houston, TX	$4,511	$68	$45.47	$1.24	-1
	Amarillo, TX	Los Angeles, CA	$4,710	$95	$47.72	$1.30	-2
Corn	Champaign-Urbana, IL	New Orleans, LA	$3,681	$70	$37.25	$0.95	8
	Toledo, OH	Raleigh, NC	$6,061	$0	$60.19	$1.53	9
	Des Moines, IA	Davenport, IA	$2,168	$15	$21.68	$0.55	-1
	Indianapolis, IN	Atlanta, GA	$5,004	$0	$49.69	$1.26	5
	Indianapolis, IN	Knoxville, TN	$4,311	$0	$42.81	$1.09	5
	Des Moines, IA	Little Rock, AR	$3,444	$44	$34.64	$0.88	3
	Des Moines, IA	Los Angeles, CA	$5,052	$128	$51.44	$1.31	1
Soybeans	Minneapolis, MN	New Orleans, LA	$3,799	$30	$38.02	$1.03	-4
	Toledo, OH	Huntsville, AL	$5,051	$0	$50.16	$1.37	8
	Indianapolis, IN	Raleigh, NC	$6,178	$0	$61.35	$1.67	10
	Indianapolis, IN	Huntsville, AL	$4,529	$0	$44.98	$1.22	4
	Champaign-Urbana, IL	New Orleans, LA	$4,395	$70	$44.34	$1.21	9
Shuttle Train							
Wheat	Great Falls, MT	Portland, OR	$3,953	-$18	$39.08	$1.06	-2
	Wichita, KS	Galveston-Houston, TX	$3,871	-$14	$38.30	$1.04	-3
	Chicago, IL	Albany, NY	$5,492	$0	$54.54	$1.48	16
	Grand Forks, ND	Portland, OR	$5,611	-$30	$55.42	$1.51	-3
	Grand Forks, ND	Galveston-Houston, TX	$5,931	-$32	$58.58	$1.59	-11
	Northwest KS	Portland, OR	$5,478	$112	$55.51	$1.51	-2
Corn	Minneapolis, MN	Portland, OR	$5,000	-$37	$49.28	$1.25	-7
	Sioux Falls, SD	Tacoma, WA	$4,960	-$34	$48.92	$1.24	-6
	Champaign-Urbana, IL	New Orleans, LA	$3,481	$70	$35.27	$0.90	8
	Lincoln, NE	Galveston-Houston, TX	$3,600	-$20	$35.55	$0.90	-3
	Des Moines, IA	Amarillo, TX	$3,795	$55	$38.23	$0.97	3
	Minneapolis, MN	Tacoma, WA	$5,000	-$37	$49.29	$1.25	-7
	Council Bluffs, IA	Stockton, CA	$4,640	-$38	$45.70	$1.16	-3
Soybeans	Sioux Falls, SD	Tacoma, WA	$5,490	-$34	$54.18	$1.47	-6
	Minneapolis, MN	Portland, OR	$5,510	-$37	$54.35	$1.48	-7
	Fargo, ND	Tacoma, WA	$5,380	-$30	$53.13	$1.45	-6
	Council Bluffs, IA	New Orleans, LA	$4,425	$81	$44.75	$1.22	-2
	Toledo, OH	Huntsville, AL	$4,226	$0	$41.97	$1.14	10
	Grand Island, NE	Portland, OR	$5,360	$115	$54.37	$1.48	-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

Effective date: 9/1/2016				Fuel			Percent
	Origin		Tariff	surcharge	Tariff plus surcharge per:		change[4]
Commodity	state	Destination region	rate/car[1]	per car[2]	metric ton[3]	bushel[3]	Y/Y
Wheat	MT	Chihuahua, CI	$7,459	$0	$76.21	$2.07	-4
	OK	Cuautitlan, EM	$6,514	$49	$67.05	$1.82	-5
	KS	Guadalajara, JA	$6,995	$102	$72.51	$1.97	-4
	TX	Salinas Victoria, NL	$4,142	$28	$42.61	$1.16	0
Corn	IA	Guadalajara, JA	$8,137	$97	$84.13	$2.14	-5
	SD	Celaya, GJ	$7,480	$0	$76.43	$1.94	-6
	NE	Queretaro, QA	$7,879	$92	$81.44	$2.07	1
	SD	Salinas Victoria, NL	$6,545	$0	$66.87	$1.70	6
	MO	Tlalnepantla, EM	$7,238	$89	$74.87	$1.90	2
	SD	Torreon, CU	$7,080	$0	$72.34	$1.84	-2
Soybeans	MO	Bojay (Tula), HG	$8,652	$98	$89.40	$2.43	2
	NE	Guadalajara, JA	$9,142	$103	$94.46	$2.57	1
	IA	El Castillo, JA	$9,470	$0	$96.76	$2.63	0
	KS	Torreon, CU	$7,439	$75	$76.77	$2.09	2
Sorghum	NE	Celaya, GJ	$7,344	$91	$75.96	$1.93	-2
	KS	Queretaro, QA	$7,563	$61	$77.89	$1.98	-1
	NE	Salinas Victoria, NL	$6,168	$49	$63.52	$1.61	3
	NE	Torreon, CU	$6,672	$72	$68.91	$1.75	-1

[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

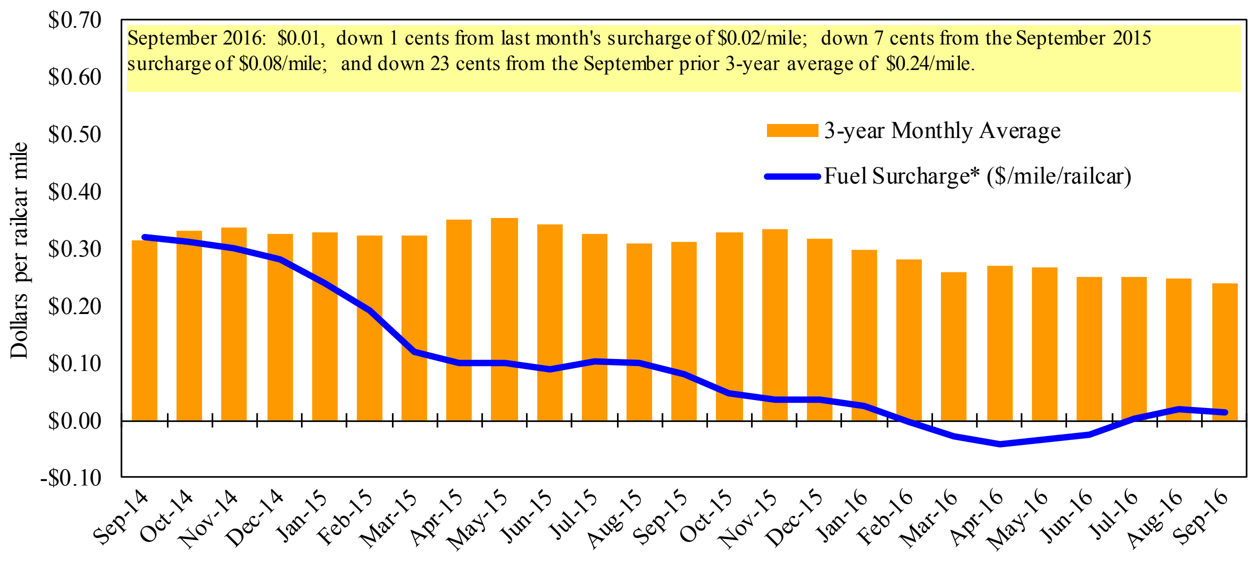
[3]Approximate load per car = 97.87 metric tons: Corn & Sorghum 56 lbs/bu, Wheat & Soybeans 60 lbs/bu

[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.

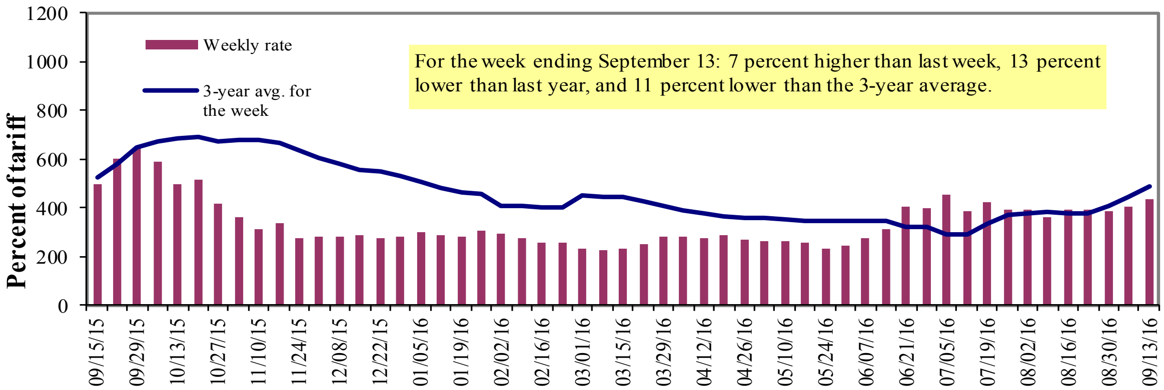
**CSX strike price changed from $2.00/gal. to $3.75/gal. starting January 1, 2015.

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]	9/13/2016	473	442	433	333	438	438	338
	9/6/2016	445	420	405	303	334	334	310
$/ton	9/13/2016	29.28	23.51	20.09	13.29	20.54	17.70	10.61
	9/6/2016	27.55	22.34	18.79	12.09	15.66	13.49	9.73
Current week % change from the same week:								
	Last year	-8	-9	-13	-26	-15	-15	-13
	3-year avg. [2]	-2	-7	-11	-29	-12	-12	-27
Rate[1]	October	608	588	583	458	585	585	433
	December	-	-	408	293	350	350	270

[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.

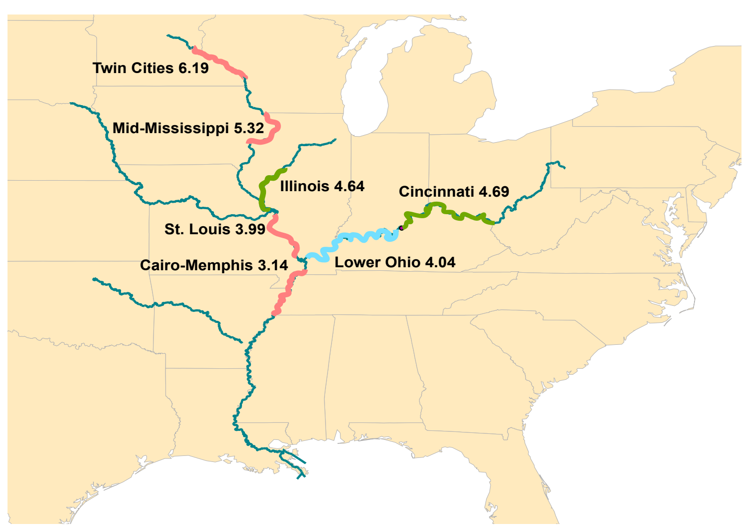
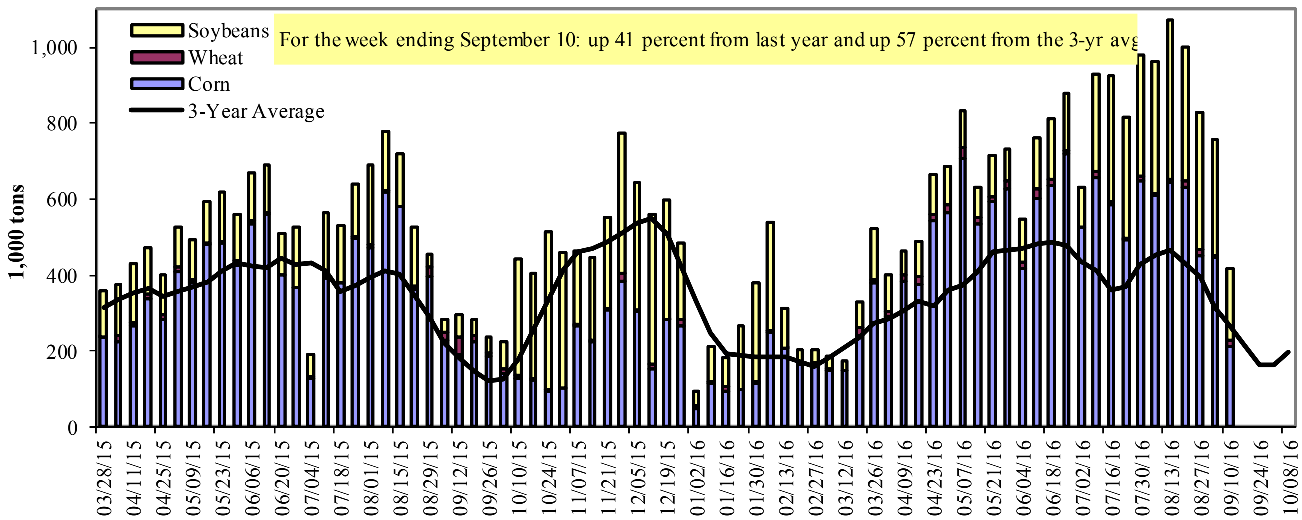


Figure 10

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 9/10/2016	Corn	Wheat	Soybeans	Other	Total
Mississippi River					
Rock Island, IL (L15)	69	9	97	8	183
Winfield, MO (L25)	162	10	167	13	351
Alton, IL (L26)	218	14	219	19	471
Granite City, IL (L27)	210	16	192	19	438
Illinois River (L8)	46	5	30	0	81
Ohio River (L52)	31	10	40	0	80
Arkansas River (L1)	7	3	1	0	11
Weekly total - 2016	248	28	234	19	529
Weekly total - 2015	288	58	46	18	410
2016 YTD[1]	18,001	1,600	8,718	250	28,569
2015 YTD	14,906	1,407	6,685	194	23,192
2016 as % of 2015 YTD	121	114	130	129	123
Last 4 weeks as % of 2015[2]	149	57	579	182	191
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.

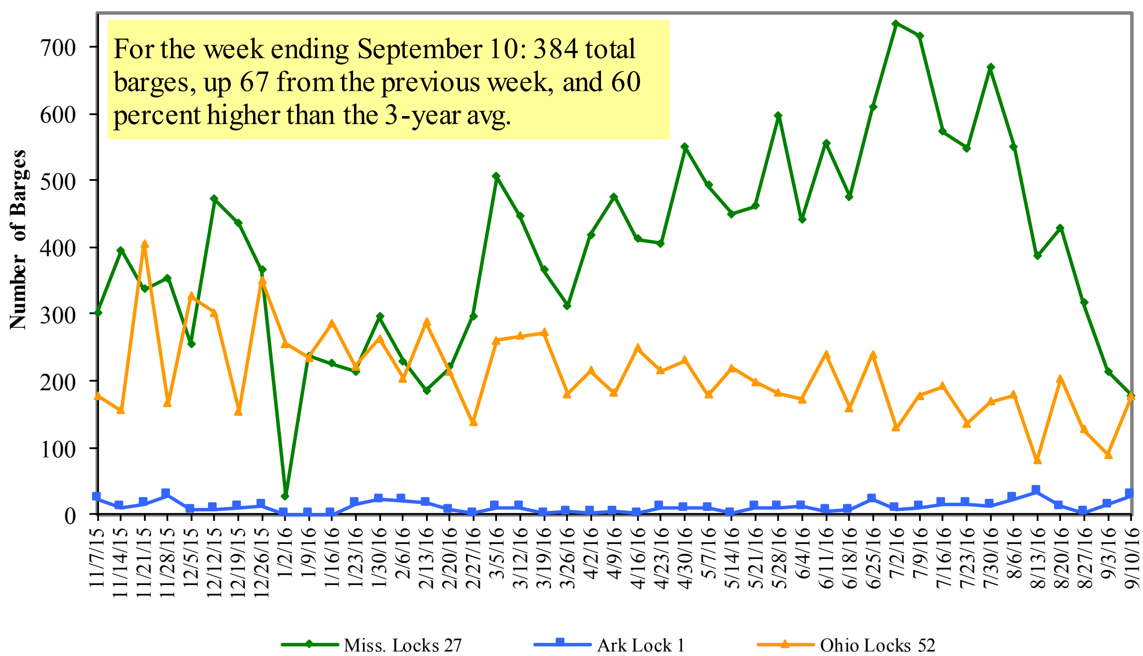
[2] As a percent of same period in 2015.

Note: Total may not add exactly, due to rounding

Source: U.S. Army Corps of Engineers

Figure 11

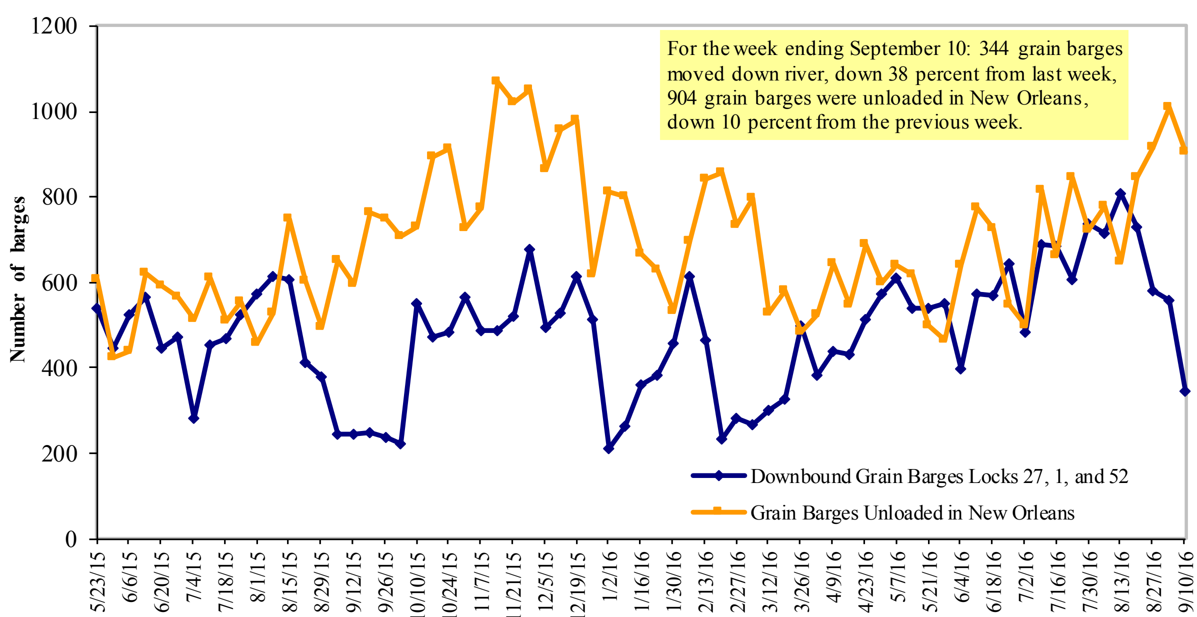
Upbound Empty Barges Transiting Mississippi River Locks 27, Arkansas River Lock and Dam 1, and Ohio River Locks and Dam 52



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 09/12/2016 (US $/gallon)

Region	Location	Price	Change from Week ago	Change from Year ago
I	East Coast	2.399	-0.009	-0.176
	New England	2.410	-0.010	-0.243
	Central Atlantic	2.495	-0.004	-0.199
	Lower Atlantic	2.323	-0.012	-0.145
II	Midwest[2]	2.376	-0.011	-0.095
III	Gulf Coast[3]	2.256	-0.008	-0.106
IV	Rocky Mountain	2.489	-0.004	-0.065
V	West Coast	2.666	0.002	-0.067
	West Coast less California	2.553	-0.010	-0.018
	California	2.756	0.010	-0.107
Total	U.S.	2.399	-0.008	-0.118

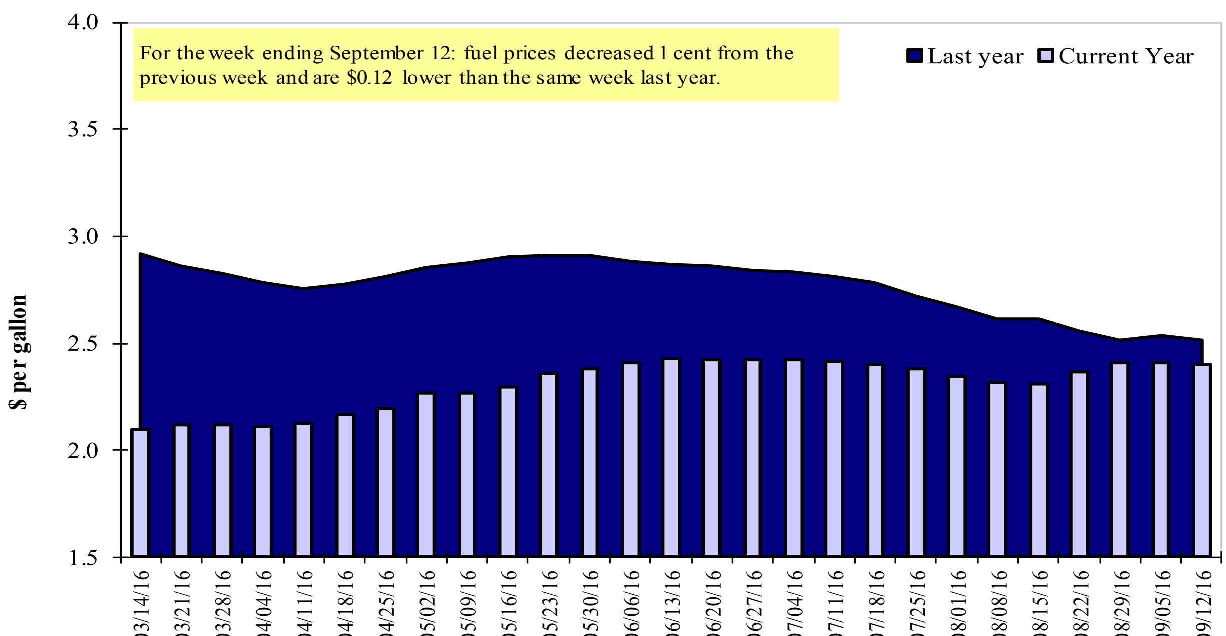
[1]Diesel fuel prices include all taxes. Prices represent an average of all types of diesel fuel.

[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]									
9/1/2016	2,245	550	1,757	998	98	5,648	16,044	22,298	43,989
This week year ago	1,296	818	1,790	939	173	5,016	8,539	16,043	29,599
Cumulative exports-marketing year [2]									
2016/17 YTD	2,949	577	2,171	1,059	103	6,859	299	228	7,386
2015/16 YTD	1,603	1,096	1,412	891	338	5,340	267	21	5,629
YTD 2016/17 as % of 2015/16	184	53	154	119	31	128	112	1,082	131
Last 4 wks as % of same period 2015/16	174	74	102	109	63	116	97	53	76
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 9/01/2016	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	2,323	1,632	42	10,997
Mexico	4,203	3,181	32	11,542
Korea	653	123	430	3,933
Colombia	587	604	(3)	3,994
Taiwan	549	139	294	1,991
Top 5 Importers	**8,314**	**5,679**	**46**	**32,457**
Total US corn export sales	**16,343**	**8,806**	**86**	**47,026**
% of Projected	30%	18%		
Change from prior week	**1,093**	**1,838**		
Top 5 importers' share of U.S. corn export sales	51%	64%		69%
USDA forecast, September 2016	**55,344**	**48,728**	**14**	
Corn Use for Ethanol USDA forecast, September 2016	**133,985**	**132,080**	**1**	

(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
Cumulative Exports (shipped) + Outstanding Sales (unshipped), FAS Weekly Export Sales Report, or Export Sales Query--http://www.fas.usda.gov/esrquery/

[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 9/01/2016	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	9,254	35,661	(74)	29,033
Mexico	1,068	972	10	3,295
Indonesia	230	135	71	2,065
Japan	514	684	(25)	1,994
Taiwan	442	291	52	1,226
Top 5 importers	**11,508**	**37,742**	**(70)**	**37,614**
Total US soybean export sales	**22,526**	**16,065**	**40**	**39,169**
% of Projected	42%	30%		
Change from prior week	**1,777**	**2,613**		
Top 5 importers' share of U.S. soybean export sales	51%	235%		**96%**
USDA forecast, September 2016	**54,087**	**52,861**	**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 reivisions from previous week's

[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 9/01/2016	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	1,022	986	4	2,743
Mexico	1,152	1,054	9	2,660
Nigeria	596	907	(34)	1,978
Philippines	1,277	867	47	2,156
Brazil	808	290	179	2,076
Korea	673	540	25	1,170
Taiwan	378	449	(16)	1,005
Indonesia	374	120	213	776
Colombia	390	290	34	679
Thailand	259	144	80	618
Top 10 importers	**6,670**	**5,502**	21	**15,861**
Total US wheat export sales	**12,507**	**10,357**	**21**	**24,485**
% of Projected	48%	49%		
Change from prior week	**661**	**290**		
Top 10 importers' share of U.S. wheat export sales	53%	53%		65%
USDA forecast, September 2016	**25,886**	**21,117**	**23**	

(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 09/08/16	Previous Week*	Current Week as % of Previous	2016 YTD*	2015 YTD*	2016 YTD as % of 2015 YTD	Last 4-weeks as % of: Last Year	Last 4-weeks as % of: Prior 3-yr. avg.	2015 Total*
Pacific Northwest									
Wheat	279	311	90	8,859	7,564	117	124	97	10,985
Corn	423	524	81	9,253	6,760	137	343	412	7,232
Soybeans	212	10	2,038	5,263	4,087	129	2746	3615	11,809
Total	**915**	**846**	**108**	**23,375**	**18,411**	**127**	**232**	**211**	**30,027**
Mississippi Gulf									
Wheat	166	100	165	2,708	3,319	82	76	54	4,504
Corn	705	582	121	22,343	21,274	105	116	142	26,701
Soybeans	727	1,197	61	16,502	12,668	130	452	682	29,593
Total	**1,598**	**1,879**	**85**	**41,552**	**37,261**	**112**	**186**	**213**	**60,797**
Texas Gulf									
Wheat	185	187	99	3,525	2,799	126	192	114	3,724
Corn	11	127	8	1,071	450	238	393	656	596
Soybeans	0	0	n/a	92	210	44	n/a	n/a	864
Total	**196**	**314**	**62**	**4,688**	**3,458**	**136**	**230**	**155**	**5,184**
Interior									
Wheat	75	31	238	967	1,020	95	122	120	1,388
Corn	114	169	68	4,926	4,373	113	102	125	6,201
Soybeans	56	50	113	2,799	2,117	132	275	357	3,518
Total	**245**	**250**	**98**	**8,693**	**7,509**	**116**	**126**	**149**	**11,106**
Great Lakes									
Wheat	52	47	112	666	717	93	111	192	997
Corn	61	36	170	449	444	101	171	270	485
Soybeans	0	0	n/a	159	89	180	n/a	n/a	733
Total	**113**	**83**	**137**	**1,274**	**1,249**	**102**	**134**	**225**	**2,216**
Atlantic									
Wheat	1	1	n/a	200	457	44	9	4	520
Corn	1	0	n/a	49	115	42	47	21	277
Soybeans	3	41	7	1,051	990	106	422	820	2,053
Total	**5**	**41**	**12**	**1,300**	**1,563**	**83**	**103**	**55**	**2,850**
U.S. total from ports**									
Wheat	759	677	112	16,925	15,875	107	120	91	22,118
Corn	1,315	1,437	91	38,091	33,416	114	157	192	41,492
Soybeans	998	1,297	77	25,866	20,160	128	472	702	48,570
Total	**3,072**	**3,412**	**90**	**80,882**	**69,451**	**116**	**188**	**196**	**112,180**

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

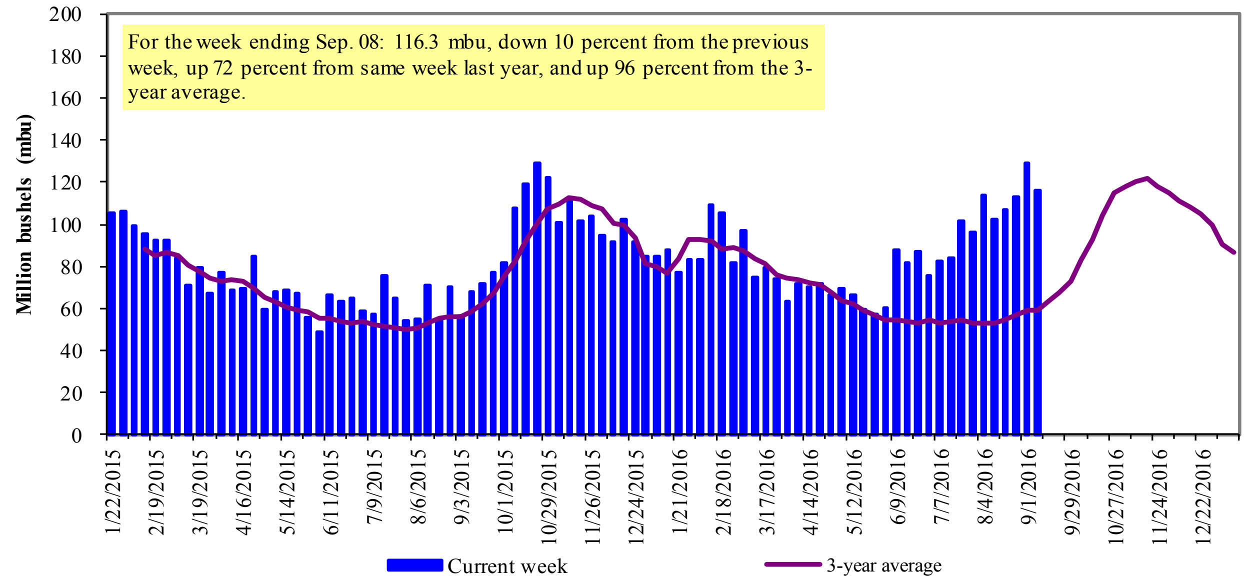
**Total only includes regions shown above

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

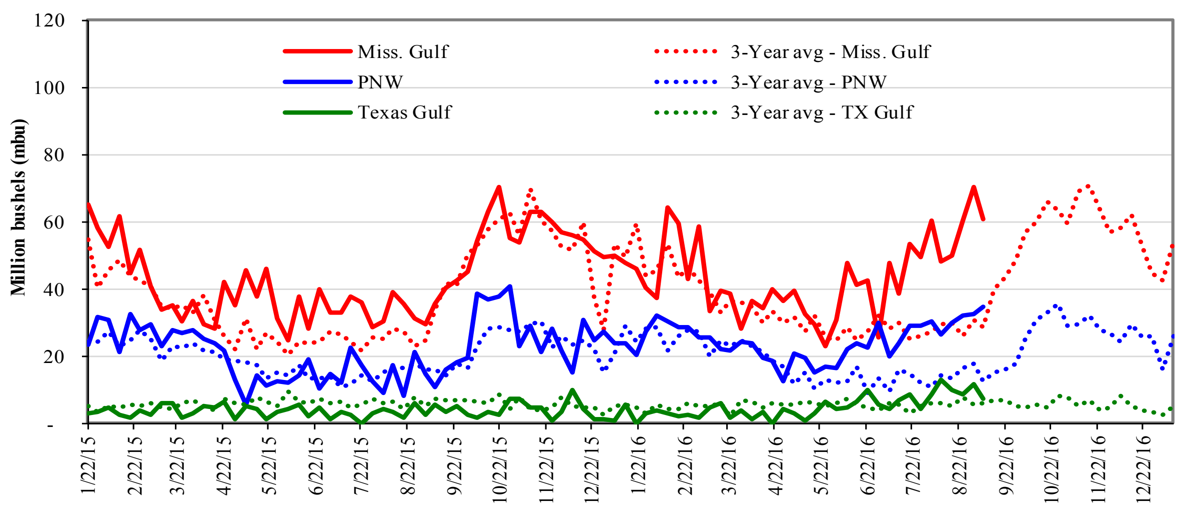
U.S. grain inspected for export (wheat, corn, and soybeans)



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 09/08/16 inspections (mbu):		Percent change from:	MS Gulf	TX Gulf	U.S. Gulf	PNW
Mississippi Gulf:	60.6	Last Week:	down 14	down 39	down 18	up 7
PNW:	34.7	Last Year (same week):	up 71	up 25	up 64	up 216
Texas Gulf:	7.2	3-yr avg. (4-wk. mov. Avg):	up 111	up 20	up 95	up 131

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

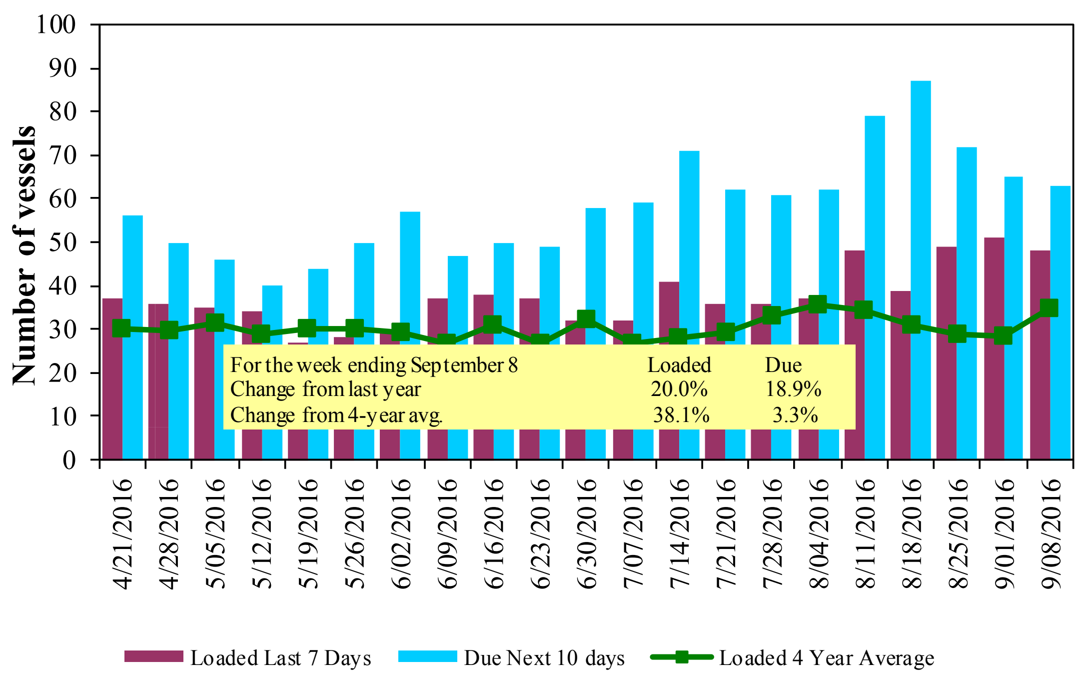
Ocean Transportation

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
9/8/2016	41	48	63	7	n/a
9/1/2016	47	51	65	8	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

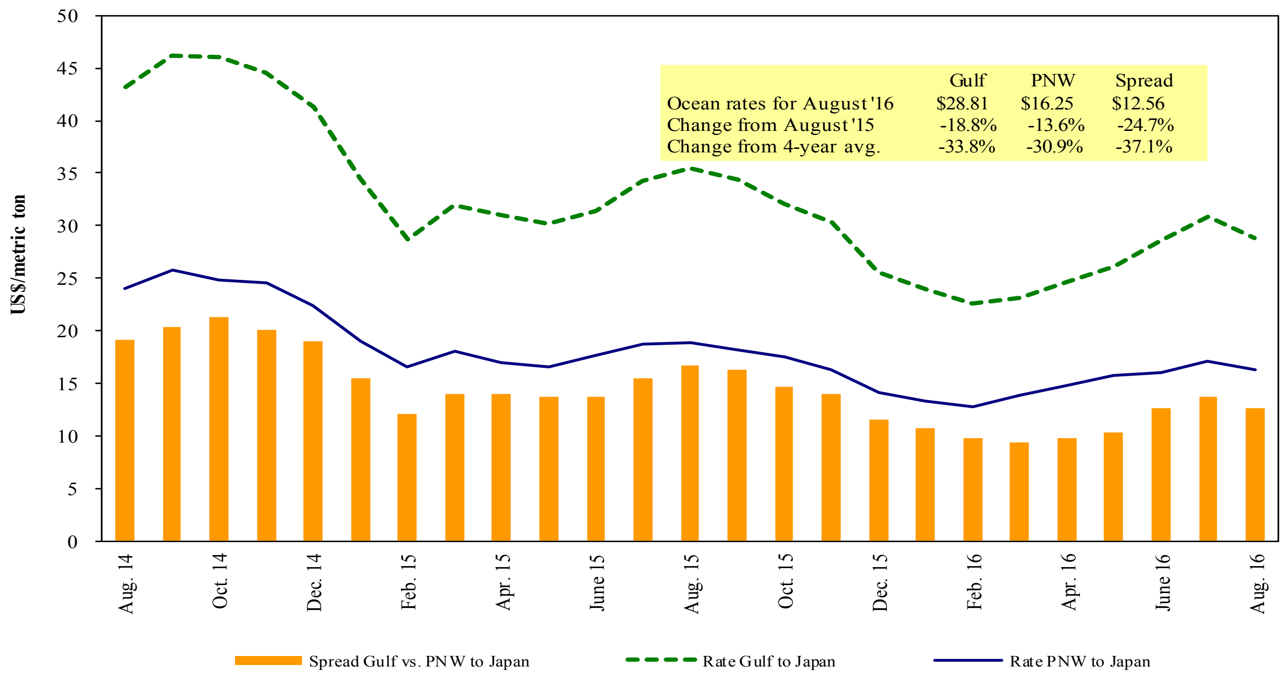
Figure 16
U.S. Gulf Vessel Loading Activity



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 09/10/2016

Export region	Import region	Grain types	Loading date	Volume loads (metric tons)	Freight rate (US$/metric ton)
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	China	Heavy Grain	Aug 24/30	60,000	26.40
U.S. Gulf	China	Heavy Grain	Aug 16/26	60,000	26.00
U.S. Gulf	China	Heavy Grain	Aug 15/25	60,000	26.75
U.S. Gulf	China	Heavy Grain	Aug 10/20	60,000	26.25
U.S. Gulf	South Africa	Sorghum[1]	Sep 15/25	20,000	63.50
U.S. Gulf	Djibouti	Wheat[1]	Aug 22/31	47,720	46.48
PNW	Japan	Heavy Grain	Aug 1/10	58,000	19.80
PNW	Japan	Heavy Grain	Jul 20/30	60,000	16.50
PNW	Taiwan	Wheat1	Sep 8/22	54,000	21.10
Brazil	China	Heavy Grain	Aug 18/25	60,000	18.60
Brazil	Japan	Heavy Grain	Sep 1/30	62,000	19.00
Brazil	Malaysia	Heavy Grain	Sep 1/30	65,000	17.00
Romania	France	Heavy Grain	Aug 5/9	55,000	8.50
Ukraine	Morroceo	Heavy Grain	Aug 29/Sep 3	30,000	16.00

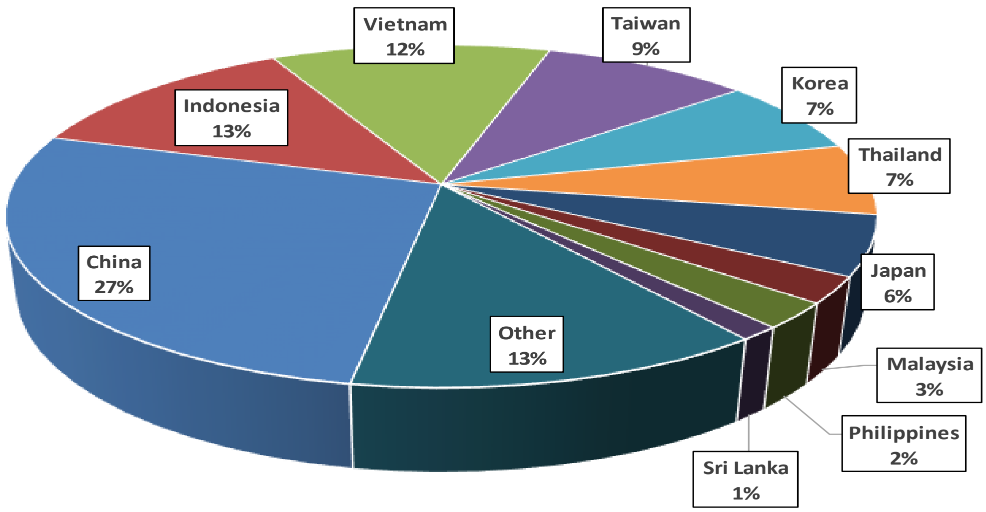
Rates shown are for metric ton (2,204.62 lbs. = 1 metric ton), F.O.B., except where otherwise indicates; op = option

[1]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 2014, containers were used to transport 7 percent of total U.S. waterborne grain exports. Approximately 63 percent of U.S. waterborne grain exports in 2014 went to Asia, of which 11 percent were moved in containers. Approximately 95 percent of U.S. waterborne containerized grain exports were destined for Asia.

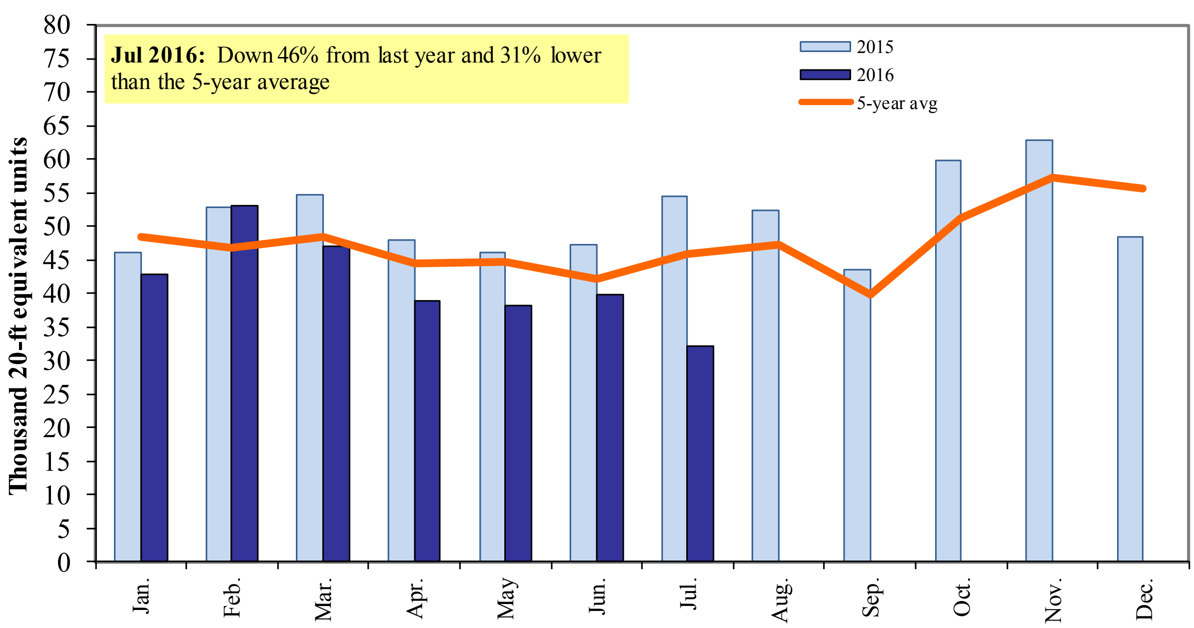
Figure 18
Top 10 Destination Markets for U.S. Containerized Grain Exports, January-July 2016



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

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