



Grain Transportation Report

A weekly publication of the
Transportation and Marketing Programs/Transportation Services Branch
www.ams.usda.gov/tmdtsb/grain

Apr. 27, 2006

Contents

Grain
Transportation
Indicators

Rail
Transportation

Barge
Transportation

Truck
Transportation

Grain Exports

Ocean
Transportation

Brazil
Transportation

Contacts
and
Links

Subscription
Information

The next
release is
May 4, '06

Ethanol Distribution Problems Could Influence Gasoline Availability. Gasoline stations in the Northeast have reported scattered shortages of gasoline as the oil industry makes the transition to ethanol-blended fuel. To ease this transition, it has been reported that President Bush may direct the Environmental Protection Agency to grant temporary waivers on the use of methyl tertiary-butyl ether (MTBE) in regions where shortages exist. U.S. Department of Energy (DOE) in its recent report expects spot shortages on the East Coast and in Texas, where reformulated gasoline containing MTBE has been most heavily used. DOE believes a combination of factors, including inadequate storage tank capacity and an inadequate supply of railroad tank cars and liquid barges, contributes to ethanol shortages in these two regions.

The petroleum industry has been shifting away from MTBE, which has been used to replace lead as an octane enhancer since 1979. In 1992, the industry began using MTBE in higher concentrations as an oxygenate to reduce air pollution, as required by the Clean Air Act Amendments of 1990. However, a phase-out of MTBE began in 1999, after it was identified as a carcinogen and found to contaminate groundwater. The Energy Policy Act of 2005 bans the addition of MTBE to all motor vehicle fuel by December 2014. Liability lawsuits are also pressuring the industry to discontinue MTBE. Congress has refused to offer protection to the oil industry from these lawsuits.

The development of renewable fuels—mainly ethanol—also drives this shift away from MTBE. Like MTBE, ethanol burns cleanly, boosts octane, and reduces emissions. Unlike MTBE, ethanol is relatively harmless to the environment because it biodegrades in water and in soil.

A shift to ethanol will be slowed by some bottlenecks in distribution, storage, and blending. According to the Energy Information Agency (EIA), these bottlenecks will be tightest in the Northeast and Texas. Ethanol is already being produced in the United States at, or near, the current capacity of 288 thousand barrels per day. Because of the elimination of MTBE, the East Coast will require an extra 90 thousand barrels of ethanol per day (2.5 times more than was delivered to the East Coast in 2005). Texas will require an additional 40 thousand barrels per day. The 29 plants currently under construction and nine more being expanded may eventually meet the added demand, but probably not this year.

Pipelines have been especially crucial to delivering reformulated gasoline containing MTBE from the U.S. Gulf to the East Coast. Operators of the two pipelines used for this movement, however, decided that they would not carry MTBE beginning with their March 2006 delivery cycle. This leaves ethanol as the only viable alternative for many eastern petroleum blending operations.

Existing pipelines are not an option for moving ethanol. They are not designed for the highly corrosive ethanol, and ethanol tends to absorb water impurities found in pipelines and separate from the gasoline. Unlike MTBE, ethanol cannot be blended at the refinery. Until new infrastructure is developed, ethanol must be transported by rail, truck, or barge. It is not clear that the number of tank railcars, liquid barges, and trucks will be adequate to meet demand. The limited capacity of loading facilities may also limit distribution. Currently, about 75 percent of ethanol is transported by rail.

In preparation, major eastern Class 1 U.S. railroads, CSX and Norfolk Southern (NS), are improving their logistics and increasing capacity to East Coast facilities. CSX, for example, has implemented "EthX," (Ethanol Express Delivery). Ethanol is railed to Albany, NY, and barged down the Hudson River to major consumer markets. NS, on the other hand, is locating a high-capacity ethanol terminal with direct access to water transportation in Sewaren, NJ, to supply the eastern petroleum market.

It is questionable if ethanol imports from Brazil, where it is made from sugar cane, will be able to meet U.S. demand during the year. Besides supplying the U.S. market and its own domestic market, Brazil also exports ethanol to major markets in India, Japan, and the Netherlands. To help meet the increasing demand, on March 1 Brazil decreased the ethanol blend in its domestic gasoline from 25 to 20 percent into the "foreseeable future." In addition, during marketing year 2005/06, despite a strong raw sugar export market, raw sugar exports were decreased by more than 1 million metric tons and the cane diverted to ethanol production. Karl.Hacker@usad.gov

Grain Transportation Indicators

Table 1--Grain transport cost indicators*

Week ending	Truck	Rail**	Barge	Gulf	Ocean
04/26/06	193	33	160	154	177
Compared with last week	↑	Unchanged	↓	↓	↓

*Indicator: Base year 2000 = 100; Weekly updates include truck = diesel (\$/gallon); rail = nearby secondary rail market (\$/car); barge = spot Illinois River basis (index = percent of tariff rate); and ocean = routes to Japan (\$/metric ton)

**The rail indicator is not an index. It is the difference between the nearby secondary rail market bid for this week and the average bid for year 2000 (+) 100.

Source: Transportation & Marketing Programs/AMS/USDA

Table 2--Market update: U.S. origins to export position price spreads (\$/bushel)

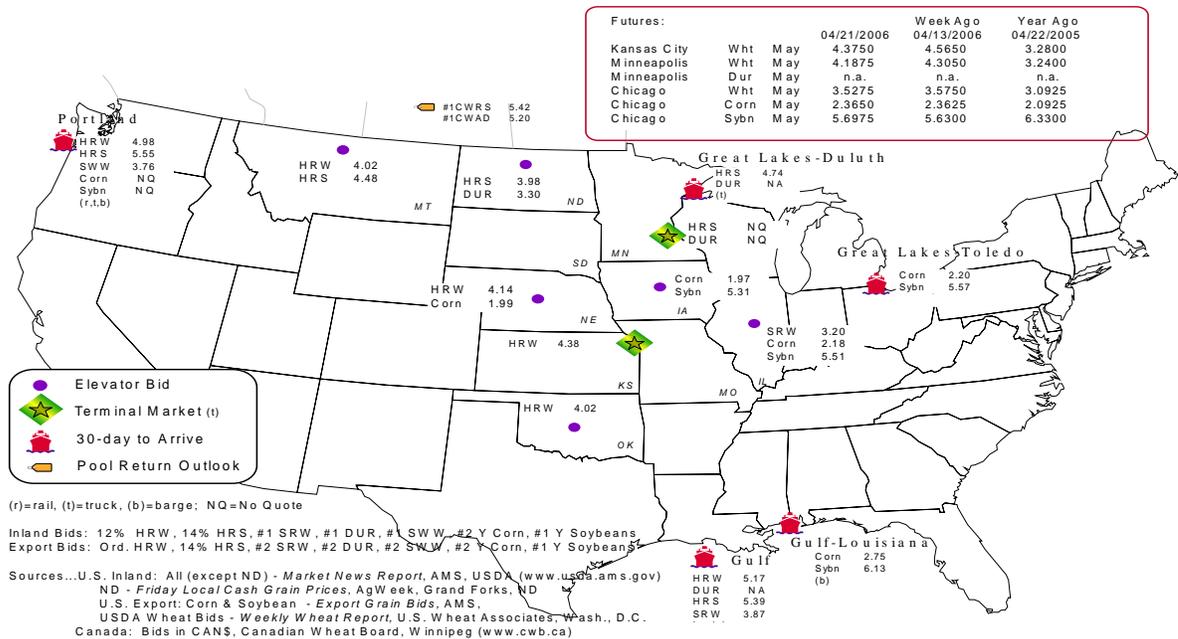
Commodity	Origin--destination	4/21/2006	4/13/2006
Corn	IL--Gulf	-0.57	-0.58
Corn	NE--Gulf	-0.76	-0.77
Soybean	IA--Gulf	-0.82	-0.84
HRW	KS--Gulf	-0.79	-0.81
HRS	ND--Portland	-1.57	-1.54

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)*

Week ending	Mississippi Gulf***	Texas Gulf	Cross-Border	Pacific	Atlantic &	Total
			Mexico	Northwest	East Gulf	
4/19/2006 ^p	502	2,142	6	4,181	215	7,046
4/12/2006 ^r	1,267	1,571	1,276	3,569	285	7,968
2006 YTD	30,322	36,244	12,931	67,185	8,068	154,750
2005 YTD	20,543	28,411	21,913	72,404	6,706	149,977
2006 as % of 2005	148	128	59	93	120	103
Total 2005**	50,677	99,864	60,879	223,328	15,752	450,500
Total 2004	43,102	92,073	59,102	209,625	10,986	414,888

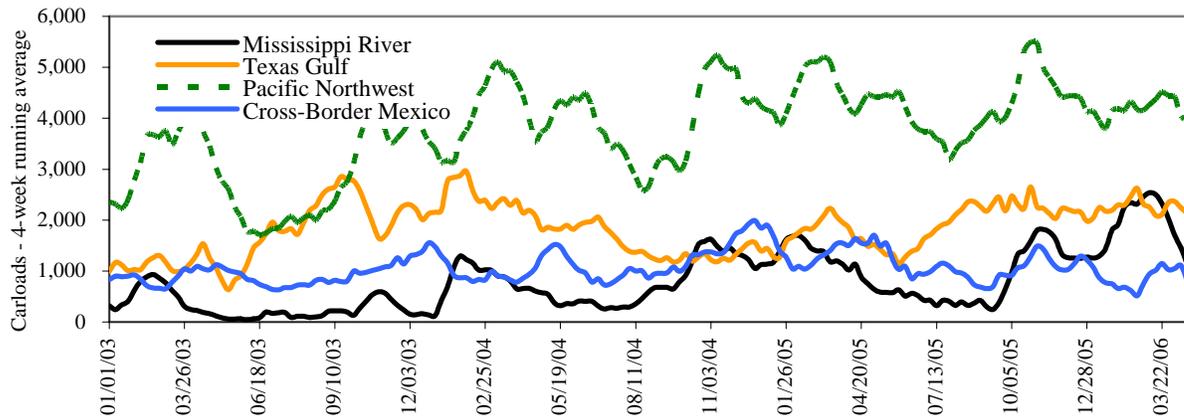
(*) Incomplete Data; as of 9/22/04, Cross-Border movements included; (**) Includes 53rd week; (***) Mississippi Gulf data back to January,

2004 from several new sources has been added; YTD= year-to-date; p=preliminary data; r = revised data

Source: Transportation & Marketing Programs/AMS/USDA

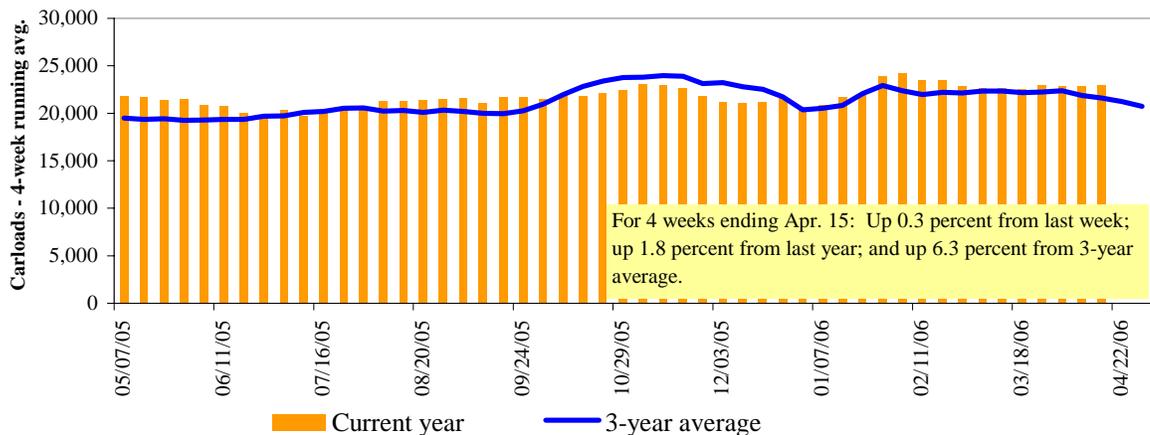
Railroads originate approximately 40 percent of U.S. grain shipments. Trends in these loadings are indicative of market conditions and expectations.

Figure 2
Rail deliveries to port



Source: Transportation & Marketing Programs/AMS/USDA

Figure 3
Total Weekly U.S. Class I Railroad Grain Car Loadings



Source: Association of American Railroads

Table 4--Class I rail carrier grain car bulletin (grain carloads originated)

Week ending	East		West			U.S. total	Canada	
	CSXT	NS	BNSF	KCS	UP		CN	CP
04/15/06	3,209	3,269	9,849	600	5,589	22,516	4,086	4,282
This week last year	3,130	3,447	9,534	365	5,577	22,053	4,188	4,550
2006 YTD	47,941	48,618	150,673	8,365	91,671	347,268	70,138	66,924
2005 YTD	46,738	51,854	143,888	9,838	90,494	342,812	67,430	59,286
Last 4 weeks as % of 2005 ¹	103	93	110	108	94	102	102	108
2006 YTD as % of 2005 YTD	103	94	105	85	101	101	104	113
Total 2005	152,060	167,465	476,033	27,459	307,170	1,130,187	225,817	215,145

¹As a percent of the same period in 2005.

Source: Association of American Railroads (www.aar.org); YTD = year-to-date

Table 5--Rail car auction offerings*, week ending 04/22/06 (\$/car)**

Delivery for:	May-06	Jun-06	Jul-06
BNSF ¹			
COT/N. grain	no bids	no offer	\$97
COT/S. grain	no bids	no bids	\$25
UP ²			
GCAS/Region 1	no bids	no bids	no offer
GCAS/Region 2	no bids	no bids	no offer

*Auction offerings are for single-car and unit train shipments only.

**Average premium/discount to tariff, last auction

¹BNSF - COT = Certificate of Transportation

N includes: ID, MN, MT, ND, OR, SD, WA, WI, WY, and Manitoba, Canada.

S includes: CO, IA, IL, KS, MO, NE, OK, TX, NM, AZ, CA, UT, and NV.

²UP - GCAS = Grain Car Allocation System

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

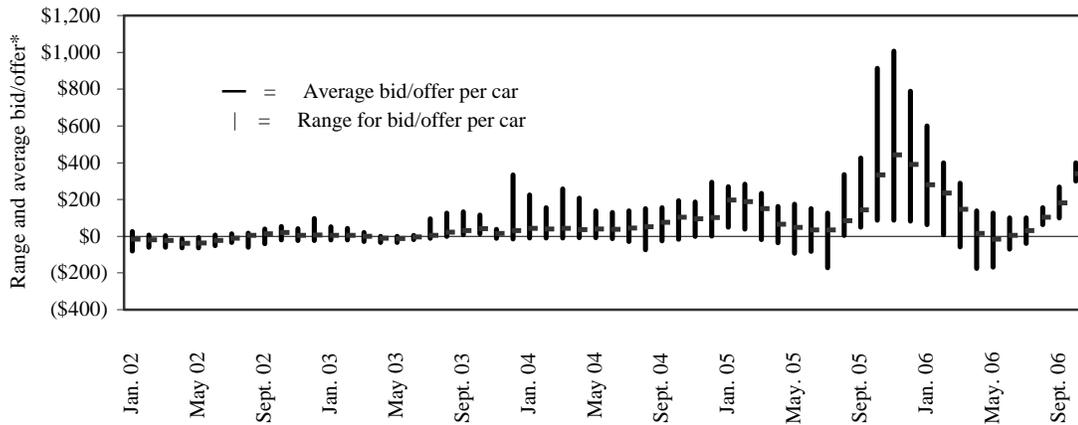
Region 2 includes: CO, IA, KS, MN, NE, WY, and Kansas City and St. Joseph, MO.

Source: Transportation & Marketing Programs/AMS/USDA

Rail service may be ordered directly from the railroad via **auction** for guaranteed service, or via tariff for nonguaranteed service, or through the secondary railcar market.

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
Secondary rail car market, delivery month-year



*up to 6 months of trading

Source: Transportation & Marketing Programs/AMS/USDA

Average bid/offer is the simple average of all the weekly bids/offers over the entire period (up to 6 months) for guaranteed railcars that are traded for delivery in a particular month.

Range for bid/offer shows the range of average weekly bids/offers over the entire period (up to 6 months) for guaranteed railcars that are traded for delivery in a particular month.

Table 6--Weekly secondary rail car market, week ending 04/22/06 (\$/car)*

	Delivery period			
	May-06	Jun-06	Jul-06	Aug-06
BNSF-GF	-\$129	\$17	\$83	\$156
Change from last week	-\$3	\$17	\$8	\$0
UP-Pool	\$4	\$6	\$56	\$153
Change from last week	\$3	-\$11	\$0	\$18

*Average premium/discount to tariff, \$/car-last week

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

Missing value = no bid quoted; GF = guaranteed freight; Pool = guaranteed pool

Sources: Transportation and Marketing Programs/AMS/USDA

Data from Atwood/ConAgra, Harvest States Co-op, James B. Joiner Co., Tradewest Brokerage Co.

Table 7--Tariff rail rates for unit and shuttle train shipments*

Effective date:

4/3/2006

	Origin Region	Destination Region	Rate/car	Rate/metric ton	Rate/bushel**
<u>Unit train*</u>					
Wheat	Chicago, IL	Albany, NY	\$1,861	\$20.51	\$0.56
	Kansas City, MO	Galveston, TX	\$2,020	\$22.27	\$0.61
	South Central, KS	Galveston, TX	\$2,450	\$27.01	\$0.74
	Minneapolis, MN	Houston, TX	\$3,020	\$33.29	\$0.91
	St. Louis, MO	Houston, TX	\$2,360	\$26.01	\$0.71
	South Central, ND	Houston, TX	\$4,149	\$45.73	\$1.24
	Minneapolis, MN	Portland, OR	\$3,963	\$43.68	\$1.19
	South Central, ND	Portland, OR	\$3,963	\$43.68	\$1.19
	Northwest, KS	Portland, OR	\$4,490	\$49.49	\$1.35
Corn	Chicago, IL	Richmond, VA	\$2,161	\$23.82	\$0.65
	Chicago, IL	Baton Rouge, LA	\$2,610	\$28.77	\$0.73
	Council Bluffs, IA	Baton Rouge, LA	\$2,470	\$27.23	\$0.69
	Kansas City, MO	Dalhart, TX	\$2,365	\$26.07	\$0.66
	Minneapolis, MN	Portland, OR	\$3,130	\$34.50	\$0.88
	Evansville, IN	Raleigh, NC	\$1,961	\$21.62	\$0.55
	Columbus, OH	Raleigh, NC	\$1,850	\$20.39	\$0.52
	Council Bluffs, IA	Stockton, CA	\$3,606	\$39.75	\$1.01
	Soybeans	Chicago, IL	Baton Rouge, LA	\$2,655	\$29.27
Council Bluffs, IA		Baton Rouge, LA	\$2,515	\$27.72	\$0.75
Minneapolis, MN		Portland, OR	\$3,610	\$39.79	\$1.08
Evansville, IN		Raleigh, NC	\$1,961	\$21.62	\$0.59
Chicago, IL		Raleigh, NC	\$2,561	\$28.23	\$0.77
<u>Shuttle Train*</u>					
Wheat	St. Louis, MO	Houston, TX	\$1,820	\$20.06	\$0.55
	Minneapolis, MN	Portland, OR	\$3,763	\$41.48	\$1.13
Corn	Fremont, NE	Houston, TX	\$2,124	\$23.41	\$0.59
	Minneapolis, MN	Portland, OR	\$3,024	\$33.33	\$0.85
Soybeans	Council Bluffs, IA	Houston, TX	\$2,412	\$26.59	\$0.72
	Minneapolis, MN	Portland, OR	\$3,170	\$34.94	\$0.95

*A unit train refers to shipments of at least 52 cars. Shuttle train rates are available for qualified shipments of more than 100 cars that meet railroad efficiency requirements.

**Approximate load per car = 100 short tons: corn 56 lbs./bu., wheat & soybeans 60 lbs./bu.

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

Table 8--Tariff rail rates for U.S. bulk grain shipments to Mexico

Effective date: 4/3/06

Commodity	Origin State	Border crossing region	Train size	Rate ¹	Rate/metric ton	Rate/bushel**
Wheat	KS	Brownsville, TX	Shuttle	\$2,851	\$29.13	\$0.79
	ND	Eagle Pass, TX	Unit	\$4,211	\$43.03	\$1.17
	OK	El Paso, TX	Shuttle	\$2,235	\$22.84	\$0.62
	OK	El Paso, TX	Unit	\$2,432	\$24.85	\$0.68
	AR	Laredo, TX	Unit	\$2,383	\$24.35	\$0.66
	IL	Laredo, TX	Unit	\$3,188	\$32.57	\$0.89
	MT	Laredo, TX	Shuttle	\$3,980	\$40.67	\$1.11
	TX	Laredo, TX	Shuttle	\$2,165	\$22.12	\$0.60
	MO	Laredo, TX	Shuttle	\$2,731	\$27.90	\$0.76
	WI	Laredo, TX	Unit	\$3,405	\$34.79	\$0.95
Corn	NE	Brownsville, TX	Shuttle	\$3,543	\$36.20	\$0.92
	NE	Brownsville, TX	Unit	\$3,623*	\$37.02	\$0.94
	IA	Eagle Pass, TX	Unit	\$3,773	\$38.55	\$0.98
	MO	Eagle Pass, TX	Shuttle	\$3,364*	\$34.37	\$0.87
	NE	Eagle Pass, TX	Shuttle	\$3,764*	\$38.46	\$0.98
	IA	Laredo, TX	Shuttle	\$3,696	\$37.76	\$0.96
Soybean	IA	Brownsville, TX	Shuttle	\$3,318	\$33.90	\$0.92
	MN	Brownsville, TX	Shuttle	\$3,614	\$36.93	\$1.00
	NE	Brownsville, TX	Shuttle	\$3,127	\$31.95	\$0.87
	NE	Eagle Pass, TX	Shuttle	\$3,203	\$32.73	\$0.89
	IA	Laredo, TX	Unit	\$3,357	\$34.30	\$0.93

A unit train refers to shipments of at least 52 cars. Shuttle train are available for qualified shipments of more than 100 cars that meet railroad efficiency requirements.

¹Rates are based upon published tariff rates for high-capacity rail cars.

*High-capacity rate not available, rate estimated using published low-capacity tariff rate x 1.08

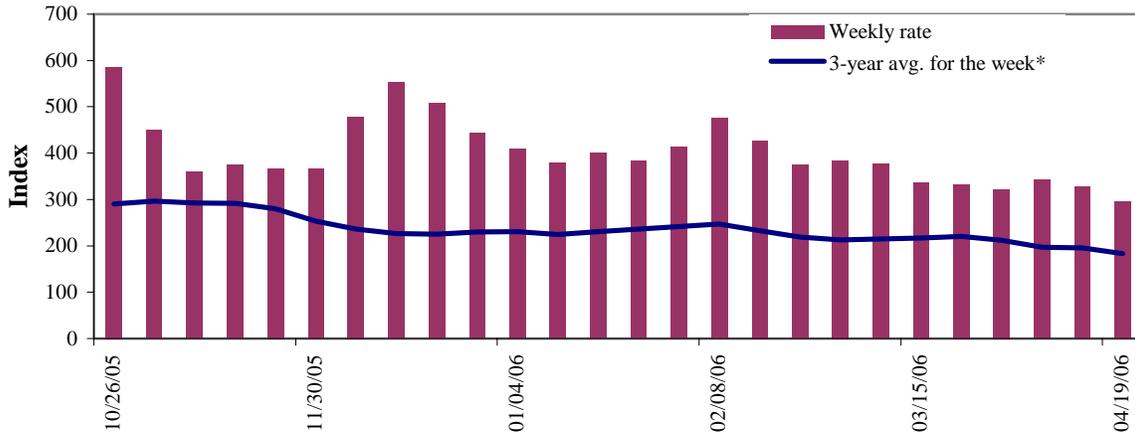
**Approximate load per car = 97.87 metric tons: Corn 56 lbs/bu, Wheat & Soybeans 60 lbs/bu

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

Barge Transportation

Figure 5

Illinois River barge rate index - quotes



Note: Index = percent of tariff rate; *4-week moving average
 Source: Transportation & Marketing Programs/AMS/USDA

The **Illinois River barge rate index** averaged 183 percent of the **benchmark tariff rates** between 1999 and 2001, based on weekly market quotes. The **index**, along with **rate quotes** and **futures market bids** are indicators of grain transport supply and demand.

Table 9--Barge rate quotes: southbound barge freight

Location	4/19/2006	4/12/2006	May '06	July '06
Twin Cities	363	374	368	385
Mid-Mississippi	315	337	321	338
Illinois River	295	328	305	337
St. Louis	215	267	236	290
Lower Ohio	290	253	249	296
Cairo-Memphis	215	238	226	280

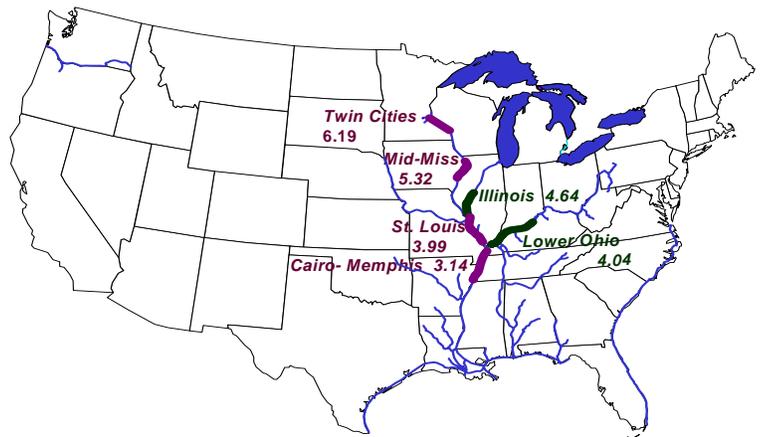
Index = percent of tariff, based on 1976 tariff benchmark rate
 Source: Transportation & Marketing Programs/AMS/USDA

Figure 6
Benchmark tariff rates

Calculating barge rate per ton:

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

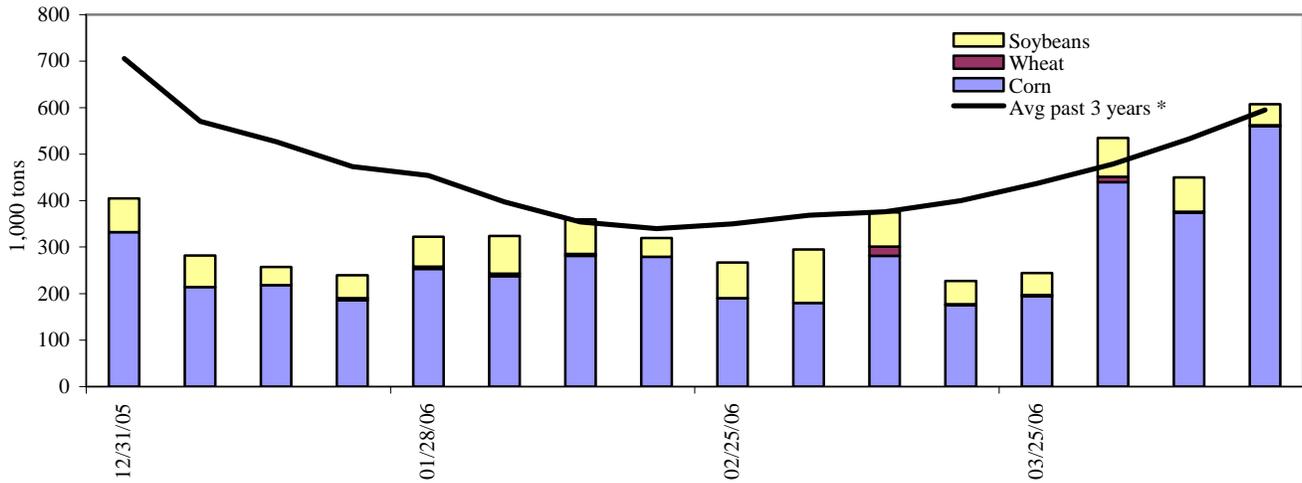
Select applicable index from market quotes included in tables on this page. The 1976 benchmark rates per ton are provided in map (see figure 6).



Note: The Illinois barge rate is for Beardstown, IL, La Grange Lock & Dam (L&D 8).

Figure 7

Barge movements on the Mississippi River (Locks 27 - Granite City, IL)



* 4-week moving average

Source: Transportation & Marketing Programs/AMS/USDA

Table 10--Barge grain movements (1,000 tons)

Week ending 4/15/2006	Corn	Wheat	Soybean	Other	Total
Mississippi River					
Rock Island, IL (L15)	217	0	21	0	238
Winfield, MO (L25)	306	2	23	0	331
Alton, IL (L26)	536	2	43	0	580
Granite City, IL (L27)	560	2	45	0	607
Illinois River (L8)	119	0	13	3	135
Ohio River (L52)	103	3	14	0	119
Arkansas River (L1)	0	11	7	5	23
2006 YTD	6,193	367	2,040	265	8,865
2005 YTD	5,501	429	2,571	243	8,744
2006 as % of 2005 YTD	113	86	79	109	101
Total 2005	23,761	1,620	7,276	731	33,388

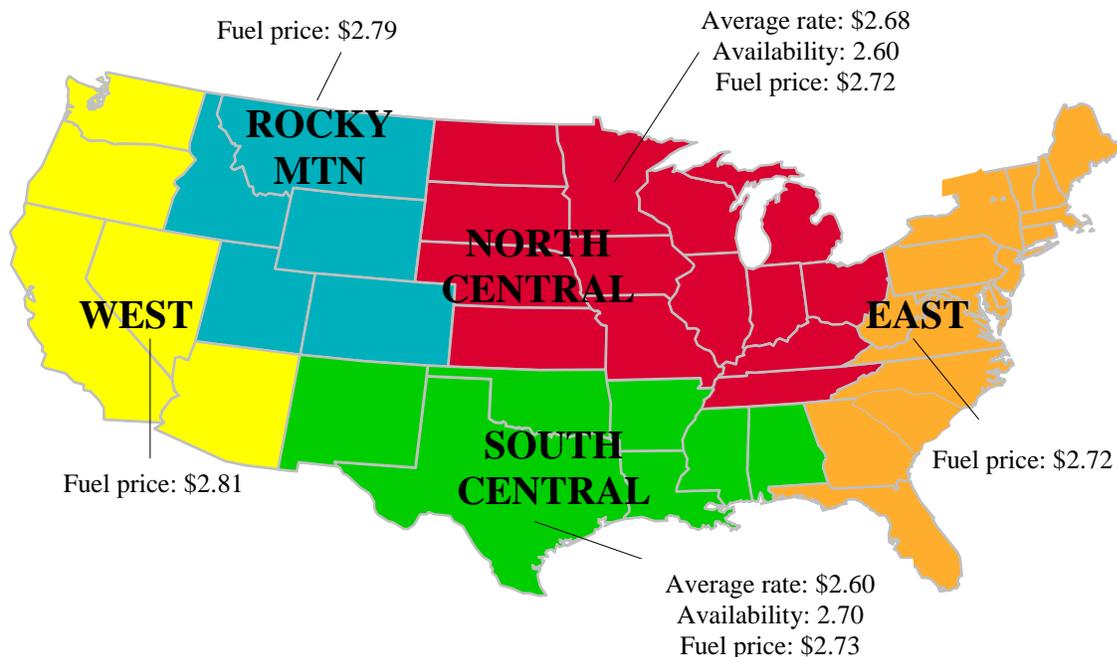
YTD (year-to-date) and calendar year total includes Miss/27, Ohio/52, and Ark/1; "Other" refers to oats, barley, sorghum, and rye.

Source: U.S. Army Corp of Engineers (www.mvr.usace.army.mil/mvrimi/omni/webbrpts/default.asp)

Note: Total may not add exactly, due to rounding

Truck Transportation

Figure 8
U.S. grain truck market advisory, 4th quarter 2005*



*Average rate per loaded mile, based on truck rates for trips of 25, 100, and 200 miles

Note: Fuel prices are a quarterly average (unit per gallon)

Fuel price data source: Energy Information Administration, U.S. Department of Energy, www.eia.doe.gov

Table 11--U.S. grain truck market overview, 4th quarter 2005

Region	25 miles	100 miles	200 miles	Truck availability	Truck activity	Future truck activity
	¹ Rate per mile			<i>Rating compared to same quarter last year</i>		
				1=Very easy to 5=Very difficult	1=Much lower to 5=Much higher	
National average²	3.31	2.46	2.26	2.6	2.9	2.9
North Central region	3.23	2.51	2.29	2.6	3.0	3.0
Rocky Mountain	4.58	2.35	1.95	2.8	3.0	3.0
South Central	3.00	2.42	2.39	2.7	2.5	2.7
West	n/a	n/a	n/a	2.0	3.5	3.0

¹Rates are based on trucks with 80,000 lb gross vehicle weight limit

²National average includes: AL, AR, CO, IA, ID, IL, IN, KS, LA, MN, MO, MS, MT, ND, NE, OH, OK, OR, SD, TX, WA, WI, and WY.

Source: Transportation and Marketing Programs/AMS/USDA

The **weekly diesel price** provides a proxy for trends in U.S. truck rates. Diesel fuel is a significant expense for truck grain movements, accounting for 37 percent of the estimated variable cost.

Table 12--Retail on-highway diesel prices*, week ending 4/24/06 (US\$/gallon)

Region	Location	Price	Change from	
			Week ago	Year ago
I	East Coast	2.888	0.100	0.601
	New England	2.961	0.096	0.548
	Central Atlantic	2.978	0.102	0.596
	Lower Atlantic	2.843	0.100	0.609
II	Midwest ¹	2.847	0.112	0.617
III	Gulf Coast ²	2.817	0.092	0.586
IV	Rocky Mountain	2.903	0.147	0.532
V	West Coast	3.026	0.145	0.477
	California	3.103	0.170	0.533
Total	U.S.	2.876	0.111	0.587

*Diesel fuel prices include all taxes.

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

¹Same as North Central

²Same as South Central

Grain Exports

Table 13--U.S. export balances (1,000 metric tons)

Week ending 1/	Wheat					All wheat	Corn	Soybeans	Total
	HRW	SRW	HRS	SWW	DUR				
4/13/2006	1,300	269	1,029	611	220	3,430	8,888	1,848	14,166
This week year ago	1,358	189	1,273	489	130	3,438	7,394	2,166	12,998
Cumulative exports-crop year 2/									
2005/06 YTD	9,489	1,789	6,513	3,673	670	22,133	30,295	19,987	72,415
2004/05 YTD	8,364	3,076	6,928	4,386	604	23,357	28,177	25,484	77,018
2005/06 as % of 2004/05	113	58	94	84	111	95	108	78	94
2004/05 Total	9,407	3,217	8,083	4,773	686	26,117	44,953	29,878	100,948
2003/04 Total	12,697	3,785	6,928	4,895	1,053	29,359	47,704	24,108	101,171

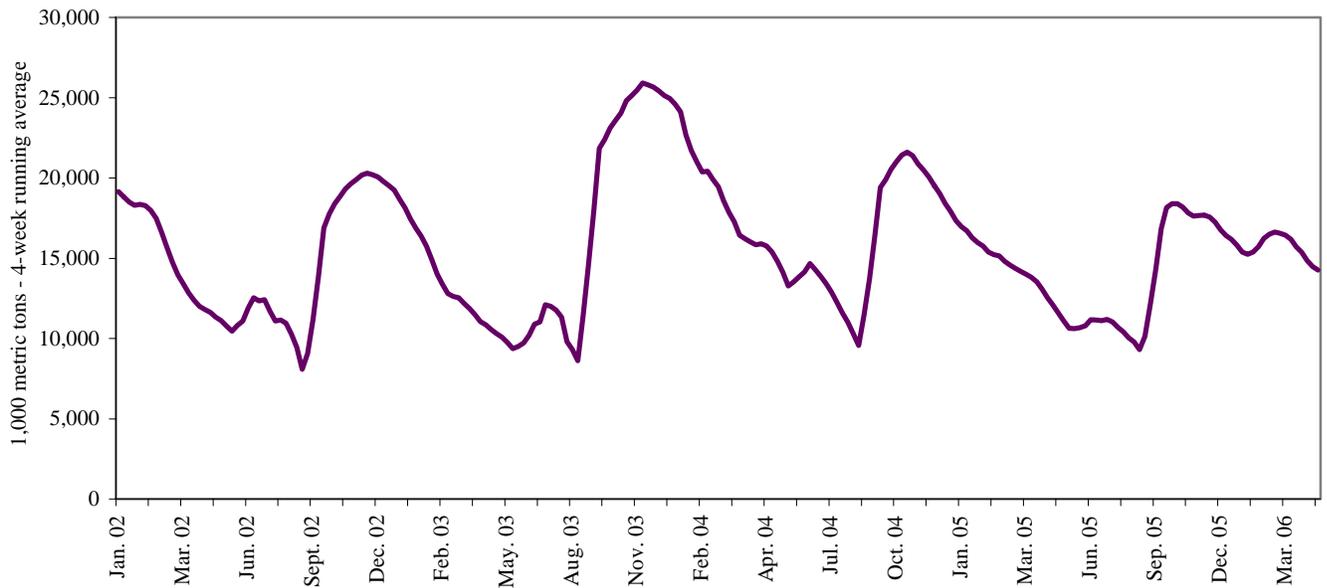
Note: YTD = year-to-date. Crop year: wheat = 6/01-5/31, corn & soybeans = 9/01-8/31, 1/ = Current unshipped export sales to date

2/ = Shipped export sales to date

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

Figure 9

U.S. grain, unshipped export balance, including wheat, corn, and soybean sales



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

Table 14--Select U.S. port regions - grain inspections for export (1,000 metric tons)

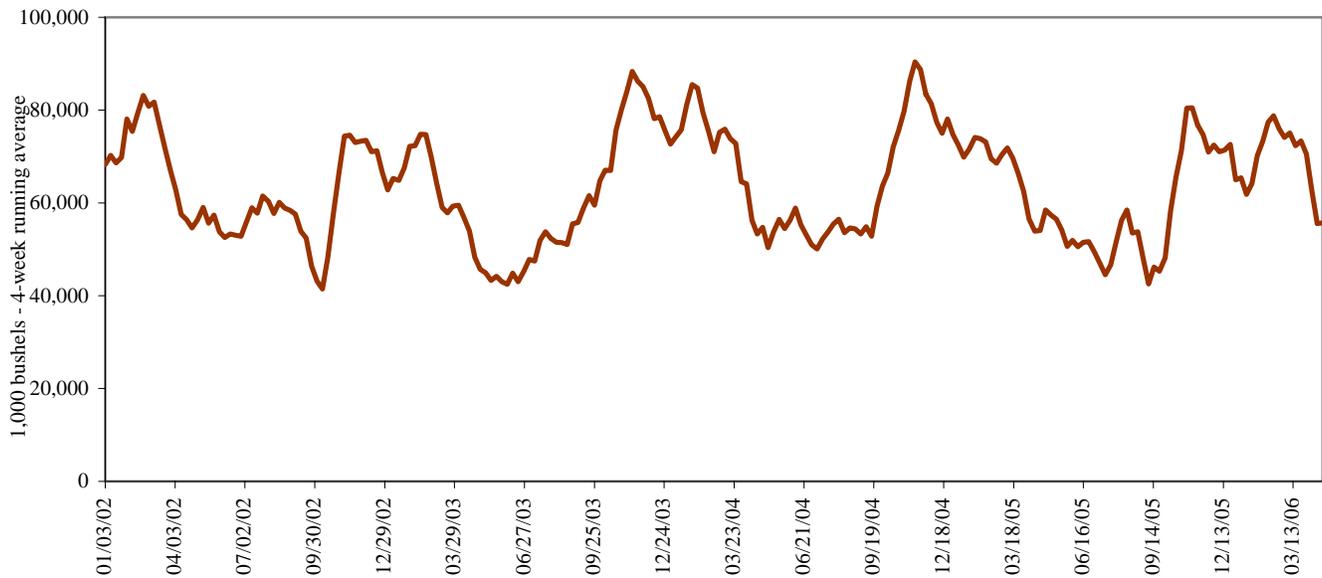
Week ending	Pacific Region			Mississippi Gulf			Texas Gulf			Port Region total		
	Wheat	Corn	Soybeans	Wheat	Corn	Soybeans	Wheat	Corn	Soybeans	Pacific	Mississippi	Texas
04/20/06	269	244	0	41	794	202	105	107	0	513	1,037	212
2006 YTD*	3,357	2,870	2,018	1,305	10,463	5,879	2,311	744	15	8,245	17,647	3,069
2005 YTD	3,493	2,735	2,726	1,699	8,364	6,710	1,871	236	6	8,954	16,774	2,112
2006 as % of 2005	96	105	74	77	125	88	124	315	260	92	105	145
2005 Total *	10,801	10,104	6,225	4,643	28,130	14,793	7,743	810	36	27,130	47,567	8,589

Source: Grain Inspection, Packers and Stockyards Administration/USDA (www.gipsa.usda.gov); YTD: year-to-date; *includes weekly revisions

The United States exports approximately one-quarter of the grain it produces. On average, it 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 49 percent of these U.S. export grain shipments departed through the Mississippi Gulf region in 2005.

Figure 10

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



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

Ocean Transportation

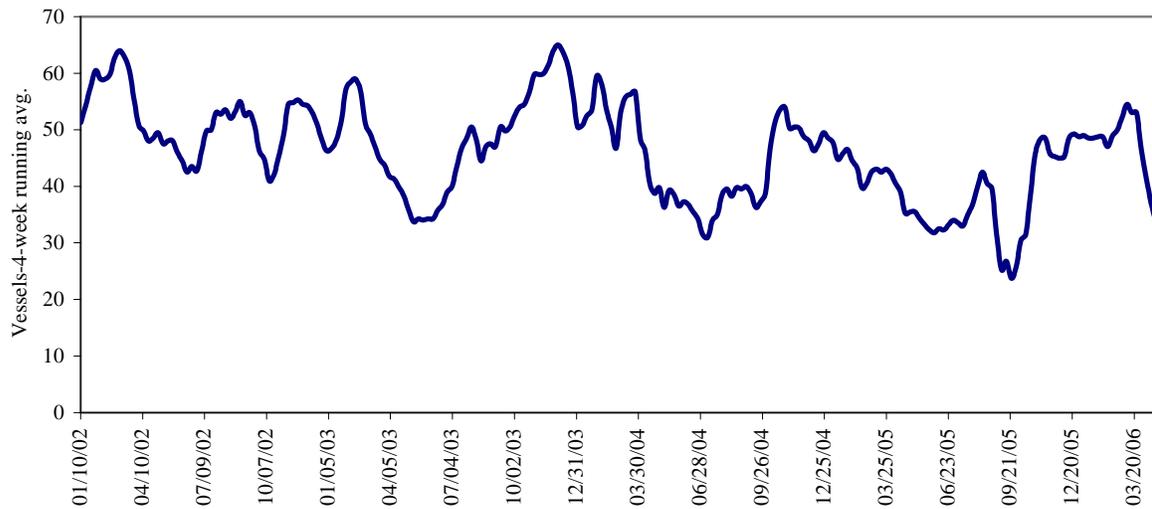
Table 15--Weekly port region grain ocean vessel activity (number of vessels)

Date	Gulf			Pacific Northwest	Vancouver B.C.
	In port	Loaded 7-days	Due next 10-days	In port	In port
4/20/2006	19	34	49	10	9
4/13/2006	20	33	52	8	4
2005 range	(11..57)	(10..56)	(18..76)	(2..16)	(0..17)
2005 avg.	27	39	53	9	7

Source: Transportation & Marketing Programs/AMS/USDA

Figure 11

Gulf Port grain vessel loading (past 7 days)



Source: Transportation & Marketing Programs/AMS/USDA

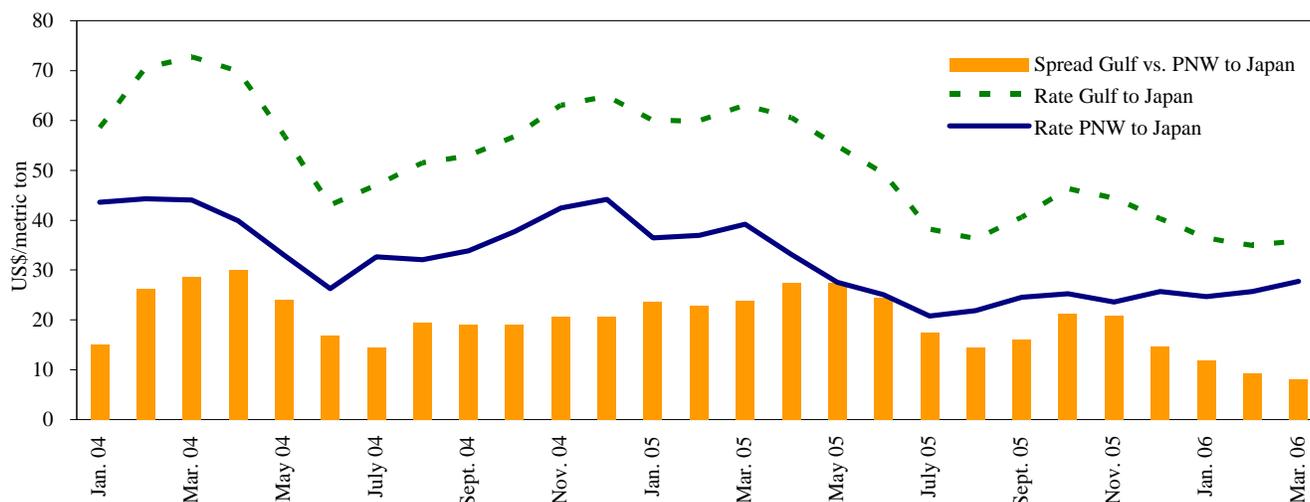
Table 16--Quarterly ocean freight rates (average rates & percentage changes) (US\$/metric ton)

Countries/ regions	2006 1 st qtr	2005 1 st qtr	Percent change	Countries/ regions	2006 1 st qtr	2005 1 st qtr	Percent change
Gulf to				Pacific NW to			
Japan	37.45	60.18	-38	Japan	---	---	---
China	30.92	57.50	-46	Argentina/Brazil to			
N. Africa	---	48.00	---	China	27.50	---	---
				N. Africa	---	59.25	---
				Mediterranean	29.00	---	---
				N. Europe	33.00	---	---

Source: Maritime Research, Inc. (www.maritime-research.com)

Figure 12

Grain vessel rates, U.S. to Japan



Source: Baltic Exchange (www.balticexchange.com)

Table 17--Ocean freight rates for selected shipments, week ending 4/22/06

Export region	Import region	Grain	Month	Volume loads (metric tons)	Freight rate (\$/metric ton)
U.S. Gulf	China	Hvy Grain	Feb 20/28	55,000	31.00
U.S. Gulf	N. China	Hvy Grain	Feb 20/28	55,000	29.75
United Kingdom	Thailand	Wheat	Feb 25/Mar 10	42,000	21.50
PNW	Pakistan*	Soybeans	Feb 16/27	10,000	59.45
Australia	Germany	Canola	Apr 15/30	55,000	34.00
Brazil	N. China	Hvy Grain	Feb 10/18	58,000	27.50
Brazil	N. France	Grains	Mar 12/20	25,000	26.00
River Plate	Poland	Grains	Feb 21/26	30,000	36.00
River Plate	Poland	Grains	Apr 1/10	25,000	34.75

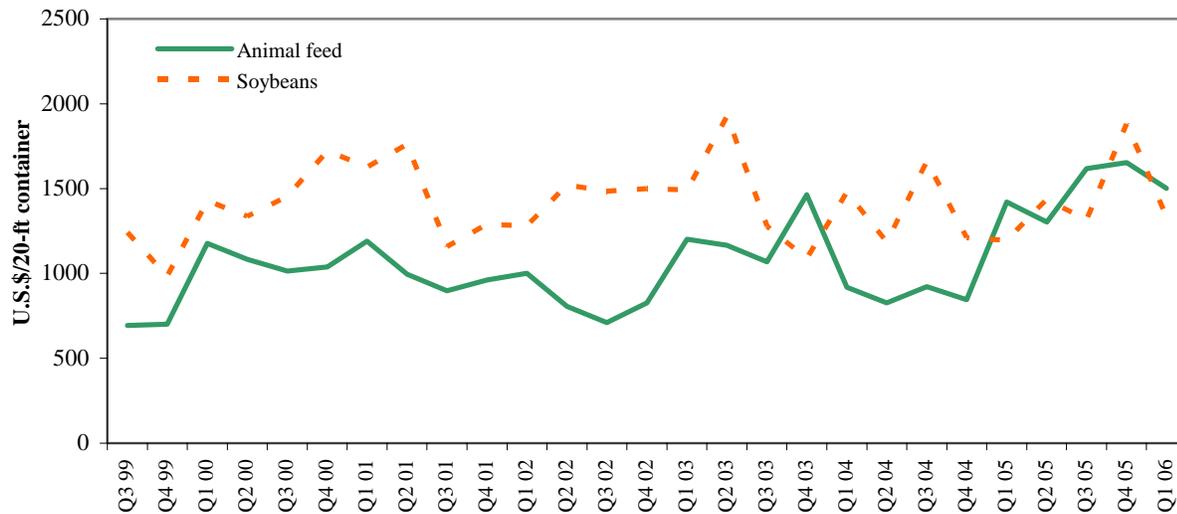
Rates shown are for metric ton (2,204.62 lbs. = 1 metric ton), F.O.B., except where otherwise indicates; op = option

*75 percent of food aid from the United States is required to be shipped on U.S. flag vessels. The vessels are limited in availability resulting in higher rates. In addition, destinations receiving food aid generally lack adequate port unloading facilities, requiring the vessel to remain in port for a longer duration than normal.

Source: Maritime Research Inc. (www.maritime-research.com)

Figure 13

Ocean Rates¹ for Containerized Shipments to Selected Asian Countries



¹Rates are weighted by shipping line market share and destination country.

Countries include: Animal Feed: Busan-Korea (7%), Kaohsiung-Taiwan (42%), Tokyo-Japan (28%), Hong Kong (13%), Bangkok-Thailand (10%) and soybeans: Busan-Korea (1%), Keelung-Taiwan (81%), Tokyo-Japan (17%), Bangkok-Thailand (<1%), Hong Kong (1%)

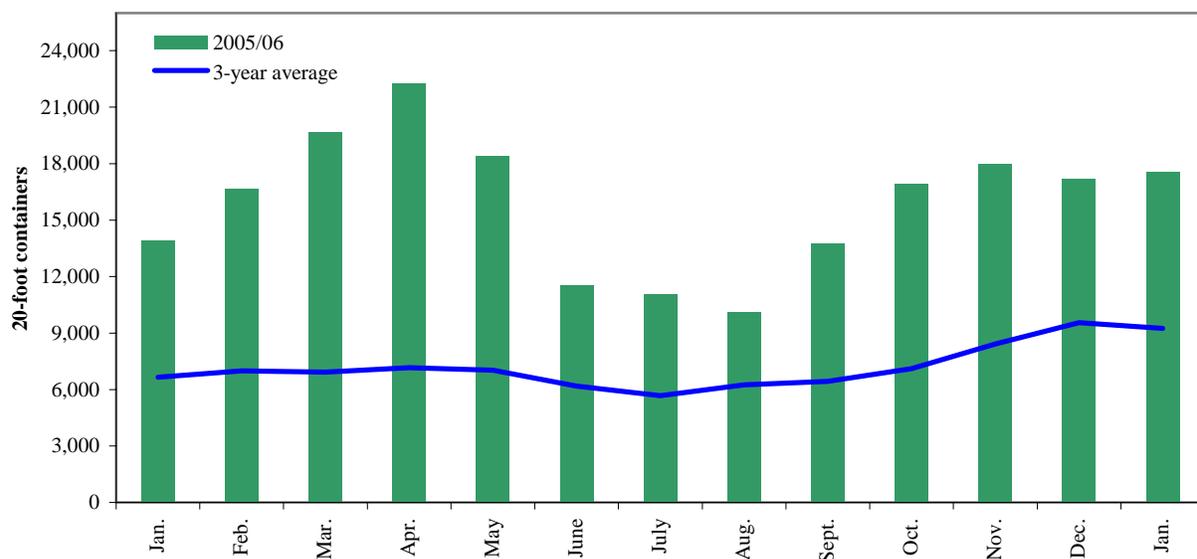
Source: Ocean Rate Bulletin, Quarter 1, 2006, Transportation & Marketing Programs/AMS/USDA

Container ocean freight rates – average rate per twenty-foot equivalent unit (TEU) weighted by shipping line market share and trade route.

During 2005, containers were used to transport 4 percent of total U.S. grain exported, and 5 percent of total U.S. grain exported to Asia.

Figure 14

Monthly Shipments of Containerized Grain to Asia

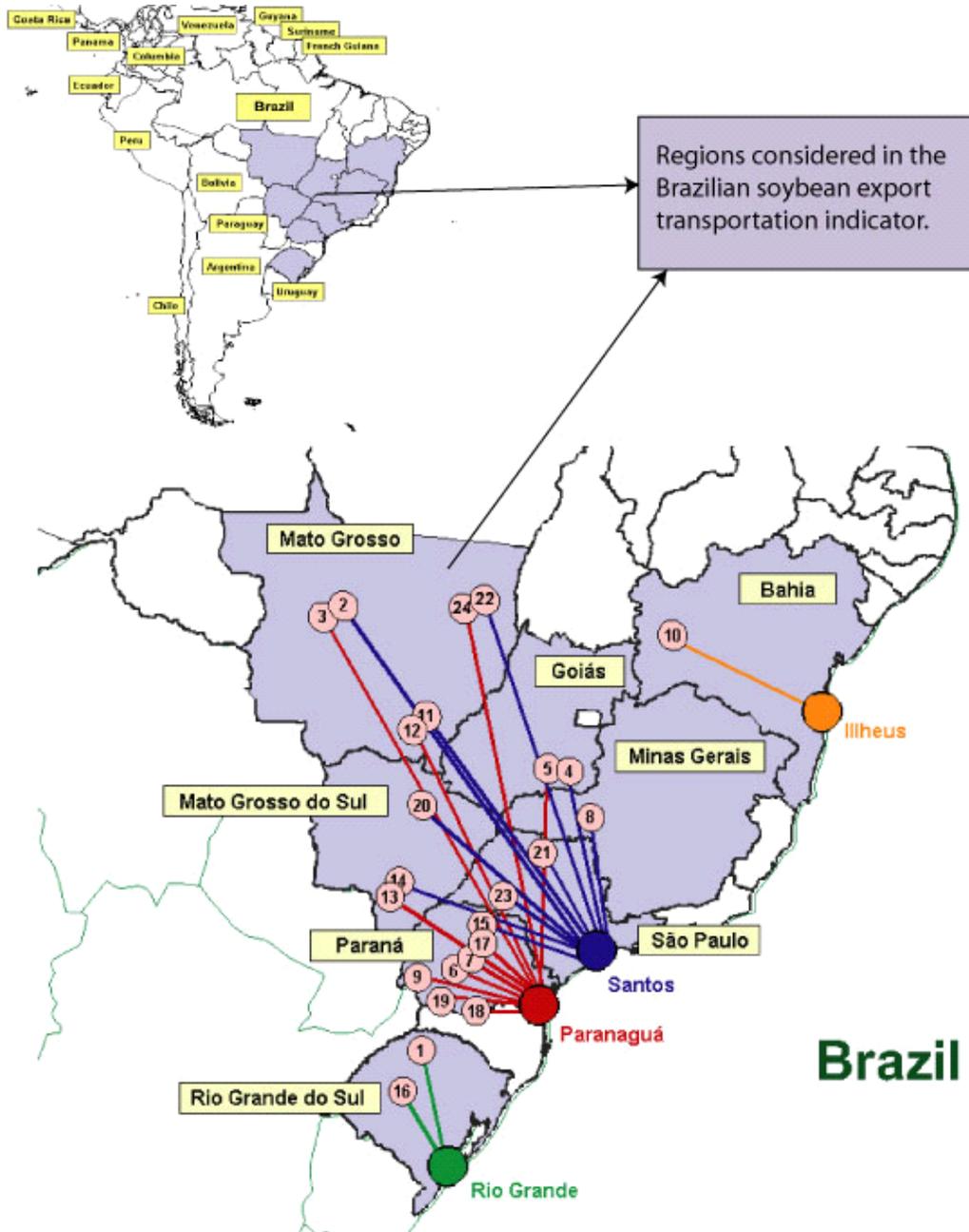


Source: Port Import Export Reporting Service (PIERS), *Journal of Commerce*

Note: PIERS data is available with a lag of approximately 40 days

Brazil Transportation

Figure 15
Routes and Regions considered in the Brazilian soybean export transportation indicator¹



¹Regions comprised 84 percent of Brazilian soybean production, 2003
Source: ESALQ/USP (University of São Paulo, Brazil) and USDA/AMS

Table 18--Truck rates for selected Brazilian soybean export transportation routes, 4th quarter 2005

Route #	Origin ¹ (reference city)	Destination	Distance (miles) ²	Weight(%) ³	Freight price (per 100 miles) ⁴
1	Northwest RS ⁵ (Cruz Alta)	Rio Grande	288	16.6	4.58
2	North MT(Sorriso)	Santos	1190	10.1	6.94
3	North MT(Sorriso)	Paranaguá	1262	9.5	6.41
4	South GO(Rio Verde)	Santos	587	7.0	7.25
5	South GO(Rio Verde)	Paranaguá	726	5.6	5.74
6	North Center PR(Londrina)	Paranaguá	268	4.4	7.93
7	Western Center PR(Mamborê)	Paranaguá	311	3.9	6.41
8	Triangle MG(Uberaba)	Santos	339	3.8	9.98
9	West PR(Assis Chateaubriand)	Paranaguá	377	3.7	6.34
10	West Extreme BA(São Desidério)	Ilhéus	544	3.6	7.87
11	Southeast MT(Primavera do Leste)	Santos	901	3.6	6.97
12	Southeast MT(Primavera do Leste)	Paranaguá	975	3.3	6.22
13	Southwest MS(Maracaju)	Paranaguá	612	3.1	5.79
14	Southwest MS(Maracaju)	Santos	652	2.9	6.24
15	West PR(Assis Chateaubriand)	Santos	550	2.5	5.85
16	Western Center RS(Tupanciretã)	Rio Grande	273	2.4	5.74
17	Southwest PR(Chopinzinho)	Paranaguá	291	2.3	9.17
18	Eastern Center PR(Castro)	Paranaguá	130	2.3	9.96
19	South Center PR(Guarapuava)	Paranaguá	204	2.1	8.67
20	North Center MS(São Gabriel do Oeste)	Santos	720	2.0	5.62
21	Ribeirão Preto SP(Guairá)	Santos	314	1.5	8.27
22	Northeast MT(Canarana)	Santos	950	1.4	7.87
23	Assis SP(Palmital)	Santos	285	1.2	7.85
24	Northeast MT(Canarana)	Paranaguá	1075	1.2	6.96
	Average		626	100	6.64

¹Although each origin region comprises several cities, the main city is considered as a reference to establish the freight price

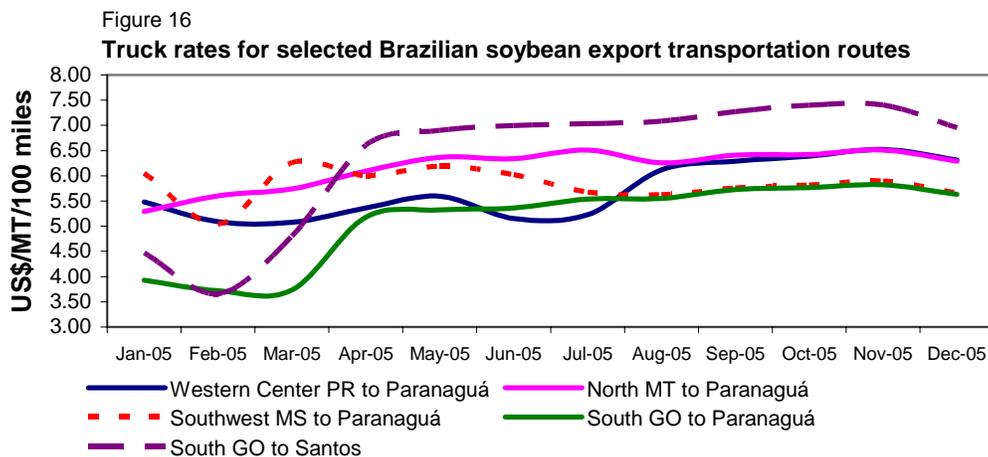
²Distance from the main city of the considered region to the mentioned ports

³The weight is directly proportional to the amount of production in each region

⁴US\$ per metric ton (average monthly exchange rate from "Banco Central do Brasil" was used to convert Brazilian reais to the U.S. dollar)

⁵RS = Rio Grande Do Sul, MT= Mato Grosso, GO = Goiás, PR = Paraná, MG = Minas Gerais, BA = Bahia, MS = Mato Grosso Do Sul, SP = São Paulo

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



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

Table 19--Monthly Brazilian soybean export truck transportation cost index

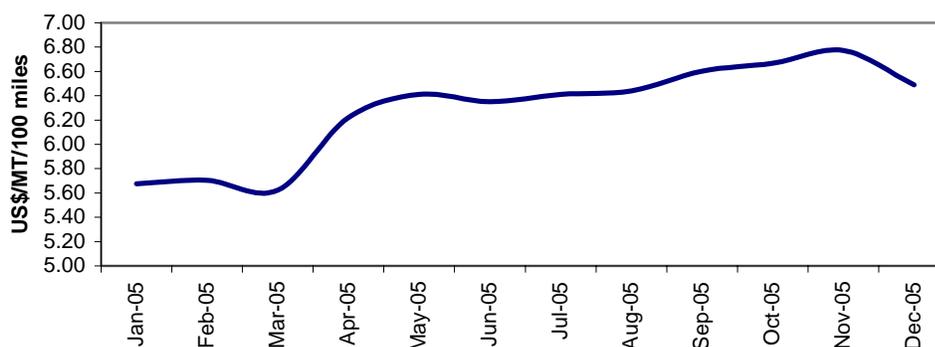
Month	Freight price* (per 100 miles)	Index variation (%) (Base: prior month)	Index value (Base: Jan. 05 = 100)
Jan. 05	5.67		100.00
Feb. 05	5.71	0.5	100.54
Mar. 05	5.62	-1.5	99.08
Apr. 05	6.22	10.6	109.61
May 05	6.41	3.1	112.96
Jun. 05	6.35	-0.9	111.90
Jul. 05	6.41	1.0	112.99
Aug. 05	6.44	0.4	113.46
Sep. 05	6.60	2.5	116.36
Oct. 05	6.67	1.0	117.52
Nov. 05	6.77	1.5	119.33
Dec. 05	6.49	-4.2	114.34

*weighted average and quoted in US\$ per metric ton

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

Figure 17

Brazilian soybean export truck transportation weighted average prices, 2005



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

Table 20--Quarterly ocean freight rates for shipping soybeans from selected Brazilian ports to Hamburg, Germany (US\$/metric ton)*

Ports	2005 1st qtr	2005 2nd qtr	2005 3rd qtr	2005 4th qtr
Santos	45.53	45.84	44.54	56.73
Paranagua	44.64	44.84**	43.54	55.73
Rio Grande	44.20	44.39	43.04	55.23

*correspond to the average actual values negotiated between shippers and carriers and weighted according to the magnitude of the shipped volumes

Source: Sistema de Informações de Fretes, SIFRECA, ESALQ/USP (University of São Paulo, Brazil)

**Revised figure

Contacts and Links

Contact Information

Coordinator		
Surajudeen (Deen) Olowolayemo	surajudeen.olowolayemo@usda.gov	(202) 690-1328
Ethel Mitchell	ethel.mitchell@usda.gov	(202) 720-1378
Grain Transportation Indicators		
Surajudeen (Deen) Olowolayemo	surajudeen.olowolayemo@usda.gov	(202) 690-1328
Rail		
Marvin Prater	marvin.prater@usda.gov	(202) 690-6290
Johnny Hill	johnny.hill@usda.gov	(202) 720-4211
Barge Transportation		
Karl Hacker	karl.hacker@usda.gov	(202) 690-0152
Nicholas Marathon	nick.marathon@usda.gov	(202) 690-0331
Truck Transportation		
Karl Hacker	karl.hacker@usda.gov	(202) 690-0152
Grain Exports		
Johnny Hill	johnny.hill@usda.gov	(202) 720-4211
Ocean Transportation		
Surajudeen (Deen) Olowolayemo (Freight rates and vessels)	surajudeen.olowolayemo@usda.gov	(202) 690-1328
April Taylor (Container rates)	april.taylor@usda.gov	(202) 690-1326

Subscription Information: To subscribe to the GTR for a weekly email copy, please contact Deen Olowolayemo at surajudeen.olowolayemo@usda.gov or 202-690-1328 (1303) (*printed copies are also available upon request*).

Related Websites

Agricultural Container Indicators
Ocean Rate Bulletin

<http://www.ams.usda.gov/tmd2/agci/>
<http://www.ams.usda.gov/tmd/Ocean/index.asp>

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation or marital or family status. (Not all prohibited bases apply to all programs). Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact the USDA's TARGET Center at (202)720-2600 (Voice and TDD).

To file a complaint of discrimination, write USDA, Director of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410, or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.