



Grain Transportation Report

*A weekly publication of the
Transportation and Marketing Programs/Transportation Services Branch*

Coordinator: [Deen Olowolayemo](#) (202) 690-1328

www.ams.usda.gov/tmdtsb/grain

March 18, 2004

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Mar. 21-24, '04	California Seed Association - Annual Meeting	Dana Point, CA	916-441-2251
Mar. 23, '04	Second Annual Soybean Seed Quality Conference	La Crosse, WI	605-692-7611
Mar. 25-28, '04	NGFA 107th Annual Convention	Tucson, AZ	202-289-0873
Mar. 31-Apr. 3, '04	California Grain & Feed Association Convention	Palm Springs, CA	760-320-6868
Apr. 14-16, '04	TGFA Southwest Grain & Feed Conference & Expo	Ft. Worth, TX	817-336-7875
Apr. 19-20, '04	Kansas Grain and Feed Association Annual Meeting	Overland Park, KS	785-234-0461
Apr. 22-25	7th International Feed Congress and Exhibition	Antalya, Turkey	90-312-479-9591
May 4-5, '04	NGFA Seminar on Trading, Trade Rules and Dispute Resolution	St. Louis, MO	202-289-0873
May 13-14, '04	Seed Trade Association of Arizona-Annual Convention	Phoenix, AZ	520-318-7271
May 19-20, '04	Distillers Grains Symposium	Louisville, KY	502-852-1575
May 24-26, '04	World Seed Congress 2004	Berlin, Germany	
June 7, '04	10th International Symposium on PreHarvest Sprouting in Cereals	Norfolk, UK	J. English/ H.Freeman (+1603) 450794
June 7-9, '04	Corn Utilization & Technology Conference	Indianapolis, IN	636-733-9004 Ext 119
June 10-12, '04	Colorado Grain & Feed Association Convention	Denver, CO	303-438-6600
June 13-15, '04	14th Annual Ethanol Producers and Consumers Ethanol Conference	Helena, MT	406-785-3722

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Grain Transportation Indicators

For more information contact: [Deen Olowolayemo](mailto:Deen.Olowolayemo@AMS.USDA) (202) 690-1328

Table 1--Grain transport cost indicators*

Week ending	Truck	Rail	Barge	Ocean	
				Gulf	Pacific
03/17/04	109	220	84	328	322
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)

Source: Transportation & Marketing Programs/AMS/USDA

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

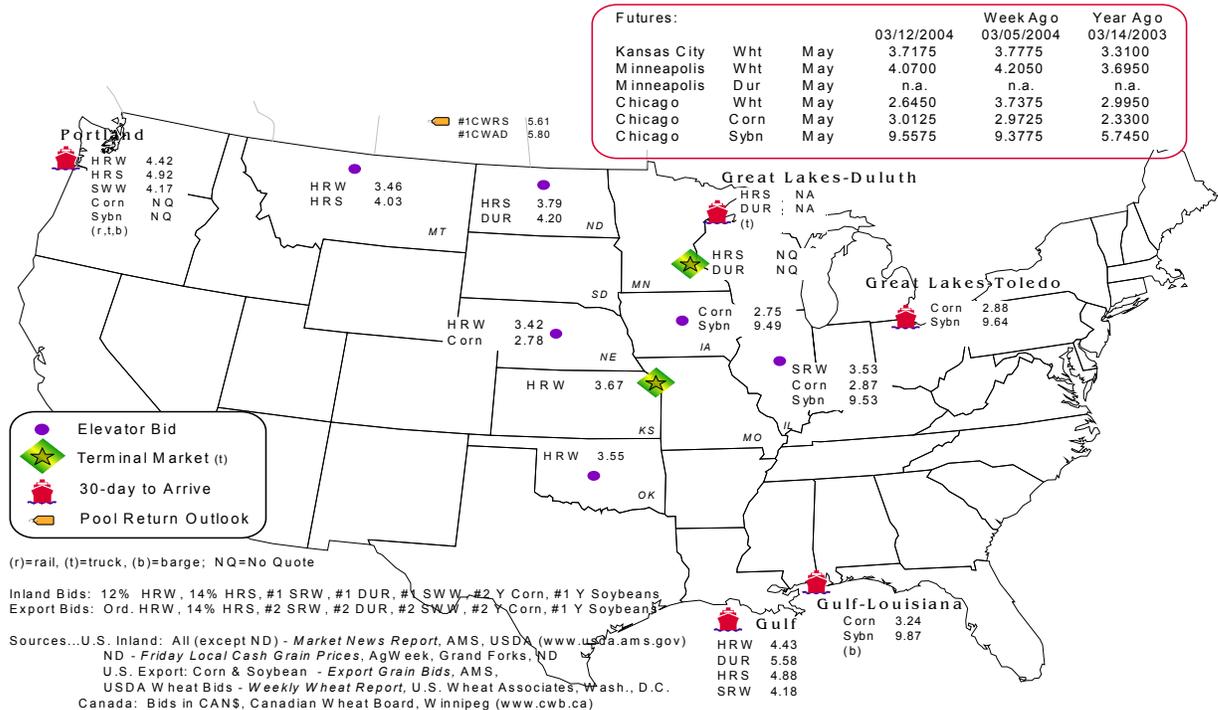
Commodity	Origin--destination	3/12/2004	3/5/2004
Corn	IL--Gulf	-0.37	-0.38
Corn	NE--Gulf	-0.46	-0.47
Soybean	IA--Gulf	-0.38	-0.33
HRW	KS--Gulf	-0.76	-0.82
HRS	ND--Portland	-1.13	-1.24

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

For more information contact: [Marvin Prater](#) (202) 690-6290 or [Johnny Hill](#) (202) 720-4211

Table 3--Rail deliveries to port (carloads)*

Week ending	Mississippi Gulf	Texas Gulf	Pacific Northwest	Atlantic & East Gulf	Total
3/10/2004 ^P	164	2,590	5,078	88	7,920
3/3/2004 ^r	271	2,058	4,887	52	7,268
2004 YTD	2,001	25,773	42,734	2,799	73,307
2003 YTD	6,829	11,126	33,046	6,508	57,509
2004 as % of 2003	29	232	129	43	127
Total 2003**	14,934	88,118	150,530	20,509	274,091
Total 2002	10,937	84,625	111,832	20,842	228,236

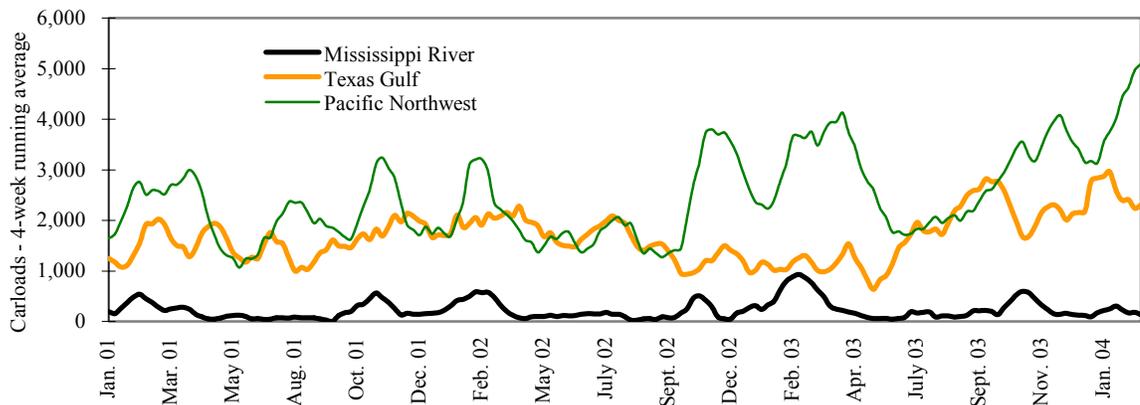
(*) Incomplete Data; (**) Excludes 53rd week; YTD = year-to-date; p = preliminary data; r = revised data

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

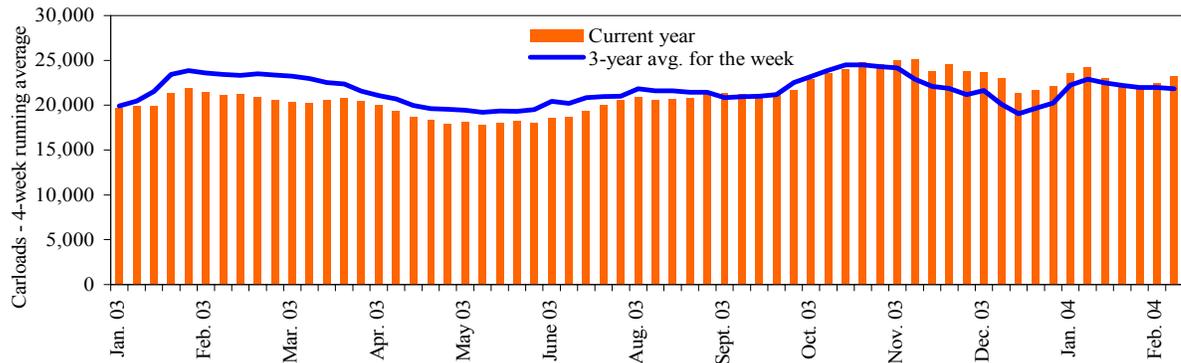
Rail deliveries to port



Source: Transportation & Marketing Programs/AMS/USDA

Figure 3

Total weekly U.S. grain car loadings for Class I railroads



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
03/06/04	2,697	3,179	9,741	536	6,840	22,993	4,488	3,444
This week last year	2,750	3,372	7,309	284	5,903	19,618	3,643	3,230
2004 YTD	26,797	31,725	85,413	5,500	60,161	209,596	40,987	30,986
2003 YTD	26,595	29,544	71,709	3,229	59,467	190,544	29,568	30,196
2004 as % of 2003	101	107	119	170	101	110	139	103
Total 2003*	146,395	171,260	416,371	24,506	336,079	1,094,611	197,993	198,185

Source: Association of American Railroads (www.aar.org); YTD = year-to-date; * Excludes 53rd week

Table 5--Rail car auction offerings (\$/car)*

Delivery for:	Apr. 04	May 04	June 04
BNSF ¹			
COT/N. grain	no offer	no offer	no offer
COT/S. grain	no offer	no offer	no offer
UP ²			
GCAS/Region 1	no offer	no offer	\$172
GCAS/Region 2	no offer	\$51	\$86

*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: ID, 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.

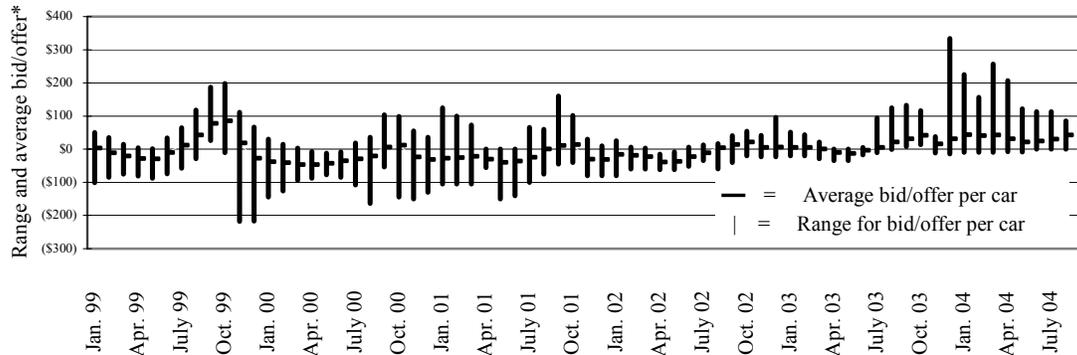
Region 2 includes: CO, IA, KS, MN, NE, WY, and Kansas City and St. Joseph, MO.

Source: Transportation & Marketing Programs/AMS/USDA

Rail service may be ordered directly from the railroad via **auction** for guaranteed service or tariff for nonguaranteed service or through the secondary 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 (\$/car)*

Week ending	Delivery period			
	Apr. 04	May 04	June 04	July 04
BNSF-GF				
3/12/2004	\$87	\$46	\$48	\$54
Change from last week	-\$13	-\$22	-\$7	-\$6
UP-Pool				
3/12/2004	\$163	\$119	\$83	\$83
Change from last week	-\$44	-\$3	-\$15	\$0

*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:					
3/1/2004					
	Origin	Destination	Rate/car	Rate/metric ton	Rate/bushel**
<u>Unit train*</u>					
Wheat	Minneapolis, MN	Houston, TX	\$2,020	\$22.27	\$0.61
	Kansas City, MO	Galveston, TX	\$1,820	\$20.06	\$0.55
	Minneapolis, MN	Portland, OR	\$4,148	\$45.72	\$1.24
	St. Louis, MO	Houston, TX	\$1,945	\$21.44	\$0.58
	Kansas City, MO	Laredo, TX	\$2,280	\$25.13	\$0.68
	Chicago, IL	Albany, NY	\$1,834	\$20.22	\$0.55
	Chicago, IL	Richmond, VA	\$1,961	\$21.62	\$0.59
Corn	Minneapolis, MN	Portland, OR	\$3,240	\$35.71	\$0.91
	Chicago, IL	Baton Rouge, LA	\$2,736	\$30.16	\$0.77
	Council Bluffs, IA	Baton Rouge, LA	\$2,170	\$23.92	\$0.61
	Evansville, IN	Raleigh, NC	\$1,841	\$20.29	\$0.52
	Council,Bluffs, IA	Stockton, CA	\$3,496	\$38.54	\$0.98
	Kansas City	Dalhart, TX	\$1,745	\$19.24	\$0.49
	Columbus, OH	Raleigh, NC	\$1,750	\$19.29	\$0.49
	Des Moines, IA	Laredo, TX	\$2,930	\$32.30	\$0.82
Soybeans	Minneapolis, MN	Portland, OR	\$3,310	\$36.49	\$0.99
	Chicago, IL	Baton Rouge, LA	\$2,736	\$30.16	\$0.82
	Council Bluffs, IA	Baton Rouge, LA	\$2,799	\$30.85	\$0.84
	Des Moines, IA	Laredo, TX	\$2,930	\$32.30	\$0.88
	Evansville, IN	Raleigh, NC	\$1,841	\$20.29	\$0.55
	Chicago, IL	Raleigh, NC	\$2,441	\$26.91	\$0.73
<u>Shuttle train*</u>					
Wheat	St. Louis, MO	Houston, TX	\$1,750	\$19.29	\$0.53
	Minneapolis, MN	Portland, OR	\$3,993	\$44.01	\$1.20
Corn	Fremont, NE	Houston, TX	\$2,425	\$26.73	\$0.68
	Minneapolis, MN	Portland, OR	\$3,090	\$34.06	\$0.87
Soybeans	Council Bluffs, IA	Houston, TX	\$2,425	\$26.73	\$0.68
	Minneapolis, MN	Portland, OR	\$3,110	\$34.28	\$0.87

*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.

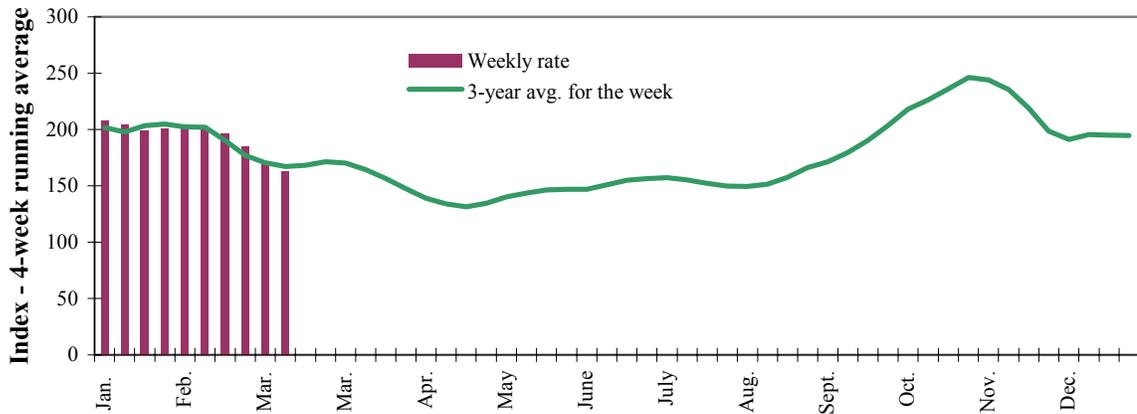
**Approximate load per car = 100 short tons: corn 56 lbs./bu., wheat & soybeans 60 lbs./bu.

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

Barge Transportation

For more information contact: [Nick Marathon](#) (202) 690-0331 or [Deen Olowolayemo](#) (202) 690-1328

Figure 5
Illinois River barge rate index - quotes



Note: Index = percent of tariff rate
 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 8--Barge rate quotes: southbound barge freight

Location	3/10/2004	3/3/2004	April '04	June '04
Twin Cities	0	0	193	190
Mid-Mississippi	0	0	166	166
Illinois River	149	160	153	155
St. Louis	127	130	129	133
Lower Ohio	122	126	127	133
Cairo-Memphis	114	116	118	125

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:
 (Index * 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 (see figure 6).

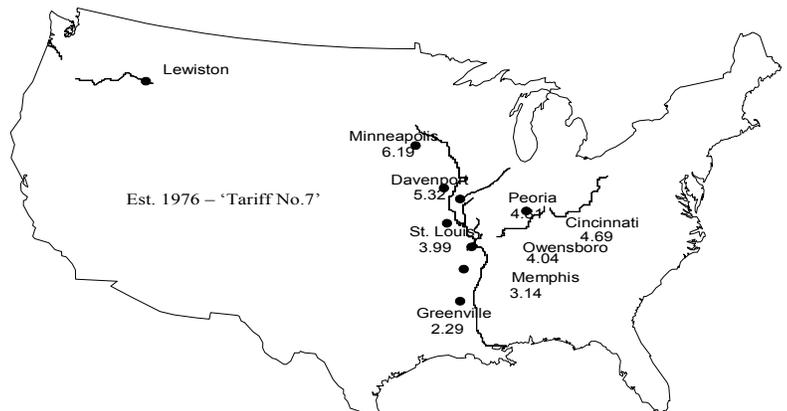


Table 9--Barge futures market (US\$)*

Week ending	River/region	Contract period	Index rate	
			Futures	Cash
3/15/2004	St. Louis	Apr.	n/a	138
		June	n/a	145
		Aug.	n/a	155
		Oct.	n/a	23
		Dec.	n/a	150
		Apr.	n/a	145
	Illinois River	June	n/a	150
		Aug.	n/a	165
		Oct.	n/a	258
		Dec.	n/a	175

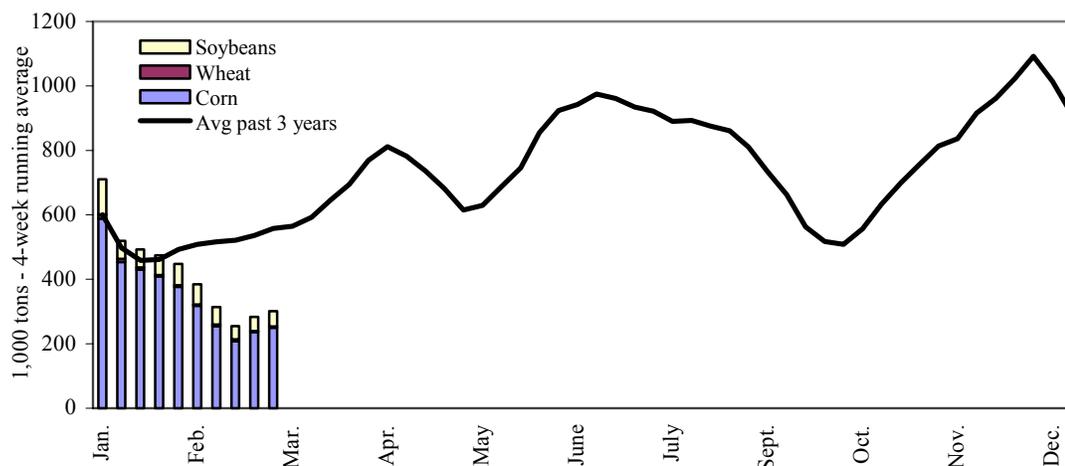
*Southbound barge freight nominal/cash basis values (US\$)

Note: Index = percent of tariff, based on 1976 tariff benchmark rate

Source: Merchants Exchange of St. Louis (www.merchants-exchange.com)

Figure 7

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



Source: Transportation & Marketing Programs/AMS/USDA

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

Week ending 03/06/04	Corn	Wheat	Soybean	Total
Mississippi River				
Rock Island, IL (L15)	0	0	0	0
Winfield, MO (L25)	0	0	0	0
Alton, IL (L26)	242	9	48	318
Granite City, IL (L27)	233	9	52	314
Illinois River (L8)	238	6	45	289
Ohio River (L52)	98	5	36	177
Arkansas River (L1)	0	23	11	34
2004 YTD	4,285	446	1,384	6,340
2003 YTD	4,300	370	2,340	7,282
2004 as % of 2003 YTD	100	121	59	87
Total 2003	29,898	2,787	9,146	42,526

YTD (year-to-date) and calendar year total includes Miss/27, Ohio/52, and Ark/1.

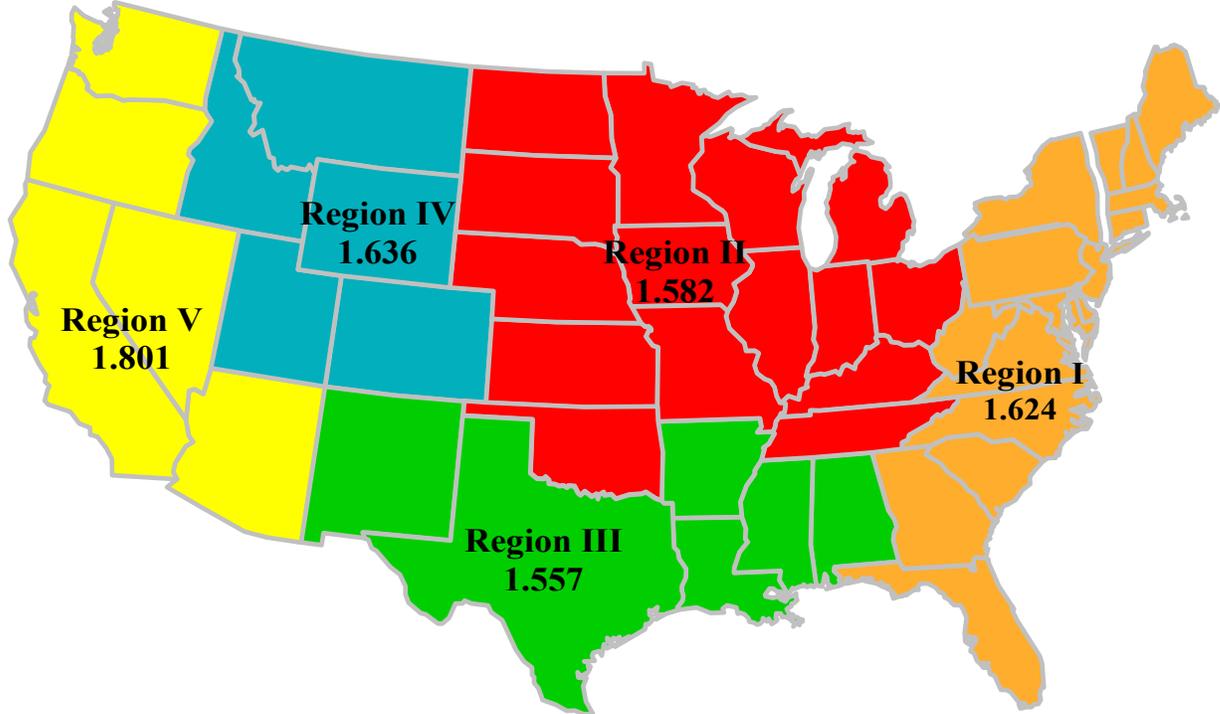
Source: U.S. Army Corp of Engineers (www.mvr.usace.army.mil/mvrmi/omni/webrpts/default.asp)

Truck Transportation

For more information contact: [Karla Martin](#) (202) 720-8264

Figure 8

Retail on-highway diesel prices (US\$/gallon), week ending 03/15/04



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

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 11--Retail on-highway diesel prices*, week ending 03/15/04 (US\$/gallon)

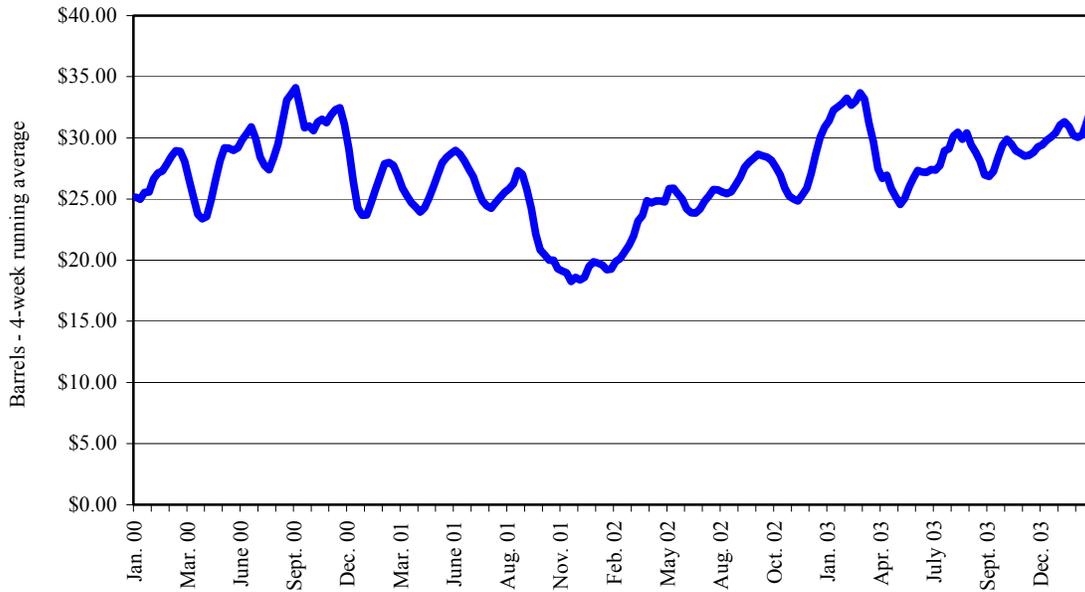
Region	Location	Price	Change from	
			Week ago	Year ago
I	East Coast	1.624	-0.015	-0.181
	New England	1.756	-0.006	-0.235
	Central Atlantic	1.731	-0.009	-0.218
	Lower Atlantic	1.566	-0.018	-0.161
II	Midwest	1.582	-0.006	-0.126
III	Gulf Coast	1.557	-0.009	-0.118
V	West Coast	1.801	-0.044	-0.078
	California	1.874	-0.053	0.005
Total	U.S.	1.617	-0.011	-0.135

*Diesel fuel prices include all taxes.

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

Figure 9

Weekly Brent crude price, Friday close (US\$/barrel)



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

Crude oil price is an indicator in future diesel price trends.

Light sweet crude is exchanged on the New York Mercantile Exchange. **Brent Crude**, a blend of North Sea oils, is traded on the International Petroleum Exchange in London.

Table 12--Crude oil prices* (US\$/barrel)

	3/15/2004	3/8/2004	% Change
Light Sweet Crude (NYMEX)	36.28	35.40	2.49
Brent Crude	n/a	33.69	n/a

*U.S. refiner crude acquisition cost, composite domestic & import; n/a = data not available

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

Grain Exports

For more information contact: [Johnny Hill](#) (202) 720-4211

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

Week ending	Wheat						Corn	Soybeans	Total
	HRW	SRW	HRS	SWW	DUR	All wheat			
3/4/2004	2,234	911	1,422	1,001	146	5,715	8,330	2,820	16,865
This week year ago	964	371	1,115	553	144	3,146	5,631	3,590	12,367
Commulative exports-crop year									
2003/04 YTD	9,720	2,876	5,005	3,782	823	22,205	25,060	20,196	67,461
2002/03 YTD	5,597	2,315	5,084	2,756	570	16,321	20,444	21,689	58,454
2003/04 as % of 2002/03	174	124	98	137	144	136	123	93	115
2002/03 Total	6,896	2,899	6,645	3,517	720	20,677	39,646	28,908	89,231
2001/02 Total	8,704	5,485	5,554	3,127	1,133	24,003	47,460	29,838	101,301

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

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

Figure 10

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
03/11/04	314	218	62	181	576	257	224	0	7	593	1,014	231
2004 YTD	2,604	1,918	1,424	1,598	7,621	4,479	2,422	44	7	5,946	13,698	2,472
2003 YTD	1,562	1,158	1,507	1,070	5,842	7,413	873	8	11	4,227	14,326	892
2004 as % of 2003	167	166	95	149	130	60	277	542	64	141	96	277
2003 Total	8,764	5,450	5,114	5,855	30,352	18,972	7,032	746	103	19,328	55,179	7,880

Source: Federal Grain Inspection Service/USDA (www.usda.gov/gipsa); YTD: year-to-date

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. Over 60 percent of these U.S. export grain shipments departed through the Mississippi Gulf region in 2003.

Figure 11
U.S. grain inspected for export, including wheat, corn, and soybeans



Source: Federal Grain Inspection Service/USDA (www.usda.gov/gipsa)

Ocean Transportation

For more information contact: [Deen Olowolayemo](#) (202) 690-1328 (ocean freight rates) or [April Taylor](#) (202) 690-1326 (container rates)

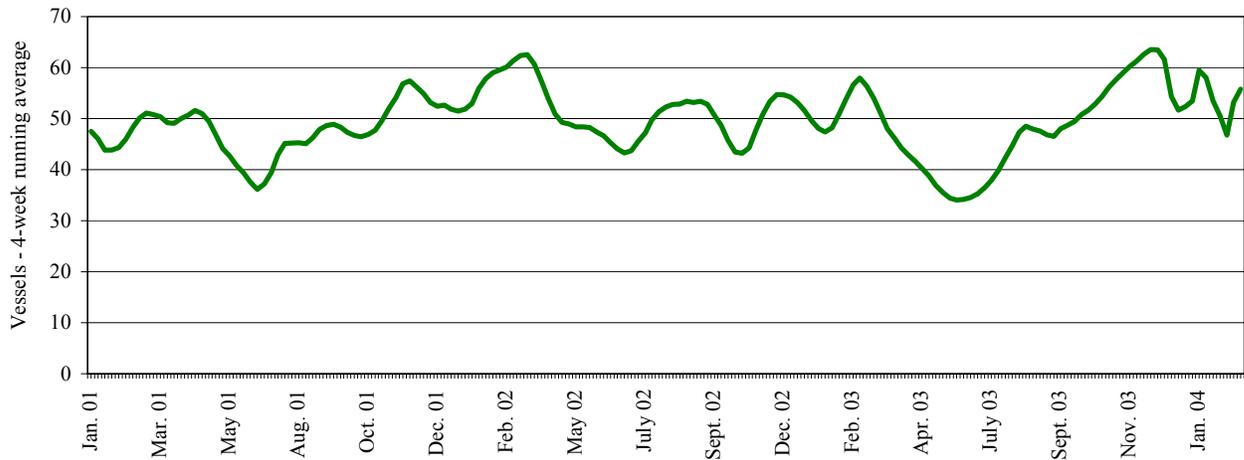
Table 15--Weekly port region grain ocean vessel activity (number of vessels)

Date	Gulf			Pacific Northwest	Vancouver B.C.
	In port	Loaded	Due next	In port	In port
		7-days	10-days		
3/11/2004	22	56	65	8	3
3/4/2004	23	73	65	10	4
2003 range	(11..47)	(30..76)	(39..93)	(3..13)	(1..15)
2003 avg.	31	49	62	9	6

Source: Transportation & Marketing Programs/AMS/USDA

Figure 12

Gulf Port grain vessel loading (past 7 days)



Source: Transportation & Marketing Programs/AMS/USDA

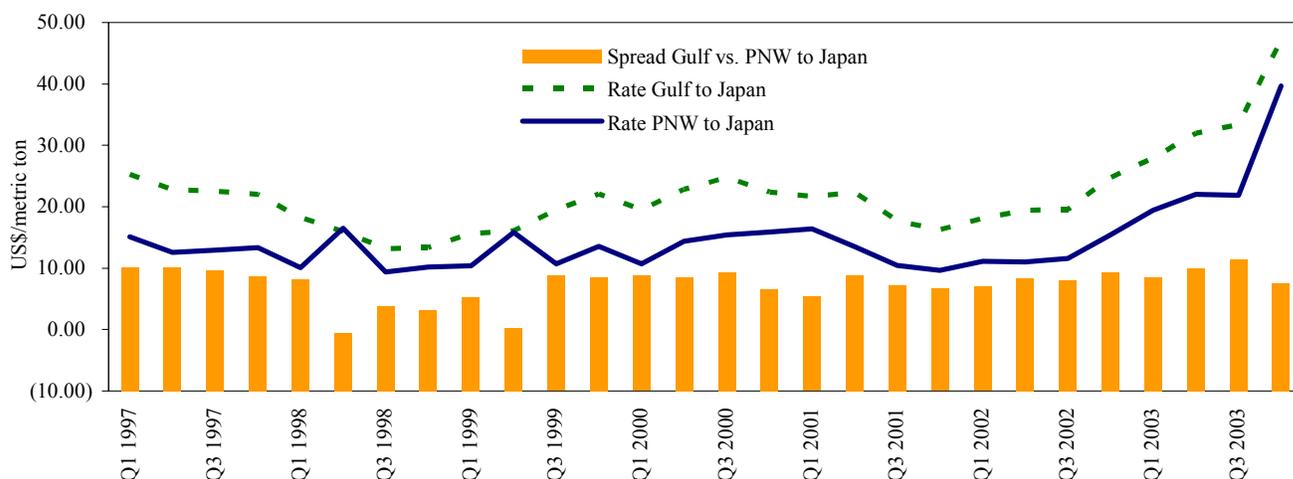
Table 16--Quarterly ocean freight rates (average rates & percentage changes) (US\$/metric ton)

Countries/ regions	2003 4th qtr	2002 4th qtr	Percent change	Countries/ regions	2003 4th qtr	2002 4th qtr	Percent change
Gulf to				Pacific NW to			
Japan	\$41.83	\$24.75	69	Japan	---	\$15.39	---
Taiwan	\$44.00	---	---				
N. Europe	---	\$18.07	---	Argentina/Brazil to			
N. Africa	\$35.00	\$18.33	91	Med. Sea	\$33.38	\$22.00	75
Med. Sea	\$31.75	---	---	N. Europe	---	\$22.63	---

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

Figure 13

Grain vessel rates, U.S. to Japan



Source: Baltic Exchange (www.balticexchange.com)

Table 17--Ocean freight rates for selected shipments, week ending 03/13/04

Export region	Import region	Grain	Month	Volume loads (metric tons)	Freight rate (\$/metric ton)
U.S. Gulf	Haiti*	Wheat Bgged	Apr 25/26	2,690	105.00
U.S. Gulf	Taiwan	Hvy grain	Mar. 10/20	56,000	68.00
U.S. Gulf	Nicaragua	Wheat	Mar 1/10	12,290	69.00
U.S. Gulf	Japan	Hvy grain	Mar. 10/20	54,000	75.00
U.S. Gulf	Egypt Med	Hvy grain	Mar 18/25	55,000	46.50
River plate	Tunisia	Grains	Mar. 10/20	22,000	72.00
Argentina	Algeria	Wheat	Mar. 15/22	25,000	59.00

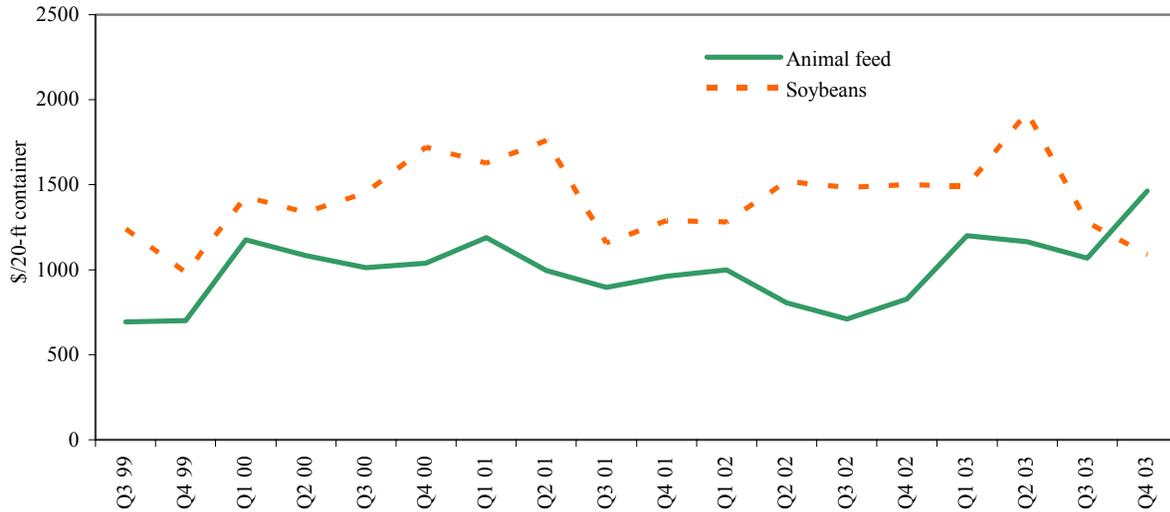
Rates shown are for metric ton (2,204.62 lbs. = 1 metric ton), F.O.B., except where otherwise indicates; op = option

*Most 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 14

Weighted average rates¹ for containerized shipments of animal feed and soybeans to selected Asian countries



¹Animal Feed: Bangkok-Thailand (4%), Busan-Korea (24%), Hong Kong (14%), Keelung-Taiwan (14%), Tokyo-Japan (44%), and soybeans: Bangkok-Thailand (3%), Busan-Korea (7%), Hong Kong (1%), Keelung-Taiwan (24%), Tokyo-Japan (65%)

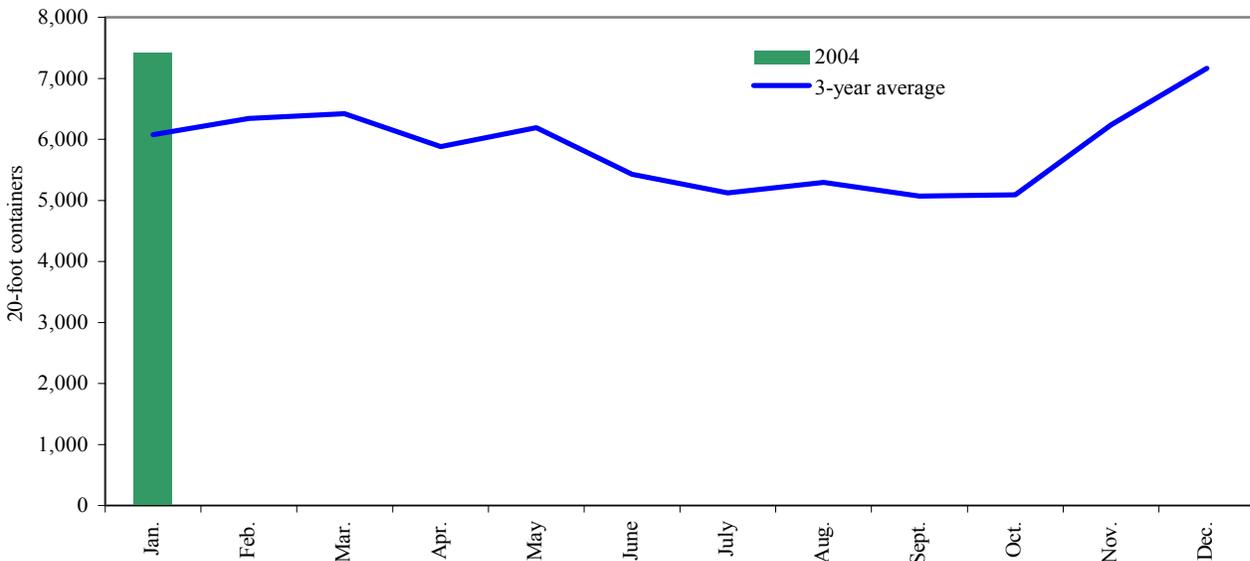
January-December 2003.

Source: Ocean Rate Bulletin, 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.

Figure 15

Monthly shipments of containerized grain for 2004 compared with a 3-year average



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

Source: Port Import Export Reporting Service (PIERS), *Journal of Commerce*, January 2004