GRAIN TRANSPORTATION REPORT

Transportation & Marketing, Agricultural Marketing Service
United States Department of Agriculture

OCTOBER 9, 2003

TM GRAIN TRANSPORT COST INDICATORS*	Truck	Rail	Barge	Ocean Gulf	Ocean Pacific
10/08/03	97	104	166	189	233
Compared to Last Week	↑	↑	↓	↑	↑

*Indicator: Base Year 2000=100; Weekly Updates include Truck=Diesel; Rail=Nearby Secondary Rail Market; Barge=Spot Illinois River Basis; Ocean Vessel based on Routes to Japan

Figure 1--Second Quarter U.S. Gulf to Japan Ocean Freight Rates Are Above 5-year Average

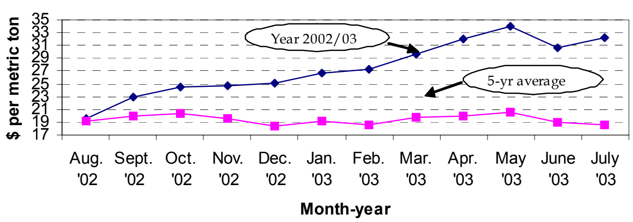
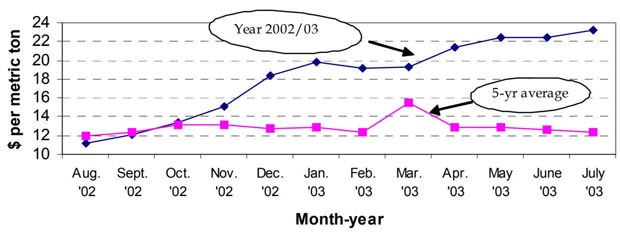


Figure 2 -- Second Quarter U.S. PNW to Japan Ocean Freight Rates Are Above 5-year Average



Second Quarter Ocean Freight Rates Were Up. For the second quarter of 2003, ocean freight rates on two major grain routes exceeded their 5-year averages. Rates were $32.17 per metric ton for the U.S. Gulf to Japan route (Gulf) and $22.09 per metric ton for the Pacific Northwest to Japan route (PNW). The above-average trend in ocean freight rates started in August 2002 for the Gulf and in October 2002 for the PNW (figures 1 and 2).

For the Gulf, the $32.71-per-metric-ton ocean freight rate in the second quarter of 2003 was 15 percent more than in the first quarter of 2003 and 59 percent more than in the second quarter of 2002. It was also 62 percent higher than the 5-year average. For the PNW, the $22.09-per-metric-ton ocean freight rate in the second quarter of 2003 was 14 percent more than in the first quarter of 2003 and 91 percent more than in the second quarter of 2002. It was also 73 percent higher than the 5-year average.

The difference between ocean freight rates from the Gulf and the PNW is referred to as “spread.” The lower the “spread,” the more attractive shipments of U.S. grain from the Gulf would be relative to those from the PNW. The “spread” was $10.08 per metric ton in the second quarter of 2003, higher than the first quarter of 2003 by 19 percent and second quarter of 2002 by 17 percent and the 5-year average by 41 percent.

May Rates for the Gulf and July Rates for the PNW Were the Highest in 5 Years. The May 2003 ocean freight rate of $33.93 per metric ton for the Gulf and July rate of $23.19 per metric ton for the PNW were the highest in 5 years. According to the Baltic Exchange, the average daily ocean freight rates for the Gulf route have been increasing since August 2002. The rates for the PNW increased continuously from September 2002 until January 2003, took a slight dip in January, increased from February to May, took another slight dip in June, and increased again to a record high in July.

In May 2003, the ocean freight rates for the Gulf route averaged $33.93 per metric ton, a growth of almost 27 percent above the average rate for the August–May (10-month) period. And July ocean freight rates from the PNW at $23.19 had an increase of 64 percent compared with the average rate for the September–July (11-month) period. Higher global demand for ocean transportation of minerals, iron ore and coal, especially to Asia and the tightening of bulk vessels market are some of the factors responsible for these high rates.
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Contents

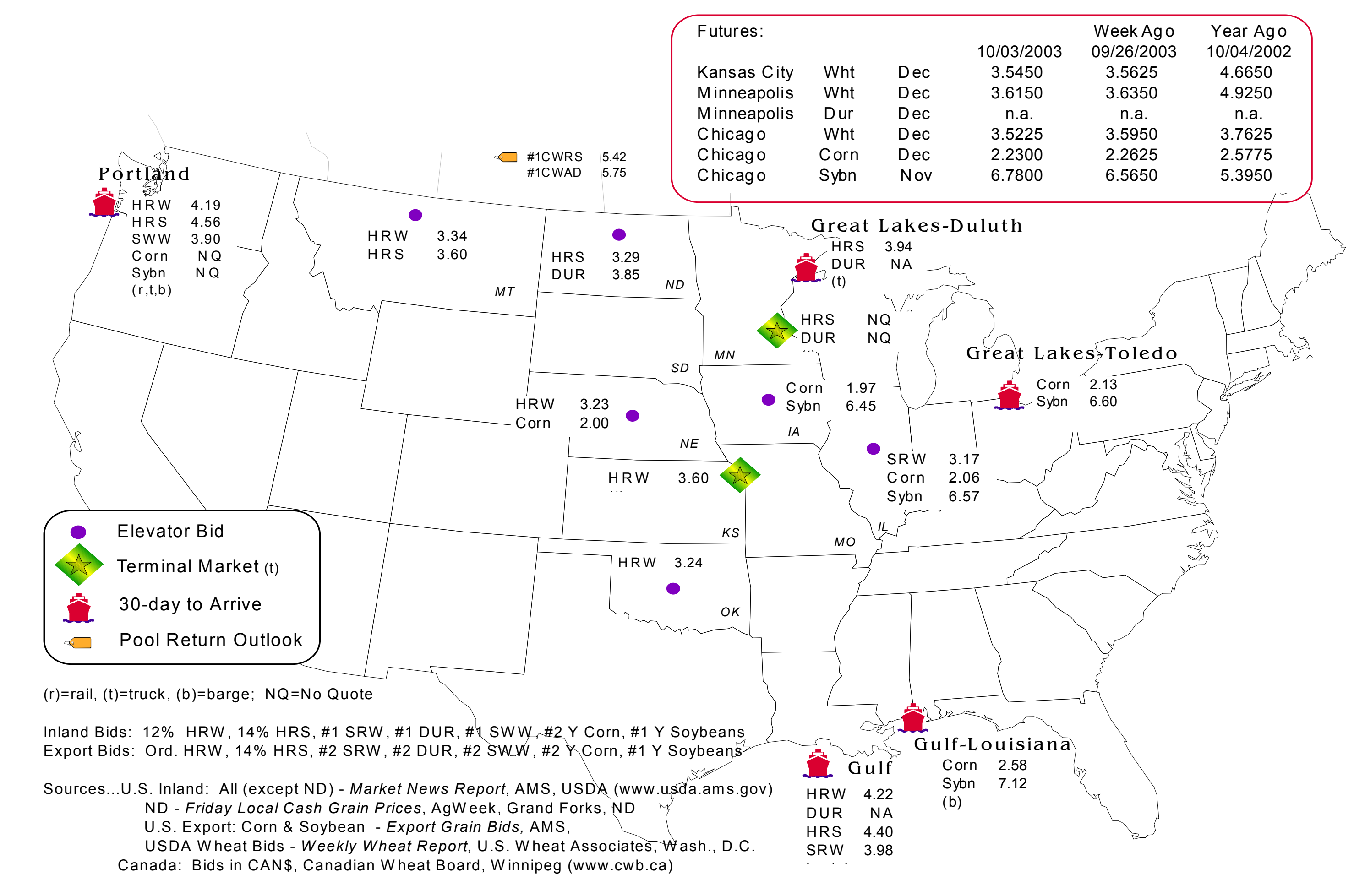
The Grain Transportation Report is a weekly news source for grain logistics. Detailed data and trend information on five major modes: barge, truck, rail, container, and vessel, provide timely insight into grain transport. The report is offered to policymakers and industry as a tool in day-to-day decision making and longer-term strategic planning for an effective and efficient U.S. grain logistics system.

Table 1-- Market update: U.S. origins to export position price spreads (per bushel)

Commodity	Origin--Destination	This week	Last week
Corn	IL -- Gulf	-0.52	-0.55
Corn	NE -- Gulf	-0.58	-0.56
Soybean	IA -- Gulf	-0.67	-0.74
HRW	KS -- Gulf	-0.62	-0.59
HRS	ND -- Portland	-1.27	-1.31

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 2--Rail deliveries to port (carloads)

	Mississippi Gulf*	Texas Gulf	Pacific Northwest	Atlantic & East Gulf	Total
Week Ending:					
09/24/03	129	2,520	2,464	29	5,142
10/01/03	230	2,652	3,169	64	6,115
2003 YTD	10,869	62,679	105,134	11,521	190,203
2002 YTD	7,614	70,587	73,887	15,443	167,531
% 2002 YTD	143%	89%	142%	75%	114%
Total 2002	11,127	85,822	113,857	21,562	232,368
Total 2001	10,022	81,804	111,376	26,604	229,806

Source: Transportation & Marketing/AMS/USDA; (*) Incomplete Data

Figure 2. Rail Deliveries to Port

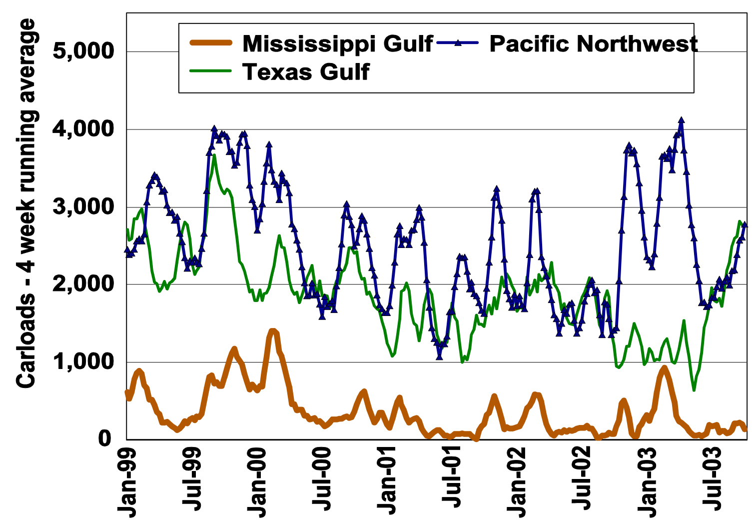
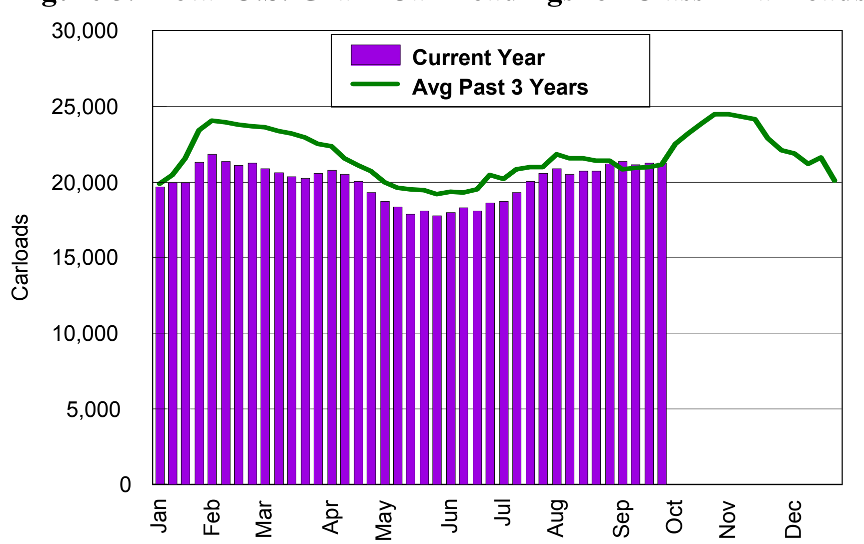


Figure 3. Total U.S. Grain Car Loadings for Class I Railroads



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

Table 3--Class I rail carrier grain car bulletin (Grain carloads originated and grain service index)

	East		West			U.S. Total	Canada	
	CSXT	NS	BNSF	KCS	UP		CN	CP
09/27/03	2,329	2,448	9,929	573	7,117	22,396	4,418	4,650
This Week Last Year	2,011	3,567	8,685	447	6,211	20,921	3,267	4,002
2003 YTD	103,903	123,116	292,137	16,302	253,276	788,734	136,954	141,386
2002 YTD	103,512	120,469	287,995	20,688	256,555	789,219	150,362	143,177
% 2002 YTD	100%	102%	101%	79%	99%	100%	91%	99%
2002 Total	142,760	164,745	400,179	27,161	344,296	1,079,141	191,835	195,765
U.S. rail covered hopper cars online index*								
Sep-03	94.6	99.4	94.4	95.5	95.6	95.7		

Source: Association of American Railroads; *Base Year =2001, Index based on Number of Covered Hopper Cars Online (available for Service).

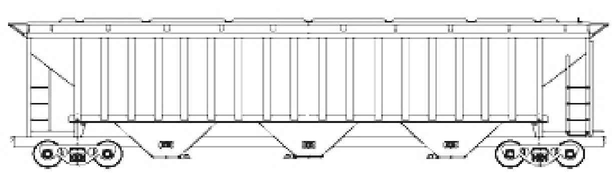


Table 4–Tariff rail rates for unit train shipments

Date effective	Commodity	Origin	Destination	Rate per car	Rate per MT	Rate/per bushel*
10/06/03	Wheat	Kansas City, MO	Galveston, TX	$1,820	$20.06	$0.55
10/06/03	Wheat	Minneapolis, MN	Portland, OR	$4,148	$45.72	$1.24
10/06/03	Wheat	St. Louis, MO	Houston, TX	$1,945	$21.44	$0.58
10/06/03	Wheat	Kansas City, MO	Laredo, TX	$2,280	$25.13	$0.68
10/06/03	Wheat	Chicago, IL	Albany, NY	$1,834	$20.22	$0.55
10/06/03	Corn	Minneapolis, MN	Portland, OR	$3,130	$34.50	$0.88
10/06/03	Corn	Chicago, IL	Baton Rouge, LA	$2,736	$30.16	$0.77
10/06/03	Corn	Council Bluffs, IA	Baton Rouge, LA	$2,170	$23.92	$0.61
10/06/03	Corn	Evansville, IN	Raleigh, NC	$1,886	$20.79	$0.53
10/06/03	Corn	Des Moines, IA	Laredo, TX	$2,864	$31.57	$0.80
10/06/03	Soybean	Minneapolis, MN	Portland, OR	$3,110	$34.28	$0.93
10/06/03	Soybeans	Chicago, IL	Baton Rouge, LA	$2,736	$30.16	$0.82
10/06/03	Soybeans	Council Bluffs, IA	Baton Rouge, LA	$2,799	$30.85	$0.84
10/06/03	Soybeans	Des Moines, IA	Laredo, TX	$2,864	$31.57	$0.86
10/06/03	Soybeans	Evansville, IN	Raleigh, NC	$1,886	$20.79	$0.57

Sources: www.bnsf.com, www.cpr.ca, www.csx.com, www.uprr.com
Approximate load per car = 100 tons: Corn 56 lbs/bu, Wheat & Soybeans 60 lbs/bu

Table 5–Secondary rail car market,
Average premium/discount to tariff, $/car - last week

	Delivery Period			
	Nov-03	**Dec-03**	**Jan-04**	**Feb-04**
BNSF-GF	$(11)	$(4)	$(4)	$(4)
UP-Pool	$6	$5	$5	$2

Sources: James B. Joiner & Co.; Tradewest Brokerage Co. Source: GF=Guaranteed Freight, Pool=Guaranteed Pool
Note: Bids listed are market INDICATORS only & are NOT guaranteed prices, missing value=No Bid Quoted

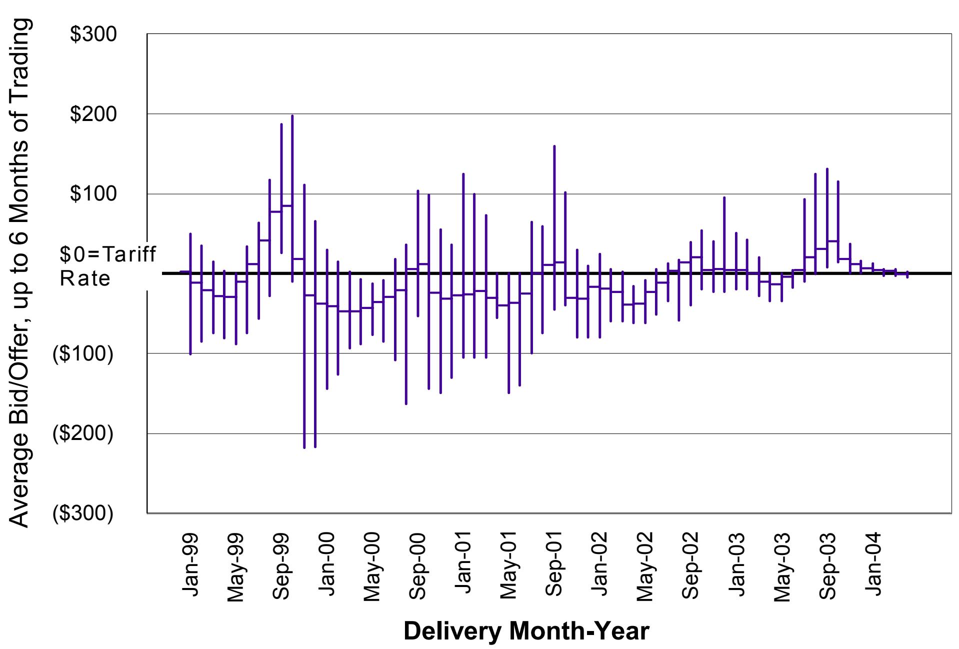
Rail service may be ordered directly from the railroad via **Auction** for guaranteed service or tariff for non-guaranteed service, or through the secondary market. The **Secondary Rail Market** information reflects trade values for service that was originally purchased from the railroad carrier as some form of guaranteed freight. The auction and secondary rail values are indicators of rail service quality and demand/supply.

Table 6--Railroad car 'Auction' results
Average premium/discount to tariff, $/car - last auction

Delivery for:	Nov-03	Dec-03	Jan-04
COT/N. Grain	no bid	no bid	no bid
COT/S. Grain	no bid	no bid	no bid
GCAS/Region 1	no bid	no bid	no bid
GCAS/Region 2	no bid	no bid	no bid

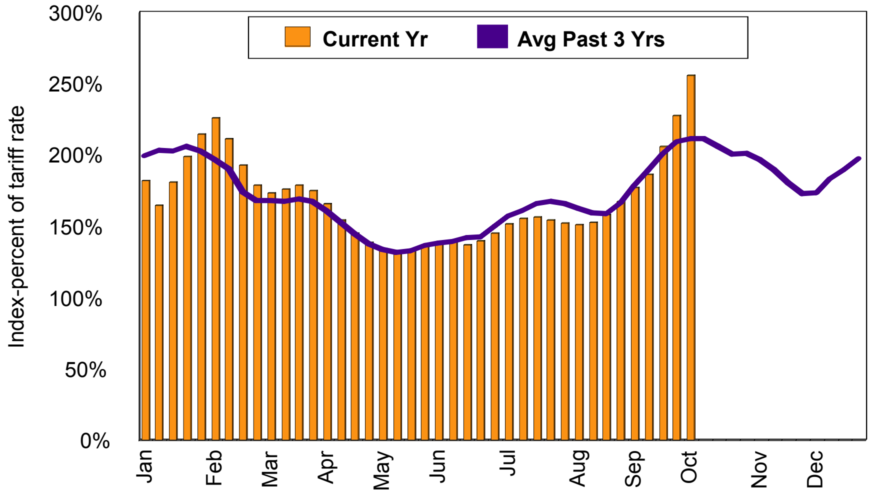
Source: Transportation & Marketing/AMS/USDA.
COT=Certificate of Transportation; GCAS=Grain Car Allocation System

Figure 4. Secondary Rail Car Market



BARGE TRANSPORTATION

Figure 5. Illinois River Barge Rate Index - Rate Quotes



The **Illinois River Barge Rate Index** averaged 183% of the Benchmark Tariff Rate 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.

Calculating **Barge Rate** Per Ton: Index × 1976 Tariff Benchmark Rate per Ton

Select applicable index from market quotes included in tables on this page. The 1976 benchmark rates per ton are provided in map below.

Table 7-- Barge rate quotes: Southbound barge freight
Index=percent of tariff, based on 1976 tariff benchmark rate

Location	10/1/03	9/24/03	Nov '03	Jan '04
Twin Cities	281	262	262	nq
Mid-Mississippi	282	268	275	nq
Illinois River	303	275	271	199
St. Louis	283	268	253	143
Lower Ohio	265	262	270	151
Cairo-Memphis	242	224	227	134

Source: Transportation & Marketing/AMS/USDA

Table 8–Barge futures market
Southbound barge freight nominal/cash basis values
Index=percent of tariff, based on 1976 tariff benchmark rate

Week ended	River/region	Contract period	Rate futures	Rate cash
10/07/03	St. Louis	Nov.	n/a	200
		Jan.	n/a	145
		Mar.	n/a	145
		Apr.	n/a	143
		May.	n/a	135
	Illinois River	Nov.	n/a	235
		Jan.	n/a	205
		Mar.	n/a	170
		Apr.	n/a	160
		May.	n/a	155

Source: St. Louis Merchants Exchange

Figure 6. Benchmark Tariff Rates

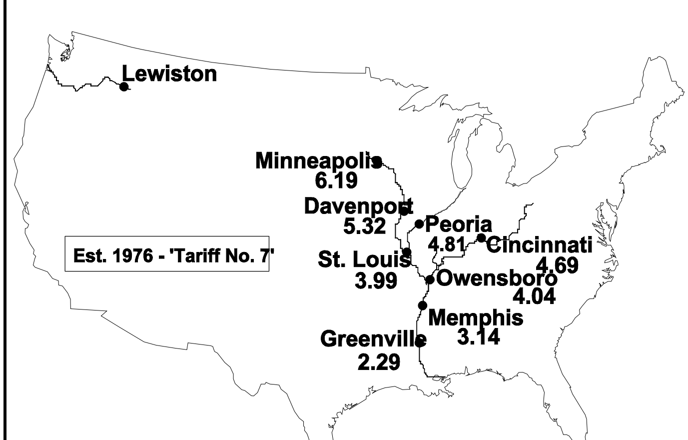


Figure 7. Barge Movements on the Mississippi River (Lock 27)

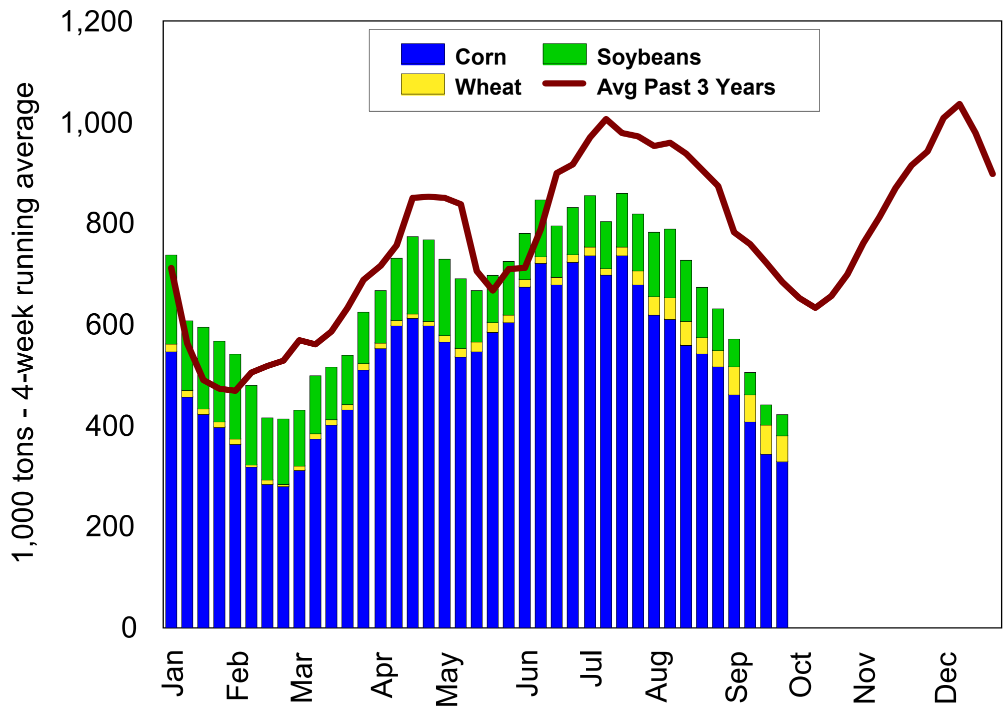


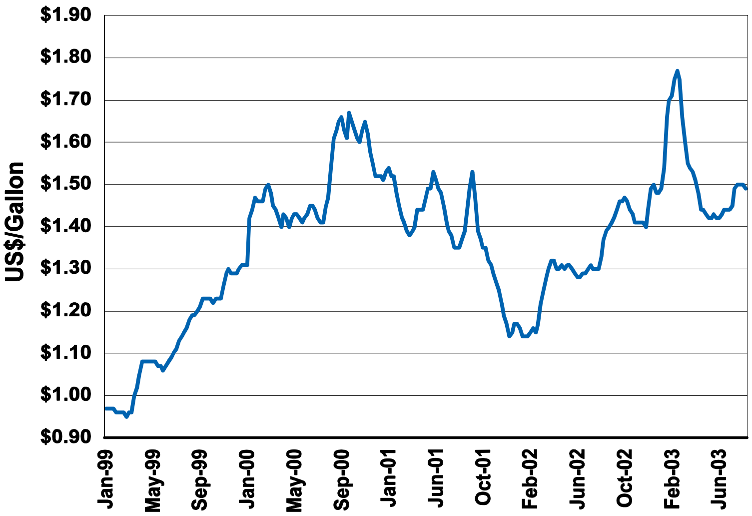
Table 9--Barge grain movements (1,000 tons)

Week ending 9/27/03	Corn	Wht	Sybn	Total
Mississippi River				
Rock Island, IL (L15)	137	13	33	184
Winfield, MO (L25)	217	16	37	269
Alton, IL (L26)	356	26	69	454
Granite City, IL (L27)	419	25	71	519
Illinois River (L8)	58	5	28	91
Ohio River (L52)	62	25	3	91
Arkansas River (L1)	0	29	7	36
2003 YTD	20,900	2,201	5,572	29,264
2002 YTD	25,715	1,961	7,201	36,046
% 2002 YTD	81%	112%	77%	81%
Total 2001	31,878	2,679	10,616	47,091

Source: U.S. Army Corp of Engineers
YTD and Calendar year total includes Miss/27, Ohio/52 and Ark/1.

TRUCK TRANSPORTATION

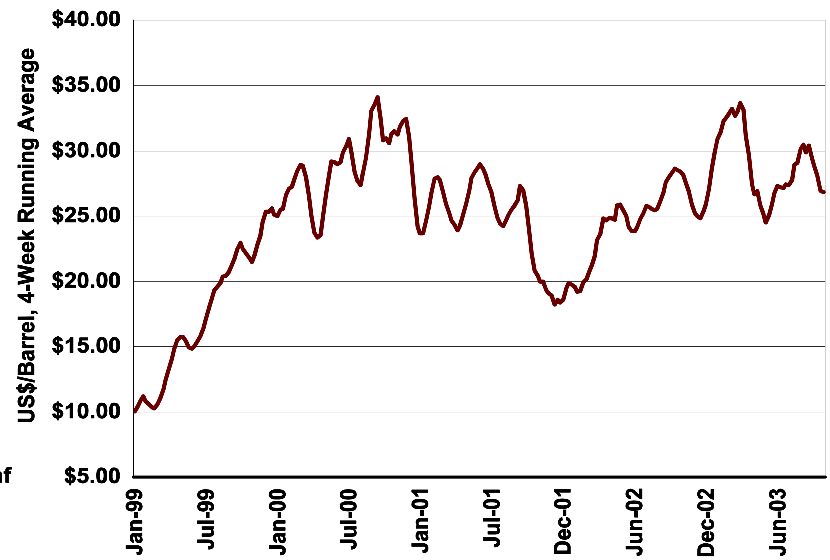
Figure 8. Weekly U.S. Retail Road Diesel Price



Source: Energy Information Administration,U.S. Department of Energy

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% of the estimated variable cost. **Crude Oil Price** is an indicator in future diesel price trends.

Figure 9. Weekly Brent Crude Price, Friday Close



Source: Energy Information Administration, U.S. Department of Energy

Light Sweet Crude is exchanged on the New York Mercantile Exchange. North Sea oil has a "benchmark" role in crude oil pricing. Brent crude, a blend of North Sea oils, is traded on the International Petroleum Exchange in London.

Table 10--Crude oil prices (US$ per Barrel)-10/07/03

Type	This week	Last week	Change
Light Sweet Crude (NYMEX)	30.07	28.67	↑
Brent Crude	29.50	28.23	↑

Source: U.S. Department of Energy, www.eia.doe.gov; *U.S. Refiner Crude Acquisition Cost, Composite Domestic & Import

GRAIN EXPORTS

Table 11--U.S. export balances (1,000 Metric Tons)

	Wheat								
Unshipped export balance	***HRW***	***SRW***	***HRS***	***SWW***	***DUR***	**All Wheat**	**Corn**	**Soybean**	**Total**
09/25/2003	2,244	497	1,127	1,020	196	5,085	8,274	9,639	22,998
This Week Year Ago	1,629	403	1,581	734	177	4,524	6,582	6,854	17,960
Cumulative Exports-Crop Year									
2003/04 YTD	3,979	1,375	2,281	1,212	402	9,249	3,021	568	12,838
2002/03 YTD	2,969	1,000	2,085	1,187	280	7,520	2,530	659	10,709
% 2002/03 YTD	134%	138%	109%	102%	144%	123%	119%	86%	120%
2001/02 Total	8,761	5,485	5,582	3,175	1,133	24,135	48,003	29,926	102,064
2000/01 Total	9,314	4,445	5,775	5,156	1,130	25,819	47,734	27,567	101,120

Source: Foreign Agricultural Service/USDA; YTD: Year-to-Date; Crop Year: Wheat=5/31-6/01, Corn & Soybeans=9/01-8/31

Figure 10. U.S. Grain, Unshipped Export Balance
Includes Wheat, Corn, and Soybean Sales

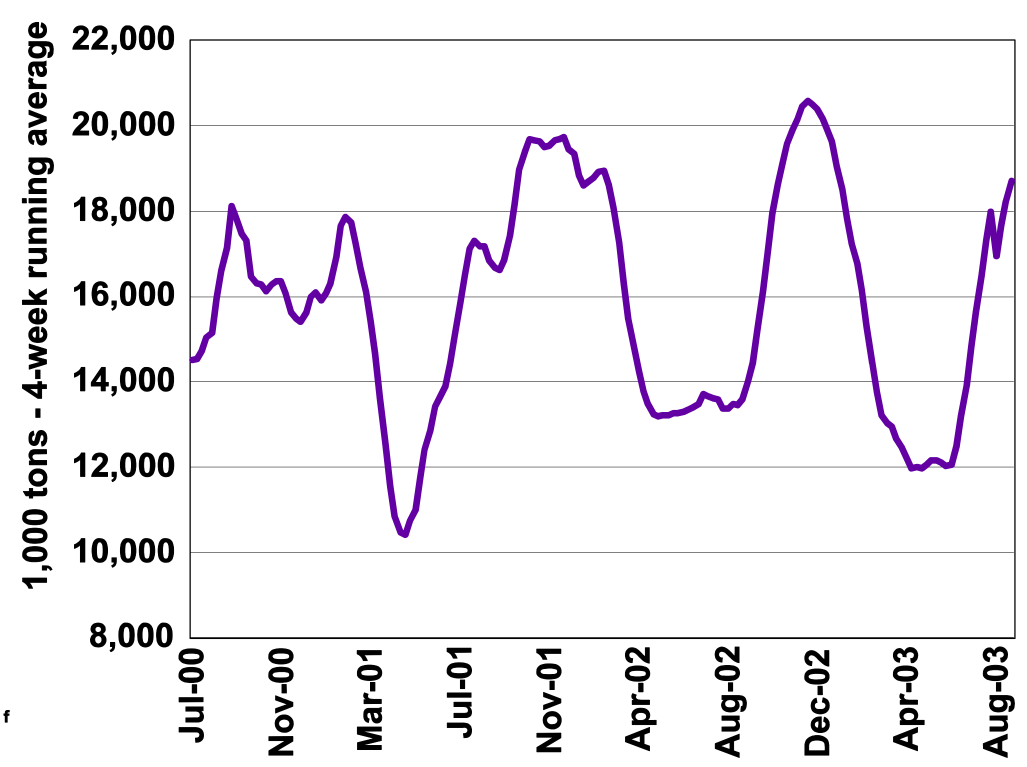
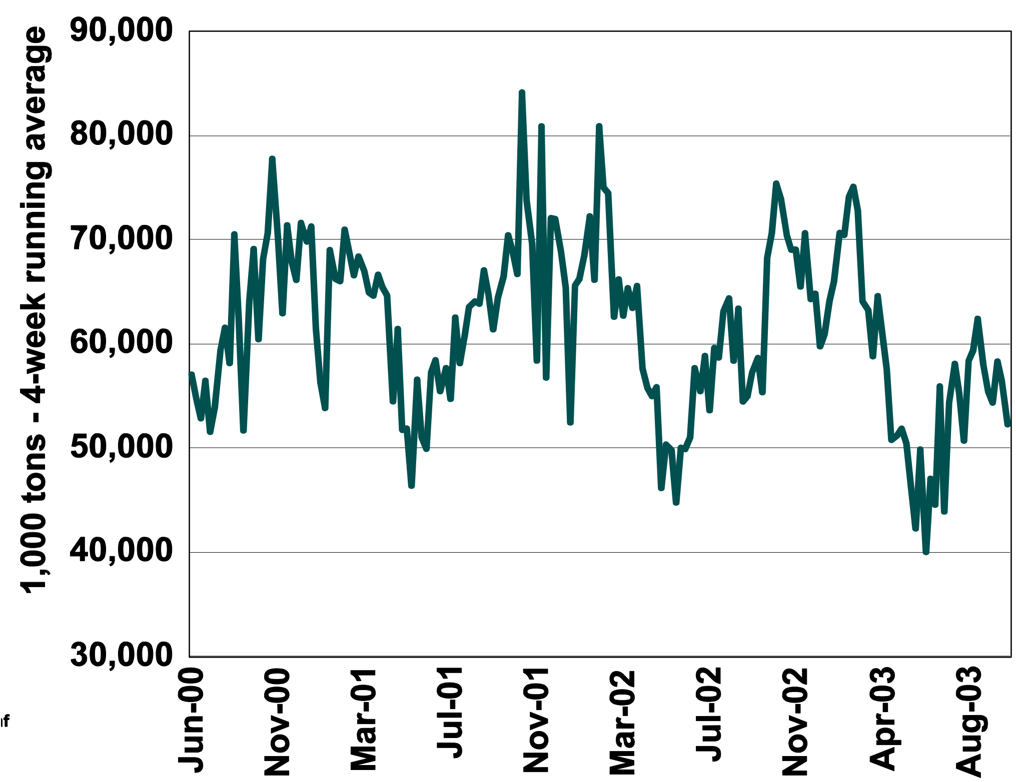


Table 12--Select U.S. port regions - grain inspections for export (1,000 metric tons)

Date	Pacific Region			Mississippi Gulf			Texas Gulf			Port Region Total		
	Wheat	*Corn*	*Soybn*	*Wheat*	*Corn*	*Soybn*	*Wheat*	*Corn*	*Soybn*	*Pacific*	*Mississippi*	*Texas*
10/02/03	269	94	86	237	708	159	218	0	0	449	1,104	218
2003 YTD	6,670	4,042	2,866	4,638	21,910	11,407	5,080	566	56	13,579	37,955	5,703
2002 YTD	6,744	3,007	1,483	4,399	28,919	11,820	4,706	237	365	11,235	45,138	5,308
% 2002 YTD	99%	134%	193%	105%	76%	97%	108%	239%	15%	121%	84%	107%
2002 Total	9,128	3,994	2,870	5,670	36,383	18,549	5,875	266	373	15,992	60,602	6,514

Source: Federal Grain Inspection Service YTD-Year-to-Date

Figure 11. U.S. Grain Inspected for Export
Includes Wheat, Corn, and Soybeans



The U.S. Exports Approximately One-Quarter of the Grain it Produces. On average, it includes nearly 45% of U.S. grown wheat, 35% of U.S. grown soybeans, and 20% of the U.S. grown corn.

Over 60% of these U.S. export grain shipments departed through Louisiana Gulf region in 2002.

Figure 12. Gulf Port Grain Vessel Loading
Past 7 Days

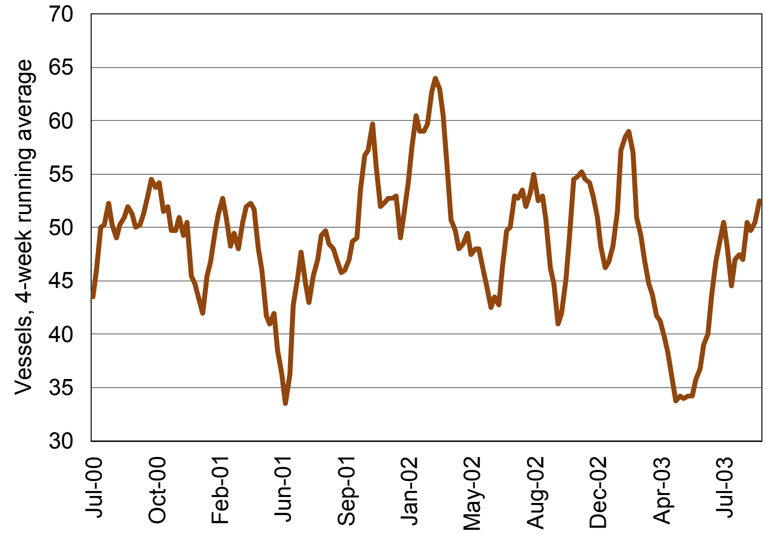


Table 13--Weekly port region grain ocean vessel activity (number of vessels)

Date	Gulf			Pacific Northwest	Vancouver B.C.
	In Port	Loaded 7-Days	Due Next 10-Days	In Port	In Port
09/25/03	31	53	65	9	6
10/02/03	30	53	65	7	3
2002 Range	(15..55)	(33..66)	(44..82)	(3..15)	(0..12)
2002 Avg	35	51	65	8	5

Source: Transportation & Marketing/AMS/ USDA

Table 14--Quarterly ocean freight rates (average rates & percentage changes, U.S. dollars/metric ton)

	2003 3rd Qtr	2002 3rd Qtr	Change %		2003 3rd Qtr	2002 3rd Qtr	Change %
Gulf to				**Pacific NW to**			
Japan	$33.83	$19.54	73%	Japan	-	$11.57	-
Mexico	-	$7.25	-	Taiwan	$19.50	$11.21	73%
Taiwan	$33.00	-	-				
N. Europe	$22.88	-	-	**Argentina/Brazil to**			
N. Africa	$25.50	$13.50	89%	Med. Sea	$33.38	$19.93	67%
Med. Sea	$24.88	$11.92	109%	N. Europe	$22.50	$18.65	21%
				China	$34.75	-	-

Source: Transportation & Marketing/AMS/USDA

Figure 13. Grain Vessel Rates, U.S. to Japan

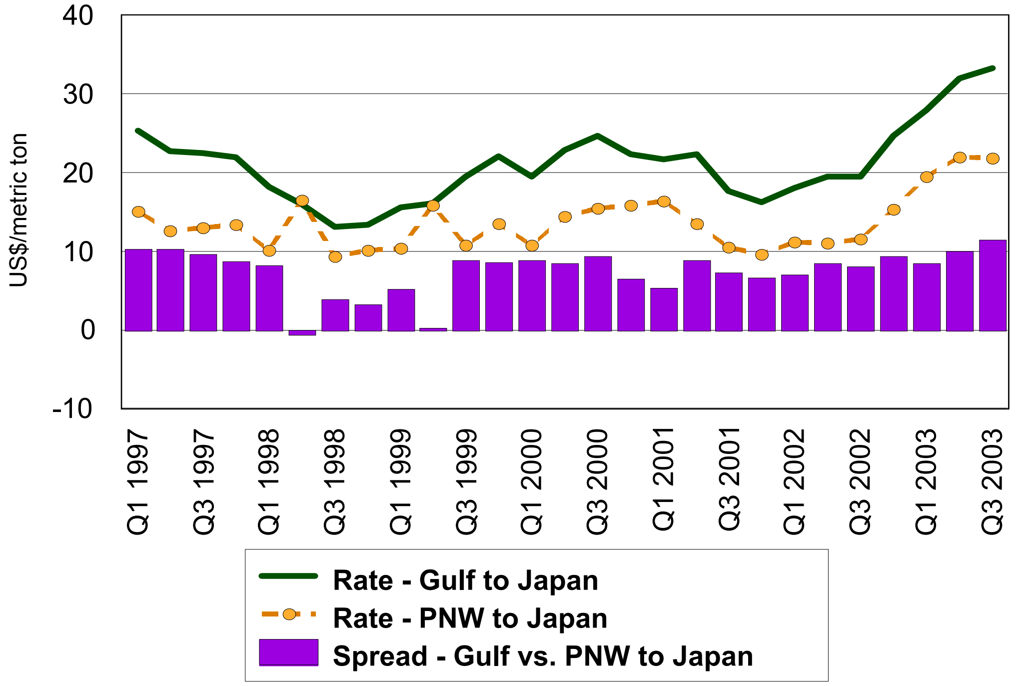


Table 15--Ocean freight rates for selected shipments
Week Ending 10/04/03

Export region	Import region	Grain	Month	Volume loaded (Tons)	Freight rate ($/ton)
U.S. Gulf	Laffiteau, Haiti	Wheat	Sep 25/30	8,500	$24.00
U.S. Gulf	Nigeria	Soybean Meals	Oct 20/30	5,800	$99.00*
U.S. Gulf	Aqaba, Jordan	Wheat	Nov 20/30	26,573	$36.75
U.S. Gulf	Japan	Hvy Grain	Nov 1/10	42,000/44,000	$38.80
U.S. Gulf	Japan	Hvy Grain	Oct 1/10	54,000	$37.00
U.S. Gulf	Japan	Hvy Grain	Oct 20/30	54,000	$37.00
U.S. Gulf	China	Hvy Grain	Oct 20/30	55,000	$34.00
PNW	Taiwan	Hvy Grain	Oct 8/15	5,400	$21.50

Source: Maritime Research Inc.
Rates shown are for metric ton (2,204.62 lbs.=one metric ton), F.O.B., except where otherwise indicated; op=option

*Most food aid from the United States is required to be shipped on U.S. flag vessels. The vessels are of limited 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.

CONTAINER

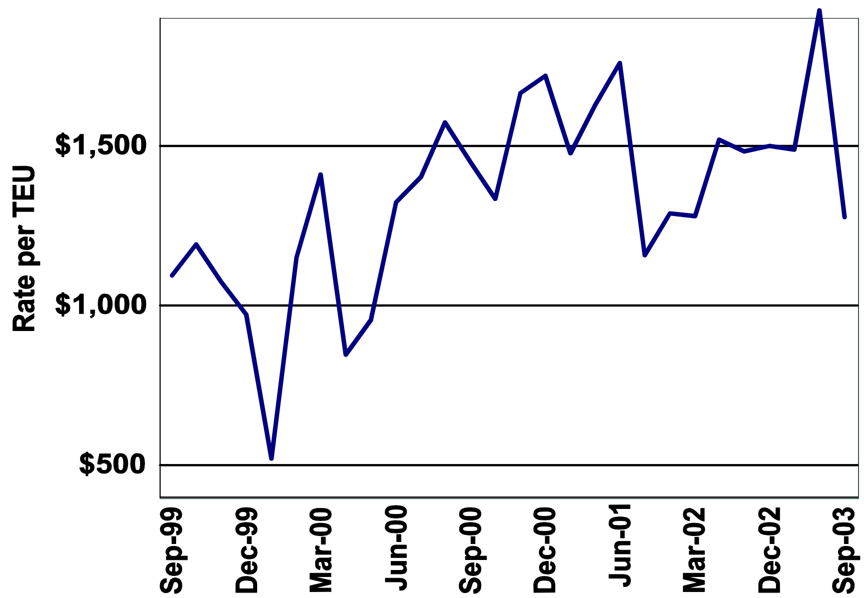
Container Ocean Freight Rates

Average rate per twenty-equivalent-unit (TEU), weighed by shipping line market share

Source: Transportation & Marketing/AMS/USDA, Quarterly Updates

Figure 14. Container Rates - Soybeans

Seattle, WA Origin to Tokyo, Japan



Approximately 420,000 MT of grain and oilseed exports were marketed via container in 2001. This volume increased 26% compared to 1997.

Figure 15. Container Rates - Feed Grain

Seattle, WA Origin to Selected Destinations