



GRAIN TRANSPORTATION REPORT

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

DECEMBER 4, 2003

<u>TM GRAIN TRANSPORT</u>						
<u>COST INDICATORS*</u>	Truck	Rail	Barge	Ocean		
				Gulf	Pacific	
12/03/03	99	271	111	220	297	
Compared With 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						

Rail Grain Cars in Short Supply. There are recent news reports of railcar shortages and grain being stored on the ground. The record 2003 corn crop, high grain prices, and rising demand in Europe and Asia for wheat and soybeans are factors contributing to pressure and strain on the transportation infrastructure. A recent media article raised concerns that unreliable transportation and shipment delays will adversely affect U.S. farmers, who already operate on low profit margins.

However, USDA measures of rail service show that the railcar loadings are about the same now as last year at this time (table 3)- the difference is that this year, the crop size is much larger. In addition, with strong prices, there is urgency by producers to hurry to sell their grain in order to take advantage of higher market prices before a price decline occurs. Moreover, data monitored by AMS show that railcar deliveries to export facilities are 131 percent higher than last year this time for the Pacific Northwest (table 2)- due to strong demand from Asian markets. But a longer travel time for railcars to return from the Pacific to the middle of the country naturally impacts the normal utilization of railcars. In addition, secondary rail market bids rose above \$300 in December, but is expected to decrease considerably by March 2004 (table 5, figure 4). These factors might suggest that delays may not be as widespread or as serious in the longer term as raised initially by some analysts.

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Contents	
Rail	<u>3</u>
Barge	<u>6</u>
Truck	<u>8</u>
Grain Exports	<u>9</u>
Container	<u>12</u>
Canadian Ports	<u>13</u>

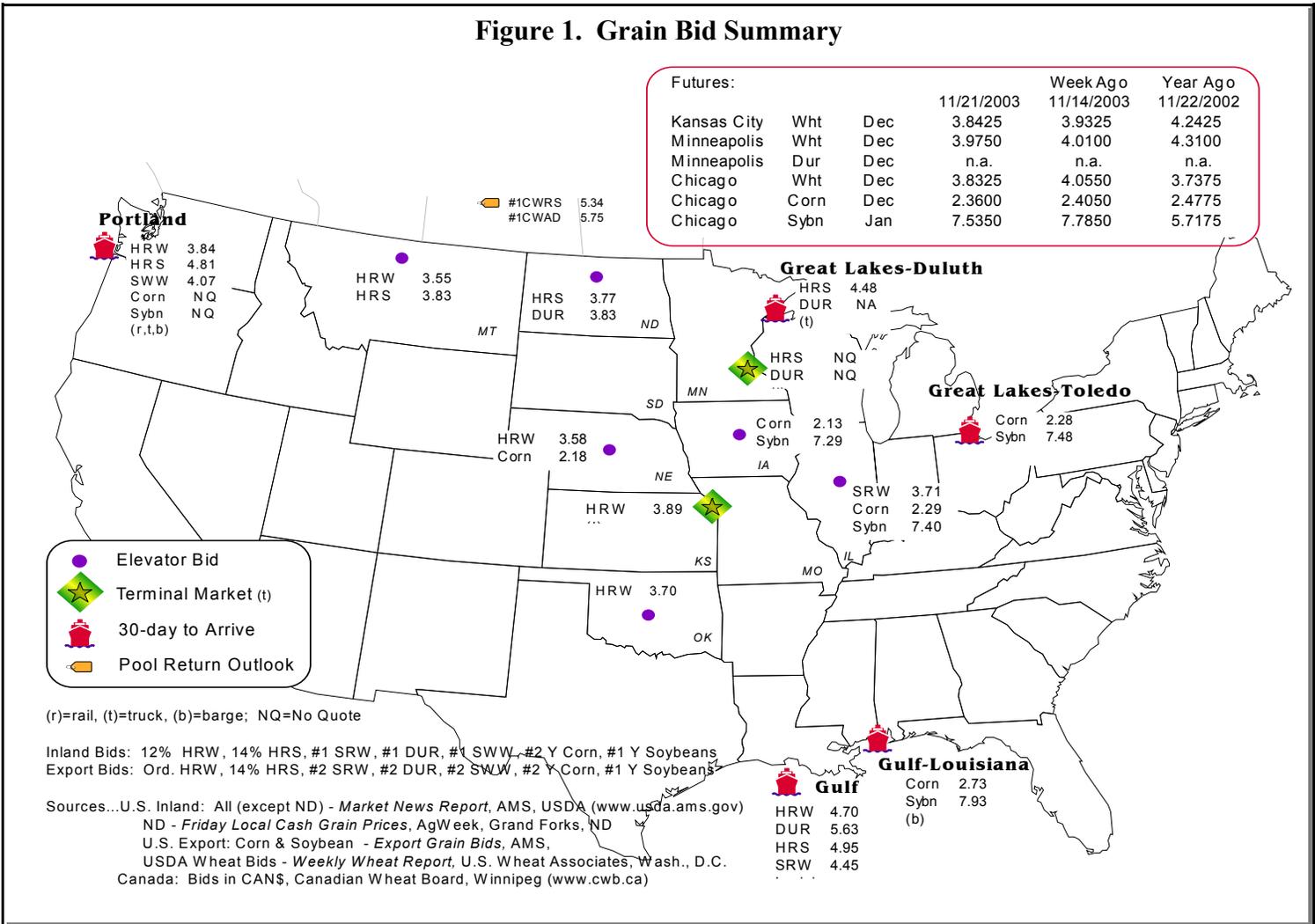
The Grain Transportation Report is a weekly news source for grain logistics. Detailed data and trend information on five major modes: barge, truck, rail, container, and vessel, provide timely insight into grain transport. The report is offered to policymakers and industry as a tool in day-to-day decision 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	-0.44	-0.48
Corn	NE -- Gulf	-0.55	-0.54
Soybean	IA -- Gulf	-0.64	-0.59
HRW	KS -- Gulf	-0.81	-0.76
HRS	ND -- Portland	-1.04	-1.26

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

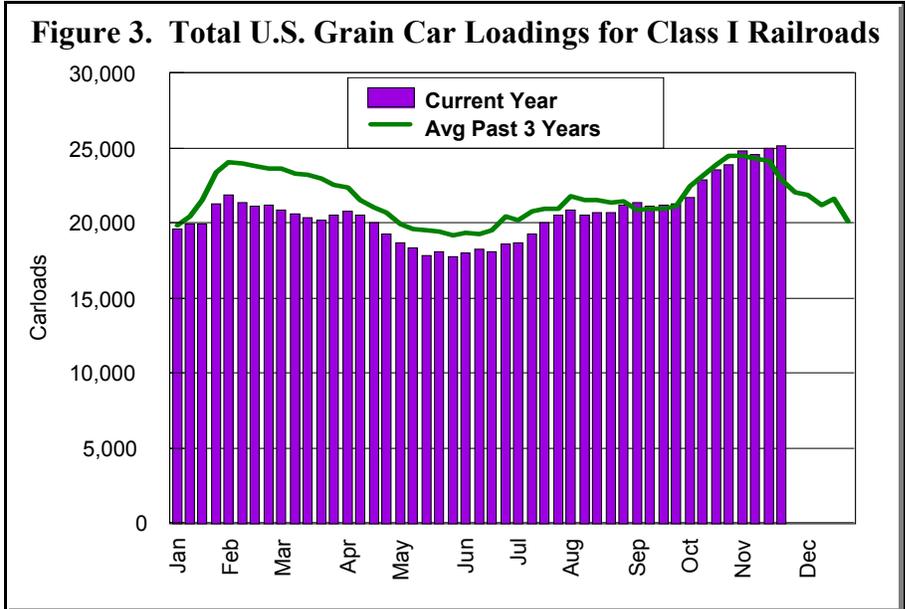
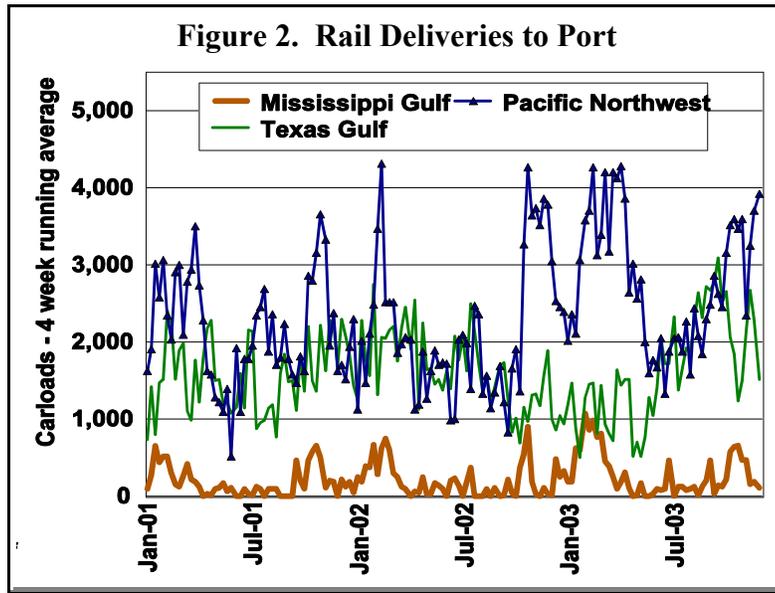


RAIL TRANSPORTATION

Table 2--Rail deliveries to port (carloads)

	Mississippi Gulf*	Texas Gulf	Pacific Northwest	Atlantic & East Gulf	Total
Week Ending:					
11/19/03	188	2,283	3,715	327	6,513
11/26/03	120	1,526	3,926	1,099	6,671
2003 YTD	14,199	77,993	132,591	17,439	242,222
2002 YTD	9,836	80,742	101,379	18,949	210,906
% 2002 YTD	144%	97%	131%	92%	115%
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



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)

	East		West			U.S. Total	Canada	
	CSXT	NS	BNSF	KCS	UP		CN	CP
11/22/03	3,580	3,712	10,198	629	6,416	24,535	4,574	4,944
This Week Last Year	3,570	3,399	8,611	692	7,665	23,937	3,566	5,135
2003 YTD	132,043	154,151	369,477	21,251	308,188	985,110	174,344	176,614
2002 YTD	130,074	149,149	360,608	24,405	311,357	975,593	177,928	180,809
% 2002 YTD	102%	103%	102%	87%	99%	101%	98%	98%
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*

Oct-03	95.1	99.1	96.3	87.7	96.9	96.6
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Source: Association of American Railroads; *Base Year =2001, Index based on Number of Covered Hopper Cars Online (available for Service).

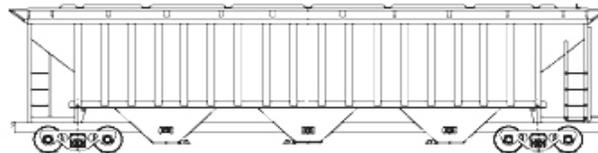


Table 4--Tariff rail rates for unit train shipments*

Date effective	Commodity	Origin	Destination	Rate per car	Rate per MT	Rate/per bushel**
12/01/03	Wheat	Kansas City, MO	Galveston, TX	\$1,820	\$20.06	\$0.55
12/01/03	Wheat	Minneapolis, MN	Portland, OR	\$4,148	\$45.72	\$1.24
12/01/03	Wheat	St. Louis, MO	Houston, TX	\$1,945	\$21.44	\$0.58
12/01/03	Wheat	Kansas City, MO	Laredo, TX	\$2,280	\$25.13	\$0.68
12/01/03	Wheat	Chicago, IL	Albany, NY	\$1,834	\$20.22	\$0.55
12/01/03	Corn	Minneapolis, MN	Portland, OR	\$3,130	\$34.50	\$0.88
12/01/03	Corn	Chicago, IL	Baton Rouge, LA	\$2,736	\$30.16	\$0.77
12/01/03	Corn	Council Bluffs, IA	Baton Rouge, LA	\$2,170	\$23.92	\$0.61
12/01/03	Corn	Evansville, IN	Raleigh, NC	\$1,841	\$20.29	\$0.52
12/01/03	Corn	Des Moines, IA	Laredo, TX	\$2,864	\$31.57	\$0.80
12/01/03	Soybean	Minneapolis, MN	Portland, OR	\$3,110	\$34.28	\$0.93
12/01/03	Soybeans	Chicago, IL	Baton Rouge, LA	\$2,736	\$30.16	\$0.82
12/01/03	Soybeans	Council Bluffs, IA	Baton Rouge, LA	\$2,799	\$30.85	\$0.84
12/01/03	Soybeans	Des Moines, IA	Laredo, TX	\$2,864	\$31.57	\$0.86
12/01/03	Soybeans	Evansville, IN	Raleigh, NC	\$1,841	\$20.29	\$0.55

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

*A unit train refers to shipments of at least 52 cars

**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			
	Jan-04	Feb-04	Mar-04	Apr-04
BNSF-GF	\$223	\$140	\$70	\$19
UP-Pool	\$128	\$70	\$51	\$6

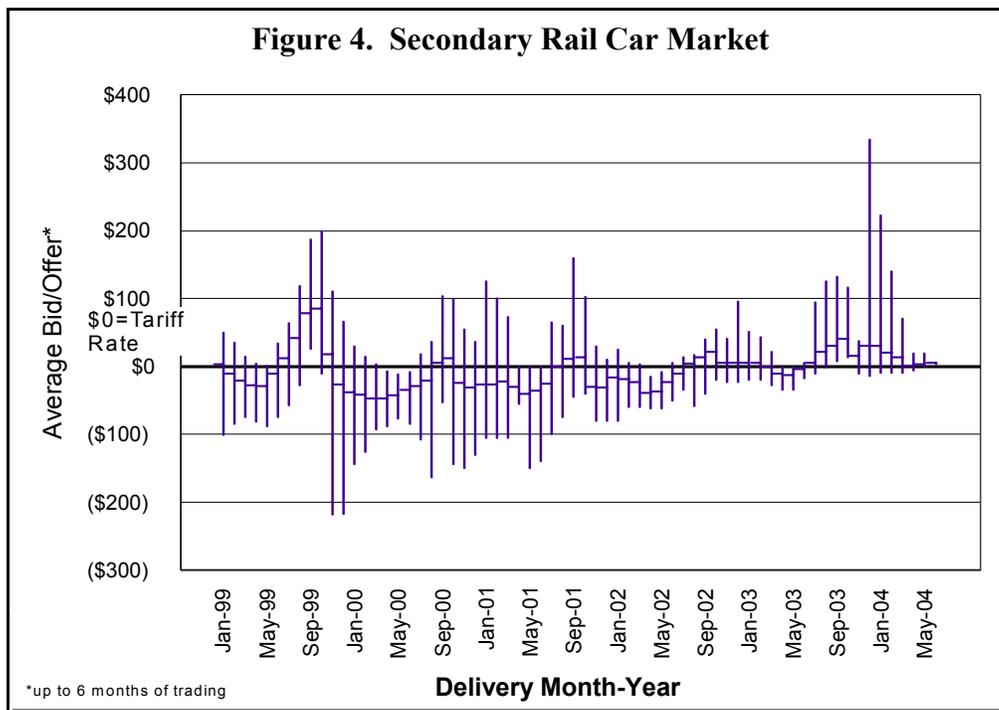
Sources: James B. Joiner & Co.; Tradewest Brokerage Co.
: GF=Guaranteed Freight, Pool=Guaranteed Pool
Note: Bids listed are market INDICATORS only & are NOT guaranteed prices, missing value=No Bid Quoted

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

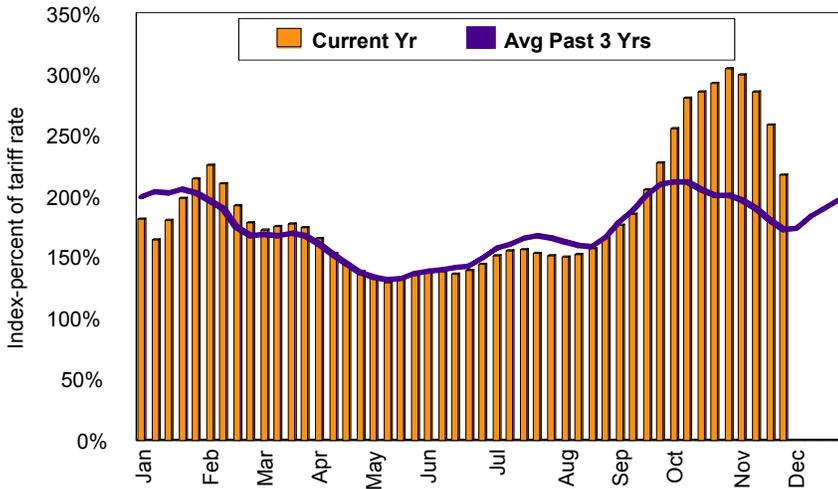
Delivery for:	Jan-04	Feb-04	Mar-04
COT/N. Grain	no bid	\$196	\$59
COT/S. Grain	no bid	\$200	\$73
GCAS/Region 1	\$131	\$35	no bid
GCAS/Region 2	\$178	\$123	no bid

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



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	11/26/03	11/19/03	Dec '03	Feb '04
Twin Cities	200	236	nq	nq
Mid-Mississippi	189	209	nq	nq
Illinois River	188	193	191	143
St. Louis	142	149	144	147
Lower Ohio	146	151	147	145
Cairo-Memphis	130	135	131	129

Source: Transportation & Marketing/AMS/USDA

Table 8--Barge futures market

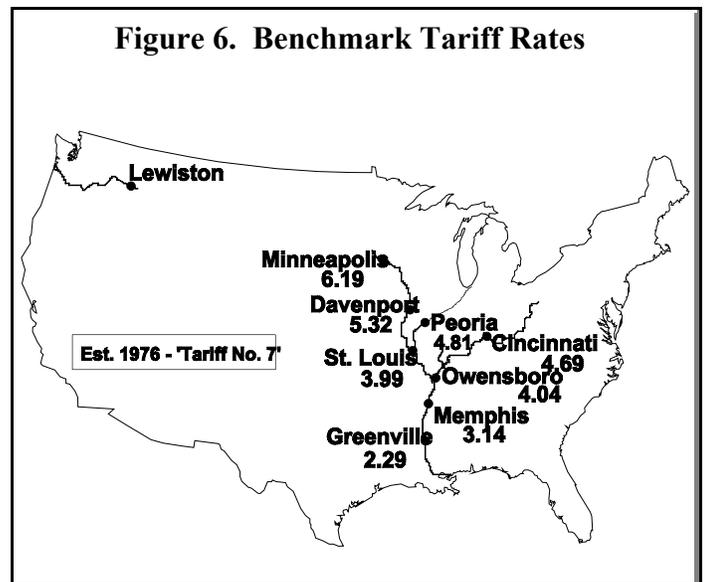
Southbound barge freight nominal/cash basis values

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

Week ended	River/region	Contract period	Rate	
			futures	cash
11/25/03	St. Louis	Dec.	n/a	150
		Feb.	n/a	150
		Apr.	n/a	145
		May	n/a	145
		Jun.	n/a	145
		Illinois River	Dec.	n/a
		Feb.	n/a	195
		Apr.	n/a	160
		May	n/a	153
		Jun.	n/a	160

Source: St. Louis Merchants Exchange

Figure 6. Benchmark Tariff Rates



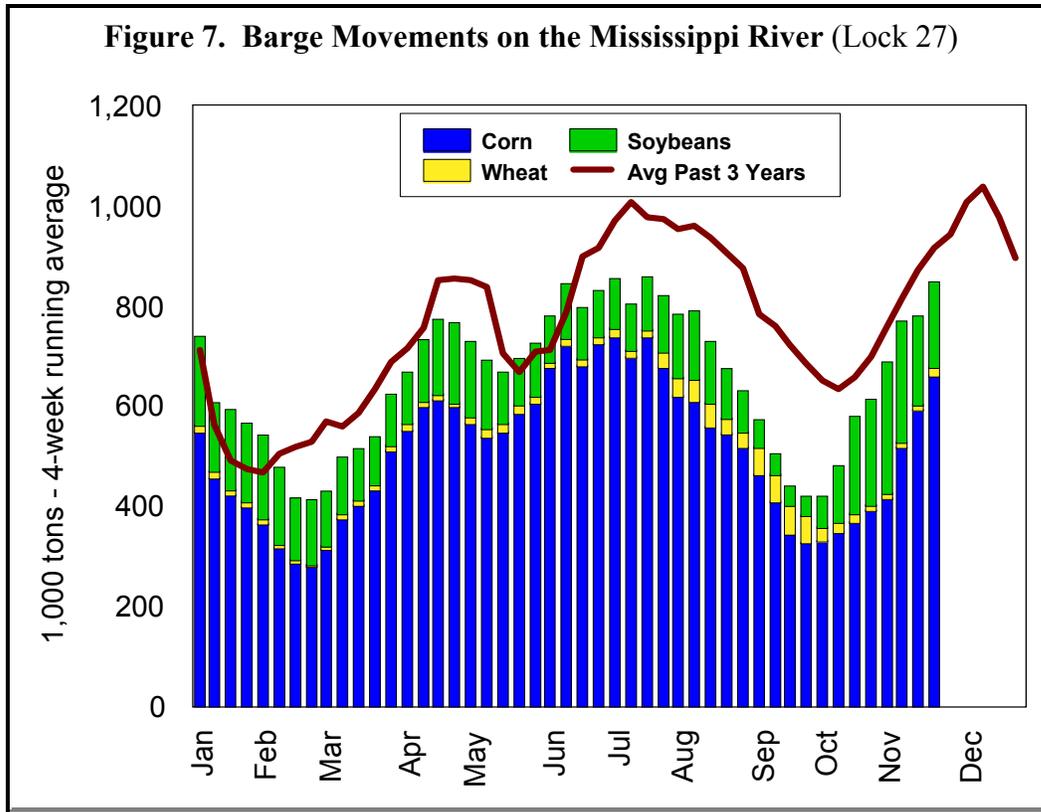


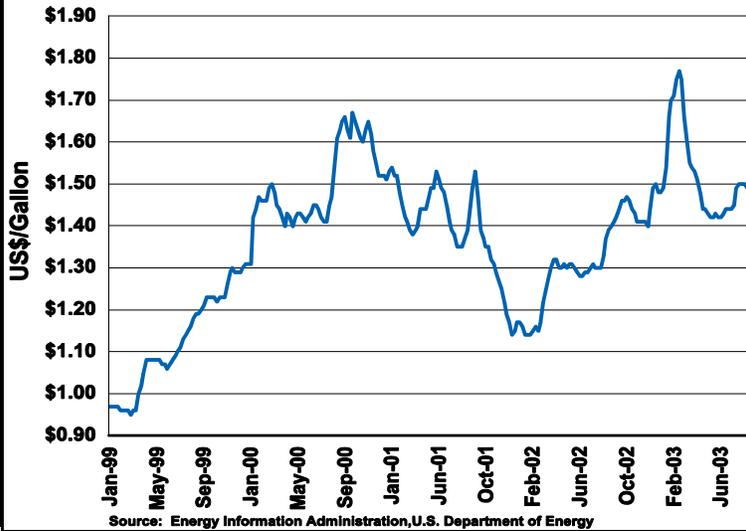
Table 9--Barge grain movements (1,000 tons)

Week ending 11/22/03	Corn	Wht	Sybn	Total
Mississippi River				
Rock Island, IL (L15)	185	6	58	249
Winfield, MO (L25)	394	6	96	496
Alton, IL (L26)	763	17	110	894
Granite City, IL (L27)	786	17	114	920
Illinois River (L8)	284	11	9	304
Ohio River (L52)	59	0	89	150
Arkansas River (L1)	0	14	17	31
2003 YTD	26,025	2,548	7,970	37,177
2002 YTD	31,321	2,374	10,280	45,376
% 2002 YTD	83%	108%	78%	82%
2002 Total	35,066	2,590	11,634	50,810

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



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.

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.

Figure 9. Weekly Brent Crude Price, Friday Close



Table 10--Crude oil prices (US\$ per Barrel)-12/2/03

Type	This week	Last week	Change
Light Sweet Crude (NYMEX)	30.36	29.33	↑
Brent Crude	29.09	n/a	n/a

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)

Unshipped export balance	Wheat					All Wheat	Corn	Soybean	Total
	HRW	SRW	HRS	SWW	DUR				
11/20/03	2,890	593	942	950	150	5,524	10,601	10,599	26,724
This Week Year Ago	1,276	787	1,557	852	162	4,633	8,308	7,603	20,544
Cumulative Exports-Crop Year									
2003/04 YTD	5,857	2,034	3,428	2,026	602	13,946	10,219	8,393	32,558
2002/03 YTD	4,074	1,309	3,494	1,733	439	11,049	8,285	7,562	26,896
% 2002/03 YTD	144%	155%	98%	1	137%	126%	123%	111%	121%
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

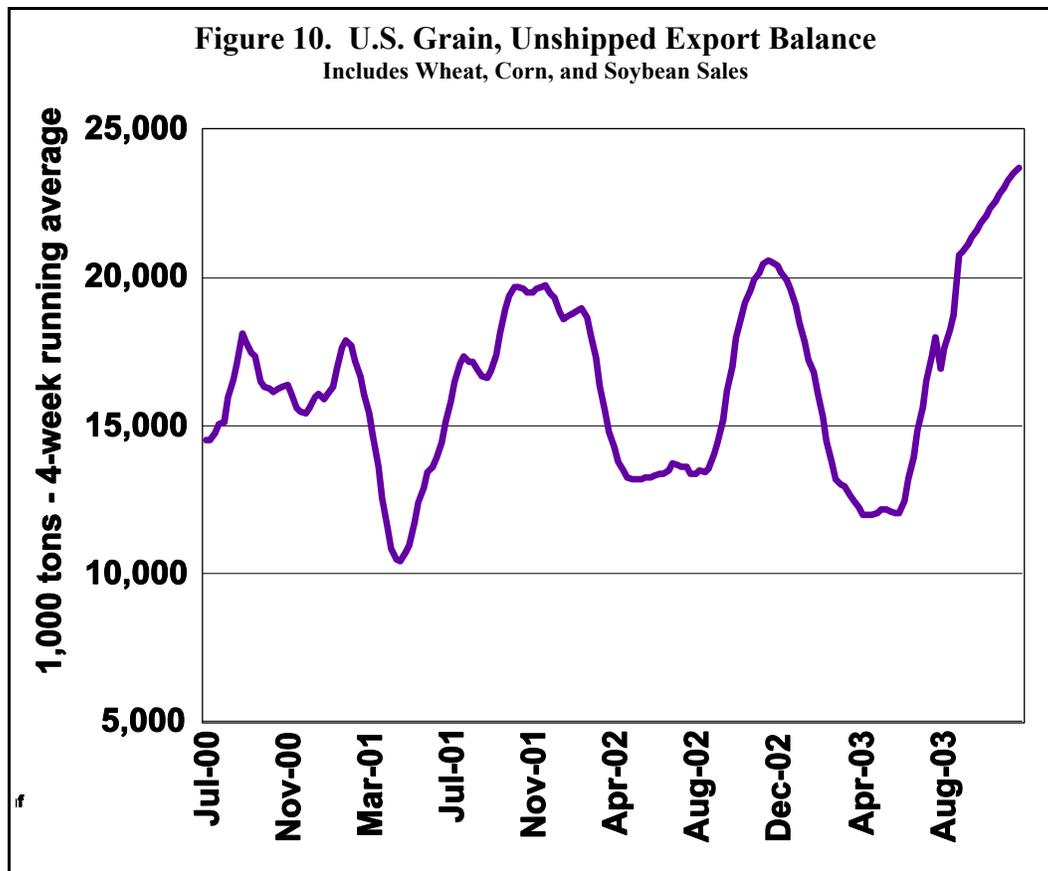
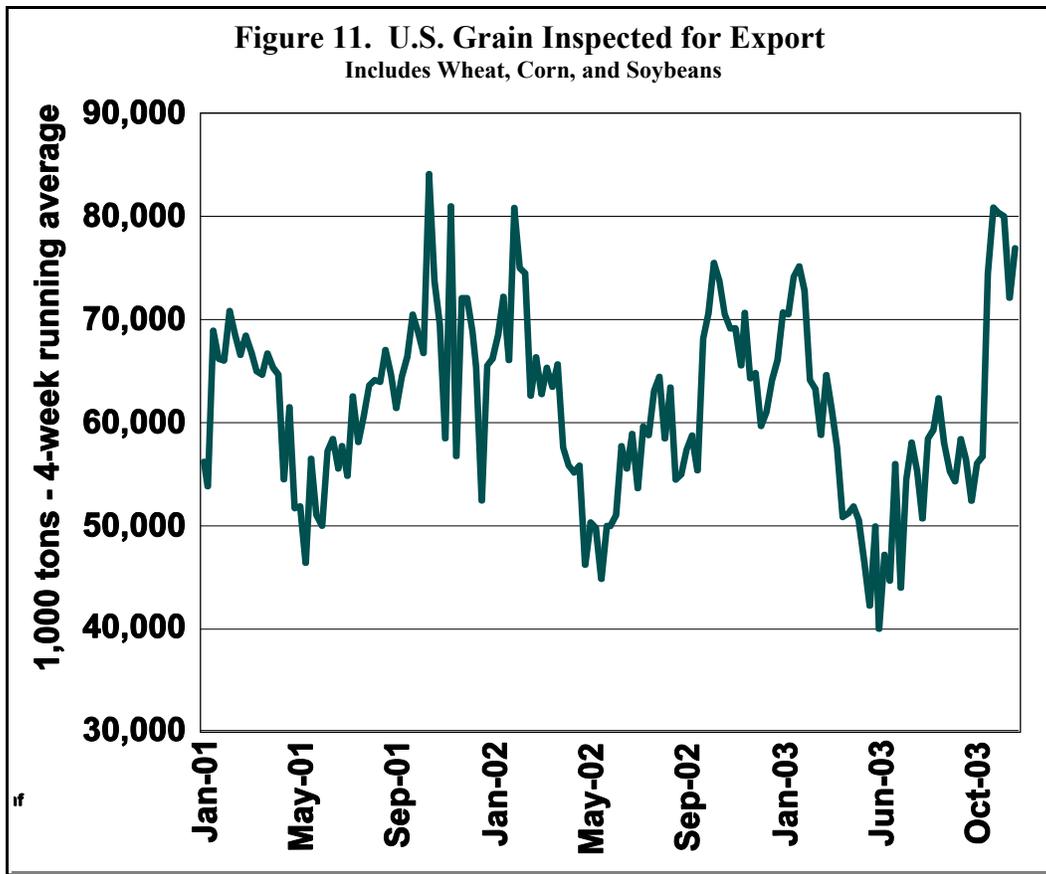


Table 12--Select U.S. port regions - grain inspections for export (1,000 metric tons)

Date	<u>Pacific Region</u>			<u>Mississippi Gulf</u>			<u>Texas Gulf</u>			<u>Port Region Total</u>		
	<i>Wheat</i>	<i>Corn</i>	<i>Soybn</i>	<i>Wheat</i>	<i>Corn</i>	<i>Soybn</i>	<i>Wheat</i>	<i>Corn</i>	<i>Soybn</i>	<i>Pacific</i>	<i>Mississippi</i>	<i>Texas</i>
11/27/03	150	216	212	77	642	700	139	15	0	578	1,419	153
2003 YTD	8,206	4,914	4,712	5,596	27,362	16,617	6,344	693	94	17,832	49,575	7,130
2002 YTD	8,340	3,601	2,752	5,319	33,722	16,378	5,439	261	373	14,694	55,418	6,073
% 2002 YTD	98%	136%	171%	105%	81%	101%	117%	265%	25%	121%	89%	117%
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



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.

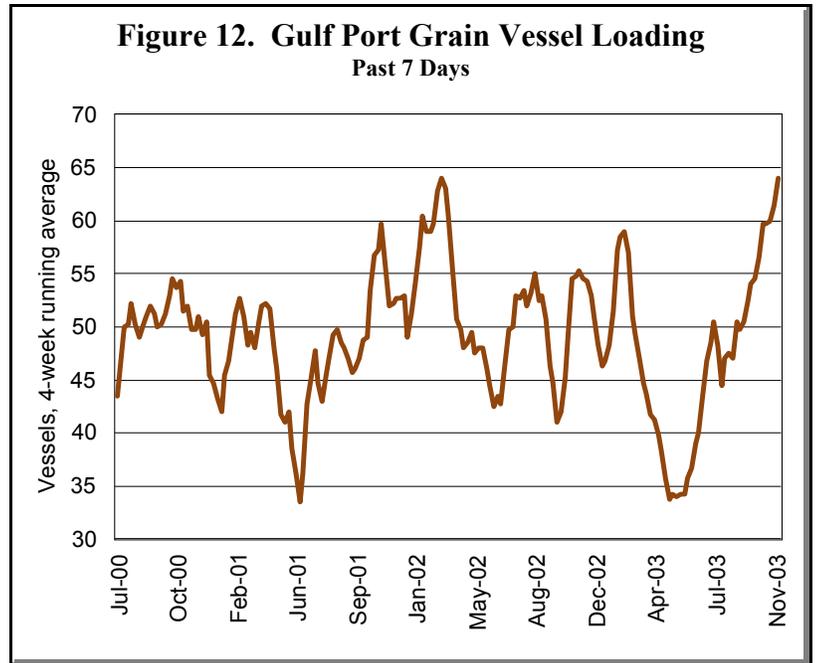


Table 13--Weekly port region grain ocean vessel activity (number of vessels)

Date	Gulf			Pacific Northwest	Vancouver B.C.
	In Port	Loaded 7-Days	Due Next 10-Days	In Port	In Port
11/20/03	33	67	78	8	3
11/27/03	35	76	51	10	15
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 3 rd Qtr	2002 3 rd Qtr	Change %		2003 3 rd Qtr	2002 3 rd 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

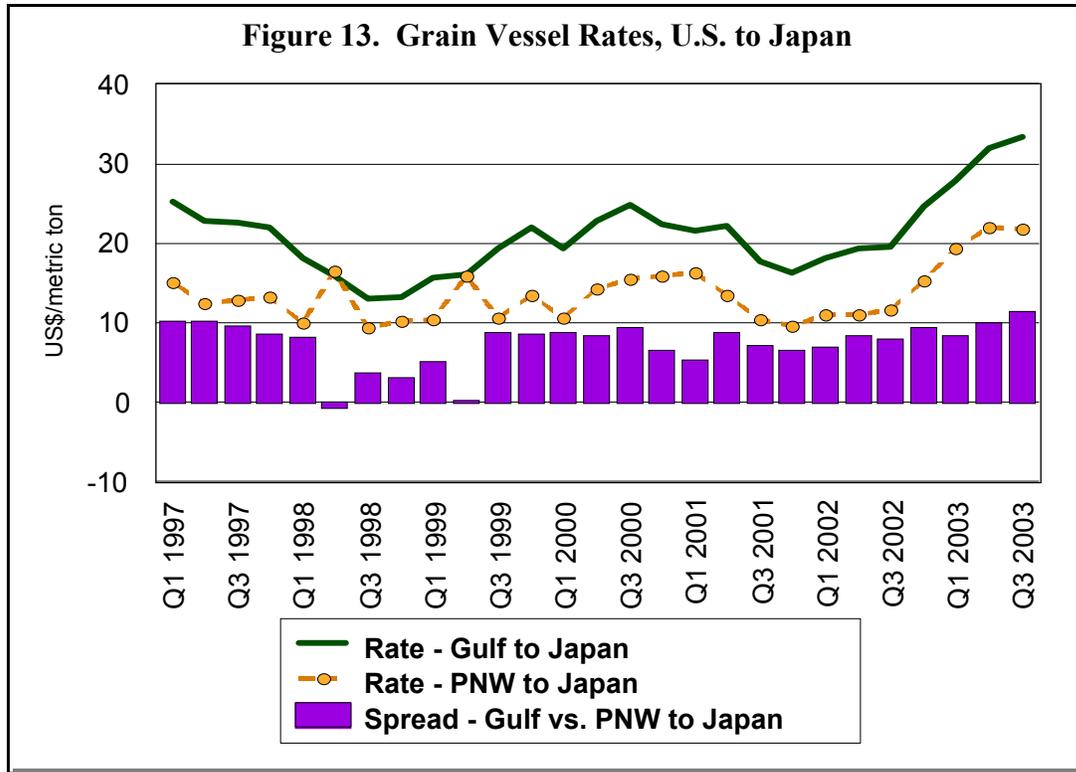


Table 15--Ocean freight rates for selected shipments

Week Ending 11/29/03

Export region	Import region	Grain	Month	Volume loaded (Tons)	Freight rate (\$/ton)
U.S. Gulf	Morocco	Wheat	Dec 12/21	35,000	\$36.00
U.S. Gulf	Ghana	Wheat	Oct 20/30	15,000	\$42.65*
U.S. Gulf	Taiwan	Hvy Grain	Nov 5/18	44000/46000	\$44.00
U.S. Gulf	Japan	Hvy Grain	Nov 1/10	42,000/44,000	\$38.80
U.S. Gulf	Kenya	Corn	Nov 10/20	55,000	\$45.00
U.S. Gulf	China	Hvy Grain	Nov 25/30	55,000	\$45.00
Brazil	Italy	Meals	Nov 25/30	20,000	\$38.50

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

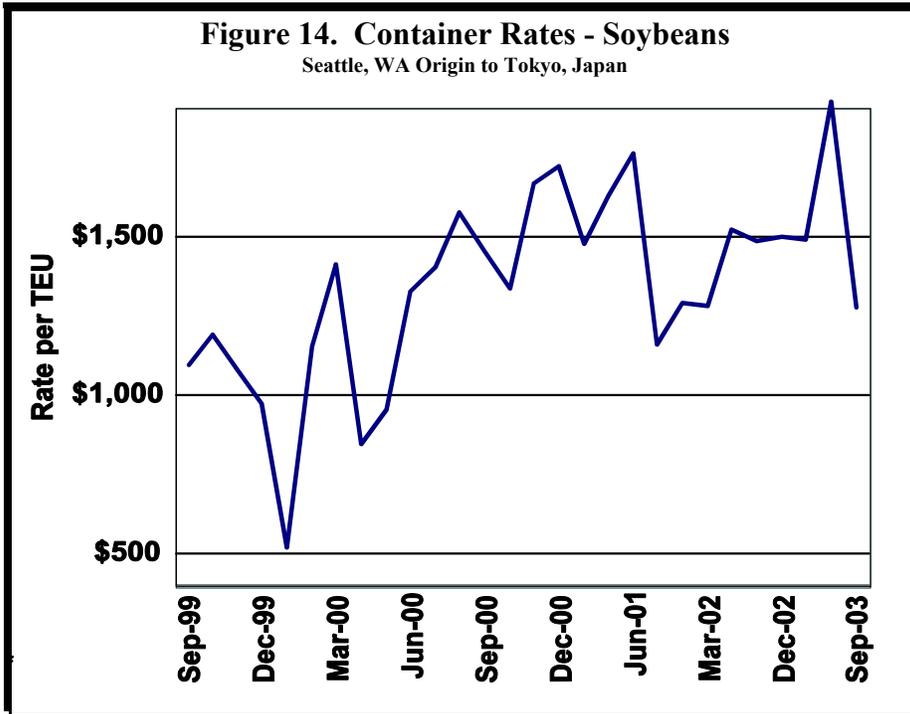
*Most food aid from the United States is required to be shipped on U.S. flag vessels. The vessels are of limited availability resulting in higher rates. In addition, destinations receiving food aid generally lack adequate port unloading facilities, requiring the vessel to remain in port for a longer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



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

