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Marketing and Transportation Analysis

GRAIN TRANSPORTATION PROSPECTS



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GRAIN TRANSPORTATION PROSPECTS

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Summary

The *Grain Transportation Prospects (Prospects)* responds to ideas and concerns stemming from the first National Agricultural Transportation Summit held in Kansas City, MO, in July 1998. At that event, the United States Department of Agriculture identified the concerns of constituents for reliable data and information on the current situation in the grain and transportation industries. *Prospects* focuses on the following grains: corn, sorghum, barley, oats, wheat, rye, and soybeans. It also focuses on grain prices/rates, stocks and storage capacity, and related transportation issues for ocean freight, barge, rail, and motor carriers.

The total supply of U.S. grain and soybeans in January is projected at 18.7 billion bushels. The estimated production for 2001/02 is approximately 15.2 billion bushels, down 4 percent from the 2000/01 marketing year. Total use is 16 billion bushels, projected down slightly, with approximately 33 million bushels more than last year and exports up by 7 million bushels. Ending stocks for the 2001/02 marketing year are projected at 2.7 billion bushels, down 2.35 percent from a year earlier.

The year 2001 started with higher than average ocean transportation costs but ended with lower than average costs. For the fourth quarter of 2001, the average ocean freight rate was \$17.06 per metric ton for the U.S. Gulf to Japan route; this represents a drop of 28 percent from a year earlier.

For the fourth quarter of 2001, weekly barge shipments of grain averaged 1 million tons, a 4-percent decrease from the 5-year average. Total grain barge traffic for 2001 was 48.2 million tons, which was almost equal to the 5-year average. This is notable since the normal 9-month upper Mississippi River navigation season was considerably shortened by high water levels in March and April and completely stopped by flood restrictions in late April through May.

Although recent demand for transportation of grain movement by rail has been strong and relatively few rail cars are in storage, U.S. Class I railroads expect rail capacity for agricultural products to be adequate during February and March. During the fourth quarter of 2001, the number of grain cars originated on U.S. Class I railroads increased 7.9 percent, compared to the same period in 2000.

Late winter and early spring prospects for grain motor carriers should benefit from a reduction in transportation costs associated with lower fuel prices at the pump. These conditions contrast sharply to last year, when grain motor carrier encountered instability in fuel prices at the pump and changes in the relatively stable regulatory regime.

Grain Market Situation

Grain and Soybeans

Supplies. The total U.S. corn, sorghum, barley, oats, wheat, rye, and soybean production estimates for 2001/2002 are approximately 15.2 billion bushels, down 4 percent from a year earlier (appendix table A). As a portion of the total supplies (18.7 billion bushels), production accounts for 81 percent. In addition to production, imports account for 1 percent or 234 million bushels for 2001/02, down 0.3 percent from a year earlier. Lastly, beginning stocks are approximately 17 percent of total supplies or 3.24 billion bushels.

- **Production**

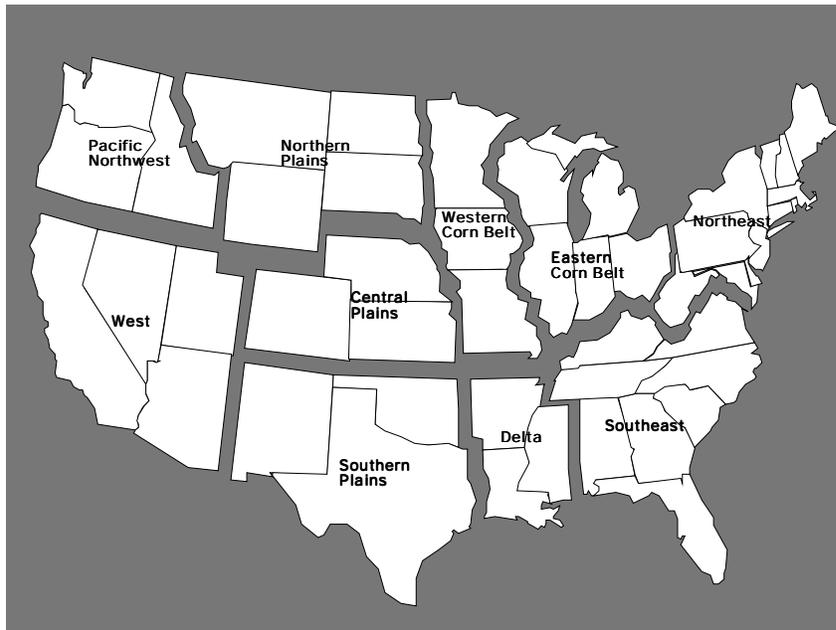
- Eastern and Western Corn Belts

- Of the 10 grain producing regions (figure 1), the Eastern and Western Corn Belt regions account for 8.7 billion bushels or 57 percent of total grain and soybeans produced in the United States, approximately 31 and 26 percent, respectively (figure 2). In the Eastern Corn Belt, production was 4.78 billion bushels, down 2 percent from the previous year but up 6 percent from the average of the previous 5 years. Production in the Western Corn Belt was down 8 percent at 3.92 billion bushels and 4 percent lower than the 5-year average.

- Central and Northern Plains

- The Central and Northern Plains account for 4.03 billion bushels or 26 percent of total grain and soybeans produced in 2001/02. The Central Plains produced 2.74 billion bushels, up 9 percent from the previous year but down 4 percent from the 5-year average. Production in the Northern Plains was down 15 percent at 1.3 billion bushels and 11 percent lower than the 5-year average.

Figure 1--U.S. Grain Production Regions

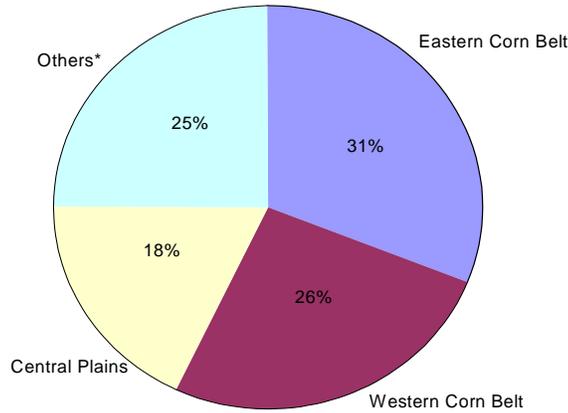


Source: USDA-AMS

- **Use**

Total use at 16 billion bushels is projected down slightly from last year with almost equal reductions in domestic use and exports. Ending stocks for the 2001/02 marketing year are projected at 2.7 billion bushels, down 2.35 percent from a year earlier.

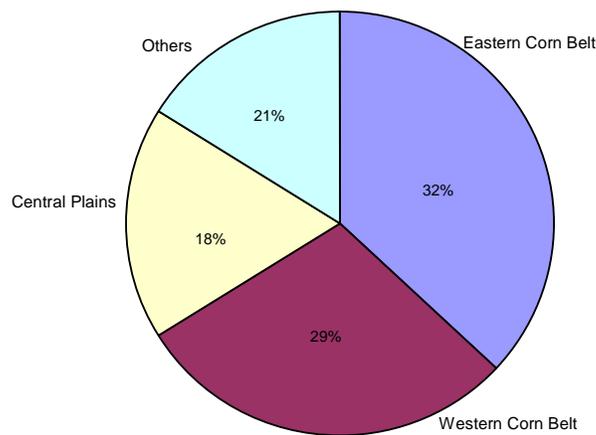
Figure 2--Proportion of Total U.S. Grain and Soybean Production by Region, 2001/2002



Note: Others* includes regions producing less than 10% each of total U.S. grain and soybean (Northeast, Southeast, Delta, Southern and Northern Plains, Pacific Northwest, and West)
 Data Source: USDA/NASS

Stocks and Storage. December 1 grain and soybean stocks in all positions are down 5 percent from last year at 12.8 billion bushels (appendix table B). The Eastern and Western Corn Belts contributed 7.83 billion bushels of total stocks stored, 61 percent of the U.S. total (figure 3). The December 1 stocks represented 24 percent of total U.S. grain storage capacity. Of the total, 57 percent of the on-farm and 43 percent of the off-farm capacity was in use (table 1).

Figure 3--Proportion of Total U.S. Grain and Soybean Stocks By Region (as of December 1, 2001)



Note: Others* includes regions storing less than 10% each of total U.S. grain and soybean (Northeast, Southeast, Delta, Southern and Northern Plains, Pacific Northwest, and West)
 Data Source: USDA/NASS

Table 1--U.S. Grain Storage Capacity, 1994-2001

| Region | U.S. Grain Storage Capacity Dec. 1, 1994 | | | U.S. Grain Storage Capacity Dec. 1, 1995 | | | U.S. Grain Storage Capacity Dec. 1, 1996 | | |
|-------------------|--|-----------|------------|--|-----------|------------|--|-----------|------------|
| | On farms | Off farms | Total | On farms | Off farms | Total | On farms | Off farms | Total |
| | <i>1,000 bushels</i> | | | <i>1,000 bushels</i> | | | <i>1,000 bushels</i> | | |
| Northeast | 255,000 | 144,290 | 399,290 | 245,000 | 148,800 | 393,800 | 230,000 | 147,420 | 377,420 |
| Southeast | 565,000 | 350,220 | 915,220 | 535,000 | 347,800 | 882,800 | 520,000 | 344,700 | 864,700 |
| Delta | 185,000 | 373,970 | 558,970 | 170,000 | 370,000 | 540,000 | 170,000 | 360,810 | 530,810 |
| Eastern Corn Belt | 3,000,000 | 2,115,120 | 5,115,120 | 2,920,000 | 2,105,180 | 5,025,180 | 2,900,000 | 2,088,840 | 4,988,840 |
| Western Corn Belt | 3,340,000 | 1,721,730 | 5,061,730 | 3,290,000 | 1,713,160 | 5,003,160 | 3,190,000 | 1,700,690 | 4,890,690 |
| Southern Plains | 270,000 | 1,097,870 | 1,367,870 | 250,000 | 1,069,260 | 1,319,260 | 230,000 | 946,920 | 1,176,920 |
| Central Plains | 1,670,000 | 1,597,240 | 3,267,240 | 1,615,000 | 1,580,930 | 3,195,930 | 1,620,000 | 1,514,360 | 3,134,360 |
| Northern Plains | 1,640,000 | 450,510 | 2,090,510 | 1,590,000 | 443,330 | 2,033,330 | 1,590,000 | 443,360 | 2,033,360 |
| Pacific Northwest | 265,000 | 379,730 | 644,730 | 270,000 | 381,700 | 651,700 | 250,000 | 385,700 | 635,700 |
| West | * | 142,300 | 142,300 | * | 139,970 | 139,970 | * | 138,600 | 138,600 |
| Unallocated | 310,000 | 1,130 | 311,130 | 280,000 | 930 | 280,930 | 270,000 | 930 | 270,930 |
| United States | 11,500,000 | 8,374,110 | 19,874,110 | 11,165,000 | 8,301,060 | 19,466,060 | 10,970,000 | 8,072,330 | 19,042,330 |
| Region | U.S. Grain Storage Capacity Dec. 1, 1997 | | | U.S. Grain Storage Capacity Dec. 1, 1998 | | | U.S. Grain Storage Capacity Dec. 1, 1999 | | |
| | On farms | Off farms | Total | On farms | Off farms | Total | On farms | Off farms | Total |
| | <i>1,000 bushels</i> | | | <i>1,000 bushels</i> | | | <i>1,000 bushels</i> | | |
| Northeast | 230,000 | 148,310 | 378,310 | 230,000 | 145,580 | 375,580 | 230,000 | 147,720 | 377,720 |
| Southeast | 505,000 | 336,350 | 841,350 | 495,000 | 329,310 | 824,310 | 500,000 | 321,990 | 821,990 |
| Delta | 170,000 | 362,130 | 532,130 | 180,000 | 369,350 | 549,350 | 200,000 | 383,990 | 583,990 |
| Eastern Corn Belt | 2,900,000 | 2,085,650 | 4,985,650 | 3,000,000 | 2,098,600 | 5,098,600 | 2,970,000 | 2,134,640 | 5,104,640 |
| Western Corn Belt | 3,200,000 | 1,695,470 | 4,895,470 | 3,200,000 | 1,732,760 | 4,932,760 | 3,220,000 | 1,722,860 | 4,942,860 |
| Southern Plains | 220,000 | 877,520 | 1,097,520 | 220,000 | 832,880 | 1,052,880 | 220,000 | 829,460 | 1,049,460 |
| Central Plains | 1,620,000 | 1,481,840 | 3,101,840 | 1,640,000 | 1,521,360 | 3,161,360 | 1,625,000 | 1,557,040 | 3,182,040 |
| Northern Plains | 1,570,000 | 444,890 | 2,014,890 | 1,620,000 | 449,980 | 2,069,980 | 1,630,000 | 464,210 | 2,094,210 |
| Pacific Northwest | 245,000 | 388,040 | 633,040 | 245,000 | 385,450 | 630,450 | 245,000 | 380,940 | 625,940 |
| West | * | 140,210 | 140,210 | * | 137,000 | 137,000 | * | 146,550 | 146,550 |
| Unallocated | 290,000 | 930 | 290,930 | 290,000 | 920 | 290,920 | 320,000 | 920 | 320,920 |
| United States | 10,950,000 | 7,961,340 | 18,911,340 | 11,130,000 | 8,003,190 | 19,133,190 | 11,160,000 | 8,090,320 | 19,250,320 |
| Region | U.S. Grain Storage Capacity Dec. 1, 2000 | | | U.S. Grain Storage Capacity Dec. 1, 2001 | | | Percent change of 2000 | | |
| | On farms | Off farms | Total | On farms | Off farms | Total | On farms | Off farms | Total |
| | <i>1,000 bushels</i> | | | <i>1,000 bushels</i> | | | <i>1,000 bushels</i> | | |
| Northeast | 230,000 | 146,650 | 376,650 | 225,000 | 147,995 | 372,995 | 2.2 | -0.9 | 1.0 |
| Southeast | 480,000 | 318,326 | 798,326 | 455,000 | 316,294 | 771,294 | 5.5 | 0.6 | 3.5 |
| Delta | 200,000 | 385,940 | 585,940 | 200,000 | 381,200 | 581,200 | 0.0 | 1.2 | 0.8 |
| Eastern Corn Belt | 2,970,000 | 2,204,156 | 5,174,156 | 2,970,000 | 2,211,322 | 5,181,322 | 0.0 | -0.3 | -0.1 |
| Western Corn Belt | 3,295,000 | 1,742,470 | 5,037,470 | 3,295,000 | 1,771,360 | 5,066,360 | 0.0 | -1.6 | -0.6 |
| Southern Plains | 240,000 | 854,960 | 1,094,960 | 235,000 | 881,060 | 1,116,060 | 2.1 | -3.0 | -1.9 |
| Central Plains | 1,595,000 | 1,693,571 | 3,288,571 | 1,580,000 | 1,701,106 | 3,281,106 | 0.9 | -0.4 | 0.2 |
| Northern Plains | 1,610,000 | 464,990 | 2,074,990 | 1,625,000 | 460,970 | 2,085,970 | -0.9 | 0.9 | -0.5 |
| Pacific Northwest | 245,000 | 379,335 | 624,335 | 260,000 | 388,370 | 648,370 | -5.8 | -2.3 | -3.7 |
| West | * | 157,614 | 157,614 | * | 159,280 | 159,280 | * | -1.0 | -1.0 |
| Unallocated | 330,000 | 924 | 330,924 | 330,000 | 923 | 330,923 | 0.0 | 0.1 | 0.0 |
| United States | 11,195,000 | 8,348,936 | 19,543,936 | 11,175,000 | 8,419,880 | 19,594,880 | 0.2 | -0.8 | -0.3 |

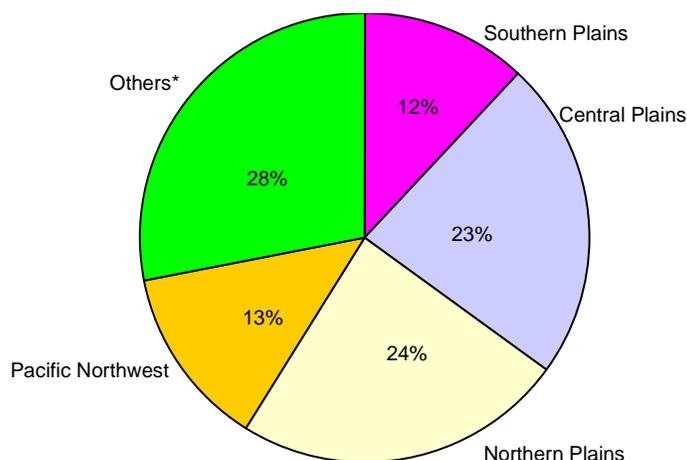
*Unallocated
Source: USDA-NASS

Wheat

U.S. Wheat Production Decreases as Area and Yield Decrease. Lower planted and harvested acreage and reduced yield per acre, compared to the previous year, resulted in a lower level of production in the current year. Wheat production for 2001/02 is estimated at 1.96 billion bushels, down 275 million bushels or 12 percent below the previous year. Area planted is down 3 million acres or 5 percent, while area harvested is projected at 4.4 million bushels or 8 percent. The estimated yield per acre at 40.2 bushels is down 1.8 bushels or 4 percent.

Wheat Production Decreases in Major Producing Regions. With the exception of the Southern Plains, wheat production was down in the Plains regions and other major producing States, compared to 2000/01. Production in the Northern Plains is projected down 102 million bushels or 18 percent, compared to the previous year, and 21 percent below the 5-year average (appendix table C). Central Plains production is projected down 22 million bushels or 5 percent below the previous year and 20 percent below the 5-year average. The Plains regions accounted for a combined 59 percent of the total wheat production (figure 4).

Figure 4--Proportion of Total U.S Wheat Production by Regions, 2001/2002



Note: Others* includes regions producing less than 10% each of total U.S. wheat production (Northeast, Southeast, Delta, Eastern and Western Corn Belts, and West)

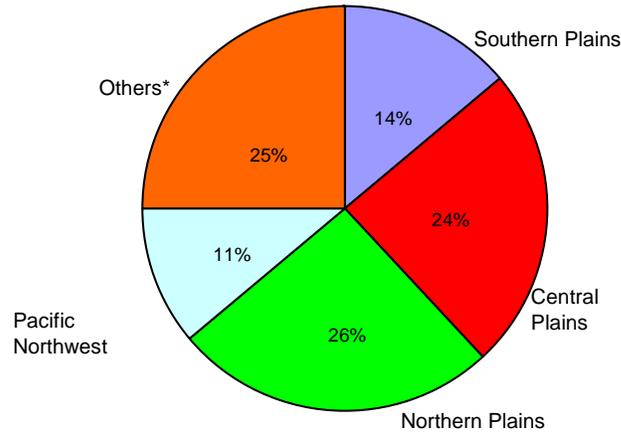
Data Source: USDA/NASS

Total U.S. Wheat Supply Decreases as Beginning Stocks and Production Decrease. Smaller beginning stocks at 876 million bushels and a projected smaller production at 1.96 billion bushels led to a decrease in projected total supply to 2.93 billion bushels, down 343 million bushels or 11 percent. Imports at 95 million bushels are projected up slightly by 5 million bushels.

Ending Stocks Shrink Despite Decrease in Total Wheat Use as Price Rises. Smaller beginning stocks and a decrease in production more than offset the reduction in total wheat use resulting in smaller ending stocks, compared to the previous year. With a projected total supply at 2.93 billion bushels and total use at 2.26 billion bushels, the ending stocks are projected at 671 million bushels. The ending stocks are down 205 million bushels or 23 percent, compared to the previous year. The average farm price for 2001/02 is forecast between \$2.75 and \$2.85 per bushel, compared to \$2.62 per bushel in 2000/01. Despite the higher farm price, winter wheat seedings for the 2001 crop were down marginally from a year earlier. While spring wheat plantings and yields are yet to be determined, there are no signals to date of increased demand for transportation of wheat.

Total Wheat Stored in the United States Declines. Wheat stored in all positions as of December 1, 2001, declined as wheat stocks in major producing regions fell (appendix table D). December wheat stocks in all positions were 1.62 billion bushels, down 183 million bushels or 10 percent from a year ago. On-farm stocks, reported at 518 million bushels, were down 17 percent from a year earlier and 18 percent from the 5-year average. Off-farm stocks at 1.11 billion bushels were down 7 percent from the same period a year ago but 5 percent above the 5-year average. Total wheat stored in all regions declined with the exception of the Southern Plains where wheat stocks increased by 18 million bushels. Wheat stored in the Northern Plains declined by 55 million bushels or 12 percent, while wheat stored in the Central Plains fell by 12 million bushels or 3 percent below 2000. The Southern and Central Plains stored the majority of their wheat off farms, while the Northern Plains stored the majority of its wheat on farms. The Central Plains held the majority of its stocks in Kansas, while the Northern Plains stored most of its wheat in North Dakota. The Plains regions accounted for 64 percent of the Nation's wheat stocks (figure 5).

Figure 5--Proportion of Total U.S. Wheat Stocks by Region (as of December 1, 2001)



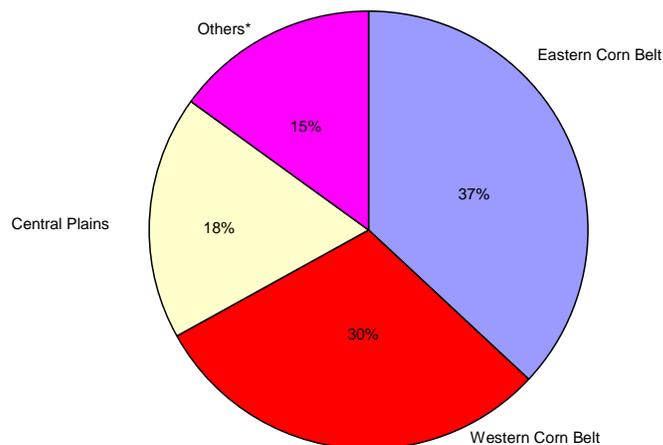
Note: Others* includes regions storing less than 10% each of total U.S. wheat (Northeast, Southeast, Delta, Eastern and Western Corn Belts, and West).
 Data Source: USDA/NASS

Corn

U.S. Total Corn Production Decreases as Area Drops. Despite the second highest yield on record, U.S. corn production at 9.51 billion bushels, declined 408 million bushels or 4 percent, compared to 2000/01 (appendix table E). Area planted and area harvested are down 3.8 (5 percent) and 3.6 million acres (5 percent), respectively. However, there is an improvement in yield per acre. The U.S. grain yield of 138.2 bushels per acre is the second highest yield on record and 1.3 bushels or 1 percent above 2000/01.

Corn Production Declines in the Corn Belt Regions. Production in the Eastern Corn Belt is estimated at 3.5 billion bushels, down 68 million bushels or 2 percent, while production in the Western Corn Belt is projected at 2.8 billion bushels, down 272 million bushels or 9 percent. Eastern Corn Belt production is 6 percent above the 5-year average, while Western Corn Belt production is 5 percent below the 5-year average. Production dropped in all States in the Eastern Corn Belt except Indiana, which is up 74 million bushels. Minnesota leads all of the States in the Western Corn Belt with a 159.3-million-bushel reduction in production. However, the Corn Belts still produce 67 percent of the Nation's corn output (figure 6).

Figure 6--Proportion of Total U.S. Corn Production by Regions, 2001/2002



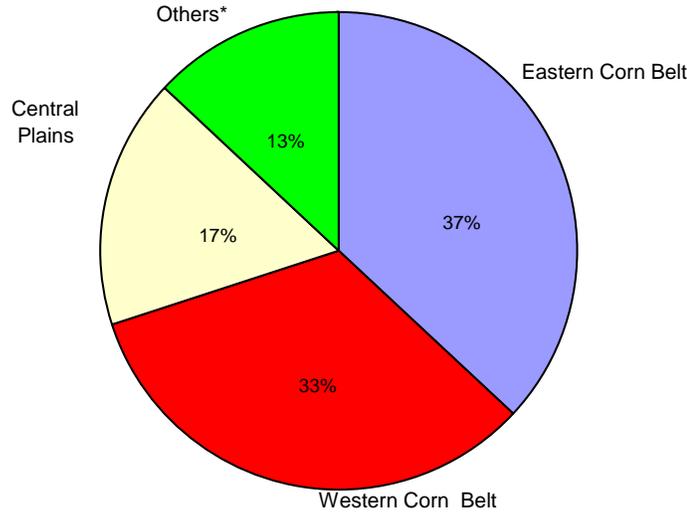
Note: Others* includes regions producing less than 10% each of total U.S. Corn (Northeast, Southeast, Delta, Southern and Northern Plains, Pacific Northwest, and West)
Data Source: USDA/NASS

Total Corn Supply Decreases as Beginning Stocks and Imports Increase. Total corn supply for 2001/02 is projected down 223 million bushels or 2 percent as increases in the beginning stocks and imports are not enough to offset the reduced production. Beginning stocks at 1.9 billion bushels are 181 million bushels or 11 percent larger than the previous year.

U.S. Total Corn Use Rises While Ending Stocks Fall and Prices Rise. Total corn use for 2001/02 is projected at a record 9.9 billion bushels, up 130 million bushels or 1 percent from last year. Domestic use is projected at 7.9 billion bushels, up 92 million bushels or 1 percent. Exports are projected at 1.98 billion bushels, up 38 million bushels or 2 percent from 2000/01. Total use will exceed production, leading to a decline in ending stocks to 1.55 billion bushels, down 353 million bushels or 19 percent, compared to the previous year. The average farm price for corn is forecast between \$1.85 and \$2.15 per bushel for 2001/02, compared to \$1.85 for 2000/01. The higher use may translate into higher demand for transportation, especially in the second half of the September-August year. Reduced competition from China and South America will mean an expanding pace for export shipments. In addition, the higher corn prices and lower stocks to be expected to result in increased corn plantings for the 2002 crop.

Total Corn Stored in United States Declines. Corn stored on and off farms in all major producing regions have fallen since last year. December 1 corn stocks in all positions were reported at 8.3 billion bushels, down 3 percent from December 1, 2000, but 7 percent above the 5-year average (appendix table F). December 1 stocks were reported down for all regions except the Delta, Central Plains, and Southeast. Corn stored in the Western Corn Belt was down 212 million bushels or 7 percent, compared to the previous year, but 9 percent above the 5-year average. Corn stocks kept in the Eastern Corn Belt were down 32 million bushels or 1 percent below 2000 but 9 percent above the 5-year average. The Corn Belts accounted for 70 percent of the Nation's corn stocks (figure 7). The Eastern Corn Belt stored 62 percent of its corn on farms, while the Western Corn Belt stored 69 percent of its corn on farms.

Figure 7--Proportion of Total U.S. Corn Stocks by Region (as of December 1, 2001)



Note: Others* includes regions storing less than 10% each of total U.S. Corn (Northeast, Southeast, Delta, Southern and Northern Plains, Pacific Northwest, and West)

Data Source: USDA/NASS

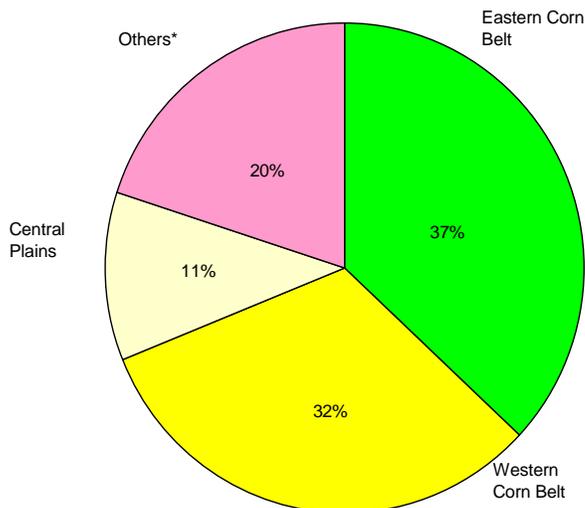
Soybeans

U.S. Soybean Production Increases Despite Decrease in Acreage Planted. A slight decrease in total area planted is not enough to roll back total soybean production as increases in acreage harvested and yield per harvested acre are projected to more than offset the reduction in acreage planted in 2001/02, compared to 2000/01. Soybean production for 2001/02 is projected at a record 2.89 billion bushels, up 133 million bushels or 5 percent above the previous year's level and 9 percent above the 5-year average. This is the highest production on record. Total area planted is estimated at 74.1 million acres, down 200,000 acres, while area harvested is projected at 73 million acres, up 600,000 acres or 1 percent. The yield per acre is projected at 39.6 bushels, which is 1.5 bushels or 4 percent more than in 2000/01.

Production is Relatively Stable in Major Producing Regions. While other producing regions are anticipated to record some gains or losses in soybean production, only a modest increase is projected for the Corn Belts, which are the major producing regions. Production in the Eastern Corn Belt is projected at 1.1 billion bushels, up 32 million bushels or 3 percent above the 5-year average, while production in the Western Corn Belt is projected at the previous year's level of 933 million and 4 percent above the 5-year average (appendix table G). The Corn Belts produce 69 percent of the Nation's soybean output (figure 8).

Total Soybean Supply Increases Despite Shrinking Beginning Stocks. An increase in production due to a larger area harvested and an increase in yield per harvested acre has led to a projected increase in total soybean supply despite smaller beginning stocks, compared to 2000/01. With production projected at 2.89 billion bushels, beginning stocks at 248 million bushels, down 42 million bushels or 15 percent, and imports at 5 million bushels, the total soybean supply is projected at 3.14 billion bushels. This is up 91 million bushels or 3 percent from the 2000/01 level.

Figure 8--Proportion of Total U.S. Soybean Production by Region (2001/2002)

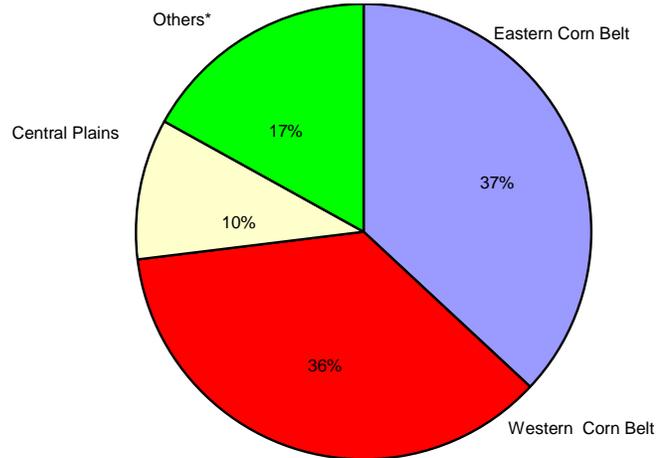


Note: Others* includes regions producing less than 10% each of total U.S. soybean (Northeast, Southeast, Delta, Southern and Northern Plains, Pacific Northwest, and West)
 Data Source: USDA/NASS

Ending Stocks Increase Despite Increase in Soybean Use. A large increase in soybean supply mainly due to an increase in production has more than offset the gain in total soybean use, resulting in an increase in ending stocks of 285 million bushels, up 37 million bushels or 15 percent. Soybean use for 2001/02 is projected at 2.86 billion bushels, up 54 million bushels or 2 percent. The 2001/02 domestic crush is projected at 1.68 billion bushels, up 34 million bushels or 2 percent. Soybean exports are projected at 1.01 billion bushels, up 12 million bushels or 1 percent. The season average soybean farm prices for 2001/02 are projected at \$3.90-\$4.70 per bushel, compared to an estimated \$4.54 per bushel in 2000/01. Although there is an increase in ending stocks, coupled with the fact that the forecasted price may fall below last year's price, it appears as if the effect on demand for transportation will be minimal.

Soybeans Stored in All Positions in United States Increases. The Nation's soybean stocks increased as the major producing areas experienced modest increases in their soybean stocks. Soybeans stored in all positions on December 1 were recorded at 2.28 billion bushels, up 36 million bushels or 2 percent from December 1, 2000 (appendix table H). Off-farm stocks at 1.04 billion bushels are 1 percent more than the previous year's level and 233 percent above the 5-year average. On-farm stocks at 1.24 billion bushels are 2 percent above the previous year's level and 300 percent above the 5-year average. The Central Plains recorded the largest absolute gain of 45 million bushels in total soybeans stored, followed by the Eastern and Western Corn Belts with 14 and 10 million bushels, respectively. The Corn Belts accounted for 73 percent of total soybeans stored in the Nation (figure 9). The Corn Belts kept the majority of their stocks on farms. Most of the Eastern Corn Belt stocks were held in Illinois, while the majority of the soybeans stored in the Western Corn Belt were stored in Iowa.

Figure 9--Proportion of Total U.S. Soybean Stocks by Region (as of December 1, 2001)



Note: Others* includes regions storing less than 10% each of total U.S. soybean (Northeast, Southeast, Delta, Southern and Northern Plains, Pacific Northwest, and West)

Data Source: USDA/NASS

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Transportation Situation

Ocean Freight

Starting with Higher, Finishing with Lower Transportation Cost. The year 2001 started with higher than average¹ ocean transportation costs but ended with lower than average² costs. For the two key grain routes, the U.S. Gulf (Gulf) to Japan and the Pacific Northwest (PNW) to Japan, the average ocean freight rates were less than the 5-, 10-, and 15-year averages in the fourth quarter of 2001 (table 2). The \$17.06 per metric ton average ocean freight rate in fourth quarter 2001 for the Gulf to Japan route (table 2) represents a drop of 9 percent from the previous quarter and 28 percent from the fourth quarter of 2000. The average ocean freight rates for the PNW to Japan route in the fourth quarter of 2001 fell by 11 percent from the third quarter of 2001 and 37 percent from this time last year. The “spread”³ ocean freight rate also dropped in the last quarter of 2001. The \$6.86 per metric ton average ocean freight rate spread in the fourth quarter of 2001 (table 2) was the lowest in 3 years.

Table 2--Average Daily Ocean Grain Freight Rates to Japan by Quarter

| Export range Year | 1st quarter (Jan.-Mar.) | 2d quarter (Apr.-June) | 3d quarter (July-Sept.) | 4th quarter (Oct.-Dec.) | Annual (Jan.-Dec.) |
|----------------------|----------------------------|---------------------------|----------------------------|----------------------------|-----------------------|
| | \$/ metric ton | | | | |
| Gulf | | | | | |
| 1998 | 18.95 | 16.85 | 13.41 | 13.65 | 15.71 |
| 1999 | 15.18 | 16.91 | 19.04 | 21.81 | 18.24 |
| 2000 | 21.47 | 22.99 | 23.96 | 23.56 | 23.34 |
| 2001 | 22.13 | 22.90 | 18.79 | 17.06 | 20.22 |
| 15-year average | 24.19 | 24.44 | 22.45 | 22.23 | 23.32 |
| 10-year average | 22.96 | 23.09 | 21.92 | 22.49 | 22.80 |
| 5-year average | 20.61 | 20.33 | 19.60 | 19.45 | 19.99 |
| Pacific Northwest | | | | | |
| 1998 | 11.08 | 11.31 | 10.41 | 12.20 | 11.25 |
| 1999 | 9.74 | 10.88 | 11.10 | 13.92 | 11.41 |
| 2000 | 15.38 | 15.79 | 16.03 | 16.11 | 15.81 |
| 2001 | 17.15 | 14.67 | 11.50 | 10.20 | 13.38 |
| 15-year average | 14.08 | 13.42 | 12.62 | 13.68 | 13.45 |
| 10-year average | 14.06 | 13.65 | 12.90 | 13.68 | 13.57 |
| 5-year average | 15.37 | 14.50 | 13.38 | 13.79 | 14.26 |
| Spread ¹ | | | | | |
| 1998 | 7.87 | 5.54 | 3.00 | 1.45 | 4.47 |
| 1999 | 5.44 | 6.03 | 7.94 | 7.89 | 6.83 |
| 2000 | 6.09 | 7.20 | 7.93 | 7.45 | 7.53 |
| 2001 | 4.98 | 8.23 | 7.29 | 6.86 | 6.84 |
| 15-year average | 10.11 | 11.02 | 9.84 | 8.55 | 9.87 |
| 10-year average | 8.90 | 9.45 | 9.02 | 8.81 | 9.24 |
| 5-year average | 5.24 | 5.83 | 6.22 | 5.66 | 5.73 |

¹Gulf minus Pacific Northwest
Source: Baltic Exchange

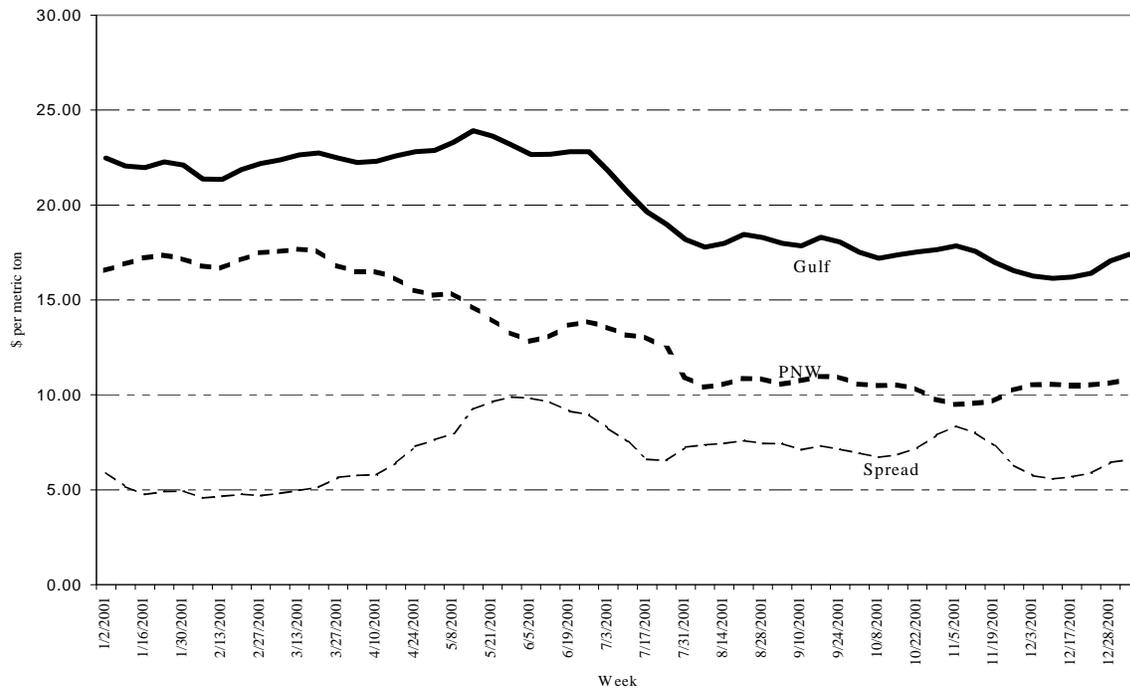
¹ 5-year average.

² Ibid.

³ Spread ocean freight rate is the difference between the Gulf to Japan and the PNW to Japan.

Shipping Companies Combat Declining Rates. Toward the end of last century, the booming world economy encouraged carriers to place orders for new vessels. The average capacity has grown by almost 100 percent since 1987, with more than 20 percent of that growth since 1997. Larger, more expensive ships entered the world fleet, increasing the world's shipping capacity. But the sluggish world economy prevented the full utilization of these vessels, making the investment in new vessels less profitable. Shippers, using both containership and bulk shipping methods, were affected by an oversupply of new vessels that caused ocean freight rates to drop up to 50 percent. Shippers took steps to combat declining rates. Some larger lines formed consortiums to fill up partially utilized voyages, while the representatives of smaller shipping lines increased freight rates to ensure the survival of their shipping companies. The decline in ocean freight rates had a rippling effect in the shipbuilding sector as well. Some shipbuilders have reported more than a 60-percent drop in their profit (compared to last year). The shipbuilders hope to use some of their idle resources in the scrapping of old vessels. Although the shipping industry is facing a short-term crisis, the crisis is unlikely to permanently disrupt the ocean transportation industry.

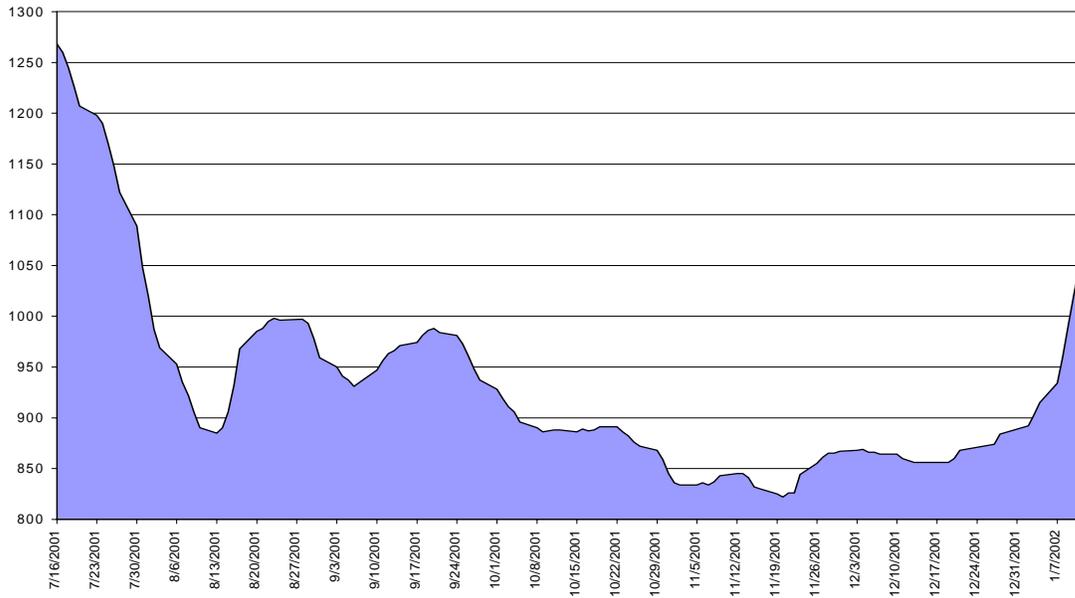
Figure 10--Weekly Ocean Freight Rates to Japan, January 2001-January 2002



Source: Baltic Exchange

The average earnings of Panamax, the vessels most commonly used to transport U.S. grain from the Gulf to Japan, fell almost 17 percent (between September 20 and November 20, 2001) before rebounding (figures 10 and 11). For now, the Panamax freight market is signaling a recovery in the ocean transportation market. Some London brokers believe the market is bouncing back. Bulk carriers, hurt from falling ocean freight rates and increasing insurance premiums, are happy to see a new positive trend in ocean freight rates. Ocean transportation of dry bulk goods is directly related to the world economy. With hopes for recovery in the second half of 2002, the U.S. economic condition is likely to affect the ocean freight market.

Figure 11--Baltic Panamax Index, July 2001-January 2002



Source: Baltic Exchange

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Barge

For the fourth quarter of 2001, weekly barge shipments of grain averaged 1 million tons, a 4-percent decrease as compared to the 5-year average (table 3)⁴. Total grain barge traffic for 2001 totaled 47.1 million tons, almost the 5-year average. This is notable since the normal 9-month upper Mississippi River (UMR) navigation season was considerably shortened by high water levels in March and April and completely stopped by flood restrictions in late April through May. Figure 12 shows a significant drop in shipments in April and May and the subsequent increase in shipments after the flooding. There is typically a significant increase in barge shipments in late September through December, but in 2001, the increase was slow to develop.

Table 3--Average Weekly Grain Barge Shipments by Quarter, 1996-2001

| Year | 1st quarter (Jan.-Mar.) | 2d quarter (Apr.-June) | 3d quarter (July-Sept.) | 4th quarter (Oct.-Dec.) | Annual (Jan.-Dec.) |
|------------|----------------------------|---------------------------|----------------------------|----------------------------|-----------------------|
| | <i>1,000 tons</i> | | | | |
| 1996 | 855 | 1,035 | 740 | 1,137 | 942 |
| 1997 | 753 | 785 | 803 | 1,145 | 871 |
| 1998 | 741 | 786 | 866 | 1,078 | 868 |
| 1999 | 831 | 1,081 | 1,040 | 1,039 | 998 |
| 2000 | 799 | 948 | 975 | 989 | 928 |
| 2001 | 784 | 834 | 973 | 1,031 | 906 |
| 5-yr. avg. | 796 | 927 | 885 | 1,078 | 921 |

Source: USDA-AMS

During 2001, Mississippi River Lock 27 (last lock on the Mississippi River) transited 37.8 million tons of grain, a decrease of 6 percent as compared to the average. The decrease was due to the spring flooding that hampered traffic. Ohio River Lock 52 usually handles 6 million tons of grain; however, during 2001, there were 7.7 million tons shipped through that lock.

At present, almost all of the locks on the UMR are closed for the nonnavigation season. The only Mississippi River locks scheduled to be open throughout the winter are the Melvin Price Locks (replaced Locks 26 in Alton, IL) and Locks 27 (Granite City, IL). Mississippi River Lock 12 (Bellevue, IA) will be closed through March 11 for major rehabilitation and maintenance work. Mississippi River Lock 24 (Clarksville, MO) will be closed for maintenance until March 3. Mississippi River Lock 25 (Winfield, MO) will be closed from January 21 through February 24 for repairs.

⁴ Grain barge shipments are monitored by USDA from weekly lock reports provided by the U.S. Army Corps of Engineers. The collective data from Mississippi River Locks 27, Ohio River Locks 52, and Norrell Lock on the Arkansas River are considered to be the total volume of barged grain since each lock is the last or second to last one in its respective river. It should be noted that any grain originating on the Mississippi River below Locks 27 is not recorded by the USDA-Corps reporting system, and thus may underestimate total barge movements.

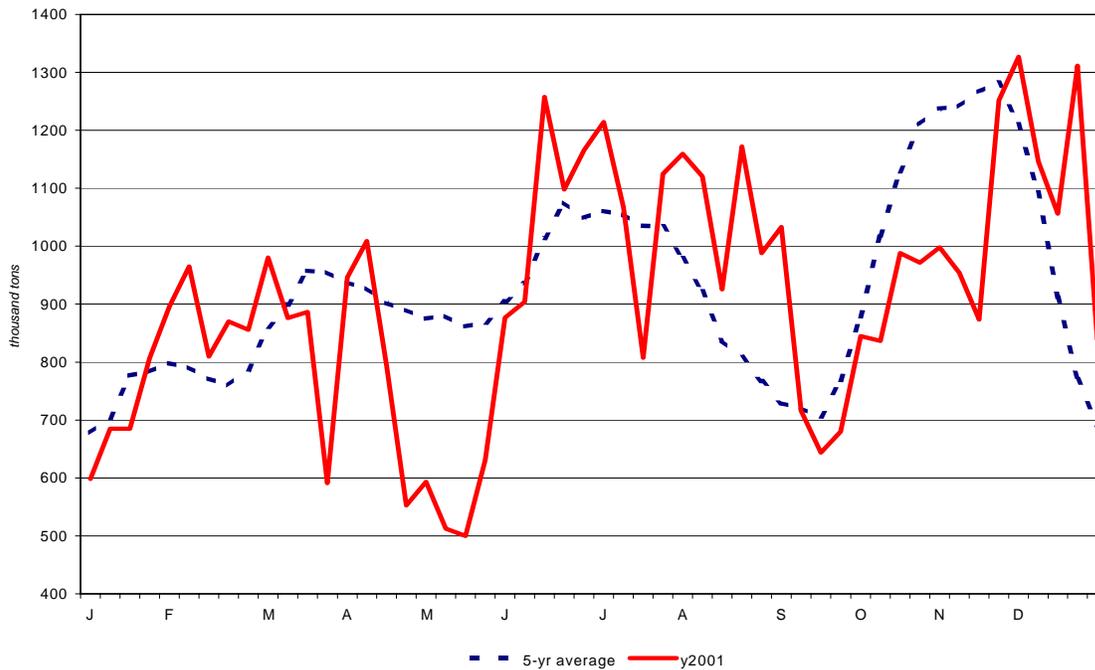
Table 4--Average Weekly Barge Rates by Quarter, 1996-2001

| Region/year | 1st quarter (Jan.-Mar.) | 2d quarter (Apr.-June) | 3d quarter (July-Sept.) | 4th quarter (Oct.-Dec.) |
|---|----------------------------|---------------------------|----------------------------|----------------------------|
| percent of tariff | | | | |
| Mississippi River Minneapolis-St. Paul to New Orleans: | | | | |
| | Tariff = \$6.19 per ton | | | |
| 1996 | no rates | 180 | 151 | 236 |
| 1997 | 165 | 146 | 179 | 249 |
| 1998 | 164 | 166 | 241 | 325 |
| 1999 | 213 | 182 | 271 | 269 |
| 2000 | 210 | 177 | 248 | 202 |
| 2001 | no rates | no rates | 221 | 217 |
| 5-yr. avg. | 190 | 171 | 217 | 256 |
| Illinois River Peoria, IL, to New Orleans | | | | |
| | Tariff = \$4.81 per ton | | | |
| 1996 | 250 | 129 | 117 | 179 |
| 1997 | 132 | 130 | 200 | 170 |
| 1998 | 113 | 130 | 208 | 215 |
| 1999 | 160 | 146 | 237 | 194 |
| 2000 | 184 | 134 | 221 | 181 |
| 2001 | 210 | 159 | 182 | 185 |
| 5-yr. avg. | 168 | 134 | 197 | 188 |
| Mississippi River St. Louis to New Orleans: | | | | |
| | Tariff = \$3.99 per ton | | | |
| 1996 | 180 | 99 | 106 | 148 |
| 1997 | 118 | 90 | 122 | 140 |
| 1998 | 93 | 106 | 199 | 189 |
| 1999 | 123 | 107 | 196 | 163 |
| 2000 | 145 | 110 | 201 | 161 |
| 2001 | 166 | 124 | 159 | 166 |
| 5-yr. avg. | 132 | 102 | 164 | 158 |

Note: All averages based on shipments through Mississippi L&D 27, Ohio L&D, and Norrel L&D on the Arkansas River.
Source: U.S. Army Corps of Engineers

Generally, the Illinois River is open throughout the winter months. Ice does form on the river, but the ice can be flushed through the lock chambers, and traffic can proceed. While the UMR is closed, the Illinois River becomes a major source of grain for Gulf exporters. As of mid-January, ice accumulations have been manageable, and normal traffic has been reported. Reports of low water conditions on the mid-Illinois River has slowed traffic due to the danger of grounding barges. Any continuation of low water conditions for the winter could be a problem for Illinois River shippers.

**Figure 12--Weekly Grain Traffic at Upper Mississippi, Ohio, and Arkansas Rivers
(2001 and 5-year average)**



Source: U.S. Army Corps of Engineers

For the fourth quarter 2001, Minneapolis-St. Paul, MN, to New Orleans, LA, barge freight rates were reported at 217 percent of tariff, which was 15 percent below average for the last 5 years (table 4). Barge rates are quoted in terms of differentials from barge tariff benchmarks.⁵ The tariff rate from Minneapolis-St. Paul is \$6.19 per ton; therefore, the spot market rate quoted is 2.17 times \$6.19 or \$13.43 per ton. Fourth quarter rates for the Illinois River were 185 percent of tariff (\$8.90 per ton based upon a \$4.81 tariff). Illinois River rates for January 2002 (as of January 23) were 174 percent of tariff. Barge freight rates for grain shipped from St. Louis, MO, to New Orleans, LA, for the fourth quarter of 2001 averaged 166 percent of tariff (\$6.62 per ton based upon a \$3.99 tariff), which was 5 percent above the 5-year average.

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⁵ The benchmarks are from the Bulk Grain and Grain Products Freight Tariff No. 7, which was issued by the Waterways Freight Bureau (WFB) of the Interstate Commerce Commission (ICC). In 1976, the U.S. Department of Justice entered into an agreement with the ICC and made Tariff No. 7 no longer applicable. Today, the WFB no longer exists, and the ICC has become the Surface Transportation Board of the U.S. Department of Transportation. However, the barge industry continues to use the benchmarks as rate units.

Rail

Although recent demand for transportation of grain by rail has been stronger and relatively few railcars are in storage, U.S. Class I railroads expect rail capacity for agricultural products to be adequate during February and March.

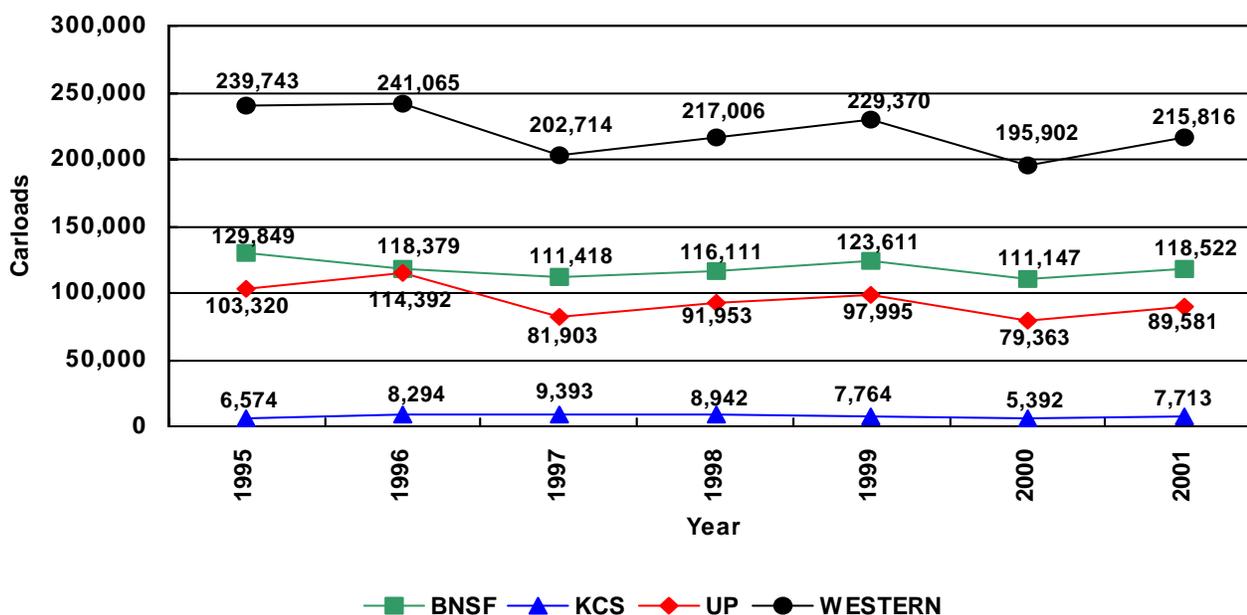
During the fourth quarter of 2001, the number of grain cars originated on U.S. Class I railroads increased 7.9 percent, compared to the same period in 2000 (302,507, compared to 280,280) and increased 0.8 percent from the fourth-quarter average of the years 1996-2000⁶. For the 4-week period (weeks 50 of 2001 through week 1 of 2002), the number of grain cars originated by U.S. Class I railroads was 6.6 percent greater than during the same period of 2000 (77,092, versus 72,336). This was, however, 4.8 percent fewer than the 1996-2000 average for the same 4-week period.

Western Railroads

Demand for grain transportation on the western railroads was strong during the fourth quarter of 2001 and is expected to remain steady through February. All of the western railroads have been operating smoothly and have adequate capacity to handle the expected February and March demand for grain transportation, even though only 8.6 percent of their combined 55,000-grain-car fleet is in storage.

The western railroads originated 215,816 grain cars during the fourth quarter of 2001, compared to 195,902 cars for the fourth quarter of 2000, a 10.2-percent increase but a 0.6-percent decrease from the 1996-2000 average for the same period (figure 13). Grain cars, loaded on the western railroads during the 4 weeks of 50 of 2001 through 1 of 2002, increased 8 percent as compared to the corresponding period last year (55,933 carloads, compared to 51,770). But, decreased 6.4 percent when compared to the 1996-2000 average of the same 4-week periods (figure 14).

Figure 13--Western Class I Railroad Carloads of Grain Originated (Fourth Quarter, 1995-2001)



Source: Weekly Railroad Traffic, Association of America Railroads

⁶ All traffic comparisons exclude Illinois Central, which, in the fourth quarter of 2000, began to report its cars originated as part of those originated by Canadian National.

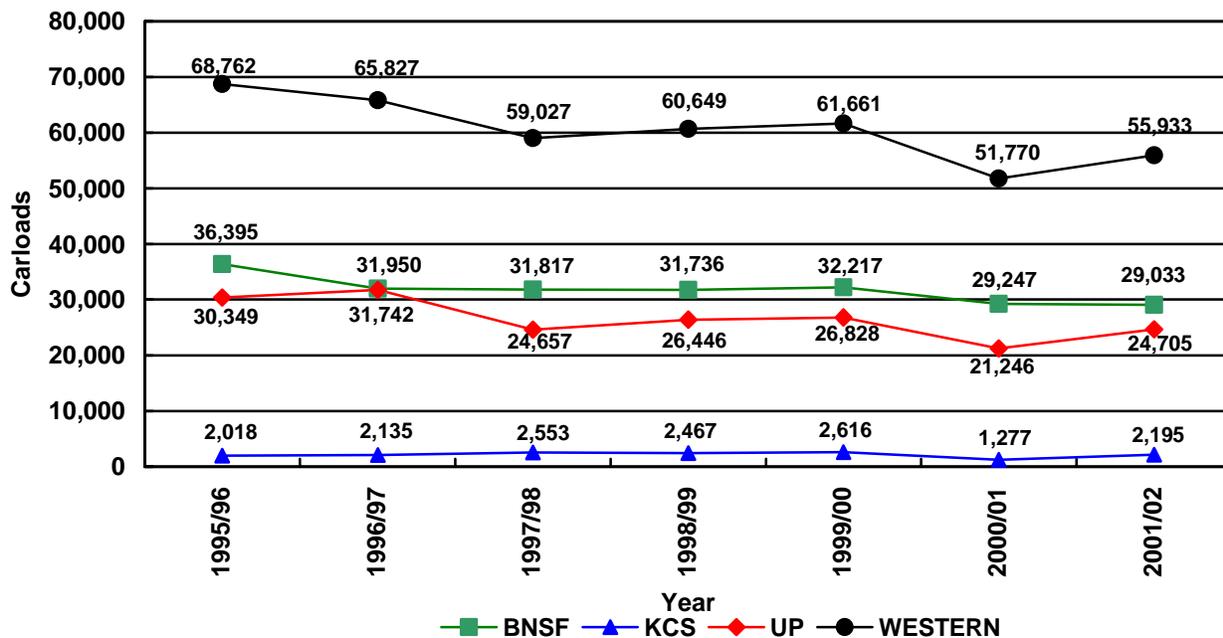
Bidding activity for guaranteed grain cars on the two major Western railroads, Burlington Northern Santa Fe (BNSF) and Union Pacific (UP), has been weak. As of January 9, railcars in the secondary market for February 2002 were selling at an average premium of \$5 on BNSF and an average discount of \$16 on UP; for March 2002, a \$1 premium and a \$20 discount, respectively; and for April 2002, \$20 and \$29 discounts, respectively.

Export movements of grain and oilseeds to Mexico have increased and are expected to remain strong. Soybean movements have been strong, and the western railroads also expect increased wheat movements to the Texas Gulf Coast during February. Domestic rail movements of grain and oilseeds to feedlots and processors remain strong--especially the movement of corn to ethanol producers.

Burlington Northern Santa Fe Railway. The number of grain cars loaded on BNSF increased 6.6 percent during the fourth quarter of 2001 as compared to the same period in 2000 (118,522 railcars, compared to 111,147) (figure 13). This is 2.1 percent greater than the average of comparable periods from 1996 to 2000.

For the most recent 4-week period, BNSF originated 0.7 percent fewer railcars of grain than during the comparable period of 2000 (29,033 railcars, compared to 29,247) and 7.5 percent fewer than the average of comparable periods from 1996 to 2000 (figure 14).

Figure 14--Western Class I Railroad Carloads of Grain Originated During 4 Weeks (Weeks 50 Through 1, 1995-2002)



Source: Weekly Railroad Traffic, Association of America Railroads

As of January 5, BNSF had 23,894 covered hopper railcars in its active grain fleet, with 4,377 in storage. BNSF reports adequate railcar and locomotive capacity to handle the expected demand for grain transportation during February and

March. As of January 8, BNSF reported 861 past-due railcar orders that were an average of 5.3 days late. For the week ending January 5, BNSF reported an average grain fleet cycle time of 27.53 days.

Auction bids for guaranteed railcars have been low, and many of the railcars offered have received no bids. As of January 8, only 2.6 and 1.6 percent of the guaranteed railcars offered for February and March, respectively, have been sold as compared to 16.8 and 2.2 percent for February and March, respectively, that had been sold as of January 2, 2000.

Kansas City Southern Lines. Compared to other U.S. Class I railroads, Kansas City Southern (KCS) receives a much larger proportion of the grain it handles from connecting railroads. Thus, the amount of grain originated on KCS does not adequately reflect its total grain traffic.

Grain originated on KCS during the fourth quarter of 2001 increased 43 percent, compared to the same period in 2000 (7,713 railcars, compared to 5,392) but was down 3.1 percent from the average of comparable periods from 1996 to 2000 (figure 13). Grain originated during the past 4 weeks increased 71.9 percent, compared to the same period in 2000 (2,195 railcars, compared to 1,277) but was 0.7 percent less than the average of comparable 4-week periods from 1996 to 2000 (figure 14). Although 80 percent of KCS' grain traffic is domestic, going mainly to the poultry industry, most of its increased traffic during these recent periods has been due to greatly increased export movements to the Gulf and to Mexico.

Although KCS currently has no grain cars in storage, it reports adequate capacity to handle expected grain movements, mainly due to improved grain car cycle times and train speeds.

Union Pacific Railroad. Grain originated on the UP was up 12.9 percent during the fourth quarter of 2001, compared to the same period in 2000 (89,581 railcars, versus 79,363) but down 3.8 percent, compared to the average of the same periods from 1996 to 2000 (figure 13). Grain originated on the UP during the last 4 weeks was up 16.3 percent from the same period last year (24,705, compared to 21,246) but decreased 5.6 percent when compared to the average of the same periods from 1996 to 2000 (figure 14).

The UP system remains fluid, and grain car cycle times are very good. UP reports that its service delivery index continues to improve, as it is meeting time commitments in all of its service lanes. As of December 1, 2001, UP had 26,775 covered-hopper railcars in its fleet, but only 400 of these were in storage as of January 11, 2002. Due to the adequate availability of railcars, auction prices for guaranteed railcars have been weak, and many of the railcars offered have received no bids. UP expects to have no difficulty in handling the expected demand for grain transportation during February and March.

Eastern Railroads

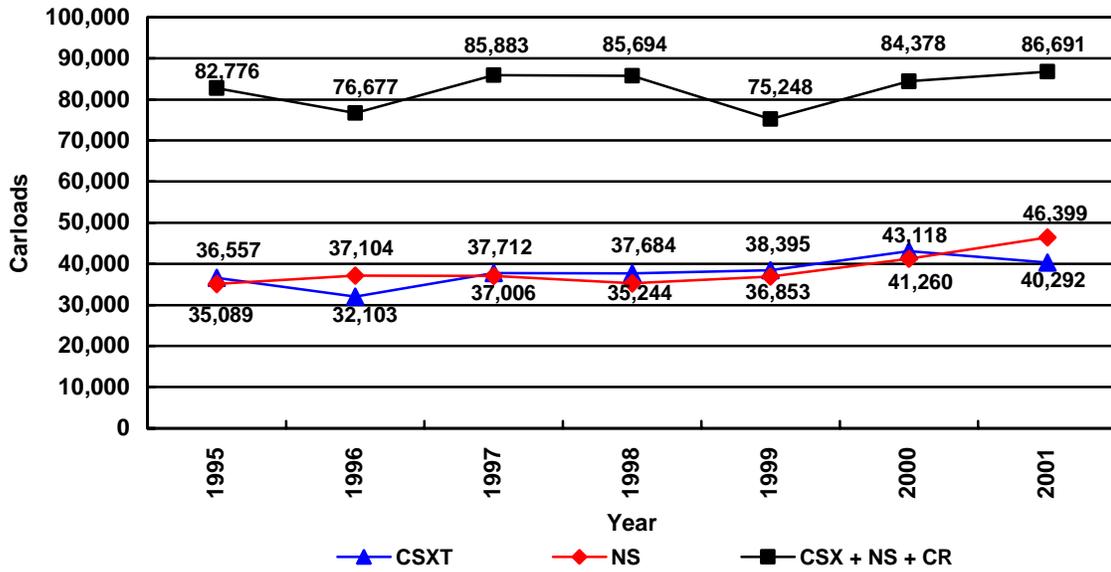
The eastern railroads continue to move more grain than prior to the split of Conrail. Demand for grain transportation on the eastern railroads was strong during the fourth quarter of 2001 and is expected to remain steady through February. The eastern railroads have been operating smoothly and have adequate capacity to handle the expected February and March demand for grain transportation.

Grain cars originated on the eastern railroads during the fourth quarter increased 2.7 percent over those originated in 2000 (86,691 railcars, compared to 84,378) and increased 6.3 percent over the average originated on those lines for comparable periods from 1996 to 2000 (figure 15).⁷ Grain traffic continues strong during the most recent 4 weeks, increasing 2.9

⁷ All traffic comparisons exclude Illinois Central, which, in the fourth quarter of 2000, began to report its cars originated as part of those originated by Canadian National. This leaves only the comparison of current rail traffic on CSX and NS to that of CSX, NS, and Conrail in the periods prior to the split of Conrail in June 1999.

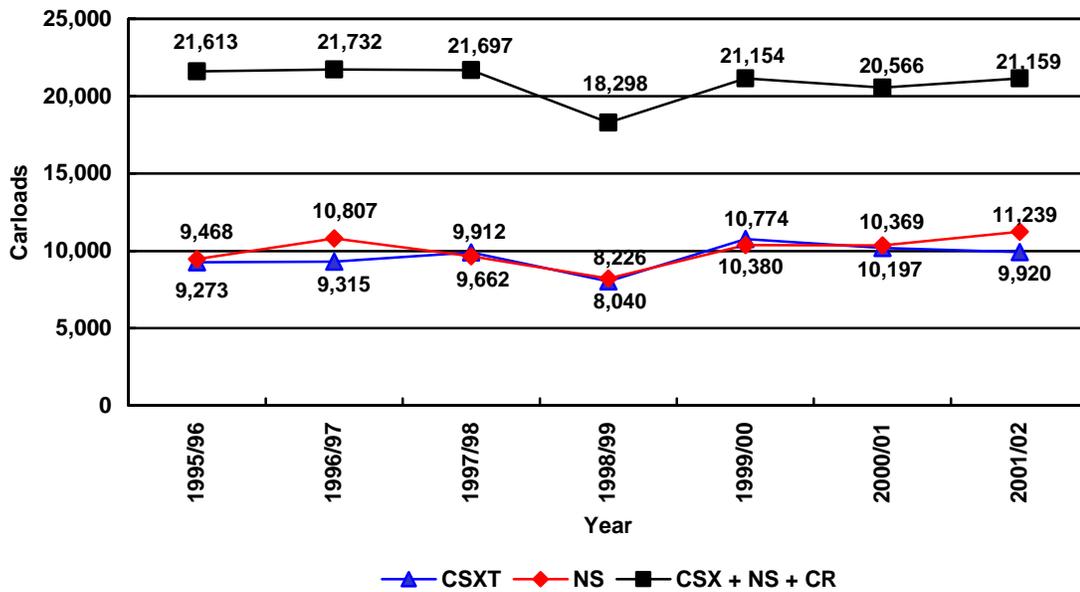
percent as compared to the same period in 2000 (21,159 railcars, compared to 20,566) and 2.3 percent greater than the average of traffic in comparable periods from 1996 to 2000 (figure 16).

Figure 15--Eastern Class I Railroad Carloads of Grain Originated (Fourth Quarter, 1995-2001)



Source: Railroad Performance Measures, Association of American Railroads

Figure 16--Eastern Class I Railroad Carloads of Grain Originated During 4 Weeks (Weeks 50 Through 1, 1995-2002)



Source: Railroad Performance Measures, Association of American Railroads

Domestic traffic to feedlots, wheat millers, soybean processors, and ethanol plants has been strong--especially corn traffic moved to ethanol plants. Export traffic remains strong also.

CSX Transportation. Although the number of grain carloads that CSX originated increased 2.8 percent during the entire year of 2001 over that in 2000, CSX grain-car loadings decreased 6.6 percent during the fourth quarter as compared to 2000 (40,292 carloads, compared to 43,118) (figure 14). Grain-car loadings on CSX during the past 4 weeks decreased 2.7 percent, compared to the same period in 2000 (9,920 carloads, versus 10,197) (figure 13).

CSX reports that its supply of covered hopper railcars (approximately 4,500 for grain service) has been adequate; currently, CSX is filling 95 percent of its grain orders on time. In addition, CSX reports good cycle times due in part to its emphasis on shuttle and unit trains.

Norfolk Southern. Grain movements on the Norfolk Southern Railroad (NS) increased 12.5 percent during the fourth quarter of 2001, compared to the comparable period in 2000 (46,399 carloads, versus 41,260) (figure 14). During the last 4 weeks, grain movements on NS have increased 8.4 percent as compared to the same period in 2000 (11,239 railcars, compared to 10,369) (figure 15).

Due to decreased unit- and shuttle-train cycle times--and increased use of these trains, which reduces cycle times--grain car supply has been good, and NS expects no difficulty in handling February and March grain transportation demand. Fifty-car unit trains have been cycling in less than 17 days, and 75-car shuttle trains have been cycling in 6 days. NS currently has less than 400 of its 5,500 grain-car fleet in storage.

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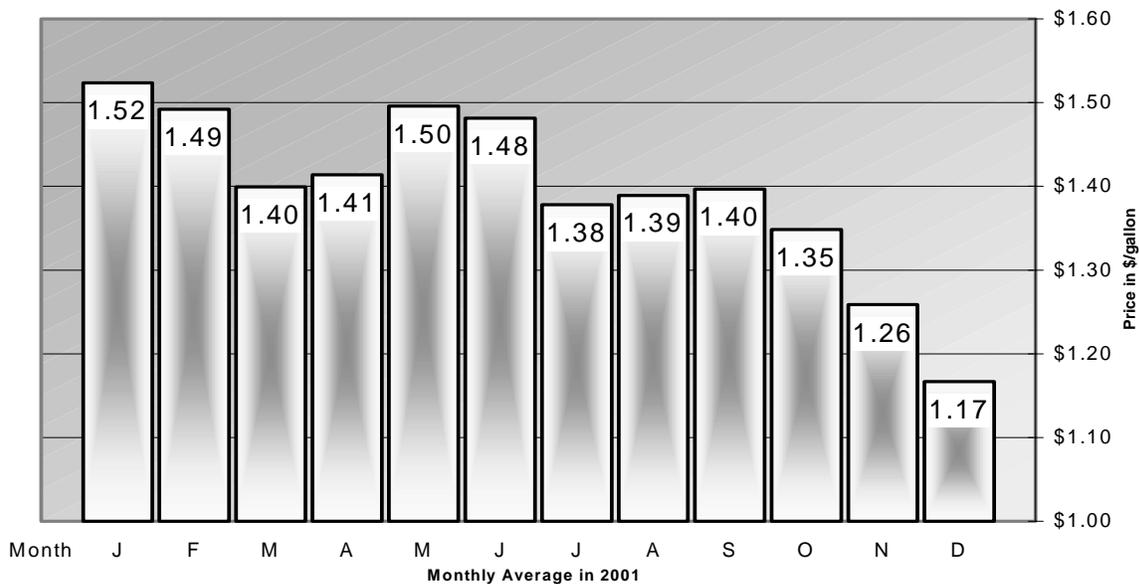
Motor Carrier

Late winter and early spring prospects for grain motor carriers should benefit from a reduction in transportation costs associated with lower fuel prices at the pump. In addition proposed legislation designed to change the amount of hours a truck driver can work on the road will not apply to agricultural truckers. These conditions contrast sharply to last year, when grain motor carriers encountered instability in fuel prices at the pump and proposed changes in the regulatory regime. These changes should assist both grain producers and their motor carrier service providers from winter into early spring.

Fuel Price Impacts in 2001

In 2001 diesel fuel prices at the pump exhibited volatility as international concerns grew over crude oil prices. These concerns influenced truck operations and earnings. The terrorist attacks in September 2001 slowed demand for crude oil and pushed pump prices down. The once volatile fuel market in 2001 slowed, evidenced by a steady dip in prices at the pump toward the end of the year. Figure 17 shows, not only the sporadic nature of the diesel fuel markets prior to September (measured in a monthly national average for diesel prices at the pump), but also the precipitous drop in diesel prices since September 2001.

Figure 17--Average National Monthly Prices for On-Highway Diesel in 2001



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

The Significance of Fuel Prices

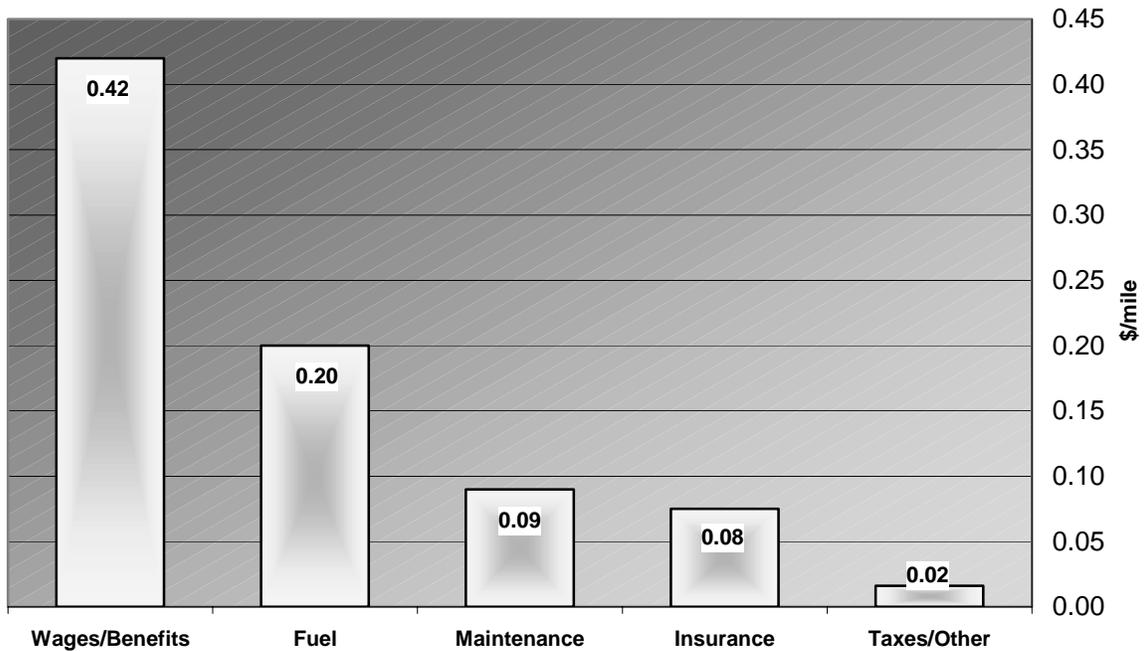
Grain producers should be concerned about diesel fuel prices at the pump for a number of reasons. Most importantly, fuel prices are a significant indicator of well-being for the entire motor carrier industry. In general, fuel costs cover a large percentage of motor carrier operating costs. Indeed, rising prices at the pump exert cost pressure on a large number of motor carrier fleets. Those carriers with thin margins may be forced to file for debt protection in bankruptcy court. In turn, the amount of available transportation services for grain farmers becomes limited. For these reasons, fuel prices

remain a key indicator and deserve close scrutiny as a benchmark for the trucking industry and agricultural transportation services.

Comparing Motor Carrier Costs with Fuel

Recent financial studies indicate that industry fleet and fuel managers estimate that fuel costs account for 10 to 25 percent⁸ of total operating costs. According to Minnesota-based Class 8 Solutions, costing indexes show fuel costs rank second among all variable operating costs, right behind driver wages⁹ (figure 18).

Figure 18--Estimated Motor Carrier Costs Per Mile



Source: The North American Truckload Rate Index: Fuel Spike Edition (Class 8 Solutions, Eagan, MN, 1998).

Comparing Motor Carrier Costs and Bankruptcies

Data from the 1990s indicate a strong correlation between high fuel prices and motor carrier bankruptcies. As fuel volatility continued through 2001 and the national economy weakened, truck shipping competition became tighter, and the bankruptcy trend accelerated through most of 2001¹⁰.

⁸ Costello, Robert, American Trucking Associations. Larger fleets can push these costs down near 10 percent due to the volume of their consumption and economies of scale, where they can purchase contract prices at fixed rates. In contrast, smaller fleet variable costs tend to run higher, near 20 percent. Telephone interview 12-6-01. Cf. David R. Goodson, of Class 8 Solutions. Goodson states “a quick rule of thumb, fuel runs around 15 percent of a truckload carriers’ costs. It will be lower for a less-than-truckload carrier due to higher costs for labor and terminal facilities. The 15 percent should be true for any type of truckload carrier that runs basic commodity freight.

⁹ Goodson, David, R., The North American Truckload Rate Index: Fuel Spike Edition (Class 8 Solutions, Eagan, MN 1998) p. 6.

¹⁰ Reiskin, Jonathan, Transport Topics, September 13, 2000, at www.ttnews.com/members/printEdition/0005559.html

Fuel Analysis and Outlook

Diesel fuel prices should remain stable with small to moderate increases through late winter and early spring 2002. Certain circumstances, however, could change this outlook. For example, increases in the level of distillate stocks¹¹ in response to severe weather changes could influence diesel prices at the pump¹². Diesel fuel and heating oil prices typically respond to the same price pressure during late winter and early spring. While these fuels have different sulfur levels, they come from the same part of a barrel of crude oil. Therefore, both fuels can be used interchangeably to serve each market. The winter of 1999-2000 witnessed a spike in heating oil prices that spilled over into diesel prices at the pump; no such similar events occurred in late 2001.

Other variables that may change stable diesel prices include production quota reductions from the Organization of the Petroleum Exporting Countries (OPEC) and non-OPEC member states or supply reductions commensurate with ongoing military actions to fight terrorism.

Legislative Protection for Agricultural Truckers

Last year, this publication highlighted various Federal regulatory proposals and possible changes that might impact grain producers and the transportation services provided by agricultural truckers¹³. For example, the U.S. Department of Transportation, Federal Motor Carrier Safety Administration (FMCSA) proposed limiting the number of hours truck drivers can be on the road to move goods from point of origin to point of destination. The proposed action would have by-passed normal rulemaking procedures, thereby amending the National Highway Designation Act (NHDA) of 1995. This threatened to eliminate an exemption for agricultural haulers.

However, the recently signed Department of Transportation Appropriations law contains language that prohibits FMCSA from changing the rules in NHDA. This provides agricultural truckers with legislative protection, enabling haulers to provide flexible transportation services to grain producers. As a result, changes to the agricultural exemption in NHDA will not occur. This legislation will benefit grain supply chains in 2002 and beyond.

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¹¹ The U.S. Department of Energy, Energy Information Administration, reports as of January 9, 2002, that stocks of distillate (including heating oil and diesel fuel), increased by 4.6 million barrels in the week ending January 4, 2002. This set a new seasonal peak of 142.2 million barrels. Cf. The American Petroleum Institute reported a 5.7-million-barrel increase in national distillate supplies. This is a 22-percent increase in stocks from levels measured in 2000-2001.

¹² Recent colder weather, however, over the last weeks of December 2001 and early weeks of January 2002, has not impacted distillate fuel demand. The U.S. Department of Energy (DOE), Energy Information Administration, report the average remains less than 3.8 million barrels per day over the last 4 weeks, averaging just 3.2 million barrels per day. (1-09-02). In fact, DOE states that even "if weather-related spikes in demand occur, supplies should be able to meet the extra requirement, albeit at higher marginal costs." (See DOE, EIA 2001-2002 Winter Fuels Outlook, at www.eia.doe.gov/emeu/steo/pub/special/Win2001/winfuel.html.)

¹³ USDA's Grain Transportation Prospects (Feb-Mar 2000) pp. 25-27 at www.ams.usda.gov/tmd/grain4.pdf

Appendix Table A--U.S. Grain¹ and Soybean Production, 1996/97-2001/02

| Region | 1996/97 | 1997/98 | 1998/99 | 1999/00 | 2000/01 | 2001/02 | Percent change of 2000/01 | Percent change of 5-yr. avg. |
|---------------------------|------------------------|---------|---------|---------|---------|---------|---------------------------|------------------------------|
| | <i>Million bushels</i> | | | | | | | |
| Northeast | 394 | 341 | 361 | 275 | 407 | 355 | -13 | 0 |
| Southeast | 770 | 703 | 584 | 565 | 691 | 706 | 2 | 7 |
| Delta | 475 | 403 | 338 | 353 | 354 | 380 | 7 | -1 |
| Eastern Corn Belt | 4,034 | 4,493 | 4,605 | 4,530 | 4,863 | 4,778 | -2 | 6 |
| Western Corn Belt | 3,981 | 3,934 | 4,260 | 4,097 | 4,244 | 3,922 | -8 | -4 |
| Southern Plains | 649 | 828 | 717 | 804 | 669 | 612 | -9 | -17 |
| Central Plains | 2,767 | 2,898 | 3,087 | 2,945 | 2,523 | 2,738 | 9 | -4 |
| Northern Plains | 1,522 | 1,325 | 1,551 | 1,338 | 1,516 | 1,295 | -15 | -11 |
| Pacific Northwest | 497 | 478 | 459 | 390 | 463 | 350 | -24 | -23 |
| West | 150 | 143 | 136 | 120 | 118 | 102 | -13 | -23 |
| Other States ¹ | n/a | n/a | n/a | n/a | 4 | 4 | n/a | n/a |
| United States | 15,240 | 15,546 | 16,097 | 15,416 | 15,853 | 15,243 | -4 | -2 |

Source: USDA/NASS

Appendix Table B--U.S. Grain and Soybean Stocks by Position, December 1, 1995-2001

| Region | 1995 | | | 1996 | | | 1997 | | |
|-------------------|------------------------|-----------|-------|----------|-----------|--------|----------|-----------|--------|
| | On farms | Off farms | Total | On farms | Off farms | Total | On farms | Off farms | Total |
| | <i>Million bushels</i> | | | | | | | | |
| Northeast | 73 | 74 | 147 | 88 | 77 | 99 | 68 | 74 | 142 |
| Southeast | 138 | 209 | 347 | 157 | 221 | 317 | 274 | 146 | 420 |
| Delta | 31 | 135 | 166 | 34 | 120 | 134 | 21 | 143 | 163 |
| Eastern Corn Belt | 1,882 | 1,272 | 3,153 | 2,040 | 1,135 | 3,158 | 2,202 | 1,370 | 3,573 |
| Western Corn Belt | 1,862 | 1,218 | 3,080 | 2,222 | 1,141 | 3,362 | 2,205 | 1,079 | 3,284 |
| Southern Plains | 31 | 214 | 245 | 18 | 168 | 178 | 46 | 387 | 433 |
| Central Plains | 649 | 728 | 1,376 | 957 | 715 | 1,669 | 1,017 | 1,071 | 2,088 |
| Northern Plains | 642 | 261 | 903 | 853 | 249 | 1,101 | 788 | 245 | 1,032 |
| Pacific Northwest | 68 | 187 | 254 | 79 | 200 | 269 | 90 | 208 | 298 |
| West | 5 | 36 | 41 | 9 | 37 | 25 | 5 | 42 | 46 |
| Unallocated | 206 | 55 | 261 | 225 | 43 | 475 | 220 | 72 | 292 |
| United States | 5,586 | 4,388 | 9,974 | 6,682 | 4,106 | 10,788 | 6,791 | 4,836 | 11,628 |

| Region | 1998 | | | 1999 | | | 2000 | | |
|-------------------|------------------------|-----------|-------|----------|-----------|-------|----------|-----------|--------|
| | On farms | Off farms | Total | On farms | Off farms | Total | On farms | Off farms | Total |
| | <i>Million bushels</i> | | | | | | | | |
| Northeast | 16 | 41 | 57 | 18 | 47 | 65 | 100 | 84 | 183 |
| Southeast | 15 | 64 | 79 | 10 | 73 | 84 | 110 | 172 | 282 |
| Delta | 1 | 60 | 61 | 1 | 49 | 50 | 0 | 121 | 121 |
| Eastern Corn Belt | 244 | 472 | 716 | 299 | 586 | 885 | 2,402 | 1,730 | 4,133 |
| Western Corn Belt | 421 | 396 | 817 | 492 | 642 | 1,135 | 2,668 | 1,335 | 4,003 |
| Southern Plains | 26 | 303 | 330 | 26 | 318 | 344 | 15 | 351 | 366 |
| Central Plains | 235 | 620 | 855 | 291 | 734 | 1,025 | 979 | 1,116 | 2,095 |
| Northern Plains | 710 | 191 | 901 | 712 | 204 | 916 | 895 | 261 | 1,156 |
| Pacific Northwest | 129 | 270 | 399 | 121 | 242 | 363 | 89 | 214 | 303 |
| West | 3 | 47 | 50 | 2 | 47 | 49 | 2 | 40 | 41 |
| Unallocated | 127 | 37 | 165 | 134 | 39 | 174 | 403 | 111 | 514 |
| United States | 1,928 | 2,502 | 4,430 | 2,106 | 2,983 | 5,089 | 7,663 | 5,535 | 13,198 |

| Region | 2001 | | | Percent of 2000 | | | Percent of 5-yr. avg. | | |
|-------------------|------------------------|-----------|--------|-----------------|-----------|-------|-----------------------|-----------|-------|
| | On farms | Off farms | Total | On farms | Off farms | Total | On farms | Off farms | Total |
| | <i>Million bushels</i> | | | | | | | | |
| Northeast | 61 | 81 | 141 | -39 | -3 | -23 | 4 | 25 | 29 |
| Southeast | 106 | 169 | 275 | -4 | -2 | -3 | -6 | 25 | 16 |
| Delta | 0 | 122 | 122 | 32 | 1 | 1 | -97 | 23 | 15 |
| Eastern Corn Belt | 2,377 | 1,703 | 4,081 | -1 | -2 | -1 | 65 | 61 | 64 |
| Western Corn Belt | 2,469 | 1,284 | 3,753 | -7 | -4 | -6 | 54 | 40 | 49 |
| Southern Plains | 12 | 383 | 395 | -19 | 9 | 8 | -53 | 25 | 20 |
| Central Plains | 1,024 | 1,224 | 2,248 | 5 | 10 | 7 | 47 | 44 | 45 |
| Northern Plains | 757 | 249 | 1,007 | -15 | -4 | -13 | -4 | 8 | -1 |
| Pacific Northwest | 71 | 174 | 244 | -20 | -19 | -19 | -30 | -24 | -25 |
| West | 1 | 37 | 38 | -53 | -7 | -9 | -78 | -13 | -11 |
| Unallocated | 377 | 104 | 481 | -6 | -7 | -6 | 70 | 71 | 49 |
| United States | 7,256 | 5,530 | 12,786 | -5 | 0 | -3 | 44 | 39 | 42 |

Source: USDA/NASS

Appendix Table C--U.S. Wheat Production, 1996/97-2001/02

| Region | 1996/97 | 1997/98 | 1998/99 | 1999/00 | 2000/01 | 2001/02 | Percent change of 2000/01 | Percent change of 5-yr. avg. |
|------------------------|---------|---------|---------|---------|---------|---------|---------------------------|------------------------------|
| <i>Million bushels</i> | | | | | | | | |
| Northeast | 34 | 39 | 34 | 37 | 37 | 31 | -17 | -14 |
| Southeast | 117 | 125 | 101 | 110 | 111 | 94 | -15 | -17 |
| Delta | 84 | 51 | 57 | 65 | 82 | 70 | -15 | 4 |
| Eastern Corn Belt | 150 | 212 | 206 | 215 | 212 | 176 | -17 | -12 |
| Western Corn Belt | 157 | 137 | 139 | 125 | 147 | 122 | -17 | -14 |
| Southern Plains | 173 | 298 | 343 | 284 | 213 | 239 | 12 | -9 |
| Central Plains | 404 | 662 | 681 | 621 | 479 | 456 | -5 | -20 |
| Northern Plains | 715 | 556 | 604 | 524 | 571 | 469 | -18 | -21 |
| Pacific Northwest | 367 | 339 | 317 | 263 | 327 | 251 | -23 | -22 |
| West | 77 | 61 | 64 | 56 | 54 | 50 | -8 | -20 |
| United States | 2,277 | 2,481 | 2,547 | 2,299 | 2,232 | 1,958 | -12 | -17 |

Source: USDA/NASS

Appendix D--U.S. Wheat Stocks by Position, December 1, 1995-2000

| Region | 1995 | | | 1996 | | | 1997 | | |
|------------------------|----------|-----------|-------|----------|-----------|-------|----------|-----------|-------|
| | On farms | Off farms | Total | On farms | Off farms | Total | On farms | Off farms | Total |
| <i>Million bushels</i> | | | | | | | | | |
| Northeast | 0 | 24 | 24 | 0 | 15 | 15 | 0 | 27 | 27 |
| Southeast | 1 | 28 | 29 | 1 | 20 | 21 | 1 | 37 | 39 |
| Delta | 0 | 21 | 21 | 0 | 15 | 15 | 0 | 25 | 26 |
| Eastern Corn Belt | 6 | 114 | 120 | 6 | 59 | 65 | 12 | 105 | 116 |
| Western Corn Belt | 44 | 56 | 100 | 63 | 36 | 99 | 56 | 56 | 112 |
| Southern Plains | 7 | 107 | 114 | 8 | 72 | 79 | 10 | 164 | 173 |
| Central Plains | 51 | 227 | 278 | 45 | 142 | 187 | 76 | 277 | 353 |
| Northern Plains | 305 | 117 | 422 | 388 | 92 | 480 | 357 | 116 | 473 |
| Pacific Northwest | 47 | 142 | 189 | 57 | 157 | 214 | 67 | 165 | 232 |
| West | 1 | 18 | 19 | 2 | 16 | 18 | 1 | 22 | 23 |
| Unallocated | 15 | 8 | 23 | 15 | 9 | 24 | 24 | 23 | 46 |
| United States | 477 | 861 | 1,338 | 584 | 635 | 1,219 | 604 | 1,015 | 1,619 |

| Region | 1998 | | | 1999 | | | 2000 | | |
|------------------------|----------|-----------|-------|----------|-----------|-------|----------|-----------|-------|
| | On farms | Off farms | Total | On farms | Off farms | Total | On farms | Off farms | Total |
| <i>Million bushels</i> | | | | | | | | | |
| Northeast | 0 | 31 | 31 | 0 | 37 | 37 | 0 | 33 | 33 |
| Southeast | 2 | 39 | 41 | 1 | 38 | 39 | 1 | 37 | 39 |
| Delta | 0 | 35 | 35 | 0 | 32 | 32 | 0 | 18 | 18 |
| Eastern Corn Belt | 15 | 157 | 172 | 17 | 182 | 198 | 16 | 182 | 198 |
| Western Corn Belt | 54 | 67 | 121 | 45 | 67 | 112 | 68 | 60 | 128 |
| Southern Plains | 15 | 243 | 258 | 11 | 234 | 244 | 9 | 199 | 209 |
| Central Plains | 86 | 328 | 414 | 89 | 341 | 430 | 65 | 332 | 397 |
| Northern Plains | 417 | 115 | 532 | 392 | 107 | 499 | 371 | 104 | 475 |
| Pacific Northwest | 61 | 159 | 220 | 66 | 163 | 229 | 65 | 165 | 230 |
| West | 2 | 33 | 35 | 1 | 26 | 27 | 2 | 23 | 25 |
| Unallocated | 29 | 9 | 38 | 26 | 11 | 37 | 26 | 28 | 54 |
| United States | 680 | 1,215 | 1,896 | 647 | 1,236 | 1,884 | 623 | 1,183 | 1,806 |

| Region | 2001 | | | Percent of 2000 | | | Percent of 5-yr. avg. | | |
|------------------------|----------|-----------|-------|-----------------|-----------|-------|-----------------------|-----------|-------|
| | On farms | Off farms | Total | On farms | Off farms | Total | On farms | Off farms | Total |
| <i>Million bushels</i> | | | | | | | | | |
| Northeast | 0 | 29 | 0 | 0 | -13 | -100 | 0 | 0 | -100 |
| Southeast | 2 | 30 | 7 | 23 | -21 | -81 | 27 | -14 | -79 |
| Delta | 0 | 11 | 0 | 32 | -39 | -100 | 6 | -56 | -100 |
| Eastern Corn Belt | 8 | 161 | 143 | -48 | -11 | -28 | -36 | 18 | -5 |
| Western Corn Belt | 53 | 51 | 102 | -23 | -15 | -21 | -8 | -11 | -11 |
| Southern Plains | 7 | 223 | 227 | -21 | 12 | 9 | -29 | 22 | 18 |
| Central Plains | 59 | 326 | 385 | -9 | -2 | -3 | -18 | 15 | 8 |
| Northern Plains | 322 | 98 | 420 | -13 | -6 | -12 | -16 | -8 | -15 |
| Pacific Northwest | 51 | 132 | 183 | -22 | -20 | -20 | -19 | -18 | -19 |
| West | 1 | 20 | 17 | -53 | -16 | -35 | -42 | -18 | -35 |
| Unallocated | 15 | 25 | 139 | -41 | -11 | 160 | -37 | 57 | 250 |
| United States | 518 | 1,105 | 1,623 | -17 | -7 | -10 | -18 | 5 | -4 |

Source: USDA/NASS

Appendix Table E--U.S. Corn Production, 1996/97-2001/02

| Region | 1996/97 | 1997/98 | 1998/99 | 1999/00 | 2000/01 | 2001/02 | Percent change of 2000/01 | Percent change of 5-yr. avg. |
|-------------------|------------------------|---------|---------|---------|---------|---------|---------------------------|------------------------------|
| | <i>Million bushels</i> | | | | | | | |
| Northeast | 295 | 232 | 254 | 172 | 284 | 244 | -14 | -1 |
| Southeast | 461 | 395 | 324 | 330 | 405 | 430 | 6 | 12 |
| Delta | 155 | 118 | 108 | 89 | 102 | 122 | 20 | 7 |
| Eastern Corn Belt | 2,994 | 3,260 | 3,336 | 3,304 | 3,569 | 3,501 | -2 | 6 |
| Western Corn Belt | 2,920 | 2,793 | 3,087 | 2,996 | 3,088 | 2,816 | -9 | -5 |
| Southern Plains | 238 | 280 | 228 | 284 | 280 | 202 | -28 | -23 |
| Central Plains | 1,663 | 1,650 | 1,814 | 1,733 | 1,571 | 1,676 | 7 | -1 |
| Northern Plains | 428 | 394 | 528 | 452 | 540 | 460 | -15 | -2 |
| Pacific Northwest | 34 | 30 | 33 | 32 | 32 | 20 | -39 | -39 |
| West | 45 | 55 | 48 | 40 | 44 | 35 | -20 | -24 |
| United States | 9,233 | 9,207 | 9,759 | 9,431 | 9,915 | 9,507 | 95 | 99 |

Source: USDA/NASS

Appendix Table F--U.S. Corn Stocks by Position, December 1, 1995-2001

| Region | 1995 | | | 1996 | | | 1997 | | |
|-------------------|------------------------|-----------|-------|----------|-----------|-------|----------|-----------|-------|
| | On farms | Off farms | Total | On farms | Off farms | Total | On farms | Off farms | Total |
| | <i>Million bushels</i> | | | | | | | | |
| Northeast | 15 | 8 | 23 | 6 | 5 | 10 | 13 | 8 | 21 |
| Southeast | 9 | 17 | 25 | 3 | 9 | 12 | 9 | 14 | 23 |
| Delta | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 3 | 3 |
| Eastern Corn Belt | 218 | 264 | 482 | 82 | 92 | 174 | 128 | 99 | 227 |
| Western Corn Belt | 321 | 378 | 699 | 62 | 73 | 135 | 181 | 169 | 350 |
| Southern Plains | 3 | 7 | 10 | 1 | 4 | 5 | 1 | 7 | 7 |
| Central Plains | 97 | 117 | 214 | 17 | 38 | 54 | 83 | 87 | 169 |
| Northern Plains | 51 | 15 | 66 | 11 | 4 | 14 | 39 | 17 | 56 |
| Pacific Northwest | 0 | 3 | 3 | 0 | 2 | 2 | 0 | 1 | 1 |
| West | 0 | 3 | 3 | 0 | 1 | 1 | 0 | 2 | 2 |
| Unallocated | 28 | 4 | 32 | 16 | 1 | 17 | 23 | 1 | 24 |
| United States | 741 | 817 | 1,558 | 197 | 229 | 426 | 475 | 408 | 883 |

| Region | 1998 | | | 1999 | | | 2000 | | |
|-------------------|------------------------|-----------|-------|----------|-----------|-------|----------|-----------|-------|
| | On farms | Off farms | Total | On farms | Off farms | Total | On farms | Off farms | Total |
| | <i>Million bushels</i> | | | | | | | | |
| Northeast | 60 | 38 | 98 | 52 | 33 | 85 | 94 | 44 | 138 |
| Southeast | 87 | 65 | 152 | 87 | 70 | 157 | 109 | 89 | 198 |
| Delta | 0 | 35 | 35 | 0 | 31 | 31 | 0 | 36 | 36 |
| Eastern Corn Belt | 1,835 | 1,034 | 2,869 | 1,775 | 1,129 | 2,904 | 1,905 | 1,163 | 3,068 |
| Western Corn Belt | 1,930 | 810 | 2,740 | 1,920 | 829 | 2,749 | 2,085 | 886 | 2,971 |
| Southern Plains | 0 | 122 | 122 | 0 | 119 | 119 | 0 | 103 | 103 |
| Central Plains | 910 | 524 | 1,434 | 873 | 533 | 1,406 | 795 | 524 | 1,319 |
| Northern Plains | 318 | 64 | 382 | 313 | 66 | 379 | 357 | 86 | 443 |
| Pacific Northwest | 0 | 12 | 12 | 0 | 15 | 15 | 0 | 12 | 12 |
| West | 0 | 16 | 16 | 0 | 14 | 14 | 0 | 12 | 12 |
| Unallocated | 180 | 11 | 191 | 175 | 6 | 181 | 205 | 12 | 217 |
| United States | 5,320 | 2,732 | 8,052 | 5,195 | 2,844 | 8,039 | 5,550 | 2,968 | 8,518 |

| Region | 2001 | | | Percent of 2000 | | | Percent of 5-yr. avg. | | |
|-------------------|------------------------|-----------|-------|-----------------|-----------|-------|-----------------------|-----------|-------|
| | On farms | Off farms | Total | On farms | Off farms | Total | On farms | Off farms | Total |
| | <i>Million bushels</i> | | | | | | | | |
| Northeast | 56 | 46 | 102 | -40 | 4 | -26 | -19 | 19 | -6 |
| Southeast | 105 | 96 | 201 | -4 | 8 | 1 | 15 | 35 | 24 |
| Delta | 0 | 52 | 52 | 0 | 46 | 46 | 0 | 78 | 78 |
| Eastern Corn Belt | 1,870 | 1,166 | 3,036 | -2 | 0 | -1 | 5 | 17 | 9 |
| Western Corn Belt | 1,910 | 850 | 2,760 | -8 | -4 | -7 | 3 | 12 | 5 |
| Southern Plains | 0 | 98 | 98 | 0 | -5 | -5 | -100 | -13 | -18 |
| Central Plains | 830 | 570 | 1,400 | 4 | 9 | 6 | -2 | 12 | 3 |
| Northern Plains | 292 | 80 | 372 | -18 | -7 | -16 | -2 | 23 | 2 |
| Pacific Northwest | 0 | 12 | 12 | 0 | 0 | 0 | 0 | 0 | 0 |
| West | 0 | 14 | 14 | 0 | 15 | 15 | 0 | 0 | 0 |
| Unallocated | 213 | 5 | 217 | 4 | -61 | 0 | 20 | -43 | 17 |
| United States | 5,275 | 2,989 | 8,264 | -5 | 1 | -3 | 3 | 14 | 7 |

Source: USDA/NASS

Appendix Table G--U.S. Soybean Production, 1996/97-2001/02

| Region | 1996/97 | 1997/98 | 1998/99 | 1999/00 | 2000/01 | 2001/02 | Percent change of 2000/01 | Percent change of 5-yr. avg. |
|------------------------|---------|---------|---------|---------|---------|---------|---------------------------|------------------------------|
| <i>Million bushels</i> | | | | | | | | |
| Northeast | 41 | 40 | 44 | 38 | 57 | 51 | -10 | 16 |
| Southeast | 170 | 163 | 143 | 105 | 154 | 164 | 6 | 11 |
| Delta | 202 | 213 | 155 | 164 | 135 | 148 | 9 | -15 |
| Eastern Corn Belt | 839 | 965 | 1,014 | 959 | 1,031 | 1,063 | 3 | 11 |
| Western Corn Belt | 790 | 908 | 952 | 915 | 933 | 933 | 0 | 4 |
| Southern Plains | 14 | 21 | 12 | 17 | 11 | 11 | -6 | -30 |
| Central Plains | 209 | 231 | 240 | 262 | 224 | 310 | 39 | 33 |
| Northern Plains | 115 | 147 | 180 | 193 | 212 | 210 | -1 | 24 |
| United States | 2,380 | 2,689 | 2,741 | 2,654 | 2,758 | 2,891 | 5 | 9 |

Source: USDA/NASS

Appendix Table H--U.S. Corn Stocks by Position, December 1, 1995-2001

| Region | 1995 | | | 1996 | | | 1997 | | |
|------------------------|----------|-----------|-------|----------|-----------|-------|----------|-----------|-------|
| | On farms | Off farms | Total | On farms | Off farms | Total | On farms | Off farms | Total |
| <i>Million bushels</i> | | | | | | | | | |
| Northeast | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Southeast | 4 | 7 | 11 | 1 | 5 | 6 | 1 | 2 | 3 |
| Delta | 1 | 9 | 10 | 0 | 8 | 8 | 0 | 5 | 5 |
| Eastern Corn Belt | 31 | 67 | 98 | 19 | 36 | 54 | 13 | 26 | 39 |
| Western Corn Belt | 47 | 104 | 151 | 30 | 49 | 79 | 20 | 36 | 55 |
| Southern Plains | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| Central Plains | 11 | 21 | 31 | 5 | 13 | 18 | 5 | 10 | 15 |
| Northern Plains | 9 | 5 | 13 | 3 | 2 | 5 | 4 | 2 | 6 |
| Pacific Northwest | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| West | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unallocated | 3 | 14 | 18 | 2 | 10 | 12 | 1 | 7 | 8 |
| United States | 105 | 230 | 335 | 60 | 124 | 183 | 44 | 88 | 132 |

| Region | 1998 | | | 1999 | | | 2000 | | |
|------------------------|----------|-----------|-------|----------|-----------|-------|----------|-----------|-------|
| | On farms | Off farms | Total | On farms | Off farms | Total | On farms | Off farms | Total |
| <i>Million bushels</i> | | | | | | | | | |
| Northeast | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 3 | 3 |
| Southeast | 0 | 4 | 4 | 0 | 5 | 5 | 0 | 44 | 44 |
| Delta | 0 | 6 | 6 | 0 | 9 | 9 | 0 | 66 | 66 |
| Eastern Corn Belt | 22 | 32 | 54 | 39 | 53 | 92 | 469 | 360 | 829 |
| Western Corn Belt | 40 | 48 | 88 | 67 | 96 | 163 | 479 | 338 | 817 |
| Southern Plains | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 |
| Central Plains | 7 | 16 | 22 | 10 | 23 | 33 | 67 | 125 | 192 |
| Northern Plains | 6 | 3 | 9 | 11 | 6 | 17 | 77 | 43 | 120 |
| Pacific Northwest | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| West | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unallocated | 10 | 6 | 16 | 18 | 10 | 28 | 125 | 41 | 166 |
| United States | 84 | 115 | 200 | 145 | 203 | 348 | 1,217 | 1,023 | 2,240 |

| Region | 2001 | | | Percent changes of 2000 | | | Percent changes of 5-yr. avg. | | |
|------------------------|----------|-----------|-------|-------------------------|-----------|-------|-------------------------------|-----------|-------|
| | On farms | Off farms | Total | On farms | Off farms | Total | On farms | Off farms | Total |
| <i>Million bushels</i> | | | | | | | | | |
| Northeast | 0 | 4 | 4 | 0 | 12 | 12 | 0 | -63 | -63 |
| Southeast | 0 | 42 | 42 | 0 | -4 | -4 | -100 | -13 | -39 |
| Delta | 0 | 58 | 58 | 0 | -13 | -13 | -100 | -25 | -32 |
| Eastern Corn Belt | 491 | 352 | 843 | 5 | -2 | 2 | 13 | 3 | 9 |
| Western Corn Belt | 486 | 341 | 827 | 1 | 1 | 1 | 11 | 5 | 8 |
| Southern Plains | 0 | 4 | 4 | 0 | -7 | -7 | 0 | -32 | -32 |
| Central Plains | 84 | 153 | 237 | 25 | 22 | 23 | 22 | 33 | 29 |
| Northern Plains | 65 | 44 | 109 | -16 | 2 | -9 | 3 | 35 | 14 |
| Pacific Northwest | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -100 | -100 |
| West | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unallocated | 114 | 40 | 154 | -9 | -1 | -7 | 51 | 66 | 55 |
| United States | 1,240 | 1,036 | 2,276 | 2 | 1 | 2 | 12 | 6 | 9 |

Source: USDA/NASS

Additional Sources of Information:

More detailed information on grain and oilseed production and stocks is available from the National Agricultural Statistics Service in:

Crop Production,

<http://jan.mannlib.cornell.edu/reports/nassr/field/pcp-bb>

Grain Stocks,

<http://jan.mannlib.cornell.edu/reports/nassr/field/pcp-bb>

Small Grains Summary,

<http://jan.mannlib.cornell.edu/reports/nassr/field/pcp-bbs>

More detailed information on grain and oilseed supplies and use is available from the Economic Research Service in:

Feed Outlook,

<http://usda.mannlib.cornell.edu/reports/ersor/field/fds-bb>

Wheat Outlook,

<http://usda.mannlib.cornell.edu/reports/ersor/field/ocs-bb>

Oil Crops Outlook,

<http://usda.mannlib.cornell.edu/reports/ersor/field/ocs-bb>

The latest and most detailed grain and oilseed supply and demand information is available from the World Agricultural Outlook Board at:

<http://www.usda.gov/oc/waob/wasde/wasde.htm>

For additional information on grain, rail, and ocean freight transportation see:

USDA-AMS, *Grain Transportation Report*,

<http://www.ams.usda.gov/tmd/grain.htm>

U.S. Surface Transportation Board,

<http://www.stb.dot.gov>

Association of American Railroads,

<http://www.aar.org>

CSX Transportation,

<http://www.csx.com>

Kansas City Southern,

<http://www.kcsi.com>

Norfolk Southern,

<http://www.nscorp.com>

Union Pacific,

<http://www.up.com>

American Shippers,

<http://www.americanshipper.com>