

# Shipments of Grain by Rail in Texas

Marvin E. Prater

Daniel O'Neil, Jr.

Adam Sparger

This summary of grain shipments by rail in Texas is drawn from *State Grain Rail Statistical Summary*,<sup>1</sup> a report that describes the grain and oilseed shipped by rail in the United States from 2006 to 2010. The full report collects information on rail shipments from each State and to each State and examines some of the factors that influence the amount of grain grown and used. It examines rail shipments, rail receipts, grain and oilseed production, animal and poultry production, grain and oilseed exports, and grain and oilseed rail rates per ton-mile to explain the variations between States in shipments of these commodities.

Texas ranks 11th among the grain and oilseed producing States, with a 2006–2010 average yearly production of 665.3 million bushels (mbu).

During the period 2006–2010, corn comprised 38 percent of Texas crops, cottonseed 20 percent, sorghum 18 percent, wheat 14 percent, rice 4 percent, peanuts 4 percent, and oats and soybeans each 1 percent.

Nationally, Texas is ranked first in animal and poultry production, averaging 37.9 million Grain Consuming Animal Units (GCAU)<sup>2</sup> from 2006 to 2010.

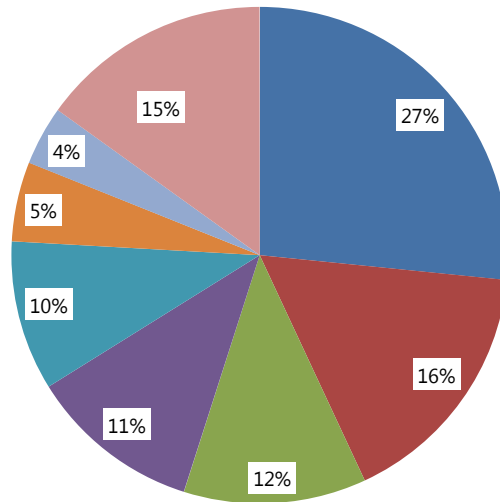
For each year from 2006 to 2010, an average of 14.1 million metric tons of grain and oilseeds were inspected for export from Texas. Railroad originations of grain and oilseeds had an average market share of 20.3 percent in the crop marketing years 2007–2010, a slight decrease from the 2001–2004 average of 21 percent.

1 Available at <http://dx.doi.org/10.9752/TS066.06-2013>

2 A standard unit used to compare feed needs of different livestock and poultry.

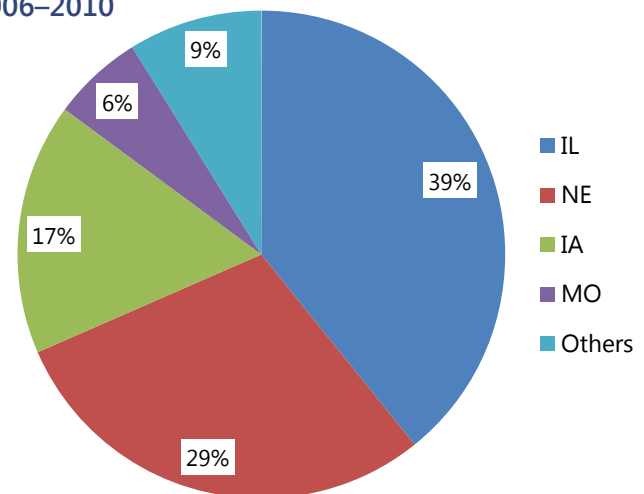
**Figure 1. Business Economic Areas Receiving Texas Corn by Rail, 2006–2010**

- Los Angeles-Riverside-Orange County, CA-AZ
- McAllen-Edinburg-Mission, TX
- Lubbock, TX
- San Francisco-Oakland-San Jose, CA
- Houston-Galveston-Brazoria, TX
- Amarillo, TX-NM
- Flagstaff, AZ-UT
- Others



Source: USDA analysis of Surface Transportation Board Confidential Waybill Samples

**Figure 2. Sources of Texas Rail Corn Receipts, 2006–2010**



Source: USDA analysis of Surface Transportation Board Confidential Waybill Samples

During the period 2006–2010, Texas shipped 1 million tons of corn by rail, down 65.6 percent from 3 million tons from 1996 to 2000. (fig. 1)

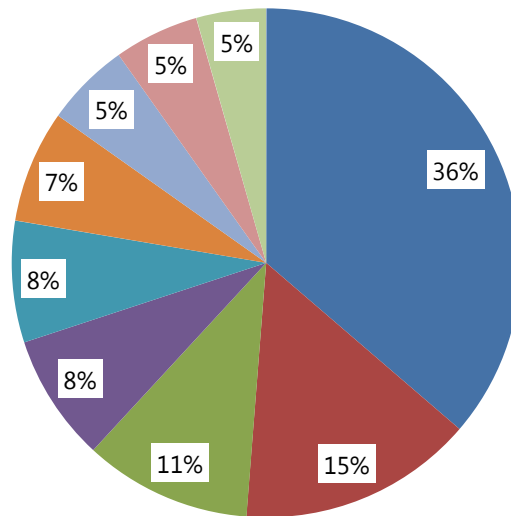
Texas received a total of 51.7 million tons of corn by rail during the 2006–2010 marketing years, up 56 percent from 33.2 million tons during the 1996–2000 marketing years. (fig. 2)

From 2006 to 2010, Texas shipped 221,000 tons of soybeans by rail, down 70.6 percent from 751,000 tons shipped in the period 1996–2000. (fig. 3)

Texas received a total of 8.4 million tons of soybeans by rail during the 2006–2010 marketing years, down 44.4 percent from 15.2 million tons during the 1996–2000 marketing years. (fig. 4)

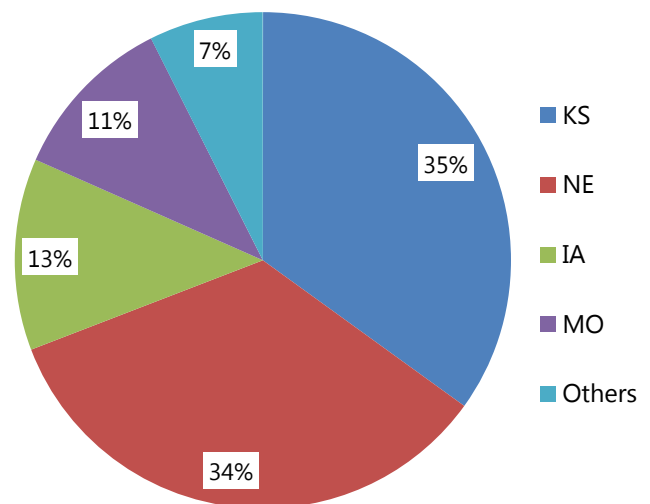
**Figure 3. Business Economic Areas Receiving Texas Soybeans by Rail, 2006–2010**

- New Orleans, LA-MS
- Houston-Galveston-Brazoria, TX
- McAllen-Edinburg-Mission, TX
- San Antonio, TX
- Amarillo, TX-NM
- Chicago-Gary-Kenosha, IL-IN-WI
- Sioux City, IA-NE-SD
- Denver-Boulder-Greeley, CO-KS-NE
- Others



Source: USDA analysis of Surface Transportation Board Confidential Waybill Samples

**Figure 4. Sources of Texas Rail Soybean Receipts, 2006–2010**



Source: USDA analysis of Surface Transportation Board Confidential Waybill Samples

In the years 2006–2010, 10.5 million tons of wheat were shipped by rail from Texas, a 5.7-percent decrease from 11.1 million tons from 1996 to 2000. (fig. 5)

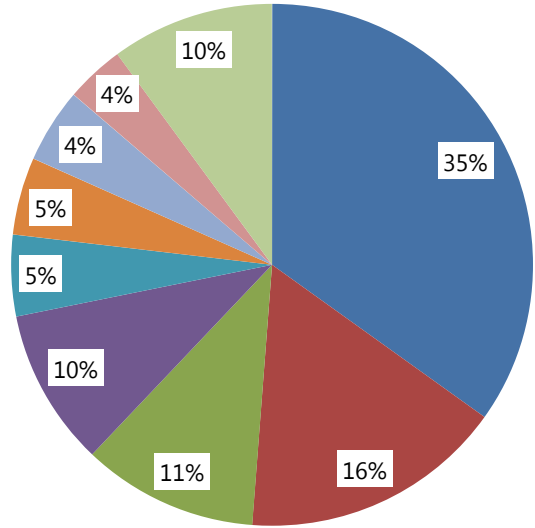
Texas received a total of 55.6 million tons of wheat by rail during the 2006–2010 marketing years, up 10.3 percent from 50.4 million tons during the 1996–2000 marketing years. (fig. 6)

Eighteen percent of the grain car shipments originating in Texas from 2006 to 2010 were 1–5 cars in size, 38 percent were 6–49 cars, 7 percent were 50–74 cars, and the remaining 37 percent of shipments were 75 cars or greater. (fig. 7)

Average tariff rail rates for shipments originating in Texas were 4.3 cents per ton-mile from 2006 to 2010. Rates ranged from 2.88 cents per ton-mile in 1996 to 5.13 cents in 2010. Rates increased 64 percent from 2005 to 2010. (fig. 8)

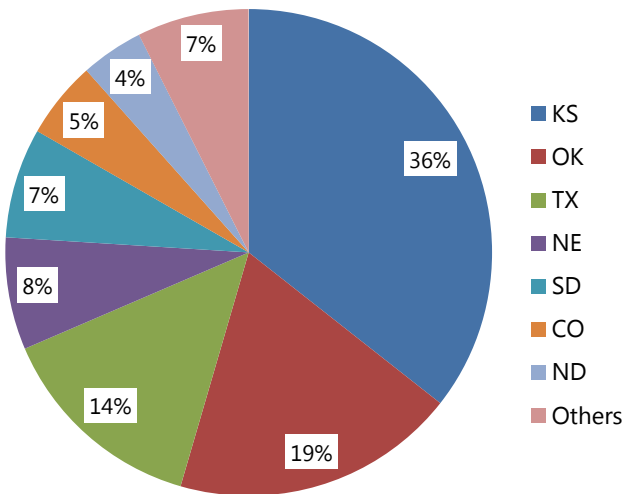
**Figure 5. Business Economic Areas Receiving Texas Wheat by Rail, 2006–2010**

- Houston-Galveston-Brazoria, TX
- Beaumont-Port Arthur, TX
- Corpus Christi, TX
- Los Angeles-Riverside-Orange County, CA-AZ
- Dallas-Fort Worth, TX-AR-OK
- New Orleans, LA-MS
- San Francisco-Oakland-San Jose, CA
- San Antonio, TX
- Others



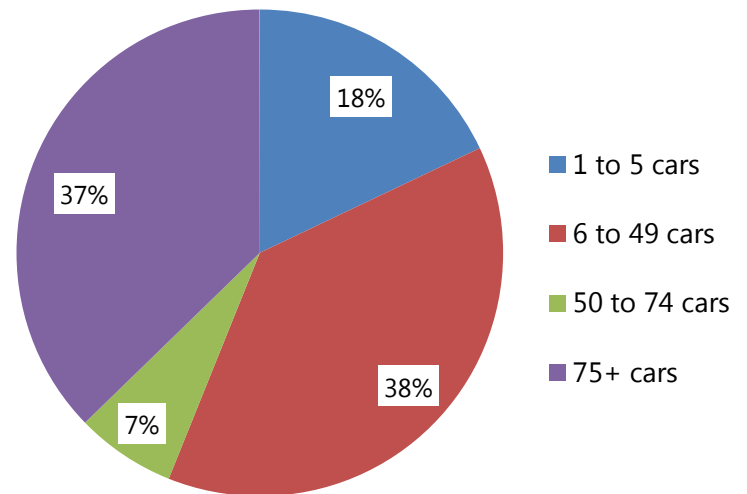
Source: USDA analysis of Surface Transportation Board Confidential Waybill Samples

**Figure 6. Sources of Texas Rail Wheat Receipts, 2006–2010**



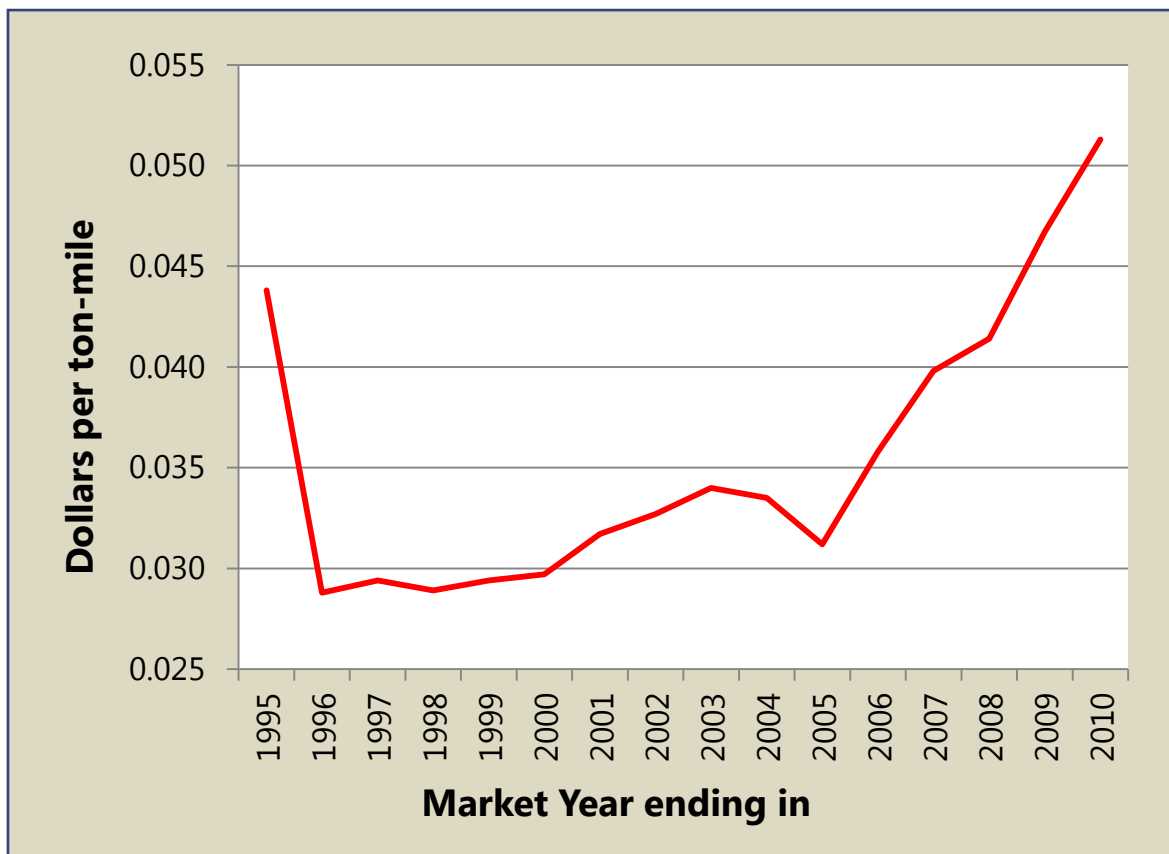
Source: USDA analysis of Surface Transportation Board Confidential Waybill Samples

**Figure 7. Texas Grain Originations by Shipment Size**



Source: USDA analysis of Surface Transportation Board Confidential Waybill Samples

Figure 8. Average Texas Rail Tariff Rates



Source: USDA analysis of Surface Transportation Board Confidential Waybill Samples

Table 1. Texas Grain and Oilseed Production and Rail Shipments, 2006-2010

	Corn	Soybeans	Wheat	Total Grain and Oilseeds	GCAUs*
Average Yearly Production	255.43 mbu†	4.50 mbu	92.39 mbu	665.33 mbu	37,878,809
Average Yearly Export Inspections (metric tons)	2,093,491	964,588	7,844,396	14,074,983	-
Total Rail Receipts (tons)	51,710,678	8,442,462	55,590,223	-	-
Total Rail Shipments (tons)	1,042,878	220,562	10,462,916	-	-

\* Grain Consuming Animal Units

† Million bushels

## Data and Methodology

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Data from the Surface Transportation Board's Confidential Waybill Samples over the period 1996-2010 were analyzed to measure grain and oilseed shipments by rail. The data were aggregated and sorted by a number of characteristics, the major categories being shipment origin, destination, and type of grain or oilseed. This information was then organized by both origin and destination State. The data were also sorted by shipment size for each State, showing the relative frequencies of grain and oilseed shipments of different sizes. Data having less than 30 observations are excluded, as are States having data for only 1 or 2 years of the 5-year period. Despite these precautions, States with relatively low volumes are more subject to year-to-year variation than are States with higher volumes because of the number of available observations used to calculate totals. This is a result of the sampling techniques used in the Waybill Samples. Thus, higher volumes are less likely to suffer from sampling limitations and be more representative of actual rail movements for any given year than are lower volumes.

GCAUs were calculated for each State using information on animal populations and the corresponding levels of feed necessary to maintain the populations. These calculations included meat and poultry for consumption and production purposes. Cows, sheep, turkeys, hogs, and chickens were included.

The export inspection numbers in this report were taken from USDA Grain Inspection, Packers and Stockyards Administration grain and oilseed export inspections at U.S. ports exporting grain and oilseeds in bulk. Grain and oilseed production levels by State were also calculated.

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