

Shipments of Grain by Rail in Colorado

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This summary of grain shipments by rail in Colorado is drawn from *State Grain Rail Statistical Summary*,¹ 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.

Colorado ranks 15th among the grain and oilseed producing States, with a 2006–2010 average yearly production of 245.6 million bushels (mbu).

During the period 2006 to 2010, corn production comprised 61 percent of Colorado crops, wheat 33 percent, barley 3 percent, and sorghum 2 percent.

Nationally, Colorado is ranked eleventh in animal and poultry production, averaging 13.1 million Grain Consuming Animal Units (GCAU)² from 2006 to 2010.

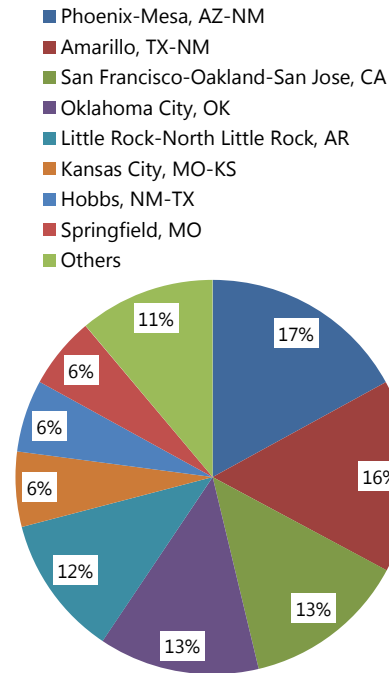
During the crop marketing years 2001 to 2004, railroad originations of grain and oilseeds averaged a market share of 22.9 percent, which decreased to 19.7 percent during the period of 2007 to 2010.

During the period 2006 to 2010, Colorado shipped 187,000 tons of corn by rail, down 56 percent from 421,000 tons from 1996 to 2000. (fig. 1)

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

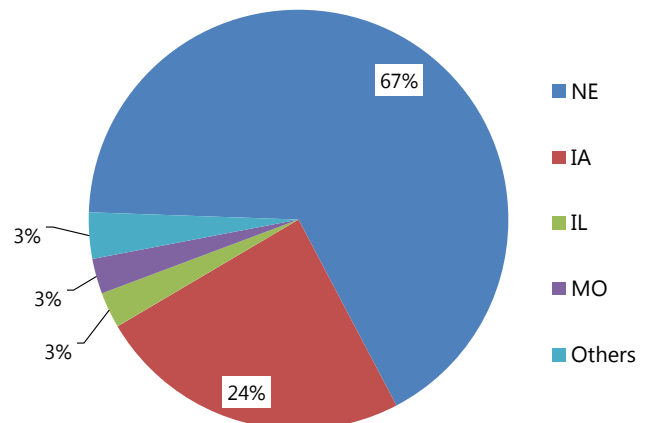
2 A standard unit used to compare the feed needs of different livestock and poultry.

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



Source: USDA analysis of Surface Transportation Board Confidential Waybill Samples

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



Source: USDA analysis of Surface Transportation Board Confidential Waybill Samples

Colorado received a total of 1.8 million tons of corn by rail during the 2006–2010 marketing years, down 15 percent from 2.1 million tons during the 1996–2000 marketing years. (fig. 2)

In the years 2006 to 2010, 5.9 million tons of wheat were shipped by rail from Colorado, a 24-percent decrease from 7.7 million tons from 1996 to 2000. (fig. 3)

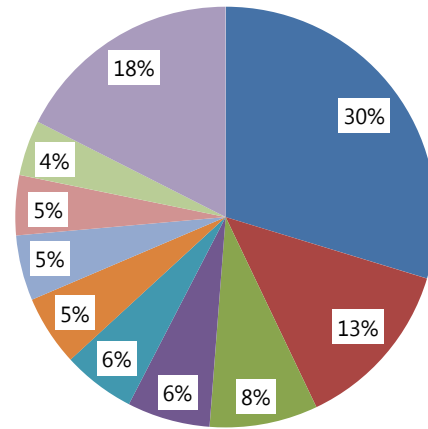
Colorado received a total of 1.1 million tons of wheat by rail during the 2006–2010 marketing years, up 82 percent from 618,000 million tons during the 1996–2000 marketing years. (fig. 4)

Eighteen percent of the grain car shipments originating in Colorado from 2006 to 2010 were 1–5 cars in size, 39 percent were 6–49 cars, 1 percent were 50–74 cars, and the remaining 42 percent of shipments were greater than 75 cars long. (fig. 5)

Average tariff rail rates for shipments originating in Colorado were 4.7 cents per ton-mile from 2006 to 2010. Rates ranged from 2.52 cents per ton-mile in 1999 to 5.67 cents in 2009. Rates increased 35 percent from 2005 to 2010. (fig. 6)

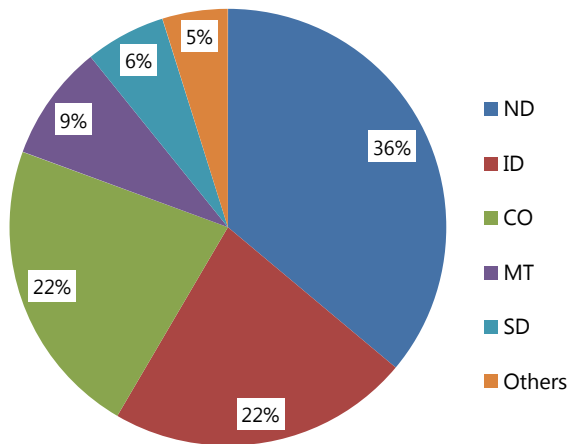
Figure 3. Business Economic Areas Receiving Colorado Wheat by Rail, 2006–2010

- Houston-Galveston-Brazoria, TX
- Portland-Salem, OR-WA
- Kansas City, MO-KS
- Dallas-Fort Worth, TX-AR-OK
- Corpus Christi, TX
- St. Louis, MO-IL
- Wichita, KS-OK
- Beaumont-Port Arthur, TX
- Denver-Boulder-Greeley, CO-KS-NE
- Others



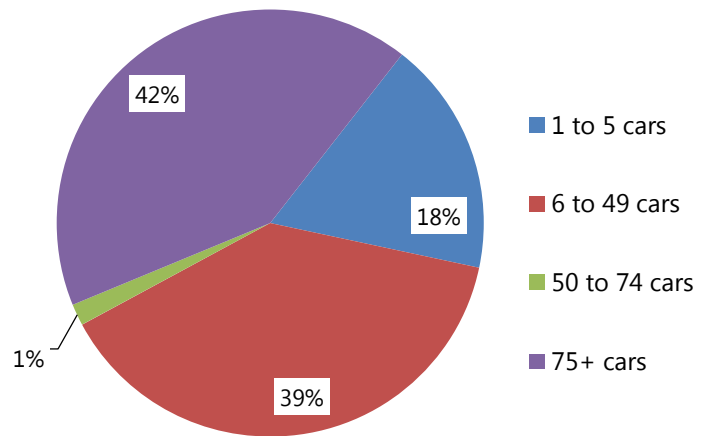
Source: USDA analysis of Surface Transportation Board Confidential Waybill Samples

Figure 4. Sources of Colorado Rail Wheat Receipts, 2006–2010



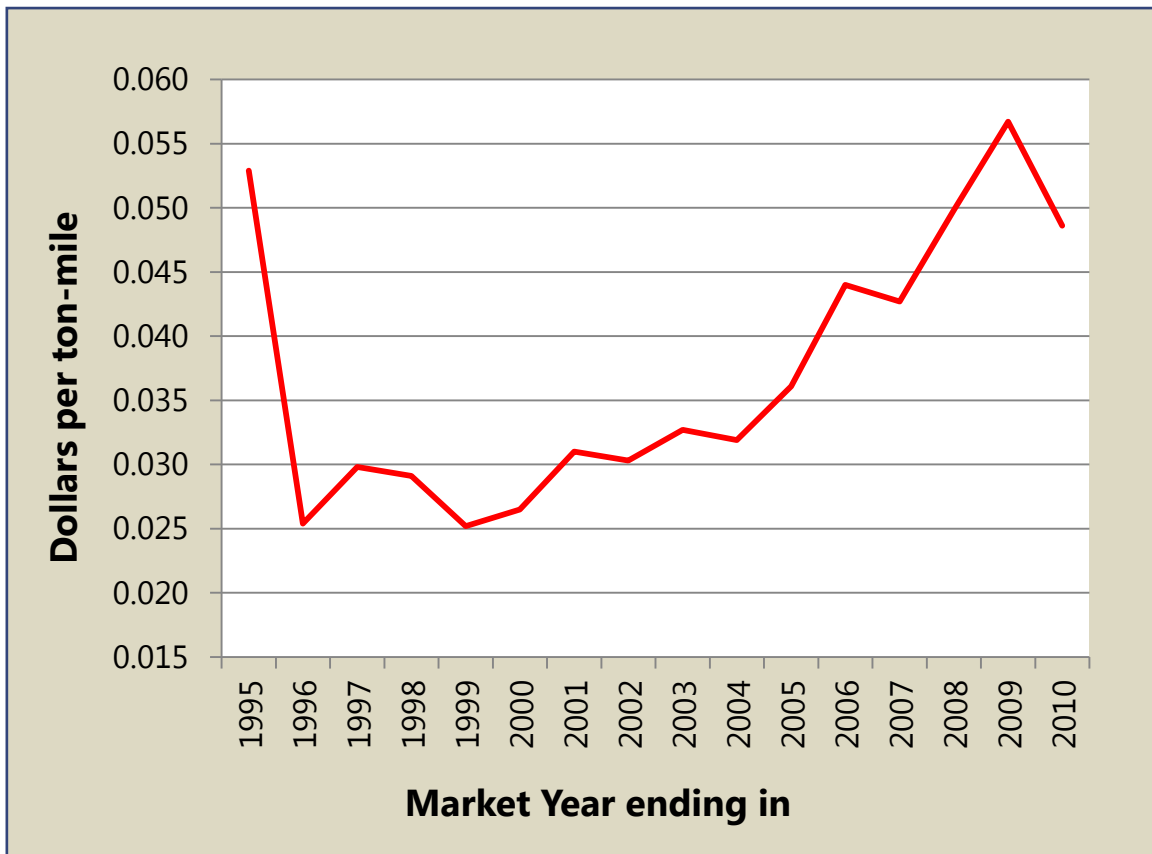
Source: USDA analysis of Surface Transportation Board Confidential Waybill Samples

Figure 5. Colorado Grain Originations by Shipment Size



Source: USDA analysis of Surface Transportation Board Confidential Waybill Samples

Figure 6. Average Colorado Rail Tariff Rates



Source: USDA analysis of Surface Transportation Board Confidential Waybill Samples

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

	Corn	Soybeans	Wheat	Total Grain and Oilseeds	GCAUs*
Average Yearly Production	151.02 mbu†	-	80.61 mbu	245.59 mbu	13,060,582
Total Rail Receipts (tons)	1,797,638	-	1,126,265	-	-
Total Rail Shipments (tons)	187,394	-	5,871,037	-	-

* Grain Consuming Animal Units

† Million bushels

Data and Methodology

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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