

Shipments of Grain by Rail in Virginia

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This summary of grain shipments by rail in Virginia 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.

Virginia ranks 30th among the grain and oilseed producing States, with a 2006–2010 average yearly production of 73.1 million bushels (mbu).

From 2006 to 2010, corn comprised 48 percent of Virginia crops, soybeans 23 percent, wheat 17 percent, barley 4 percent, cottonseeds 4 percent, and peanuts 3 percent.

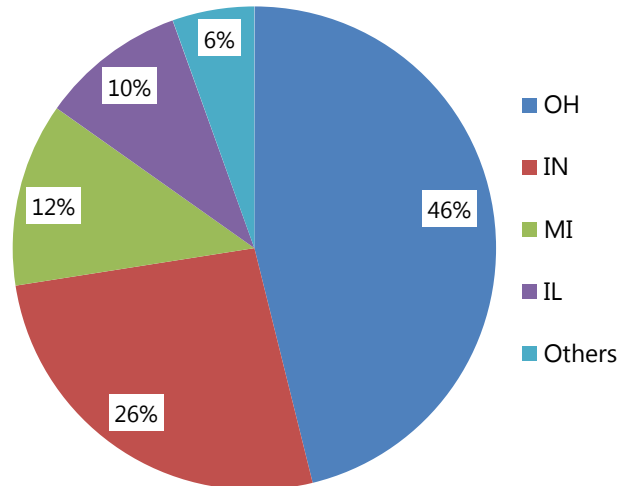
Nationally, Virginia is ranked 22nd in animal and poultry production, averaging 5.7 million Grain Consuming Animal Units (GCAU)² from 2006 to 2010.

For each year from 2006 to 2010, an average of 1.6 million metric tons of grain and oilseeds were inspected for export from Virginia. Railroad originations of grain and oilseeds had an average market share of 4.8 percent during the crop marketing years from 2007 to 2010, a decrease from the average of 10 percent during the period 2001–2004.

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

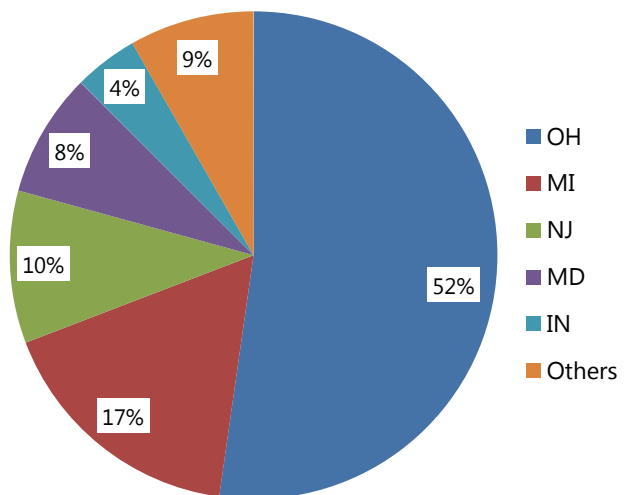
2 A standard unit used to compare feed needs of different livestock and poultry.

Figure 1. Sources of Virginia Rail Corn Receipts, 2006–2010



Source: USDA analysis of Surface Transportation Board Confidential Waybill Samples

Figure 2. Sources of Virginia Rail Soybean Receipts, 2006–2010



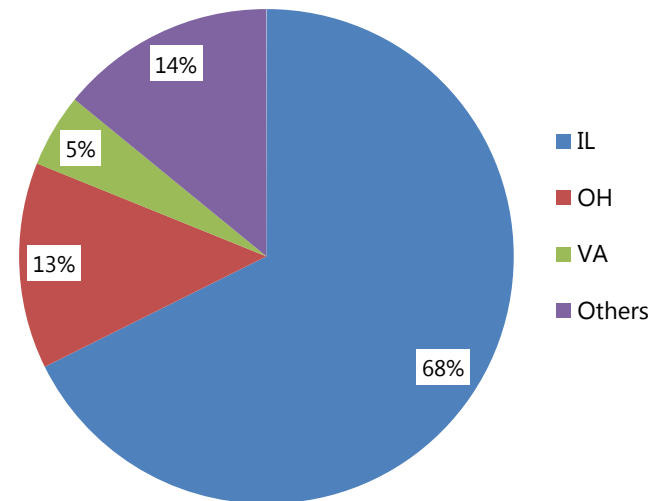
Source: USDA analysis of Surface Transportation Board Confidential Waybill Samples

Virginia received a total of 5.7 million tons of corn by rail during the 2006–2010 marketing years, down 8.1 percent from 6.2 million tons during the 1996–2000 marketing years. (fig. 1)

Virginia received a total of 2.9 million tons of soybeans by rail during the 2006–2010 marketing years, up 424 percent from 548,000 tons during the 1996–2000 marketing years. (fig. 2)

Virginia received a total of 3.8 million tons of wheat by rail during the 2006–2010 marketing years, up 31.8 percent from 2.9 million tons during the 1996–2000 marketing years. (fig. 3)

Figure 3. Sources of Virginia Rail Wheat Receipts, 2006–2010



Source: USDA analysis of Surface Transportation Board Confidential Waybill Samples

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

| | Corn | Soybeans | Wheat | Total Grain and Oilseeds | GCAUs* |
|---|-------------|-----------|-----------|--------------------------|-----------|
| Average Yearly Production | 35.39 mbut† | 16.70 mbu | 12.78 mbu | 73.05 mbu | 5,656,910 |
| Average Yearly Export Inspections (metric tons) | 499,822 | 549,267 | 514,597 | 1,587,234 | - |
| Total Rail Receipts (tons) | 5,708,738 | 2,872,886 | 3,834,496 | - | - |

* 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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