Barge Situation for Grains and Oilseeds

This section looks at key barge factors that are impacting movements of grains and oilseeds. The information in this section is based on information from the Army Corps of Engineers Lock Performance Monitoring System, Waterborne Commerce of the United States and Vessel Operator Characteristics, and Informa’s annual Barge Fleet Profile report.

Grain barge loadings demonstrate a shift in loadings by waterway. The trend of relatively less grain loading on the upper Mississippi and Illinois Rivers has emerged since the early 2000s. About 60% of annual grain barge loadings originated on the upper Mississippi and Illinois Rivers, and has trended lower to about 40% in 2010. This trend is particularly evident for soybean loadings with increased loadings on the lower Ohio and lower Mississippi Rivers.

This shift in loadings has occurred during the time of the ethanol build out across the Corn Belt and within proximity of the navigable river system, especially in Iowa where corn became deficit. Once the corn ethanol mandate is achieved corn surpluses are expected to return along the upper Mississippi River. But with issues of crumbling lock infrastructure, increased crop production lower along the Mississippi River, deeper draft barge equipment being used, and a widening barge freight spread, will the upper Mississippi River gain a competitive edge with the lower Mississippi River, during a time when the Panama Canal expansion effort will be completed and will likely expand the draw area for river navigation.
U.S. Inland River System

UPPER MISSISSIPPI SYSTEM

OHIO RIVER SYSTEM

LOWER MISSISSIPPI SYSTEM

Minneapolis

Chicago

St. Louis

Rockport

Jeffersonville

Louisville

Cairo

Gumersville

New Orleans

Houston

Pittsburgh

Chicago

New Orleans

Minneapolis

St. Louis

Rockport

Jeffersonville

Louisville

Cairo

Gumersville

New Orleans

Houston

Pittsburgh
Share of Grain and Soybean Loadings by River Segment

Source: Army Corps of Engineers and Informa
SOY TRANSPORTATION COALITION
FARM TO MARKET: A Soybean’s Journey

Share of Soybean Barge Loadings by River Segment

Source: Army Corps of Engineers and Informa
• Since 2001, the average tons loaded per barge for grains and soybeans by river segment:
  o Upper Mississippi River 1,554 tons;
  o Lower Mississippi River approximately 1,700 tons;
  o Illinois Waterway 1,552 tons;
  o Ohio River 1,561 tons; and
  o Arkansas River 1,406 tons (average since 2003).

• Since 2011, the average tons loaded per barge for grains and oilseeds by river segment:
  o Upper Mississippi River 1,538 tons;
  o Lower Mississippi River approximately 1,700 tons;
  o Illinois Waterway 1,544 tons;
  o Ohio River 1,699 tons; and
  o Arkansas River 1,397 tons.

• The number of total grain and oilseed barge loadings has decreased since the 2001/02 highs on the Upper Mississippi and Illinois Waterway while on the Ohio River 2009/10 was the high with just under 5,000 total barge loadings. Around 85% of the covered hopper barge fleet is able to handle loads that draft 12 feet to 14 feet compared with 15% that is limited to 9 feet to 10 feet. As a result, in most cases a covered hopper barge will be able to take advantage of deeper drafts if the river allows.
The barge freight rate differentials between key river locations and Peoria, IL on the Illinois River have been widening. The spreads at locations downriver from Peoria have widened from a range of -10 cents to -15 cents per soybean bushel from the mid-1990s to the mid-2000s from Memphis.
for example. Since 2004 the barge freight spread between Memphis with Peoria has widened further to more than -30 cents per soybean bushel and has maintained a greater than 25% freight advantage since 2009.

Barge Freight Rate Differential with Peoria, IL for Soybean Movements to New Orleans, LA by Select River Segments

Source: USDA and Informa
Commodities Moved

**Tons**

- On the demand side, commodity volumes moved on the inland waterways during 2010 totaled 555.4 million tons, an increase of 9% from 2009. The economic recession led to a dramatic drop in commodity flows during 2009, but movements during 2010 showed a decent rebound.

- Only farm products displayed a positive annual increase in movements, led by higher corn and soybean moves. Farm products were up 7.5 million tons or 11% to 74.7 million tons. The increase follows the poor navigation conditions of 2008 that directly impacted corn moves. Movements of soybeans were record high in 2009 at 21.8 million tons.

- For 2009, Informa estimates waterborne commerce to have expanded 15% to 587 million tons. The estimates were developed through specific commodity and trend analysis.

**Average Distance**

- The average distance commodities were hauled during 2009 increased to 481 miles, up from 456 miles in 2008, which is about 30 miles above the 5-year average.

- Food and farm products were hauled the greatest distance in 2009, with an average of 972 miles, which was the highest distance for this group since 2006.

- Chemical movements averaged 604 miles, nearly unchanged from the 602 miles in 2008, but about average for the past five years.
Ton-Miles

- Commodity ton-miles for all internal movements during 2009 totaled 245 billion ton-miles, down 6% from 2008.

- Food and farm products totaled 72.6 billion ton-miles during 2009, an increase of 17% on higher volumes and longer distances moved.
Total Grain and Oilseed Barge Loadings on the Upper Mississippi River

Crop Year

Barges

- 2000/01
- 2001/02
- 2002/03
- 2003/04
- 2004/05
- 2005/06
- 2006/07
- 2007/08
- 2008/09
- 2009/10
Total Grain and Oilseed Barge Loadings on the Illinois Waterway

Crop Year

Barges

“Farm to Market: A Soybean’s Journey” can be accessed at [www.unitedsoybean.org](http://www.unitedsoybean.org) or [www.soytransportation.org](http://www.soytransportation.org).

Funded by the Soybean Checkoff