

FACT SHEET: Superior Barge Fuel Efficiency Claims are Questionable

The barge industry promotes barge navigation as the most fuel efficient mode of domestic shipping. By measuring the number of miles one gallon of diesel fuel can move a ton of freight, the barge industry asserts that barges can move freight significantly further than both trucks and trains. However, critical aspects of the measurement are omitted, making the assertion inaccurate in regard to trains.

1. **Barges must travel between 30 and 38 percent further than trains to go to the same destination.** This is because rivers are not aligned in a straight line; they have many bends and turns that increase their length. (Comparing the length of trips from the same start and end points between differing modes of transportation is called “circuitry.”)
2. **The barge industry compares their barges to general freight trains, not to unit trains that are far more fuel efficient.** Barges are typically filled with the same type of commodity (e.g. corn, coal, etc.), and are transported to the same destination. General freight trains can have a large number of different materials and commodities that have different destinations and require many stops and separations of the train’s cars. However, unit trains carry only one commodity, as is typical for barges, and also typically travel to one destination.

When comparisons between trains and barges are adjusted for the additional distance of river travel and compared with unit trains, the alleged advantage in fuel efficiency touted by the barge industry disappears.

Revised Fuel Efficiency Comparison of Transportation Modes	
Mode	Tons-Miles/Gallon
Inland Towing (1.3 circuitry)	443
Inland Towing (1.38 circuitry)	417
Average Railroad	413
Unit Grain Train	640

The fuel efficiency advantage for trains over barges is confirmed by the U.S. Department of Energy (DOE) in their Transportation Energy Data Books. The DOE compares the amount of energy used per ton-mile by modes of transportation (the less energy used per mile, the more efficient the transportation). In 2006, the latest available data for barges, rail averaged 330 BTUs per ton-mile and barges averaged 571 BTUs per ton-mile.

To review the entire “Big Price – Little Benefit” report and find out why the proposed locks on the Upper Mississippi River are not economically viable, go to: www.iwla.org/bigprice

The Nicollet Island Coalition is a group of conservation and environmental organizations formed in 1994 to address restoration issues on the Upper Mississippi River and provide coordinated advocacy work on Upper Mississippi River issues.