ECONOMIC IMPACT OF MISSOURI'S INLAND WATERWAYS



IN 2018, MISSOURI'S PORTS, INLAND WATERWAYS, AND INLAND WATERWAYS-DEPENDENT INDUSTRIES SUPPORTED

Nearly 140,000 jobs

\$8.3 billion in personal income

\$13.3 billion in Gross State Product

\$37.0 billion in total output

...Giving rise to \$930.4 million

in state & local tax revenue

Missouri has over

1,050 MILES

of navigable inland waterways, ranking it

10th in the nation

INLAND WATERWAYS SUPPORT MISSOURI'S KEY INDUSTRIES

Industry Sub-Category	Percent of Goods Shipped by Water (Tons)	Direct Missouri Jobs
Chemical manufacturing	G 32% of inbound	19,760
Primary metal manufacturing	19% of inbound	6,460
Crop production	→ 12% of outbound	2,900*
Mining (except oil & gas)	→ 10% of outbound	3,030
Nonmetallic mineral product mfg.	→ 8% of outbound	8,210

^{*}Total for Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11)

TOP INLAND WATERWAYS COMMODITIES BY WEIGHT (comprising 70% of total tonnage)

Sand, gravel, shells, clay, salt, & slag 13.0 million tons

Food & food products, such as fruits, vegetables, oils, & seeds

9.2 million tons

Primary non-metal products, such as sulfur & chlorine 5.8 million tons

TOP INLAND WATERWAYS COMMODITIES BY VALUE

(comprising 87% of total value)

Basic chemicals used in consumer products, including appliances, toys, & cosmetics

\$4.1 billion

Cereal grains, including wheat, corn, barley, & oats

\$2.4 billion

Agricultural & food products

\$536.2 million

MISSOURI'S INLAND WATERWAY ASSETS AT A GLANCE



Mississippi Rivers

12 public ports

39.9M tons of freight valued at

\$8.0 BILLION

moved on Missouri's inland waterways, which is equivalent to over

999,000 TRUCKS

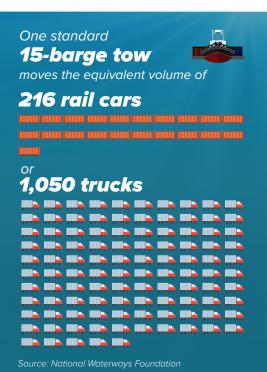
Avoided trucks translates into reduced congestion, emissions, and crashes, lessening impacts on highway infrastructure

BENEFITS OF INLAND WATERWAYS TRANSPORTATION

America's inland waterways system is vital to our nation's competitiveness and economic growth. The inland waterways efficiently, sustainably, cost-effectively and safely transport critical commodities like agricultural goods, energy products, building materials and industrial chemicals to destinations within the U.S. and to deep water ports for export. In 2018, 766.3 million tons of goods valued at \$507.3 billion moved on the U.S. inland waterways system, and by 2045 it is expected to increase by 23% to 942 million tons valued at \$871 billion. Barge transportation is the safest, most environmentally-friendly, economical, and fuel-efficient way to move our nation's goods for use domestically and for export. On a single gallon of fuel, one barge can move freight more than four times farther than trucks, releasing 10 times fewer emissions.

Called "the backbone of the transportation logistics system," the inland waterways are a key part of the United States' transportation supply chain. The system includes a vast network of 12,000 miles of connecting waterways and 218 locks. However, the majority of locks and dams on the Mississippi River system were constructed during the 1930s and are operating well beyond their 50-year design life. Modernizing the nation's inland waterways system will support and create American jobs, increase U.S. exports, and inject billions of dollars into the U.S. economy to power our growth for the next 50 years.

Sources: U.S. Department of Agriculture Inland Waterways Study (2019); U.S. Army Corps of Engineers Waterborne Commerce Statistics; Federal Highway Administration Freight Analysis Framework; U.S. Department of Labor Bureau of Labor Statistics Occupational Employment Statistics; IMPLAN



Over the next 10 years, constructing all authorized navigation projects and rehabilitating existing locks could have significant national impacts, leading to a 20% increase in jobs, 39% increase in Gross Domestic Product, and 40% increase in output

Source: USDA



The US' inland waterways system saves between

\$7 billion & \$9 billion

annually over the cost of other modes due to efficiency and low cost

Source: USDA

The National Waterways Foundation estimates overall investment needs of inland waterways at

\$8 billion over the next 10 years

The U.S. currently has a

\$5.35 per metric ton advantage over Brazil when shipping soybeans on the inland waterways system from Davenport, lowa, to Shanghai, China.

Barges have the smallest carbon footprint among freight transportation modes









In 2016, recreational

of Corps lakes resulted in

\$10.6B in total trip spending, supporting over

189K jobs nationwide

Source: USACE

Tons of CO2 per Million Ton-Miles

Compared to barges, moving an identical amount of cargo by rail generates 30% more emissions, while trucks generate 1,000% more emissions.

Source: Texas Transportation Institut