

ECONOMIC IMPACT OF MINNESOTA'S INLAND WATERWAYS



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

Nearly **460,000 jobs**

\$24.4 billion in personal income

\$58.6 billion in Gross State Product

\$196.9 billion in total output

...Giving rise to **\$16 billion** in state & local tax revenue

Minnesota has

260 MILES

of navigable inland waterways, ranking it

27th in the nation

INLAND WATERWAYS SUPPORT MINNESOTA'S KEY INDUSTRIES

Industry Sub-Category	Percent of Goods Shipped by Water (Tons)	Direct Minnesota Jobs
Crop production	↻ 26.1% of inbound	3,110*
Nondurable manufacturing	↻ 16.0% of inbound	79,800
Primary metal manufacturing	↻ 7.5% of outbound	5,720
Mining (except oil & gas)	↻ 5.3% of inbound/outbound	5,570

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

MINNESOTA'S INLAND WATERWAY ASSETS AT A GLANCE



Mississippi River and Great Lakes System



9 public ports

TOP INLAND WATERWAYS COMMODITIES BY WEIGHT (comprising 84% of total tonnage)

Food & food products, such as fruits, vegetables, oils, & seeds **6.0 million tons**

Sand, gravel, shells, clay, salt, & slag **2.4 million tons**

Chemical fertilizers **1.7 million tons**

TOP INLAND WATERWAYS COMMODITIES BY VALUE (comprising 63% of total value)

Cereal grains, including wheat, corn, barley, & oats **\$689.3 million**

Agricultural products, such as fruits, vegetables, oils, & seeds **\$680.3 million**

Fertilizers **\$627.7 million**

In 2018, **12.0M** tons of freight valued at **\$3.2 BILLION** moved on Minnesota's inland waterways, which is equivalent to **300,000 TRUCKS**

Avoided trucks translates into **reduced congestion, emissions, and crashes**, and contributes to the state of good repair of 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

One standard
15-barge tow
moves the equivalent volume of
216 rail cars



or
1,050 trucks



Source: National Waterways Foundation

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**



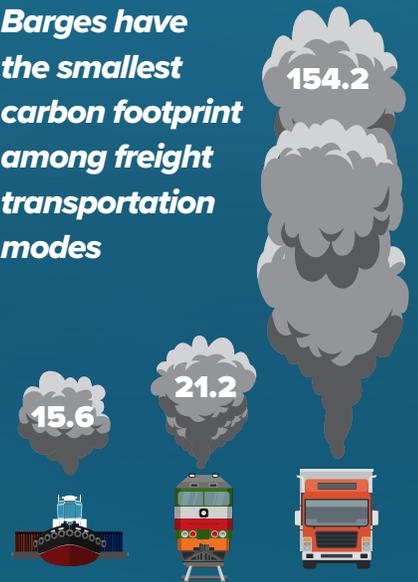
The U.S. currently has a **\$5.35 per metric ton advantage** over Brazil when shipping soybeans on the inland waterways system from Davenport, Iowa, to Shanghai, China.

Source: USDA

In 2016, **250M recreational visitors** of Corps lakes resulted in **\$10.6B in total trip spending**, supporting over **189K jobs nationwide**

Source: USACE

Barges have the smallest carbon footprint among freight transportation modes



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 Institute