

# ECONOMIC IMPACT OF MINNESOTA'S INLAND WATERWAYS



NATIONAL WATERWAYS FOUNDATION

IN 2021, MINNESOTA'S INLAND PORTS, INLAND WATERWAYS, AND INLAND WATERWAYS-DEPENDENT INDUSTRIES SUPPORTED

Nearly **198,000 jobs**

**\$15.0 billion** in personal income

**\$24.3 billion** in Gross State Product

**\$48.5 billion** in total output

...Giving rise to **\$2.2 billion**

in state & local tax revenue

Minnesota has nearly

**260 MILES**

of navigable inland waterways, ranking it

**27<sup>th</sup>** in the nation

## MINNESOTA'S INLAND WATERWAY ASSETS AT A GLANCE



Mississippi River and Great Lakes System



**10** public ports

## INLAND WATERWAYS SUPPORT MINNESOTA'S KEY INDUSTRIES

Industry Sub-Category	Percent of Goods Shipped by Water (Tons)	Direct Minnesota Jobs
Mining (except oil & gas)	↻ <b>8.6%</b> of outbound	5,465
Crop Production	↻ <b>1.5%</b> of inbound / ↻ <b>4.0%</b> of outbound	3,363*
Nonmetallic Mineral Product Mfg	↻ <b>14.6%</b> of inbound	9,736
Construction	↻ <b>5.2%</b> of inbound	64,612

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

## TOP INLAND WATERWAYS COMMODITIES BY WEIGHT (comprising 83% of total tonnage)

**Food & Food Products**, such as oils & seeds **5.1 million tons**

**Sand, Gravel, Shells, Clay, Salt, & Slag** **2.2 million tons**

**Chemical Fertilizers** **1.9 million tons**

## TOP INLAND WATERWAYS COMMODITIES BY VALUE (comprising 62% of total value)

**Cereal Grains**, including wheat, corn, barley, & oats **\$332 million**

**Metallic Ores** **\$285 million**

**Agricultural Products**, such as oils & seeds **\$199 million**

In 2021,

**11.1M** tons of freight

valued at

**\$1.3 BILLION**

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

**277,000 TRUCKS**

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

**25%** of Minnesota's **MARINE FREIGHT TONNAGE** moves on inland waterways

## 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 2021, nearly 500 million tons of goods valued at more than \$158 billion moved on the U.S. inland waterways system. The U.S. Department of Transportation Freight Analysis Framework freight forecasts suggest total water tonnage will increase at an annual growth of 0.7% per year through 2040. 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 219 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  
plus 6 locomotives



or  
1,050 trucks



Source: National Waterways Foundation

Our nation's ports and waterways remain the crucial **backbone of our economy**. Approximately **2.3B tons of cargo** are shipped to, from or through **41 states each year**. The U.S. marine transportation industry supports **trillions of dollars in commerce and millions of jobs**.



Source: U.S. Army Corps of Engineers Value to the Nation Civil Works, 2021.

The annual net economic benefit generated by the Corps' Civil Works mission is estimated to be **\$89B** – a return of about **\$12 for every dollar expended** – with the total amount provided to improve the nation's water infrastructure at **\$10.24B**.

Source: Senate Environment and Public Works Committee summaries, 2023

In 2021, there were **115,580 recreational lockages** on the inland waterways system.

Source: U.S. Army Corps of Engineers Recreation 2021 National Report

Barges have the smallest carbon footprint among surface transportation modes

832% more than barges

140.7

43% more than barges

21.6

15.1



Tons of CO2 per Million Ton-Miles

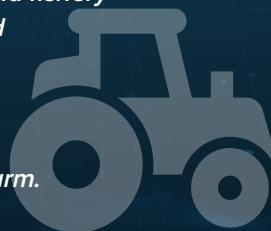
Compared to barges, moving an identical amount of cargo by rail generates 43% more carbon dioxide emissions, and trucks generate over 800% more emissions.

Source: Texas Transportation Institute

Marine transportation is critical to **agricultural exports**, forecast at **\$175.5B**.

Agriculture will provide a **\$10.5B trade surplus** to the American economy, with **imports forecast at \$165 billion**. Forestry and fishery products, and critical farm inputs such as fertilizer, feed, and fuel move on the waterway system as well.

Agricultural exports are responsible for **25.5%** of **U.S. farm income**, also driving rural economic activity and supporting more than **1M American jobs** on and off the farm.



Source: A Reliable Waterway System Is Important to Agriculture, 2022