



THE AMERICAN WATERWAYS OPERATORS ABOUT US

JOBS AND THE ECONOMY

The American Waterways Operators is the national advocate for the U.S. tugboat, towboat and barge industry, which serves the nation as the safest, most environmentally friendly, and most efficient mode of freight transportation. Our industry's 5,500 tugboats and towboats and 31,000 barges fuel the American economy by transporting more than 760 million tons of domestic cargo each year, including petroleum products, chemicals, food and farm products, coal, steel, aggregates and containers. The industry provides family-wage jobs and ladders of career opportunity for more than 50,000 Americans, including nearly 39,000 positions as mariners on board our vessels, and supports more than 300,000 jobs in related industries across the nation. AWO members operate on the rivers, coasts, Great Lakes, and harbors of the United States, moving economically critical cargo safely, reducing pollution and highway congestion, and protecting homeland security.

SAFETY AND ENVIRONMENTAL STEWARDSHIP

For more than 25 years, the tugboat, towboat and barge industry has been on a journey of continuous improvement, working with our shipper-customers and government partners to achieve the goal of zero harm to human life and the environment. This journey has been marked by strong private sector leadership, highlighted by the AWO Responsible Carrier Program and the Coast Guard-AWO Safety Partnership. The RCP is a set of safety standards for tugboat, towboat and barge companies with

which all AWO members must comply as a condition of association membership. The Coast Guard-AWO Safety Partnership is a first-of-its-kind public-private partnership to improve safety and environmental protection and strengthen the working relationship between the Coast Guard and the tugboat, towboat and barge industry.

HOMELAND AND NATIONAL SECURITY

AWO member vessels operating in the domestic commerce of the United States, owned and crewed by Americans and built in American shipyards in accordance with the Jones Act, serve as valuable "eyes and ears" for the Coast Guard on U.S. waterways. The domestic maritime industry also has the strong support of U.S. military and national security leaders for the vital role the industry plays in providing military sealift services and sustaining America's defense industrial base.

ADVOCACY AND GRASSROOTS ENGAGEMENT

AWO members and staff work daily to educate policymakers on the value of the tugboat, towboat and barge industry and advance its public policy priorities, including: preserving the Jones Act; reforming the vessel discharge regulatory system; maintaining federal primacy in the regulation of domestic vessel operations; ensuring a modern, well-maintained waterways infrastructure; and ensuring the continuity and reliability of navigation while preventing the movement of aquatic invasive species.

The tugboat, towboat and barge industry advocate since 1944.



THE TUGBOAT, TOWBOAT AND BARGE INDUSTRY

A LEADER IN MARINE SAFETY AND ENVIRONMENTAL STEWARDSHIP

For nearly 25 years, The American Waterways Operators and its member companies have been leaders in marine safety and environmental stewardship. AWO's top priority is to lead and support members in continuously improving safety, security and environmental protection. AWO members have demonstrated their commitment to safety leadership through voluntary initiatives and partnership with government to protect safety of life, preserve our marine environment, and maintain the integrity of maritime commerce.

THE RESPONSIBLE CARRIER PROGRAM® AND SUBCHAPTER M

In 1994, AWO developed the Responsible Carrier Program® as a code of best practices for member companies. Member companies use the program to develop company-specific safety programs that meet or exceed applicable laws and regulations, while being practical enough to reflect a company's unique operational needs. In 1998, AWO instituted a third-party external audit mechanism and in 2000, compliance with the RCP became a requirement for AWO membership.

In concert with the U.S. Coast Guard, AWO was instrumental in the passage of the Coast Guard and Maritime Transportation Act of 2004, which directed the Coast Guard to establish a comprehensive inspection regime for towing vessels. AWO worked with the Coast Guard for more than a decade to develop the new regulations, which were published in June 2016 at 46 CFR Subchapter M. The regulations raise safety standards throughout the industry, incorporating safeguards that responsible carriers have already put in place and ensuring that the more than 5,000 affected U.S.-flagged towing vessels meet baseline standards to protect lives, the environment and property.

In November 2016, AWO's RCP was accepted by the Coast Guard as an existing safety management system that meets the requirements of Subchapter M, a recognition of AWO's safety leadership and an important milestone in facilitating industry compliance with the new regulations.

THE COAST GUARD-AWO SAFETY PARTNERSHIP

Established in 1995, the Coast Guard-AWO Safety Partnership is the oldest public-private partnership between the U.S. Coast Guard and its stakeholders. Since its establishment, the partnership has launched more than 40 cooperative initiatives to improve safety and environmental protection. The Partnership's many accomplishments include:

- Recommendations, informed by comprehensive analysis, to reduce towing vessel crew fatalities;
- Establishment of a first-of-its-kind industry training program for Coast Guard Academy cadets; and
- Leadership of the Towing Vessel Bridging Program, under which thousands of towing vessel examinations have been conducted to facilitate the transition to towing vessel inspection.

SAFETY STATISTICS

In 2015, AWO implemented a web-based Safety Statistics Reporting Program to help member companies foster a culture of safety and strive toward continuous improvement. The program provides a simple, confidential means for tracking vessel crew hours; crew fatalities; recordable injuries; lost-time injuries; falls overboard; reportable spills of all types; and volume of spills in gallons. The program gives members access to reports and tools that allow them to benchmark their company data against other companies in their sector and AWO's membership overall.

SAFETY COMMITTEES

AWO's Coastal and Interregion Safety Committees provide a critical forum for dialogue and discussion among AWO member health and safety professionals to support members in striving for continuous improvement in safety, security and environmental stewardship. Safety committee meetings encourage member company safety experts to share their experiences and learn from each other as they work to implement a culture of safety in their companies and throughout the industry.

The tugboat, towboat and barge industry advocate since 1944.

WATERBORNE COMMERCE and the U.S. ECONOMY

Telling the Untold Story

The tugboat, towboat and barge industry is a major pillar of the American economy and provides critical services in support of homeland and national security. Our vessels operate on U.S. inland and coastal waterways, crewed by mariners dedicated to ensuring that the vital commodities that sustain our way of life reach their destinations safely and efficiently.

Despite the importance of this industry, the role of tugboats, towboats and barges in powering our nation is one of the great untold stories of American commerce. AWO and the U.S. Department of Transportation's Maritime Administration (MARAD) signed a cooperative agreement to help tell that story through the new PricewaterhouseCoopers study, *Economic Contribution of the US Tugboat, Towboat and Barge Industry*.



STUDY HIGHLIGHTS

- **Jobs and GDP.** 301,550 jobs nationwide, with a total impact on U.S. gross domestic product of \$33.8 billion.
- **What We're Moving.** More than 760 million tons annually of vital commodities like petroleum, agricultural products, chemicals, coal, and manufactured goods.
- **Efficiency and Environmental Benefit.**
 - 1 inland dry cargo barge can haul 1,750 tons of dry cargo, the equivalent of 16 bulk rail cars or 70 tractor trailers.
 - 1 inland liquid cargo barge can haul 27,500 barrels of liquid, the equivalent of 46 rail cars or 144 tanker trucks.

CONTENT OVERVIEW

- Industry overview, including direct employment map, top 10 states for direct employment, barge traffic by commodity group, top 15 largest ports, and more.
- Economic impact, including national and state economic contributions to employment, GDP, and tax revenues.
- Other benefits of the industry, including fuel efficiency, greenhouse gas emissions, and injury and fatality rates as compared to other modes.

For more information, visit the AWO online press kit, available here: www.americanwaterways.com

ABOUT AWO

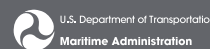
The American Waterways Operators is the national advocate for the U.S. tugboat, towboat and barge industry, which serves the nation as the safest, most environmentally friendly and economical mode of freight transportation. Industry vessels move more than 760 million tons of America's commerce each year on the U.S. inland and intracoastal waterways, the Atlantic, Pacific and Gulf Coasts and the Great Lakes.

For more information about the importance of waterway transportation, please visit AWO's website at www.americanwaterways.com, or contact us at (703) 841-9300.



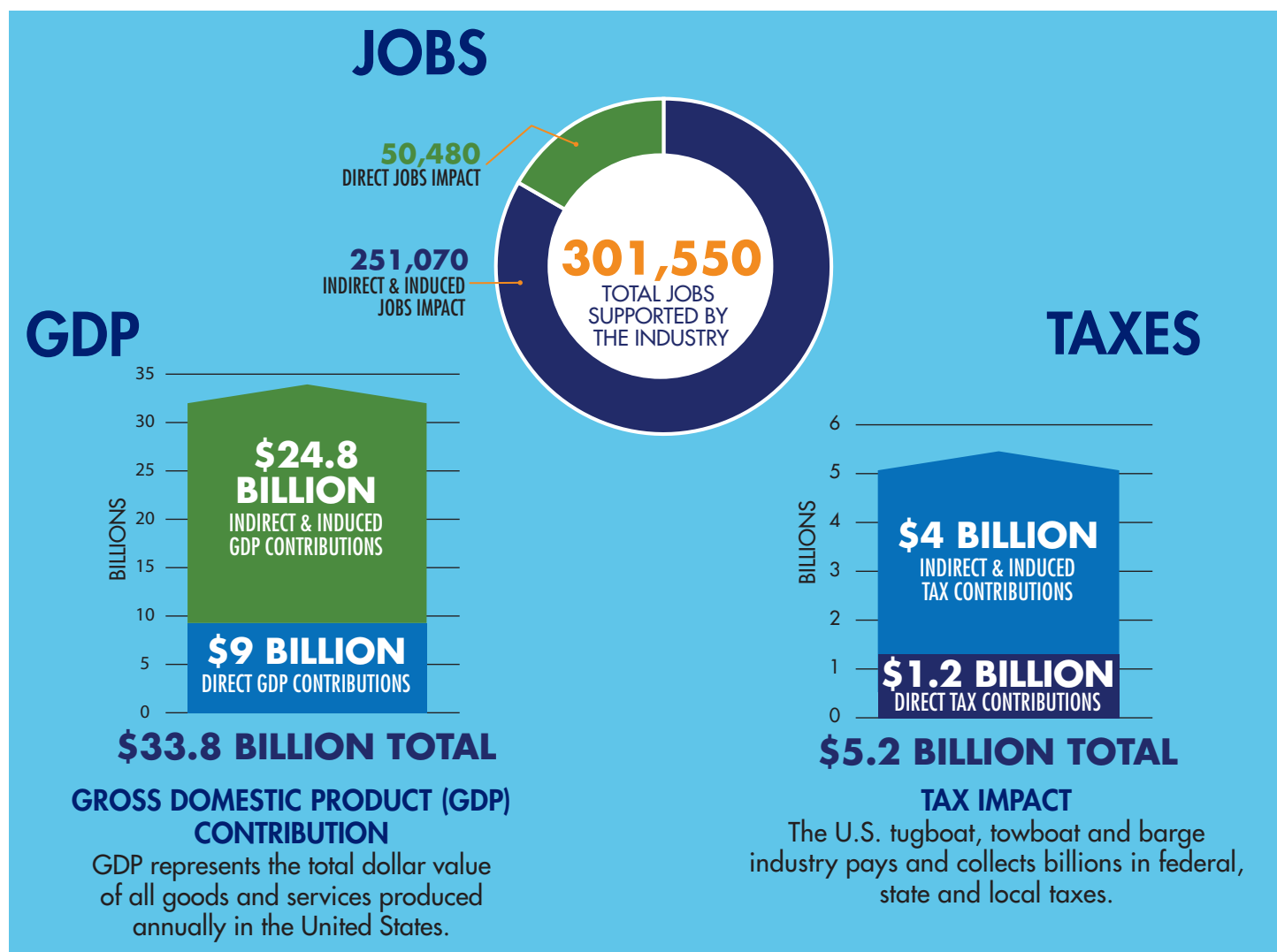
ABOUT MARAD

The Maritime Administration is the agency within the U.S. Department of Transportation dealing with waterborne transportation. Its programs promote the use of waterborne transportation and its seamless integration with other segments of the transportation system, and the viability of the U.S. merchant marine.



ECONOMIC IMPACT: JOBS, GDP AND TAXES

The U.S. tugboat, towboat and barge industry includes nearly 5,500 U.S.-flagged tugboats and towboats and more than 31,000 barges that move more than 760 million tons of cargo on the nation's waterways each year. The industry provides family-wage jobs for Americans, and contributes billions of dollars to U.S. gross domestic product (GDP), labor income and federal and state tax revenues.¹

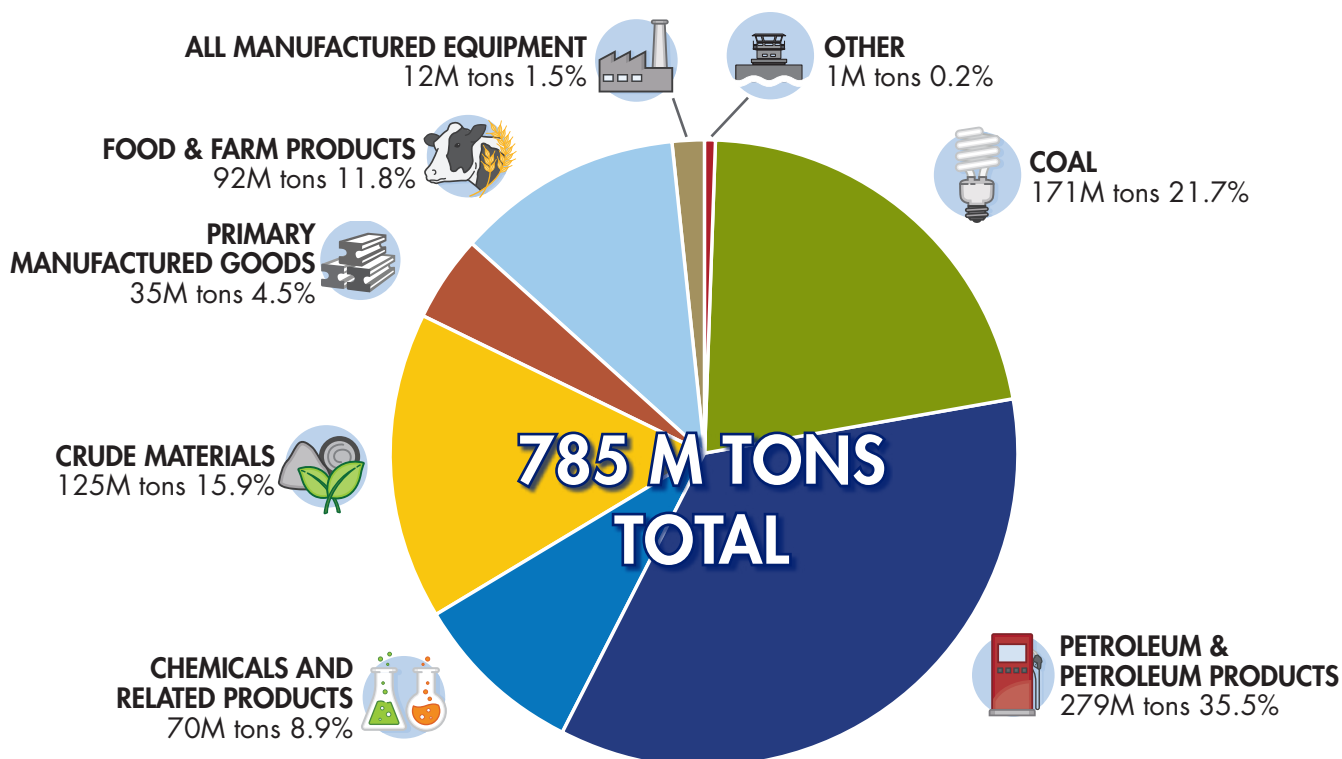


- **DIRECT IMPACTS** Jobs, labor income, value added, and taxes directly attributable to the U.S. tugboat, towboat and barge industry.
- **INDIRECT IMPACTS** Jobs, labor income, value added, and taxes occurring throughout the industry's supply chain.
- **INDUCED IMPACTS** Jobs, labor income, value added, and taxes resulting from household spending of labor and proprietor's income earned either directly or indirectly from the U.S. tugboat, towboat and barge industry.

¹ Jobs, GDP and tax figures are from 2014, as reflected in the PricewaterhouseCoopers industry study. The induced and indirect figures estimate the economic impact (jobs, GDP and taxes) resulting from the industry's operational impact (purchases of intermediate inputs and labor compensation) and capital investment impact.

ECONOMIC IMPACT: COMMODITIES

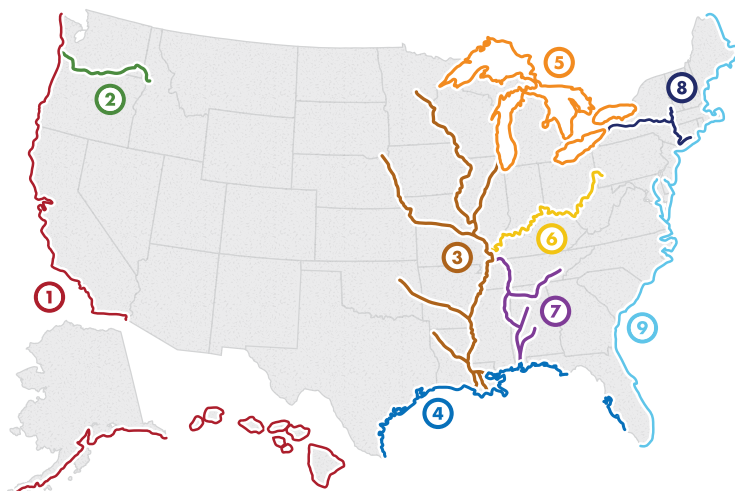
Tugboats, towboats and barges are an important mode of transportation for delivering essential commodities, such as energy sources, raw materials and agricultural products, throughout the U.S. These commodities help provide food for our tables, fuel for our cars, heat for our homes, and inputs for our manufacturing facilities.¹



¹ Tonnage figures are from 2014, as reflected in the PricewaterhouseCoopers industry study.

The total value of commodities transported by barges in domestic trade is nearly **\$300 billion annually.**

The U.S. Waterways System



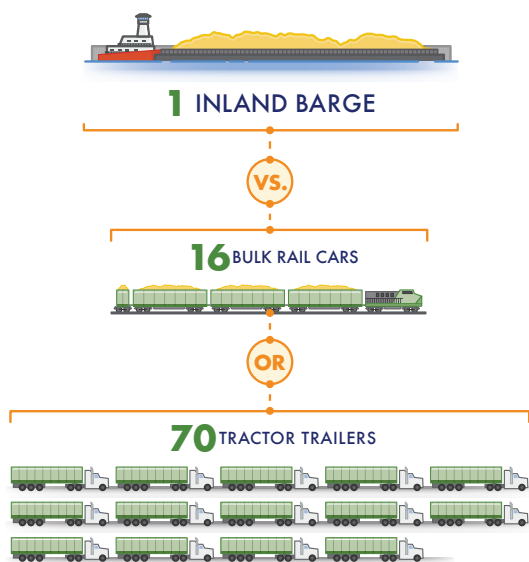
- ① Pacific Coast
- ② Columbia River
- ③ Mississippi River System
- ④ Gulf Intracoastal Waterway
- ⑤ Great Lakes
- ⑥ Ohio River System
- ⑦ Tenn-Tom Waterway
- ⑧ Hudson River
- ⑨ Atlantic Coast

Sources: PricewaterhouseCoopers industry study; U.S. Army Corps of Engineers (USACE)

COMPARING TRANSPORTATION MODES

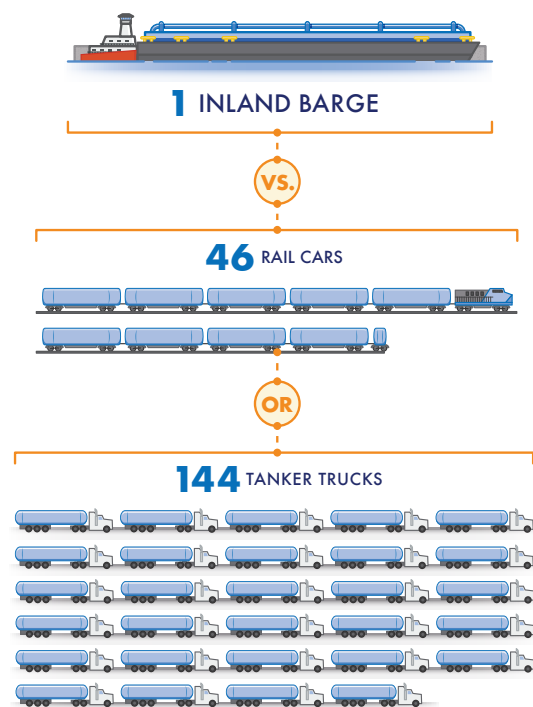
The tugboat, towboat and barge industry not only provides the most efficient method for transporting large amounts of a broad range of commodities, but is also safer, more fuel efficient and has a lower environmental footprint.¹

Dry Cargo Transportation: 1,750 tons



Key = 5 bulk rail cars = 5 tractor trailers

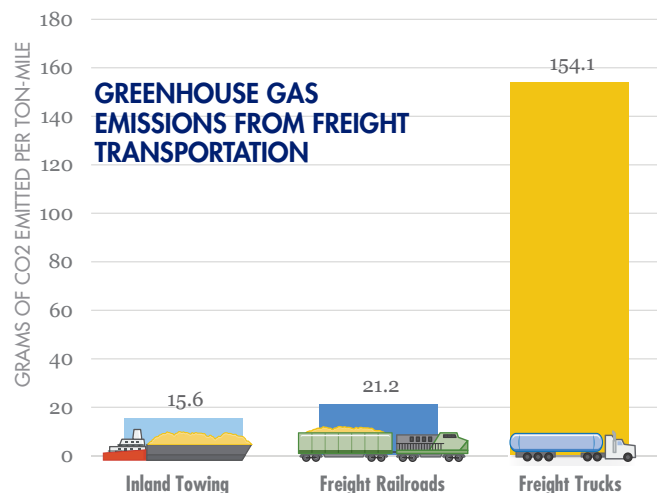
Liquid Cargo Transportation: 27,500 BBL



Key = 5 rail cars = 5 tanker trucks

The U.S. tugboat, towboat and barge industry is more efficient, cleaner, and safer for the public than other modes of cargo transport.

CLEANER FOR THE ENVIRONMENT



¹ All Figures adapted from Texas Transportation Institute, "A Modal Comparison of Domestic Freight Transportation Effects of the General Public: 2001-2014," January 2107, as reflected in the PricewaterhouseCoopers industry study.

SAFER FOR THE PUBLIC

The tugboat, towboat and barge industry poses the lowest risk to the safety of the public compared to other forms of cargo transport.

Average Annual Injuries to the Public
 Freight Truck—104,286
 Freight Railroad—7,962
 Waterborne Freight—16

Average Annual Fatalities to the Public
 Freight Truck—4,452
 Freight Railroad—807
 Waterborne Freight—6

