NATIONAL WATERWAYS FOUNDATION

WATERWAYS: Working for America

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Wepfer Marine, Inc.
Mississippi River Parkway Commission
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NATIONAL WATERWAYS FOUNDATION

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WATERWAYS: Working for America

Waterways transportation keeps our nation's commerce on the move in the safest, most fuel-efficient, environmentally sound way.

Highlights of *A Modal Comparison of Domestic Freight Transportation Effects on the General Public: 2001-2009*
February 2012

Texas Transportation Institute

Highlights of "A Modal Comparison of Domestic Freight Transportation Effects on the General Public: 2001-2009"

Conducted by the Texas Transportation Institute,
Center for Ports & Waterways, Texas A&M University

- The study compares barges, trucks and rail transportation in terms of safety, energy efficiency and environmental impacts

A Study in Freight Transportation Solutions

The study, "A Modal Comparison of Domestic Freight Transportation Effects on the General Public: 2001-2009" was sponsored by the National Waterways Foundation and updated in February 2012.

NATIONAL WATERWAYS FOUNDATION

An "Inland Marine Highway" for Freight Transportation

Our "inland marine highways" move commerce to and from 38 states throughout the nation's heartland and Pacific Northwest, serve industrial and agricultural centers, and facilitate imports and exports at gateway ports on the Gulf Coast.

- 12,000 miles of commercially navigable channels
- 192 lock sites

NATIONAL WATERWAYS FOUNDATION

An "Inland Marine Highway" for Freight Transportation

Moving the nation's commodities

Barges are ideal for hauling bulk commodities and oversized or overweight equipment:

- Coal
- Petroleum
- Iron & Steel
- Project Cargoes
- Grain
- Chemicals
- Aggregates
- Intermodal Containers

An "Inland Marine Highway" for Freight Transportation

Moving the nation's commodities

Waterways transport:

- more than 60% of the nation's grain exports
- about 22% of domestic petroleum products
- 20% of the coal used in electricity generation

An "Inland Marine Highway" for Freight Transportation

Strengthening the economy

In 2011, 565 million tons of waterborne cargo transited the inland waterways valued at more than **$214 billion**.

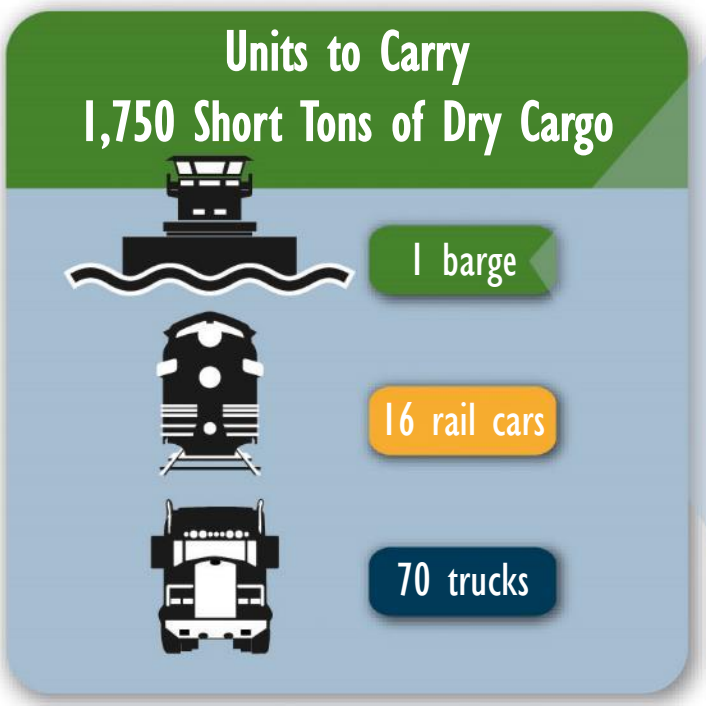
Easing Rail and Highway Congestion in Our Communities

Waterways provide great cargo capacity and move freight more safely than truck or rail. In fact, they carry the equivalent of 51 million truck trips per year, with room to spare.

If waterborne cargo were diverted to highway or rail there would be:

- Increased demand for railroad equipment and higher freight rates
- Slower, less reliable delivery times

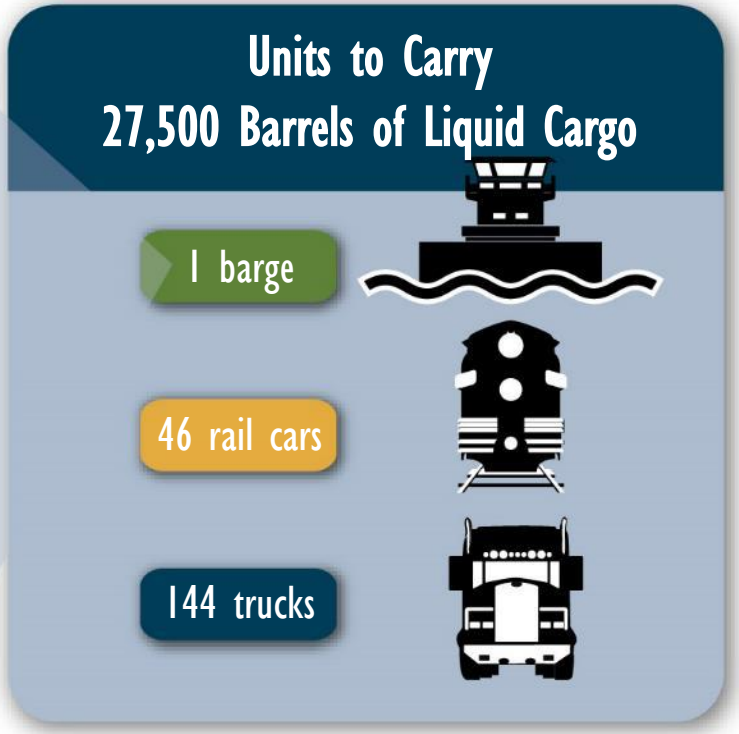
Easing Rail and Highway Congestion in Our Communities



One loaded covered hopper barge carries 58,333 bushels of wheat, enough to make almost 2.5 million loaves of bread.

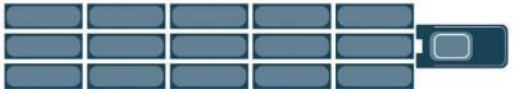
Easing Rail and Highway Congestion in Our Communities

A loaded tank barge carries 27,500 barrels of gasoline, enough to keep about 2,500 automobiles running for an entire year.

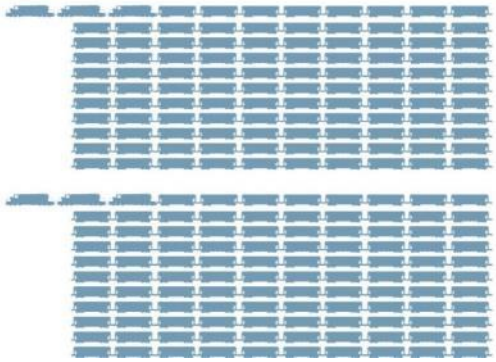


One 15-Barge Tow Equals 216 Rail Cars or 1,050 Trucks

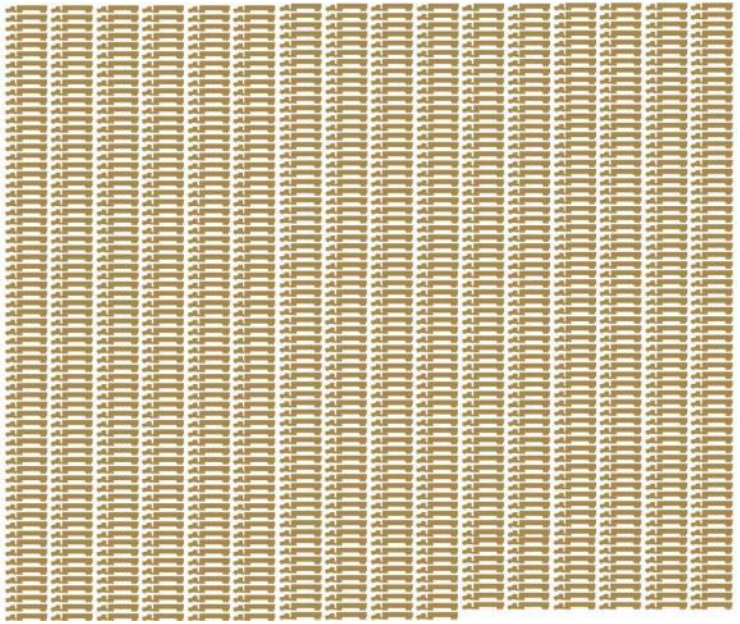
One 15-Barge Tow



216 Rail Cars + 6 Locomotives



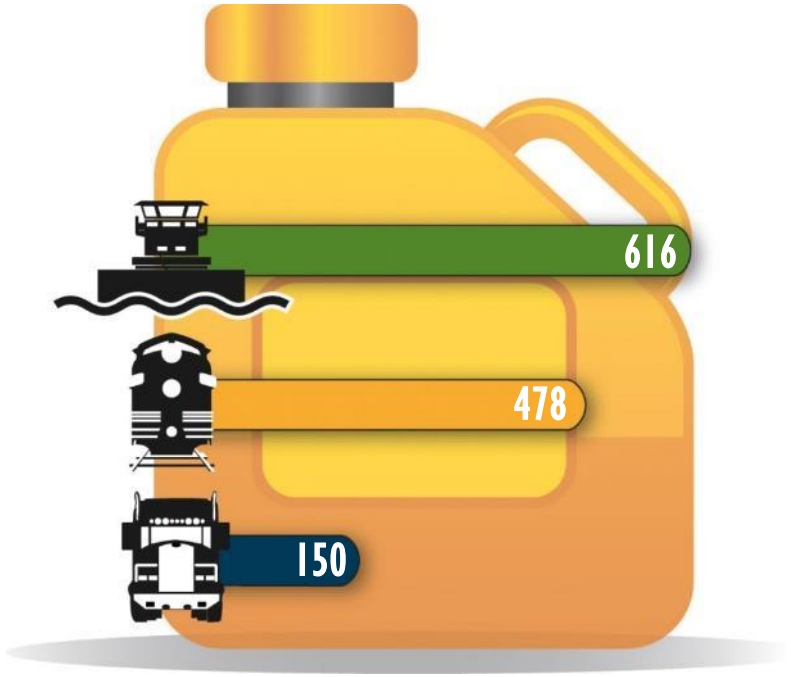
1,050 Large Semi Tractor-Trailers



Moving Freight Efficiently Throughout America

Transporting freight by water is also the most energy-efficient choice.

Barges can move one ton of cargo 616 miles per gallon of fuel. A rail car would move the same ton of cargo 478 miles, and a truck only 150 miles.

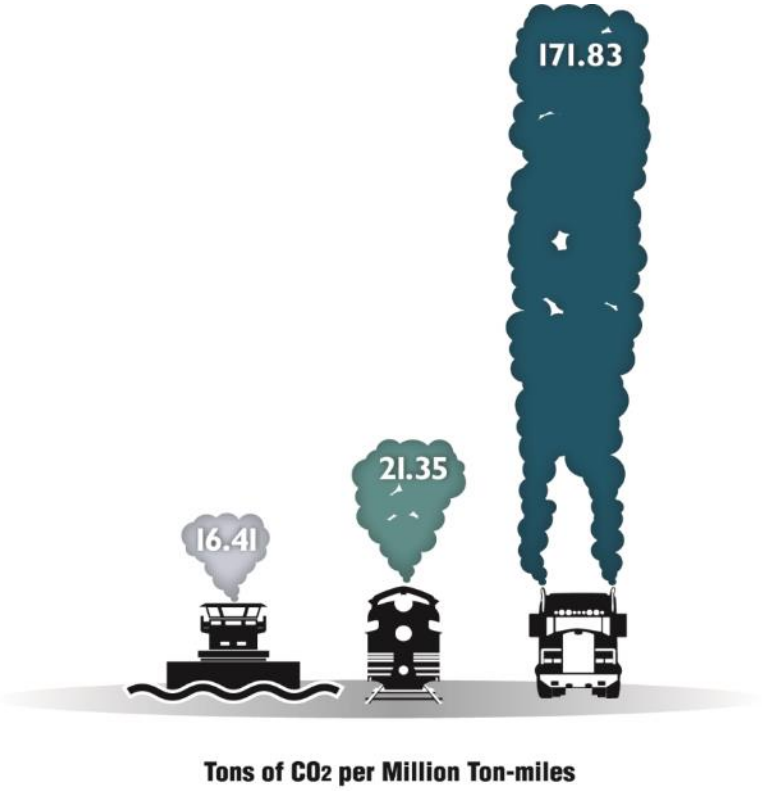


Ton-miles Traveled per Gallon of Fuel

The Greener Way to Move America's Cargoes

Barges have the smallest carbon footprint among other transportation modes.

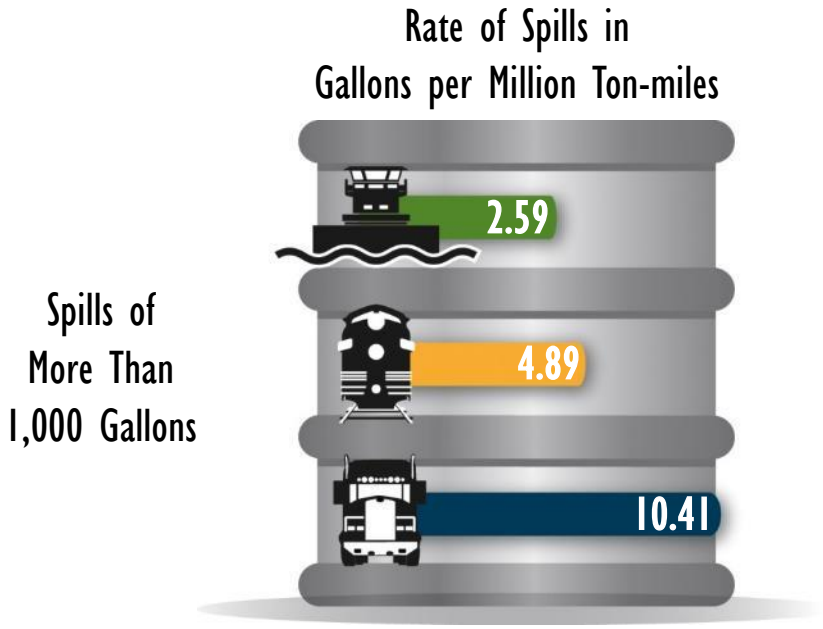
To move an identical amount of cargo by rail generates 30% more carbon dioxide than by barge, and 1,000% more emissions by trucks than by barge.



Safeguarding Our Health and the Environment

Inland waterways transport moves hazardous materials safely.

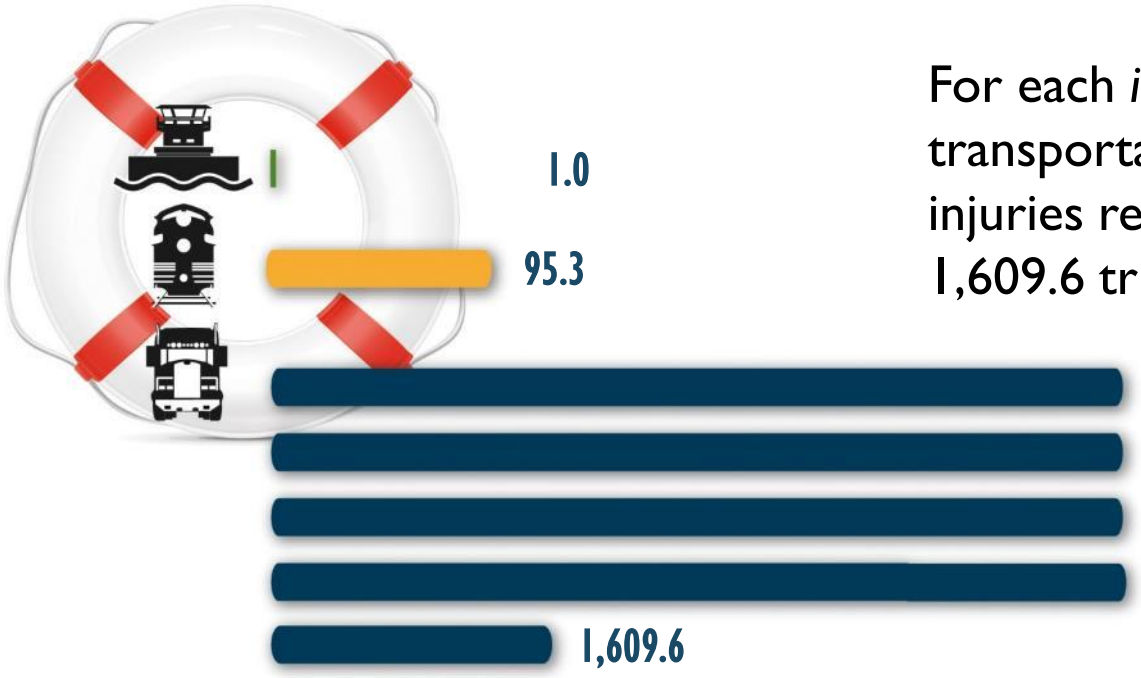
Overall, spill rates remain low. Trucks lose 10.41 gallons per one million ton-miles, rail cars 4.89 gallons and barges 2.59 gallons per one million ton-miles.



Safeguarding Our Health and the Environment

Inland waterways transport has a low *injury* record compared to rail or truck.

Ratio of *Injuries* in Freight Transportation

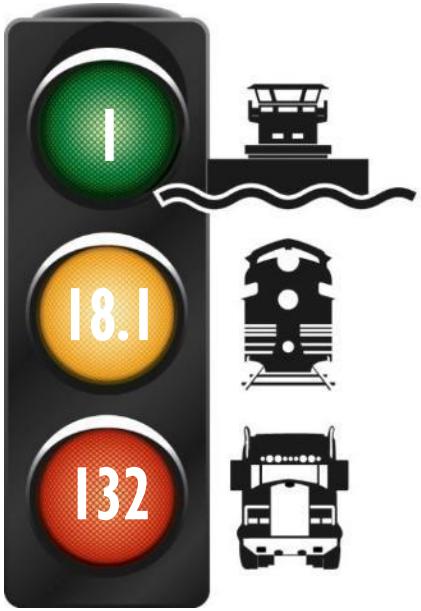


For each *injury* involving barge transportation, there are 95.3 injuries related to rail and 1,609.6 truck-related injuries.

Safeguarding Our Health and the Environment

Inland waterways transport has a low *fatality* record compared to rail or truck.

Ratio of *Fatalities* in Freight Transportation



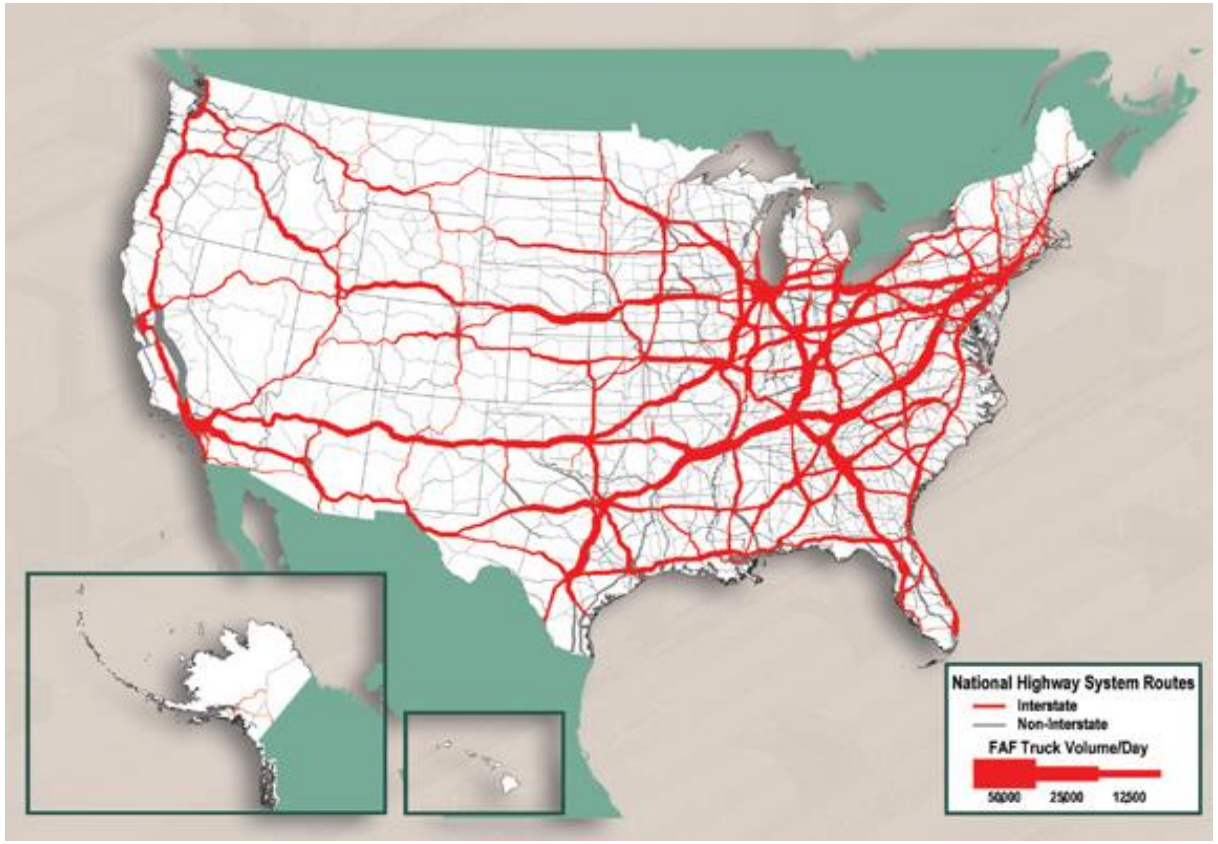
For each barge transportation *fatality*, there are 18.1 fatalities related to rail and 132 truck-related fatalities.

Anticipating Future Demands

Our inland waterways have capacity:

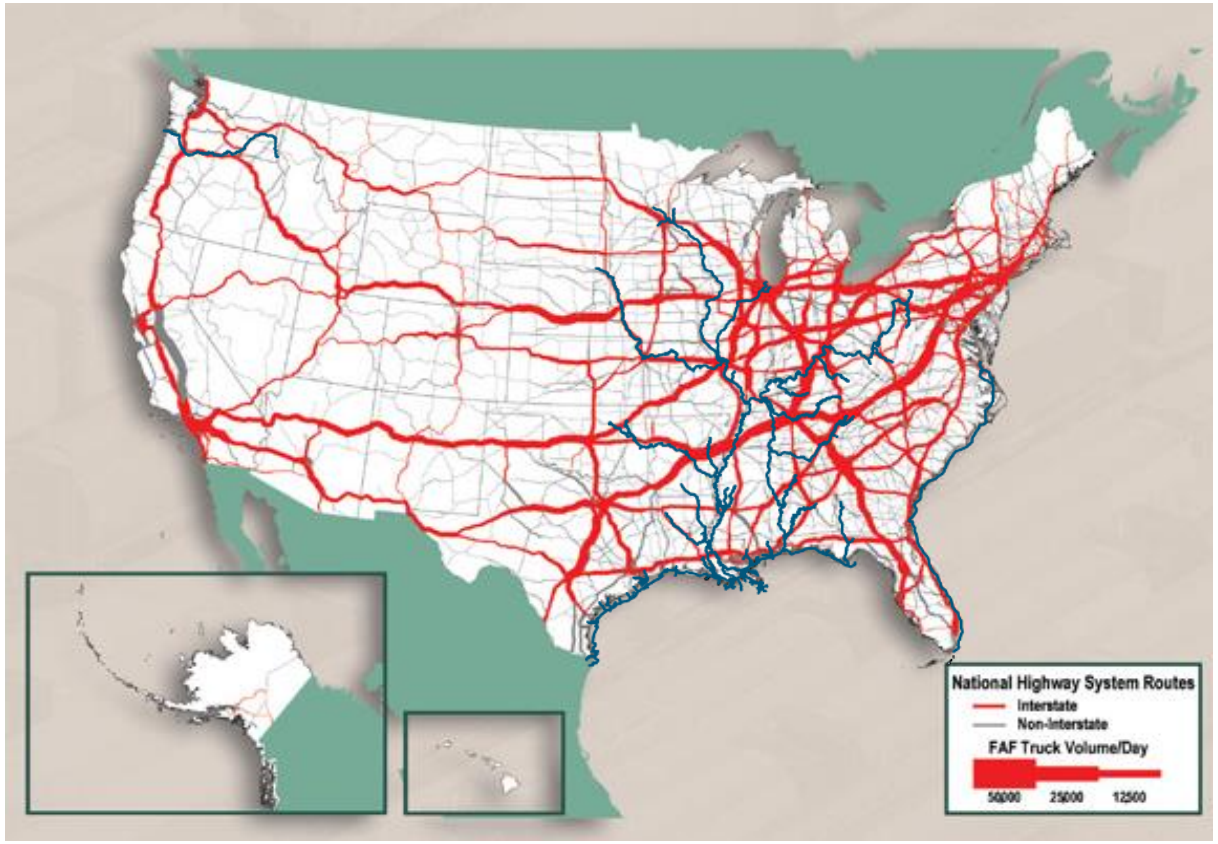
- to transport today's bulk commodities and intermodal cargo,
- to accommodate tomorrow's growth in those cargoes, and
- to accept cargo diverted from overcrowded highways and railways.

Anticipating Future Demands



Average Daily Long-Haul Truck Traffic 2007 on U.S. Highways
(Federal Highway Administration)

Anticipating Future Demands



Rivers run through it… waterways are where the congestion is!

A Freight Transportation Solution for the Future

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With the least impact of any surface mode on air quality, the environment, and public safety, as well as capacity to spare, our inland waterways are a transportation solution for the nation's future.

A Study in Freight Transportation Solutions

The full study, "A Modal Comparison of Domestic Freight Transportation Effects on the General Public: 2001-2009," can be downloaded from www.nationalwaterwaysfoundation.org.

NATIONAL WATERWAYS FOUNDATION

Factual and Intellectual Support for Waterways

NATIONAL WATERWAYS FOUNDATION

The mission of the National Waterways Foundation is to develop the intellectual and factual arguments for an efficient, well-funded and secure inland waterways system.

Learn more about the Foundation:

- Visit www.nationalwaterwaysfoundation.org
- Call 703.373.2261
- E-mail NWF@vesselalliance.com

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