



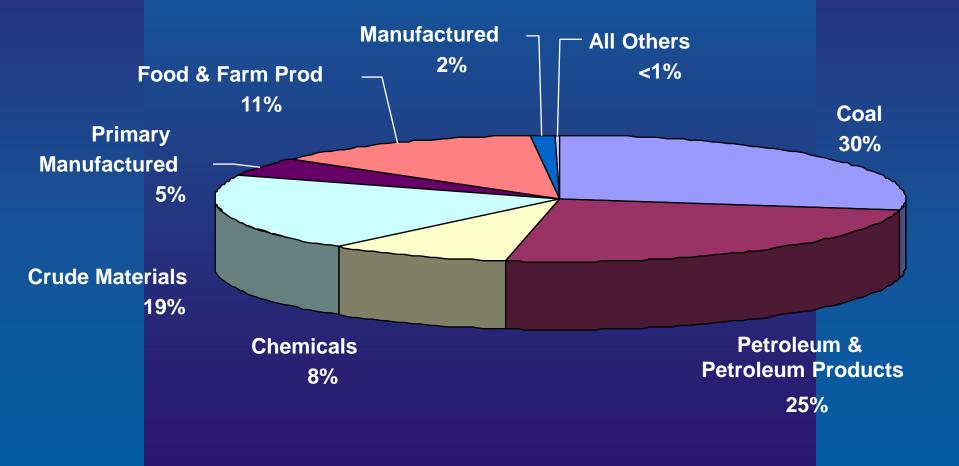
National Public Policy Organization Advocating a World-Class System of Ports and Inland Waterways

# America's Waterways: A Great Success Story

- Attracts Billions of Investment Dollars into Landside Plants and Equipment
- Creates/Supports Millions of Sustainable, Living-Wage Jobs
- Critical Energy Supply Line
- Keeps U.S. Industries Competitive in Global Market
- Marine Highway for Exports (Esp. Missouri Ag)
- Sets Baseline for Transportation Rates for Rail, Truck
- Environmentally Superior, Reduces Pollution, Conserves Fuel Usage
- 14% of All Intercity Freight for only 3% of Total Freight Cost



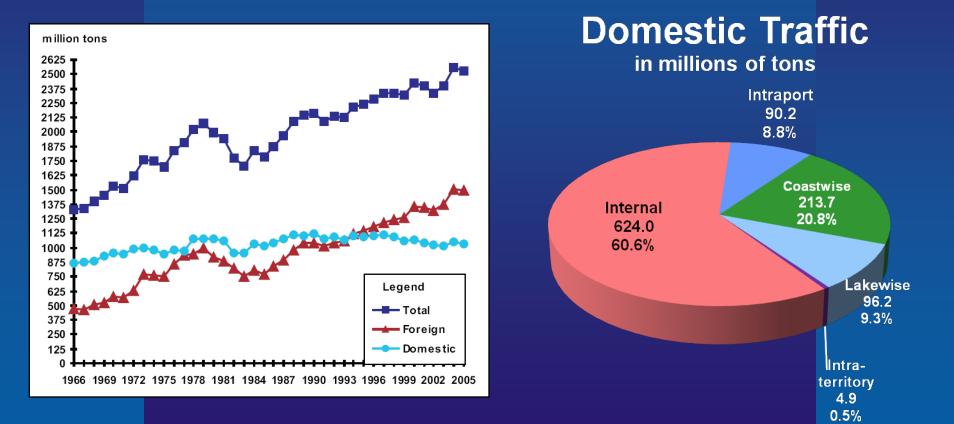
# Inland Waterway Commodities (2006) 625 Million Tons, \$70+ Billion Value



# U.S. Waterborne Commerc

100

- 2.5 Billion Tons (2005)
- 59% Foreign Trade / 41% Domestic
- Of Domestic: 61% on Inland Waterways



# 2008: On the River

- Barges Added to American Fleet
- Strong Markets for Both Liquid & Dry Barges
- Tight Supply of Grain Barges
- Northbound Emptys Reduced
- Supplier, Labor Costs Escalated Well Ahead of Inflation Indices
- Intermittent, Unscheduled Closures of Locks
- Navigation Slowed and/or Halted
  - March-May Flooding (Ohio & Lower Miss)
  - June Flooding (Upper Miss)
  - Aug-Sept Hurricanes Gustav, Ike

# Looking Ahead: 2009

- Import/Export Market Reeling from World Financial/Economic Crisis
- Trickle Down Reaches River Operations
- Automotive/Housing Markets Slow to Rebound
- Impact of Economic Stimulus on Shipping of Construction, Industrial Materials?
- Steel Prices' Impacts to Barge Availability
- Ethanol Impact on River Exports
- Continuing Challenges: Restrictive Trade Policies, Onerous Econ/Enviro Regulations, Labor-Management Issues

# **2008: Policy Issues**

- Inland Waterways Trust Fund Sustainability Reaches Critical Mass
- Administration Proposes New Barge Tax
- "Earmarks" Pariah on Appropriations Front
- Continued Disconnect: Annual Appropriations Process vs. Construction Progress
- Comparative Corps Projects Study, Evaluating Project Delivery
- Sen Kit Bond Announces Retirement, 2010



# Inland Waterway Challenges

- Infrastructure Appropriation Levels
  - Unreliable Funding Streams/Schedules
- Strategic Expenditure of Those Appropriated Funds
  - Dialogue Among Feds, Industry on Priority Projects for O&M, Rehabs, and New Construction
- Improved Project Delivery for Project Completion
- Higher/New Taxes Proposal
- Sustainability of Inland Waterways Trust Fund
  - IWTF Cost-Shares 50-50 on Capital Improvements
  - Newly-Authorized Upper Miss/Illinois Locks Joins Existing Queue of Construction

# **Other Noteworthy Challenges**

- Killing Off Missouri River Navigation
  - Econ/Enviro/Social Impacts to Nation
  - Mississippi Navigation Impacts
    - Capacity, Cost, Competition
  - Harbinger for Tributary River politics
    - Tonnage vs. Value of Cargo
    - ESA as Political Leverage
- Authorized Closure of Mississippi River Gulf Outlet
  - Access to Global Markets Relying on Single, 80-Year Old Lock

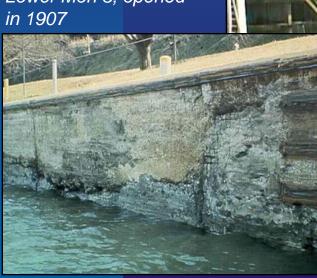
# **Still More Challenges**

- Preparedness for Industry Trends, Innovations
  - Growing World Population
  - Panama Canal Market Opportunities, But is American Infrastructure Prepared?
    - Increased Traffic, Containerization Facilities
- Homeland Security-Mandated Red Tape
- Increase in Recreation Boaters = 130m (65% Increase) by 2020

# Aging Infrastructure

- Frequent Closures for Repairs
- Reliability?
- Delays Impact Cost, Availability







Concrete deterioration at Chickamauga

# Concerns about Reliability:

## Major Locks and Dams Requiring Emergency Repairs

November 2002 through July 2007

L&D 3

L&D 18-&-19

**&D** 1

.&D 15

Mel Price

&D 27

<u>Chicágo</u>

Lockport

McAlpine

Cheatham

Holt

**Bayou Sorrel** 

Markland A

**Emsworth** 

Hannibal

Greenup

Harbor

Lock and/or Dam Requiring Major Emergency Repair

John Day

Lock Major Rehabilitation Awaiting Adequate Funding (new or continuing)

Lower Monumental



# Funding Infrastructure Construction

- Corps' Civil Works Budget FY09, CR, Omnibus, Stimulus
  - Disconnect: Annual Congressional Appropriations Process vs. Timely Construction Progress
- Project Completion Timeframes, Cost Overruns, Lock Performance Reliability
- Inland Waterways Trust Fund Cost-Share
- Ongoing Shift Outside Original Corps Purpose
- Emergency Closures and Non-Navigation Redirections Away from Operation, Maintenance, Lock Rehabilitations, Construction

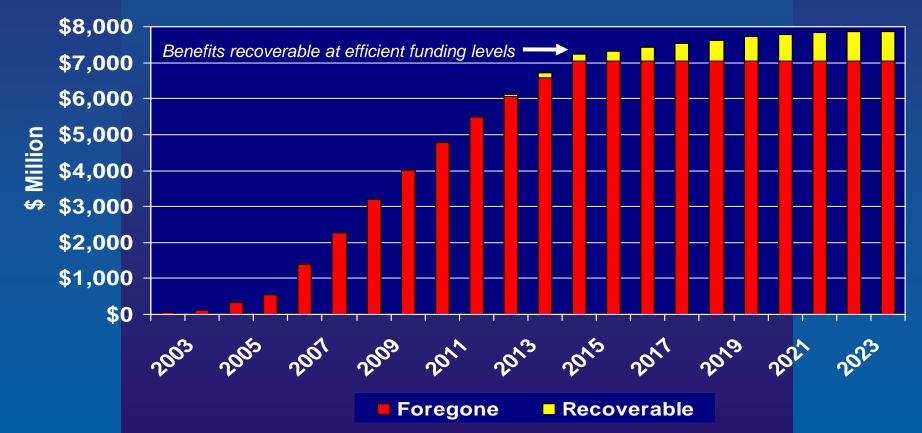


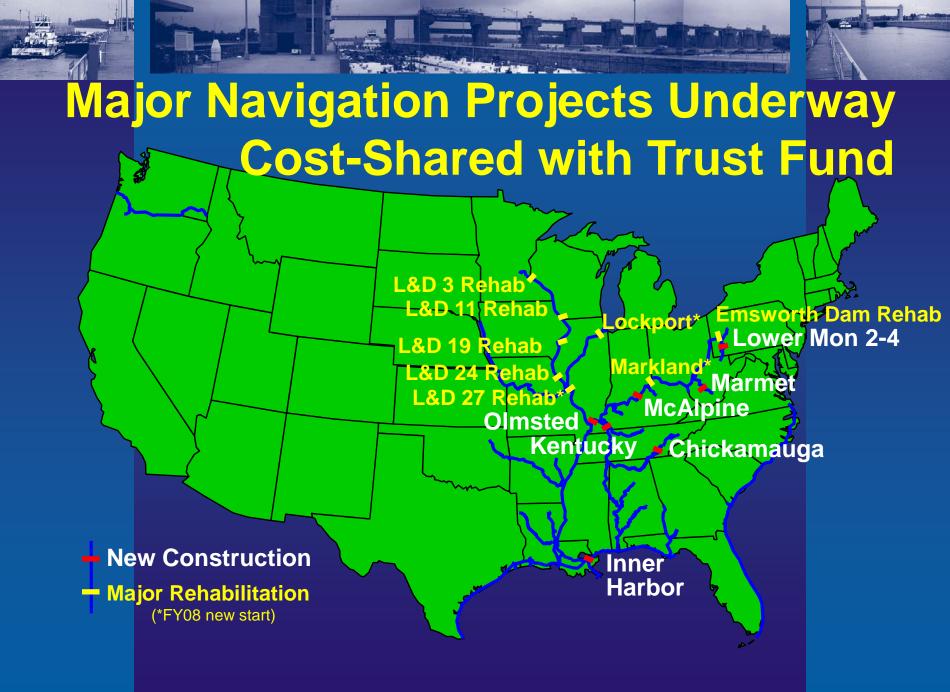
# Strategic Expenditure of Annual Appropriations

- Olmsted Lock & Dam: How <u>Not</u> to Plan & Fund Infrastructure
  - Authorized 1988, Planning Begun 1980
  - Cost to Exceed 3x Original Estimates: Pricetag Now \$2.1 BILLION
- <u>Upper Mississippi River</u> <u>System</u>:"Paralysis by Analysis"
  - Navigation-Ecosystem Sustainability
    Program
    - 20+ Years Study
    - WRDA Authorization Timeline

# Foregone from Construction Delays

Constrained funding has led to delays in project completions, foregoing anticipated project benefits. Cumulative benefits that can no longer be recovered now exceed \$7 billion...





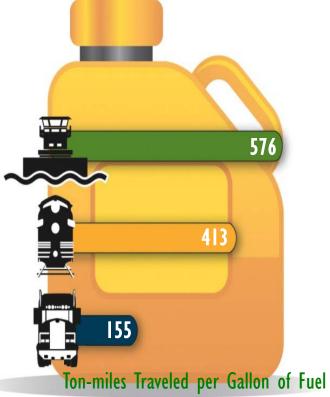


# <u>Sustainability of Inland</u> <u>Waterway Trust Fund</u>

- Project Completions Delayed
- Cost Overruns
- Reliable, Appropriate Commitments from Congress & Administration
- Revenue Stream Impacted by Shipping Activity

# **Positioned for Economic Stimulus**

- \$4.6 Billion to River Infrastructure
  - \$70B Backlog!
- "Shovel-Ready" Projects
- Create Hundreds of Millions Man-Hours
  in Construction Jobs
- Ignores Real Problem; Need Reliable, Adequate, Ongoing Funding
- Transportation "Policy" for U.S.?
- River Transportation Should be Major Factor in Larger Issues of Climate Change, Energy Independence , National Security, Jobs that Can't Outsourced.....



# Major Navigation Projects Proposed for Stimulus Bill



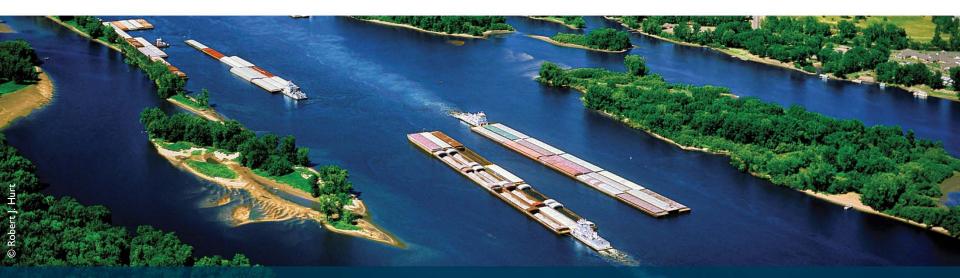
# waterwayscouncil.org

# WATERWAYS









# WATERWAYS: Working for America

Paul C. Rohde Waterways Council, Inc. CONSERVATION /// BULLET POINTS

#### Inland Waterways Industry: Environmental Stewards



Heroes of Conservation A Big Muddy lobbyist, a stream teacher, and a conservationist on base > BY BRIAN McCLINTOCK

#### Paul Rohde, St. Louis, Mo.

weekend volunteer for Ducks Unlimited in Chicago, Paul Rohde turned his avocation into nis vocation when he became the president of the Midwest Area River Coalition (MARC) in 2005. "When your work is something you're passionate about, your day doesn't end at five," says Rohde, an avid duck hunter and

angler. In 2007, MARC merged with Waterways Council Inc., and Rohde's new job was ating a coalition of conservation and commercial groups that would lobby Congress to authorize spending to restore 105,000 acres of habitat along the Upper Mississippi River. Rohde is currently working with conservation groups, state governments, and members of Congress to get the funds appropriated for the restoration



#### VOLUNTEERING FOR PENNSYLVANIA WILDLIFE Kathy Davis, Charleroi, Pa. When Kathy Davis retired as a disabled veteran, she went right to

work preserving the fish and wildlife she grew up hunting in southn Pennsylvania. "A friend invited me to a Citizens' Volunteer Monitoring Program with the Pennsylvania Department of Environmen al Protection," she says. "Two weeks later I was a water-quality structor." She also does volunteer conservation work for the Peoptybania Game Commission and Eich and Boat Commission In ting water-quality surveys, Davis teaches groups how to identify macroinver

rate organisms and to monitor the health of streams. She is researching epizootic hemorhagic disease and works to introduce youth and senior citizens to the outdoors.



#### CONSERVING STATION TO STATION Edward Sobieranski, Fredricksburg, Va. As an active-duty Marine for 22 years. vard Sobieranski brought his passion

Hero Now for the outdoors to wherever he was looking for the next stationed. In Hawaii, for example, he Hero of Conser tion. Everyone organized beach and lagoon cleanups. In 2002, Sobieranski, now a range safety featured in the magazine will ger with the Marine Corps, began working with state and al government environmental agencies to conserve land on receive a \$1,000 the Marine Corps base in Quantico, Va., so veterans wounded in grant from Toy

Nominate Your

and one recipient

and a new Toyota

combat could hunt whitetails and turkeys. In addition to his work th the Quantico Injured Military Sportsmen Association, will win \$5,000 inski volunteers with the National Wild Turkey Federation Tundra. ing data to contribute to the improvement of turkey habitat







#### THESE CRUSADERS LEAVE THE CAPE AT HOME. SO IT DOESN'T GET DIRTY.

Toyota proudly supports the 20 Heroes of Conservation Gala - in and women who have shown as the habitats and wildlife in their loca insect life in the Chattahooche River to monitor water quality to save acres of Oregon wilderne their hard work and leadership h ensure nature's finest will long surviv for all to enjoy. You may just know o appreciate their efforts and nominate nem at fieldandstream.com/heroe











# WATERWAYS: Working for America

Waterways transportation keeps commerce on the move with fewer adverse societal impacts than truck or rail.

> Highlights of "A Modal Comparison of Freight Transportation Effects on the General Public"

#### A Study in Freight Transportation Solutions

## Highlights of "A Modal Comparison of Freight Transportation Effects on the General Public"



Center for Ports & Waterways, Texas Transportation Institute at Texas A&M University

- Compares surface transportation modes: safety, energy efficiency and environmental impacts
- Conducted over a one-year period
- Peer-reviewed by independent university-based experts



A Study in Freight Transportation Solutions

A Modal Comparison of Freight Transportation Effects on the General Public

•Co-sponsored by the National Waterways Foundation and the U.S. Department of Transportation Maritime Administration (MARAD).

•An executive summary and the full study can be downloaded from <u>nationalwaterwaysfoundation.org</u>









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
- 240 lock sites





## Moving the nation's commodities

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

Coal

Grain

- Petroleum
- Iron & Steel
- Aggregates

Chemicals

- Project cargoes
  Intermodal containers





## Moving the nation's commodities

Waterways transport:

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





## **Strengthening the economy**

**625 million tons annually:** Waterborne cargo transiting the inland waterways.

 This equals 14% of all intercity freight, valued at nearly \$70 billion, at only 3% of the nation's total freight transportation cost.



#### Easing Rail and Highway Congestion in Our Communities



Waterways provide superior cargo capacity, moving freight more safely than truck or rail.

In fact, they carry the equivalent of **58 million truck trips per year**, on our major waterways, with capacity to spare.

If Waterborne Cargo Were Diverted to Highway or Rail:

- Interstate Truck Traffic Would <u>Double</u>
- Rail Tonnage Would Increase 25%



#### Hypothetical Case Study:

#### Waterways Closure on the Mississippi River & Illinois Waterway



Case Study: If cargo going through St. Louis by barge were shifted from the river system to St. Louis' overcrowded Interstates:

- Highway costs over 10 years would increase
  \$345 million over \$721 million
- Truck traffic on St. Louis Interstates would increase by 200%
- Traffic delays would increase by almost **500**%
- Injuries and fatalities on Interstate segments would increase 36% - 45%
- Maintenance costs would increase 80% 93%



#### Easing Rail and Highway Congestion in Our Communities: Dry Cargo



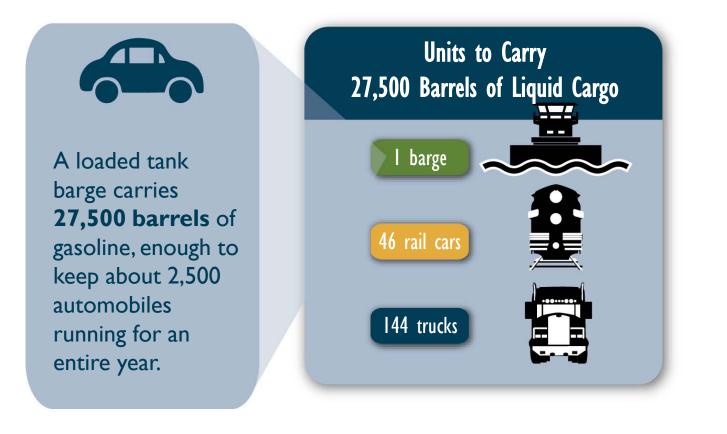


#### One 15-Barge Tow Equals 216 Rail Cars or 1,050 Trucks

One 15-Barge Tow	1,050 Large Semi Tractor-Trailers
216 Rail Cars + 6 Locomotives	
F  F  F  A <th></th>	



#### Easing Rail and Highway Congestion in Our Communities: Liquid Cargo



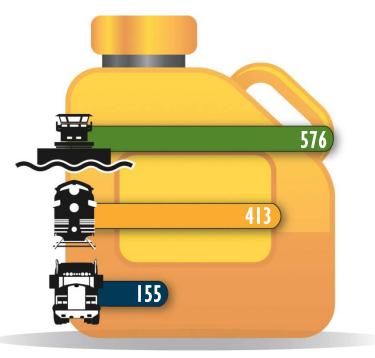


#### Moving Freight Efficiently Throughout America

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

Barges can move one ton of cargo **576 miles** per gallon of fuel.

A rail car loaded with the same cargo would go 413 miles, and a truck only 155 miles.



Ton-miles Traveled per Gallon of Fuel



#### Inland waterways transportation generates fewer emissions than rail or truck per ton-mile.

Barge transportation generates the lowest emissions as measured in grams per ton-miles in four standards tracked by the EPA:

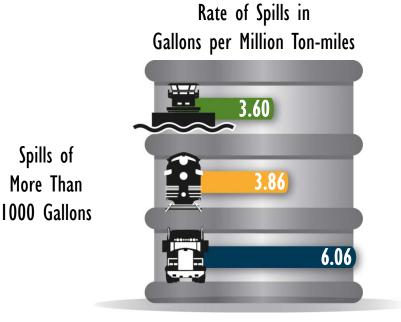
- Hydrocarbons (HC)
- Particulate matter (PM)
  Carbon monoxide (CO)
  - Nitrogen oxides (NOx)

PM HC CO NOx	0.011164 0.01737 0.04621	0.46907	
PM HC CO NOx	0.01621 0.02423 0.06445		0.65423
PM HC CO NOx	0.018 0.020 0.136		0.732



#### Inland waterways transport moves hazardous materials safely.

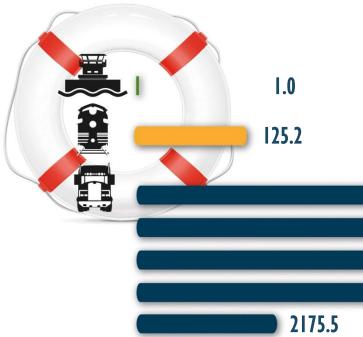
Overall, spill rates remain low. Trucks lose 6.06 gallons per one million tonmiles, rail cars 3.86 gallons and barges only 3.6 gallons.





# Inland waterways transport has the lowest injury record compared to rail or truck.

Ratio of Injuries in Freight Transportation

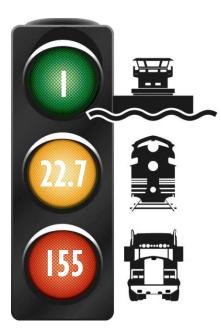


For each *injury* involving barge transportation, there are 125.2 injuries related to rail and **2,171.5** truck-related injuries.



# 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 22.7 fatalities related to rail and **155** truck-related fatalities.



#### **Preparing for Future Transportation Demands**

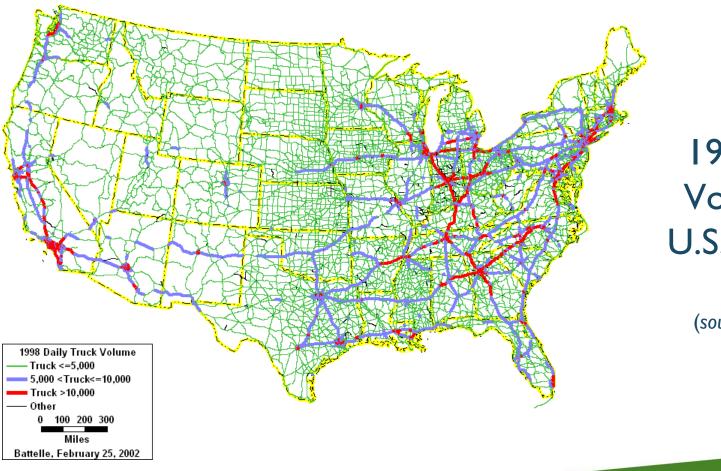


Our inland waterways have capacity to:

- Transport *today*'s bulk commodities and intermodal cargo,
- Accommodate tomorrow's growth in those cargoes, and
- Accept cargo diverted from overcrowded highways and railways.



#### **Anticipating Future Demands**

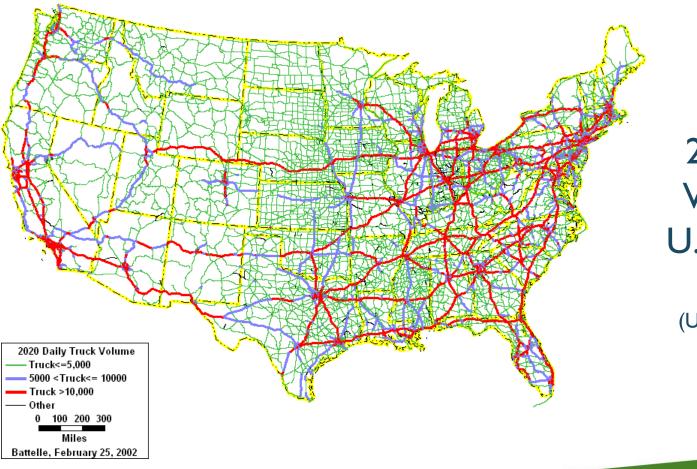


## 1998 Truck Volumes on U.S. Highways

(source: U.S. DOT)



#### **Anticipating Future Demands**

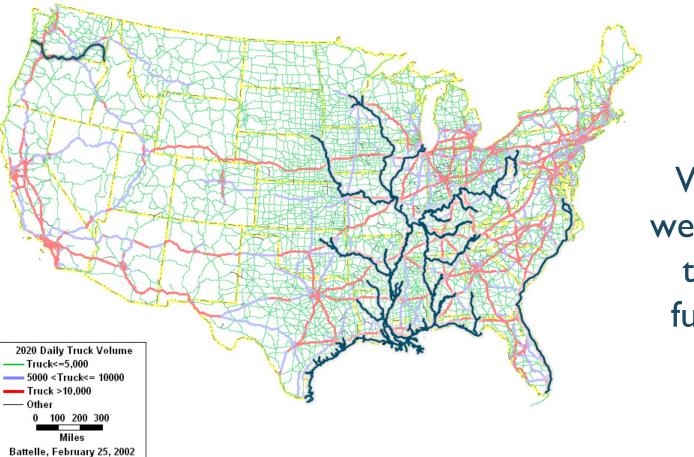


## 2020 Truck Volumes on U.S. Highways

(U.S. DOT forecasts)



#### **Anticipating Future Demands**



Waterways: well-positioned to respond future needs



#### A Freight Transportation Solution for the Future



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.



#### Factual and Intellectual Support for Waterways



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 <u>www.nationalwaterwaysfoundation.org</u>
- Call 703.373.2261
- E-mail <u>NWF@vesselalliance.com</u>







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Waterways transportation keeps commerce on the move with fewer adverse societal impacts than truck or rail.

> Highlights of "A Modal Comparison of Freight Transportation Effects on the General Public"