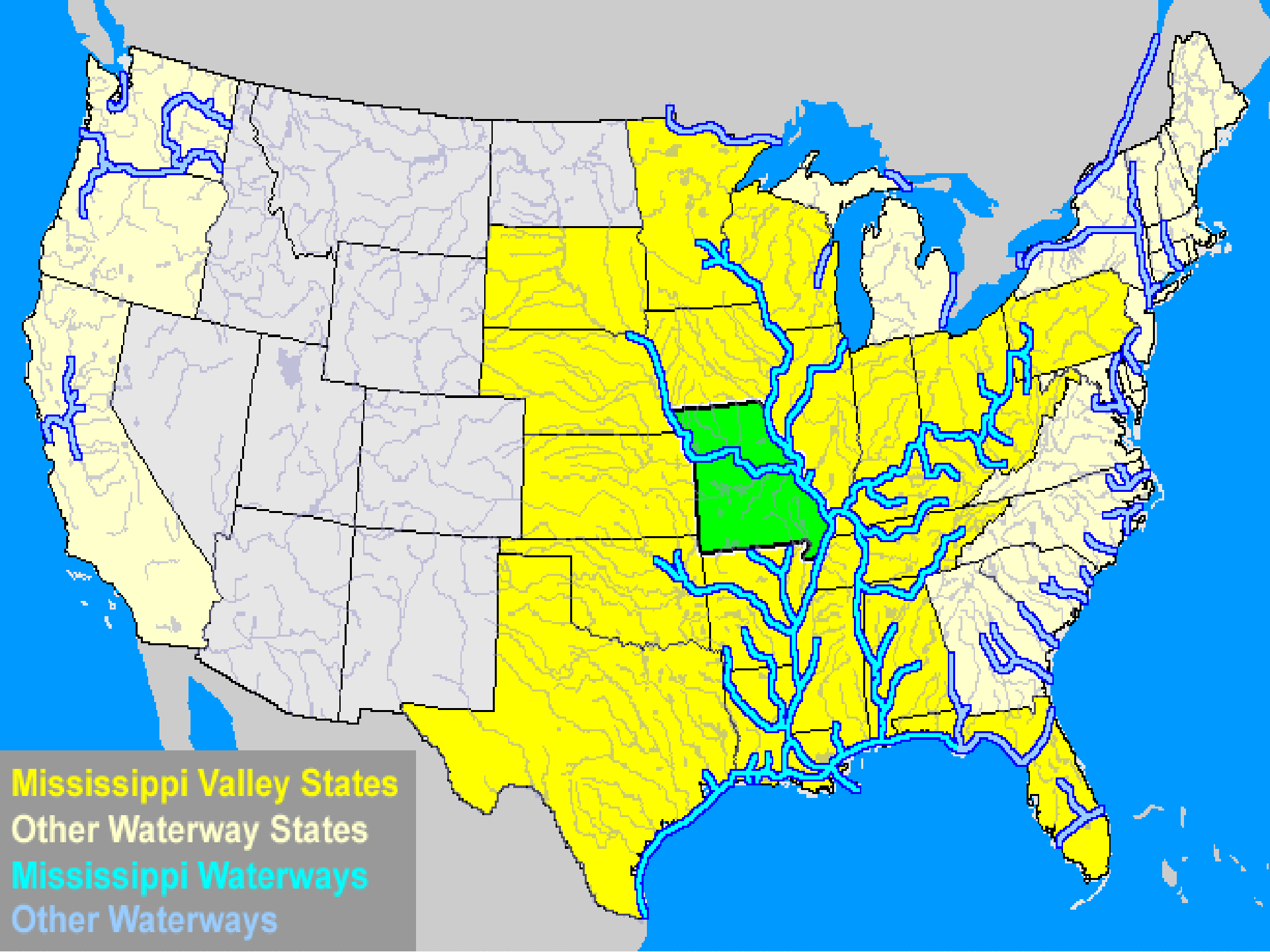


The Economic Impact of Alabama's Navigable Waterways


The Coalition of Alabama Waterway Associations

**National Strategic Planning Analysis and Research Center
Mississippi State University**

Troy University Sorrell College of Business







Benefits of Rivers

- Navigation
- Water Supply
- Power Generation
- Recreation

Total Economic Impact of the 5 navigable river systems of Alabama

\$910 million in federal tax revenues*

\$485 million in State tax revenue

53,500 directly dependent jobs and an additional 116,000 jobs indirectly dependent

- About 11% of Alabama's total employment
- Affects 40 of Alabama's 67 counties

*The federal Government invests approximately \$75 million through the Corps of Engineers for O & M for the five river systems

Port of Mobile Economic Impact

Martin Associates 2012 Economic Impact Study

- **Alabama State Port Authority**
 - ✓ 127,591 Jobs
 - ✓ \$506+ Million in Tax Impact
 - ✓ \$18.7 Billion in Economic Value

- **Port of Mobile Private Terminals**
 - ✓ 18,439 Jobs
 - ✓ \$78+ Million in Tax Impact
 - ✓ \$4.3 Billion in Economic Value

TOTAL PORTWIDE

- Over 147,030 Jobs
- Over \$584+ Million in Taxes
- \$22.3 Billion in Total Economic Impact

Other Benefits



Other benefits*

- Because companies can move many products by water, there are at least 3.5 million trucks not traveling Alabama Roads or 800 thousand rail cars not blocking intersections.
- One gallon of fuel will move a ton of product 616 miles on the water, while a truck can only move that ton 150 miles, therefore less energy is used transporting by water than by other means
- The environment (air emissions) is impacted less by water transportation than any other mode of transportation (as much as 70% less air emissions)
- Improves quality of life for those who make use of the waterway.

*Source: Texas Transportation Institute

Important facts

- Major highway congestion coupled with high maintenance costs makes water transportation a vital component of transportation that has available capacity to handle more commerce.
- Coal, iron & steel, forest products, petroleum, sand & gravel, primary manufactured goods, and chemicals are major products shipped by water. Rural counties depend on these industries.
- About 63% of the electric power generated in Alabama depend upon the rivers (Hydro – Steam – Nuclear).
- Inland river systems cause better competitive transportation costs, less highway maintenance, and a huge return on investment for federal and state governments

Waterway Issues

Navigation – About 85 million tons of commerce move annually on Alabama Rivers.

The Corps of Engineers has instituted an “Asset Management Plan”, with the first application being taken to move O & M funds from low use waterways and give to high use waterways. The second Application was to take funds from well maintained waterways and give to high use waterways. Now the Corps is reducing hours of lock operations based on number of lockages per year. These changes in operational procedures could have a negative impact on navigation for Alabama rivers causing a loss of efficiency and reliability.

Environmental – New environmental groups continue to arise that are attempting to have Fish & Wildlife Service list, as endangered or extinct, large numbers of aquatic species. Many times their efforts conflict with municipal, utility, and industrial uses of Alabama Waterways, therefore monitoring of these activities is important for protection and job growth, and maintaining a balanced approach for protection of the environment and promotion of economic growth.

Waterway Issues – Con't

Energy Production – 63% of Alabama's energy production, some 27 power generation facilities with over 7,500 employees, depend upon Alabama rivers. The requirement for dependable river flow greatly affects production, therefore, issues such as the “water wars” between Georgia, Alabama, and Florida, can directly affect energy production as well as navigable channel depth and loss of ecological habitat.

Economic Development – many municipalities need rivers for their drinking water and depend upon river levels being maintained above their intake systems. The same holds true for industries requiring water for process or dissolution of effluent, as well as, for transportation of raw and finished product.

Recreation – Troy University's study of the Economic Value of Alabama Rivers revealed that the rivers of Alabama support over 10,000 recreational jobs and promote the spending of almost \$1 billion for river related recreational activities. Loss of habitat and the ability to reach back waters would dramatically impact the value of this industry.



The Economic and Social Impacts of the Tennessee-Tombigbee Waterway

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 - University of Kentucky
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Historical Background

- 18th Century -- Marquis de Montcalm
- 1946 -- Authorized by Congress
- 1972 -- Construction begins
- 1984 -- Completed 234 miles of river to create a 1,300-mile water system between Ohio River and Gulf of Mexico
- 1985 -- Towboat *Eddie Waxler* pushed a barge of 2.7 million gallons of petroleum to start commercial navigation
- Today, 10 locks and dams, 17 commercial ports and terminals, are used to transport commercial goods such as automotive, aerospace, chemicals, petroleum, hydropower



Commercial Navigation Trends

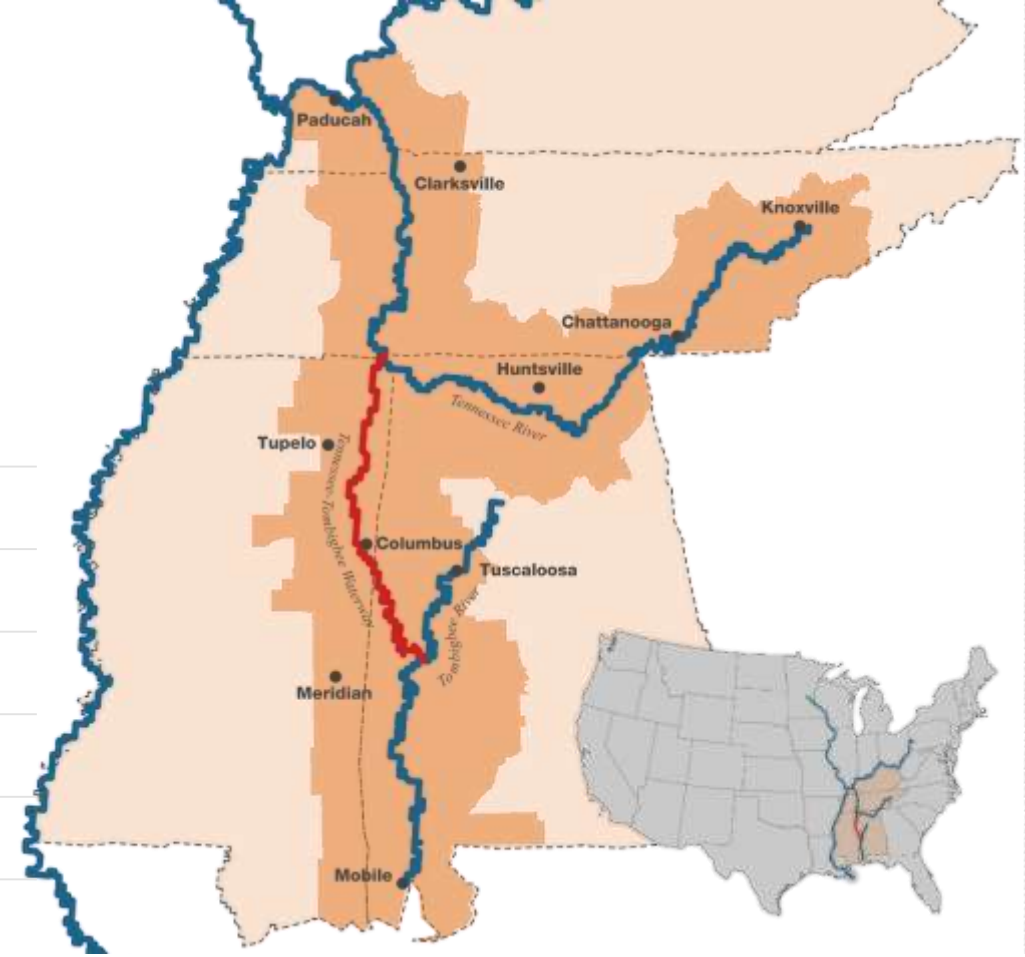
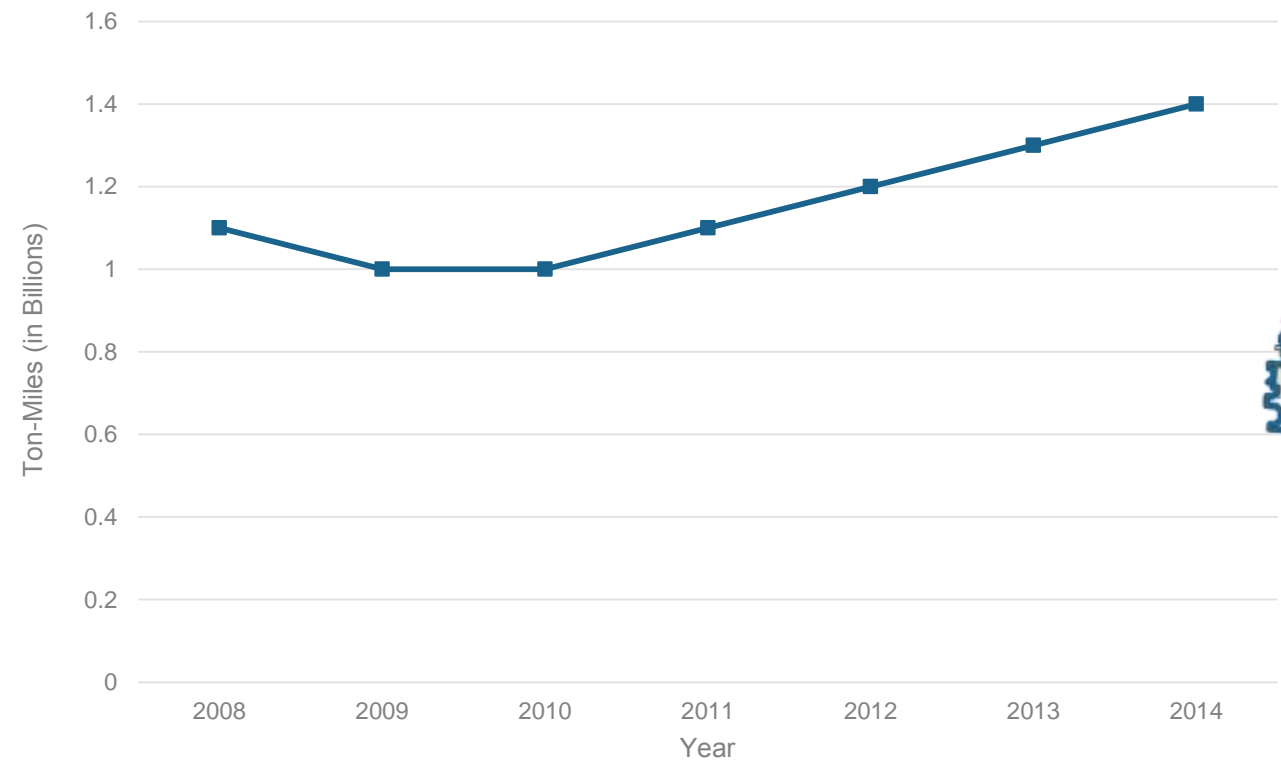
The Tennessee-Tombigbee Waterway Impact Area (TTWIA)

The Waterway was strategically planned to create an economy around it.



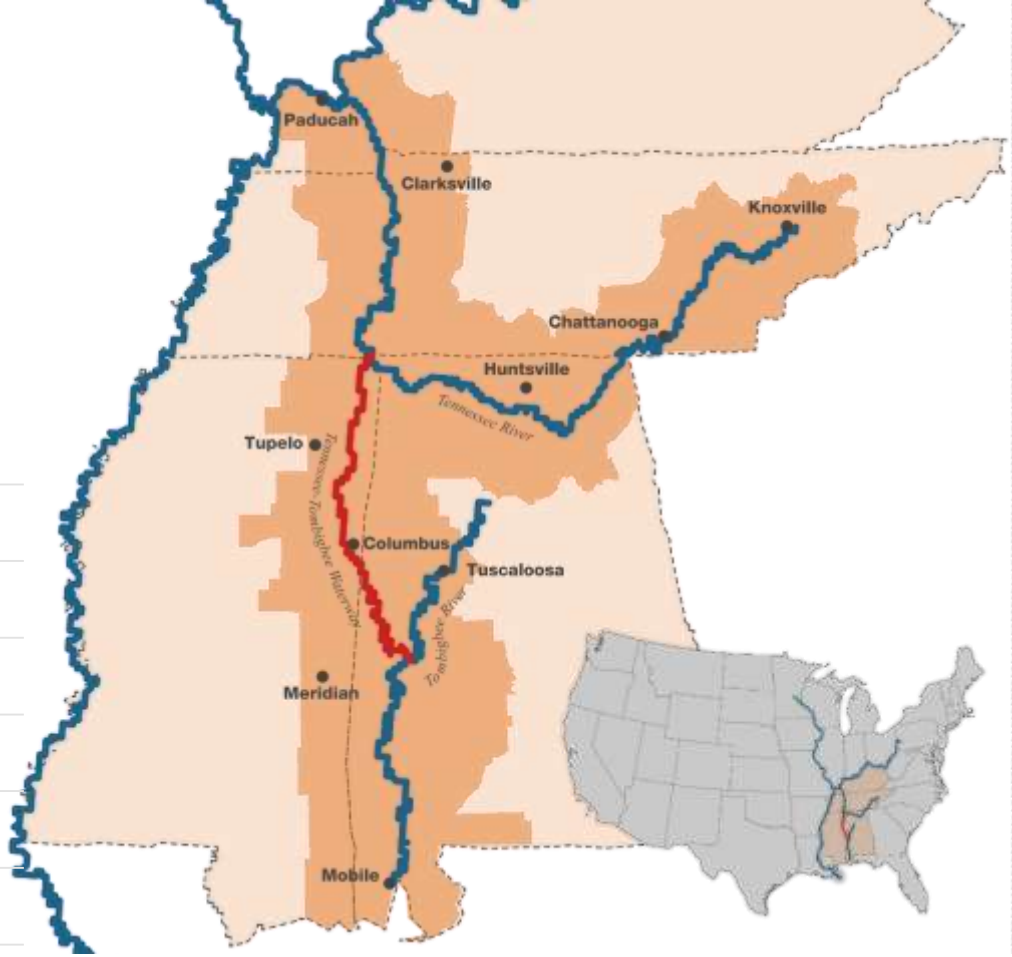
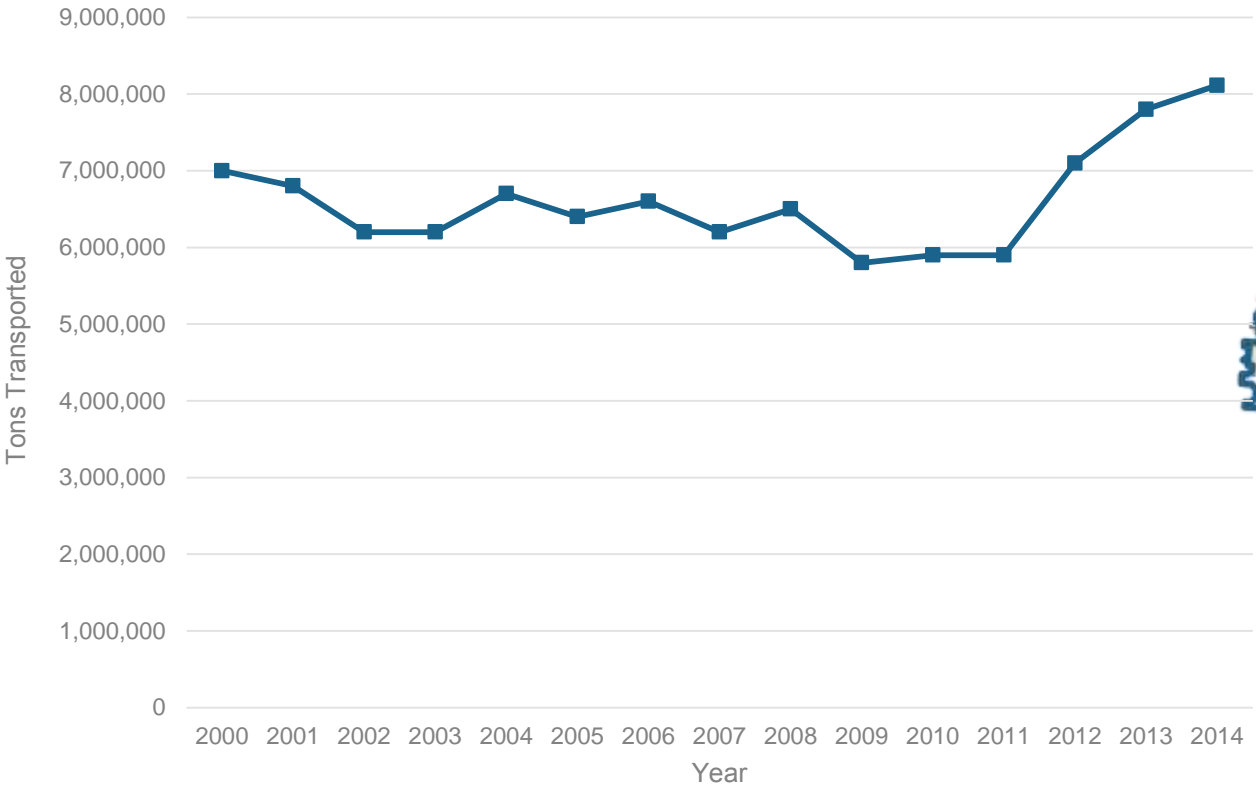


Shipping, Measured in Ton-Miles



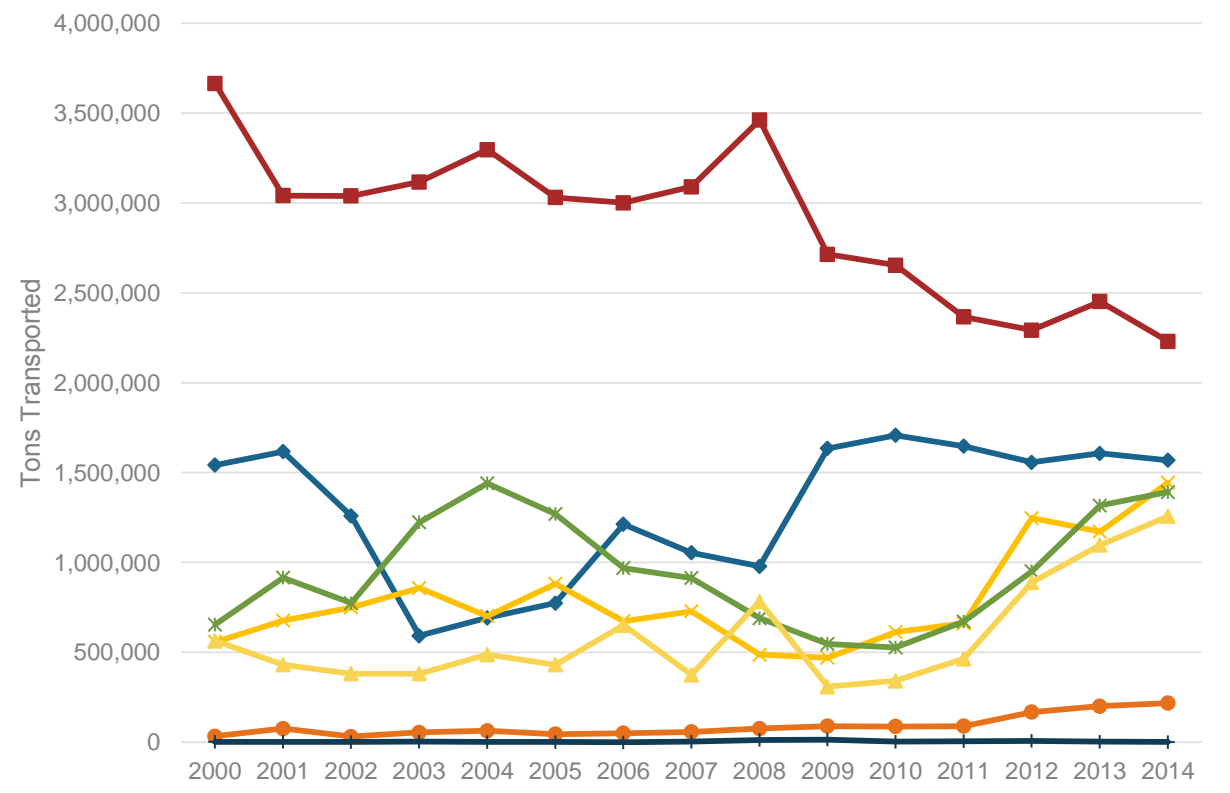


Tonnage Shipped

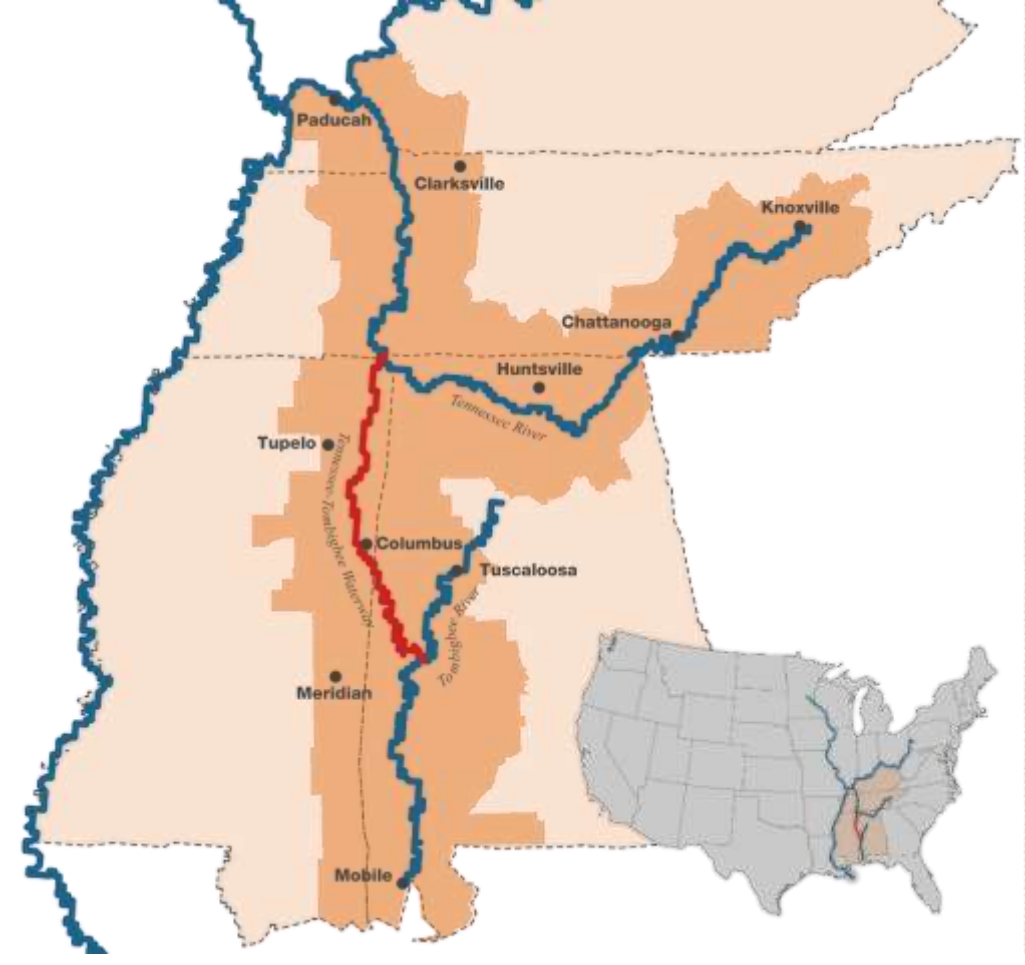




Tonnage Shipped by Commodity



- ◆ Coal, Lignite, and Coal Coke
- ✱ Chemicals and Related Products
- ▲ Primary Manufactured Goods
- + Manufactured Equipment & Machinery
- ✕ Petroleum and Petroleum Products
- Crude Materials, Inedible, Except Fuels
- Food and Farm Products





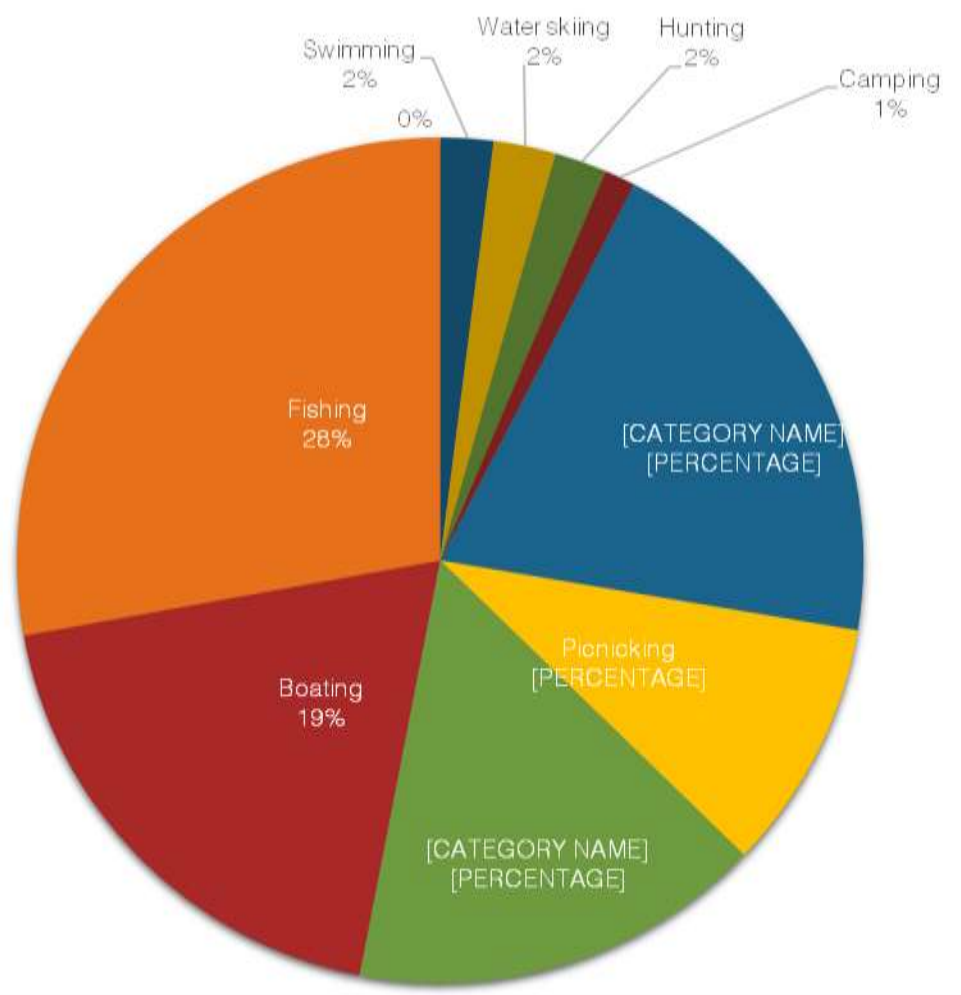
Recreation

- 1.7 million visitors each year
- 32,000 acres of surface water for fishing and boating
- 180,000 acres of managed natural habitats
- 7 Class-A campgrounds with 747 campsites
- 69 recreation areas
- 168 picnic sites
- Hundreds of recreational boating access points





Distribution of Recreational Activities





Economic Impacts of Commercial Navigation

- 3.54 -- Return on Investment (ROI)
- 24,541 – Number of Full-Time Jobs Created
- \$1.9 Billion – Annual Total Personal Income
- \$200 Million – Annual Federal Tax Revenue
- \$133 Million -- Annual State Tax Revenue
- \$53 Million – Annual Local Tax Revenue
- \$8.1 Billion – Annual Economic Output



Economic Impacts of Recreation

- 1.22 -- Return on Investment (ROI)
- 1.7 Million -- Total Annual Visitors
- \$61 Million -- Annual Visitor Spending
- \$14 Million -- Annual Total Personal Income
- \$5 Million -- Annual Sales Tax Revenue
- \$1.4 Million -- Annual Federal Tax Revenue
- \$1.1 Million -- Annual State Tax Revenue
- \$400,000 -- Annual Local Tax Revenue



Opportunities

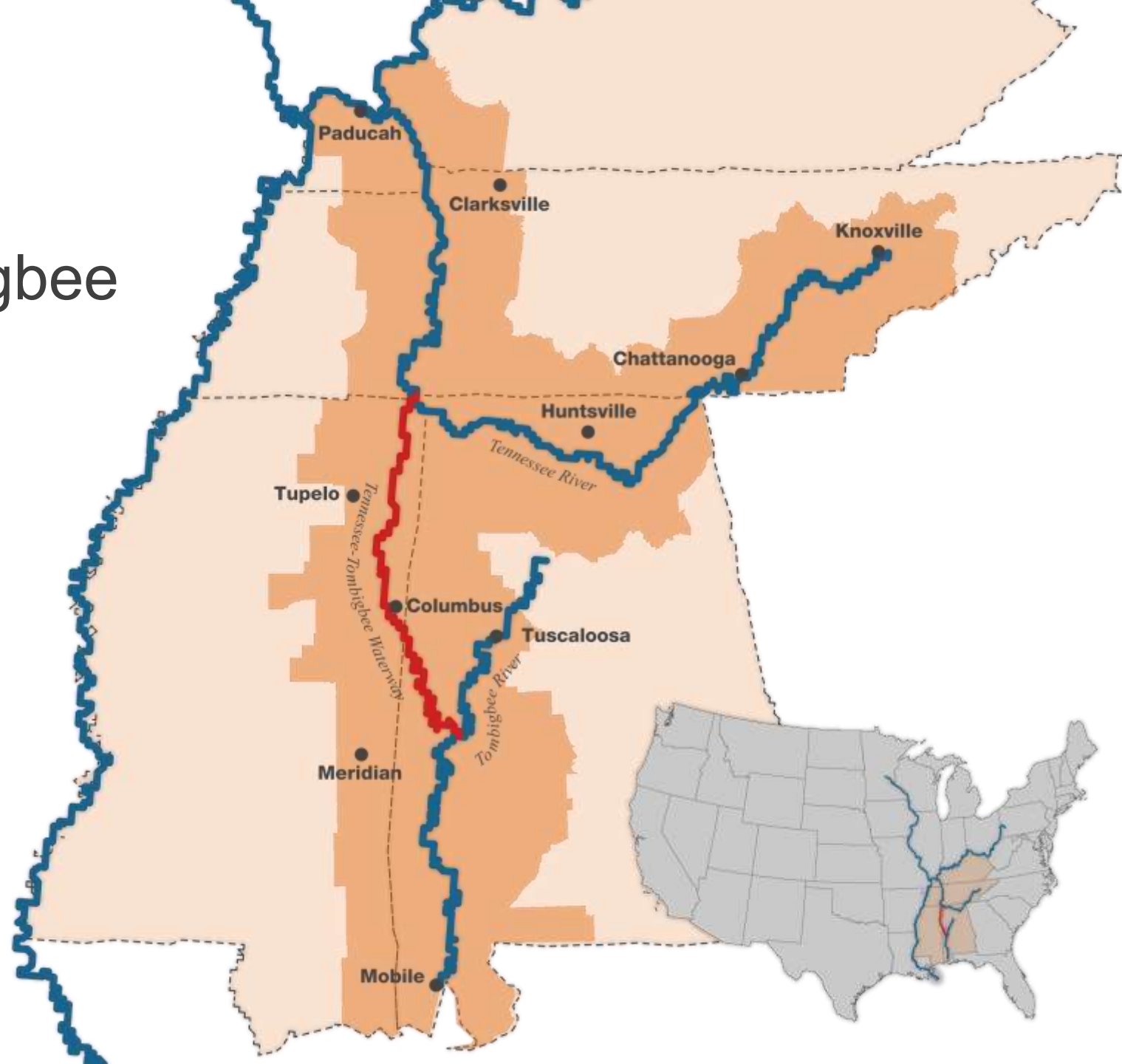
- 45 million gallons of water withdrawn daily for residential and commercial use
- Water used for irrigation
- Infrastructure, through 10 locks and dams, for flood control



Looking Ahead

Tennessee-Tombigbee Impact Area

- 111 counties
- 17 metro areas
- 6 million people



Looking Ahead

The Tennessee-Tombigbee Waterway is the Gateway to the Global Economy

The key to reaching its full potential:

Be the centerpiece of a multi-state regional economic strategy

