



Arkansas

# STATE FREIGHT PLAN

*Executive Summary*



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# Introduction

The movement of freight is critical to Arkansas' economy and the quality of life of every Arkansan. The multi-modal freight system puts food on our tables, transports the fuel used to power industry, delivers packages to our front doors, and creates thousands of jobs for hard-working Arkansans. Indeed, freight touches nearly every aspect of our daily lives.

Given the vital importance of freight to Arkansas, it is imperative that we plan for the future of our freight transportation system. Across all modes, freight volumes in Arkansas are projected to grow by more than 40 percent over the next 25 years. The movement of those goods will be impacted by many forces, including emerging technologies, shifting populations, changes in national policy, and trends in international trade. Planning for those opportunities and challenges is an essential step toward delivering a safe, reliable and competitive freight system for the future.

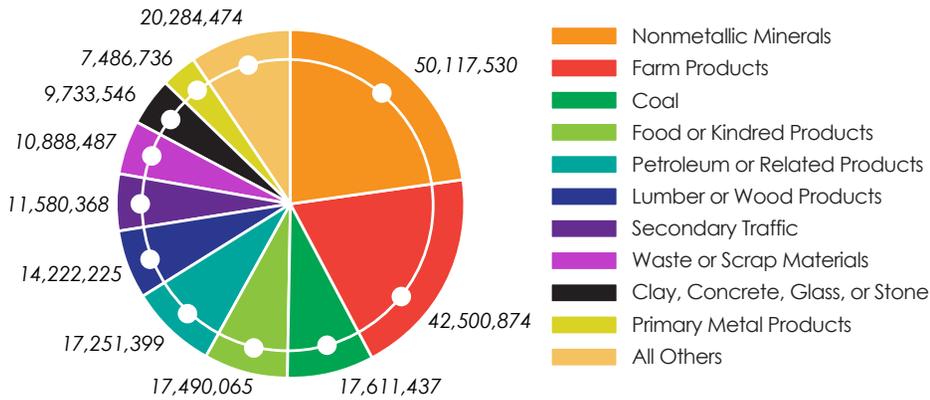
The need for freight planning activities was recognized by the U.S. Congress with the passage of the Fixing America's Surface Transportation (FAST) Act in 2015. The FAST Act, for the first time, provides a designated source of Federal dollars for freight investments. To ensure that those investments are sound, the 2017 Arkansas State Freight Plan includes (among other contents): an identification of freight system trends, needs and issues; a description of the policies, strategies and performance measures that will guide investment decisions; and a freight investment plan that identifies high-priority freight projects. Final approval of this plan by the Federal Highway Administration (FHWA) will provide for continuing eligibility for federal freight funding.

This Plan was developed under the guidance of a diverse group of public- and private-sector freight stakeholders – the Freight Advisory Committee (FAC). The FAC advises ARDOT on freight-related priorities and funding needs; serves as a forum for discussing issues affecting freight mobility; and provides a conduit for public participation in transportation planning in Arkansas. As the Plan is implemented, ARDOT will look to the FAC for continuing feedback about freight planning activities and the performance of the State freight system.

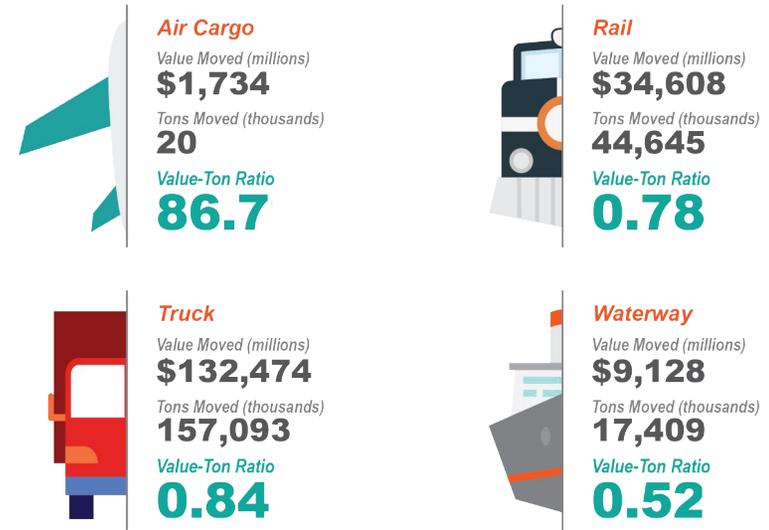


# Arkansas Freight At-a-Glance

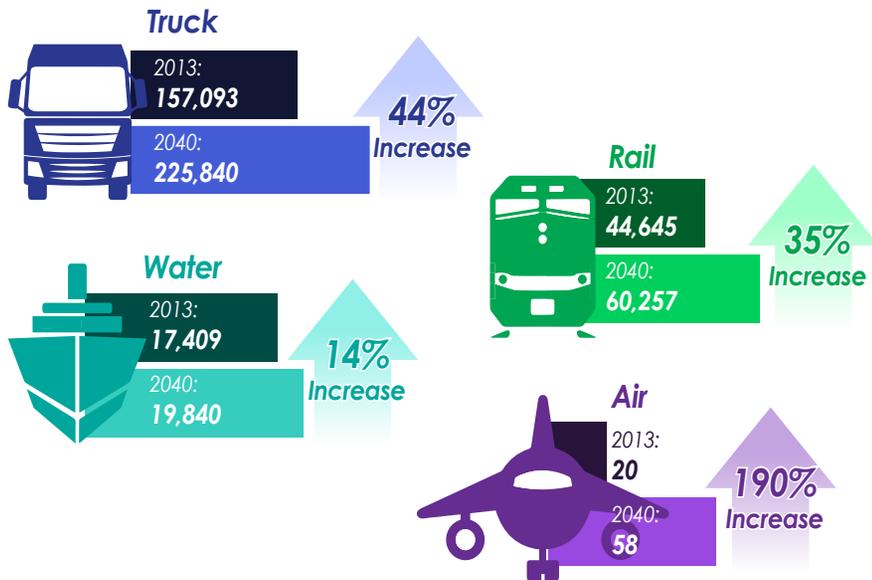
Top Commodities Moved in Arkansas by Tonnage, 2013



Ton-Value Ratio, 2013



Arkansas Freight Growth by Mode, 2013-2040



Pipelines in Arkansas (miles)



Arkansas Ranks....





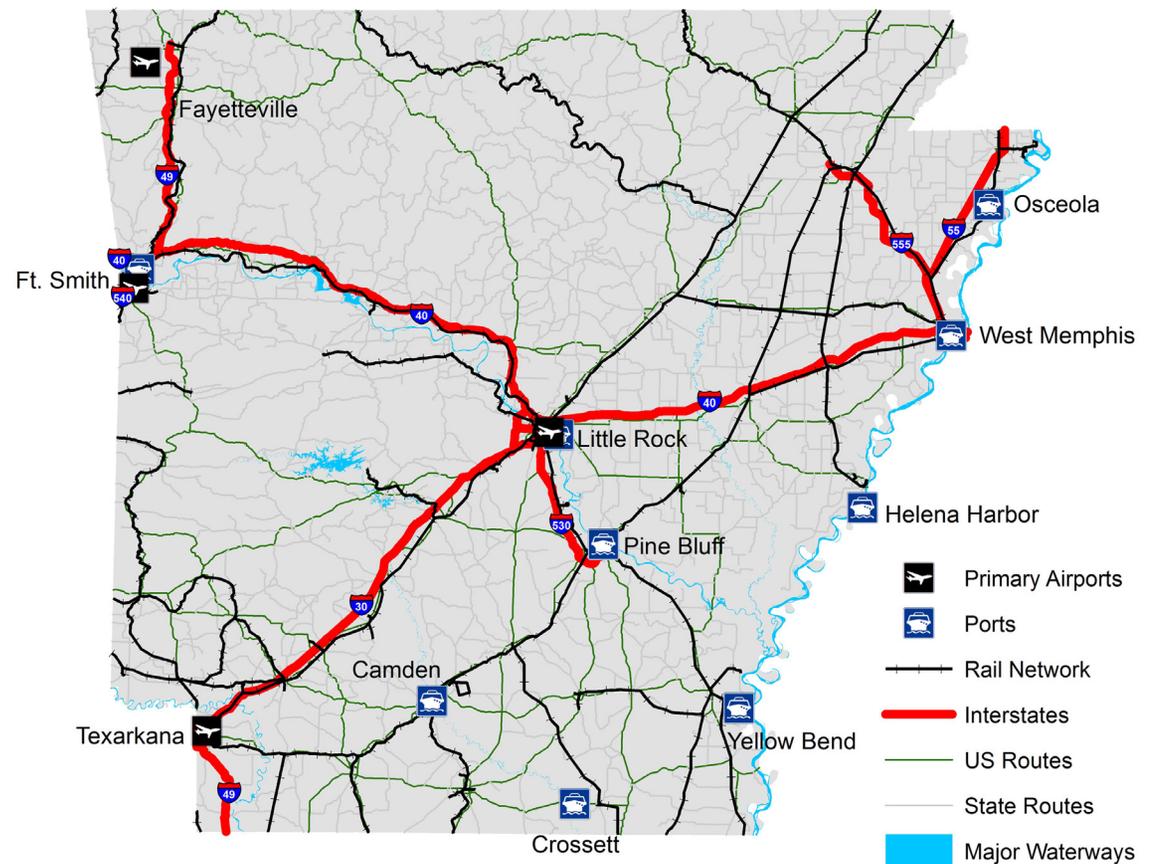
## Arkansas Freight Advisory Committee

To support the development of the State freight plan, the Arkansas Department of Transportation assembled a Freight Advisory Committee (FAC). The FAC was comprised of members of the public sector and private sector, including the Arkansas Farm Bureau, the Arkansas Trucking Association, Union Pacific (UP) Railroad, the Port of Little Rock, the Arkansas Waterways Commission, the Arkansas Economic Development Corporation, and many other freight stakeholders. The committee met on six occasions to discuss progress on the freight plan and specialty topics ranging from truck parking to the documentary film "Be Prepared to Stop." Additionally, each member of the FAC was interviewed in a one-on-one setting to provide detailed perspectives on their key issues, potential freight improvement projects and policies to consider, and their expectations for what the freight plan should incorporate. Future FAC activities are anticipated as the State Freight Plan is implemented.

# Multimodal Freight Infrastructure

Arkansas has a robust multimodal freight transportation infrastructure that connects businesses in Arkansas with suppliers and customers located in all corners of the State, across the U.S., and to major overseas economies. This freight transportation infrastructure includes over 16,400 miles of state highways (includes over 700 miles of Interstate), 2,700 miles of rail infrastructure, four air cargo airports, more than 1,600 miles of navigable waterways, and more than 10,000 miles of pipelines. The Arkansas inland waterway system is particularly noteworthy as it is the third largest in the nation in terms of the number of navigable miles.

### National Multimodal Freight Network



Note: Pipelines are not shown.

Source: FHWA

# Goals and Objectives

The goals and objectives development process included a review of federal and state laws and regulations, coordination with the development of the Statewide Long-Range Intermodal Transportation (LRITP) and a peer review of goals and objectives from the FAC, Arkansas MPOs and other states.

These goals and objectives provide a strategic vision for the future of Arkansas' transportation system. The plan identifies specific internal and external strategies to improve and maintain system performance and inform modal agencies and partners about how the system is preserved, maintained, modernized, and expanded to meet 21<sup>st</sup> century needs in the era of performance-based planning. Implementing these strategies will help the state meet its performance measurement requirements and manage its transportation system and in turn improve the Arkansas transportation system.

*For more information about scenario planning activities performed as a part of the Long Range Plan please visit [www.WeMoveArkansas.com](http://www.WeMoveArkansas.com)*



**KEEP IT SMOOTH  
PRESERVE THE INVESTMENT**



**THINK LOCALLY  
TRADE GLOBALLY**



**CONNECTING COMMUNITIES  
FORGING OPPORTUNITIES**



**BIGGER CITIES  
MORE MOBILITY**

# Goals and Objectives

## SAFETY AND SECURITY

Improve statewide safety by funding projects that reduce fatal and serious injury crashes, reduce vulnerability, and improve resiliency of the system

- Identify Interstate and Non-Interstate truck crash hotspots and develop recommendations that have the potential to reduce truck-involved crashes.
- Partner with counties and local governments to provide guidance on low-cost truck safety applications for local roads.
- Identify segments of the freight transportation system that may be at an elevated risk of failure based on infrastructure condition, system demand, or outside forces.
- Improve the resiliency of the freight transportation system.

## ECONOMIC COMPETITIVENESS

Improve intermodal transportation system connectivity, efficiency, and mobility to support existing industries and strengthen national and regional economic competitiveness

- Identify key freight routes between Arkansas and external trading partners in need of long-term additional capacity.
- Determine freight transportation needs of key existing freight-related industries in Arkansas.
- Prioritize and enhance intermodal connections for freight movement by updating designated NHS intermodal connectors and documenting the use, condition, and performance of connectors.
- Determine the economic impact of freight-related bottlenecks on the Arkansas highway system.
- Collaborate with the Arkansas Economic Development Commission to identify freight projects that will improve the State's economic competitiveness.
- Support the maintenance and operation of state highways, bridges, rail, ports, locks, dams and airports.

## INFRASTRUCTURE CONDITION

Invest in existing infrastructure to maintain and preserve the existing system

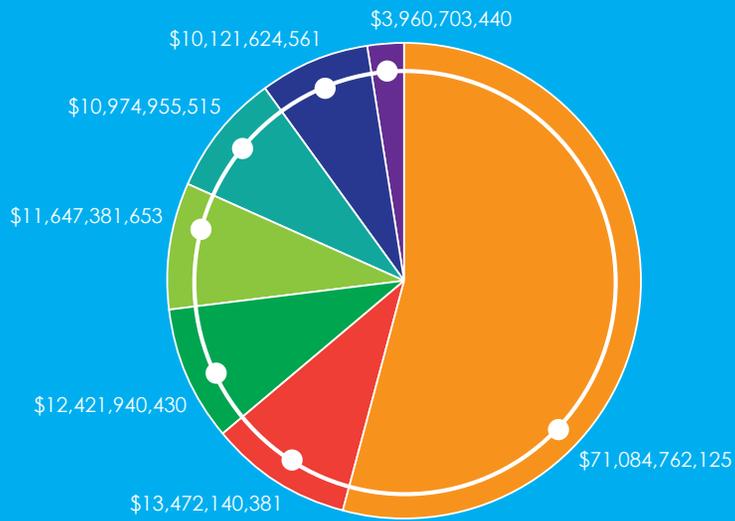
- Provide predictable, reliable travel times on key freight corridors.
- Implement Intelligent Transportation System (ITS) strategies to provide commercial vehicle operators real-time information regarding weather conditions, travel times, emergencies, incidents, and delays.
- Consider technology advances such as connected and automated vehicles to improve freight system performance.
- Plan and prepare for autonomous and connected trucks.
- Use output from MPO Congestion Management Systems to identify and address congested areas on the National Highway System (NHS).
- Support freight multimodal transportation alternatives that best match freight origin-destination patterns.

## CONGESTION REDUCTION, MOBILITY, AND SYSTEM RELIABILITY

Invest in the multimodal transportation system to improve mobility, connectivity, accessibility, and reliability for people and goods

- Document freight transportation assets and needs for each mode.
- Provide current and forecast goods movement data for use in forecasting the future condition of freight infrastructure.
- Enforce weight and size restrictions to protect roads and bridges.

## Arkansas Economic Output of Freight-Dependent Industries, 2013



Arkansas is a leader in the production of many specific agricultural goods

**#1** in rice production, producing close to **50%** of rice in the U.S.

**#2** in poultry production with **2,500** farms producing **chickens**

**#3** in **cotton** production

## Economy

Freight transportation demand is directly correlated to economic activity in goods movement related sectors along with retail consumption by the general public. Each day, the national freight system moves 55 million tons of goods, worth more than \$49 billion, and will grow by 42 percent between 2013 and 2040. Similar growth is forecast for Arkansas freight and will be driven by a combination of international, domestic, and local trends. These trends include the negotiation of trade agreements such as the North American Free Trade Agreement and the 2017 U.S.-China Trade Agreement, continued reshoring of manufacturing back to the U.S., population shifts from rural to urban locations, and growth in e-commerce activity.

The majority of the Arkansas economy is comprised of industries that are freight-dependent. According to the U.S. Economic Census, 53 percent of the \$251 billion of economic output in Arkansas was in the manufacturing, construction, wholesale trade, retail trade, agriculture, transportation/warehousing, and mining industries. This underscores the importance of goods movement to maintaining a vibrant economy for the State.

In 2013, 219 million tons of freight were shipped in, out, around, and through Arkansas with the trucking mode carrying the bulk of these goods. Farm, timber/wood, and food products represent over one-third of these shipments, while bulk shipments such as building materials, coal, and petroleum products also represent significant freight movements in Arkansas.

Agriculture is a key driver of economic activity in Arkansas. As a single industry, it contributes \$10 billion in economic output to the State. However, when including related industries such as food manufacturing, retail sales of agricultural supplies, and transporting agricultural and food commodities, the economic impact of activities related to agriculture is \$16 billion based on data from the Arkansas Farm Bureau.

### Arkansas Freight Growth by Commodity (tons), 2013-2040

| Commodity                       | 2013        | 2040        | Percent Change |
|---------------------------------|-------------|-------------|----------------|
| Nonmetallic Minerals            | 50,117,530  | 76,138,029  | 52%            |
| Farm Products                   | 42,500,874  | 43,875,572  | 3%             |
| Coal                            | 17,611,437  | 11,046,241  | -37%           |
| Food or Kindred Products        | 17,490,065  | 29,484,459  | 69%            |
| Petroleum or Related Products   | 17,251,399  | 16,643,248  | -4%            |
| Lumber or Wood Products         | 14,222,225  | 22,082,573  | 56%            |
| Secondary Traffic               | 11,580,368  | 21,428,505  | 85%            |
| Waste or Scrap Materials        | 10,888,487  | 17,138,071  | 57%            |
| Clay, Concrete, Glass, or Stone | 9,733,546   | 12,903,733  | 33%            |
| Primary Metal Products          | 7,486,736   | 12,903,733  | 72%            |
| All Others                      | 20,284,474  | 38,319,957  | 89%            |
| Total                           | 219,167,141 | 305,995,000 | 40%            |

Source: Transearch.



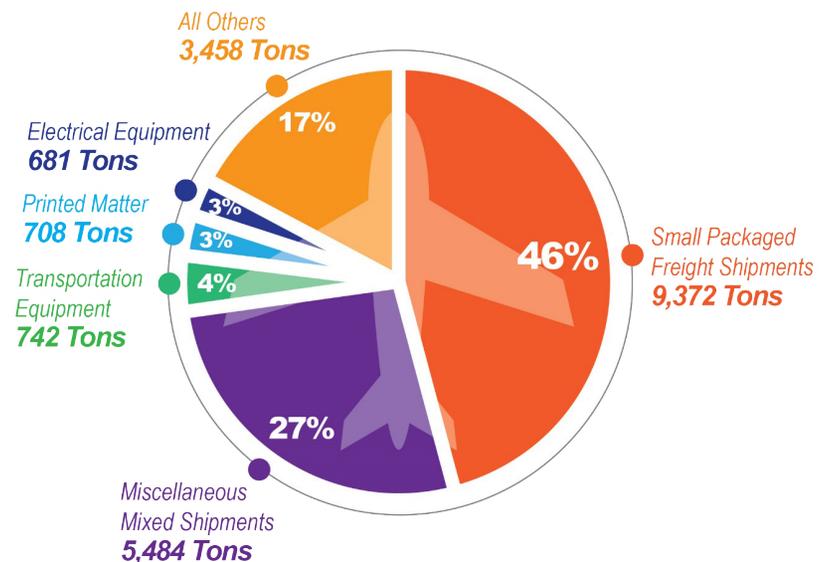
# Air Cargo

Arkansas is home to four airports that serve air cargo: Bill and Hillary Clinton National/Adams Field (LIT), Fort Smith Regional (FSM), Northwest Arkansas Regional (XNA), and Texarkana Regional-Webb Field (TXK).

According to Global Insight Transearch data, over 20,000 tons of air cargo valued at over \$1 billion moved through Arkansas airports in 2013. The vast majority of air cargo movement occurred at the Little Rock airport. Roughly half of the State's air cargo is small packaged shipments. Miscellaneous mixed shipments make up just over one-quarter of air cargo traffic. Air cargo is forecast to nearly triple between 2013 and 2040 based primarily on increased demand for small packaged shipments.

Much of the air cargo needs of Arkansas shippers is met through facilities located in neighboring states. The Memphis International Airport is the largest air cargo airport in the U.S. moving over 2.4 million tons annually, and the Dallas/Fort Worth International Airport is 10th largest moving over 400,000 tons annually as of 2015.

## Air Cargo Commodity Distribution, 2013



The air cargo needs of the Clinton National Airport include an air cargo terminal with U.S. customs, a dedicated air cargo taxiway, and improvements in roadway access to the airport, including realignment of the primary access road to the airport, Roosevelt Road.

One of the notable commercial air cargo activities in Arkansas is the movement of Dassault Falcon jets. Incomplete planes are flown into the facility from France to the company's Completion Center in Little Rock where optional avionics and custom interiors are installed and exteriors are painted. Dassault Aircraft Services is based at the Clinton National Airport and performs inspection, maintenance, modification, completion and repairs for Dassault Falcon jets.

# Pipelines

Arkansas has over 10,000 miles of pipelines moving gas, oil, and other products. Pipelines are a specialized system. Points of modal shift occur at the pipeline terminals. Often, there are multiple modes interacting at these points – pipeline, trucking, and rail.

# Railroads

There are approximately 2,662 miles of active rail lines in Arkansas. Roughly half of these miles are owned and operated by Union Pacific Railroad, the largest Class I railroad in the U.S. Another 356 miles are owned by two other Class I railroads, Burlington Northern Sante Fe (BNSF) and Kansas City Southern. The remaining nearly 1,000 miles are owned by 23 Class III or “shortline” railroads. While rail lines are spread across the State, the densest part of the rail infrastructure stretches from the northeast portions of the State to the southwest portion of the State.

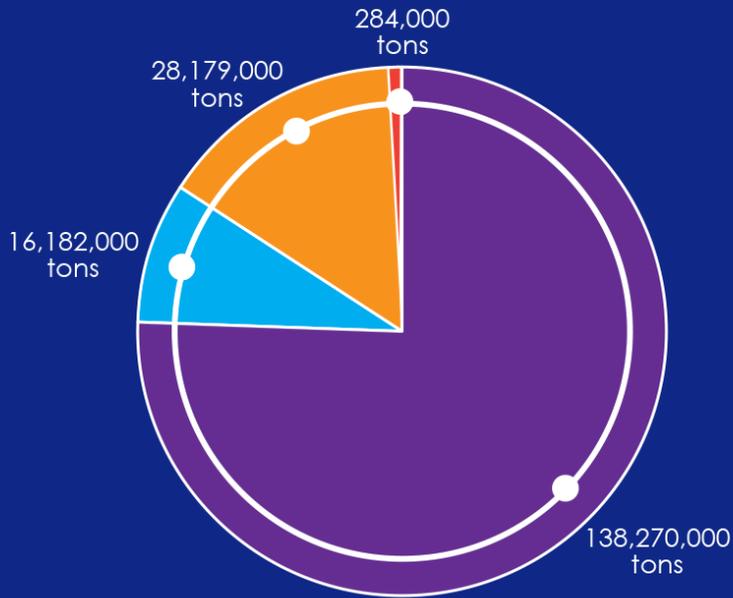
Nearly two-thirds of the rail freight in Arkansas is moving through the state without loading or unloading. Of the traffic that originates and terminates in Arkansas, roughly 30 percent is containerized traffic according to the American Association of Railroads. Stone, sand and gravel represents another 21 percent of all originating rail traffic in Arkansas, while coal represents 29 percent of the terminating rail traffic in Arkansas.

UP Railroad operates one of its largest classification yards in North Little Rock where nearly 2,000 railcars are sorted and processed along 68 different tracks every day. The yard is also located adjacent to the North Little Rock locomotive overhaul and maintenance facilities, which is one of the largest of its kind in the U.S. and overhauls over 400 locomotive engines annually. In total, UP Railroad has more than 2,600 employees in Arkansas.

The 2013 Arkansas State Rail Plan identified nearly 100 improvements for freight rail infrastructure, totaling \$1.5 billion. Significant projects include double-tracking 150-200 miles of rail lines between the northeast and southwest parts of the state; building nearly 60 miles of new rail between Hartford and Danville; and constructing sidings and double track extensions for port terminals. Additional freight improvement projects recommended in the State Rail Plan include over \$300 million in capacity enhancements, \$22 million in industrial access and economic development projects, \$70 million in intermodal and transloading improvements, and \$62 million in track upgrades and rehabilitation.



## Rail Tonnage Distribution by Type of Trip, 2013

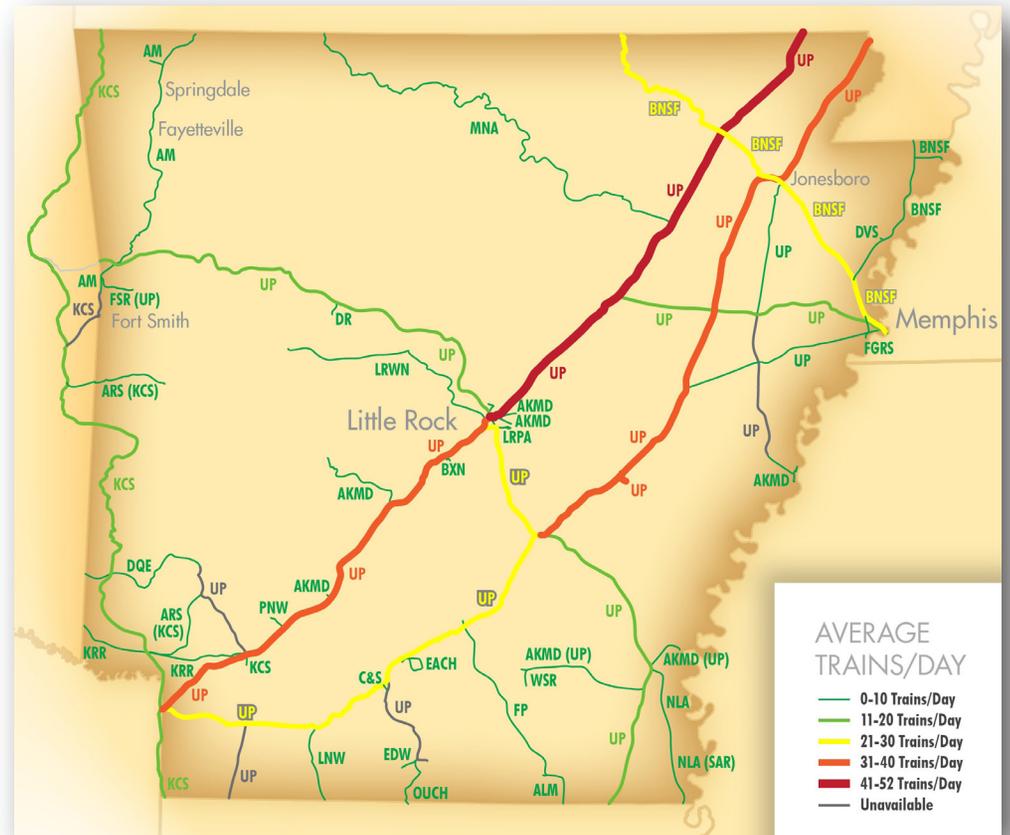


### Direction of Flow



Arkansas has an expansive network of rail lines that serve to connect businesses and customers within the state with trading partners nationwide. The large Class I railroads provide the primary rail access in Arkansas. UP Railroad mainlines that cross the State from the northeast to the southwest have the highest train volumes. One of UP Railroad's lines connects Arkansas to major markets such as Chicago, St. Louis, Dallas, and Houston and can carry over 50 trains in a single day. Another UP Railroad line has over 30 trains per day running in a parallel path. In the northeast corner of Arkansas, the BNSF also serves between 20 and 30 trains per day as part of its Transcon Corridor. Rail traffic is forecast to grow by 35 percent in Arkansas between 2013 and 2040.

## Arkansas Rail Infrastructure and Train Volumes, 2014

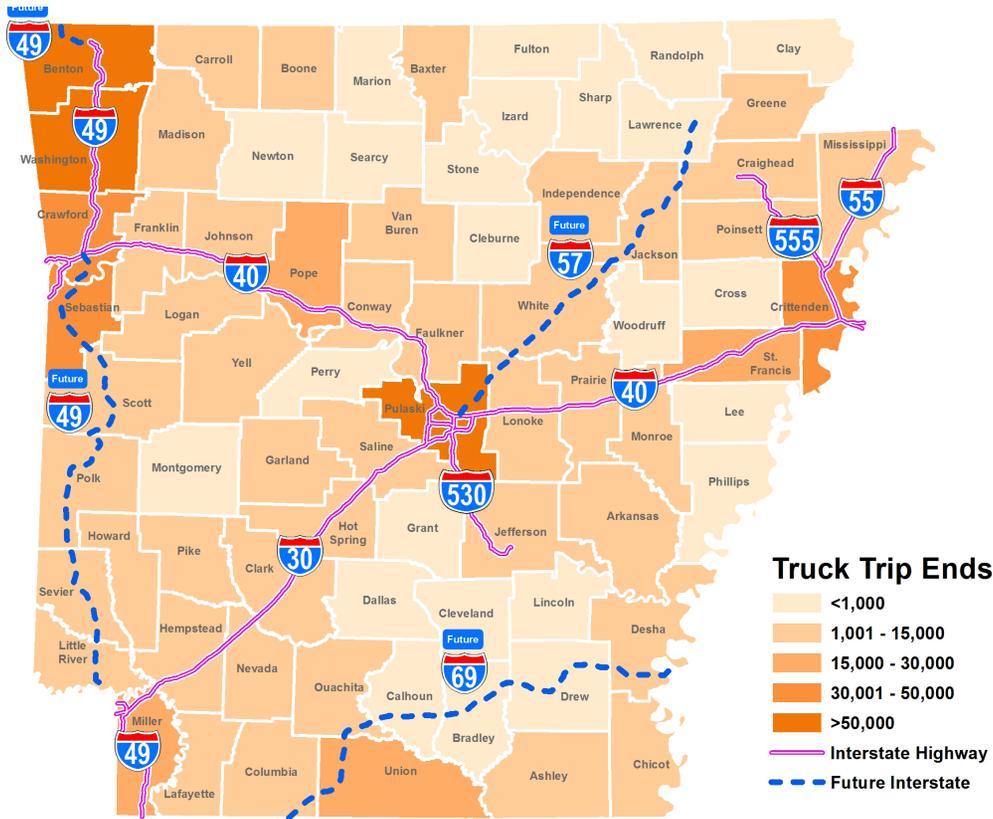


Source: Arkansas State Rail Plan.

# Trucking

Of the five modes of freight transportation in Arkansas, commercial trucking moves the greatest tonnage. Every county in Arkansas generates truck traffic, but nearly half originates in or is destined for three regions: Pulaski County with 13 percent, northwest Arkansas (Benton, Crawford, Sebastian, and Washington Counties) with 29 percent, and Crittenden County with 7 percent. Significant truck activity also occurs in other counties adjacent to the Interstate System – specifically, Pope, St. Francis, and Miller Counties. Union County, in south central Arkansas rounds out the top ten counties for truck trip generation.

**Trucks Generated in Arkansas Counties, 2015**

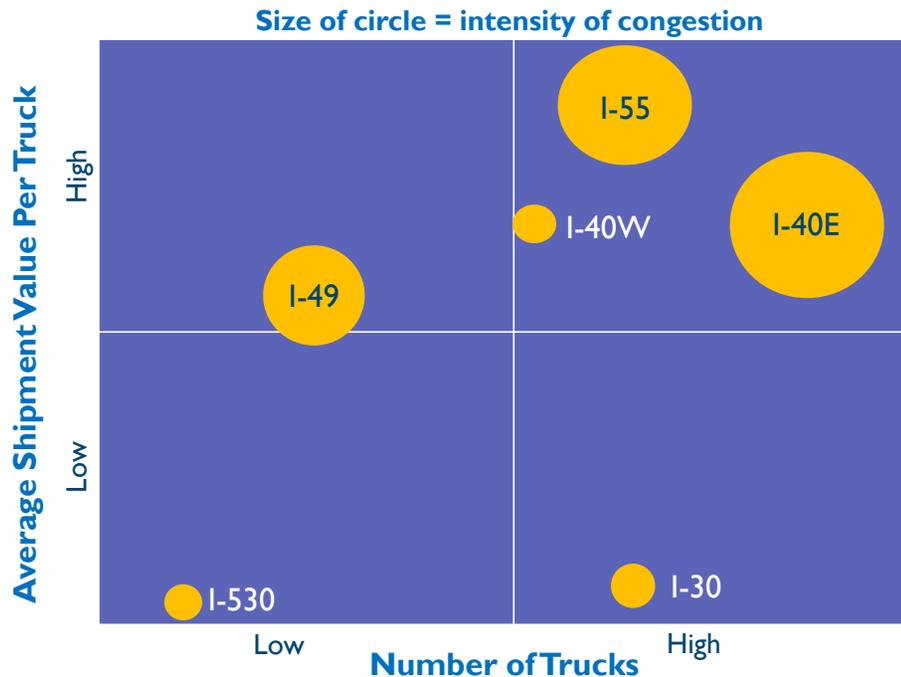


## Importance of the Interstate System

The Interstate System is the workhorse of the Arkansas State Highway System. The top 50 truck-volume locations are on the Interstate System. The Interstates are the only roadways in Arkansas that serve more than 5,000 trucks per day. Interstate 40, between North Little Rock and West Memphis, has the highest truck volume with an average of 17,500 truck per day. Some locations report over 20,000 trucks per day and more than 50 percent truck traffic. Interstate 30 between Little Rock and the Texas State Line has the second highest truck volumes with an average of 12,500 trucks per day.

Congestion along Arkansas roadways is most significant in metropolitan areas as trucks encounter commuter traffic. There is no recurring congestion on Interstates in Arkansas outside of urban areas. The average value of truck shipments on Arkansas' Interstates varies, primarily due to the wide variety of goods shipped – from agricultural goods, to building materials, to goods destined for retail locations. Combining truck volumes, shipment values, and congestion intensity illustrates the impact of congestion on the movement of freight in Arkansas.

### Roadway Congestion



Note: I-40 W represents I-40 from Oklahoma state line to North Little Rock. I-40 E represents I-40 from North Little Rock to the Tennessee state line.



Interstate 40 between North Little Rock and West Memphis is the most heavily-traveled segment of highway freight infrastructure in Arkansas. Annually, Interstate 40 serves nearly 5 million trucks traveling over 500 million miles. Interstate 40 also experiences more truck involved crashes than any other route in Arkansas, leading to personal injury, property damage, and user delay due to temporary closure. Analysis of traffic count data and growth projections indicates that congestion on Interstate 40 will become an issue as early as 2022.

As a major link in the freight network of Arkansas, Interstate 40 is also vulnerable to impacts related to severe weather, such as the 2011 floods. Consequently, parallel or redundant routes (such as Highway 70) are also critically important for managing crashes and other events along the corridor.

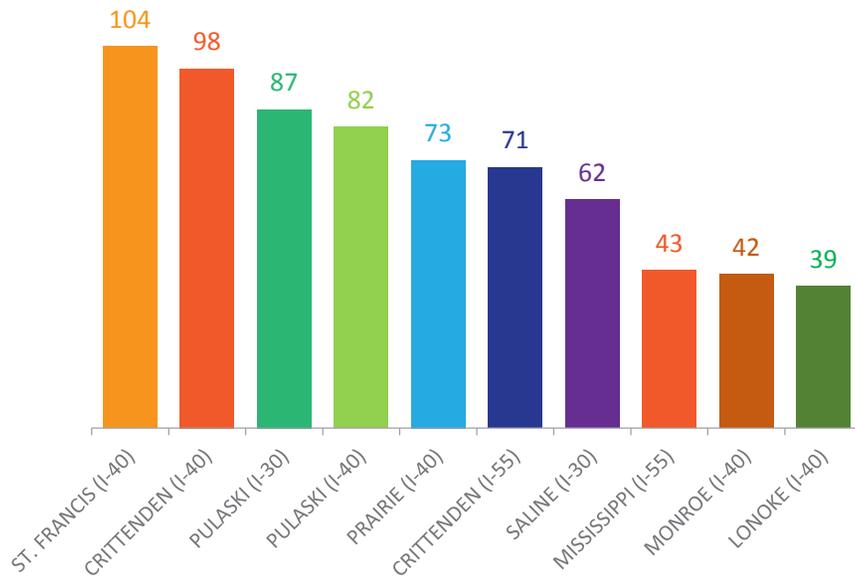
Emerging technologies such as truck platooning, automated and connected vehicles, and intelligent transportation systems are also expected to positively impact safety and operations on Interstate 40 and parallel routes.

## Commercial Vehicle Operations

Based on data from the FHWA Freight Analysis Framework, trucking carries 55 percent of freight tonnage shipped into, out of, and within Arkansas. This represents over 70 percent of the freight movements when the value is considered. One of the scenarios considered during the development of the Statewide Long Range Intermodal Transportation Plan emphasized the expected increase in freight traffic of nearly 50 percent over the next 20 years. Many of the stakeholders and public comments indicated a desire to see improved safety and efficiency for freight movements.

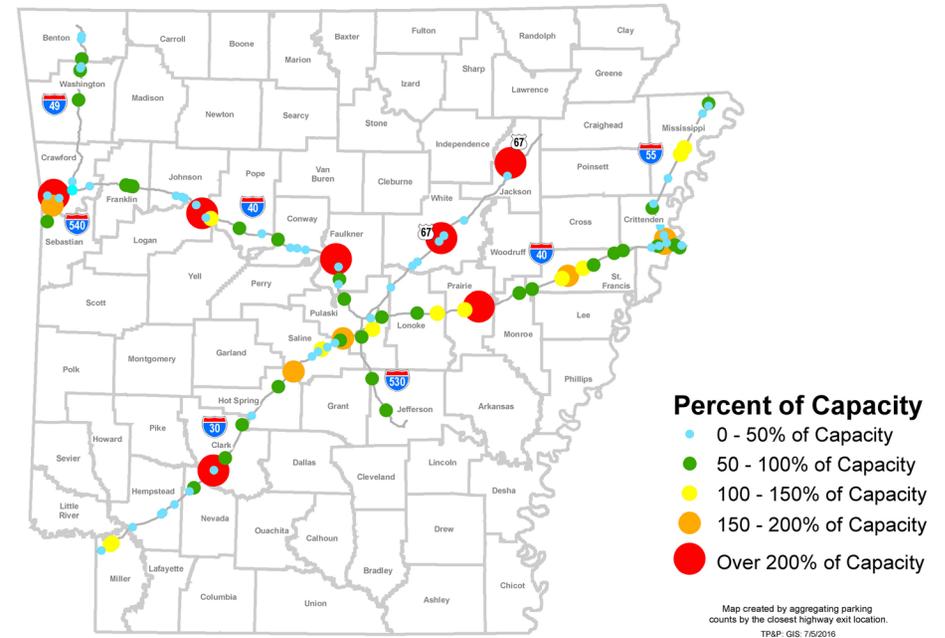
Crashes involving large commercial motor vehicles and passenger vehicles are more likely to be fatal due to the size differences between the two vehicles. Over 11 percent of all roadway fatalities in Arkansas involved a large commercial motor vehicle in 2014. ARDOT recently updated the Strategic Highway Safety Plan, which includes specific coordination with the Commercial Vehicles Safety Plan to address enforcement and behavioral safety elements while addressing Large Commercial Motor Vehicles as a Primary Emphasis Area.

### Annual Average Crashes, 2011-2015



There is a critical need for long-term parking along major freight corridors. Lack of parking impacts the efficiency of goods movement by causing drivers to end their hours of operation early to ensure a legal truck parking location is secured. This leads to undesirable truck parking activities or drivers operating beyond their maximum hours of service.

### Overcrowding of Truck Parking Facilities By Exit, 2015



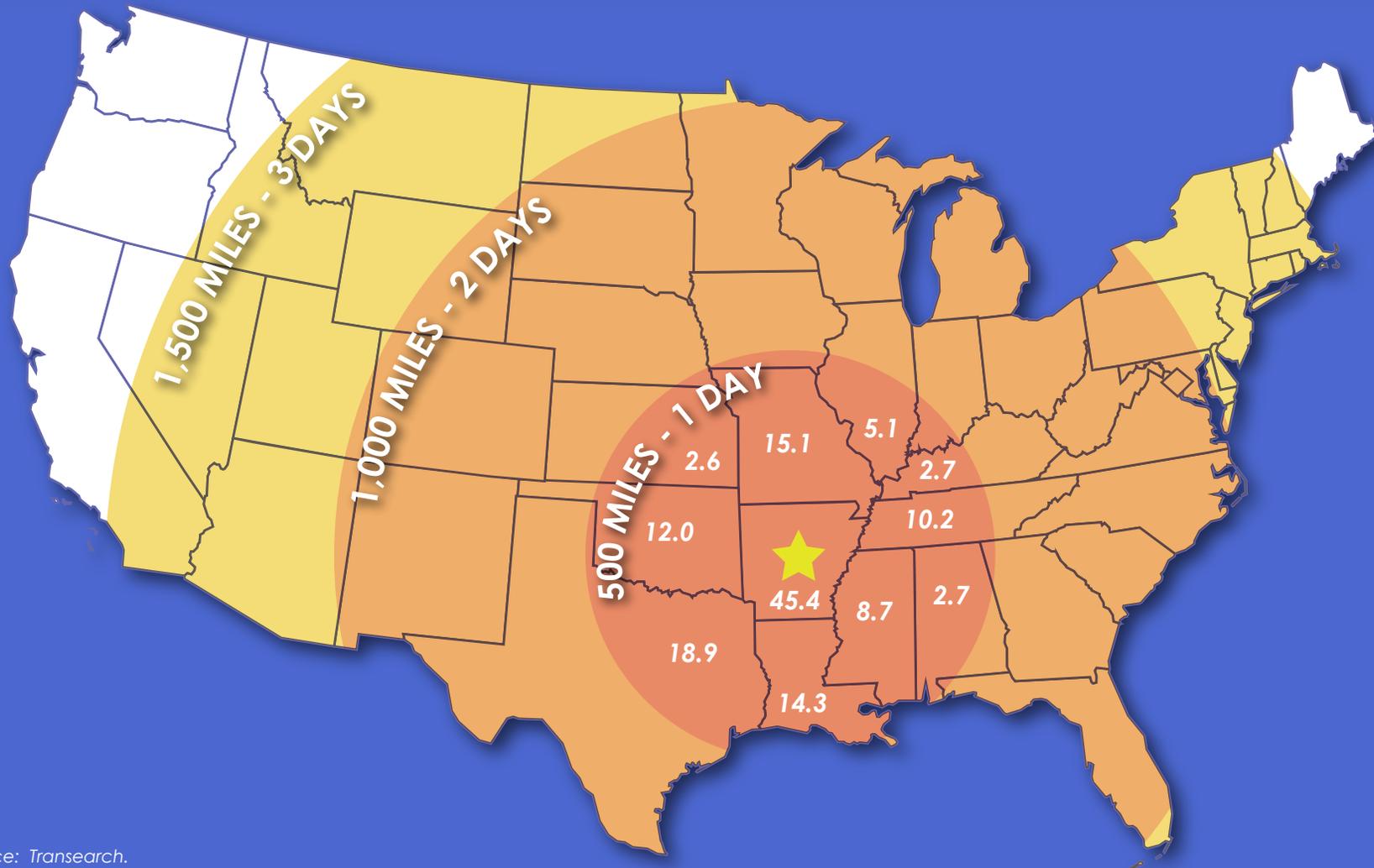
Act 797 of 2017 was adopted by the Arkansas General Assembly to allow for the use of truck platooning technology in Arkansas. This technology uses forward collision avoidance and vehicle-to-vehicle communication to allow trucks to operate with a reduced following distance relative to typical operations. Implementation of this technology presents an opportunity to make goods movement more efficient in Arkansas, allowing Arkansas businesses to be more competitive.

## Domestic Truck Flows

The top truck trading partners for Arkansas are neighboring and nearby states. Texas is the largest single trading partner with an estimated 18.9 million tons moved by truck between Texas and Arkansas. This is followed by Missouri with 15.1 million tons and Louisiana with 14.3 million tons. Truck traffic within Arkansas is estimated at 45.4 million tons annually, which is roughly equivalent to the trade with the top three partners.

The average daily run for a long-haul, over-the-road truck driver is approximately 500 miles. The concentric circles in the graphic below demonstrate the distances of 500 miles, 1,000 miles, and 1,500 miles that can be reached from central Arkansas. This correlates to locations that can be reached in 1-day, 2-day, and 3-day drives from the middle portion of the State. From central Arkansas, it is possible to reach a good portion of the U.S. within a 2-day driving period.

**Arkansas Top Trade Partners and Truck Service Areas (millions of tons), 2013**



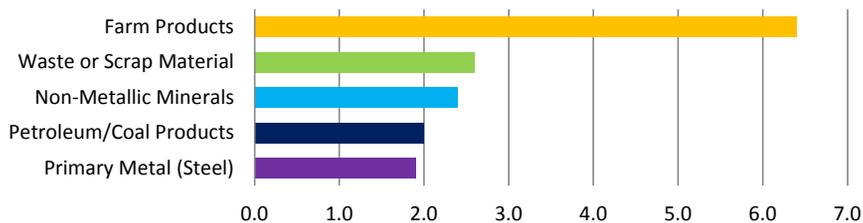
Source: Transearch.

# Inland Waterways and Ports

Arkansas is third in the nation for number of inland waterway miles and is currently served by five navigation systems: the Mississippi River, the McClellan-Kerr Arkansas River Navigation System (MKARNS), the Ouachita-Black Navigation System, the Red River and the White River. The State borders 320 miles of the Lower Mississippi River and also borders or contains more than 600 miles of other commercially navigable waterways. The remaining 940 miles of inland waterways in Arkansas is not capable of moving freight, but much of it is available for recreational boating. River navigation is accommodated by 15 lock-and-dam systems, thirteen of which are on the MKARNS and two on the Ouachita River. There are no lock-and-dam systems on the Mississippi River below St. Louis, and none on the Red River or White River.

Many of Arkansas' major shippers, including Tyson Foods, Riceland Foods and Oakley Grain, rely on waterways to transport their products. It is estimated that 17.4 million tons of goods move on waterways annually in Arkansas. Waterway traffic in Arkansas is expected to increase by 14 percent between 2013 and 2040. Over three-quarters of the goods shipped by waterways fall into one of the following five categories:

**Goods Shipped by Waterways, 2013 (millions of tons)**



The MKARNS is the most heavily used inland waterway in Arkansas, moving over \$4 billion worth of goods annually, representing 70 percent of the inland waterway commodity flows in Arkansas. Increasing the channel depth to 12 feet throughout its expanse would allow for larger, more-cost effective barges to utilize the river, thereby increasing the competitiveness of Arkansas-based businesses. Improvements to roadway and rail access will also enhance operations at the Arkansas inland ports.

## Arkansas Inland Waterways and Ports



In 2015, The U.S. Department of Transportation (USDOT) upgraded the McClellan-Kerr Arkansas River Navigation System (MKARNS) from connector to corridor as part of the Maritime Administration's America's Marine Highway Program. The upgrade in status brings the MKARNS into the same category as other major inland waterways in America and raises the profile of the waterway with the potential to attract additional investment and create additional jobs in Arkansas.



# System Performance

As the transportation systems in Arkansas reach maturity, operational improvements are increasingly important to provide the maximum capacity of the system. Technical analyses and stakeholder engagement conducted during the development of the State Freight Plan identified potential operational improvements for all modes. Specifically, bottlenecks along major freight corridors were identified by analyzing travel-time data and traffic projections from the Statewide Travel Demand Model.

Improvement to Arkansas' freight system has been an on-going effort by public and private entities for many years. One example of an operational improvement is the consolidation of directional movements within the UP Railroad in Arkansas. After acquisition of several other rail companies, UP Railroad was able to assign all of their northbound movements along the Little Rock and Hoxie subdivisions. The southbound movements are located on the Pine Bluff and Jonesboro subdivisions. These consolidations allowed UP Railroad to schedule more than 40 trains per day in each direction.

Analyses are continuing to determine the location and cause of other bottlenecks. Not only are there incidents such as crashes that impact the reliability of major freight routes, but there are also characteristics of the actual traffic flow that lead to slowing and temporary stoppages. ARDOT is studying the National Performance Management Research Data Set to calculate the travel time reliability along major corridors to better prioritize operational and capacity improvements to better serve the freight community. These analyses will be used to establish performance targets as described in the full document.

# Freight Investment Partners

The FAST Act designated a portion of the Federal-aid apportioned funds for freight-related improvements through the National Highway Freight Program. However, that is not the only source of funding that can be used to improve the Nation's freight system. Other sources of funding from the public sector include, but are not limited to, funding from the U.S. Army Corps of Engineers, U.S. Department of Transportation Discretionary Grants, and locally-generated public and private funds.

Many counties and cities have partnered with ARDOT to fund important local transportation investments. Partnerships (federal, state, and local) are extremely important to the economic vitality of Arkansas and will become more common in the future. With needs outpacing available funds, any additional contributions from non-traditional sources will accelerate project development.

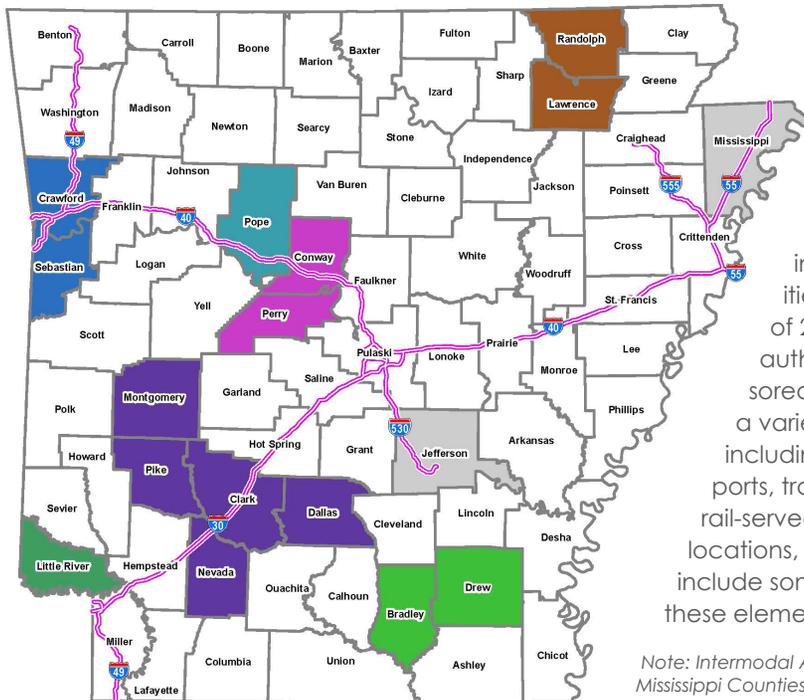
## Intermodal Authorities

Act 690 of 1997, adopted by the Arkansas General Assembly, allowed for the creation of intermodal authorities by two or more contiguous counties or municipalities. These authorities are publicly owned corporations authorized to acquire, equip, construct, maintain,

operate, and fund regional intermodal facilities.

The General Assembly provided an annual funding stream to intermodal authorities under Act 705 of 2017. Intermodal authorities have sponsored or are sponsoring a variety of rail projects, including rail-served river ports, transload facilities, rail-served industrial parks/locations, or locations that include some combination of these elements.

*Note: Intermodal Authorities in Jefferson and Mississippi Counties are currently inactive.*



## Investment Plan

During the development of the Statewide Long Range Intermodal Transportation Plan, four future scenarios were considered. One scenario, Think Locally – Trade Globally, examined the impact of enhanced infrastructure investments to support industry retention and attraction. Investments were proposed along existing freight corridors to add capacity and alleviate freight bottlenecks, generating significant benefits not only to freight movers, but to the general public as well.

As the State Freight Plan moves toward implementation, ARDOT and its freight partners face significant challenges and opportunities. A combination of public and private investment in freight infrastructure will be critical to meeting, and making the most of, these challenges and opportunities.

A fiscally constrained list of freight projects is included in the National Highway Freight Program section of the Statewide Transportation Improvement Program. The identification of these projects was informed by:

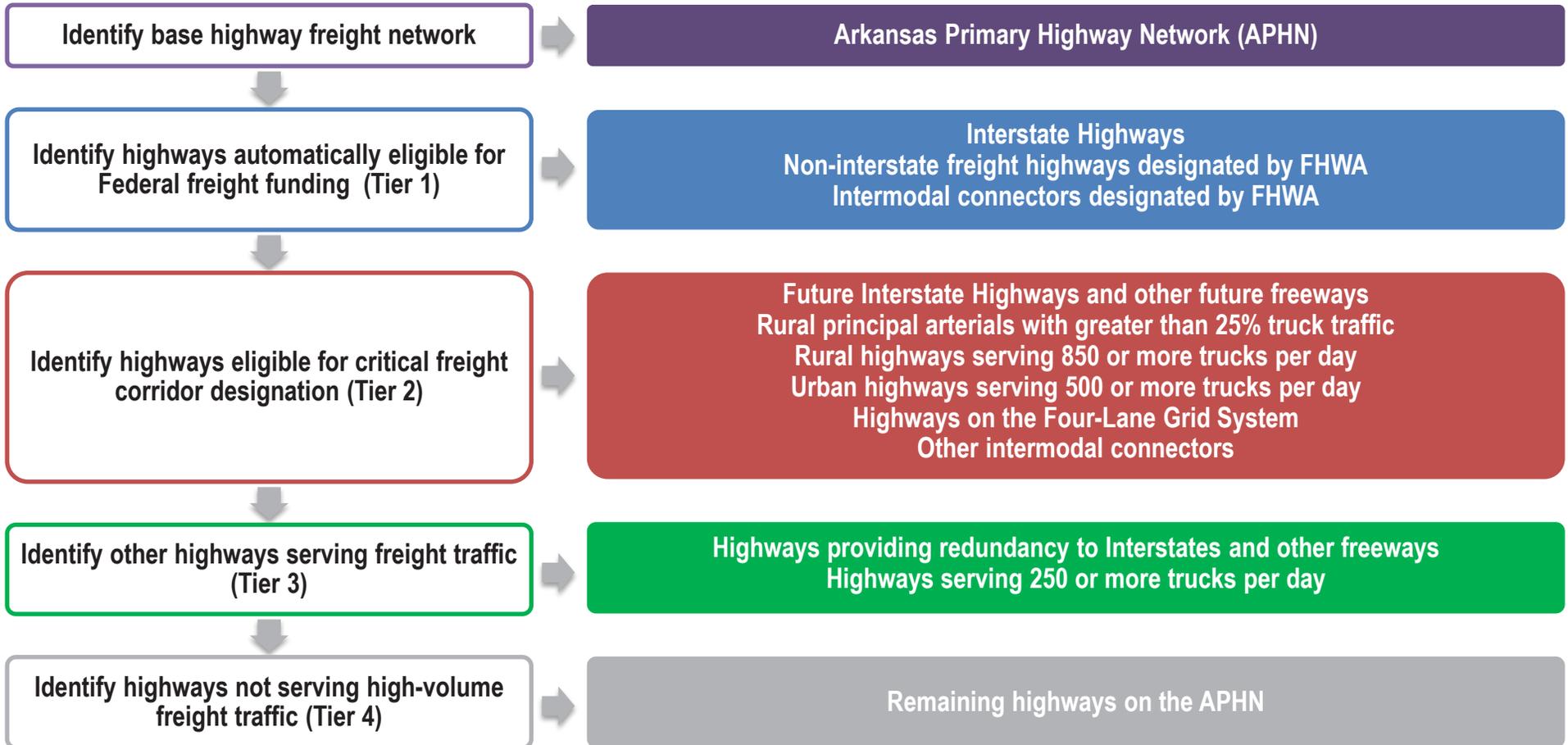
- Growth in freight movement, as well as truck size and weight, will increase roadway congestion and adversely impact bridge and pavement conditions.
- Keeping Arkansas' bridges and pavement in good condition is the most effective way to extend the life of an aging transportation system.
- Increasing options for the efficient movement of people and goods is both necessary and possible to promote Arkansas' economy.

The full State Freight Plan includes an investment plan for freight-related improvements, prioritized using the Goals and Objectives.

# State Highway Freight Network

The National Highway Freight Network (NHFN) was established under the FAST Act to strategically direct Federal freight resources. In Arkansas, the NHFN includes all Interstate Highways, and other important freight routes. ARDOT has the opportunity to designate 150 miles of Critical Rural Freight Corridors (CRFCs) and 75 miles of Critical Urban Freight Corridors (CUFCs) to allow for expanded use of Federal freight funding. To guide the designation of critical freight corridors, ARDOT identified a tiered highway freight network using traffic-count data, the results of previous planning efforts, geospatial data, and other sources of information.

## Methodology for Delineating a Tiered Highway Freight Network



As the State Freight Plan is implemented, ARDOT will continue to work with the State Freight Advisory Committee and other stakeholders to refine these designations, to identify freight routes that are not on the APHN, and to identify first- and last-mile freight connectors.

# Priority Freight Needs

## ***Infrastructure Enhancements***

- Improve resiliency along key, rural freight corridors
- Relieve bottlenecks along urban freight corridors
- Complete the Four-Lane Grid System
- Dredge the MKARNS to 12 feet

## ***Operational Enhancements***

- Preserve existing bridges and highways
- Improve operations and safety on Interstates
- Enhance routing options for commercial vehicles in urban areas
- Improve Transportation Systems Management and Operation including enhanced intelligent transportation systems and driver information systems

## ***Access Improvements***

- Improve farm access roads
- Improve road and rail access to ports
- Improve rail access through coordination with short-line railroads

## ***Development of New Freight Facilities***

- Construct additional inland ports
- Construct transload terminals
- Construct new truck parking areas

# Path Forward

The FAST Act's National Highway Freight Program provides funding for near-term freight projects. Identifying funding for medium-term and long-term freight improvement projects will be a challenge. There are many more priority freight improvement projects identified in Arkansas than there are currently available funds for implementation.

Private sector stakeholders are potential sources of freight improvement projects. UP Railroad has invested \$588 million into its Arkansas freight rail infrastructure, and continued investment is expected to occur on a similar scale into the future. Private sector stakeholders may also express interest in constructing transload terminals, additional inland ports, and new truck parking areas.

The U.S. Army Corps of Engineers operates and maintains the inland waterways in the U.S. and would be the lead agency on deepening the McKlellan-Kerr Arkansas River Navigation System and improving the navigation status of the Red River. The 2017 fiscal year annual budget for the Corps is \$4.6 billion, which is used for flood and storm damage, commercial navigation, and aquatic ecosystem restoration across the entire country, so there are many other competing projects for those funds.

The U.S. Department of Transportation operates discretionary grant programs that have provided millions of dollars for freight projects. Recent ARDOT grant requests have not been funded. However, a strategic vision and strategy for freight investments across all modes and sectors will place ARDOT and its partners at a competitive advantage when discretionary grants are awarded.

The Governor's Working Group on Highway Funding identified funding options that potentially could be directed for freight improvement projects. These options included increasing the motor fuel tax, transferring road-user revenue from general revenue, and eliminating the sales tax exemption for motor fuel and diesel. At the Federal level, there are ongoing discussions on increasing funds for infrastructure and depending on how these discussions proceed, there is also the potential for additional funding of freight improvement projects.

To stay up to date on freight planning efforts at the  
Arkansas Department of Transportation, visit us at:

**[wemovearkansas.com](http://wemovearkansas.com)**

# Acknowledgments

Arkansas Department of Transportation Staff

## **State Freight Advisory Committee Members:**

American Society of Civil Engineers - Arkansas Section

Arkansas Agriculture Department

Arkansas Department of Aeronautics

Arkansas Department of Environmental Quality

Arkansas Economic Development Commission

Arkansas Farm Bureau

Arkansas Good Roads and Transportation Council

Arkansas Highway Police

Arkansas State Chamber of Commerce

Arkansas Trucking Association

Arkansas Waterways Commission

Genesee and Wyoming Railroad Services, Inc.

Federal Highway Administration - AR Division

FMSCA - Arkansas Division

Maverick USA, Inc.

Northwest Arkansas Regional Transportation Study

Port of Little Rock

Southeast Arkansas Economic Development District, Inc.

Union Pacific Railroad

US Army Corps of Engineers - Little Rock District





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Free language assistance for Limited English Proficient individuals is available upon request.

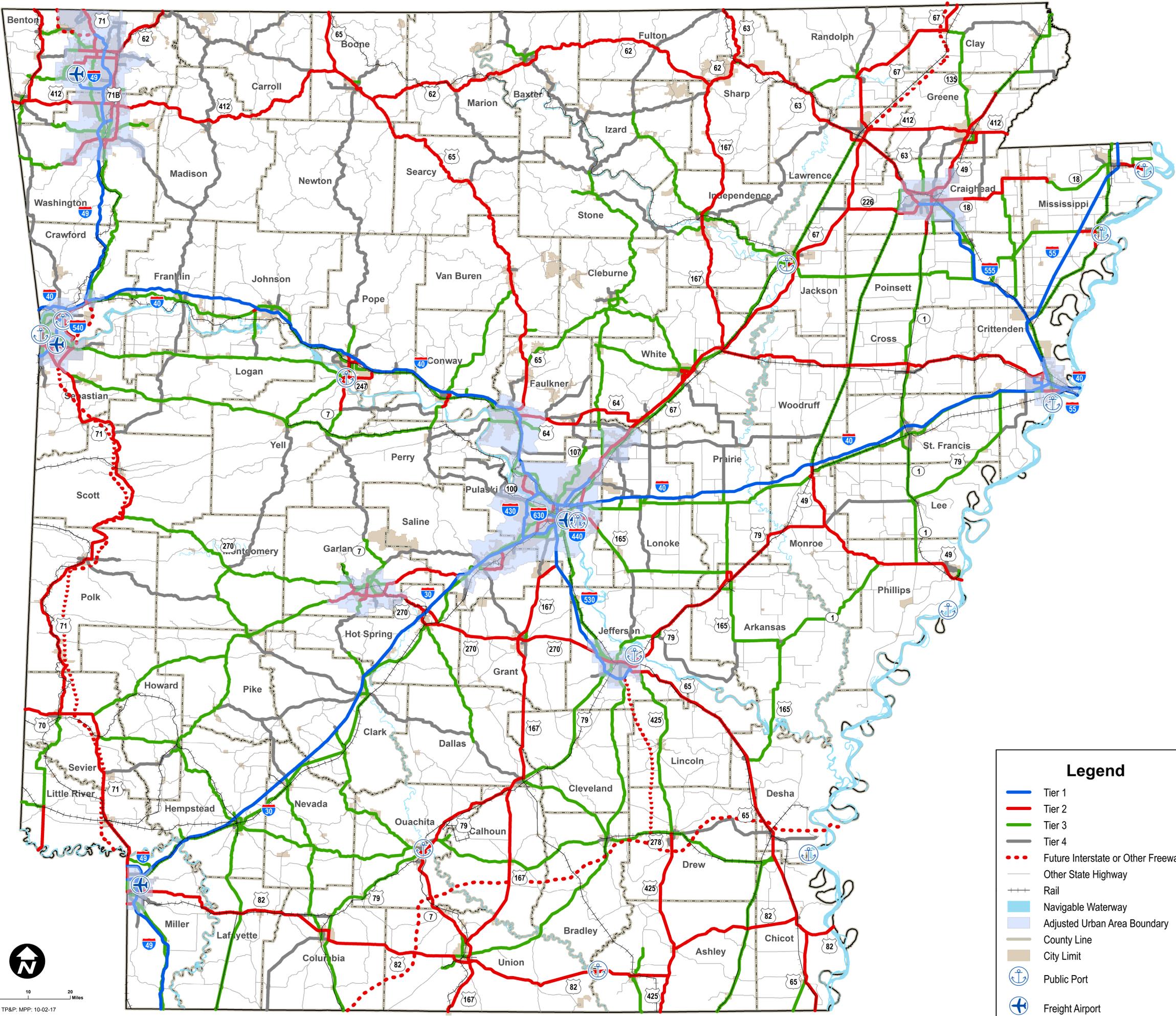
This notice is available from the ADA/504/Title VI Coordinator in large print, on audiotape and in Braille.



October 2017



# Arkansas Department of Transportation Draft Arkansas State Freight Network



**Legend**

- Tier 1
- Tier 2
- Tier 3
- Tier 4
- ⋯ Future Interstate or Other Freeway
- Other State Highway
- + Rail
- Navigable Waterway
- Adjusted Urban Area Boundary
- County Line
- City Limit
- ⚓ Public Port
- ✈ Freight Airport



0 10 20 Miles  
TP&P: MPP: 10-02-17

