



# 2015

# Arkansas State Rail Plan

## Executive Summary



Arkansas State Highway and Transportation Department  
Transportation Planning and Policy Division

August 2016



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# Abbreviations

AASHTO.....	American Association of State Highway and Transportation Officials	FP .....	Fordyce & Princeton Railroad
AAR .....	Association of American Railroads	FRA.....	Federal Railroad Administration
AEDC .....	Arkansas Economic Development Commission	FSR .....	Fort Smith Railroad
AHTD .....	Arkansas State Highway and Transportation Department	HSIPR .....	High-Speed Intercity Passenger Rail
AKMD .....	Arkansas Midland Railroad	HSR.....	High-Speed Rail
ALM.....	Arkansas Louisiana & Mississippi Railroad	IRPLP .....	International Rail Port Logistics Park Project
AM.....	Arkansas & Missouri Railroad	ITTS .....	Institute for Trade and Transportation Studies
ARS.....	Arkansas Southern Railroad	KCS.....	Kansas City Southern Railway
ASR.....	Arkansas Short Line Railroads, Inc.	KRR.....	Kiamichi Railroad
ASLRR.....	American Short Line and Regional Railroad Association	LNW .....	Louisiana & North West Railroad
AVO .....	Average Vehicle Occupancy	LRPA.....	Little Rock Port Authority Railroad
AWC .....	Arkansas Waterways Commission	LRWN .....	Little Rock & Western Railway
BCG .....	Boston Consulting Group	LOS.....	Level of Service
BNSF.....	BNSF Railway	M&LR .....	Memphis & Little Rock Railroad
BTU.....	British Thermal Unit	MNA.....	Missouri & Northern Arkansas Railroad
BXN .....	Bauxite & Northern Railroad	MPO .....	Metropolitan Planning Organizations
C&S.....	Camden & Southern Railroad	MPP .....	Multimodal and Project Planning Section
CTC .....	Centralized Traffic Control	NAAQS .....	National Ambient Air Quality Standards
CAIDC .....	Camden Area Industrial Development Corporation	NEARIFA.....	Northeast Arkansas Regional Intermodal Facilities Authority
COFC.....	Container-on-Flatcar	NHPN .....	National Highway Planning Network
DoD .....	U.S. Department of Defense	NLA .....	North Louisiana & Arkansas Railroad
DQE .....	DeQueen & Eastern Railroad	OUCH .....	Ouachita Railroad
DR.....	Dardanelle & Russellville Railroad	PNW.....	Prescott & Northwestern Railroad
DVS.....	Delta Valley & Southern Railway	PIP.....	Performance Improvement Plan
EACH .....	East Camden & Highland Railroad	PRIIA .....	Passenger Rail Investment and Improvement Act
EDW .....	El Dorado & Wesson Railway	PTC.....	Positive Train Control
EIA.....	U.S. Energy Information Administration	RITA.....	Regional Intermodal Transportation Authority of Western Arkansas
FAF .....	Freight Analysis Framework	RRIF.....	Railroad Rehabilitation and Improvement Financing Program
FAF3 .....	Freight Analysis Framework-3		
FAK.....	Freight-All-Kinds		
FGRS.....	Friday-Graham Rail Spur		
FHWA .....	Federal Highway Administration		

RSIA .....	Rail Safety Improvement Act
SAEDD .....	Southeast Arkansas Economic Development District
SCHSRC.....	South Central High-Speed Rail Corridor
SCORT.....	Standing Committee on Rail Transportation
STB .....	Surface Transportation Board
STRACNET ...	Strategic Rail Corridor Network
TC .....	Transport Canada
TIFIA .....	Transportation Infrastructure Finance and Innovation Act
TIGER.....	Transportation Investment Generating Economic Recovery
TIH.....	Toxic Inhalation Hazards
TIP .....	Transportation Improvement Program
TOE.....	Texas, Oklahoma & Eastern Railroad
TPP .....	Transportation Planning and Policy Division
TSA .....	Transportation Security Administration
UP.....	Union Pacific Railroad
USDOT .....	U.S. Department of Transportation
VMT.....	Vehicle Miles Traveled
WSR.....	Warren & Saline River Railroad

# Executive Summary

## Purpose of the Arkansas State Rail Plan

Arkansas Act 192 of 1977 designated the Arkansas Highway and Transportation Department (Department) to serve as the State's multimodal transportation planning agency responsible for coordinating the development of statewide transportation plans, including the Arkansas State Rail Plan. In 2008, the United States Congress passed the Passenger Rail Investment and Improvement Act (PRIIA), which requires each state to have an approved rail plan as a condition of receiving future federal rail funding for either passenger or freight improvements.

In 2011, the Arkansas Highway Commission authorized the Department to initiate the update of the 2002 Arkansas State Rail Plan through Minute Order 2011-173. This Plan has been prepared to conform to the requirements of PRIIA. It has also been prepared to reflect changes that have occurred to the Arkansas rail network since the last state rail plan in 2002.

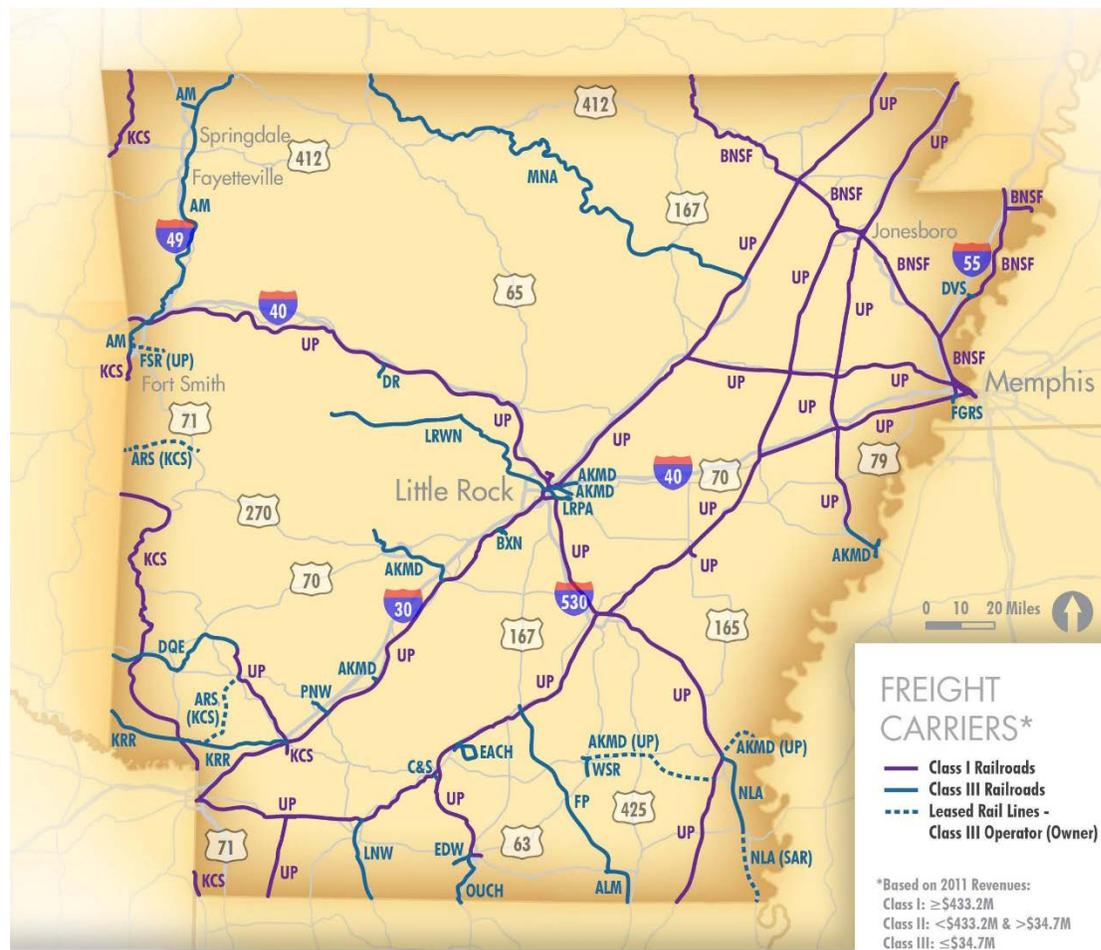
The Plan focuses on freight rail, intercity passenger rail, and commuter rail. Freight rail focuses on the movement of goods. "Intercity passenger rail" refers to passenger rail transportation between metropolitan areas. "Commuter rail" refers to passenger rail transportation in a metropolitan area, between a central city and its suburbs, with morning and evening peak period operations and running on a railroad right of way. "Commuter rail" is usually considered mass transit service.

## Arkansas Rail System

Arkansas has 2,662 miles of active rail lines, predominantly owned by private companies. The few exceptions are several industrial spurs that are owned by port authorities or municipalities, as well as a segment of rail line owned by the Southeast Arkansas Economic Development District (SEAEDD). Rail lines in Arkansas are primarily used for hauling freight. There are no dedicated passenger rail corridors within Arkansas. The single passenger rail service that operates within Arkansas, the Amtrak Texas Eagle Service, operates over rail lines owned by a freight railroad company, the Union Pacific Railroad.

There are three classifications of railroads: Class I, II, and III. Per definition by the United States Surface Transportation Board (STB), Class III or short line railroads are those with annual operating revenues of \$37.4 million or less. Railroads with revenues between \$37.4 and \$467.0 million are classified as Class II railroads and are considered regional operators. Class I railroads are those with revenues of \$467.0 million or more. Currently, no Class II railroads operate in Arkansas. Short line railroads usually play a gathering role in the freight rail system. They originate and terminate individual or groups of railcars and then make railcars available to Class I rail carriers. The Class I carriers then provide long-distance transportation, carrying cars between regional markets across North America.

Figure ES–1. Arkansas Freight Rail System



<b>RAILROADS</b>	AKMD Arkansas Midland Railroad	DVS Delta Valley & Southern Railway	LRWN Little Rock & Western Railway
	ALM Arkansas, Louisiana & Mississippi Railroad	EACH East Camden & Highland Railroad	MNA Missouri & Northern Arkansas Railroad
	AM Arkansas & Missouri Railroad	EDW El Dorado & Wesson Railway	NLA North Louisiana & Arkansas Railroad
	ARS Arkansas Southern Railroad	FGRS Friday-Graham Rail Spur	OUCH Ouachita Railroad
	BNSF BNSF Railway	FP Fordyce & Princeton Railroad	PNW Prescott & Northwestern Railroad
	BXN Bauxite & Northern Railroad	FSR Fort Smith Railroad	SAR Southeast Arkansas Economic Development District
	C&S Camden & Southern Railroad	KCS Kansas City Southern Railway	UP Union Pacific Railroad
	DQE DeQueen & Eastern Railroad	KRR Kiamichi Railroad	WSR Warren & Saline River Railroad
	LNW Louisiana & North West Railroad	LRPA Little Rock Port Authority Railroad	
	DR Dardanelle & Russellville Railroad		

Of the 2,662 miles of active rail lines in Arkansas, the breakdown of rail operations are as follows:

- 1,327 miles operated by the Union Pacific Railroad (UP), a Class I railroad
- 198 miles operated by the Burlington Northern – Santa Fe Railroad (BNSF), a Class I railroad
- 158 miles operated by the Kansas City Southern Railroad (KCS), a Class I railroad
- 979 miles operated by 23 short line railroads

The Arkansas rail network is projected to carry 167 million tons of freight in 2015, of which 70 percent will be passing through the state moving between other states. Rail transportation is primarily used to carry heavy, bulky products long distances, in contrast to trucking which

dominates the transportation of high value goods and freight moving over short distances. Coal has traditionally been by far the highest tonnage commodity carried on the Arkansas rail network, and is projected to account for 57 percent of tons terminating in the state in 2015 and 36 percent of the tons passing through the state. However, strict new environmental regulations on coal-fired power plants have created uncertainty as to future volumes of coal movements.

The largest destinations of rail freight originating in Arkansas are Texas, Louisiana, and California. Much of the freight shipped to California is containerized freight from the UP intermodal ramp in Marion, while much of the freight shipped to Texas and Louisiana consists of gravel. The largest origins of freight shipped to Arkansas are Wyoming (primarily coal), California (intermodal containers to Marion), Iowa, Nebraska and Illinois (grain and food-related), and Texas (much of which relates to chemicals or plastics). Figure ES-2 displays a summary of originating and terminating freight traffic to and from Arkansas.

**Figure ES-2: Summary of Freight Originating and Terminating in Arkansas by Commodity Tonnage**

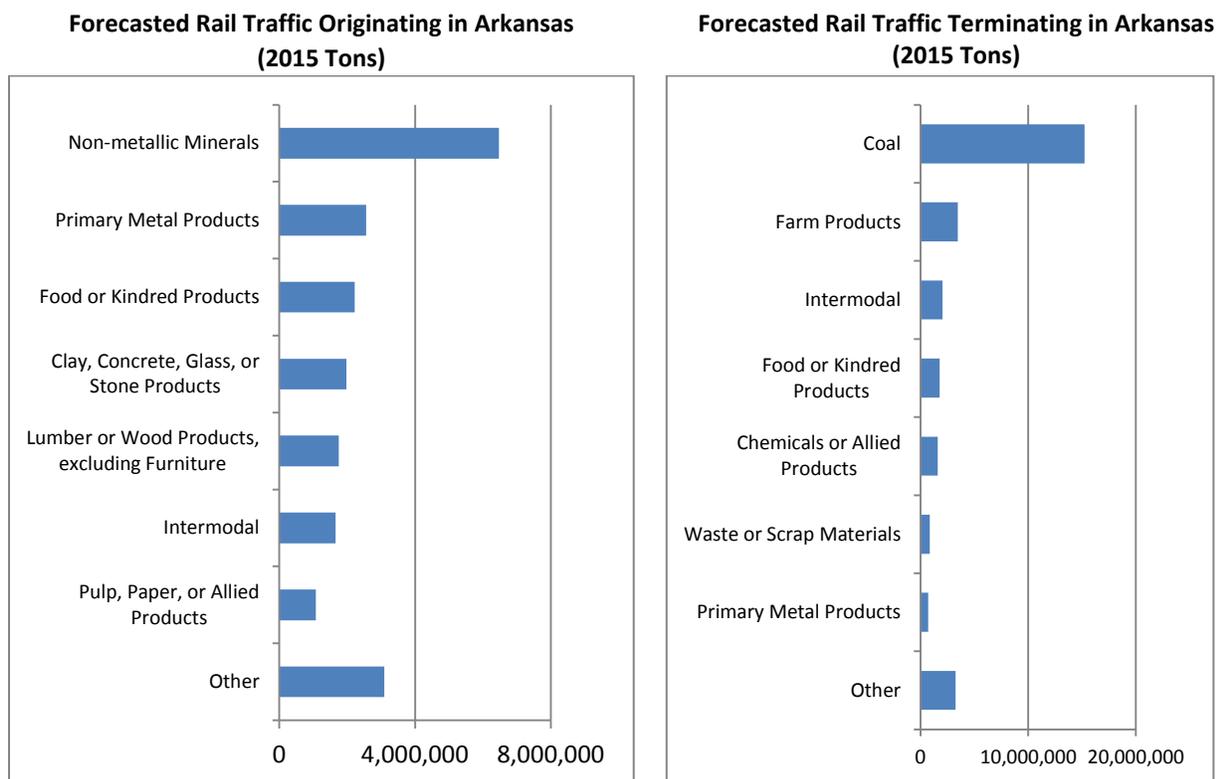
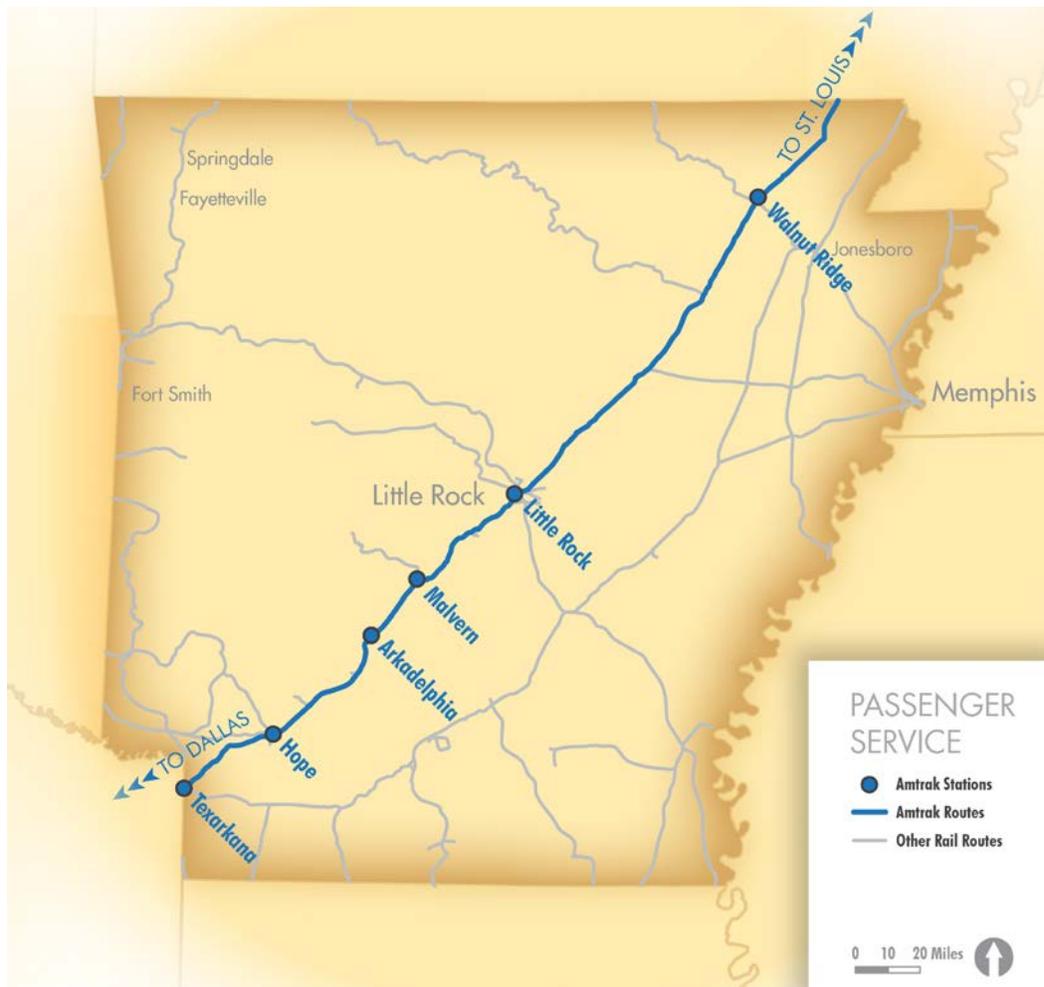


Figure ES-3. Texas Eagle Route through Arkansas



Passenger rail service in Arkansas is provided by the Amtrak, Texas Eagle service, a long-distance train that runs between Chicago and Los Angeles with a transfer at San Antonio, Texas. A single train in each direction passes through Arkansas each day, making six stops each at night. The northbound train makes its first stop in Arkansas at Texarkana at 8:43 PM and makes its last stop in Arkansas at Walnut Ridge at 1:41 AM. The southbound train makes its first stop in Arkansas at Walnut Ridge at 12:37 AM and its last stop in Texarkana at 5:58 AM.

By far the most heavily used Arkansas station on the Texas Eagle route is in Little Rock, accounting for 56 percent of passengers who got on or off Amtrak trains in Arkansas in 2013. The most common origins and destinations for travelers to and from Arkansas are Chicago and Saint Louis. These two stations account for over 38 percent of the ridership at Arkansas Amtrak stations. Dallas, Houston, and San Antonio are also significant origins/destinations.

In addition to inconvenient arrival and departure times, the Texas Eagle service is slower and less reliable than automobile travel. As an example, about six hours are required to drive between Little Rock and Saint Louis while seven hours and 40 minutes are required on Amtrak. Little Rock to Chicago is a ten hour drive but is over 14 hours on Amtrak. During the third quarter of 2013,

Texas Eagle trains were only on time about 54 percent of the time. On the other hand, Amtrak by some measures is a less expensive mode of travel than automobile travel, at least when compared with single occupancy automobiles.

Despite its limitations, Texas Eagle ridership to/from Arkansas has significantly increased in recent years. The number of passengers boarding and getting off Amtrak trains increased from 20,789 in 2003 to 41,358 in 2013. The increase in passengers using Amtrak in Arkansas nearly doubled in this period while the State's population grew roughly nine percent.

## Railroad Funding in Arkansas

There is no dedicated, reliable public funding source for rail in Arkansas. Traditionally, freight railroads have been responsible for paying the cost of operating, maintaining, and performing any upgrades to their rail lines, structures, and equipment. The cost of the Amtrak Texas Eagle service is paid through ticket revenues and subsidies from the federal government.

Although public funding is inconsistent, there are examples of public funds being used to pay for projects involving rail in Arkansas, such as:

- The U.S. Federal Highway Administration (FHWA) funds about \$3.7 million worth of improvements to roadway/rail grade crossings per year.
- Additional discretionary funding has been provided by FHWA for crossing improvements within High Speed Rail Corridors.
- The U.S. Department of Transportation (USDOT) Transportation Investment Generating Economic Recovery (TIGER) program has funded about \$12 million in rail projects since the program began in 2009, including a rail line improvement/extension project in West Memphis and design/environmental work for a roadway/rail grade separation project in Jonesboro.
- The Federal Railroad Administration (FRA) Rail Line Relocation and Improvement program has funded rail projects, such as the rehabilitation of an Arkansas Midland rail line, and rehabilitation of bridges on the Ouachita Railroad. This program is currently unfunded.
- State funds have from time to time been used to fund rail projects. Generally, these are provided by the General Improvement Fund (GIF), which is contingent upon actual versus expected state general revenues in any given year.
- The U.S. Economic Development Administration (EDA) has sometimes provided funding for Arkansas rail projects through its Public Works program. One example is the partial funding for rehabilitation of the North Louisiana and Arkansas Railroad.
- The Delta Regional Authority has helped to fund at least four projects in eastern Arkansas since 2002, providing around \$200,000 for each project.
- The federal government's low interest loan program, the Railroad Rehabilitation & Improvement Financing (RRIF) was used by Arkansas & Missouri Railroad to purchase property from BNSF in 2003.

Generally, public investment in railroad infrastructure or passenger services is justified by public benefits that result from rail such as:

- Passengers and freight that move by rail do not move by highway and thereby decrease highway maintenance expense, required investment, and congestion.
- Rail is a relatively fuel efficient mode of transportation and thereby generates less greenhouse gas and other emissions.
- Rail is a relatively safe mode of transportation, causing fewer fatalities and injuries relative to highway transportation.

Rail can also support economic development by lowering transportation costs for existing and prospective companies in Arkansas. Rail can also provide a vital transportation link to rural areas.

## **Rail Issues and Opportunities/ Initiatives**

Based on data gathered and discussions with stakeholders, a number of issues and opportunities, as well as potential initiatives to address those issues and opportunities, have been identified.

### ***Passenger Rail Initiatives***

As described above, the Texas Eagle service is slow compared to automobile travel, to some degree unreliable, and provides relatively infrequent service at inconvenient times of the day. Furthermore, stakeholders have reported that some stations are in a poor state of repair.

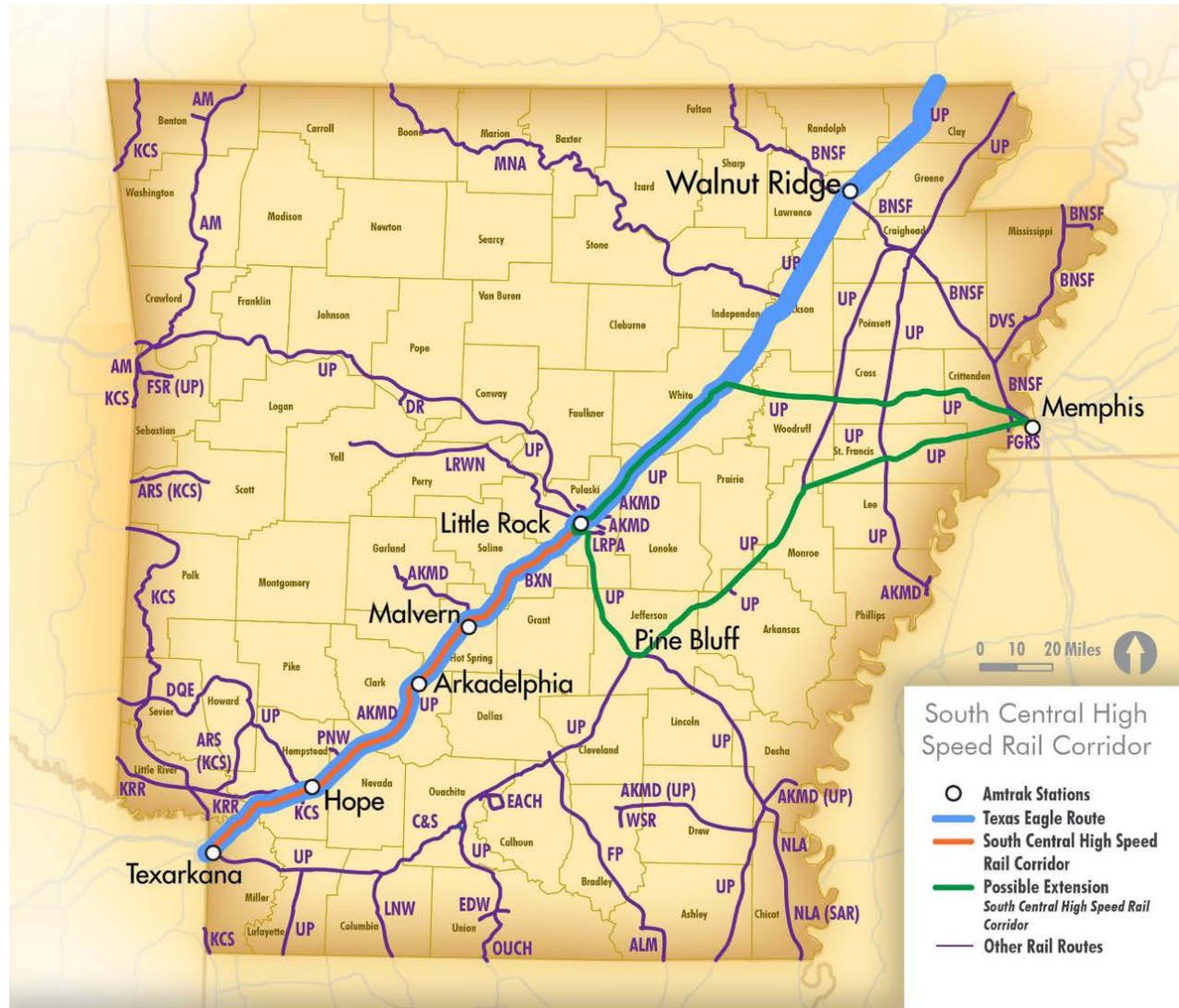
The U.S. Congress has designated a series of High-Speed Rail Corridors, which would be the focus of investment for improving intercity passenger rail train speeds. A portion of one of these corridors, the South Central High Speed Rail Corridor (SCHSRC), lies between Dallas and Little Rock through Texarkana. As part of the PRIIA legislation, the U.S. Congress requested an investigation of whether the SCHSRC could be extended to Memphis from Little Rock. Arkansas is currently studying the possibility of improving service between Texarkana and Little Rock, as well as the feasibility of passenger rail service between Little Rock and Memphis. This effort is collectively referred to as the Arkansas Passenger Rail Study. The study is funded by about \$0.4 million from the FRA, matched by about \$0.4 million from AHTD, and \$0.1 million from the Arkansas General Improvement Fund.

The Arkansas Passenger Rail Study focuses on passenger rail service on existing freight railroad lines. Most freight trains operate at speeds below 50 miles per hour (MPH). This could limit the top speeds contemplated for passenger rail service. It would be impossible, for example, for 160 MPH passenger trains to share a busy freight corridor with many slow-moving freight trains. More likely, the focus of this study will be on achieving travel speeds competitive with automobile travel. In this sense, the term “high-speed rail” is misleading, since it conjures images of bullet trains in Europe or Japan, which is not what is being contemplated.

While Arkansas currently pays nothing for the existing Amtrak Texas Eagle service, if the state were to add or modify intercity passenger rail service, the state would need to compensate Amtrak for the service. In contrast to freight service, passenger rail service is not self-supporting. Not only

would any infrastructure improvements need to be publicly-funded, but Arkansas would need to pay for the usage of the passenger rail equipment and cover any operating losses.

Figure ES-4. South Central High-Speed Rail Corridor



RAILROADS

AKMD	Arkansas Midland Railroad	DVS	Delta Valley & Southern Railway	LRWN	Little Rock & Western Railway
ALM	Arkansas, Louisiana & Mississippi Railroad	EACH	East Camden & Highland Railroad	MNA	Missouri & Northern Arkansas Railroad
AM	Arkansas & Missouri Railroad	EDW	El Dorado & Wesson Railway	NLA	North Louisiana & Arkansas Railroad
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DR	Dardanelle & Russellville Railroad	LNW	Louisiana & North West Railroad		
		LRPA	Little Rock Port Authority Railroad		

During the development of this Plan, a number of stakeholders expressed interest in additional passenger rail corridors. The most frequent requests were for passenger rail services between

Little Rock and Hot Springs or for service from central Arkansas to northwest Arkansas. From a purely demographic perspective, Northwest Arkansas would be a logical location for passenger rail service, since the area around Bentonville and Fayetteville is forecast to become the most populous area in Arkansas, surpassing the Little Rock metropolitan area in the coming decades.

## **Safety/Crossings**

While rail is a relatively safe mode of transportation when compared to highways, railroad transportation nevertheless still generates risks. Typically, risks include the potential for collisions at roadway/rail grade crossings; trespassers, others being struck by trains on railroad right of ways; and general occupational hazards of railroad employees doing their jobs. Public agencies in Arkansas are best equipped to mitigate risks at roadway/rail grade crossings, since these are the areas over which agencies have the most control. A total of 2,464 public roadway/rail grade crossings are located in Arkansas, of which about 35 percent have train-activated signals (flashing lights, and/or gates alert drivers that a train is coming), while the other 65 percent rely on signage, such as crossbucks to warn motorists of the crossing.

According to FRA statistics, a total of 144 crashes occurred at Arkansas crossings between 2012 and 2014, resulting in 54 injuries and 18 fatalities. The accident rates at Arkansas crossings have trended downward. For example, FRA data reports 225 accidents, 102 injuries, and 29 fatalities at Arkansas crossings between 2005 and 2007, a higher rate than the more recent years of 2012 to 2014. Evidence also suggests that Arkansas may lag behind other parts of the country in crossing safety. For example, the 11 fatalities at roadway/rail grade crossings in Arkansas represent about 2.5 percent of all roadway/rail grade crossing fatalities nationwide between 2012 and 2013. However, vehicle miles traveled (VMT) in Arkansas were only about 1.1 percent of national VMT during that time period. The frequency of fatalities at crossings was higher than the national average on a per VMT basis. Arkansas also lags in crossing protection technology. Fifty-two percent of roadway/rail grade crossings nationwide have train-activated signals compared to 35 percent in Arkansas. The *Arkansas Strategic Safety Highway Plan* set a goal of reducing the number of annual railroad crossing fatalities to six or fewer by 2017.

Crossings are not only a safety concern, but also an inconvenience. There is a cost to the time that motorists must wait for trains to clear crossings. Trains in many cases must also slow for crossings. There are numerous instances throughout Arkansas of trains blocking crossings for extended periods of time.

Arkansas continues to address the issue of roadway/rail grade crossings through a number of means.

- **Crossing improvements.** Arkansas upgrades the safety countermeasures, such as installing train-activated signals, at eight to ten crossings per year on average.
- **Grade separations.** Grade separations consist of the construction of an underpass or an overpass, so that roadways and rail lines are vertically separated. Grade separations usually cost above \$15 million to complete and can cost significantly more. AHTD completes on average one rail/grade separation per year.
- **Crossing closure.** If feasible, crossings can be closed, thus removing their associated risk.

- Siding extensions. Sometimes railroads can avoid blocking crossings over extended periods of time if the location where trains wait can be moved so that crossings are not blocked.
- Improved passive measures. In addition to active control devices that give advance notice of the approach of a train, passive control devices indicate that a crossing is present and that a highway user must look for an approaching train and take appropriate action. These include crossbucks, stop signs, approach warning signs, pavement markings, etc. The USDOT *Manual on Uniform Traffic Control Devices for Streets and Highways* provides guidance on appropriate passive measures. AHTD is working to ensure that passive measures at crossings in the state meet these standards.
- Public Education. Most accidents at crossings happen as the result of driver behavior. According to data by the FRA between January 1999 and July 2015, 92 percent of crossing accidents in Arkansas have resulted when drivers did not stop at crossings, stopped on the crossing, stopped and then proceeded over the crossing, or went around crossing gates. Operation Lifesaver is a national nonprofit organization whose mission is to end collisions, injuries and deaths at roadway/rail grade crossings and on rail property, through public education and awareness of rail safety.
- Improved crossing safety on passenger rail routes. Crossing improvements are a component of the Arkansas Passenger Rail Study. If passenger service were to be extended from Little Rock to Memphis, or if passenger rail service between Texarkana and Little Rock were to be improved, commensurate improvements to roadway/rail crossings on the corridor would be required.

Some communities in Arkansas are essentially bisected by railroad tracks, and roadways in these communities cross tracks at numerous locations. In these cases, a “corridor” approach to addressing crossing issues can be established, where a combination of approaches are used to reduce the risk and inconvenience of crossings.

Crossing safety improvements in Arkansas are primarily funded through the FHWA Rail-Highways Crossing (Section 130) Program. Some states fund crossing improvements beyond the FHWA program. Other states also actively enforce state regulations for crossing safety, in areas such as maintaining sight lines to crossings (enables motorists to see trains approaching), maintaining pavement markings, etc. Based upon the relatively high risks of crossings in Arkansas, the state could consider increasing the level of resources devoted to crossing issues, depending upon future funding capacity.

Roadway/rail crossings are not the only safety concern within Arkansas. More than five percent of carloads of rail nationwide are carrying hazardous materials, including about 75,000 carloads of toxic inhalant substances (TIH).<sup>1</sup> Railroad transportation of hazardous materials has come under increased scrutiny as of 2015 due to the growth of crude oil shipments by rail, which increased from 9,500 carloads nationwide to 540,383 carloads in 2014.<sup>2</sup> As the railroad industry points out,

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<sup>1</sup> David Hunt, David Friedman, Mark Meketon, Carl Van Dyke, “Transporting Hazardous Materials by Rail: Identifying Feasible, Lower-Risk Routes,” *TR News*, May-June 2013.

<sup>2</sup> Association of American Railroads, *Moving Crude Safely by Rail*, July 2015.

99.99 percent of carloads since 2000 have arrived at their destination without incident.<sup>3</sup> The railroad industry has sought to minimize risks by routing certain traffic away from high risk areas, voluntary increased inspections and speed limits on trains carrying hazardous materials, as well as general investment in infrastructure to reduce the risks of derailments. In May 2015, the U.S. Department of Transportation (USDOT) has promulgated new requirements for high hazard flammable trains. The rule,

- presented new standards for tank cars, plus required retrofitting for older tank cars;
- new brake standards for certain trains;
- new operational protocols for trains transporting large volumes of flammable liquids, such as routing requirements, speed restrictions, information for local governments; and
- better classification standards for energy products placed into transport.

### ***Rail Corridor Preservation***

The number of route miles of the U.S. railroad network has generally declined since reaching its peak in 1916. Decreases were highest in the 1970s due the industry's financial crisis during that decade, and in the 1980s due to railroads' ability to divest unprofitable lines per industry deregulation following the passage of the Staggers Rail Act of 1980. In many parts of the country, the rail network has generally stabilized, but in recent years, some relatively significant segments of the Arkansas rail network have either been threatened or abandoned. The abandonment of the 52 mile Caddo Valley Railroad was finalized in late 2014. The Delta Southern Railroad filed to abandon its line between McGehee, Arkansas, to Lake Providence, Louisiana in 2008 and 2011. The Arkansas Short Line Railroads Inc., the Southeast Arkansas Economic Development District (SAEDD), and the Lake Providence Port Commission purchased the 62 mile rail line before it could be abandoned. A major effort is currently underway to rehabilitate this line. A number of measures could address the issue of abandonment in the future:

- Develop a state rail corridor preservation policy;
- Establish a fund to support purchases of at-risk rail lines by third parties;
- Establish a legal/funding basis whereby the state can acquire rail corridors that would otherwise be abandoned;
- Provide grant or loans to support short line infrastructure investment to prevent their operations from declining to such an extent that continued operations are at risk;
- Reduce the costs to rail carriers of owning inactive rail corridors;
- Establish a rail-banking program (This is a legal means of maintaining an intact rail corridor. Rather than being abandoned, the corridor is assigned an "interim use" status, as a recreational trail);
- Use state law to discourage full abandonment of rail corridors, if such a law would be consistent with the state constitution.

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<sup>3</sup> Ibid.

## ***Rail and Economic Development***

Stakeholders consulted for this Rail Plan have stressed that rail can help drive economic development in Arkansas. Rail access can help attract employers to the state and improve/maintain the competitiveness of employers currently within the state. For many companies, the landed or total cost of receiving or shipping goods is a key consideration in location decisions. Rail can help to reinforce competitive advantages of Arkansas as a business location, by reducing costs and providing transportation access to material resources. Rail can be particularly important to rural communities that produce raw materials but do not have high-capacity highway networks because of their remote location. Some initiatives that have been proposed or are underway to improve rail's role in economic development in Arkansas include:

- Cataloguing developable rail-served sites, particularly on low-density rail lines;
- Mapping of rail assets and raw materials;
- Developing and disseminating a handbook on multimodal facilities (currently underway);
- Evaluating transload facility feasibility and location guide;
- Creating a logistics directory for the State of Arkansas;
- Complete industrial rail access projects (a number of specific projects are presented in the investment program of this Rail Plan);
- Establishing an industrial rail access funding mechanism that can receive applications from any existing or new business.

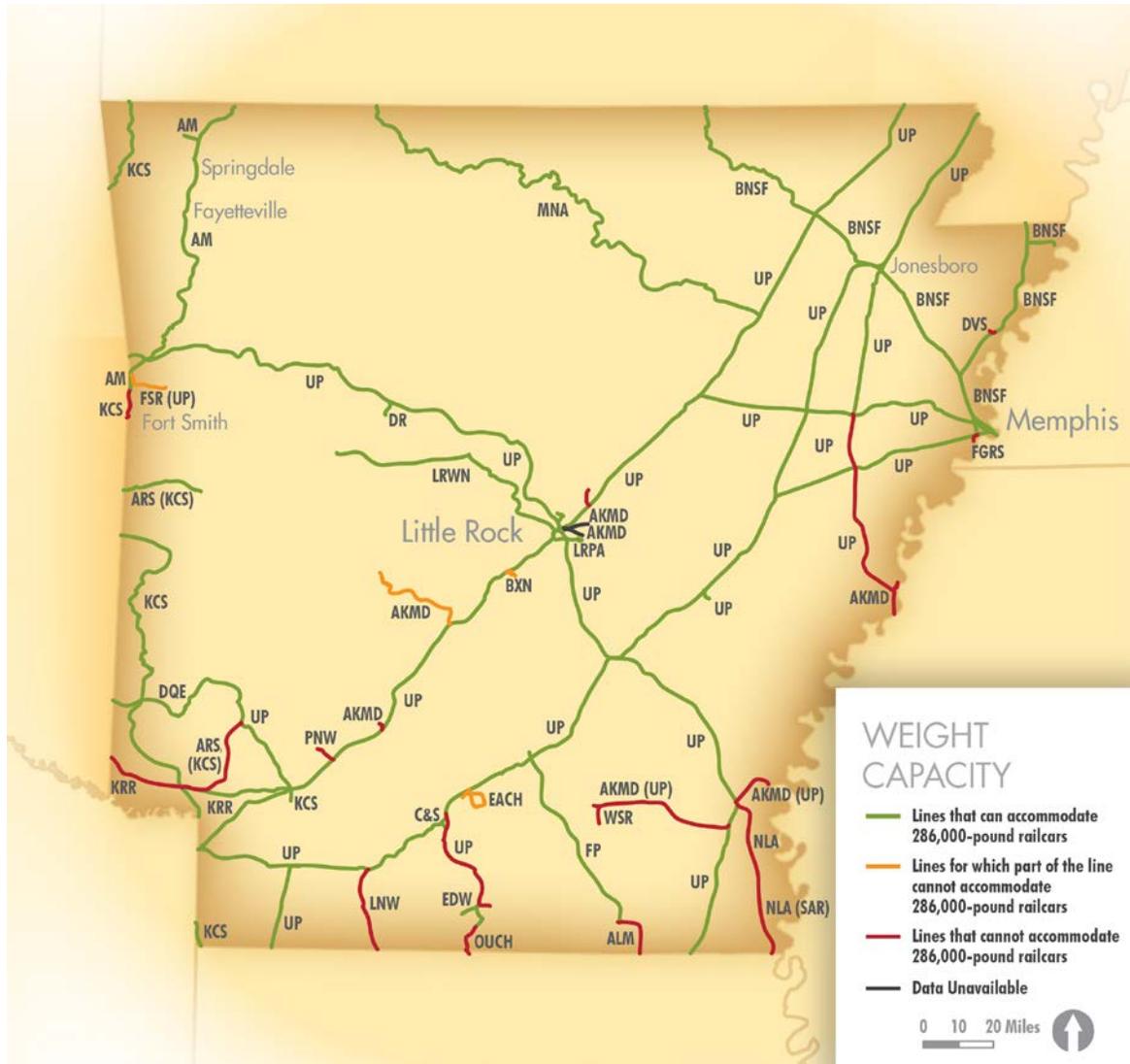
## ***Rail Line Condition, Rail Line Rehabilitation***

Currently, many of the Arkansas short line railroads are in a poor state of repair. Railroad operations are capital intensive, and track maintenance requires large investments in materials, equipment and construction labor on a regular basis. When traffic declines and revenues are marginal, maintenance often is deferred and maintenance requirements accumulate. Many short line railroads were created from rail lines previously owned by Class I railroads, which deferred maintenance for years before selling the lines. Two hundred and eighty-six miles of rail line in Arkansas are rated by the FRA as having an "excepted" track condition, which means that these track segments are in poor state of repair and in need of upgrade. Five hundred and forty-five miles of rail line are limited to ten MPH or less for freight operations. This slow speed of operations may hinder the competitiveness of rail services offered. The total mileage operated by Class III railroads is 979.

When rail lines cannot accommodate the industry standard 286,000-pound railcars, shippers must "light load" their railcars or use smaller cars, a practice that is inefficient. Thirteen of the Arkansas short line railroads have limited capacity to haul industry standard 286,000-pound carloads. A total of 396 track miles in Arkansas are unable to handle 286,000-pound railcars. Of these, 310 miles are on short line railroads, and 86 miles are on rail lines owned by Class I carriers. These restrictions limit these railroads' ability to attract new business, and to remain competitive with other rail lanes and modes of transportation.

Over \$61 million worth of rail line rehabilitation/upgrade needs have been identified in the investment section of this Rail Plan. The completion of these projects will depend upon available funding or financing.

**Figure ES-5. Weight Restrictions on Arkansas Rail Corridors**



### Expanding Access to Rail in Arkansas

Stakeholders consulted for this Rail Plan have expressed interest not only in preserving the existing rail system, but also in extending or reactivating some previously abandoned lines. Proposed initiatives include the following:

- The Chicot-Desha Metropolitan Port Authority sponsors a project to build an 8.1-mile rail line from the Port of Yellow Bend to the interchange with the NLA at Trippe Junction, Arkansas. This project would cost about \$25 million. Environmental work has been completed, and several TIGER grant applications have been submitted to seek funding for the project.

- A recent study looked into the possibility of reconstructing a 76-mile segment of the former Chicago, Rock Island and Pacific Railroad (CRIP) line between Danville, Arkansas and Howe, Oklahoma.<sup>4</sup> The study evaluated the feasibility of restoring the line in two phases. An initial phase would restore the line (18.4 miles) between Hartford, Arkansas and an interchange with KCS in Howe, Oklahoma (Phase 1). A second phase would restore the remaining 57.6 miles between Hartford, Arkansas and an interchange with the Little Rock & Western Railway at Danville, Arkansas (Phase 2). The cost of the line's reconstruction is estimated to be \$38.8 million for Phase 1 and \$107.9 million for Phase 2.
- In Washington County, the Department completed the Fayetteville South Industrial Park Railroad Access Study focusing on the identification of possible rail line routes, determination of roadway/rail at-grade crossings, water features to be bridged, other potential constraints, design considerations, and cost estimates.
- The Department completed the Northwest Arkansas Regional Airport – Air Cargo Study and Freight Transportation Access Assessment. This study investigated the feasibility of constructing a rail line to the Northwest Arkansas Regional Airport, connecting to either the KCS or the Arkansas and Missouri Railroad (AM). Both alternatives included roughly 10 miles of rail construction.

Other rail access projects would improve the connection between rail and other modes of transportation. The Port of Little Rock and the port operator at the Port of Fort Smith have identified about \$6 million in improvements that would improve rail access to these facilities. Transload facilities are areas where freight is transferred between truck and rail. Rail carriers have identified over \$26 million worth of improvements to support transload facilities in Arkansas. Some stakeholders are interested in additional intermodal service (shipping containers or trailers on rail) within Arkansas, since the sole intermodal terminal within Arkansas at Marion is costly to access for shippers in other parts of the state. In order for a new intermodal service to be established in the state, providing this service would need to be worthwhile to the rail carrier. Rail carriers would require the following:

- A sufficient demand for trainload volumes of intermodal freight multiple days per week;
- A reasonable balance between empty and loaded containers; and
- A logical “fit” in the carriers’ intermodal network, so that the service does not disrupt other intermodal services, and shipping distances are long enough to compete effectively with trucking.

### **Summary of Rail Infrastructure Needs**

Figure ES-6 displays rail projects in Arkansas for which, as of 2014, funding has been identified. At least some of the funding has been provided by public sector sources. These projects represent

<sup>4</sup> South Logan County Chamber of Commerce, *Western Arkansas Railroad Reconstruction Economic Feasibility Study*, June 30, 2014.

about \$46 million in public and private investment. Some are planned, while others are being designed or are under construction.

**Figure ES–6. Funded Arkansas Rail Projects with Public Investment**

Project Description	Cost	Funding Mechanism	Project Benefits
Rail extension and rehabilitation at the Port of West Memphis	Total cost is \$27.0 million	\$10.9 million from 2012 TIGER grant, other local and private funds	Economic development and modal connectivity
Rail Rehabilitation of the North Louisiana and Arkansas Railroad	Total cost, including work within Louisiana, is \$13 million	U.S. Economic Development Administration, State of Arkansas SEAEDD, Lake Providence Port Commission, State of Louisiana, Delta Regional Authority, Arkansas Short Line Railroads, Inc.	Economic development, rail system preservation/ state of good repair, freight system efficiency
City of Jonesboro Railroad Corridor Highway 18/BNSF Crossing Planning for environmental and designs	\$1.5 million	\$1.2 million from 2014 TIGER grant, \$0.3 in local match	Safety, reduces community impacts
Arkansas Passenger Rail Study	\$0.9 million	\$0.4 from FRA HSR (pre HISPR), \$0.5 from State of Arkansas	Investigates potential transportation options
AKMD Warren Branch Rail Line Rehabilitation	\$3.4 Million	\$2.7 million from FRA Rail Line Relocation and Improvement program, \$0.7 million from AKMD	Rail system preservation/ state of good repair, freight system efficiency
Ouachita Railroad Bridge Rehabilitation (OUCH)	\$370,000	\$330,000 from FRA Rail Line Relocation and Improvement program, \$40,000 from OUCH	Rail system preservation/ state of good repair, freight system efficiency

Throughout the preparation of the Arkansas State Rail Plan, a much larger set of rail needs have been identified that are not funded. Projects have been put forth by short line railroads, public agencies, and Class I railroads. Of the Class I railroads, UP provided project cost estimates, while BNSF and KCS put forward recommended project needs but not cost estimates. Some projects put forward are for new rail lines or rebuilds of rail lines that had once been in place. It is not certain who would operate these lines. Project needs have been categorized as follows:

- **Capacity.** Increases to rail line capacity that will allow more trains per day to operate over rail lines.
- **Extend or reactivate rail lines.** Major construction of rail lines to serve areas not recently served by rail.
- **Multimodal Improvement.** Construction or improvement to transload, port, or intermodal container facilities.
- **Rehabilitation/Upgrade.** Projects to return rail lines and structures to a state of good repair and to modern standards.
- **Yard.** Improvements to rail yards in order to bring yards to a state of good repair, to improve efficiency, or to expand capacity.

- **Industrial Access.** Construction of turnouts, sidings, and spur tracks to serve rail customers.
- **Rail Line Connections.** Improved connections between two rail lines, sometimes of different railroads, but sometimes of the same railroad.
- **Equipment.** Needed purchase of new rail rolling stock.
- **Safety.** Improved safety at roadway/rail grade crossings or crossing closures.

As shown in Figure ES–7, identified unfunded rail needs exceed \$1.6 billion. Most of these are the \$1.1 billion that UP has identified in capacity needs. The second largest set of needs relate to extending the Arkansas rail network to locations that have not recently had rail access. This includes extending rail access to the Port of Yellow Bend, the reactivation of a rail line between Hartford, Arkansas and Howe, Oklahoma, and the extension of rail lines to multimodal/industrial facilities in Northwest Arkansas. Compared to extending the rail network, it is far less costly to maintain the existing rail network. More than \$63 million in needs have been identified for rehabilitating and upgrading existing rail facilities.

**Figure ES–7. Unfunded Arkansas Rail Needs**

Type of Project	Class I Railroad	Class III Railroad	Railroad Uncertain	Grand Total
Capacity	\$1,057,000,000			\$1,057,000,000
Extend or reactivate rail line		\$252,000,000	\$167,300,000	\$419,300,000
Multimodal Improvement	\$60,000,000	\$7,500,000		\$67,500,000
Rehabilitation/Upgrade		\$63,251,497		\$63,251,497
Yard	\$15,000,000	\$15,510,000		\$30,510,000
Industrial Access		\$13,700,000		\$13,700,000
Rail Line Connections	\$13,000,000			\$13,000,000
Equipment		\$7,500,000		\$7,500,000
Safety		\$1,550,000		\$1,550,000
<b>Grand Total</b>	<b>\$1,145,000,000</b>	<b>\$361,011,497</b>	<b>\$167,300,000</b>	<b>\$1,673,311,497</b>

### ***Institutional and Funding Issues***

By Act 1430 of 2013 the Arkansas General Assembly created a Task Force to investigate and make recommendations regarding intermodal transportation and commerce policy. The findings of the Task Force expressed concern over recent losses to the Arkansas rail network and recommended greater unified oversight, not just over highway, but also rail, waterways, ports, and aviation. As mentioned above, there is no consistent, dedicated funding source for rail in Arkansas, either through federal or state funding sources. Task Force members would like to find such a funding source.

In 2015, Arkansas Act 166 reestablished the Legislative Task Force on Intermodal Transportation and Commerce and expanded the membership to include representatives of the Arkansas Department of Aeronautics, the Metropolitan Planning Organizations in Arkansas, and the Arkansas Economic Development Commission. The charge of the Task Force was also modified in 2015. The

revised charge of the Task Force is to review and consider constitutional and legislative constraints related the creation of an Arkansas Department of Transportation, including consideration of existing agencies, agency funding, and oversight protocol.

## Summary

Rail has traditionally served Arkansas well, from the time of high passenger volumes to the current trend of massive cross-country unit trains. The changing economy and the need for economical shipments have had an impact on the rail system in Arkansas. Transfer from Class I railroads to Class III railroads has made a significant impact on the viability of many local and regional businesses. Enhancement of the rail system in Arkansas will have a positive impact on the economy by providing more opportunities for receiving and shipping materials and goods into and out of Arkansas.





Arkansas State Highway and Transportation Department  
Transportation Planning and Policy Division