

MISSOURI

state rail plan

TECHNICAL MEMORANDUM #1

The Vision, Goals and Objectives for Rail Transportation in Missouri

April 2012

Prepared for:



Missouri Department
of Transportation

Prepared by:



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Role of Railroads in Missouri

Missouri has an extensive rail network supporting both freight and passenger operations which rank 10th nationally in the number of miles of track. Missouri also has a long history of Amtrak and state-supported intercity passenger rail service and is one of 13 states that contract with Amtrak for the operation of trains which provide supplement frequencies and/or extend service beyond the national system.

Freight Rail

There are approximately 4,050 miles of railroad tracks within the state of Missouri operated by 19 freight railroads including six Class 1 railroads, eight switching and terminal railroad and five local railroads.¹ There are 2,500 miles of yard track and about 7,000 public and private crossings in Missouri. Kansas City and St. Louis are ranked as the second and third largest rail hubs in the U.S., respectively, with more than 300 Kansas City freight arrivals and departures daily.²

The rail mode is a major component of Missouri's freight transportation system and economy. In 2011, 304 million tons of freight was carried on railroads in Missouri, ranking fourth among the 50 states. In the same year, 19 million tons of rail freight originated and 65.7 million tons of rail freight terminated in Missouri. In terms of tons terminating within its border Missouri ranks 5th in the nation.³ The rail industry itself has a significant impact on Missouri's economy, generating \$2.8 billion in Gross State Product (2007). More than 8,200 rail industry workers generated an estimated 17,985 indirect and induced jobs through industry intermediate inputs and employee consumer spending.⁴

The value of freight rail service to key Missouri export industries is significant. In 2006, \$19.8 billion in commodity exports were shipped from Missouri. These exports generated \$655.2 million in net Missouri general revenues, \$8.7 billion in personal income, \$13.4 billion in Gross State Product and \$32.4 billion in total state output. These same rail-borne Missouri exports generate over 234,000 direct, indirect and induced jobs within the state.⁵

Passenger Rail

In Missouri, Amtrak provides intercity passenger rail service in four corridors. Amtrak, supported in part by the state of Missouri, provides two round trips per day between St. Louis and Kansas City on the Missouri River Runner. The Missouri River Runner served 190,628 passengers in

¹ "Freight Railroads in Missouri," Association of American Railroads, 2011

² "Missouri Freight Transportation: Economy on the Move – Rail Freight," Missouri Economic Research and Information Center, 2010

³ "Railroad Industry Snapshot: State Rankings," Association of American Railroads, 2011

⁴ "Missouri Freight Transportation: Economy on the Move – Rail Freight," Missouri Economic Research and Information Center, 2010

⁵ "The Economic Value of Investment in Freight Transportation: Missouri Rail," Missouri Economic Research and Information Center, June 2008

FY 2011 (July 2010 – June 2011), with stops at St. Louis, Kirkwood, Washington, Hermann, Jefferson City, Sedalia, Warrensburg, Lee's Summit, Independence and Kansas City. The Lincoln Service is supported by the state of Illinois and offers service on four daily round trips between Chicago and St. Louis. Amtrak also provides one round-trip daily service two national routes: the Southwest Chief, operating between Chicago and Los Angeles with stops in La Plata and Kansas City; and the Texas Eagle, operating between Chicago and San Antonio with stops in St. Louis and Poplar Bluff.

Passenger rail development also can provide important economic development benefits to Missouri. An economic impact analysis prepared for the Midwest Regional Rail Initiative recommends enhanced 90 mph passenger rail service with up to six round trips on the St. Louis to Kansas City corridor. This analysis estimates improved passenger rail service in Missouri will result in 5,600 new permanent jobs, \$480 million in increased property values around Missouri stations and a \$109 million increase in annual household income statewide.⁶

Benefits

Beyond freight movement and passenger mobility, intercity rail service provides important environmental benefits to the citizens of Missouri. The U.S. Environmental Protection Agency (EPA) estimates a typical freight train emits only one-third the pollution of a truck on a ton-mile basis. Rail also reduces truck congestion on Missouri roadways. It would have taken more than 20 million additional trucks to handle the 304 million tons of freight that originated, terminated, or passed through Missouri by rail in 2011.⁷

Passenger rail travel has similar environmental benefits. Data from the Oak Ridge National Laboratory indicate that intercity passenger rail consumes 17 percent less energy per passenger mile than airlines and 21 percent less energy per passenger mile than automobiles.⁸ Intercity passenger rail produces 60 percent fewer carbon dioxide (CO₂) greenhouse gas emissions per passenger mile than the average auto and about half the greenhouse gas emissions per passenger mile of an airplane. Intercity passenger rail also generates fewer emissions per passenger mile of other pollutants such as nitrous oxide (N₂O), volatile organic compounds (VOCs) and carbon monoxide (CO).⁹

Efficient freight and passenger rail service provides important economic development benefits to Missouri communities. Business development can be thwarted by the lack of freight rail service. Freight rail service is a key location factor for many new companies seeking to locate or expand in Missouri. Enhanced passenger rail service can provide important economic development benefits to Missouri communities by providing improved accessibility, connectivity and travel efficiency.

⁶ "Economic Impacts of the Midwest Regional Rail System," Transportation Economics and Management Systems, Inc. and HNTB, November 2006

⁷ "Freight Railroads in Missouri," Association of American Railroads, 2011

⁸ Oak Ridge National Laboratory, Transportation Energy Data Book, Edition 26, 2007

⁹ "Vision for the Future – U.S. Intercity Passenger Rail Network Through 2050," prepared for the National Surface Transportation Policy and Revenue Study Commission, December 2007

Vision Statement

The Missouri Department of Transportation (MoDOT) created a State Rail Plan Project Advisory Committee to kick off the initial rail planning efforts. The following is the vision statement developed by the committee:

“Missouri’s rail vision is to provide safe, environmentally-friendly transportation options supporting efficient movement of freight and passengers, while strengthening communities and advancing global competitiveness through intermodal connectivity.”

Goals and Objectives: Missouri State Rail Plan

MoDOT has developed the Tracker to identify and monitor performance measures for delivering efficient and practical transportation services. Tracker is built around 18 Tangible Results covering all areas of MoDOT’s service delivery. Performance measures directly related to MoDOT’s rail transportation services can be found in four of these Tangible Results:

- Advance Economic Development
- Environmentally and Socially Responsible
- Efficient Movement of Goods
- Easily Accessible Modal Choices

The following goals and objectives have been developed to direct MoDOT on its mission to achieve its rail vision:

1) Goal: Promote the Efficient Movement of Passengers

Objectives:

- a) Provide new and enhanced passenger rail service to Missouri communities and travelers as an efficient and cost-effective mobility alternative.
- b) Reduce travel times through increased speeds and reduced delays.
- c) Increase frequencies on the existing route.
- d) Improve reliability and performance.
- e) Improve traveler efficiency and comfort by providing amenities such as food service, internet connectivity, 110-volt power for electronic devices, and video information displays onboard and at stations.
- f) Increase passenger rail accessibility to low income, elderly and special needs groups who have limited access to auto and other modes.

2) Goal: Promote the Efficient Movement of Freight

Objectives:

- a) Promote public policies which support frequent, reliable and efficient freight rail service to un-served or under-served communities, businesses and shippers.
- b) Support policies which have the potential to increase total freight tonnage carried by rail.
- c) Provide public investments for railroad projects where public benefits exceed public costs.

- d) Pursue public-private partnerships to improve service and reduce freight rail congestion.

3) Goal: Encourage Intermodal Connectivity

Objectives:

- a) Support the development of intermodal freight facilities to provide seamless connectivity between rail, truck, and water modes and increase access to global markets. Focus on facilities that have the greatest potential to increase the efficiency and accessibility to rail and provide lower transportation costs for shippers.
- b) Support the connectivity of Missouri passenger rail service to other corridors regionally, nationally, and internationally to maximize network benefits in terms of increased ridership, revenues and passenger mobility.
- c) Support intermodal connectivity between intercity passenger rail and other passenger modes including air, local transit, auto, intercity bus, and non-motorized transportation. Focus on intermodal investments with the greatest potential to increase the efficiency of rail. .

4) Goal: Enhance State and Local Economic Development

Objectives:

- a) Promote freight rail service, infrastructure improvements, and intermodal connectivity to increase the efficiency of freight rail service, lower transportation costs for Missouri businesses, and provide increased access to global markets.
- b) Promote state policies and programs to provide increased freight rail service to Missouri communities and businesses as a means of increasing their attractiveness for the expansion of existing businesses and the recruitment of new businesses.
- c) Provide enhanced passenger rail service to Missouri communities as a part of an overall economic development strategy to increase employment, household incomes and property values based on the increased accessibility and mobility provided by the rail mode.

5) Goal: Promote an Environmentally and Socially Responsible Rail Transportation Development

Objectives:

- a) Support enhanced freight and passenger rail service as a part of an overall state energy conservation policy to protect Missouri travelers and shippers from the adverse mobility and economic impacts of expected increases in future transportation energy costs.
- b) Support enhanced freight and passenger rail service as a means of reducing fuel consumed per ton- and per passenger-mile.
- c) Support enhanced freight and passenger rail service as a means of reducing carbon emissions per ton- and per passenger-mile.
- d) Support intermodal connectivity between intercity passenger rail and other passenger modes including air, local transit, auto, intercity bus, and non-motorized transportation to provide greater accessibility to travelers, including those with low incomes, special needs and limited access to automobile transportation.

6) Goal: Promote Safe and Secure Railroad Operations

Objectives:

- a) Promote rail and highway safety by improving grade crossing surfaces and warning devices and pursuing road closures and grade separations where appropriate.
- b) Promote the safe transportation of hazardous materials via railroads.
- c) Promote cooperative efforts with Amtrak and freight railroads to enhance the security of passenger and freight railroad operations.