

Alabama Rail Plan Summary

Bureau of Transportation Planning
and Modal Programs

June 2014

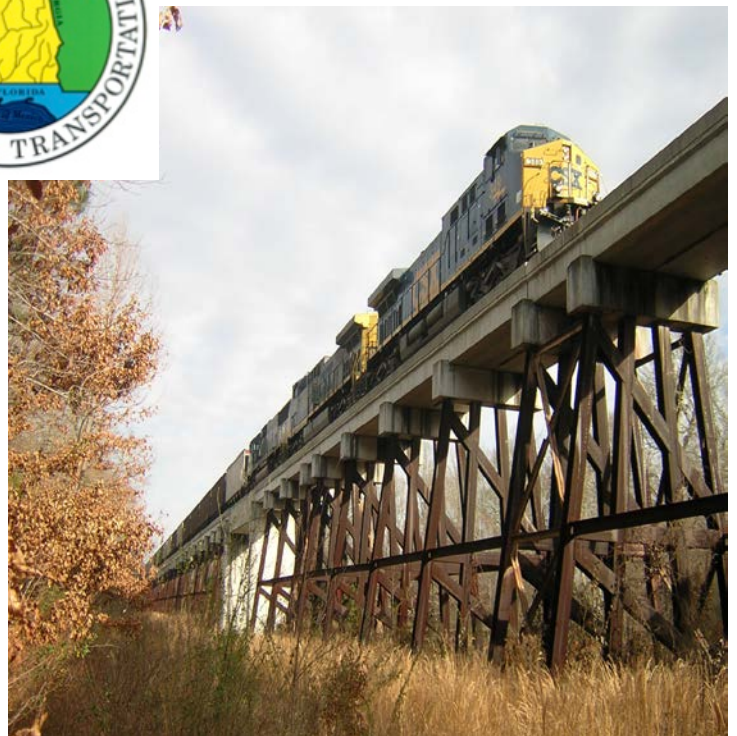




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What Is the Alabama Rail Plan?

The Alabama Rail Plan is a component of the State's multimodal transportation planning program, reflecting the role of rail mobility in serving Alabama's passenger and freight demands. A companion to the Alabama Statewide Transportation Plan, the Rail Plan addresses the rail aspects of the transportation program.

PURPOSE

The 2013 Alabama Rail Plan responds to final Federal Railroad Administration (FRA) guidance to implement the Passenger Rail Investment and Improvement Act (PRIIA) enacted by Congress in October 2008. Building on previous requirements, the final guidance emphasizes the State's role in rail policy, planning and development for freight and passenger rail service. Updated by the Alabama Department of Transportation (ALDOT) Bureau of Transportation Planning and Modal Programs, the 2013 Alabama Rail Plan considers developments in rail over the last five years. The plan is done in accordance with FRA guidance and the Moving Ahead for Progress in the 21st Century Act (MAP-21) requirements, as well as coordination with ALDOT and other stakeholders.

SCHEDULE, ACTIVITIES, AND DELIVERABLES

The update of 2013 Alabama Rail Plan was initiated in early 2013 and finalized in late 2013. It involved four primary tasks:

- Outline stakeholder involvement, define the role of rail in Alabama, and review existing conditions.
- Identify trends, assess current needs, forecast future needs, and determine opportunities of the rail system in Alabama.
- Determine passenger and freight rail improvements and investments.
- Describe the long range Rail Service and Investment Program (RSIP) and its development and coordination with stakeholders.

The Rail Plan includes two primary deliverables: the 2013 Rail Plan and Rail Directory. These documents are available from ALDOT and online at www.dot.state.al.us.

ALDOT's Role in Rail Transportation

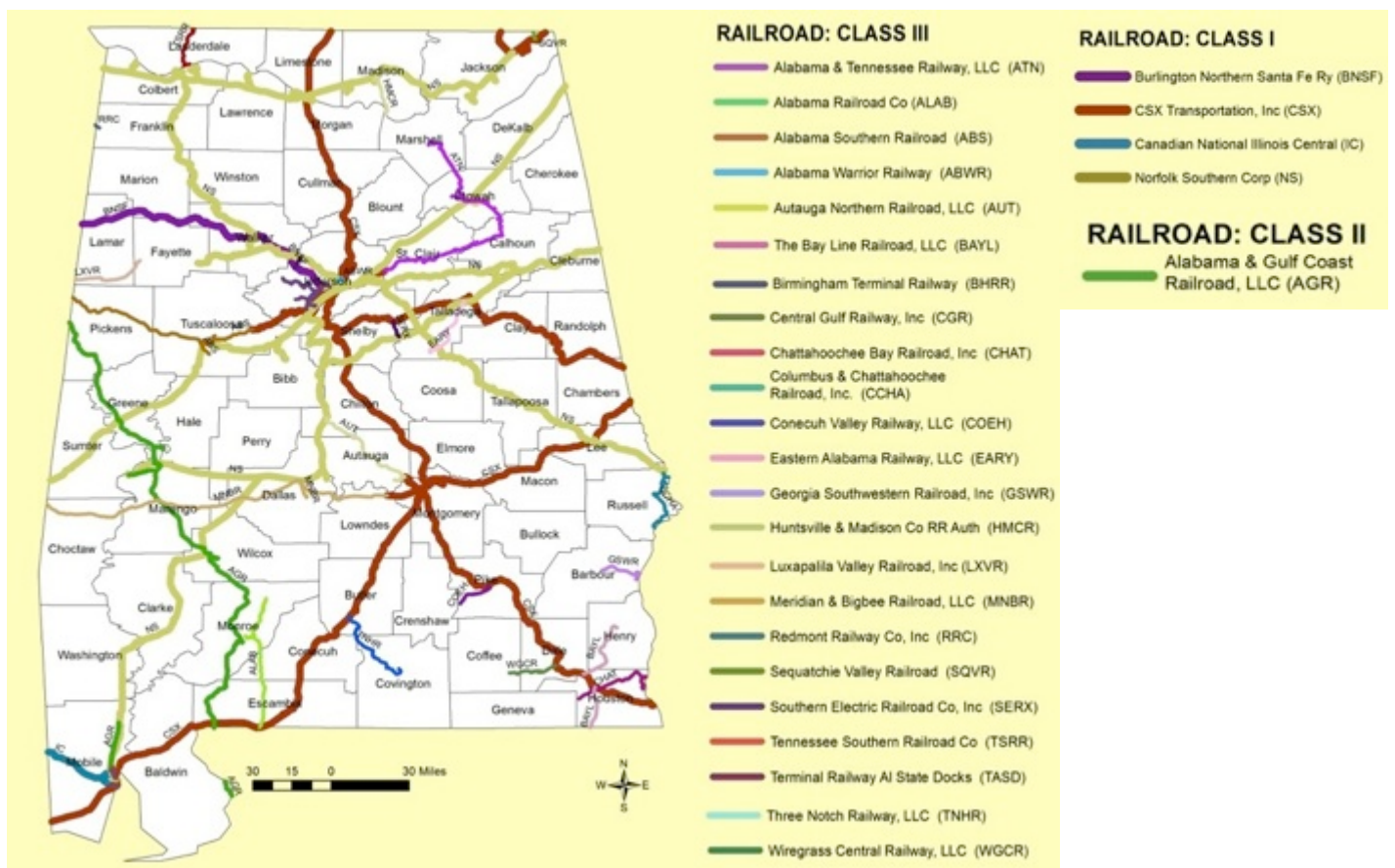
ALDOT is designated as Alabama's "State Rail Transportation Authority," with responsibility to plan for passenger and freight rail, receive federal funds for rail programs, coordinate with railroads, and construct rail crossing improvements. The Rail Section of the Transportation Planning and Modal Programs Bureau serves as liaison with the railroads. ALDOT administers Alabama's Section 130 Program, which is aimed at eliminating hazards at public rail/highway grade crossings. From 2008-2013, ALDOT's Section 130 Program authorized 84 rail/highway grade crossing safety projects, with funding totaling \$19,763,070. Other roles for ALDOT related to rail transportation include maintaining road connections to intermodal facilities and participating in passenger rail studies carried out by the Alabama Department of Economic and Community Affairs (ADECA).

Freight Rail in Alabama

The rail industry provides important economic benefits to Alabama. According to the Association of American Railroads, 162.4 million tons of freight originated, terminated, or moved through Alabama by rail in 2011. The railroad industry also employs over 3,600 people, with average wages and benefits of \$104,670. Because railroads are four times more fuel efficient than trucks and one train can carry as much freight as several hundred trucks, an estimated 9 million additional trucks would have been required to handle the 162.4 million tons of freight moved in Alabama by rail in 2011.

ALABAMA'S FREIGHT RAIL NETWORK

Alabama's freight rail network is composed of 3,973 freight rail miles operated by 28 Class I, II and III railroads. Railroads are classified by the Surface Transportation Board (STB) based on operating revenue threshold figures that are adjusted annually for inflation. Class I railroads represent the largest of the US railroads and account for 67 percent of the industry's mileage, 89 percent of its employees, and 93 percent of its freight revenue. In 2012, Class I railroads were defined by annual operating revenues of at least \$452.7 million. There are seven Class I railroads nationwide, four of which have a presence in Alabama—Burlington Northern Santa Fe (BNSF), Canadian National Illinois Central (CN/IC), CSX Transportation (CSXT), and Norfolk Southern (NS). Class II railroads, also called regional railroads, typically operate over several hundred miles of track in two or three states. Class II railroads are defined by a 2012 revenue threshold of at least \$36.2 million. The Alabama & Gulf Coast Railway (AGR) is Alabama's only Class II railroad. It accounts for approximately 8 percent of Alabama's total track mileage. Class III railroads address local demands and frequently operate fewer than 100 miles of line. Alabama has 23 Class III railroads, which account for approximately 20 percent of total track mileage.



EXISTING FREIGHT RAIL TRAFFIC

Existing rail traffic in Alabama was analyzed using the US Surface Transportation Board Rail Waybill Sample for 2011. Alabama's total rail flows in 2011 equaled 165,282,015 tons.

Total rail traffic that originated in Alabama for 2011 amounted to 26,366,641 tons, or 16 percent of total tonnage. The top 8 commodity shipments originating in Alabama were: primary metal products (20%), non-metallic minerals (19%), pulp/paper (16%), chemicals (14%), clay (7%), miscellaneous mixed shipments (5%), transportation equipment (5%), and lumber/wood products (4%).

Traffic terminating in Alabama totaled 36,478,988 tons, or 22 percent of total tonnage. The top 8 commodity shipments terminating in Alabama were: coal (48%), farm products (10%), metallic ores (7%), chemicals (7%), waste scrap (6%), primary metal products (5%), food products (4%), and miscellaneous mixed shipments (3%).

Intrastate traffic is that which begins and ends in Alabama. A total of 13,392,231 tons of freight originated and terminated in Alabama, equaling 8 percent of total tonnage. The top 8 commodity shipments originating and terminating in Alabama were: coal (69%), chemicals (7%), non-metallic minerals (5%), printed products (5%), articles of base metal (3%), miscellaneous manufactured products (3%), clay (2%), and transportation equipment (2%).

Traffic that travels through Alabama without either originating or terminating in the state is called overhead traffic. A total of 89,044,155 tons of overhead freight passed through Alabama in 2011, accounting for 54 percent of total tonnage. Alabama's top 8 overhead commodity shipments were: coal (29%), chemicals (21%), miscellaneous mixed shipments (9%), food products (8%), pulp/paper (6%), farm products (5%), primary metal products (5%), and petroleum (4%).

Coal continues to be a dominant freight staple for Alabama rail traffic. Much of the coal activity is found in and around the mines in Birmingham, serving electric utility plants, and at McDuffie Terminal at the Port of Mobile.

Overhead traffic accounts for a majority of tonnage moved by rail in Alabama. Much of this traffic is intermodal containers and trailers traveling between Tennessee-Georgia, Illinois-Florida, and Kentucky-Florida. A review of overhead traffic volumes shows concentrations in NS's Atlanta-New Orleans corridor and in northeast Alabama where CSXT has a 10-mile corridor that connects Nashville and Atlanta.

FREIGHT RAIL TRAFFIC DENSITY

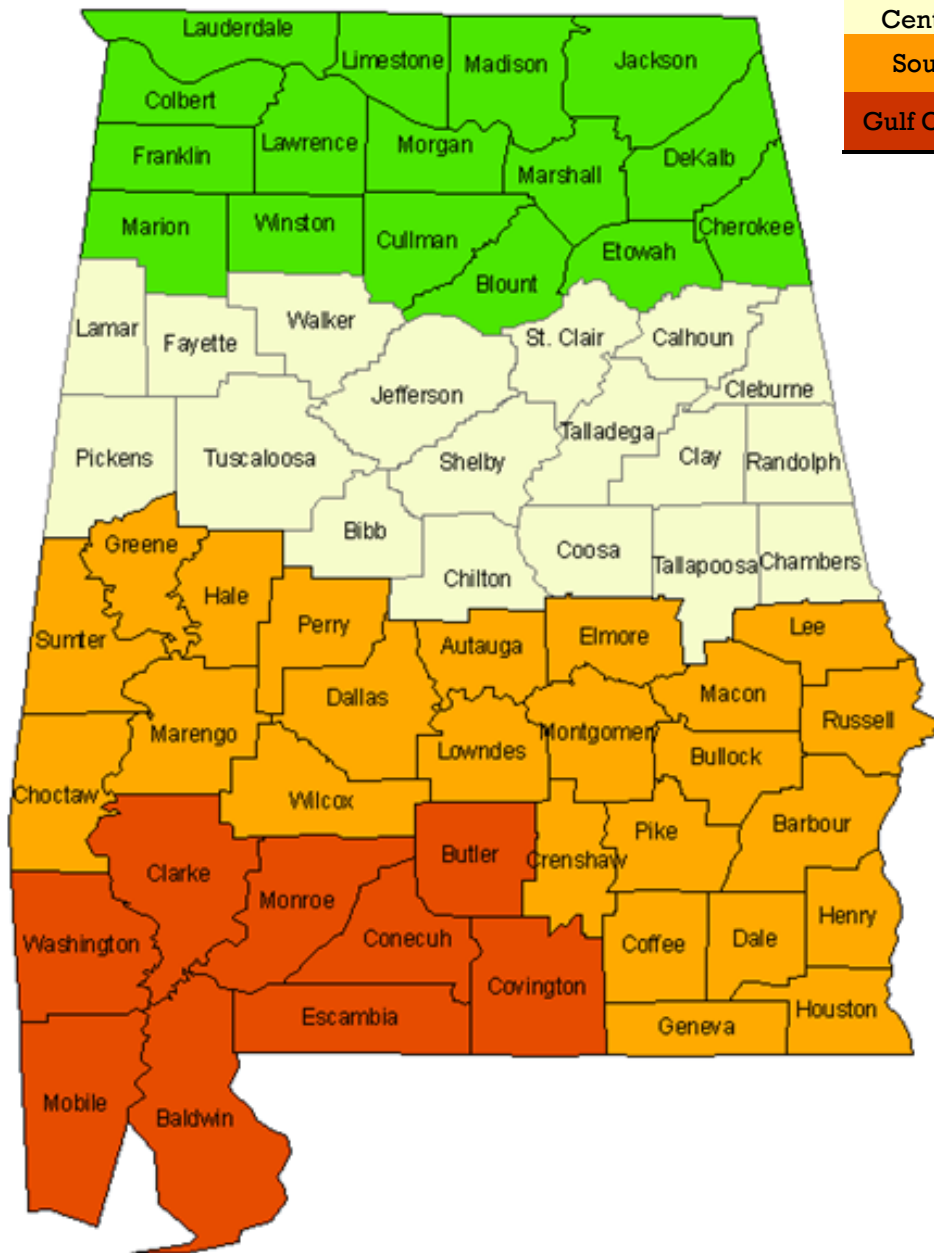
Traffic density for different segments of track was developed from the Waybill Sample data to provide a visual reference of the amount of freight moving on Alabama's rail system. As can be seen on the following map, the four major sections of track with respect to tonnage are:

- CSXT line in the northeast corner of Alabama, where the track between Nashville and Atlanta dips into Alabama
- NS line in northwest Alabama from the Mississippi state line to Morgan County
- NS line in west central Alabama from Birmingham to Mississippi
- CSXT line from Montgomery to Mississippi via Mobile

FREIGHT RAIL IMPORTS AND EXPORTS

Import and export tons for 2011 are illustrated below by area of the state. A comparison of the total tons by state of origin and destination for Alabama imports and exports for years 2011 and 2040, respectively, is shown on the following pages.

Import/Export Tons by Area of the State, 2011



Area of Alabama	Import Tons 2011	Export Tons 2011
North	5,642,989	3,864,420
North Central	28,046,130	23,218,552
South	3,097,683	6,077,189
Gulf Coast	13,084,417	6,598,711

State of Origin for Alabama Imports, 2011 and 2040



2011

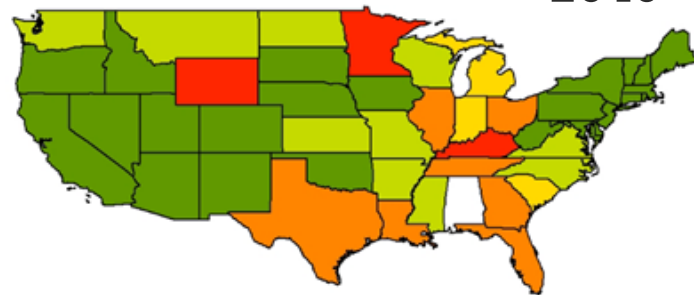


Total Tons

- Less than 100,000
- Between 100,001 and 500,000
- Between 500,001 and 1,000,000
- Between 1,000,001 and 2,500,000
- Greater than 2,500,000



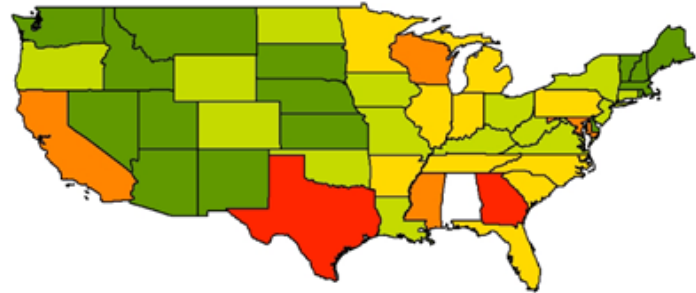
2040



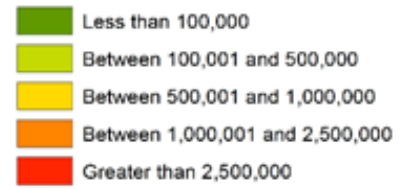
State of Destination for Alabama Exports, 2011 and 2040



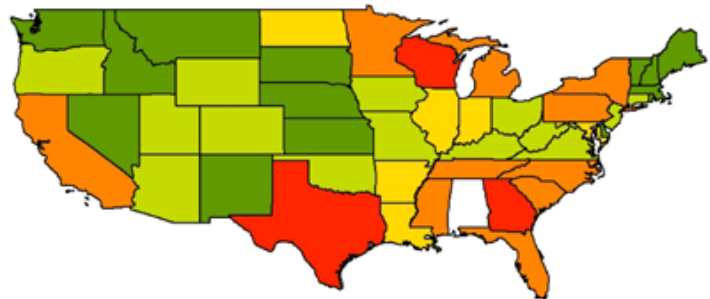
2011



Total Tons



2040

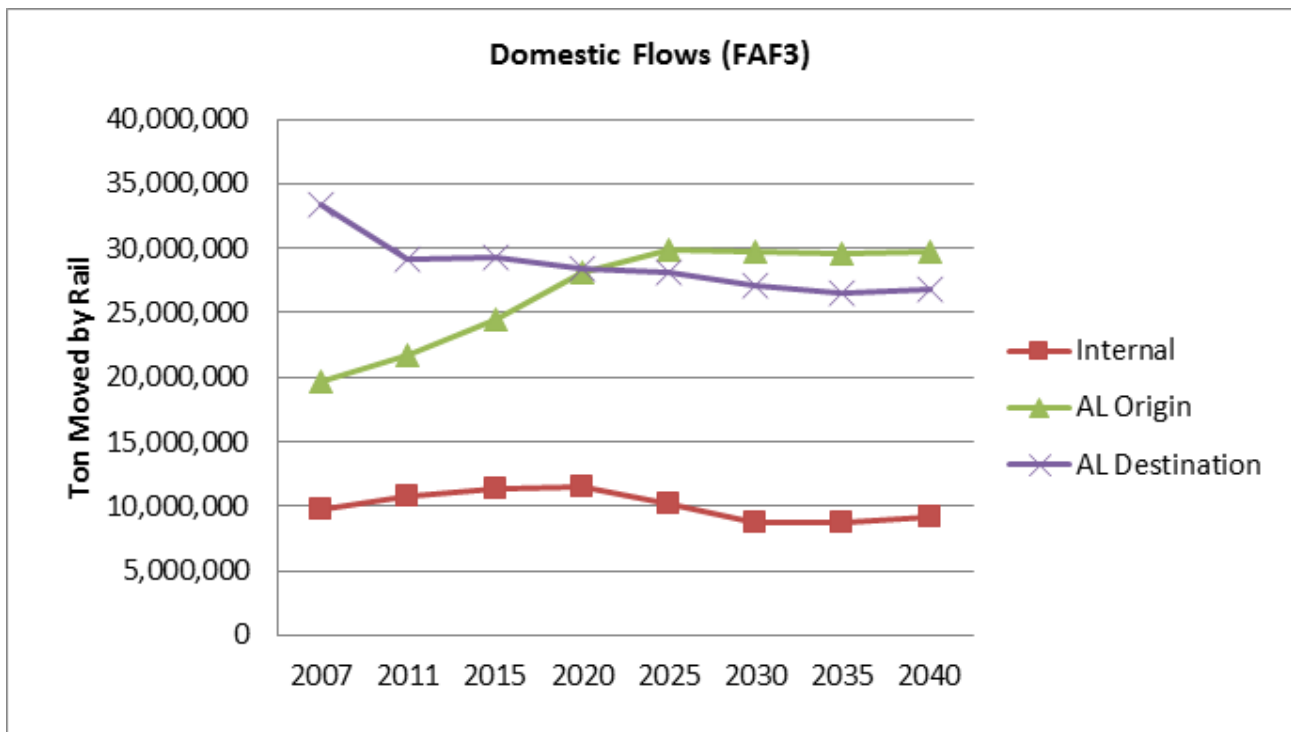


MAJOR TRENDS IN FREIGHT RAIL TO 2040

The future of rail transportation in Alabama is projected in the Freight Analysis Framework Version 3 (FAF3) available from the USDOT. The data contain tons of freight moved by commodity for multiple years; this study uses 2011 and 2040 for comparison purposes. The FAF3 was utilized for this comparison to provide consistency between 2011 and 2040 because the Waybill Sample does not contain a projection for 2040.

By 2040, total tonnage will increase by 25 percent from 2015. Projections for Alabama rail movements in 2040 include 34,519,380 tons moved internally, 31,977,920 tons imported, and 36,859,290 tons exported. Examining the commodities projected to be moved by rail in 2040, coal remains the dominant commodity with 60 percent of imports and 42 percent of exports. The second major export commodity is gravel at 15 percent.

The trend for domestic rail flows—those that are internal to the United States and thus have both the origin and destination inside the US—is shown below. The trend is that rail exported from Alabama is projected to grow in the next ten years before leveling off, while rail imports are projected to have a slight decline.



Imports through the Port of Mobile will increase from 65 percent to 69 percent. The largest domestic export markets will continue to be Texas (5.8 million tons) and Georgia (5 million tons). International exports will predominantly be to Europe (44 percent increase) and the Rest of the Americas (52 percent increase).

PASSENGER RAIL IN ALABAMA

The Southern Rail Commission (SRC) is the primary organization advocating for the expansion of passenger rail services in Alabama. Currently, the only passenger rail service operating in the state is Amtrak's *Crescent* line. Traveling daily in both directions between New York City and New Orleans, it stops in Anniston, Birmingham and Tuscaloosa. In Fiscal Year 2012, the *Crescent* experienced 67,233 total passenger ons/off in Alabama, including 48,734 in Birmingham, 12,290 in Tuscaloosa, and 6,209 in Anniston. *Crescent* passenger ons/off in Alabama increased 5.75 percent from FY2010 to FY2012.

Passenger service along the Gulf Coast was suspended in 2005 following Hurricane Katrina. Restoration of daily passenger service between New Orleans and Jacksonville is strongly supported by local officials in the Gulf Coast communities of Alabama, Mississippi and Florida.

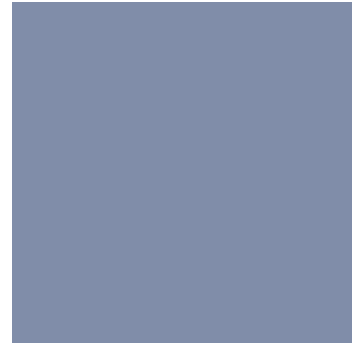
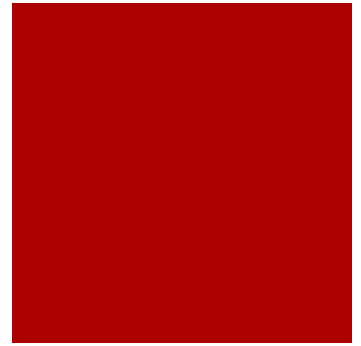
Other corridors for potential expansion of passenger rail service exist. A recent feasibility study, sponsored by ADECA and jointly funded by the FRA and the cities of Birmingham and Montgomery, considered passenger service between Birmingham and Montgomery, with expectation for future extension to Mobile. A similar study related to the feasibility of initiating passenger rail service in the Birmingham-Atlanta corridor was conducted by Georgia DOT in partnership with the Regional Planning Commission of Greater Birmingham (RPCGB).

Passenger rail works best in corridors with dense land development and population concentrations. Year 2000 population and population densities in key Alabama cities were compared with those in North Carolina, which has an active passenger rail program. A summary of important statistics from that comparison follows.

City	Population (Year 2000 Census)	Population Density
Raleigh, NC	403,892	2804.8 / sq. mi.
Charlotte, NC	731,424	2440.8 / sq. mi.
Birmingham, AL	212,237	1428.1 / sq. mi.
Montgomery, AL	205,764	1270.7 / sq. mi.
Mobile, AL	195,111	1085.3 / sq. mi.

Another factor indicative of potential support for passenger rail service involves journey to work statistics. The US Census' county-to-county work trip flow files for year 2000 provide daily intercity trip making, as shown in comparison below.

Daily Intercity Commuter Trips	
From	To
Jefferson County (Birmingham)	Montgomery = 337 commuter trips Mobile = 110 commuter trips
Montgomery County	Jefferson = 259 commuter trips Mobile = 64 commuter trips
Mobile County	Jefferson = 141 commuter trips Montgomery = 127 commuter trips
Raleigh (Wake County)	Charlotte = 417 commuter trips
Charlotte (Mecklenburg County)	Raleigh = 230 commuter trips



Alabama's Existing Rail System

Alabama's railroads are actively working businesses, continuously changing in response to evolving state and national economic conditions. Since the 2008 Alabama Rail Plan, a number of events have revised the complexion of rail transportation. Alabama's rail resources are an important component of a multimodal network that provides transportation for new industries and supports growth in the system.