FREIGHT NEWS

Freight Transportation Profile—Missouri Freight Analysis Framework

Understanding future freight activity is important for matching infrastructure supply to demand and for assessing potential investment and operational strategies. To help decisionmakers identify areas in need of capacity improvements, the U.S. Department of Transportation developed the Freight Analysis Framework (FAF), a comprehensive national data and analysis tool, including county-to-county freight flows for the truck, rail, water, and air modes. FAF also forecasts freight activity in 2010 and 2020 for each of these modes. Information about the methodology used in developing FAF is available on the Office of Freight Management and Operations' website www.ops.fhwa.dot.gov/freight.

The U.S. freight transportation network moves a staggering volume of goods each year. Over 15 billion tons of goods, worth over $9 trillion, were moved in 1998. The movement of bulk goods, such as grains, coal, and ores, still comprises a large share of the tonnage moved on the U.S. freight network. However, lighter and more valuable goods, such as computers and office equipment, now make up an increasing proportion of what is moved. FAF estimates that trucks carried about 71 percent of the total tonnage and 80 percent of the total value of U.S. shipments in 1998. By 2020, the U.S. transportation system is expected to handle about 23 billion tons of cargo valued at nearly $30 trillion.

Missouri

Table 1 presents information on freight shipments that have either an origin or a destination in Missouri. As shown in the table, trucks moved a large percentage of the tonnage and value of shipments, followed by rail. Figures 1 and 2 show freight flows on the highway and rail modes.

Truck traffic is expected to grow throughout the state over the next 20 years. Much of the growth will occur in urban areas and on the Interstate highway system (Figures 3 and 4). Truck traffic moving to and from Missouri accounted for nearly 15 percent of the average annual daily truck traffic (AADTT) on the FAF road network. Approximately 13 percent of truck traffic involved in-state shipments, and 37 percent involved trucks traveling across the state to other markets. About 35 percent of the AADTT were not identified with a route-specific origin or destination.

Table 2 shows the top five commodity groups shipped to, from, and within Missouri by all modes. The top commodities by weight are nonmetallic minerals and farm products. By value, the top commodities are transportation equipment and secondary traffic. Secondary traffic is defined as freight flows to and from distribution centers or through intermodal facilities. No commodities are assigned to this intermediate step in the transportation process.

Table 1. Freight Shipments To, From, and Within Missouri: 1998, 2010, and 2020

MISSOURI	Tons (millions)			Value (billions $)		
	1998	2010	2020	1998	2010	2020
State Total	453	635	761	341	636	989
By Mode						
Air	<1	1	1	31	72	125
Highway	310	446	542	251	470	730
Other[a]	<1	<1	<1	<1	<1	<1
Rail	104	137	159	56	87	125
Water	38	51	58	4	6	9
By Destination/Market						
Domestic	433	604	718	326	605	935
International	20	31	43	15	30	54

Note: Modal numbers may not add to totals due to rounding.

[a] The "Other" category includes international shipments that moved via pipeline or by an unspecified mode.

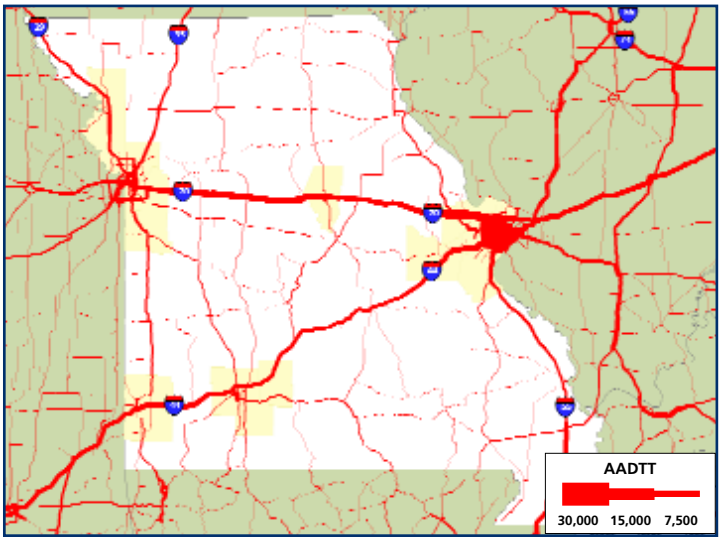
Figure 1. Freight Flows To, From, and Within Missouri by Truck: 1998 (tons)

Federal Highway Administration

Figure 2. Freight Flows To, From, and Within Missouri by Rail: 1998 (tons)

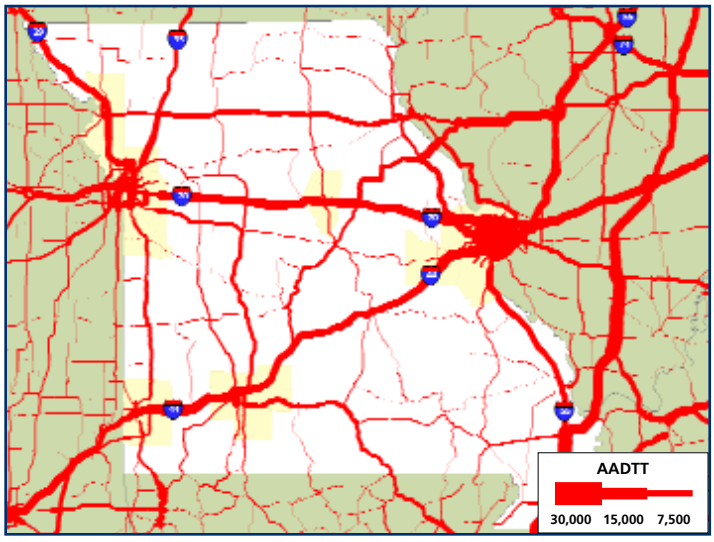
Federal Railroad Administration

Figure 3. Estimated Average Annual Daily Truck Traffic: 1998



Federal Highway Administration

Figure 4. Estimated Average Annual Daily Truck Traffic: 2020



Federal Highway Administration

Table 2. Top Five Commodities Shipped To, From, and Within Missouri by All Modes: 1998 and 2020

Commodity	Tons (millions)		Commodity	Value (billions $)	
	1998	2020		1998	2020
Nonmetallic Minerals	87	99	Transportation Equipment	96	202
Farm Products	60	83	Secondary Traffic	51	211
Coal	58	78	Food/Kindred Products	31	102
Secondary Traffic	50	137	Chemicals/Allied Products	22	58
Clay/Concrete/Glass/Stone	46	94	Farm Products	19	31

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A series of FAF products are available on the website noted below. FAF outputs include freight flow maps for states, modes, and gateways; detailed databases on traffic flows and commodity movements; information on the methodologies used to develop FAF; and forecast assumptions.

The U.S. Department of Transportation, Bureau of Transportation Statistics (BTS) is also developing a series of state transportation profiles. For more information and to obtain a copy of the BTS reports, please call 202-366-DATA.

U.S. Department of Transportation

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