



L RTP

Long-Range
Transportation
Plan

Existing System Trends and Conditions

DRAFT

Introduction



Source: MoDOT

Missouri’s transportation system is the backbone of the state’s economy and quality of life. It connects people to essential needs such as jobs, schools, healthcare and community services while enabling businesses to access suppliers, reach customers and support economic growth. The system also plays a key role in tourism, helping visitors travel safely and efficiently across the state of Missouri.

To make sure this vast network continues to meet current and future demands, the Missouri Department of Transportation (MoDOT) examines trends, conditions and emerging challenges across all modes of transportation, using a broad set of resources,

studies, reports and planning data. This chapter provides a comprehensive picture of the state’s transportation assets, their condition and the pressures that shape them.

The state’s system is multimodal and interconnected, encompassing highways, bridges, public transit, railroads, airports, waterways, bicycle and pedestrian routes and freight infrastructure. Each mode contributes uniquely to the overall system and each must be considered as part of one integrated network that sustains the state’s mobility and competitiveness. For example, highways and major bridges support the bulk of passenger and freight movement, while rail, ports and air cargo enhance the state’s role as a national

logistics hub. Meanwhile, transit, bicycle and pedestrian networks provide connections for those without access to personal vehicles, supporting equitable mobility.

This chapter highlights both progress and persistent challenges. The state’s extensive highway network remains central to mobility but requires continued investment to maintain safety and reliability. Bridge conditions are improving, yet aging infrastructure presents ongoing concerns. Public transit has faced declining ridership, exacerbated by the COVID-19 pandemic, though recovery is underway. Freight volumes continue to grow, reinforcing the state’s importance as a connector for national and global commerce. Aviation, waterways and active transportation systems also present opportunities for growth and modernization.

By examining system performance, emerging trends and long-term risks, this chapter lays the foundation for informed decision-making. It provides a clear understanding of the state’s transportation needs and priorities, offering guidance for future investments that will sustain mobility, enhance safety and strengthen the economy. Together, these insights help the state’s transportation system remain resilient, adaptable and capable of supporting a more connected future.



Source: MoDOT

Multimodal Transportation System Overview

The state's transportation system includes a vast multimodal network of roads, bridges, buses, airports, railroads, waterways, ports, bicycle routes and pedestrian paths. A numerical snapshot highlighting the key components of the state's multimodal transportation system is shown in **Figure 1**.¹

Figure 1 – Missouri's Transportation System

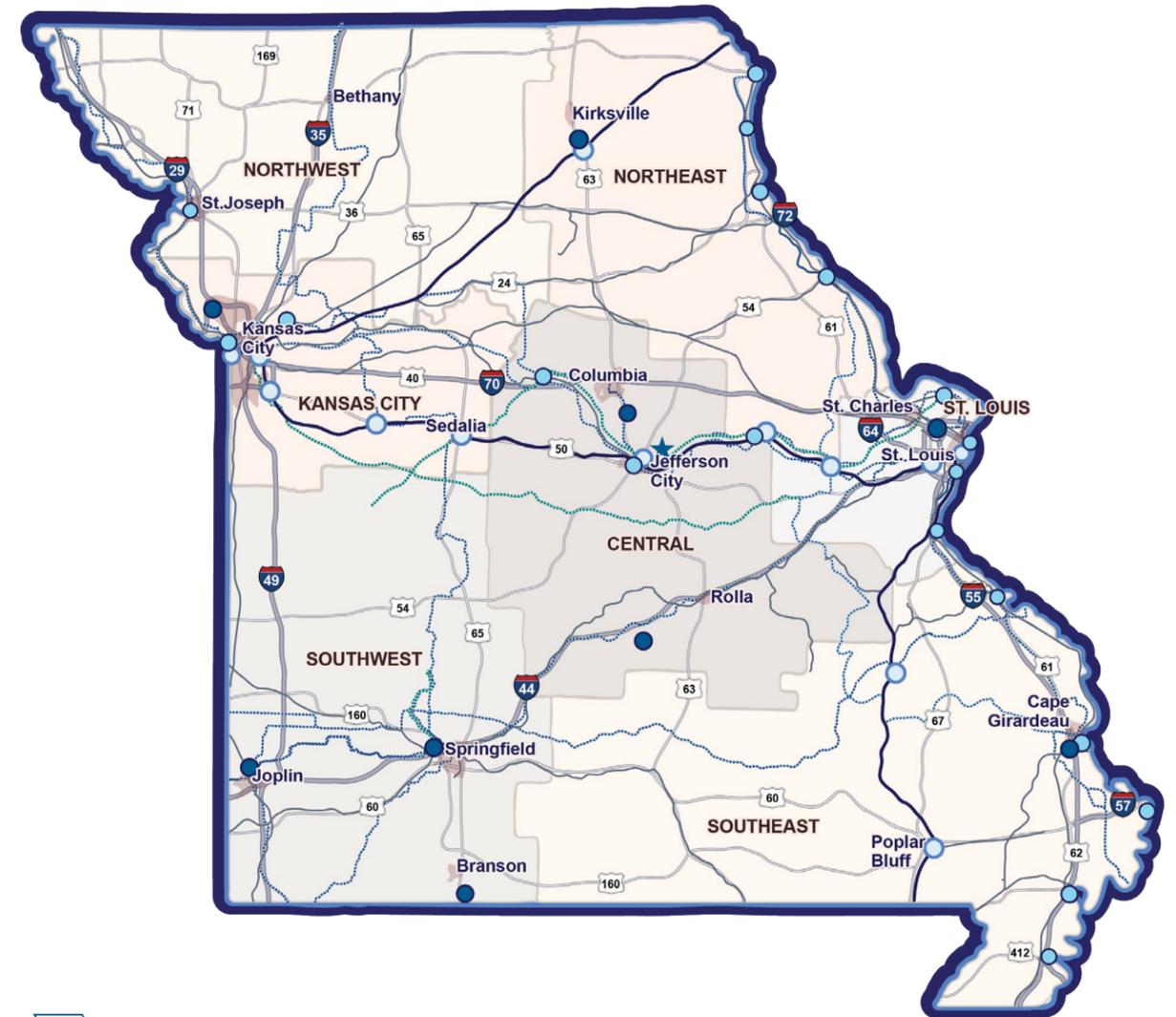


Source: MoDOT, Fast Facts.

This system provides the necessary infrastructure to support an economy for the state of Missouri that maintains and attracts investments and supports quality of life by safely and reliably connecting people with family, jobs and services, businesses with suppliers and customers, students with schools and visitors with their destinations. For that reason, each transportation mode in the state cannot be thought of as an individual transportation system. Instead, each component, whether road, rail, waterway, port, airport, bus or sidewalk, must be considered part of one large and interconnected network. **Figure 2** shows key components of the state's multimodal transportation network.

¹ MoDOT, "Fast Facts," accessed June 5, 2025, <https://www.modot.org/fast-facts>.

Figure 2 – Missouri's Multimodal Transportation Network



Legend

- Inland Port
- Commercial Airport
- Amtrak Station
- Amtrak Route
- Class 1 Railroad
- Cities
- Interstate
- U.S. Route
- Bike Routes Associated with Roadways
 - Bicycle Route 66
 - Great Rivers South Trail
 - Lewis & Clark Trail
 - Mississippi River Trail
 - TransAmerica Trail
 - U.S. Bicycle Route 51
 - U.S. Bicycle Route 251
- Bike Routes Not Associated with Roadways
 - Frisco Highline Trail
 - Katy Trail
 - Rock Island Trail

Source: MoDOT.

Highway System

The state of Missouri has the seventh largest state highway system in the United States (U.S.), totaling 33,814 centerline miles. Each day, 80.8 million miles are driven and 1.7 million tons of freight are hauled on this system.^{2&3} The state's highway network includes interstates, major routes, minor routes and low-volume routes. Interstates and major routes include approximately 5,560 miles or 16% of the 33,814 miles of highway in the state, but account for 77% of the travel. The state's minor routes make up the largest group of state highways, accounting for 17,903 miles or 53% of the state system miles and approximately 22% of travel occurs on these routes. The final tier of the state highways is the low-volume routes, each of which carry less than 400 vehicles per day and serve local transportation needs. The low-volume routes total 10,351 miles accounting for 31% of the state system. Travel on these routes is approximately 1% of all state highway travel.⁴ The state's highway travel by route type is given below in **Table 1**.



Source: MoDOT

Table 1 – Missouri's Highway Travel by Route Type

Description	Major Highways	Minor Highways	Low-Volume Roads
Missouri System Miles	16%	53%	31%
Where Travel Takes Place	77%	22%	1%

Source: MoDOT.

² Federal Highway Administration (FHWA), "Table VM-2 – Highway Statistics 2023," accessed June 20, 2025, <https://www.fhwa.dot.gov/policyinformation/statistics/2023/vm2.cfm>

³ Transearch, 2023.

⁴ MoDOT, "Fast Facts," accessed June 5, 2025, <https://www.modot.org/fast-facts>.

Major Highways

The state's major highways, such as I-70, I-44, I-55, U.S. 50, U.S. 60 and U.S. 63, encompass just 16% of the state highway miles but carry 77% of the system's traffic. Many of the busy routes in urban areas, particularly where vehicles travel between business districts and residential areas, also are classified as major highways. Since 2021, major highways in good condition decreased from 90% to 89%.⁵ **Figure 3** below shows the network of the state's major highways.

Figure 3 – Missouri's Major Highways



Source: HG Consult Inc. Analysis of MoDOT, Major Highways Dataset, 2025.

⁵ MoDOT, "Tracker" "Condition of State Highways - 5c," accessed June 5, 2025, <https://www.modot.org/condition-state-highways-5c>.

Minor Highways

The state's minor highways primarily serve local transportation needs. Examples include MO 17, MO 42, BU 54 and Rt. C. The state's minor highways account for 17,903 miles of the total state system and are the largest group of state highways, accounting for approximately 22% of statewide travel. The minor highways serve as a vital link to the agricultural industry throughout the state. In 2024, 83% of minor highways were in good condition and thus 17% of minor highways were in poor condition. Since 2021, minor highways in good condition increased from 80% to 83%.⁶ **Figure 4** below highlights the state's minor highway network.

Figure 4 – Missouri's Minor Highways



Source: HG Consult Inc. Analysis of MoDOT, Minor Highways Dataset, 2025.

⁶ MoDOT, "Condition of State Highways - 5c," accessed June 5, 2025, <https://www.modot.org/condition-state-highways-5c>.

Low-Volume Routes

The state's low-volume routes carry less than 400 vehicles per day and primarily serves local transportation needs and consist mostly of lettered routes. The low-volume routes total 10,351 miles, accounting for 31% of the state system. Travel on these routes is approximately 1% of all state highway travel. **Figure 6** shows the low-volume routes that serve as a vital link to the agricultural industry throughout the state. **Figure 5** presents two photographs of MoDOT-owned low-volume routes. In 2024, low-volume routes mirrored the condition of minor highways with 83% of low-volume routes in good condition and 17% in poor condition. Since 2021, low-volume roads in good condition increased from 71% to 83%.⁷

Figure 5 – MoDOT-Owned Low-Volume Route C (Grundy County) and Route D (Iron County)



Source: HG Consult Inc. Analysis of MoDOT, Low-Volume Routes Dataset, 2025.

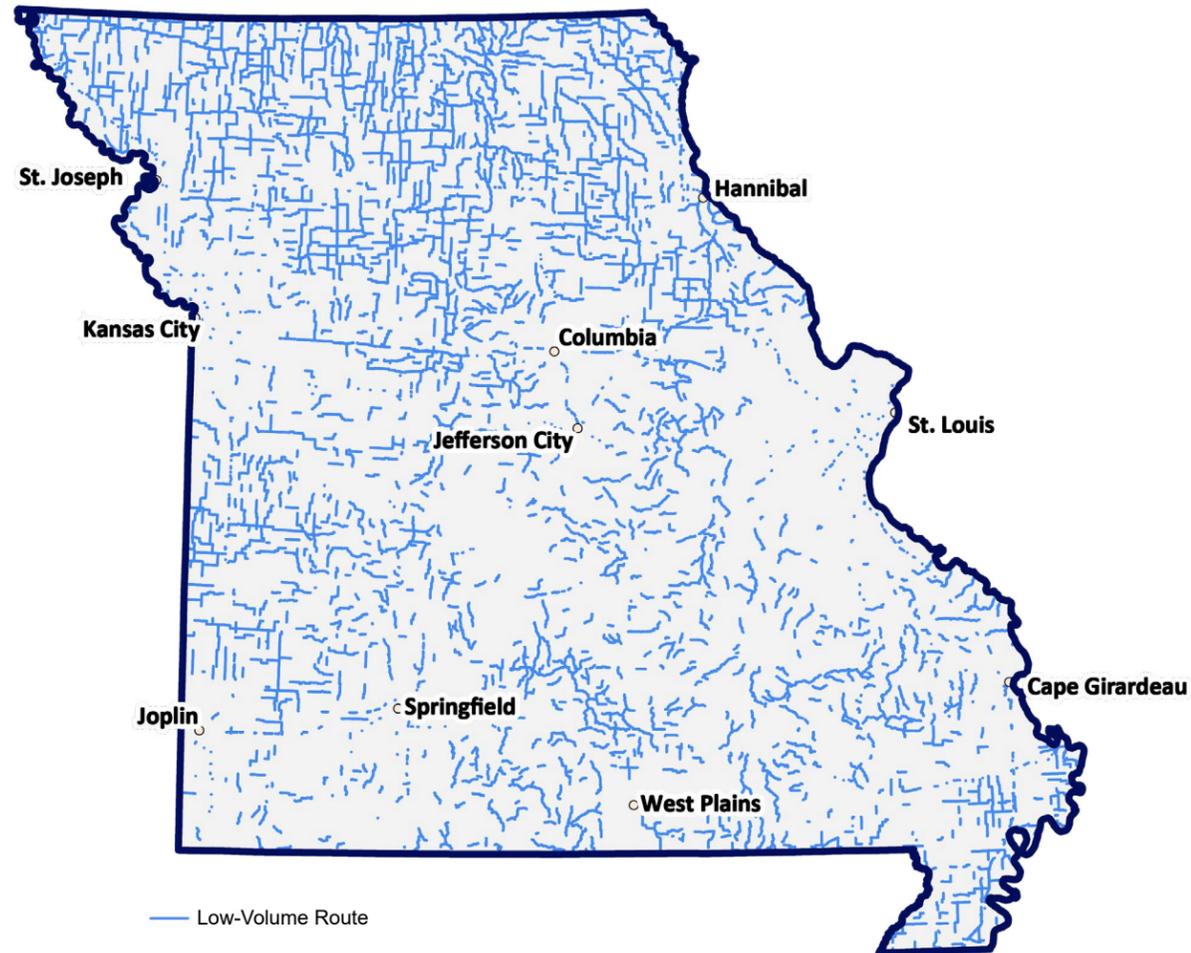
⁷ MoDOT, Tracker "Condition of State Highways - 5c," accessed June 5, 2025, <https://www.modot.org/condition-state-highways-5c>.

⁸ MoDOT, Tracker "Condition of State Bridges – 5a," accessed June 5, 2025, <https://www.modot.org/condition-state-bridges-5a>.

Bridges

In addition to the large network of highways, the state has 10,427 bridges and culverts of varying sizes, including 209 major bridges that are longer than 1,000 feet. The average bridge age in 2024 is 50 years. Between 2021 and 2024, the number of bridges in poor condition declined from 823 to 752, representing an 8.6% reduction.⁸

Figure 6 – Missouri’s Low-Volume Routes



Source: MoDOT.

Public Transit

Public transit continues to provide Missourians with an essential alternative to personal vehicle travel to access work, school and essential services. An overview of the state’s transit system is provided in **Figure 7**. In the state, transit travel mostly occurs on buses and vans but includes other forms such as light rail and street cars. The state’s larger cities offer a broader array of transit services, in some cases offering service most hours of the day, seven days a week. Transit-dependent residents in smaller communities and rural areas typically rely on limited scheduled trips (specific days of the week or month) or on-demand services that must be scheduled in advance.

Less than 1% of Missourians use public transit for commuting compared to the national average of 3.5%. The 2019-2023 American Community Survey (ACS) data for the state estimated that 6.6% of households in the state have no vehicle available. This is slightly less than 8.3% nationally.⁹

Figure 7 – Missouri’s Public Transit Overview



34
Transit Agencies
in 2023

Source: Federal Transit Administration (FTA), "2024 Annual Agency Database Information," 2024.



782,550
Annual Amtrak
Ridership at
Missouri Stations

Amtrak, "Amtrak in Missouri Fiscal Year 2025," 2025.



40,800,000
Public Transit
Ridership

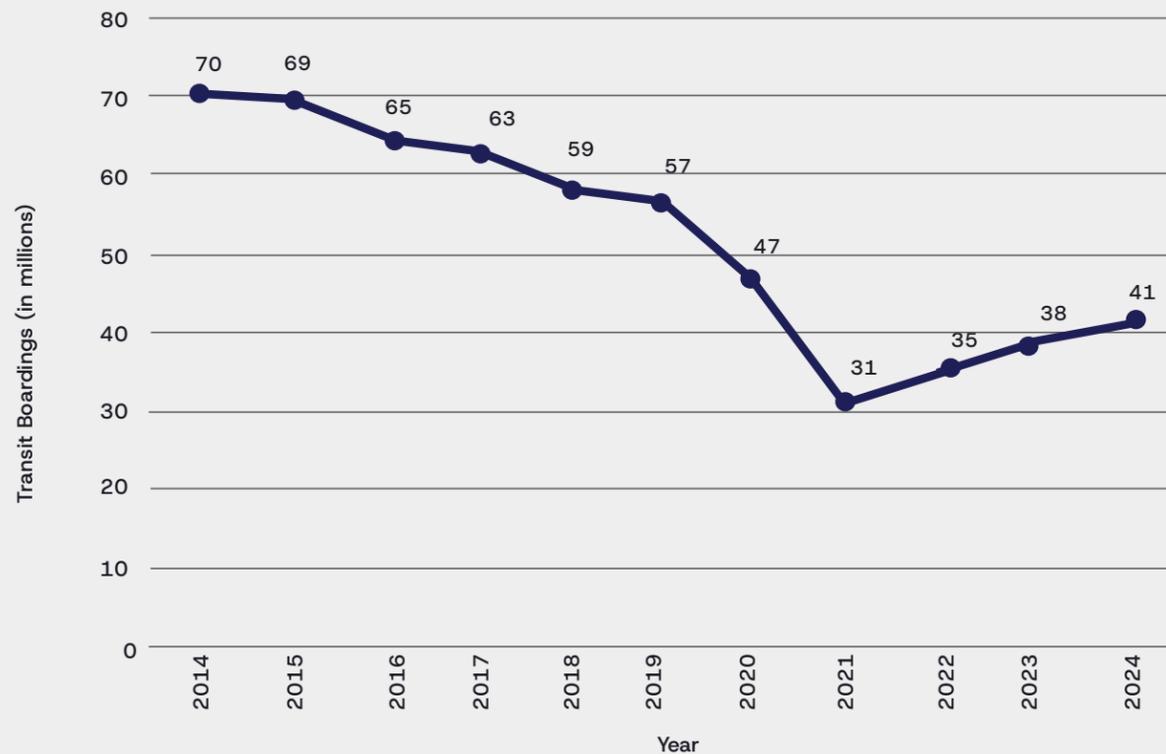
Source: MoDOT, 2024.

⁹ U.S. Census Bureau, "Vehicles Available and Electric Vehicles," accessed June 5, 2025, <https://www.census.gov/acs/www/about/why-we-ask-each-question/vehicles/#:~:text=starting%20in%202026.-.United%20States.Data%20Profiles/Housing%20Characteristics>.

In 2024, the state's transit systems—both rural and urban—provided an annual average of 40.8 million rides, equivalent to approximately 6.5 rides per resident.¹⁰ Despite this, overall ridership declined by 40% over the past decade, with the most significant drop occurring between 2019 and 2022 primarily due to the impacts of the COVID-19 pandemic. **Figure 8** illustrates annual transit boardings from 2014 to 2024, highlighting a general downward trend.

Transit ridership in the state has been declining since 2014 due to a mix of economic and structural factors. Affordable car ownership reduced dependence on transit, while service cuts, labor shortages and less compact urban development weakened reliability and accessibility. The rise of ride-hailing, COVID-19's impact on commuting and significant investments in light rail that did not substantially boost ridership also shaped the trend. The lowest point was reached in 2021, with just 31 million boardings. However, ridership has rebounded since the pandemic, climbing to 40.8 million boardings in 2024.¹¹

Figure 8 – Missouri's Transit Boardings



Source: FTA, NTD, Annual Data Tables – Metrics.

¹⁰ Robert M. Lewis, "Economic Impact of Public Transit in Missouri 2019-2023," January 2024, https://mopublictransit.org/wp-content/uploads/2024/02/Economic-Impact-of-Public-Transit-in-MO-Report_2024.pdf.

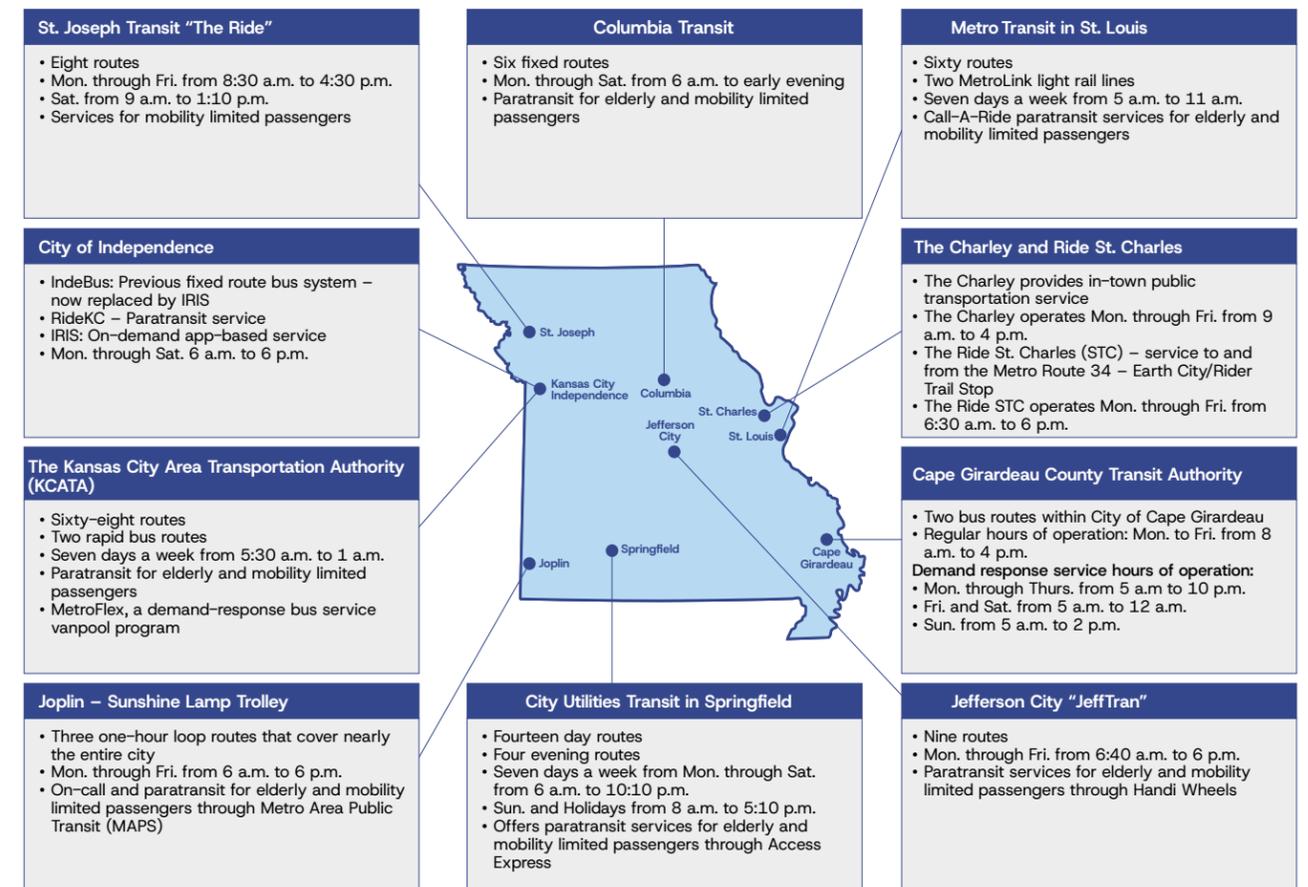
¹¹ MoDOT

Urban Transit

The state's largest metro areas inclusive of St. Louis, St. Charles, Kansas City, Independence, Springfield, Columbia, Jefferson City, Joplin, Cape Girardeau and St. Joseph support urban transit systems offering a variety of services and availability. On average, 165,000 passengers board buses on these systems each day.¹²

Public transportation consists of shared passenger services that are used by the general public as an alternative to driving, and in some cases owning, a personal vehicle. There are a variety of public transit methods in the state, including buses, vans, light rail and streetcars. Larger cities in the state offer the public a wider variety of public transit options with greater frequency. **Figure 9** highlights the type of service, number of routes and service schedules of each urban area's system.

Figure 9 – Missouri Urban Public Transit Systems



Source: MoDOT.

¹² U.S. Department of Transportation (USDOT) FTA, "NTD Transit Agency Profiles", accessed June 5, 2025, https://www.transit.dot.gov/ntd/transit-agency-profiles?field_geography_target_id=All&field_address_administrative_area=MO&combine=.

Rural Transit

As shown in **Figure 10**, numerous rural transit service providers serve the state’s rural areas. Operating Above the Standard (OATS), Inc. is a 501(c)(3), not-for-profit organization serving 87 of the state’s 114 counties. Southeast Missouri Transportation Service (SMTS) serves 21 of the state’s counties. Some of these transit services are branded with a localized name, such as Direct Transit (Ray County), Cape Girardeau County Transit (Cape Girardeau County), Scott County Transit System (Scott County) and Dunklin County Transit Service (Dunklin County). In addition, 19 towns, cities and not-for-profit organizations offer local transportation services.

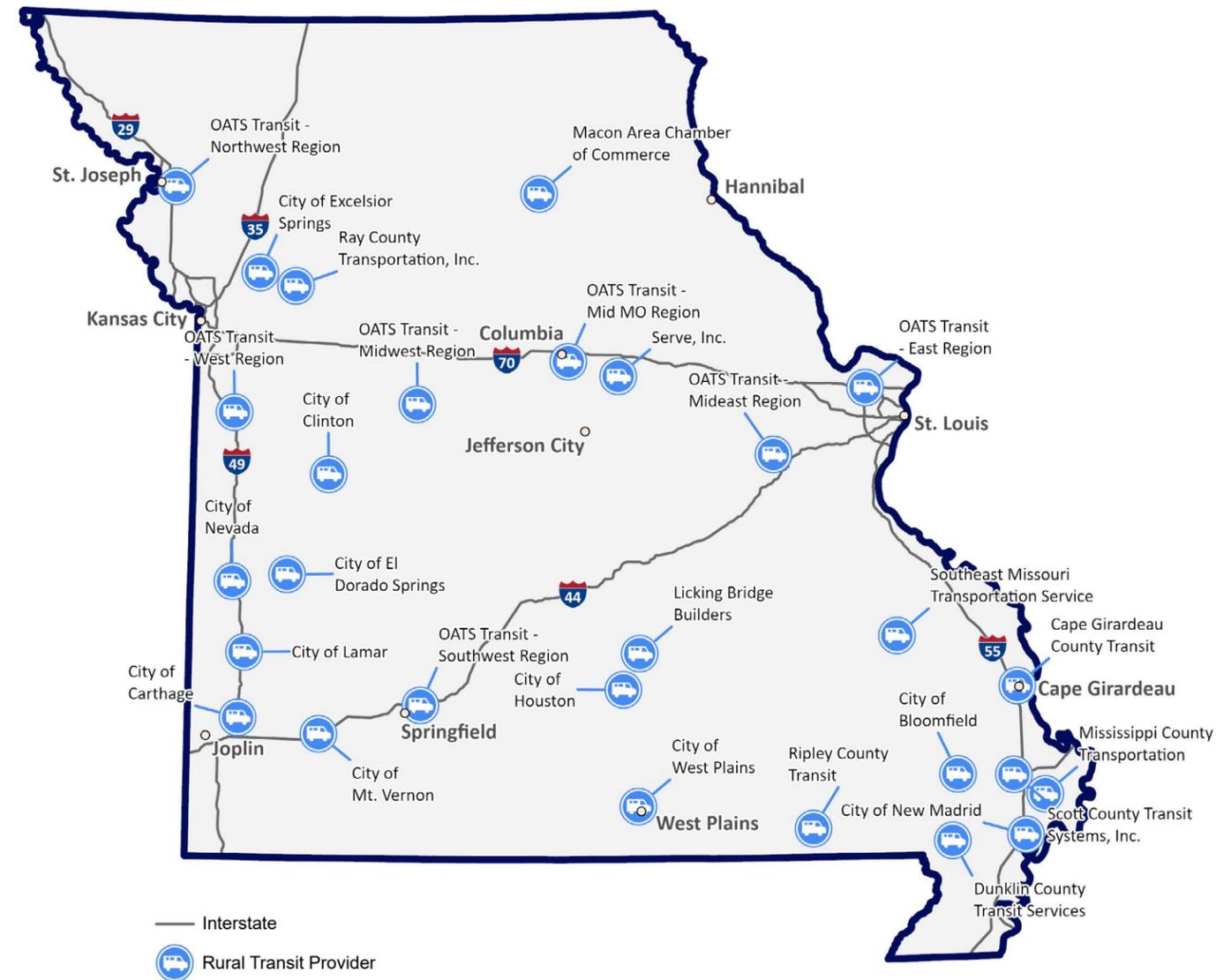
Services offered vary and include local buses, intercity bus services, taxi coupon programs and paratransit (which is a service that does not follow fixed routes or schedules). Transit services are available throughout the state; however, depending on the county, service may be limited in days and hours of operation, which on average is two days per week.

State and local social service programs also offer transit services for riders with financial or physical needs to get access to essential services, such as medical appointments and healthcare facilities, job training and grocery shopping. Assistance is offered in the form of cash reimbursements, contracts with public or private transportation providers or agency-operated transportation services.



Source: MoDOT

Figure 10 – Missouri’s Rural Transit Service Providers

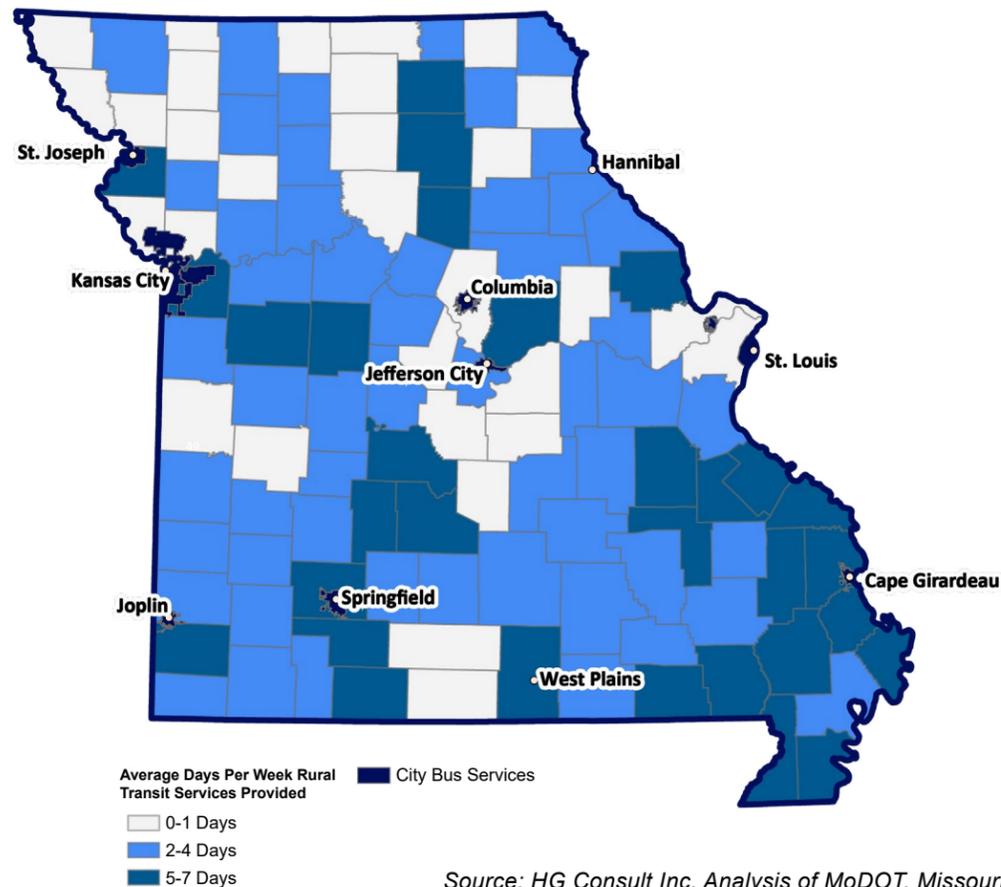


Source: MoDOT, Missouri Rural Transit Map, 2025.

Smaller communities and rural areas in the state tend to rely heavily on less frequently scheduled trips or on-demand services that are scheduled in advance. OATS, Inc. offers shared-ride, demand-response and door-to-door transportation service. SMTS provides door-to-door transportation throughout South Central and Southeast Missouri. In addition, there are 25 other city, county and not-for-profit service providers. University bus systems including University of Missouri, Missouri State University and Southeast Missouri State University also provide transit services for students, staff and the general public.

Transit ridership across the state declined by 24% between 2015 and 2019, followed by an additional 20% drop from 2019 to 2020. These declines were largely driven by the COVID-19 pandemic, with reduced ridership continuing into 2021. However, modest and steady recovery began in 2022 and continued through 2023. During the 2019–2023 period, OATS, Inc. provided an average of 38,470 rides annually equating to roughly one-third of a ride per resident within its service area.¹³ Figure 11 illustrates the average number of rural transit service days per week by county, showing that service is most frequent in southeastern Missouri and in counties surrounding metropolitan areas.

Figure 11 – Average Days Per Week of Rural Transit Service



Source: HG Consult Inc. Analysis of MoDOT, Missouri Rural Transit Map, 2025.

¹³ Robert M. Lewis, "Economic Impact of Public Transit in Missouri 2019–2023," January 2024, https://mopublictransit.org/wp-content/uploads/2024/02/Economic-Impact-of-Public-Transit-in-MO-Report_2024.pdf.

Intercity Bus

The state's intercity bus (ICB) services provide a link between smaller communities and connects those communities to larger urban areas that offer services and opportunities otherwise not available as shown in Figure 12. Four intercity bus companies provide service to Missourians—Greyhound, Megabus, Burlington Trailways and Jefferson Lines (Appendix B).

Intercity bus ridership in the state totaled 80,034 in 2016, down from a peak of 89,129 in 2015, though still an increase from 64,404 in 2014.¹⁴ Private intercity bus companies play a vital role in reducing traffic congestion, lowering emissions and conserving energy across the state.

Six of the seven cities with urban transit services also have ICB service.¹⁵ While route connections between these two types of bus service are fairly good, the time of day that the ICB bus arrives may not always be compatible with the hour of service offered by the urban transit system. Additional information can be found in Appendix C.

Figure 12 – Intercity Bus Stop Locations



Source: HG Consult Inc. Analysis of Bureau of Transportation Statistics (BTS); Intercity Bus Atlas Stops, 2025; HG Consult Inc. Analysis of BTS; Intercity Bus Atlas Routes, 2025.

¹⁴ HDR Engineering, Inc., "Missouri Intercity Bus Study," April 27, 2010, <https://www.modot.org/sites/default/files/documents/multimodal/modotibcreport-final042710ch1-2.pdf>.

¹⁵ HDR Engineering, Inc., "Missouri Intercity Bus Study," April 27, 2010, <https://www.modot.org/sites/default/files/documents/multimodal/modotibcreport-final042710ch1-2.pdf>.

Passenger Rail

Passenger rail services in the state are shown in **Figure 13**. The state has three passenger rail transit systems: Amtrak, the St. Louis MetroLink and the Kansas City Streetcar. Amtrak provides inter-city passenger service while St. Louis MetroLink is a light rail system serving the St. Louis metropolitan area and surrounding communities and the Kansas City Streetcar is an electric streetcar system within downtown Kansas City. An additional light rail service, the Delmar Loop Trolley, completed construction in early 2020. The Delmar Loop Trolley is a 2.2-mile, 10-station heritage streetcar line in and near the Delmar Loop area of greater St. Louis.

The state sponsors the Amtrak Missouri River Runner inter-city passenger service with four permanent routes and stops at 13 locations. The Missouri River Runner provides an alternative travel mode along the heavily traveled I-70 corridor between St. Louis and Kansas City. The state also has access points to two national Amtrak routes and another regional service between St. Louis and Chicago. Additionally, there are three excursion railroads that operate in the state.¹⁶ Amtrak operates two national passenger train routes in the state:

- Southwest Chief Train operates between Chicago and Los Angeles with service in the state from Kansas City across northern Missouri to Ft. Madison, Iowa.
- Texas Eagle Train provides connections between Chicago and San Antonio, through major cities from Austin to Dallas and through the Ozarks to Little Rock.

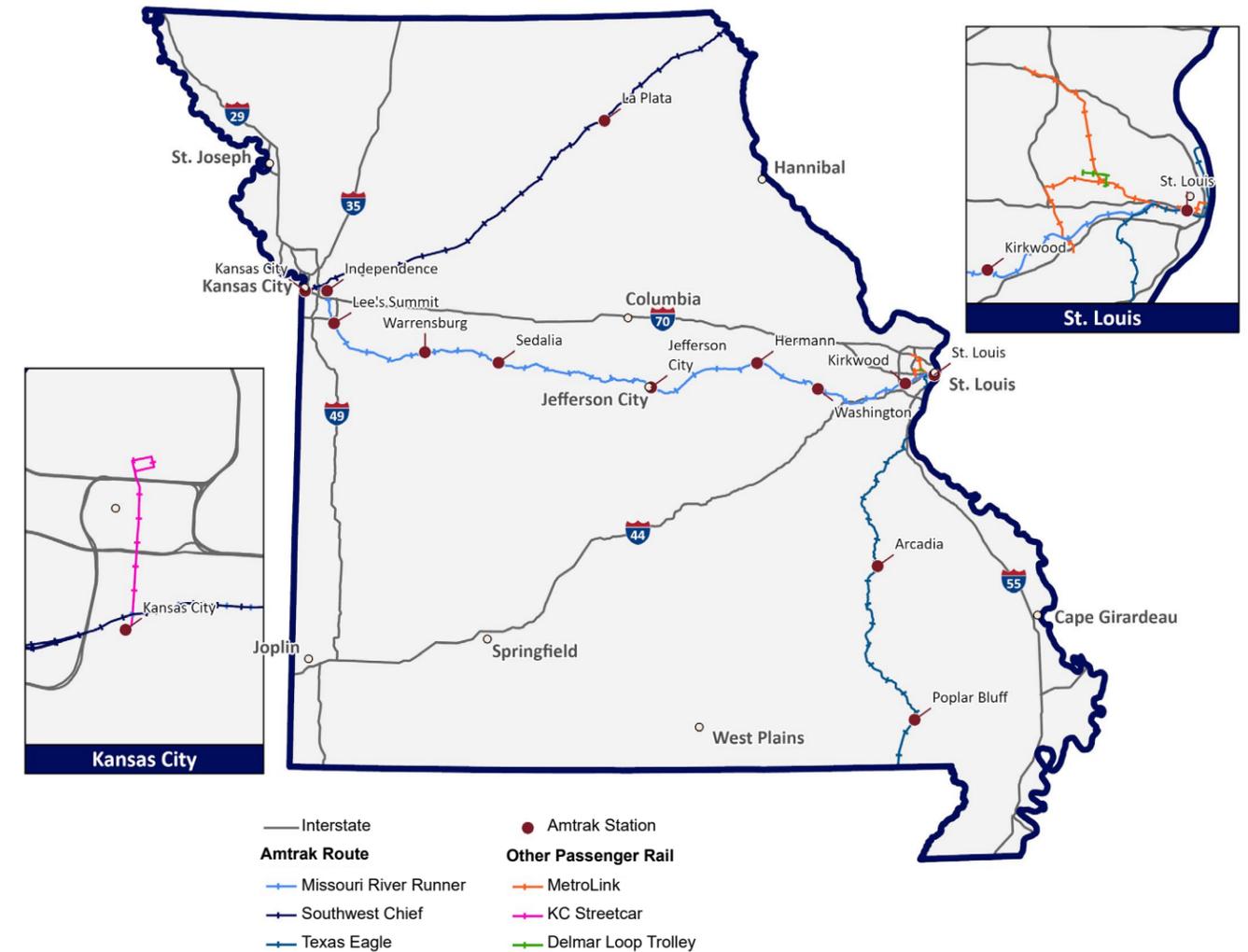
The Missouri River Runner operates two round trips per day across 283 miles of track between the Gateway Transportation Center in St. Louis and Union Station in Kansas City, providing connection to the Southwest Chief and Texas Eagle routes, with stops in Kirkwood, Washington, Hermann, Jefferson City, Sedalia, Warrensburg, Lee's Summit, Independence and Kansas City.

82% of Missourians live within 60 miles of a passenger rail station. In 2024, 194,275 passengers rode the Missouri River Runner with an average fare of \$34.88 per passenger. Passenger rail ridership decreased almost two-thirds between 2019 and 2021. This decrease in ridership can be attributed to the COVID-19 pandemic. In 2025 Amtrak ridership in Missouri surpassed pre-pandemic levels and reached a ridership level of 782,550.¹⁷

¹⁶ MoDOT, "Passenger Railroads," accessed June 5, 2025, <https://www.modot.org/passenger-railroads>.

¹⁷ Amtrak, "Amtrak in Missouri Fiscal Year (FY) 2025," accessed June 5, 2025, <https://www.amtrak.com/content/dam/projects/dotcom/english/public/documents/corporate/statefactsheets/MISSOURI25.pdf>

Figure 13 – Missouri’s Passenger Rail Service



Source: HG Consult Inc. Analysis of BTS, Amtrak Routes and Stations, 2025; HG Consult Inc. Analysis of St. Louis Metro, Current MetroBus and MetroLink System, 2022; HG Consult Inc. Analysis of City of St. Louis, Loop Trolley, 2024; HG Consult Inc. Analysis of RideKC, Streetcar Route, 2025.

Aviation

The state is home to 505 aviation facilities, including publicly owned airports. The state system includes nine public-use commercial and 98 general aviation airports.¹⁸ There are over 250 airfields in the state, ranging from private grass strips to large commercial service airports as shown in **Figure 14**. Of its 120 public use airports, 106 are publicly owned.¹⁹

Figure 14 – Missouri’s Airport Locations



Source: MoDOT, State Airport System Plan Update – Chapter 5, Airport Roles, 2019; HG Consult Inc. Analysis of BTS, Aviation Facilities, 2025.

¹⁸ MoDOT, "Missouri State Airport System Plan Update: Executive Summary," February 2019, <https://sites.jviation.com/MoDOTAirportSystemPlan/documents/MoSASP-Executive-Summary.pdf>.

¹⁹ MoDOT, "Aviation Overview," accessed June 5, 2025, <https://www.modot.org/sites/default/files/documents/Aviation%20Overview%20FY25.pdf>.

More than 200,000 tons of cargo are transported by air in the state each year.²⁰ The state’s top three freight airports are Kansas City International Airport, St. Louis Lambert International Airport and Springfield-Branson National Airport. In 2023, the St. Louis Lambert International Airport, the region’s primary cargo airport, moved 160 million pounds of cargo for dedicated freighters such as UPS, FedEx, Amazon, DHL and more as well as belly cargo moved from passenger airlines.²¹ In the same year, the Springfield-Branson National Airport moved 15,600 tons for dedicated daily freight such as FedEx and UPS. As shown in **Figure 15**, according to 2023 Transearch data, air tonnage is forecast to increase from 207,031 in 2023 to

280,244 in 2043 an increase of 35.4%. Moreover, air commodity value is forecast to increase from \$7.2 billion in 2023 to \$9.4 billion by 2043, an increase of 30.5%.²²

According to the Federal Aviation Administration (FAA), the state had approximately 13.7 million enplaned passengers in 2023, up from approximately 12.1 million enplaned passengers in 2022.²² In 2023, Springfield-Branson National Airport was ranked as the 123rd busiest airport in the U.S., St. Louis Lambert International Airport ranked as 34th and Kansas City International Airport was ranked as 40th.²⁴

For fiscal year (FY) 2025, MoDOT received appropriations of \$98.1 million in federal funds and \$38.4 million in state funds.²⁵

Figure 15 – Missouri’s Aviation by the Numbers



Source: MoDOT, FY2025 Aviation Overview.

²⁰ Transearch, 2023

²¹ St. Louis Regional Freightways, "Airfreight and Cargo," accessed June 5, 2025, <https://www.thefreightway.com/regional-advantages/airfreight-and-cargo/>.

²² Transearch, 2023.

²³ FAA, "CY 2023 Enplanements at All Airports (Primary, Non-primary Commercial Service and General Aviation)," accessed June 5, 2025, https://www.faa.gov/airports/planning_capacity/passenger_allcargo_stats/passenger/cy23_all_enplanements.

²⁴ USDOT, Bureau of Transportation Statistics (BTS), "Airport Rankings 2023," accessed June 5, 2025, <https://www.bts.gov/topics/airlines-and-airports/airport-rankings-2023>.

²⁵ MoDOT, "Aviation Overview," accessed June 5, 2025, <https://www.modot.org/sites/default/files/documents/Aviation%20Overview%20FY25.pdf>.

Commercial Service Airports

In 2024, the state's nine commercial service for public use airports combined served over 27 million passengers. Two of the nine commercial airports – Kansas City International Airport and St. Louis Lambert International Airport shown in **Figure 16** – offer national and international flights. In 2023, the Kansas City Aviation Department reported that 5,654,068 passengers traveled through Kansas City International Airport. In 2024, that number increased by 4.6% to 5,915,078 passengers.²⁶

In the same year, 15,946,730 passengers traveled through St. Louis Lambert International Airport, which is 7.1% higher than in 2023 when 14,886,000 traveled through the airport.²⁷ Additional regional airport services are offered at Springfield-Branson National Airport, Joplin Regional Airport, Branson Airport, Columbia Regional Airport, Cape Girardeau Regional Airport, Kirksville Regional Airport and Waynesville-St. Robert Regional Airport.

Kansas City International has six all-cargo carriers including Amazon Air, Atlas Air, DHL, FedEx Express, Freight Runners Express and UPS servicing shipping needs for western Missouri and eastern Kansas. St. Louis Lambert International has four all-cargo carriers including Amazon Air, DHL, FedEx Express and UPS serving eastern Missouri and western Illinois.

Figure 16 – Commercial Service (St. Louis Lambert International Airport)



²⁶ FAA, "CY 2024 ACAIS: Calendar Year 2024 Enplanements at All Commercial Airports (by Rank)," accessed January 15, 2026, https://www.faa.gov/airports/planning_capacity/passenger_allcargo_stats/passenger/arp-cy2024-commercial-service-enplanements.pdf?utm.

²⁷ St. Louis Lambert International Airport, "STL's Total Number of Passengers Is Largest in More Than 20 Years," February 4, 2025, <https://www.flystl.com/newsroom/stl-news/2025/high-number-of-travelers-use-st-louis-lambert-in-2024>.

Business Capable Airports

In the state, 35 business capable airports have runways 5,000 feet or longer. These airports, such as Jefferson City Memorial Airport shown in **Figure 17**, serve a wide variety of services and amenities for general aviation, business community, military aircraft and supports local and regional economies across the state.

Figure 17 – Business Capable (Jefferson City Memorial Airport)



Source: MoDOT

General Aviation Airports

The final category of public use airports is General Aviation, such as the Jesse Viertel Memorial Airport (Boonville) shown in **Figure 18**. General aviation refers to aviation not served for military or commercial uses. While these airports may provide passenger service, they are more typically used by businesses and corporations and for agricultural, private flying and training, law enforcement and security, emergency response and various industrial and recreational activities.

Figure 18 – General Aviation (Jesse Viertel Memorial Airport – Boonville)



Source: MoDOT

Waterways

The state's waterways transport an average of \$19.2 billion in cargo annually.²⁸ The state has approximately 1,050 miles of navigable rivers, including almost 500 river miles of the Mississippi River and over 550 river miles of the Missouri River. The state statute allows for the formation of port authorities and MoDOT's waterways unit assists authorized cities and counties in forming port authorities to foster local economic development. MoDOT assists in capital and administrative funding for public port authorities, along with other technical assistance. A total of 19 public port authorities and approximately 200 private river terminals can be found along the state's waterways.^{29&30} The general status of the state's 19 public port authorities, as of 2025, is summarized below:

Commodities transported by barge on the Missouri River include agricultural products, fertilizers, petroleum products, road salt, aggregates and iron/steel. The Mississippi River continues to be a key transportation option for a variety of agricultural products, as well as other bulk materials including aggregates, petroleum products, chemicals and building materials.

In 2023, ports in the state moved 51.1 million tons of freight.³¹ In 2043, 58.6 million tons of freight will be transported through the state's waterways, according to forecasts. This would amount to a cumulative increase of 14.5% and a compounded annual growth rate of 0.7%.³² The value of this freight is expected to increase to \$22.6 billion by 2043, which amounts to a cumulative increase of 17.5%.

The state has four nationally designated marine highways, as shown in **Figure 19**, which generally shadow the interstate highway system along the Mississippi and Missouri Rivers. Designated marine highways receive preferential treatment for federal assistance from USDOT's Maritime Administration (MARAD). The marine highway system has been designated to expand the use of the nation's waterways to relieve congestion, reduce air emissions and generate other public benefits by increasing the efficiency of freight movement on the surface transportation system.

²⁸ Transearch, 2023.

²⁹ MoDOT, "Port Authority Contacts," accessed September 3, 2025, <https://www.modot.org/port-authority-contacts>.

³⁰ .S. Army Corps of Engineers (USACE), "Project Assistance Library, Navigation and Civil Works Decision Support Center, Port and Waterfall Facilities," July 2024, <https://publibrary.sec.usace.army.mil/resource?title=Port%20and%20Waterways%20Facilities&documentId=6b2be847-d49d-46c9-980b-00ac094104f8>.

³¹ Transearch, 2023.

³² Transearch, 2023.

Marine highways serving the state include the following:

- **M-29 connects the Upper Missouri River from Kansas City to Sioux City, Iowa**
- **M-70 covers the Missouri River from Kansas City to St. Louis**
- **M-35 covers the Upper Mississippi River from the Twin Cities to St. Louis**
- **M-55 connects the Illinois River from Chicago to St. Louis and then the Mississippi River from St. Louis to the Gulf of America**

Figure 19 – U.S. Marine Highway Routes



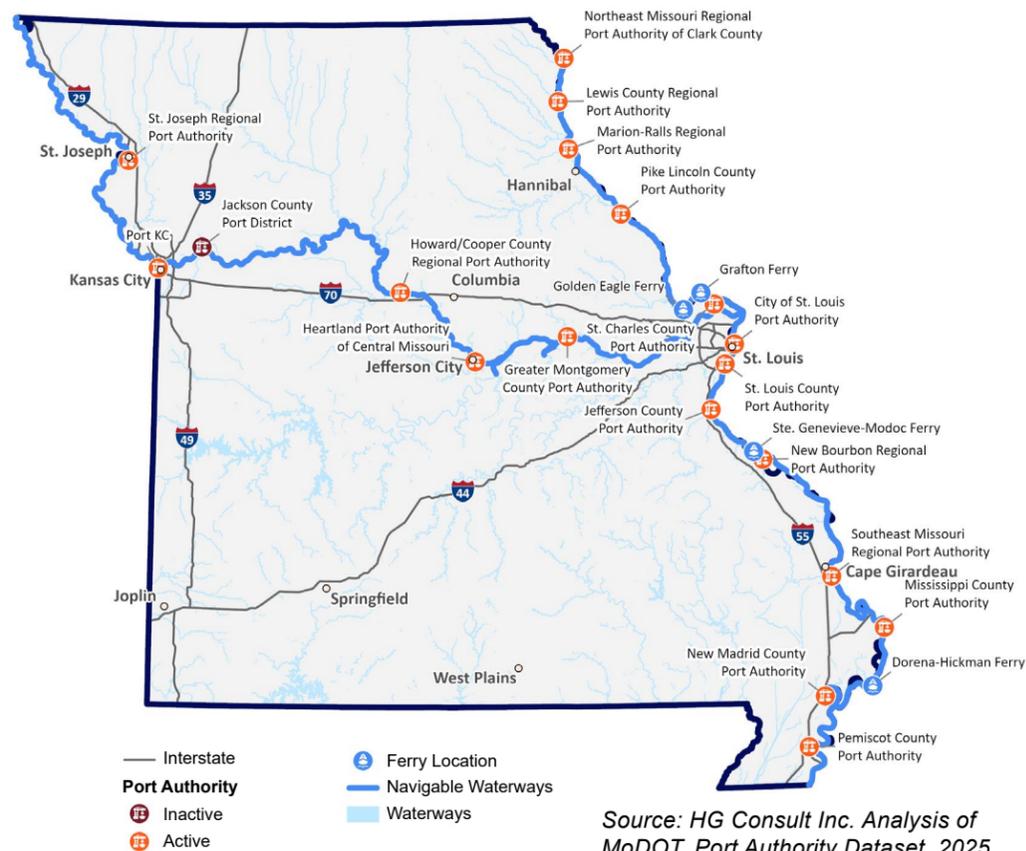
Source: U.S. Maritime Administration (MARAD), U.S. Marine Highway Program Routes Map, 2025

In 2023, approximately 32 million tons of freight originated on the state's waterways.³³ Access to this transportation option is available through 19 public port authorities in the state as shown in **Figure 20**. Commodities transported by barge tow on the Missouri River include agricultural products, chemicals such as fertilizers and petroleum products and manufactured goods such as building materials. The Mississippi River continues to be a major mode of transportation for a variety of farm products and other bulk materials such as chemicals and building materials.

The state also offers four toll ferry services that cross the Mississippi River:

- The Golden Eagle Ferry is privately owned and operated.
- The Grafton Ferry is privately operated with the landings maintained by St. Charles County (Missouri) and the City of Grafton (Illinois).
- The Ste. Genevieve-Modoc Ferry is privately operated, but it is owned by the New Bourbon Regional Port Authority (Missouri), with the Illinois Department of Transportation (IDOT) owning and maintaining the Illinois landing.
- The Dorena-Hickman Ferry is owned and operated by the Mississippi County Port Authority (Missouri).

Figure 20 – Missouri's Public Port Authorities and Toll Ferries



³³ Transearch, 2023.

Freight Rail

Rail is a major part of the state's transportation system and plays a significant role in the state's economy. **Figure 21** shows the state's freight railroad routes. The state has the 11th-largest number of railroad miles in the U.S., with 3,793 miles of freight track (including 2,500 miles of yard track).^{34&35} The state has 6,524 total rail crossings, 4,364 public (including 3,294 at grade), 2,148 private (including 2,080 at grade) and 12 unknown crossings.³⁶ Twenty freight railroads operate in the state, carrying the fourth-largest volume of freight tonnage in the country. Kansas City and St. Louis are ranked as the second and sixth largest rail transportation centers in the nation, respectively.³⁷ In 2022, the state ranked sixth nationally in freight rail employment.³⁸

In 2023, 7.3 million rail cars carried 344.8 million tons of freight valued at \$663 billion, representing 39.2% of the total value of goods shipped in the state.³⁹

The state has a significant freight rail infrastructure, with five Class I railroads- BNSF Railway (BNSF), Union Pacific (UP), Norfolk Southern (NS), CSX and Canadian Pacific Kansas City (CPKC), operating approximately 4,161 miles of main track rail lines and approximately 4,100 public and private highway-rail crossings.^{40&41} Of these, 2,755 crossings are public and 1,316 crossings are private. In addition to the Class I network, 15 short line railroads operate approximately 566 track miles within the state, providing essential last-mile connections to rural shippers and local industries.^{42&43} **Figure 22** shows the routes of the state's Class I railroads. 30% of the freight in the state is moved by rail and volumes are projected to grow in the future, reinforcing the state's role as a connector in the national freight network.⁴⁴

³⁴ Association of American Railroads (AAR), "Missouri State Fact Sheet," accessed September 3, 2025, <https://www.aar.org/wp-content/uploads/2025/01/AAR-Missouri-State-Fact-Sheet.pdf>.

³⁵ MoDOT, "Freight Railroads," accessed September 3, 2025, <https://www.modot.org/freight-railroads>.

³⁶ Federal Railroad Administration (FRA), "Crossing Inventory Listing (8.01/8.08)," updated January 27, 2025, DOT Open Data Catalog, accessed September 3, 2025, <https://data.transportation.gov/stories/s/Crossing-Inventory-Listing/ejv6-cpdh/>.

³⁷ AAR, "Freight Railroads," accessed September 3, 2025, <https://www.modot.org/freight-railroads>.

³⁸ AAR, "Freight in Your State," accessed September 3, 2025, <https://www.aar.org/states/>.

³⁹ Transearch, 2023.

⁴⁰ MoDOT, "Freight Railroads," accessed September 3, 2025, <https://www.modot.org/freight-railroads>.

⁴¹ AAR, Missouri State Fact Sheet," accessed September 3, 2025, <https://www.aar.org/wp-content/uploads/2025/01/AAR-Missouri-State-Fact-Sheet.pdf>.

⁴² AAR, Missouri State Fact Sheet," accessed September 3, 2025, <https://www.aar.org/wp-content/uploads/2025/01/AAR-Missouri-State-Fact-Sheet.pdf>.

⁴³ MoDOT, "Freight Railroads," accessed September 3, 2025, <https://www.modot.org/freight-railroads>.

⁴⁴ Transearch, 2023

Figure 21 – Missouri’s Freight Railroads



— Class I Freight Railroad
 — Shortline Railroad

Source: HG Consult Inc. Analysis of MoDOT, Freight Railroads, 2025.

Figure 22 – Missouri’s Class I Freight Railroads



— Class I Freight Railroad

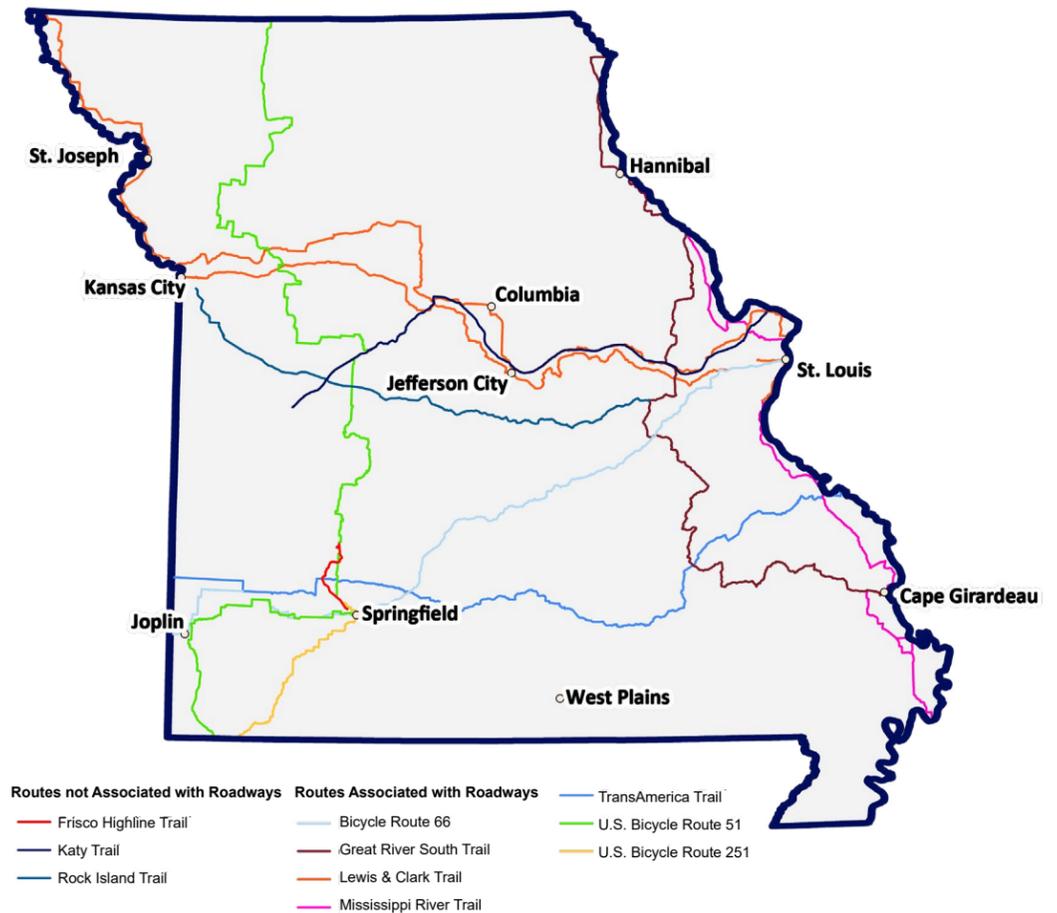
Source: HG Consult Inc. Analysis of MoDOT, Freight Railroads, 2025.

Bicycle and Pedestrian

Missouri has more than 600 miles of shared use paths that serve both bicyclists and pedestrians, although bicycling and walking together account for less than 2% of all trips taken on Missouri’s roadways.⁴⁵ These facilities include sidewalks, shoulders, on street bicycle lanes, crosswalks and trail systems and they are managed by a variety of entities including cities, counties and MoDOT. MoDOT partners with active transportation advocacy groups to improve bicycle and pedestrian facilities and to bring attention to nonmotorized transportation issues around the state. **Figure 23** shows designated bicycle routes throughout Missouri.

The state has nine cross-country bicycle routes each of which is a small part of a much longer national bicycle route, plus one cross-state route, the Katy Trail. Additional information can be found in **Appendix D**.

Figure 23 – Missouri Bicycle Routes



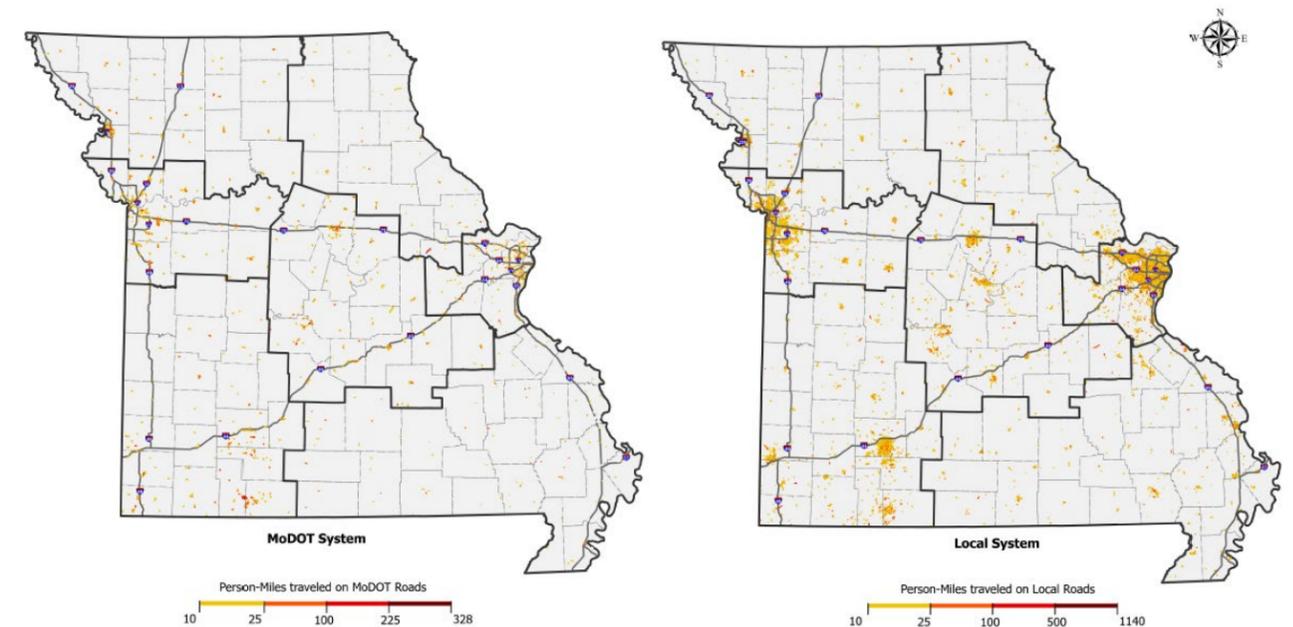
Source: HG Consult Inc. Analysis of MoDOT, Multimodal Bike/Ped, 2025; Adventure Cycling Association, U.S. Bicycle Route System Maps and Route Resources, 2025.

⁴⁵ MoDOT, “Number of Vulnerable Roadway User Fatalities,” accessed September 3, 2025, <https://www.modot.org/number-vulnerable-roadway-user-fatalities-1c>.

As reflected spatially in **Figure 24** and **Figure 25** and summarized in **Table 2** and **Table 3**, pedestrian and cyclist activity on Missouri roadways is overwhelmingly concentrated on locally maintained facilities rather than MoDOT owned roads, with this pattern consistent across all districts. Statewide, 93.2% of total daily pedestrian miles traveled and 94.9% of total daily cyclist miles traveled occur on local roadways, while MoDOT facilities account for only 6.8% of pedestrian miles and 5.1% of cyclist miles.

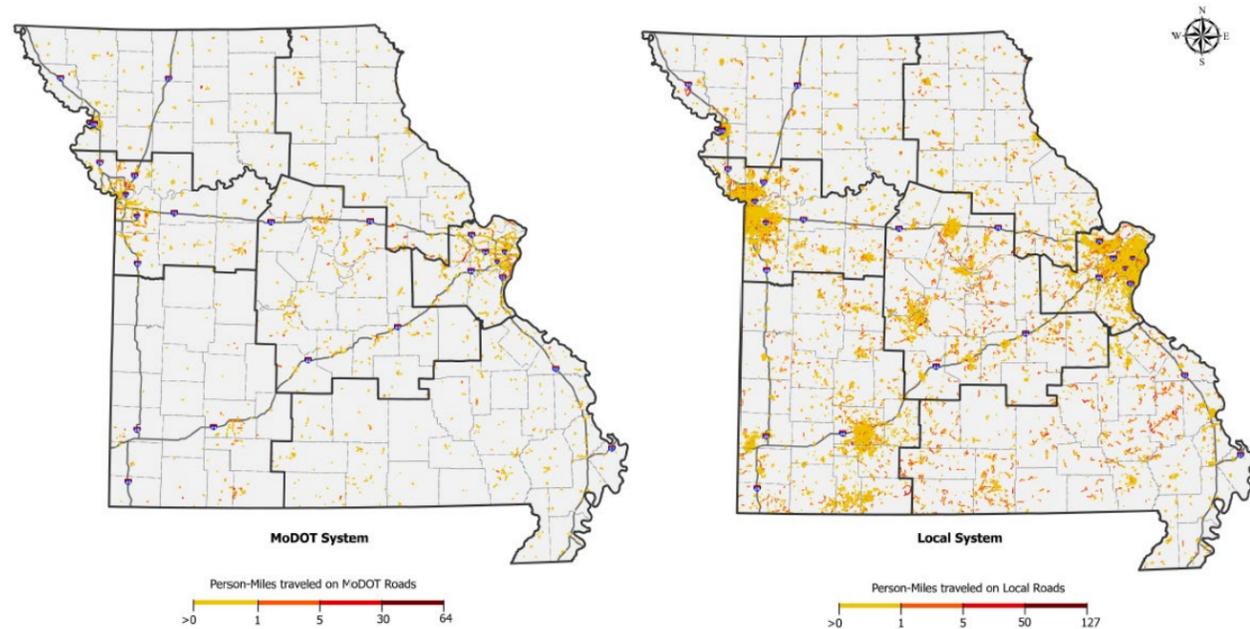
Urban districts, particularly St. Louis and Kansas City record the highest overall volumes for both modes and the lowest shares on MoDOT roads, reflecting dense local street networks that support walking and biking. In contrast, rural districts such as the Northwest and Southeast show higher proportional use of MoDOT facilities, though total pedestrian and cyclist miles traveled remain comparatively low. Across all districts, pedestrian travel consistently exceeds cycling in total miles, underscoring the critical role of local roadway networks in supporting active transportation and the importance of pedestrian and bicycle friendly design on locally maintained streets.

Figure 24 – Total Daily Pedestrian Miles Traveled on Missouri Roadways



Source: Streetlight Data, Collected from May 1, 2021 to April 30, 2022.

Figure 25 – Total Daily Cyclist Miles Traveled on Missouri Roadways



Source: Streetlight Data, Collected from May 1, 2021 to April 30, 2022.

Table 2 – Total Pedestrian Miles Traveled on Missouri Roadways

District	MoDOT	Local
Northwest	18,938 (17.6%)	88,842 (82.4%)
Northeast	8,516 (8.9%)	86,495 (91.0%)
Kansas City	28,960 (5.5%)	496,282 (94.5%)
Central	17,046 (6.4%)	250,936 (93.7%)
St.Louis	37,120 (4.3%)	831,621 (94.7%)
Southwest	25,600 (5.9%)	404,447 (94.1%)
Southeast	34,730 (16.6%)	174,272 (83.4%)
Statewide	170,910 (6.8%)	2,332,895 (93.2%)

Source: Streetlight Data, Collected from May 1, 2021 to April 30, 2022.

Table 3 – Total Daily Cyclist Miles Traveled on Missouri Roadways

District	MoDOT	Local
Northwest	543 (9.0%)	5,489 (91%)
Northeast	351 (6.6%)	4,992 (93.4%)
Kansas City	2,2029 (5.9%)	32,547 (94.1%)
Central	1,061 (6.2%)	16,109 (93.8%)
St.Louis	2,740 (4.6%)	57,116 (95.4%)
Southwest	756 (2.6%)	28,353 (97.4%)
Southeast	718 (8.5%)	7,735 (91.5%)
Statewide	8,220 (5.1%)	152,319 (94.9%)

Source: Streetlight Data, Collected from May 1, 2021 to April 30, 2022.



Source: MoDOT

Highly trafficked trails in the St. Louis District include the Grants Trail and Katy Trail among cyclists and the Arch Pedestrian Walkway, Great River Road Trail and the Lewis and Clark Trail among pedestrians and hikers. The Kansas City District experiences high volumes of cyclists and pedestrians on the Lewis and Clark Trail, U.S. Bike Route 51 and the Katy Trail.

These findings are based on StreetLight data, which, while providing valuable insights, may have limitations due to segmentation and trip classification methods. Continuous trips may be counted as separate segments and transitions between street and trail could result in overlapping or double counting. As such, percentages should be interpreted with caution and considered as estimates rather than precise measures.

Freight Transportation

Freight transportation is the economic engine for the state, enabling the movement of manufactured goods, agricultural produce, energy products and critical inputs across the nation and around the world. The state's central location, expansive highway system and strong connectivity between all transportation modes are among the state's top strengths for moving freight efficiently. More than 1.1 billion tons of freight were shipped within, from, or to the state in 2023, with volumes expected to grow to 1.3 billion tons by 2043.⁴⁶ Whether by rail, truck, barge, or air cargo, these networks not only sustain key industries but also support thousands of jobs in logistics, warehousing and operations.

Though exact numbers vary across sources, freight-related activity is expected to account for a substantial portion of the state's economic output and workforce, likely representing a significant share of the state's gross domestic product (GDP) and employment across sectors. Because of its central role in the state's economy, understanding current and future freight system needs is critical to the state's Long-Range Transportation Plan (LRTP), aligning infrastructure investments, policies and programs with long-term economic growth and competitiveness.

The following charts illustrate the top five commodities moved in the state by mode and percent share, providing a snapshot of the goods that dominate the state's freight flows and drive demand across transportation modes.



Source: MoDOT

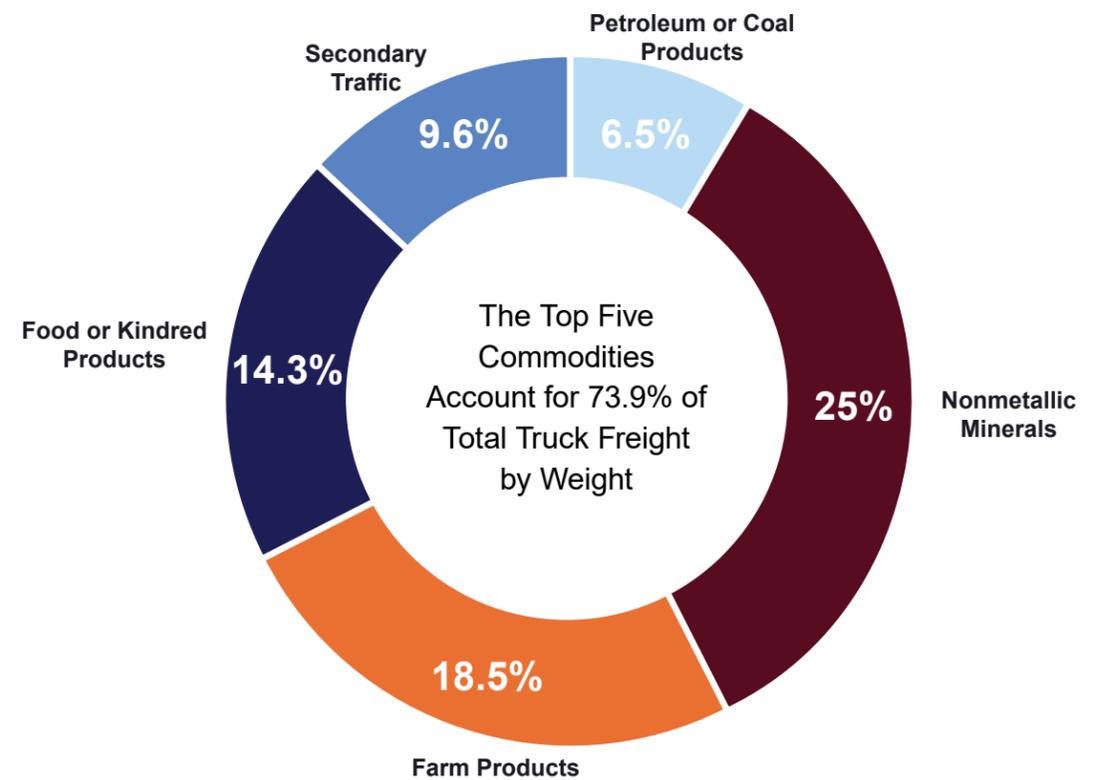
⁴⁶Transearch, 2023.

Truck Freight

Truck movements accounted for 55% of the total freight tonnage in 2023 and are forecast to increase 59% from 624 million in 2023 to 765 million in 2043.⁴⁷

As shown in **Figure 26**, top five commodities include non-metallic minerals (25%, e.g., coal, salt, clay, aggregates), farm products (18.5%), food or kindred products (14.3%), secondary traffic (9.6%, e.g., mixed shipments containing consumer goods) and petroleum or coal products (6.5%).⁴⁸

Figure 26 – Top Five Commodities by Weight (Percent) for Truck Freight, 2023



Source: Transearch, 2023.

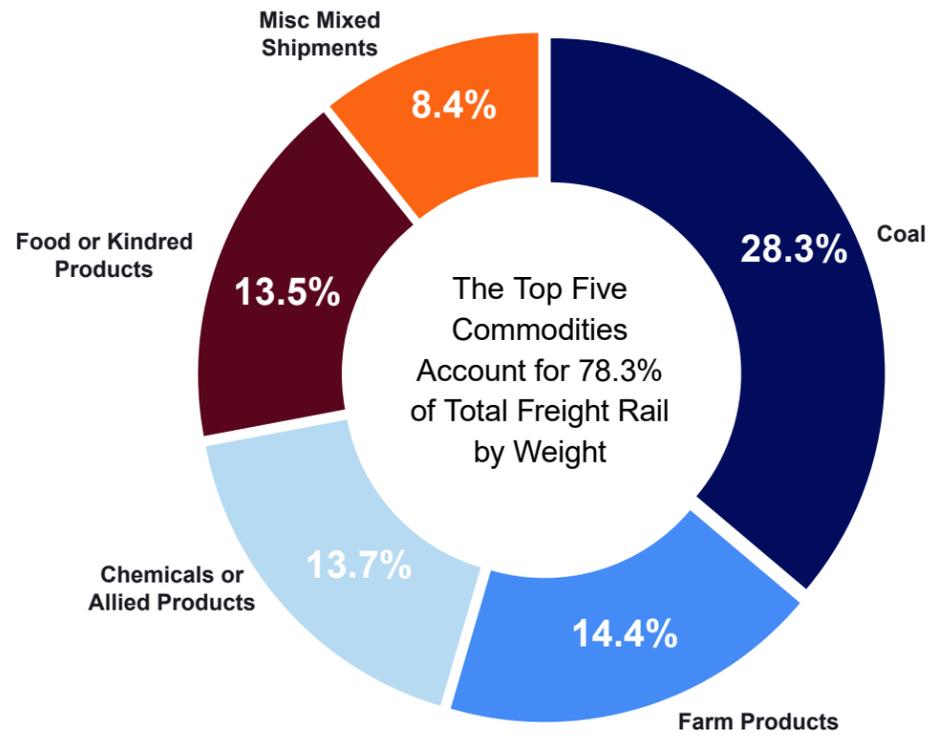
⁴⁷Transearch, 2023.

⁴⁸Transearch, 2023.

Freight Rail

As shown in **Figure 27**, coal represented 28.3% of the rail freight tonnage transported in the state in 2023. Other commodities that contribute to the freight tonnage moved through the state include farm products (14.4%), chemicals or similar products (13.7%), food or similar products (13.5%) and miscellaneous mixed shipments (8.4%).⁴⁹

Figure 27 – Top Five Commodities by Weight (Percent) for Freight Rail, 2023



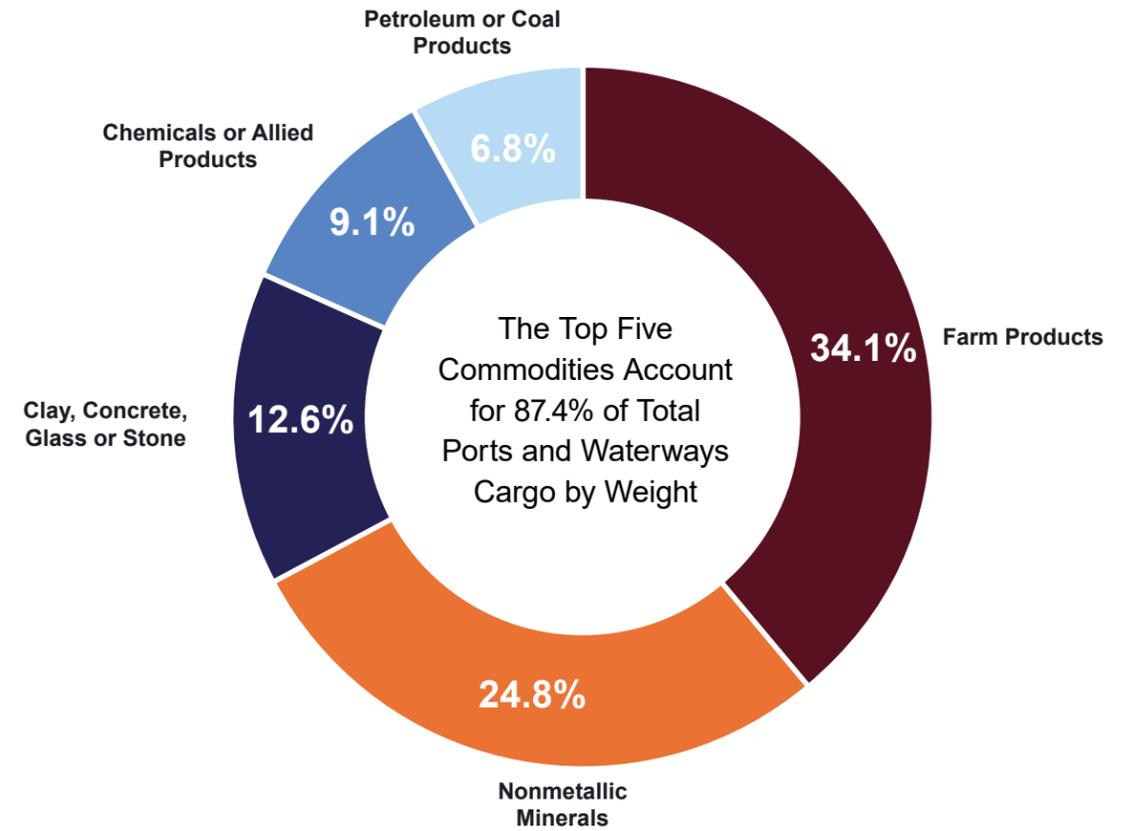
Source: Transearch, 2023.

⁴⁹ Transearch, 2023.

Ports and Waterways

As shown in **Figure 28**, farm products (34.1%); non-metallic minerals (24.8%); clay, concrete, glass or stone (12.6%), chemicals or similar products (9.1%); and petroleum or coal products (6.8%) are the primary commodities moved on the waterways.⁵⁰

Figure 28 – Top Five Commodities by Weight (Percent) for Ports and Waterways, 2023



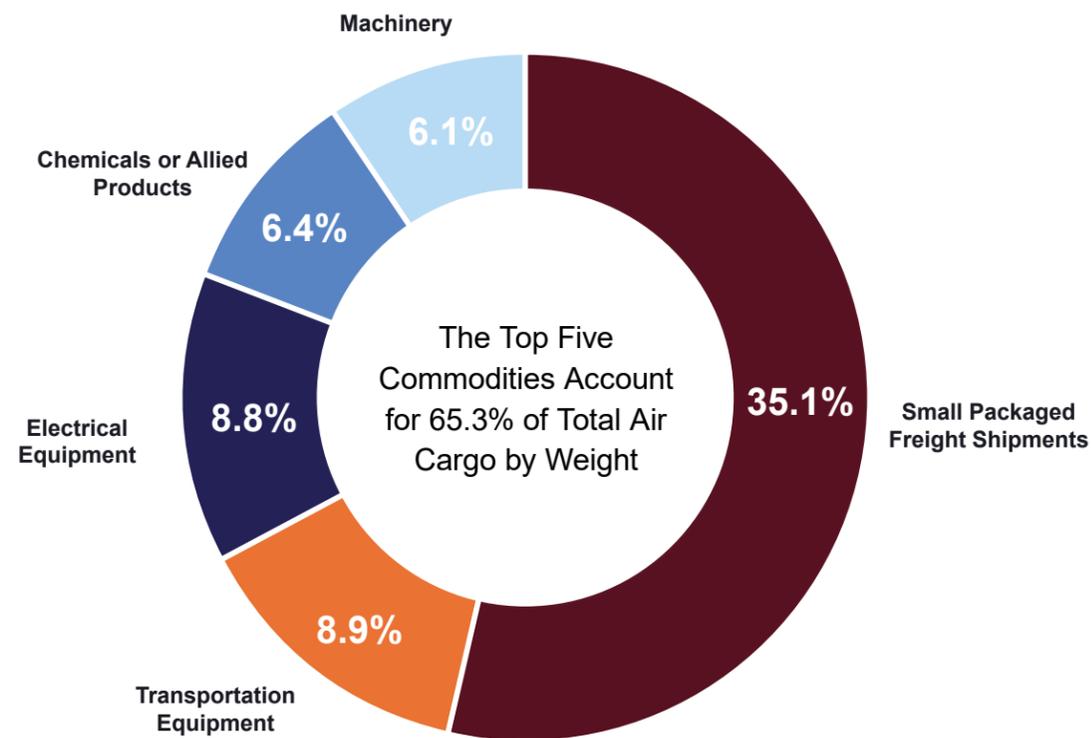
Source: Transearch, 2023.

⁵⁰ Transearch, 2023.

Air Cargo

As shown in **Figure 29**, principal commodities moved by air include small, packaged freight shipments (35.1%), transportation equipment (8.9%), electrical equipment (8.8%), chemicals or similar products (6.4%) and machinery (6.1%).⁵¹

Figure 29 – Top Five Commodities by Weight (Percent) for Air Cargo, 2023



Source: Transearch, 2023.

⁵¹ Transearch, 2023.

Table 4 below provides an overview of the top five freight commodities by weight and value in the state. In 2023, broken stone or riprap and crude petroleum were ranked top one and two commodities, respectively, by weight and are projected to continue to rank as such in 2043. In 2023, mixed freight and motor vehicles were ranked top one and two commodities, respectively, by value and are projected to continue to rank as such in 2043.

Table 4 – Missouri Freight and Rail Overview

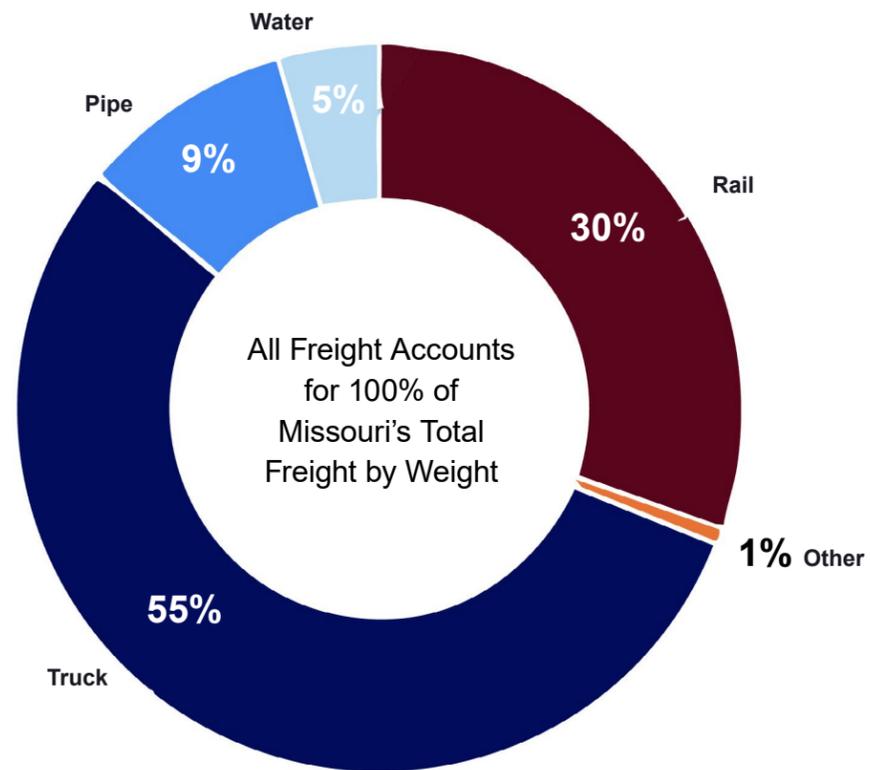
Top Five Commodities by Weight			
	2023		2043 (Projected)
Broken Stone or Riprap	131,430 TT*	Broken Stone or Riprap	155,298.2 TT
Crude Petroleum	117,722.4 TT	Crude Petroleum	118,069.7 TT
Bituminous Coal	100,125.8 TT	Grain	117,224.7 TT
Grain	96,433.2 TT	Warehouse and Distribution Center	59,905.71 TT
Warehouse and Distribution Center	47,757.9 TT	Mixed Freight	40,027 TT
Top Five Commodities by Value			
	2023		2043 (Projected)
Mixed Freight	\$198,371.5 M	Mixed Freight	\$273,374.6 M
Motor Vehicles	\$146,936.2 M	Motor Vehicles	\$201,448.1 M
Small Packaged Freight Shipments	\$98,889.3 M	Small Packaged Freight Shipments	\$150,638.3 M
Motor Vehicle Parts or Accessories	\$81,710.73 M	Motor Vehicle Parts or Accessories	\$115,171.4 M
Warehouse and Distribution Center	\$77,908.5 M	Warehouse and Distribution Center	\$97,725.4 M
**Millions of Dollars			

Source: Transearch, 2023.

Note: *TT = Thousand Tons ** Millions of Dollars

Figure 30 below shows the movement of all freight in the state by weight in 2023. Truck movement accounted for 76% while movement by water accounted for 2%. Both pipeline and rail movement accounted for 9% of all freight movement by weight.

Figure 30 – Movement of all Freight in Missouri by Weight (Thousands of Tons), 2023



Source: Transearch, 2023.



Source: MoDOT