Posted: May 27, 2026 at 1:00 p.m.
MHTC Central Office
105 West Capitol
Jefferson City, Missouri 65101

Copies of this notice may be obtained by contacting:
Jennifer Jorgensen
Secretary to the Commission
(573) 751-2824

Missouri Highways and Transportation Commission
Tentative Agenda

This meeting will be available to watch live stream at www.modot.org/mhtc/live.

White River Conference Center
Dogwood Canyon
600 West Sunshine Street
Springfield, MO

June 3, 2026

Open Meeting 9:00 a.m.

Est. Time

COMMISSION ITEMS.

1. **Action Item – Consideration of Minutes:** Regular Meeting on May 6, 2026, and the Special Meeting on May 5, 2026. — 9:05 – 9:10

2. **Action Item – Consideration of Items on the Consent Agenda.** — 9:10 – 9:15
   a. **Removals.** *Items removed from the consent agenda will be discussed under "Items Removed from the Consent Agenda" below. All items not removed from the consent agenda will be approved, without discussion, by a single action taken by the Commission.*
   b. **Abstentions.** *A Commissioner may abstain from voting on an item on the consent agenda without removing it by specifying the item number and their desire to abstain prior to the vote.*

3. **Non-Action Item – Committee and Board Reports.** — 9:15 – 9:30
   a. Audit (Boatwright, Slay, and Baker)
   b. Legislative (Boatwright and Erdman)
   c. Missouri Transportation Finance Corporation Board of Directors (Smith, Erdman, and Baker)
   d. MoDOT and Patrol Employees' Retirement System Board of Trustees (Boatwright, Erdman, and Hegeman)
   e. Missouri Coalition for Roadway Safety Executive Committee (Boatwright)

4. **Non-Action Item - MoDOT Director's Report.** — 9:30 – 9:45

Est. Time

PUBLIC PRESENTATIONS.

1. **Non-Action Item – "Building What's Next," Presentation by Springfield Delegation.** 9:45 – 10:05
Sara Fields, Executive Director of Ozarks Transportation Organization; Matt Morrow, President of Springfield Area Chamber of Commerce; and David Cameron, City Administrator of City of Springfield.
Springfield Delegation will present current and future regional projects and priorities.

City of Springfield
840 Boonville Avenue
Springfield, MO 65802
(417) 864-1006

Springfield Area Chamber of Commerce
202 S. John Q Hammons Parkway
Springfield, MO 65806
(417) 862-5567

Ozarks Transportation Organization
2208 W Chesterfield Blvd, Suite 101
Springfield, MO 65807
(417) 865-3047

MODOT PRESENTATIONS.

2. **Action Item – Consideration of Bids for Transportation Improvements.** 10:05 – 10:20
Sarah Kleinschmit, State Design Engineer
Consideration of award or rejection of bids on individual projects that will be presented, which is necessary to construct the improvements contained in the current year of the Statewide Transportation Improvement Program.

3. **Non-Action Item – Update from MoDOT's Southwest District.** 10:20 – 10:35
Stacy Reese, Southwest District Engineer
This presentation will provide a brief overview of the current state of the make-up of the district, projects, upcoming events, and other critical issues in the Southwest (SW) District.

4. **Action Item – Consideration of Proposal for the Forward 44: Southwest I-44 Improvements Design-Build Project.** 10:35 – 10:50
Eric Schroeter, Deputy Director/Chief Engineer, and Kristi Bachman, Project Director
Consideration of award of best value selection of the Forward 44: Southwest I-44 Improvements Design-Build Project in Newton, Jasper, Lawrence, Greene, Webster, and Laclede Counties, in the Southwest District which will improve safety and reliability, maintain the serviceability of bridges and pavement, and minimize overall traffic impacts at various locations along the I-44 corridor.

5. **Action Item – Forward 44 Project Contract Authorizations.** 10:50 – 11:05
Brenda Morris, Chief Financial Officer
Consideration to approve Forward 44 Project contracts contingent upon transfer of funds from the Office of Administration I-44 Improvement Fund to the State Road Fund I-44 Improvement Fund.

MODOT PRESENTATIONS (CONTINUED). Est. Time

6. **Action Item – Missouri Department of Transportation Fiscal Year 2027 Budget.** 11:05 – 11:20
Brenda Morris, Chief Financial Officer
Consideration to approve the fiscal year 2027 budget, contingent upon approval by the Governor and all General Assembly Designated projects funded in this budget to be vetted through the planning process.

7. **Action Item – 2026 Long-Range Transportation Plan and State Freight and Rail Plan.** 11:20 – 11:35
Britni O'Connor, Planning and Programming Coordinator, and Levi Woods, Administrator of Freight and Waterways
Consideration to approve the Long-Range Transportation Plan (LRTP) and State Freight and Rail Plan (SFRP). A draft LRTP and SFRP was presented to the Missouri Highways and Transportation Commission on March 4, 2026. A public comment period was provided for the draft plans March 4 to April 3, 2026.

8. **Non-Action Item – Third Lien State Road Bonds, Series A 2026 Pricing Summary.** 11:35 – 11:50
Brenda Morris, Chief Financial Officer
This presentation will provide a brief overview of the pricing results of the sale of the Third Lien State Road Bonds, Series A 2026 that took place on May 19, 2026.

-- Items Removed from the Consent Agenda, if any.
(Taken in numerical order.)

PUBLIC COMMENT PERIOD.

Members of the public who have not scheduled presentations before the Commission may speak to the Commission on transportation-related issues by signing in at the registration desk by 9:30 a.m. Comments will be limited to five minutes per person, ten minutes per topic.

COMMISSION CONCERNS.

ADJOURN.

-- CONSENT AGENDA --

All items on the Consent Agenda require Commission Action.

Items on the Consent Agenda are taken up by the Commission as the first order of business. Any items removed from the Consent Agenda are taken up by the Commission in numerical order under "Items Removed from the Consent Agenda". (See previous page.) All items not removed from the Consent Agenda are approved with a single action by the Commission.

ADMINISTRATIVE RULES/POLICIES.

1. **Report and Recommendation Regarding Final Order of Rulemaking – Contractor Performance Rating.**
   Mark Croarkin, Assistant Chief Engineer, and Terri Parker, Chief Counsel
   Consideration to file the final order of rulemaking with the Joint Committee on Administrative Rules and the Office of the Secretary of State for publication in the Missouri Register.

BUSINESS ISSUES.

2. **Missouri Transportation Finance Corporation (MTFC) Election of At-Large Board Member.**
   Brenda Morris, Chief Financial Officer
   Consideration to elect an at-large member to the MTFC Board of Directors for a two-year term beginning July 1, 2026 and expiring June 30, 2028.

STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM (STIP).

3. **Approval of Plans for Condemnation.**
   Sarah Kleinschmit, State Design Engineer
   Request for ratification of staff approval of detailed right of way plans on various routes.

County	Route	Job Number
Jasper	66	J7S2185B, J7S2185F
Jasper	66	J7S2185C
Jasper	66	J7S2185D
Jasper	66	J7S2185E, J7S2185G

-- REPORTS --

Written reports pertaining to the items listed below are presented for Commission information and do not require action.

1. **MoDOT Briefing Report.**
   Ed Hassinger, Director

2. **Missouri Department of Transportation Financial Report – Fiscal Year 2026.**
   Year-to-Date. Period ending April 30, 2026.
   Doug Hood, Financial Services Director

3. **Consultant Services Contract Report.**
   Sarah Kleinschmit, State Design Engineer


MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
MDCCCXX

Minutes

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
Official Minutes

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MINUTES OF THE REGULARLY SCHEDULED
HIGHWAYS AND TRANSPORTATION COMMISSION MEETING
HELD IN JEFFERSON CITY, MISSOURI
WEDNESDAY, MAY 6, 2026

A regularly scheduled meeting of the Missouri Highways and Transportation Commission was held on Wednesday, May 6, 2026, at the Missouri Department of Transportation, 105 W. Capitol Avenue, Jefferson City, Missouri, and was available via live stream. Warren K. Erdman, Chair, called the meeting to order at 9:00 a.m. The following Commissioners were present: W. Dustin Boatwright, P.E., Gregg C. Smith, Daniel J. Hegeman, Francis G. Slay, and Ann Marie Baker.

The meeting was called pursuant to Section 226.120 of the Revised Statutes of Missouri, as amended. The Secretary verified that notice of the meeting was posted in keeping with Section 610.020 of the Revised Statutes of Missouri, as amended.

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Ed Hassinger, Director of the Missouri Department of Transportation; Melinda Grace-Beasley, Assistant Chief Counsel–Human Resources to the Commission; and Jennifer Jorgensen, Secretary to the Commission, were present on Wednesday, May 6, 2026.

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"Department" or "MoDOT" herein refers to Missouri Department of Transportation.
"Commission" or "MHTC" herein refers to Missouri Highways and Transportation Commission.

-- OPEN MEETING –

COMMISSION/DIRECTOR ITEMS

APPROVAL OF MINUTES

Upon motion by Commissioner Smith, seconded by Commissioner Boatwright, a quorum of Commission members present approved the minutes of the regular meeting held on April 8, 2026, and the special meeting held April 7, 2026.

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CONSENT AGENDA

Consent Agenda Process

In order to make the most efficient use of Commission meeting time and to ensure Commission members are well informed on issues requiring their action, staff prepares and submits to the Commission members, in advance of their meeting, internal memoranda consisting of advice, opinions, and recommendations related to the items of the Commission meeting agenda. Those items considered by staff to be of a routine or non-controversial nature are placed on a consent agenda. During the meeting, items can be removed from the consent agenda at the request of any one Commission member. The items that are not removed from the consent agenda are approved with a single motion and unanimous vote by a quorum of the members.

Minutes reflecting approval of items on the consent agenda are singly reported herein and intermingled with minutes reflecting action on related subjects that were openly discussed. Reference to "consent agenda" is made in each minute approved via the process described in the paragraph above. Minutes reflecting action on items removed from the consent agenda and openly discussed reflect the open discussion and vote thereon.

Consideration of May 6, 2026, Consent Agenda

No items were removed from the consent agenda. Upon motion by Commissioner Boatwright, seconded by Commissioner Slay, the consent agenda items were unanimously approved by a quorum of Commission members present.

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COMMISSION COMMITTEES AND COMMISSION RELATED BOARDS

The Commission has two standing committees: Audit and Legislative. In addition, it elects Commission representatives to two boards: Missouri Transportation Finance Corporation Board of Directors and MoDOT and Patrol Employees' Retirement System Board of Trustees. A Commissioner also serves on the Missouri Coalition for Roadway Safety Executive Committee. The following committee and board reports were made during the May 6, 2026, meeting.

Audit Committee – Commissioner Slay stated there was no report. The next Audit Committee meeting will be June 9, 2026.

Legislative Committee – Commissioner Boatwright provided an update on several key legislative activities at both the state and federal levels. He reported as of April 30, the General Assembly has truly agreed and finally passed thirty bills. They now have a week and a half remaining to pass any other legislative proposals. Budget bills are currently in conference committees, and it is anticipated they will be presented to each chamber for final consideration and vote soon. The budget is required to be passed by May 8, 2026.

Last week the House passed its transportation omnibus in Senate Bill 1408, which includes numerous provisions and changes that will now have to go back to the Senate for consideration. The Senate can adopt the changes the House made or choose to go to conference to negotiate the provisions of the proposal further.

The Senate debated Senate Bill 916 on the floor last week. Initially, this proposal was to provide MoDOT contracts with the same sovereign immunity caps as the department. However, it has evolved now and created agents of MoDOT, which include contractors, subcontractors, and engineering firms. The provisions of the proposal change when MoDOT and these agents are liable. MoDOT does not believe this proposal addresses the issues that industry partners wanted to address and will lead to less transportation funds being available for roadwork. This bill now crosses chambers for consideration by the House.

On the federal side, the department continues to wait for congress to take up federal reauthorization for transportation. The latest report indicates that mark-ups could start as early as mid-May.

Missouri Transportation Finance Corporation (MTFC) – Commissioner Smith stated the board met this morning and elected officers and approved the Fiscal Year 2027 Budget. The next meeting will be on August 6, 2026.

MoDOT and Patrol Employees' Retirement System (MPERS) – Commissioner Hegeman stated that there was no report. The next board meeting is scheduled for June 25, 2026.

Missouri Coalition for Roadway Safety Executive Committee – Commissioner Boatwright reported that as of May 1, there has been 236 traffic fatalities in Missouri so far this year. This is 16 fewer fatalities than this time last year, which represents a six percent reduction. So far this year, there have been 15 different days on which there were zero traffic fatalities.

May is Motorcycle Awareness Month, and as the last several years have proven, this is a critical issue in Missouri. It is a good time to remind drivers that as motorcycle traffic increases, drivers can help keep them safe by looking twice before changing lanes, entering roadways, and turning in front of traffic. Like pedestrians and bicyclists, motorcyclists can be difficult to see when drivers do not slow down and take time to make sure the path is clear. Likewise, the department encourages all motorcyclists to ride responsibly and to always wear a helmet.

The coalition will be ramping up efforts to ensure highway safety remains a topic of conversation and on the minds of Missouri drivers during the summer months. These efforts will include a press release, media interviews, and other public events later this month. The Coalition Executive Committee will meet again on June 1.

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DIRECTOR'S REPORT

During the May 6, 2026, Commission meeting, Director Ed Hassinger provided the following report:

Work Zone Awareness Week Recap – Director Hassinger reported last month there was a presentation from the Highway Safety team about work zone safety efforts as the department is looking at another historic construction season on Missouri highways. MoDOT took that conversation to the public as part of the National Work Zone Awareness Week. The Director shared a video from the statewide kickoff event, where he was joined by some MoDOT partners to remind drivers of the presence of workers along the roads this construction season, and reinforce the critical role the partners play in making those safe places to drive and work. It is always critical that the department gets team members perspective who are working on these roadways every day. Team members need to have their faces seen and voices heard and remember that they are humans; people who have families and lives they want to get back to at the end of the day. Director Hassinger stated that he is thankful for all the speakers and partners working hard to keep the team safe and as well as the contractors. Director Hassinger expressed sincere thanks to Ralph and the rest of the maintenance team for standing up and putting a real face to that effort.

Route 66/I-44 Celebration – Director Hassinger reported last week, Missouri played host to the national kickoff celebration of the Route 66 Centennial. There were a lot of exciting events happening in Springfield, which many people were able to attend. Those events brought state and federal leaders to town, and MoDOT took advantage of that. Director Hassinger went on to say that the Federal Highway Administer and Governor Kehoe were there together and it helped the department emphasize that the progress has not stopped. As the last one hundred years was celebrated with Route 66, these federal, state and local partnerships are actively yielding improvements and expansions to serve travelers for the next one hundred years. The MoDOT team took the administrator around to see the I-44 project and a local Springfield project. It is great to be able to engage directly with federal leaders, and MoDOT is thankful for him and Governor Kehoe taking the time to help tell the story of continued progress on Missouri's highways.

AASHTO Spring Meeting Recap – Director Hassinger reported last month, a few members of the Executive team traveled to Savannah, Georgia, for the American Association of State Highway and Transportation Officials (AASHTO) spring meeting. It is always great to meet with fellow transportation leaders across the country and collaborate on some of the biggest issues being faced. It is always great to work together on World Cup challenges, safety innovations, and future-proofing transportation assets. A shared concern this year is the ongoing effort toward a reauthorization of the federal surface transportation bill. There was also some great discussion around the need, from a Department of Transportation (DOT) perspective, for formula funding to be a priority of that bill. This meeting is a great avenue to gather and funnel those priorities to elected officials. As the September 30 deadline to pass a new bill approaches, staff in the House Committee on Transportation and Infrastructure and in the Senate Committee on the Environment and Public Works are working hard to come to agreements on spending levels and bill language. The MoDOT team will provide progress updates.

Recognition of Service: Tom Blair – Director Hassinger wrapped up the report by recognizing one of MoDOT's senior leaders, St. Louis District Engineer Tom Blair. Mr. Blair has spent the last eight years in that role but has vast previous experience in the department in the 25 years prior to that. In light of Mr. Blair's recent decision to retire from such a tenured public service career next month, Director Hassinger took some time to recognize what Mr. Blair has accomplished at MoDOT. He has been a great leader and a true model of a public servant. When Mr. Blair was an Area Engineer in South County, there was a project with significant traffic impacts. He took on that project and worked with the contractor and the public to make it a success. His perseverance and commitment have served him well in every role. Director Hassinger also highlighted Mr. Blairs involvement with innovative thinking and the Road to Tomorrow. He was a central leader who took on this project with great fervor and did a terrific job. Additionally, Mr. Blair was instrumental in a St. Louis City project that reconfigured numerous city roads and took two years of work behind the scenes. There were tough interactions, but Mr. Blair did it in such a diplomatic way that people came to the table with ideas and resources. Mr. Blair has definitely left his mark on the department. Director Hassinger wished him well in his next adventure.

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PUBLIC COMMENTS

APPRECIATION FROM THE HIGHWAY 54 COALITION

Alan Winders, Audrain County Commissioner and the Chairman of the Highway 54 Coalition, gave a brief overview of the Highway 54 Coalition and the project that is approximately 58 miles that goes from Mexico, Missouri to the Illinois border through Louisiana, Missouri. It connects Highway 61 and Interstate 70. The project is a shared four-lane project that will increase safety and is regionally important. Mr. Winders noted his appreciation for Congressman Graves, who previously announced that the Highway 54 Shared Four-Lane Project had received a nearly $25 million BUILD (Better Utilizing

Investments to Leverage Development) Grant. The $24.892 million grant will widen an approximately 14-mile segment of U.S. Route 54 from a two-lane roadway to a shared four lane configuration (alternating passing lane) between Farber and Curryville. The project also includes improvements at the intersection of U.S. Route 54 and Highway 154 and utility relocations.

Mr. Winders thanked the Commission and MoDOT for their support and expressed his appreciation for staff from the Director to the Northeast District staff who have all done an excellent job. He also commended the department on the Statewide Transportation Improvement Program (STIP) process, which lets partners at the local level be heard.

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RECORDS REQUEST, I-70 CONSTRUCTION ZONES, AND LEGISLATIVE PROPOSALS

Arnie Dienoff requested records from the May 5, 2026 closed Commission meeting and the May 6, 2026 Missouri Transportation Finance Corporation (MTFC) and open Commission meeting. He then shared his concerns that he reported last month about police vehicles violating the laws in construction zones. Mr. Dienoff shared an article about work zone safety and the need for drivers to pay attention. Distracted driving and driving too fast for conditions remain the top contributors to work zone crashes. He noted that MoDOT has previously reported there would be over 600 workers in construction zones including in Kingdom City, Columbia, Wright City, and Wentzville. He noted he has seen drivers who disregard for the work zones and drive at high speeds. He requested the Missouri State Highway Patrol (MHSP) provide enforcement in these work zones. Mr. Dienoff then highlighted legislation that he believes will have severe ramifications. He concluded his comments by congratulating Tom Blair, St. Louis District Engineer, on his retirement and provided kind words about ethics, compassion, understanding, and leadership.

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MODOT PRESENTATIONS

2027-2031 DRAFT STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM

On behalf of the Director, Llans Taylor, Transportation Planning Director, presented the 2027-2031 Draft Statewide Transportation Improvement Program (STIP), which is developed in unison with the budget and financial forecast. Mr. Taylor explained the STIP is MoDOT's proposed list of transportation projects for the next five years. This document describes how transportation dollars are being invested and represents MoDOT's commitment to Missourians. The STIP being presented today totals $13.0 billion and 1,265 projects.

MoDOT's approach to planning is transparent, inclusive, and flexible to identify the right transportation solutions. MoDOT uses the planning framework relying on bottom-up decision making, ensuring the correct stakeholders are actively engaged in determining each region's highest priority needs and projects. Missouri has terrific partners with the Metropolitan Planning Organizations (MPOs) and Regional Planning Commissions (RPCs), both of which are full of incredibly committed and dedicated people focused on understanding the needs of the region.

Mr. Taylor highlighted that there is approximately $9.3 billion available for the fiscal years 2027 to 2031 for contractor awards. This averages approximately $1.9 billion per year. He noted that there were slight adjustments made in the first and third years based upon the current financial forecast compared to last year. Additionally, as the general revenue funds decline, so will contractor awards.

He noted objective criteria are used to distribute funds to the districts who work side-by-side with the planning partners to identify needs and prioritize projects that are included in the draft STIP. The amount of funds available to distribute in the construction program for Fiscal Years 2027-2031 is $9.3 billion. Of that amount $372 million is distributed for safety related projects, $5.0 billion is distributed for asset management projects, and $1.4 billion is distributed for system improvements. Safety funds are distributed based on fatalities and serious injuries. Asset management funds are distributed based on

system usage and system size. The remaining funds, system improvement funding, are distributed based on population, employment, and system usage.

Each year when preparing the draft STIP the department reviews the percent of projects programmed for asset management, system improvement, and other projects. Mr. Taylor was pleased to report this STIP maintains a focus on asset management. Over the first three years of the draft STIP, 86 percent of programmed funds are committed to asset management. This draft STIP will address a total of about 11,800 miles of pavement and 757 bridges across the system.

Mr. Taylor reviewed project growth and schedule adjustments for the draft STIP. He explained because projects programmed are commitments, MoDOT reviews how projects transfer from the current to the draft STIP. He explained this review identified project growth of 5.24 percent, or $144 million. This is attributable to 2.35 percent inflation, or $65 million, and 2.89 percent, or $79 million, in additional cost drivers. The department also recognizes the commitment in timing of the projects and there were 114 projects that had schedule adjustments.

Mr. Taylor reported on the changes for the 2027-2031 draft STIP. There were 393 projects added to this STIP, which includes 365 asset management projects, 3 capital improvement project, and 25 other projects. There are 9 projects that will be deleted because the work is being incorporated into other projects, withdrawn cost share projects, or work is being completed by MoDOT forces.

There is a total of $2.3 billion in legislatively designated and funded initiatives to improve I-70 and I-44, of which $1.7 billion is programmed for the Improve I-70 program. Within the multimodal section of the STIP, the estimated total funding is $1.1 billion. Mr. Taylor explained the multimodal program has seen a significant increase in funding, and the multimodal staff do a terrific job of understanding and managing those funds. He explained that the draft STIP also includes the maintenance and operations pavement and bridge work plan that helps maintain the transportation system. In 2025, almost $600 million was spent on operations and safety.

The next step in the process is for the department to conduct a public comment period for the draft STIP, then the department will collect the comments received and recommend action, noting any changes to the draft STIP. The final STIP is then presented to the Commission for consideration and approval following the public comment period. Chairman Erdman commended the management team for scheduling a preview meeting with contracting partners. Commissioner Baker stated her appreciation for how the department collaborates with planning partners, stakeholders, and customers to plan for transportation in Missouri. She noted it is a monumental task and commended Mr. Taylor and his team for their work.

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INNOVATIONS SHOWCASE PRESENTATION

On behalf of the Director, Kelly Backues, Transportation Planning Specialist, highlighted MoDOT's Innovations Challenge program, provided details of this year's showcase, and shared a brief highlights video. MoDOT's pillars of Safety, Service, and Stability are supported by the Innovations Challenge.

Since the first Innovations Showcase in 2008, the Innovations Challenge has generated innovations that have become best practices. Over the years the challenge has evolved. It began as a tool and equipment challenge in the districts as a way to share and promote ideas for MoDOT's employees to do their jobs safely and more efficiently. In 2013, the challenge was broadened to all areas of MoDOT and included the categories of projects and productivity. These new categories vastly enhanced the program and provided all employees the opportunity to join in the competition.

The Innovations Showcase exists to encourage MoDOT employees to develop and share creative ideas that support organizational progress and future improvements. Since the program's inception, more than 2,000 submissions have been received, with over 800 innovations showcased. This year there were 52 innovations featured in the showcase. The Innovations Challenge currently bestows 16 awards. Four

winners come from each of the three categories: tools and equipment (creative, handcrafted solutions designed to save time, reduce costs, and enhance safety). productivity (focuses on employee-driven processes, materials, and products that enhance efficiency), and projects (highlights exceptional transportation results that strengthen internal operations and improve services delivered to Missourian). Three Director's awards are presented, one each for safety, service, and stability. There is one Dickson People's Choice award, named for Jim Dickson who was the Innovations Challenge coordinator since its inception in 2007; he retired in 2018.

Innovations are evaluated on the following four criteria. Judges look for originality, like how new it is to MoDOT. There is also a safety review, to evaluate if the innovation improves the safety of equipment and/or processes. Judges also want to know how it performs internally and externally, to evaluate if the innovation improves service to customers and/or employees. The last criteria are conserving resources, such as does the innovation save time or money.

For an innovation to advance to the statewide showcase, it must win the first challenge round either at a district or central office. A local panel of experts from each district and central office select the first round winners from each district and central office to advance to the second round. During the second round, each district and central office coordinator rate the innovations to narrow the list to up to the top 20 in each category. Typically, up to 60 innovations compete at the annual statewide showcase.

This year the showcase was held at the Expo Center in Columbia. Ms. Backues reported the 2026 category winners.

Productivity

Skid Steer Mounted Concrete Saw – Southeast District
Retro Tek – Southwest District
Long Term Field Condition Tracker – Northeast District
P.R.I.S.M – Kansas City District

Projects

Traffic Cam Webpage Integration – Kansas District
MCE Common Customer 2.0 – Motor Carrier Services Division
HPUN Dashboard – Transportation Planning Division
Drury Intern Housing Partnership – Southwest District

Tools and Equipment

Slide-N-Cinch – Southeast District
Sander Calibration Scale – Southwest District
Guardrail Debris Pusher – Central District
Bolt-On Rubber Track Grouser – Northwest District

Director's Safety award – Patch Marker – Central District
Director's Service award – AMP Results Dashboard – Transportation Planning Division
Director's Stability award – Northeast Stockpile Photogrammetry – Northeast District
Dickson People's Choice Award – Houston Handy Hopper – Southeast District

Ms. Backues congratulated the Southeast District for winning the People's Choice Award for the third year in a row. She also highlighted the implementation of an electronic voting system for the People's Choice Award and noted it was well received by attendees. The showcase continues to demonstrate strong engagement and creativity across MoDOT. The breadth and quality of entries reflect staff commitment to innovation, efficiency, and safety. Identifying and evaluating innovative efforts will continue to be a significant factor in the achievement of MoDOT's mission.

Commissioner Erdman thanked Ms. Backues for her presentation and stated the Innovations Challenge and Showcase produces such exciting and innovative solutions that benefit the department. Employees have the freedom, opportunity, and incentive to find a solution to a daily problem. He commended staff for their passion and for striving to do better.

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CONSIDERATION OF PROPOSALS FOR THE IMPROVE I-70: TRUCK PARKING DESIGN-BUILD PROJECT

On behalf of the Director, Eric Schroeter, Deputy Director/Chief Engineer, and Project Director Zach Osman described the project that will improve truck parking facilities along Interstate 70. The Project

will expand the availability of truck parking spaces, reconstruct or rehabilitate existing pavement and buildings, and improve the safety and usability of rest area facilities.

Project Goals

MoDOT has established the following goals for the project which were used in evaluating and determining the Best Value Proposal:

1. Deliver the project by December 31, 2028 within the program budget.
2. Expand and modernize truck parking facilities along I-70 while improving the safety of facilities for users.
3. Minimize construction impacts with a focus on work zone safety, communication, and construction staging while maintaining mobility.
4. Provide expanded employment opportunities while developing and using a diverse workforce.

MoDOT's Business Development and Compliance Division established a zero percent disadvantaged business enterprise goal for construction work and a zero percent disadvantaged business enterprise goal for professional services for the project.

Procurement Process

By Commission action on July 12, 2023, the Commission approved the use of design-build for Statewide Improve I-70. Since then, MoDOT's design-build team has been working through the procurement process. Two teams were prequalified on February 5, 2026 to compete for the contract. The Request for Proposals was issued February 9, 2026. The MoDOT Design-Build team held five confidential discussions with each team over a period of seven weeks to discuss their proposal ideas. Final proposals were submitted by the teams on April 17, 2026. The MoDOT design-build team reviewed and evaluated the proposals. The two teams that submitted proposals include:

- *The Capital-Wilson Team – major participants include Capital Paving and Construction and Wilson & Company*
- *The KCI Construction Team – major participants include KCI Construction and Bartlett & West*

Evaluation

The items that were evaluated by the MoDOT design-build team included: Project Definition (70 points available) and Maintenance of Traffic and Schedule (30 points available) for a total of 100 points. Project Director Osman provided a summary of the proposals submitted by each team and the total points awarded to each team as outlined below.

- The Capital-Wilson Team –54.9 points
- The KCI Construction Team – 62.6 points

Commission Consideration and Action

Project Director Osman recommended the KCI Construction Team as the best value proposer. Their proposal included:

- Adding 255 new truck parking stalls, for a total of 474 truck parking stalls
- Pavement improvements at all eight locations
- Upgrading or relocating facilities at five locations
- Improving safety and lighting at all eight locations

Commissioner Slay and Commissioner Baker thanked Project Director Osman for his presentation, and the MoDOT design-build team for their work on this project to date.

After consideration, Commissioner Slay moved that the Commission adopt staff recommendations to award the KCI Construction Design-Build team for submitting the best value proposal for the Improve I-70: Truck Parking Design-Build Project; authorize the Director, Deputy Director/Chief Engineer, Assistant Chief Engineer, or their designee to negotiate and execute a contract with the KCI Construction Team subject to approval as to form by the Chief Counsel's Office; and authorize payment of the agreed stipend to the one unsuccessful proposing team. This motion was seconded by Commissioner Smith.

Upon motion duly made and seconded, the Chairman called for a voice vote of the members. The vote was as follows:

Commissioner Erdman, Abstain
Commissioner Boatwright, Aye
Commissioner Smith, Aye
Commissioner Hegeman, Aye
Commissioner Slay, Aye
Commissioner Baker, Aye

The Commission unanimously approved the motion.

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RESOLUTION AUTHORIZING THE OFFER FOR SALE OF THIRD LIEN STATE ROAD BONDS, SERIES A 2026

On behalf of the Director, Brenda Morris, Chief Financial Officer, presented a report and recommendation for sale of bonds. She explained, bond financing allows the department to provide much needed infrastructure improvements to the traveling public sooner than pay-as-you-go funding allows. Building projects sooner results in cost savings by reducing project inflation costs, while at the same time improving safety, easing congestion, and advancing economic development. The Commission has a five-lien structure in place: Senior Lien, Amendment 3 (First Lien, Second Lien and Third Lien) and Federal Reimbursement Lien (Grant Anticipation Revenue Vehicle (GARVEE) Bonds).

In November 2004, Amendment 3 was voter-approved as a constitutional amendment and redirected a portion of the statewide sales tax on motor vehicle purchases from the state's General Revenue Fund to a newly created State Road Bond Fund. The law mandated the redirected revenue be used to repay bonds until January 1, 2009. After January 1, 2009, the amount not needed for debt service or to maintain a reserve would require certain certifications and a General Assembly appropriation of the unused funds from the State Road Bond Fund to the State Road Fund, which then could be used on pay-as-you-go projects; however, the intent was to use this revenue for debt service. In accordance with Commission

policy, before proceeding with certification, the Commission should consider whether there are state highway construction projects that will benefit from the issuance of state road bonds.

The financial forecast presented to the Commission earlier this year included this potential bond issuance. This bond issuance will support the construction awards in the Statewide Transportation Improvement Program (STIP). This will allow the department to repeat this process and issue bonds every three or four years if economic conditions support it and provide a more stable construction program versus a spike in one or two years.

Issuance of the Series A 2026 Bonds will generate an estimated $650.0 million in proceeds for projects in the Statewide Transportation Improvement Program (STIP). The debt service payments for the Series A 2026 Bonds will be paid from Amendment 3 revenue deposited into the State Road Bond Fund. The Series A 2026 Bonds will be under the Third Lien debt structure of the Commission's Amendment 3 state road bonds. The Series A 2026 Bonds cannot be paid off early. Ms. Morris reported the issuance of the Series A 2026 Bonds is a targeted bond issuance for projects with long term benefits that complies with the Commission's conservative Debt Management Policy.

On April 7, 2026 and April 20, 2026, MoDOT staff presented information to the credit rating agencies regarding the Series A 2026 Bonds. MoDOT plans to award the competitive sale on May 19, 2026. MoDOT staff will give a Series A 2026 Bond sale summary at the June 3, 2026, MHTC meeting that will set out the final terms of the sale. Expected closing and delivery of funds will be on June 16, 2026.

Ms. Morris recommended adoption of the following resolution authorizing the issuance of Series A 2026 Bonds in an aggregate principal amount not to exceed $655,000,000 to fund projects for the state highway system. The Resolution further delegates authority for approving certain documents and actions in connection with the issuance of said Series A 2026 Bonds. Ms. Morris also requested authority for the execution of documents related to the Series A 2026 Bonds.

RESOLUTION

RESOLUTION AUTHORIZING THE ISSUANCE OF THIRD LIEN STATE ROAD BONDS, SERIES A 2026 TO FINANCE THE COSTS OF PROJECTS FOR THE STATE HIGHWAY SYSTEM AND CERTAIN DOCUMENTS AND ACTIONS BY THE COMMISSION.

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1. The Commission is duly organized and existing under Article IV, Section 29 of the Missouri Constitution and Sections 226.005 to 226.191 of the Revised Statutes of Missouri, as amended, with authority over all state transportation programs and facilities as provided by law, and is vested with the powers and duties specified in Chapters 226 and 227 of the Revised Statutes of Missouri, as amended, including the general supervision and control over the Missouri Department of Transportation (**"MoDOT"**) and the construction, reconstruction and repairs of the statewide connected system of public roads, highways and bridges which are acquired, constructed, reconstructed, improved and maintained by the State of Missouri in whole or in part by the aid of state moneys, and of highways constructed in whole or in part by the aid of moneys appropriated by the United States government, so far as such supervision is consistent with the acts of Congress relating thereto (the **"State Highway System"**).

2. The Commission is authorized by the State Highway Act, to issue state road bonds for the purpose of providing funds for use in State Highway System construction and reconstruction, which bonds are payable out of the State Road Fund and the State Road Bond Fund as provided in Article IV, Section 30(b) of the State Highway Act.

3. The Commission has entered into a Master Bond Indenture dated as of July 1, 2005 (as originally executed, and with all amendments and supplements thereto, the **"2005 Master Bond Indenture"**), to provide for the issuance of state road bonds (the **"Amendment 3 Bonds"**), in separate series under the 2005 Master Bond Indenture, in authorized principal amounts as the Commission may determine to be appropriate to comply with the constitutional and statutory duties of the Commission to fund the cost of implementing state highway projects (the **"Projects"**) as provided in the State Highway Act, and to pay certain costs related to the issuance of the Amendment 3 Bonds, subject to the terms and conditions provided for in the 2005 Master Bond Indenture.

4. The Commission has entered into a Master Bond Indenture dated as of December 1, 2008 (as originally executed, and with all amendments and supplements thereto, the **"2008 Master Bond Indenture"**), to provide for the issuance of state road bonds (the **"Federal Reimbursement Bonds"**), in separate series under the 2008 Master Bond Indenture, in authorized principal amounts as the Commission may determine to be appropriate to comply with the constitutional and statutory duties of the Commission to fund the cost of implementing Projects as provided in the State Highway Act, and to pay certain costs related to the issuance of the Federal Reimbursement Bonds, subject and subordinate to the terms of the Amendment 3 Bonds and the 2005 Master Bond Indenture as to State Road Fund Revenues and State Road Bond Fund Revenues (as defined in the 2005 Master Bond Indenture), and on the terms and conditions provided for in the 2008 Master Bond Indenture.

5. The Commission has entered into a Master Bond Indenture dated as of December 1, 2023 (as originally executed, and with all amendments and supplements thereto, the **"2023 Master Bond Indenture"**), to provide for the issuance of state road bonds (the **"Mega Projects Bonds"**), in separate series under the 2023 Master Bond Indenture, in authorized principal amounts as the Commission may determine to be appropriate to comply with the constitutional and statutory duties of the Commission to fund the cost of implementing Projects as provided in the State Highway Act, and to pay certain costs related to the issuance of the Mega Projects Bonds, subject and subordinate to the terms of the Amendment 3 Bonds and the Federal Reimbursement Bonds as to State Road Fund

Revenues and State Road Bond Fund Revenues (as defined in the 2005 Master Bond Indenture and the 2008 Master Bond Indenture), and on the terms and conditions provided for in the 2023 Master Bond Indenture.

6. Pursuant to the State Highway Act, the Commission proposes to issue its **Third Lien State Road Bonds, Series A 2026** (the **"Series A 2026 Bonds"**), under the 2005 Master Bond Indenture, as amended and supplemented by the Supplemental Bond Trust Indenture No. 10 (the **"Supplemental Bond Indenture No. 10"**), for the purpose of providing funds to (i) finance a portion of the costs of the Projects, and (ii) pay costs related to the issuance of the Series A 2026 Bonds.

7. The Commission finds and determines that it is necessary and desirable in connection with the issuance of the Series A 2026 Bonds that the Commission executes and delivers certain documents and that the Commission takes certain other actions as herein provided.

NOW THEREFORE, BE IT RESOLVED BY THE MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION, AS FOLLOWS:

Section 1. Authorization of the Series A 2026 Bonds. The Commission is authorized to issue and sell the Series A 2026 Bonds in an aggregate principal amount not to exceed $655,000,000, for purposes aforesaid which shall be issued under and secured by and shall have the terms and provisions set forth in the Master Bond Indenture, as supplemented and amended including the amendment by the Supplemental Bond Indenture No. 10 referred to herein (collectively, the **"Indenture"**); provided that (1) the principal amount of the Series A 2026 Bonds shall not exceed $655,000,000, (2) the Series A 2026 Bonds shall have a final maturity not later than 2033, (3) the Series A 2026 Bonds shall have a weighted average maturity of not less than 3.0 years and not more than 5.0 years, (4) the Series A 2026 Bonds shall bear interest at various interest rates not to exceed a true interest cost of 5.50%, and (5) the Series A 2026 Bonds shall not be subject to optional redemption prior to maturity. The Series A 2026 Bonds shall have such other terms to be determined by the authorized officers of the Commission and MoDOT in the manner described herein.

The Commission hereby authorizes the preparation of a Preliminary Official Statement and a Notice of Sale to provide for the competitive public sale of the Series A 2026 Bonds. Notice of said bond sale is hereby authorized and directed to be given by mailing copies, or by providing electronic notice through *PARITY* electronic bid submission system (**"*PARITY*"**), of the Notice of Sale and Preliminary Official Statement to investment banking firms and banks and other financial institutions located throughout the United States. Bids for the Series A 2026 Bonds may be received by a representative of the Commission, or by electronic bids through *PARITY*, upon the terms and conditions set forth in the Notice of Sale. The Commission hereby consents to the use and public distribution of the Preliminary Official Statement and the Notice of Sale related to the offering for sale of the Series A 2026 Bonds. The Commission further authorizes the filing of an application to Moody's Investors Service, Inc., Standard & Poor's Rating Service and Fitch Ratings for a rating of the Series A 2026 Bonds, and to take other actions necessary to carry out the competitive public sale of the Series A 2026 Bonds. The Series A 2026 Bonds shall be sold by the Commission to the underwriters (the **"Underwriters"**) providing the best bid in response to the Notice of Sale distributed by the Commission. The final terms of the Series A 2026 Bonds shall be specified in the Indenture upon the execution thereof, and the signatures of the officers of the Commission or MoDOT executing such Indenture shall, subject to approval as to form by the Chief Counsel's Office, constitute conclusive evidence of their approval and the Commission's approval thereof.

Section 2. Limited Obligations. The Series A 2026 Bonds shall be limited obligations of the Commission payable solely from the sources and in the manner as provided in the Indenture and shall be secured by a pledge and assignment of and a grant of a security interest in the Trust Estate (as defined in the Indenture) to the Bond Trustee (herein defined) and in favor of the holders of the Series A 2026 Bonds, as provided in the Indenture. The Series A 2026 Bonds shall not be deemed to constitute a debt or liability of the State of Missouri or

a pledge of the full faith and credit of the State of Missouri. Nothing in the Series A 2026 Bonds shall be construed as obligating the State of Missouri to pay or redeem any of the Series A 2026 Bonds from, and the owners thereof may not look to, any general or other fund of the State of Missouri or of MoDOT, except as specifically provided in the Indenture.

Section 3. Authorization and Approval of Documents. The following documents (the **"Financing Documents"**) are hereby approved in substantially the forms filed in the records of the Secretary to the Commission, and the Commission is hereby authorized to execute and deliver each of the Financing Documents with such changes therein as shall be approved by the officers of the Commission or MoDOT executing the Financing Documents, such officers' signatures thereon being conclusive evidence of their approval and the Commission's approval thereof, subject to approval as to form by the Chief Counsel's Office:

(a) Supplemental Bond Trust Indenture No. 10 between the Commission and BOKF, N.A. (the **"Bond Trustee"**), providing for the issuance of the Series A 2026 Bonds pursuant to the Indenture, and setting forth additional terms and provisions applicable to the Series A 2026 Bonds.

(b) Tax Compliance Agreement for the Series A 2026 Bonds between the Commission and the Bond Trustee, which sets forth certain representations, facts, expectations, terms and conditions relating to the use and investment of the proceeds of the Series A 2026 Bonds, to establish and maintain the exclusion of interest on the Series A 2026 Bonds from gross income for federal income tax purposes, and to provide guidance for complying with the arbitrage rebate provisions of §148(f) of the Internal Revenue Code (the **"Code"**).

(c) Continuing Disclosure Agreement between the Commission and BOKF, N.A., as Dissemination Agent, under which the Commission agrees to provide continuing disclosure of certain financial information, operating data and material events, for the benefit of the owners of the Series A 2026 Bonds and to assist the Underwriters of the Series A 2026 Bonds in complying with Rule 15c2-12 of the Securities and Exchange Commission.

Section 4. Approval of Notice of Sale, the Preliminary Official Statement and the Final Official Statement. The form and substance of the Preliminary Official Statement and the Notice of Sale relating to the Series A 2026 Bonds submitted to the Commission is hereby in all respects ratified, confirmed and approved, and the officers of the Commission and MoDOT are hereby authorized, empowered and directed to execute the Notice of Sale, the Preliminary Official Statement and the final Official Statement in the name and on behalf of the Commission. The Commission approves the use and distribution of the Notice of Sale, the Preliminary Official Statement and the final Official Statement in connection with the offering and sale of the Series A 2026 Bonds. The Notice of Sale, the Preliminary Official Statement and the final Official Statement shall be in substantially the same form as the draft Notice of Sale and the Preliminary Official Statement now on file in the records of the Secretary to the Commission and hereby approved, with such changes therein as shall be approved by the officer of the Commission or MoDOT executing the same, and such execution shall constitute conclusive evidence of such officer's approval and the Commission's approval of any departures therein from the form of the Notice of Sale and the Preliminary Official Statement now on file in the records of the Secretary to the Commission. For the purpose of enabling the Underwriters to comply with the requirements of Rule 15c2-12(b)(1) of the Securities and Exchange Commission, the Commission hereby deems the information contained in the Preliminary Official Statement to be "final" as of its date, except for the omission of such information as is permitted by Rule 15c2-12(b)(1), and the appropriate officers of the Commission and MoDOT are hereby authorized, if requested, to provide the Underwriters a letter or certification to such effect and to take such other actions or execute such other documents as such officers in their reasonable judgment deem necessary to enable the Underwriters to comply with the requirements of such Rule.

Section 5. Execution of Series A 2026 Bonds and Financing Documents. The Chairman or the Vice Chairman of the Commission, or the Director, the Deputy Director/Chief Engineer or the Chief Financial Officer of MoDOT, are hereby authorized and directed to execute the Series A 2026 Bonds by manual or facsimile signature and to deliver the Series A 2026 Bonds to the Bond Trustee for authentication for and on behalf of and as the act and deed of the Commission in the manner provided in the Indenture. The Chairman or Vice Chairman of the Commission, or the Director, the Deputy Director/Chief Engineer or the Chief Financial Officer of MoDOT, are hereby authorized and directed to execute and deliver the Financing Documents for and on behalf of and as the act and deed of the Commission subject to approval as to form by the Chief Counsel's Office. The Secretary to the Commission is hereby authorized and directed to attest to the Series A 2026 Bonds by manual or facsimile signature, to the Financing Documents and to such other documents, certificates and instruments as may be necessary or desirable to carry out and comply with the intent of this Resolution.

Section 6. Reimbursement. The Commission has previously made and expects to make capital expenditures in connection with the Projects after the date of this Resolution and the Commission intends to reimburse itself for such expenditures with proceeds of the Bonds.

Section 7. Further Authority. The Commission shall, and the officers, agents and employees of the Commission and MoDOT are hereby authorized and directed to, take such further action, and execute such other documents, certificates and instruments, including, without limitation, any arbitrage certificate, closing certificates, and tax forms, as may be necessary or desirable to carry out and comply with the intent of this Resolution, and to carry out, comply with and perform the duties of the Commission with respect to the Series A 2026 Bonds and the Financing Documents subject to approval as to form by the Chief Counsel's Office.

Section 8. Effective Date. This Resolution shall take effect and be in full force immediately after its adoption by the Commission.

ADOPTED by the Missouri Highways and Transportation Commission this 6th day of May, 2026.

After consideration, and upon motion by Commissioner Smith, seconded by Commissioner Hegeman, the Commission took the following action:

1. Adopted a Resolution authorizing the issuance of Third Lien State Road Bond Series A 2026 Bonds in an aggregate principal amount not to exceed $655,000,000 to fund projects for the state highway system, as outlined in the resolution above
2. Authorized the Secretary to the Commission to execute the Resolution confirming its adoption by the Commission, subject to approval as to form by the Chief Counsel's Office.
3. Authorized the Series A 2026 Bonds to be sold through a competitive sale.
4. Authorized the Director, Deputy Director/Chief Engineer or the Chief Financial Officer to execute the following documents for the Series A 2026 Bonds: (1) Supplemental Bond Trust Indenture No. 10; (2) Tax Compliance Agreement; (3) Continuing Disclosure Agreement; and

(4) any other documents, certificates or instructions necessary to complete the bond issuance, subject to approval as to form by the Chief Counsel's Office.

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ADMINISTRATIVE RULES/POLICIES

COMMISSION POLICY – FINANCIAL-INVESTMENT – NEW

Following a comprehensive review of all Commission policies, on November 7, 2013, the Commission formally compiled and adopted the Commission policies that the department currently operates under today. In addition to the Commission's periodic review, there are occasions where a policy may need to be added or updated. The purpose of the Investment Policy is to establish the Commission's investment objectives for MoDOT for funds deposited outside the State Treasury and to provide a set of investment parameters to govern the type, quality, diversification, and term of investments in order to realize those objectives. Currently, the Investment Policy is a department policy instead of a Commission policy. The current department Investment Policy was adopted on December 1, 2005.

Category: **FINANCIAL**
Subcategory: **Investment**

INVESTMENT
Missouri Department of Transportation (MoDOT) funding comes from both state and federal sources. Most of the money is dedicated by federal law or the state constitution and statutes to specific purposes. Funds are held in two locations: State funds are held at the State Treasury and non-state funds are held outside of the State Treasury at a bank selected during the Commercial Banking, Investment Management and Security Safekeeping Services Request for Proposals process.

As mandated by the Missouri Constitution, the State Treasurer's Office holds custody of all state moneys, specifically, those that get appropriated by the legislature. The State Treasurer's Office Investment Committee is responsible for developing and reviewing the investment process of the State Treasurer's Office within the framework provided by the Constitution and statutes of the State of Missouri. The State Treasurer's Office Investment Committee shall set and monitor policies, set general strategies, and implement necessary monitoring mechanisms.

Non-state funds include the Local Fund, Medical and Life Insurance Fund, Self Insurance Fund, Missouri Transportation Finance Corporation (MTFC) highway and transportation accounts, and Department of Revenue-Motor Carrier Services.

Investments through external programs, facilities and professionals operating in a manner consistent with this policy will constitute compliance.

I. Scope

The purpose of the Investment Policy shall be to establish the investment objectives of MoDOT and provide a set of investment parameters to govern the type, quality, diversification and term of investments in order to realize those objectives. To assist in accomplishing investment objectives, MoDOT shall employ an Investment Advisor to act in a fiduciary capacity as custodian for the interest and benefit of MoDOT and to, among other responsibilities, develop, implement and execute an investment strategy consistent with this Investment Policy.

The Investment Advisor and MoDOT shall have an agreement defining the duties expected of them as MoDOT's Investment Advisor. In developing and implementing any investment strategy for the assets, the Investment Advisor shall comply with the investment parameters set forth in this policy.

II. General Objectives

The primary objectives, in priority order, of investment activities shall be safety, liquidity, and yield:

1. **Safety.** Safety of principal is the foremost objective of the investment program. Investments shall be undertaken in a manner that seeks to ensure the preservation of capital in the overall portfolio. The objective is to mitigate credit risk and interest rate risk.
    a. **Credit Risk.** MoDOT's Investment Advisor will minimize credit risk, the risk of loss due to the failure of the security issuer or backer, by:
    - limiting investments to the safest types of securities, as defined in Section V; and
    - diversifying the investment portfolio so that potential losses on individual securities will be minimized, as defined in Section VI.
    -
    b. **Interest Rate Risk.** MoDOT's Investment Advisor will minimize the risk that the market value of securities in the portfolio will fall due to changes in general interest rates by structuring the investment portfolio so securities mature to meet cash requirements for ongoing operations; thereby, avoiding the need to sell securities on the open market prior to maturity.

2. **Liquidity.** The investment portfolio shall remain sufficiently liquid to meet all reasonably anticipated operating requirements. This is accomplished by structuring the portfolio so securities mature concurrent with cash needs to meet anticipated demands (static liquidity). Since all possible cash demands cannot be anticipated, the portfolio should consist largely of securities with active secondary or resale markets (dynamic liquidity). A portion of the portfolio also may be placed in money market mutual funds, local government investment pools or overnight repurchase agreements that offer next day liquidity for short-term funds. In the event a security must be sold prior to maturity, all measures will be taken to preserve loss of principal.

3. **Yield.** The investment portfolio shall be designed with the objective of attaining a market rate of return throughout budgetary and economic cycles, taking into account the investment risk constraints and liquidity needs. Return on investment is the least important objective. The core investments are limited to relatively low risk securities in anticipation of earning a fair return relative to the risk being assumed.

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III. Standards of Care

1. **Delegation of Authority.** Responsibility for the operation of the investment program and execution of documents in accordance with this Investment Policy is hereby delegated to the Director, Deputy Director/Chief Engineer, and Chief Financial Officer and his or her delegate(s), hereinafter referred to as MoDOT personnel. MoDOT personnel shall act in accordance with established written procedures and internal controls for the operation of the investment program consistent with this Investment Policy. Procedures should include references to: safekeeping, delivery vs. payment, investment accounting,

repurchase agreements, wire transfer agreements and collateral/depository agreements. No person may engage in an investment transaction except as provided under the terms of this Investment Policy and the procedures established by MoDOT personnel. MoDOT personnel shall be responsible for all transactions undertaken and shall establish a system of controls to regulate the activities of subordinate employees.

The Director, Deputy Director/Chief Engineer, and the Chief Financial Officer may execute documents in accordance with the Investment Policy, including those listed in Section IX of this policy, and may delegate authority as needed per written notification to the Commission Secretary's Office.

2. **Prudence.** The standard of prudence to be used by MoDOT personnel shall be the "prudent person" standard and shall be applied in the context of managing an overall portfolio. The standard of prudence to be used by the Investment Advisor shall be the "prudent expert" standard and shall be applied in the context of managing an overall portfolio.

- Investments shall be made with judgment and care, under circumstances then prevailing, which persons of prudence, discretion and intelligence exercise in the management of their own affairs, not for speculation, but for investment, considering the probable safety, liquidity and yield to be derived.

3. **Ethics and Conflicts of Interest.** Investment Advisors, MoDOT personnel and employees involved in the investment process shall refrain from personal business activity that could conflict with the proper execution and management of the investment program, or that could impair their ability to make impartial decisions. MoDOT personnel and employees involved in the investment process shall disclose any material interests in financial institutions with which they conduct business. They shall further disclose any personal financial/investment positions that could be related to the performance of the investment portfolio. MoDOT personnel and employees involved in the investment process shall refrain from undertaking personal investment transactions with the same individual with which business is conducted on behalf of MoDOT.

IV. Safekeeping and Custody

1. **Authorized Financial Dealers and Institutions.** MoDOT's Investment Advisor will serve as MoDOT's Financial Dealer and Institution. The Investment Advisor shall retain principal collection subject to MoDOT's direction and shall distribute income to MoDOT. All securities will be registered in the name of the Missouri Highways and Transportation Commission (MHTC) unless otherwise instructed. Reviews of the financial condition and registration of MoDOT's Investment Advisor will be conducted by MoDOT personnel. MoDOT's Investment Advisor will supply the following information as requested:
    - Audited financial statements; and
    - Certification of having read and understood and agreeing to comply with MHTC's Investment Policy.

2. **Internal Controls.** MoDOT personnel are responsible for establishing and maintaining an internal control structure designed to ensure the assets of MoDOT are protected from loss, theft or misuse. The internal control structure shall be designed to provide reasonable assurance these objectives are met. The concept of reasonable assurance recognizes (1) the cost of a control should not exceed the benefits likely to be derived and (2) the valuation of costs and benefits requires estimates and judgments by management.

   Accordingly, MoDOT personnel, as a part of its annual review of all of the Department's internal controls, shall establish a process for an annual review to ensure compliance with policies and procedures. The internal controls shall address the following points:

- Separation of transaction authority from accounting and record keeping;
- Custodial safekeeping;
- Avoidance of physical delivery securities;
- Clear delegation of authority to subordinate staff members;
- Written confirmation of transactions for investments and wire transfers; and
- Sufficiency check of repurchase agreement collateral.

In addition, as part of the Department's annual financial statement audit, the financial statement auditors will review investments to determine they are fairly presented in the financial statements.

3. **Delivery vs. Payment.** All trades where applicable will be executed by delivery vs. payment (DVP) to ensure securities are deposited in an eligible financial institution prior to the release of funds. All securities will be held to avoid custodial credit risk as defined by Governmental Accounting Standards Board (GASB) standards. DVP is the industry standard, and it is the Investment Advisor's responsibility to notify MoDOT personnel of any changes to this standard.

V. Suitable and Authorized Investments

1. **Investment Types.** In accordance with and subject to restrictions imposed by current statutes, the following list represents the entire range of investments MoDOT will consider. MoDOT may directly invest in or purchase money market mutual funds with the following as underlying securities:

   a. United States Treasury Securities. MoDOT may invest in obligations of the United States government for which the full faith and credit of the United States are pledged for the payment of principal and interest.

   b. United States Agency Securities. MoDOT may invest in obligations issued or guaranteed by any agency of the United States Government as described below:

- **i.** U.S. Govt. Agency Coupon and Zero Coupon Securities. Bullet coupon bonds with no embedded options.

- **ii.** U.S. Govt. Agency Discount Notes. Purchased at a discount.

- **iii.** U.S. Govt. Agency Callable Securities. Restricted to securities callable at par or above.

- **iv.** U.S. Govt. Agency Step-Up Securities. The coupon rate is fixed for an initial term. At specific future rate reset dates, the coupon rate changes to a new pre-determined rate, for a specific period of time.

- **v.** U.S. Govt. Agency Floating Rate Securities. The coupon rate floats off one index and resets at least quarterly.

- **vi.** U.S. Govt. Mortgage Backed Securities. Restricted to securities with average life of five (5) years or less at time of purchase. Collateralized Mortgage Obligations must pass the Federal Financial Institutions Examination Council (FFIEC) test at the time of purchase.

   c. Repurchase Agreements. MoDOT may invest in contractual agreements between MoDOT and commercial banks or primary government securities dealers for periods of ninety (90) days or less. The purchaser in a repurchase agreement (repo) enters into a contractual agreement to purchase U.S. Treasury and government agency securities while simultaneously agreeing to resell the

securities at predetermined dates and prices. This includes the purchase of reverse repurchase agreements for not longer than ninety (90) days.

d. Collateralized Public Deposits (certificates of deposit). MoDOT may invest in instruments issued by financial institutions, which state that specified sums have been deposited for specified periods of time, and at specified rates of interest. The certificates of deposit are required to be backed by acceptable collateral securities as dictated by State statute.

e. Bankers' Acceptances. Definition - Bills of exchange or time drafts on and accepted by a commercial bank, otherwise known as bankers' acceptances. MoDOT may invest in bankers' acceptances issued by domestic commercial banks possessing the highest rating issued by at least two nationally recognized statistical rating organizations (NRSRO's).

2. **Investment Restrictions and Prohibited Transactions.** To provide for the safety and liquidity of MoDOT's funds, the investment portfolio will be subject to the following restrictions:

a. Borrowing for investment purposes ("Leverage") is prohibited.

b. Instruments known as Structured Notes having internal leverage (e.g., inverse floaters, leveraged floaters and equity-linked securities) are not permitted. Investment in any instrument, which is commonly considered a "derivative" instrument (e.g., options, futures, swaps, caps, floors, and collars), is prohibited.

c. Contracting to sell securities not yet acquired in order to purchase other securities for purposes of speculating on developments or trends in the market is prohibited.

d. No more than five (5) percent of the total market value of the portfolio may be invested in bankers' acceptances issued by any one commercial bank.

- **e.** The portfolio shall not invest, directly or indirectly, in cryptocurrencies, digital tokens, or any other blockchain-based digital assets, including but not limited to Bitcoin, Ethereum, stablecoins, non-fungible tokens (NFTs), or any derivative or pooled investment vehicle (e.g., ETFs, trusts, or funds) whose underlying assets are primarily composed of such instruments.

3. **Collateralization.** Collateralization will be required on the following types of investments: demand deposit accounts, certificates of deposit and repurchase agreements. The market value (including accrued interest) of the collateral should be at least 100 percent. For certificates of deposit, the market value of collateral must be at least 100 percent or greater of the amount of certificates of deposits plus demand deposits with the depository, less the amount, if any, which is insured by the Federal Deposit Insurance Corporation, or the National Credit Union Administration. All securities, which serve as collateral against the deposits of a depository institution, must be safekept at a non-affiliated custodial facility. Depository institutions pledging collateral against deposits must, in conjunction with the custodial agent, furnish the necessary custodial receipts by the next business day from the settlement date. MoDOT shall have a *pledgee agreement* with each safekeeping bank. This will ensure that MoDOT's security interest in collateral pledged to secure deposits is enforceable against the receiver of a failed financial institution.

4. **Repurchase Agreements.** The securities for which repurchase agreements will be transacted will be limited to U.S. Treasury and government agency securities that are eligible to be delivered via the Federal Reserve's Fedwire book entry system. Securities will be delivered to MoDOT's designated Custodial Agent. Funds and securities will be transferred on a delivery vs. payment basis.

VI. Investment Parameters

1. Diversification. The aggregate investments shall be diversified to minimize the risk of loss resulting from over concentration of assets in specific maturity, specific issuer, or specific class of securities. Diversification strategies shall be established and periodically reviewed. At a minimum, diversification standards by security type and issuer shall be:

a. U.S. treasuries and securities having principal and/or interest guaranteed by the U.S. government <= 100%

b. Collateralized time and demand deposits <= 100%

c. U.S. Government agencies, and government sponsored enterprises (with no more than 50% of the portfolio in any one Government-sponsored enterprise) <= 100%

d. Collateralized repurchase agreements <= 100%

e. U.S. Government agency callable securities <= 50%

f. Bankers' Acceptances <= 20%

2. Maximum Maturities. To the extent possible, MoDOT shall attempt to match its investments with anticipated cash flow requirements. MoDOT shall adopt weighted average life limitations for the individual portfolios as defined below:

a. Self Insurance Plan – the weighted average life should not exceed two (2) years and is consistent with the investment objectives.

b. Medical & Life Insurance Plan – the weighted average life should not exceed three (3) years and is consistent with the investment objectives.

c. Missouri Transportation Finance Corporation – the weighted average life for the Transportation and Highway account investments should not exceed three (3) years and is consistent with the investment objectives.

Because of inherent difficulties in accurately forecasting cash flow requirements, a portion of the portfolio shall be continuously invested in readily available funds such as in bank deposits or overnight repurchase agreements to ensure that appropriate liquidity is maintained to meet ongoing obligations.

VII. Reporting

1. **Methods.** MoDOT personnel shall maintain monthly investment and market value reports tracking investment performance and verifying the market value of the investment portfolio has been reviewed by the State Treasurer's Office. MoDOT personnel shall also prepare a management summary investment report at least quarterly that provides an analysis of the status of the current investment portfolio. Timing of the management summary investment report will be as of month-end January, April, July and October. This management summary will be prepared in a manner that will allow MoDOT to ascertain whether investment activities during the reporting period have conformed to the Investment Policy. The management summary investment report will include the following:
    - A portfolio summary by investment type of the securities held at the end of the reporting period.

- Market value of cash and investments of the portfolio.
- Realized and unrealized gains or losses resulting from appreciation or depreciation of the market value of securities held during the reporting period.
- Average weighted yield to maturity of the portfolio as compared to applicable benchmarks.
- Average weighted life of the portfolio.

The report shall be provided to the Director, Chief Financial Officer, Financial Services Director, and his or her delegate(s). MoDOT, at their discretion, will meet with the Investment Advisor to review and discuss investment activities as needed.

2. **Performance Standards.** The investment portfolio will be managed in accordance with the parameters specified within this Investment Policy. The portfolio should obtain a market average rate of return during a market/economic environment of stable interest rates. A series of appropriate benchmarks shall be established against which portfolio performance shall be compared on a regular basis.

   Commercial paper and bankers' acceptances must be reviewed monthly to determine if the rating level has changed. The commercial paper and bankers' acceptances should be reviewed for possible sale if the securities are downgraded below the minimum acceptable rating levels.

VIII. Policy Considerations

1. **Exemption.** Any investment currently held that does not meet the guidelines of this Investment Policy shall be exempted from the requirements of this Investment Policy. At maturity or liquidation, such monies shall be reinvested only as provided by this Investment Policy.

IX. List of Documents

The following documents are associated with this Investment Policy and should be in-place, reviewed and updated on a regular basis:

- Commercial Banking, Investment Management and Security Safekeeping Services Contract Agreement, including any safekeeping agreements, wire transfer agreements, and BusinessLink agreements
- Listing of authorized personnel as identified in the Delegation of Investment Authority memorandum,
- Relevant investment statutes and ordinances,
- Repurchase agreements,
- Credit ratings for securities purchased,
- Pledgee Agreement Form with the Federal Reserve Bank of Boston, and
- Portfolio stress testing if necessary

Effective Date: May 6, 2026
Supersedes Policy Dated:
Last Reaffirmed:
Date of Origin: May 6, 2026

Related Commission Minutes: May 6, 2026.

Via approval of the consent agenda, the Commission unanimously approved the policy revisions described above.

* * * * * * *

BUSINESS ISSUES

FISCAL YEAR 2026 BUDGET AMENDMENT

On behalf of the Director, Doug Hood, Financial Services Director, recommended increasing the budget for fiscal year 2026 by $11.5 million. The budget increase is for Program Delivery Assembly Designated and Funded Projects and Multimodal General Assembly Designated and Funded Projects. The Governor by law can restrict General Revenue spending making appropriations unavailable. Via approval of the consent agenda, the Commission unanimously approved the fiscal year 2026 budget amendment described above.

* * * * * * *

STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM (STIP)

CONSIDERATION OF BIDS FOR TRANSPORTATION IMPROVEMENTS

On behalf of the Director, Sarah Kleinschmit, State Design Engineer, presented the following recommendations pertaining to bids received on federal aid and state highway and bridge projects during the past month.

Ms. Kleinschmit recommended: (1) Award of contracts to the lowest responsive bidders for bids received at the April 17, 2026, letting, as recommended, and noted in Table I below.

Table I
Award of Contracts
April 17, 2026, Bid Opening

Call No.	Route	Counties	Job No.	Bid Amount	Non-Contractual Costs	Contractor	Description
A01	I-35	Various	JNW0108	$350,000.00	$0.00	Herzog Contracting Corp.	Job Order Contract for Asphalt Pavement Repair
A02	I-29, I-229	Various	JNW0109	$250,000.00	$0.00	Herzog Contracting Corp.	Job Order Contract for Asphalt Pavement Repair

Call No.	Route	Counties	Job No.	Bid Amount	Non-Contractual Costs	Contractor	Description
B01	J, 15, 22, AA, BU 54	Audrain	J2P3396	$4,272,501.19	$0.00	Magruder Paving, LLC	Coldmill, Resurface and ADA Improvements
B02	47	Lincoln	JNE0003	$18,884,174.74	$0.00	Magruder Paving, LLC	Pavement Widening
C01	Various	Clay, Jackson, Platte	J4P3093	$3,232,643.73	$0.00	Comanche Construction, Inc.	9 Bridge Rehabilitations
C02	Various	Jackson	J4P3268I	$1,365,591.40	$0.00	Primetime Contracting Corp.	ADA Improvements
C04	50	Pettis	JKRM0123	$66,976.13	$0.00	Capital Paving & Construction, LLC	Drainage Improvements
C06	291	Clay	JKU0125	$1,997,220.19	$0.00	Comanche Construction, Inc.	Bridge Deck Replacement
C07	I-49	Jackson	JKU0198	$3,806,878.81	$0.00	Superior Bowen Asphalt Company, LLC	Resurface
C09	I-29	Platte	JKU0455	$2,031,453.53	$0.00	Leavenworth Excavating & Equipment Company, Inc.	Slide Repairs
D01	I-44	Crawford, Laclede, Phelps, Pulaski	JCD0009	$350,000.00	$0.00	N.B. West Contracting Company	Job Order Contract for Asphalt Pavement Repair
D02	I-44	Crawford, Laclede, Phelps, Pulaski	JCD0010	$500,000.00	$0.00	Geromini Concrete Paving, LLC dba GC Paving	Job Order Contract for Concrete Pavement Repair
D03	763, 163, PP	Boone	JCD0125	$1,362,809.88	$0.00	Ti-Zack Concrete, LLC	ADA Improvements
D05	B	Dent	J5S3559	$996,609.65	$0.00	Joe's Bridge & Grading, Inc.	Bridge Replacement
F02	67	St Louis	J6S3625C	$4,935,777.00	$0.00	Pace Construction Company, LLC	Resurface and ADA Improvements
F03	Various	Various	JSL0097	$1,500,000.00	$0.00	Pace Construction Company, LLC	Job Order Contract for Asphalt Pavement Repair
F04	Various	Various	JSL0099	$2,750,000.00	$0.00	Above And Below Contracting, LLC	Job Order Contract for Concrete Pavement Repair

Call No.	Route	Counties	Job No.	Bid Amount	Non-Contractual Costs	Contractor	Description
F05	30	Jefferson, St Louis	JSLM0105	$961,127.11	$0.00	CSD Environmental Services, Inc.	Slide Repairs
F06	I-44	St Louis City	JSL0285	$342,248.90	$0.00	R. V. Wagner, Inc.	Diamond Grinding
G01	CC	Christian	J8S0736E	$2,550,020.95	$0.00	Radmacher Brothers Excavating Co., Inc.	Turn Lane, Intersection, ADA Improvements and Box Culvert Extension
G02	76	Taney	JSR0326	$6,686,015.97	$0.00	KCI Construction Company	Grading, Paving, and Slide Repair
G03	54	Vernon	JSR0340	$797,000.00	$0.00	Hunter Chase & Associates, Inc.	ADA Improvements
	Various	Henry	JSR0338				
H02	AA	Oregon	J9S3809	$2,465,000.00	$0.00	Pace Construction Company, LLC	Resurface
	K	Texas	JSE0042				
	ZZ	Howell	J9S3845				
H03	OO	Cape Girardeau	JSE0030	$2,834,748.85	$0.00	Penzel Construction Company, Inc.	Bridge Replacement
H04	Various	Various	JSE0173	$100,000.00	$0.00	Putz Construction, LLC	Job Order Contracting for ADA Improvements
H05	Various	Various	JSE0174	$500,000.00	$0.00	Putz Construction, LLC	Job Order Contract for Concrete Pavement Repairs
H06	I-55, I-57, I-155	Various	JSE0175	$500,000.00	$0.00	Putz Construction, LLC	Job Order Contract for Concrete Pavement Repairs
H07	Various	Various	JSE0176	$2,250,000.00	$0.00	Collins & Hermann, Inc.	Job Order Contract for Guardrail/Guard Cable Repair
H08	Various	Various	JSE0177	$500,000.00	$0.00	Collins & Hermann, Inc.	Job Order Contract for Guardrail/Guard Cable Repair
H09	Various	Various	JSE0179	$1,000,000.00	$0.00	H.R. Quadri Contractors, LLC	Job Order Contract for Erosion Control Repairs

Call No.	Route	Counties	Job No.	Bid Amount	Non-Contractual Costs	Contractor	Description
H10	60, 63, 67	Various	JSEM0117	$1,767,657.07	$0.00	Reynolds Sealing and Striping, Inc.	Pavement Marking
H11	I-57	Mississippi	JSEM0125	$48,365.00	$0.00	Midwest Mechanical and Welding, LLC	Pipe Extension and Rock Ditch Liner
H12	38	Wright	J9S3689	$2,030,000.00	$0.00	West Plains Bridge & Grading, LLC	Bridge Replacement
			TOTAL:	**$73,984,820.10**	**$0.00**		

After consideration, and upon motion by Commissioner Smith, seconded by Commissioner Boatright, the Commission took the following action with abstentions noted below.

1. Awarded contracts to the lowest responsive bidders for bids received at the April 17, 2026, bid opening, as recommended, and noted in Table I above. Non-contractual costs for these projects are shown on the above tabulation.

Commissioner Erdman abstained from voting on Calls B01, C01, C02, and C06. Commissioner Smith abstained from voting on Call G03. Commissioner Hegeman abstained from voting on Calls A01, A02, C02, and D03. Commissioner Slay abstained from voting on Call F06.

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APPROVAL OF PLANS FOR CONDEMNATION

On behalf of the Director, Sarah Kleinschmit, State Design Engineer, recommended the Commission approve the following detailed project plans, approved by the Chief Engineer, for filing as necessary for the condemnation of right of way.

County	Route	Job Number
Lafayette and Johnson	13	J4P2333
St. Louis	340	JSL0076B
St. Louis and St. Charles	Various	J6P3510C

In accordance with Section 227.050 RSMo, the Commission, via approval of the consent agenda, approved the detailed project plans for the above noted projects and directed them to be filed as necessary for the condemnation of right of way.

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-- REPORTS --

REPORTS

The Commission received the following written reports.

FISCAL YEAR 2026 QUARTERLY FINANCIAL STATEMENTS

Doug Hood, Financial Services Director, provided to the Commission the written Quarterly Financial Accountability Report for the period ending March 31, 2026.

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MODOT BRIEFING REPORT

Ed Hassinger, Director, provided to the Commission the written monthly Issue Briefs that are sent from the department to the Governor since the previous MoDOT Briefing Report. There were no briefing reports to the Governor for the past month.

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MISSOURI DEPARTMENT OF TRANSPORTATON FINANCIAL REPORT – FISCAL YEAR 2026

Doug Hood, Financial Services Director, submitted a written financial report for fiscal year to date March 31, 2026, with budget and prior year comparisons.

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CONSULTANT SERVICES CONTRACT REPORT

Sarah Kleinschmit, State Design Engineer, submitted a written report of consultant contracts executed in the month of March 2026, for both engineering and non-engineering related projects. The department utilizes consultants to efficiently manage workload and provide specialized expertise to supplement and support department staff. Expenditures for consultant services are funded from the Commission approved Statewide Transportation Improvement Program and MoDOT Operating Budget. There were 668 active contracts held by individual engineering consultant firms prior to March 1, 2026.

Twenty engineering consultant services contracts were executed in March 2026, for a total of $7,076,322.

There were zero non-engineering consultant contracts executed in March 2026.

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By unanimous consensus of all members present, the meeting of the Commission adjourned.

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The Mission of the Missouri Highways and Transportation Commission is to:

- Represent the citizens of Missouri pursuant to the Constitution by providing independent and nonpartisan governance of the Missouri Department of Transportation; and

- Establish policies, exercise oversight, and ensure accountability in developing and maintaining a world class transportation system in Missouri which fosters safety and economic development.

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
Official Minutes

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May 5, 2026

VOTE TO CLOSE MEETING 4

MINUTES OF THE SPECIAL HIGHWAYS AND TRANSPORTATION COMMISSION MEETING HELD IN JEFFERSON CITY, MISSOURI, TUESDAY, MAY 5, 2026

A special meeting of the Missouri Highways and Transportation Commission was held on Tuesday, May 5, 2026, at the Missouri Department of Transportation, 105 W. Capitol Avenue, Jefferson City, Missouri. Warren K. Erdman, Chairman, called the meeting to order at 2:40 p.m. The following Commissioners were present: W. Dustin Boatwright, P.E., Gregg C. Smith, Daniel J. Hegeman, Francis G. Slay, and Ann Marie Baker.

The meeting was called pursuant to Section 226.120 of the Revised Statutes of Missouri, as amended. The Secretary verified that notice of the meeting was posted in keeping with Section 610.020 of the Revised Statutes of Missouri, as amended.

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Ed Hassinger, Director of the Missouri Department of Transportation; Melida Grace-Beasley, Assistant Chief Counsel-Human Resources; and Jennifer Jorgensen, Secretary to the Commission, were present on Tuesday, May 5, 2026.

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"Department" or "MoDOT" herein refers to Missouri Department of Transportation.
"Commission" or "MHTC" herein refers to Missouri Highways and Transportation Commission.

-- CLOSED MEETING –

VOTE TO CLOSE MEETING

The agenda of the closed meeting was posted in keeping with Sections 610.020 and 610.022, RSMo, including the following statutory citations allowing the meeting to be closed:

1. Section 610.021(1) – Legal actions and attorney-client privileged communications.
2. Section 610.021(3), (13) – Personnel administration regarding particular employees.
3. Section 610.021(11), (12) – Competitive bidding specs, sealed bids, or negotiated contracts.

Upon motion duly made and seconded to convene in closed session, the Chairman called for a voice vote of the members. The vote was as follows:

Commissioner Erdman, Aye
Commissioner Boatwright, Aye
Commissioner Smith, Aye
Commissioner Hegeman, Aye
Commissioner Slay, Aye
Commissioner Baker, Aye

The Commission met in closed session on Tuesday, May 5, 2026, at 2:40 p.m. and adjourned at 5:15 p.m.

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By unanimous consensus of all members present, the meeting of the Commission adjourned.

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Director's Report

Director’s Report

JUNE 3, 2026



Improve I-70: Rocheport to Columbia

Improve I-70: Rocheport to Columbia

Video to be played during the meeting. The video can be viewed by playing the recording of the entire meeting located at https://www.modot.org/past-meeting-recordings.



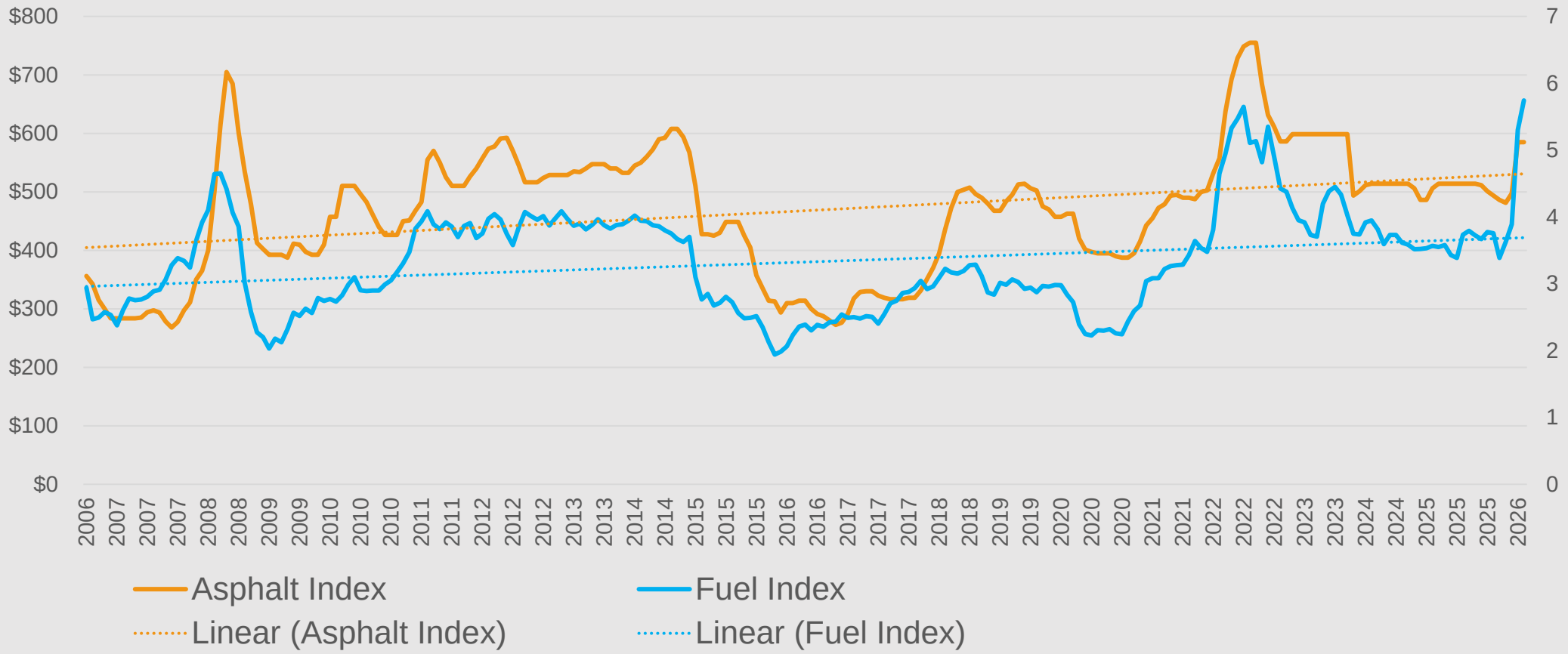


Improve I-70: Rocheport to Columbia

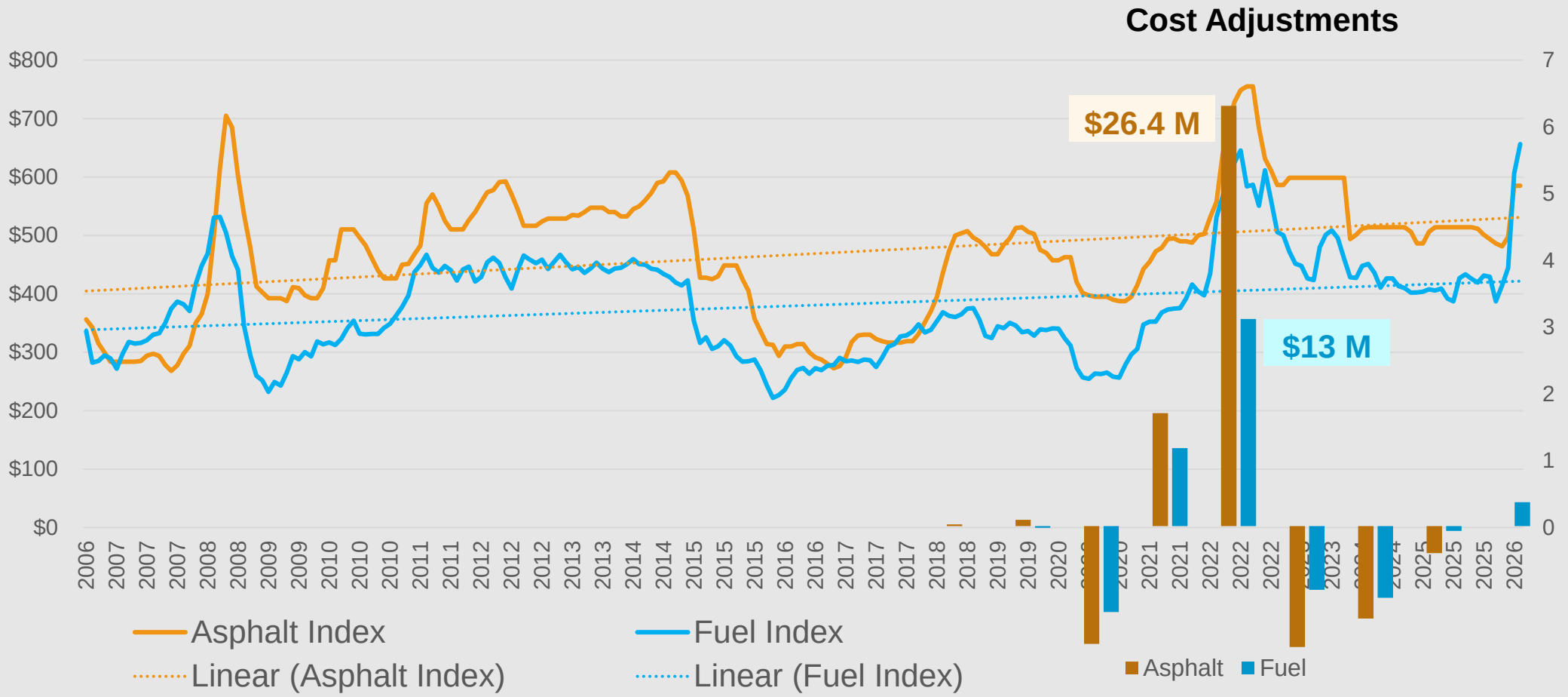


FARM
BRIDGE PROGRAM
Fixing Access to Rural Missouri

FARM Bridge Program Recognized



Fuel/Asphalt Index - Update



Fuel/Asphalt Index - Update

Director’s Report

JUNE 3, 2026


MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
MDCCCXX

"BUILDING WHAT'S NEXT," PRESENTATION BY SPRINGFIELD DELEGATION

-- Presented by Sara Fields, Executive Director of Ozarks Transportation Organization, 417-496-4613; Matt Morrow, President of Springfield Area Chamber of Commerce, 417-862-5567; David Cameron, City Administrator of the City of Springfield, 417-864-1006.

ISSUE:

- Springfield is the fastest growing city in the state, with 5.31 percent population growth between 2020-2025. This outpaces national growth rates by more than 2 percent.
- Infrastructure projects across the region support this population growth by supporting the increase in traffic from commuter traffic in and around Springfield, Nixa, Ozark, Willard, and Republic.
- In 2024, the local system accounted for 24 percent of lane miles.
- In 2024, 50 percent of crashes occurred on local roads, including 39 percent of fatality crashes and 43 percent of severe injury crashes.
- Ozark Transportation Organization's Safety Action Plan focuses on high-risk corridors in the region including those with narrow shoulders, no median, and multimodal activity.
- The top local priorities for the state system include improvements to: Greene County Route MM (Republic), Missouri Route 13 (widening), U.S. 60 intersections (Republic), U.S. 160 (south widening), U.S. 60/65 interchanges, Route CC widening (Ozark), U.S. 160 intersection safety (Springfield), and I-44/U.S.65 interchange (Springfield).
- The Ozarks Transportation Organization is currently leading an access and operations study of the U.S. 60 corridor from the U.S. 60/U.S. 65 interchange to the U.S. 60/Missouri Route 125 interchange, along with Greene County, the City of Springfield, City Utilities, and MoDOT.
- The study will look at understanding how the corridor functions today, how it will function in the future, and what types of improvements could be made to address current and future transportation needs.
- The region has benefited from 25 years of successful project delivery, with over 200 projects delivered.
- Over $154 million has been obligated since 2005, with 98 percent obligated through Fiscal Year 2025.

MoDOT STAFF POSITION:

- It is impressive to see the growth in population and support of the infrastructure in the area. MoDOT appreciates supportive transportation partners like the Springfield Area Chamber of Commerce, with the same desires to move economic development and transportation forward.
- MoDOT appreciates the close working relationship with supportive transportation partners, like the Ozarks Transportation Organization and City of Springfield, to program projects that address the region's priorities. Partners will continue to work together to move Missourians forward safely.

BUILDING WHAT'S NEXT

Community Growth
State and Local
Infrastructure



CITY OF Springfield

MoDOT

OTO

Springfield®
Area Chamber of Commerce

Population Growth



2020 - 2025		
MSA (MO)	Growth	Population Added
Springfield	5.31%	25,259
Kansas City*	3.56%	44,594
St. Louis*	0.23%	4,955
Columbia	3.89%	8,198
Joplin*	4.56%	8,280
Jefferson City	1.60%	2,411
St. Joseph*	-2.10%	-2,389
Missouri	1.90%	115,628
USA	3.10%	10,268,744

Springfield MSA Job Growth

Springfield MSA Workforce Change by Industry 2014 – 2024, American Community Survey 5-yr Estimates

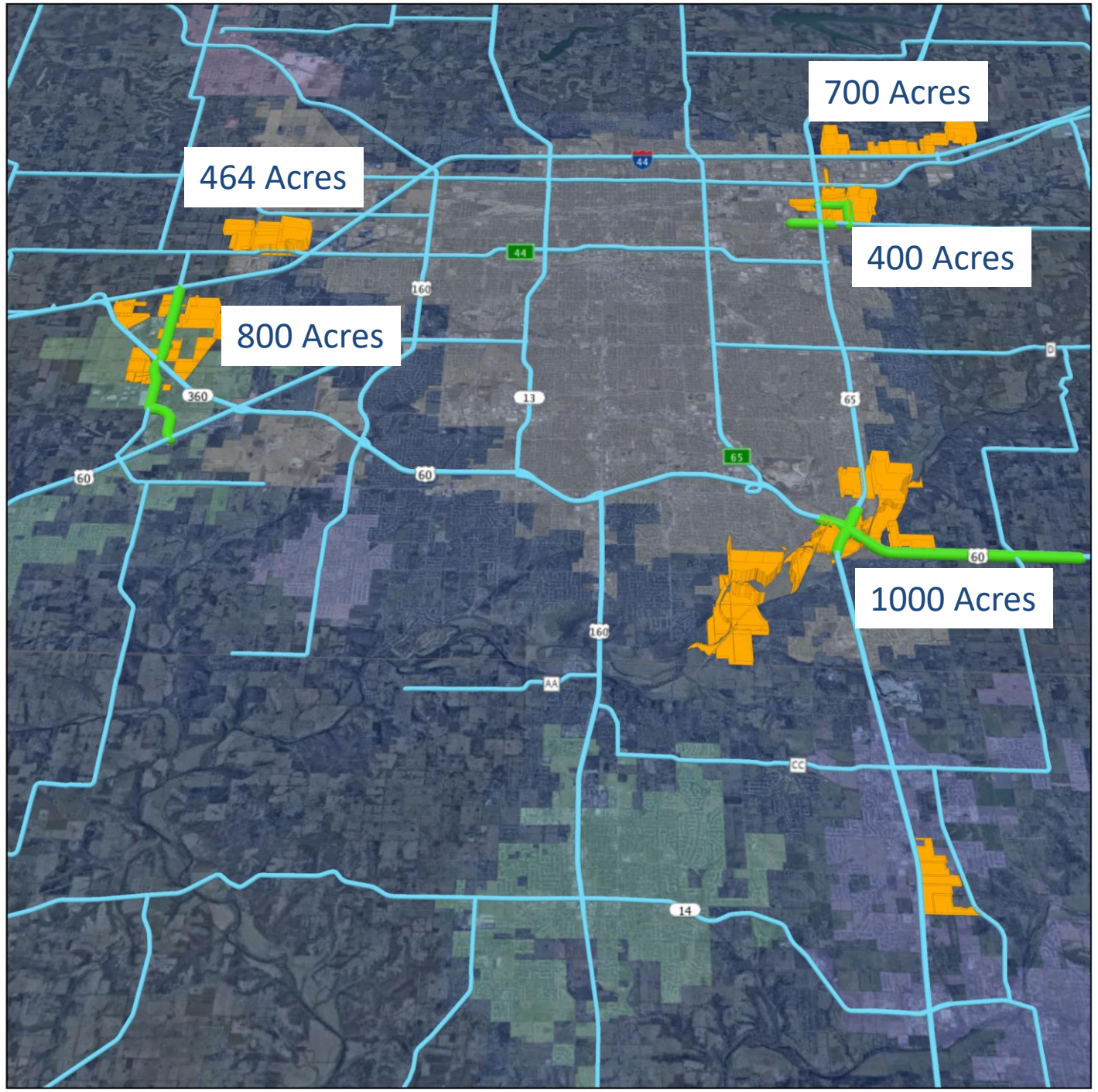
	2014	2024	Difference	% Change
Full-time, year-round civilian employed population 16 years and over	**135,862**	**165,944**	**30,082**	**22.1**
Agriculture, forestry, fishing and hunting, and mining:	**1,654**	**2,043**	**389**	**23.5**
Agriculture, forestry, fishing and hunting	1,503	1,807	**304**	**20.2**
Mining, quarrying, and oil and gas extraction	151	236	**85**	**56.3**
Construction	**7,368**	**11,134**	**3,766**	**51.1**
Manufacturing	**14,729**	**18,843**	**4,114**	**27.9**
Wholesale trade	**5,259**	**4,787**	**(472)**	**-9.0**
Retail trade	**16,531**	**19,142**	**2,611**	**15.8**
Transportation and warehousing, and utilities:	**9,107**	**11,970**	**2,863**	**31.4**
Transportation and warehousing	7,136	10,111	**2,975**	**41.7**
Utilities	1,971	1,859	**(112)**	**-5.7**
Information	**2,966**	**1,983**	**(983)**	**-33.1**
Finance and insurance, and real estate and rental and leasing:	**9,638**	**12,587**	**2,949**	**30.6**
Finance and insurance	7,454	9,813	**2,359**	**31.6**
Real estate and rental and leasing	2,184	2,774	**590**	**27.0**
Professional, scientific, and management, and administrative and was	**11,476**	**18,187**	**6,711**	**58.5**
Professional, scientific, and technical services	6,343	11,786	**5,443**	**85.8**
Management of companies and enterprises	231	303	**72**	**31.2**
Administrative and support and waste management services	4,902	6,098	**1,196**	**24.4**
Educational services, and health care and social assistance:	**35,395**	**41,990**	**6,595**	**18.6**
Educational services	12,457	12,769	**312**	**2.5**
Health care and social assistance	22,938	29,221	**6,283**	**27.4**
ntertainment, and recreation, and accommodation and food services:	**8,458**	**8,896**	**438**	**5.2**
Arts, entertainment, and recreation	1,511	2,092	**581**	**38.5**
Accommodation and food services	6,947	6,804	**(143)**	**-2.1**
Other services, except public administration	**7,316**	**7,873**	**557**	**7.6**
Public administration	**5,965**	**6,509**	**544**	**9.1**

MSA Job Growth 2020 - 2024

MSA (MO only)	Growth	Jobs Added
Springfield	9.92%	17,766
Kansas City*	8.4%	41,005
St. Louis*	7.96%	78,070
Columbia	8.47%	5,992
Joplin*	5.45%	3,629
Jefferson City	6.17%	3,063
St. Joseph*	1.32%	598
Missouri	7.42%	170,174
USA	10.27%	12,292,977

PROJECTS TO SUPPORT JOB GROWTH

- LeCompte and Eastgate Improvements Completed
- MM Relocation and Widening- Partially Funded
- Division Interchange and RR Overpass Study
- 60/65 Study and 60 Outer Road Project



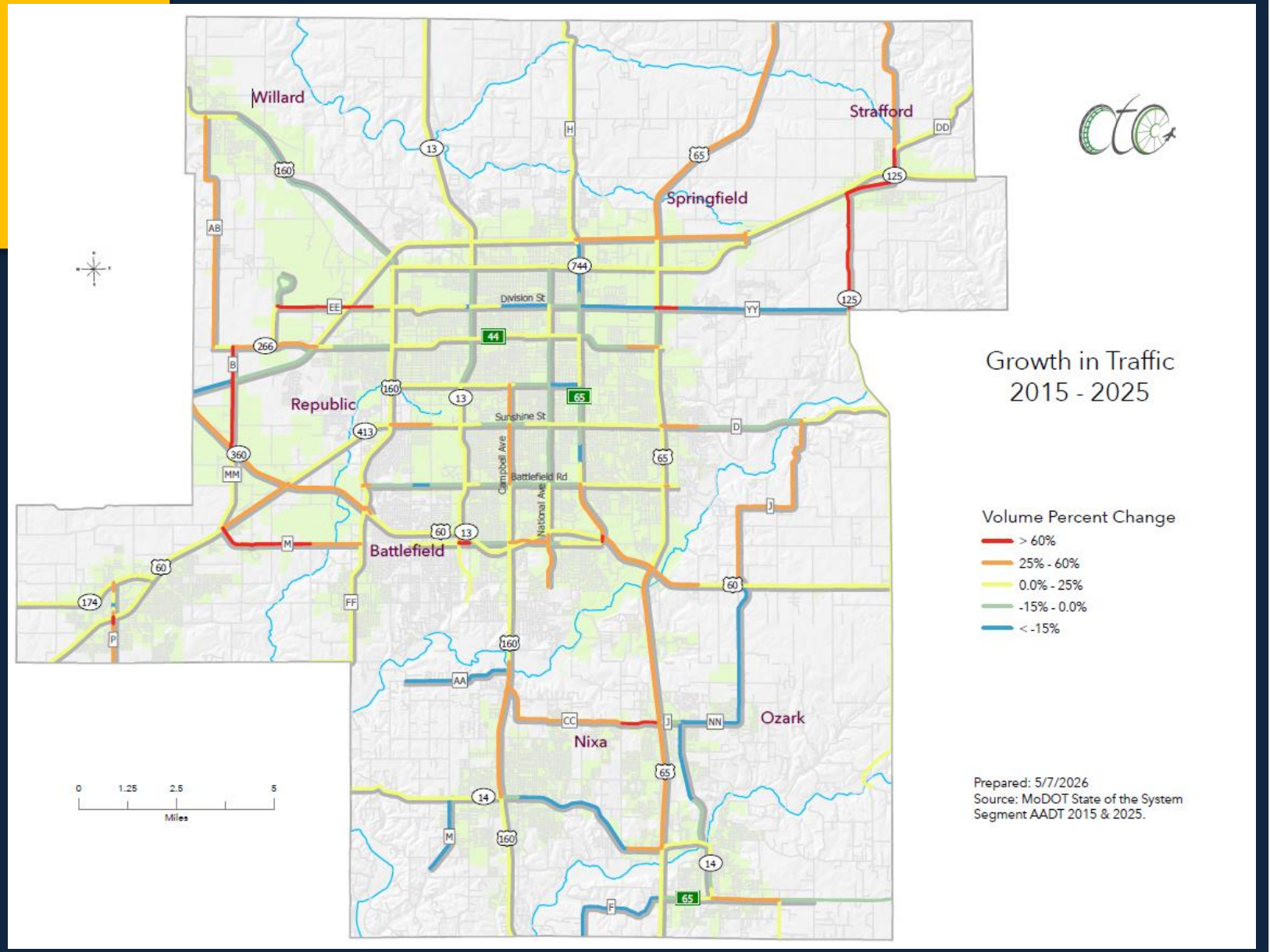
PROJECTS TO SUPPORT POPULATION GROWTH

Completed

- 65 Widening
- James River Freeway Widening
- Kansas extension
- Bridge rebuilds
- Grant Avenue
- National Avenue
- 125 Safety/Roundabouts (Strafford)

Planned Projects

- I-44
- Campbell Safety (2025 SS4A)
- Sunshine Safety
- 13 (Kansas widening)
- 14 widening
- Roundabouts at 266/AB and 266/B
- US 60 widening (East and West)
- Kearney/65 Interchange
- FF/Weaver Roundabout



Sunshine Street Corridor- SAFETY PROJECT

Federal Highway Administration

BUILD 2026 Application

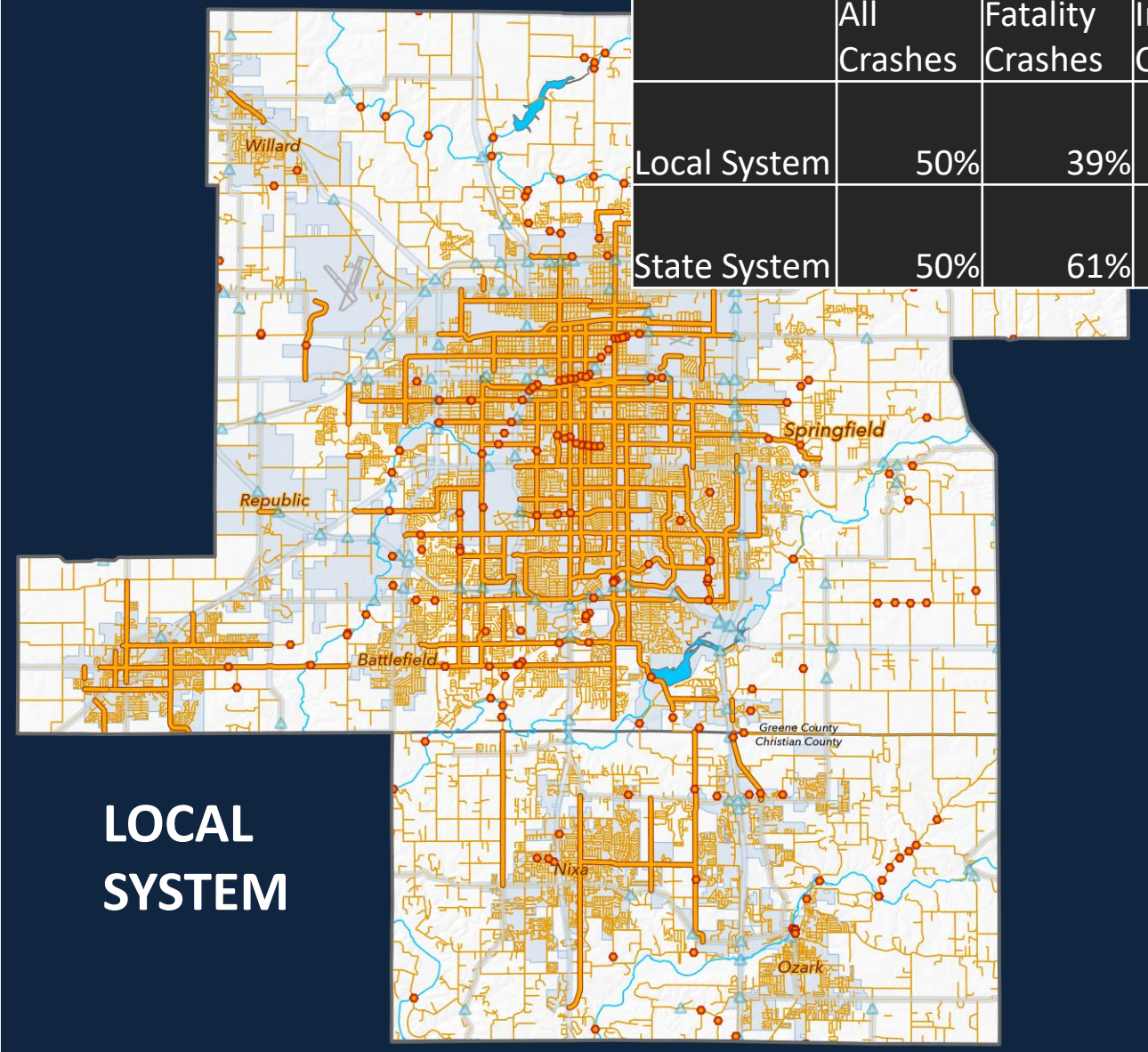




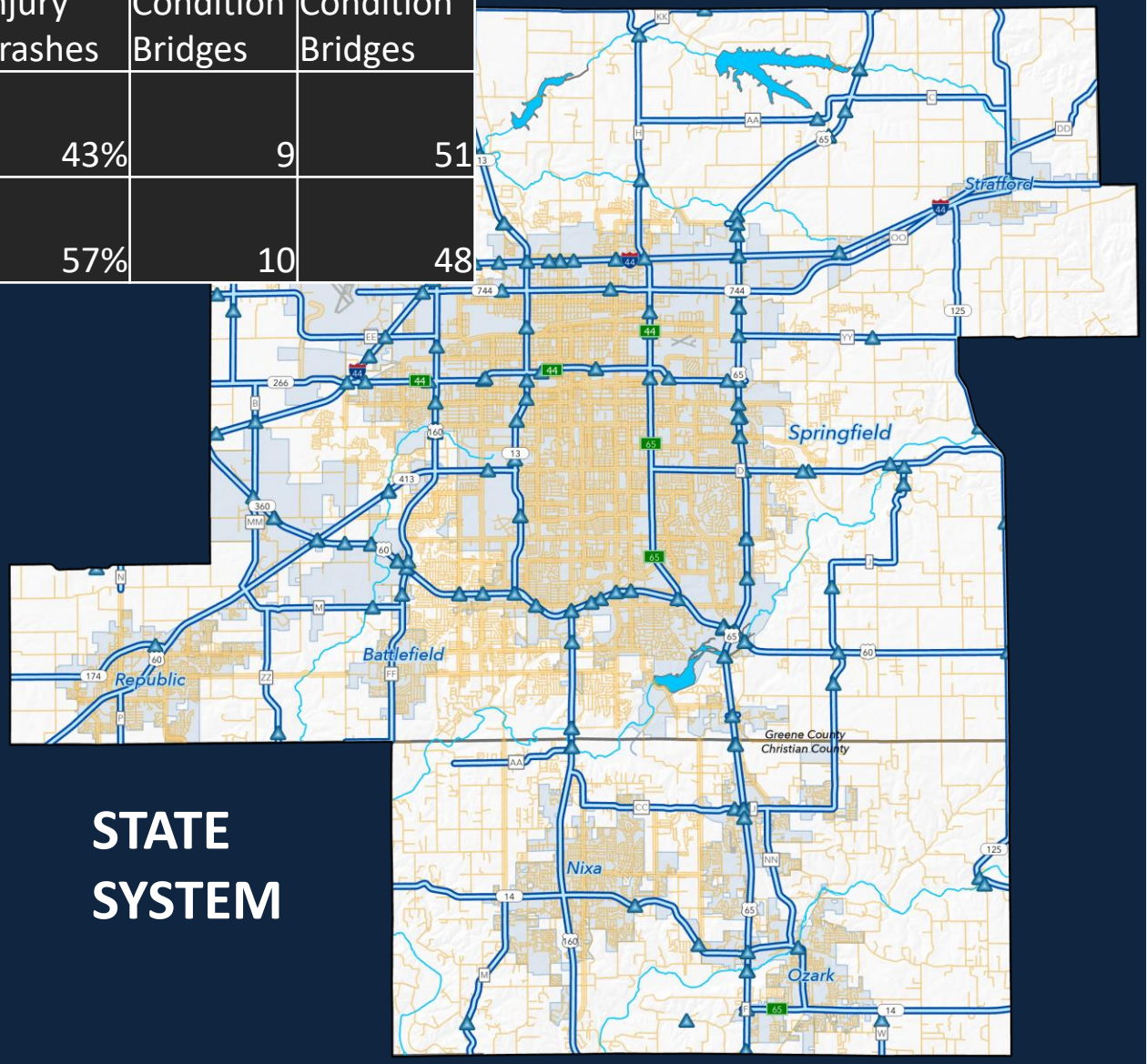


Local vs State System 2024

	All Crashes	Fatality Crashes	Severe Injury Crashes	Poor Condition Bridges	Fair Condition Bridges
Local System	50%	39%	43%	9	51
State System	50%	61%	57%	10	48



LOCAL SYSTEM



STATE SYSTEM



High Risk Corridor Characteristics

- Arterials
- Narrow Shoulders
- Undivided/No Median
- Multimodal Activity
- Urban Area
- Expressway and 5 lane section

HIGH RISK INDEX CORRIDORS

Locally Owned

Grant Avenue
National Avenue
Glenstone Avenue
S. Campbell Avenue
Division Street
Battlefield Street
Sunshine Street
Republic Street

State Owned

Sunshine Street
Chestnut Expressway
Kearney Street
MO14 (Nixa and Ozark)
US 60 (Republic)

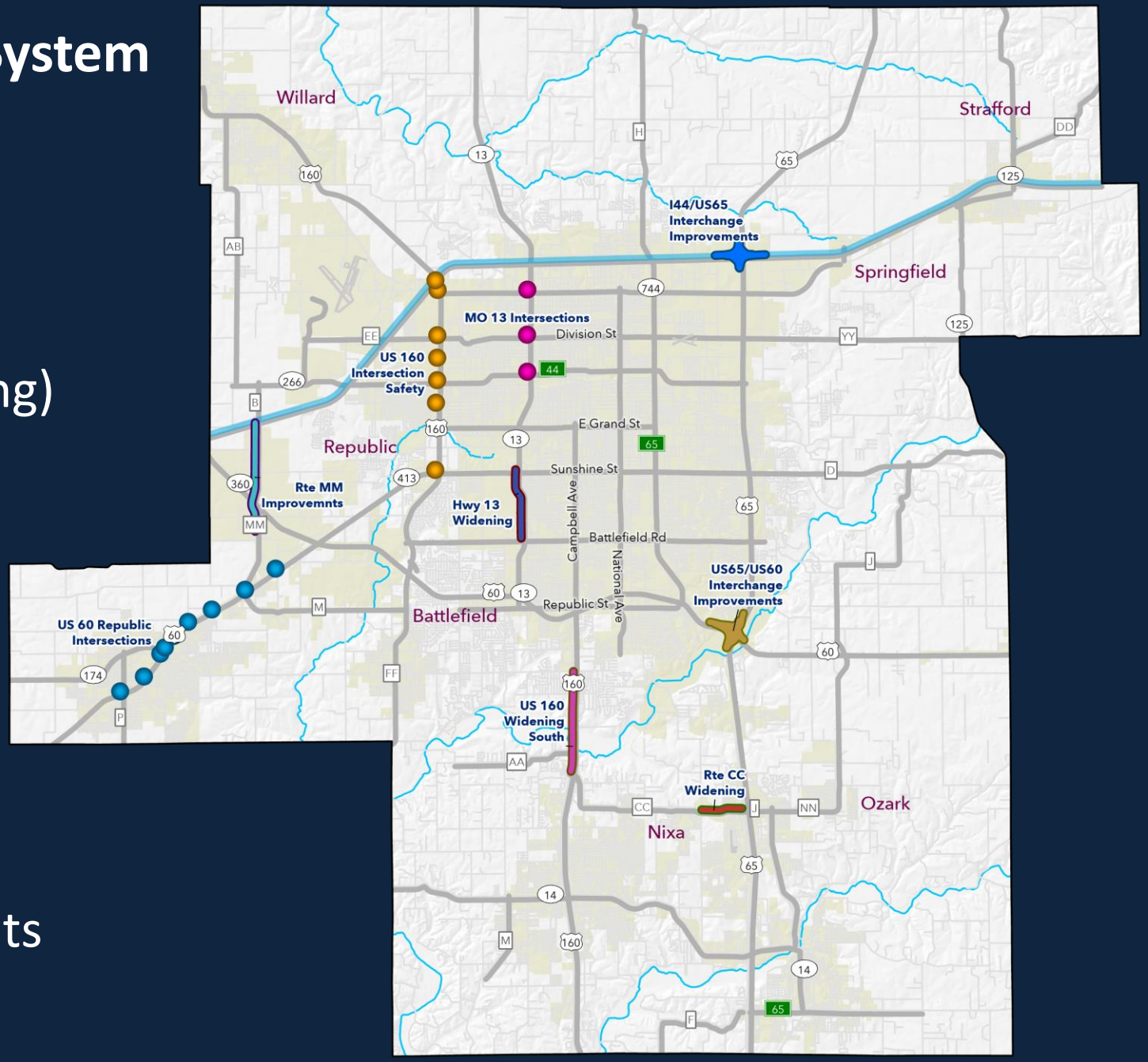
BUILD America 250 Act

- Safety (SS4A) Discretionary application
  - Local Eligibility
- BRIDGE
  - Increase 25%
  - 25% set aside for locally owned bridges
- Metropolitan Planning
  - Direct Funding to MPOs
  - 90% match
- STBG Suballocation
  - Direct recipient pilot
  - Separate obligation limitation

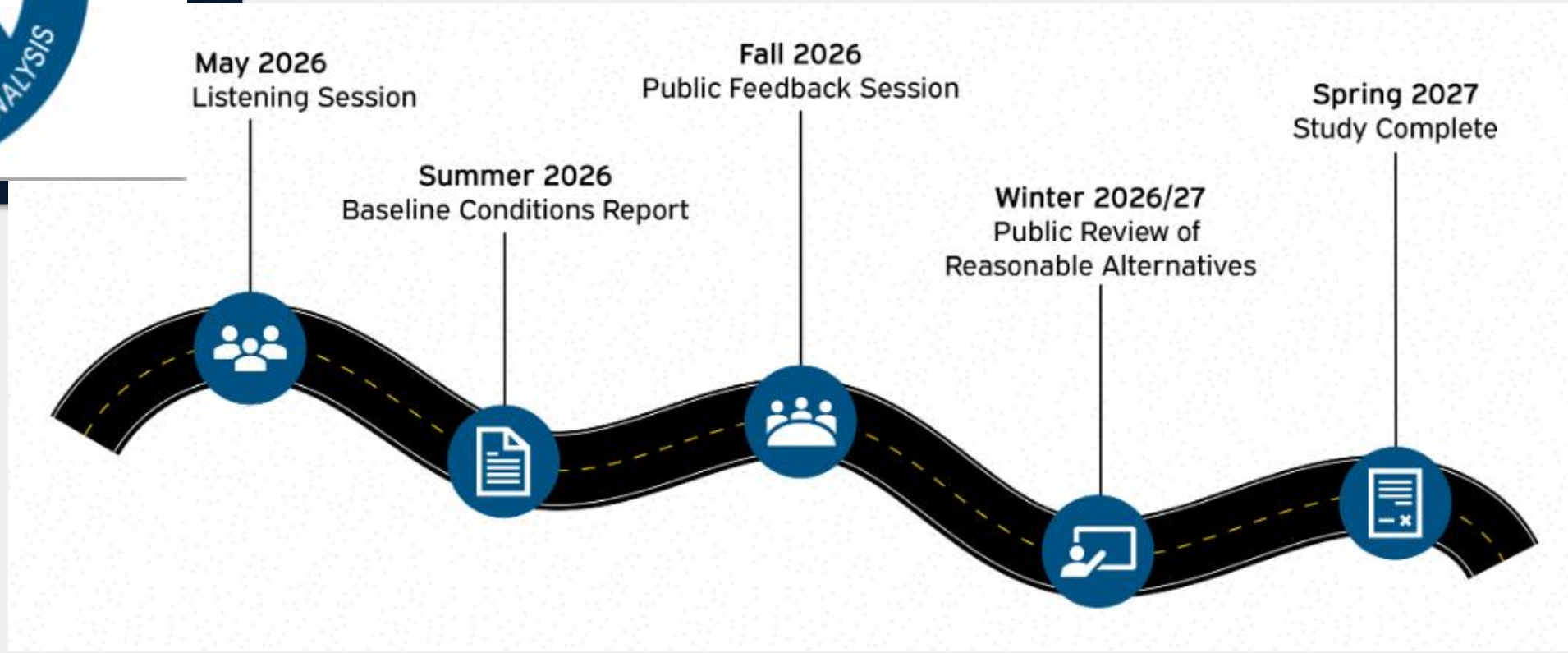
Local Priorities for the State System

TOP STIP Priorities

- Route MM
- Highway 13 (Springfield widening)
- US 60 Intersections (Republic)
- US 160 (south widening)
- 60/65 Interchanges
- CC widening (Ozark)
- 160 Intersection Safety (Springfield)
- 44/65 Interchange Improvements



6065STUDY.COM



COUNTY OF GREENE

City Utilities
Connecting Our Community

CITY OF Springfield

OZARKS TRANSPORTATION ORGANIZATION
A METROPOLITAN PLANNING ORGANIZATION

MoDOT

FHWA

25 years of successful project delivery

204 PROJECTS DELIVERED

98%
OBLIGATED THROUGH FY 2025



$2.25 MILLION BALANCE

$154.3 MILLION OBLIGATED SINCE 2005

THANK YOU

BUILDING WHATS NEXT


MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
MDCCCXX

2

CONSIDERATION OF BIDS FOR TRANSPORTATION IMPROVEMENTS
-- Presented by Sarah Kleinschmit, State Design Engineer, 573-751-2876.

ISSUE: The Commission approves contracts for transportation improvements.

RECOMMEND that the Commission:

- A recommendation for award or rejection of bids on individual projects will be presented orally.

DEPARTMENT VIEW:

- Approval of the award by the Commission is necessary to construct the improvements contained in the current year of the Statewide Transportation Improvement Program.

OTHER VIEWS:

- Not applicable.

MHTC POLICY:

- Highways – Construction – Contract Awards.

OTHER PERTINENT INFORMATION:

- Low Bid Summary of the May 15, 2026, Bid Opening (Attachment 1).
- Project location map (Attachment 2).
- A summary of the Official MoDOT Awards (Attachment 3).

SOURCE OF FUNDING: Funds required for these projects will come from the State Road Fund and will appear in the applicable budgets under the category of contractor payments.

SUMMARY OF BID OPENING

May 15, 2026

	CALL NO.	COUNTY	RTE.	JOB NO.	ADT	DESCRIPTION	BID	LENGTH	MAXIMUM TERM WITH EXTENSIONS	% FED	PROGRAM AMOUNT	NO. OF BIDS	DBE %
NW	A02	NODAWAY	71	JNW0165	8,000	INTERSECTION IMPROVEMENTS		0.991		STATE			
							BASE BID	LCCA FACTOR	BASIS OF AWARD				
	LOW	LEAVENWORTH EXCAVATING & EQUIPMENT COMPANY, INC.				AC	$3,067,645.65	$220,100.00	$3,287,745.65		$2,000,000.00	1	0
		100% FUNDED BY EVERGY MISSOURI WEST											
KC	C02	JOHNSON, LAFAYETTE, PETTIS, SALIN	VARIOUS	JKR0309	VARIOUS	JOB ORDER CONTRACT FOR ASPHALT PAVEMENT REPAIR		0.000		80%			
							FACTOR	AMOUNT OF WORK					
	LOW	SUPERIOR BOWEN ASPHALT COMPANY, LLC					1.750	$1,000,000.00	2		$1,020,000.00	2	0
		IDEKER, INC.					2.100						
KC	C03	VARIOUS	VARIOUS	JKR0317	VARIOUS	JOB ORDER CONTRACT FOR CONCRETE PAVEMENT REPAIR		0.000		80%			
							FACTOR	AMOUNT OF WORK					
	LOW	REALM CONSTRUCTION INC.					1.600	$2,000,000.00	2		$2,000,000.00	1	0
KC	C04	SALINE	127	JKR0411	846	INTERCHANGE IMPROVEMENTS		0.162		80%			
	LOW	RADMACHER BROTHERS EXCAVATING CO., INC.					$1,553,061.09				$929,000.00	1	0
		FUNDING BY SWEET SPRINGS - $1,088,652.59											
KC	C05	CLAY	9	JKU0031	9,691	COLDMILL AND RESURFACE		1.675		80%			
		CLAY, JACKSON	9	JKU0465	19,728	COLDMILL AND RESURFACE		1.489					
	LOW	IDEKER, INC.					$1,803,685.46				$1,612,000.00	2	0
		SUPERIOR BOWEN ASPHALT COMPANY, LLC					$1,862,604.98						
KC	C06	CLAY	1	JKU0096	5,538	COLDMILL, RESURFACE, ADA IMPROVEMENTS		0.232		80%			
	LOW	REALM CONSTRUCTION INC.					$986,497.15				$1,541,000.00	1	0
KC	C07	CLAY	69	JKU0097	11,896	ADA IMPROVEMENTS		0.557		80%			
	LOW	REALM CONSTRUCTION INC.					$621,908.95				$848,000.00	5	0
		TI-ZACK CONCRETE, LLC					$677,112.68						
		AMINO BROS. CO., INC.					$786,801.10						
		LEAVENWORTH EXCAVATING & EQUIPMENT COMPANY, INC.					$941,281.00						
		FREEMAN CONCRETE CONSTRUCTION LLC					$1,377,252.87						
KC	C08	JACKSON	150	JKU0147	31,197	SLIDE REPAIRS		0.350		80%			
	LOW	WIDEL, INC.					$150,857.00				$511,000.00	4	0
		LEAVENWORTH EXCAVATING & EQUIPMENT COMPANY, INC.					$192,249.95						
		COURTNEY CONSTRUCTION, LLC DBA COURTNEY EXCAVATING & CONSTRUCTION					$216,299.05						
		HOY EXCAVATING, LLC					$251,086.97						
KC	C09	CLAY	OR 69	JKU0236	90	INTERSECTION REALIGNMENT		0.089		100%			
	LOW	LEAVENWORTH EXCAVATING & EQUIPMENT COMPANY, INC.					$297,806.80				$223,000.00	2	0
		AMINO BROS. CO., INC.					$364,181.00						

SUMMARY OF BID OPENING

May 15, 2026

	CALL NO.	COUNTY	RTE.	JOB NO.	ADT	DESCRIPTION	BID	LENGTH	MAXIMUM TERM WITH EXTENSIONS	% FED	PROGRAM AMOUNT	NO. OF BIDS	DBE %
KC	C11	VARIOUS	VARIOUS	JKU0316	VARIOUS	JOB ORDER CONTRACT FOR CONCRETE PAVEMENT REPAIR		0.000		80%			
							FACTOR / AMOUNT OF WORK						
	LOW	REALM CONSTRUCTION INC.					1.490 / $5,000,000.00		2		$5,000,000.00	1	0
KC	C12	JACKSON	VARIOUS	JKU0424	VARIOUS	SIGNAL REPAIR		1.240		80%			
	LOW	CAPITAL ELECTRIC LINE BUILDERS, LLC					$237,323.00				$300,000.00	2	0
		CUSTOM LIGHTING SERVICES, LLC DBA BLACK & MCDONALD					$311,602.83						
						BASE ONLY							
KC	C13	PETTIS	65	J3P3206	4,829 (NB) - 5,904 (SB)	BRIDGE REPLACEMENT AND BRIDGE REHABILITATION		0.984		80%			
	LOW	E & C BRIDGE, LLC					$2,824,492.28				$2,267,000.00	3	0
		DON SCHNIEDERS EXCAVATING COMPANY, INC.					$3,794,725.74						
		LOUIS-COMPANY, LLC					$4,554,683.16						
KC	C14	JACKSON	40	JKU0201	8,921	INTERSECTION IMPROVEMENTS		1.136		80%			
	LOW	REALM CONSTRUCTION INC.					$1,044,860.97				$580,000.00	3	0
		LEAVENWORTH EXCAVATING & EQUIPMENT COMPANY, INC.					$1,204,026.60						
		AMINO BROS. CO., INC.					$1,292,866.02						
KC	C15	VARIOUS	VARIOUS	JKU0319	VARIOUS	JOB ORDER CONTRACT FOR ASPHALT PAVEMENT REPAIR		0.000		80%			
							FACTOR / AMOUNT OF WORK						
	LOW	SUPERIOR BOWEN ASPHALT COMPANY, LLC					1.348 / $4,000,000.00		2		$4,000,000.00	2	0
		IDEKER, INC.					1.400						
CD	D02	COOPER	87	JCD0023	1,842	BRIDGE REHABILITATION		0.057		80%			
		COOPER	87	JCD0024	1,949	BRIDGE REHABILITATION		0.037					
	LOW	WIDEL, INC.					$515,468.20				$752,000.00	3	0
		E & C BRIDGE, LLC					$819,327.00						
		LOUIS-COMPANY, LLC					$942,186.91						
CD	D03	WASHINGTON	47	JCD0135	3,688	GRADING, PAVEMENT, DRAINAGE AND BRIDGE		0.524		80%			
	LOW	H.R. QUADRI CONTRACTORS, LLC					$6,356,214.41				$5,804,000.00	4	0
		N.B. WEST CONTRACTING COMPANY					$7,871,296.00						
		ROBERTSON CONTRACTORS, INC.					$8,187,367.23						
		CAPITAL PAVING & CONSTRUCTION, LLC					$8,605,484.50						
						FUNDING FROM UNION PACIFIC RR - $124,231.24							
CD	D05	WASHINGTON	A	JCD0228	290	BRIDGE REPLACEMENT		0.114		80%			
	LOW	ROBERTSON CONTRACTORS, INC.					$2,283,758.17				$2,368,000.00	6	0
		E & C BRIDGE, LLC					$2,319,042.00						
		GERSHENSON CONSTRUCTION CO., INC.					$2,406,648.00						
		KOZENY-WAGNER, INC.					$2,458,310.50						
		N.B. WEST CONTRACTING COMPANY					$2,610,000.00						
		LOUIS-COMPANY, LLC					$7,514,757.34						

SUMMARY OF BID OPENING

May 15, 2026

	CALL NO.	COUNTY	RTE.	JOB NO.	ADT	DESCRIPTION	BID	LENGTH	MAXIMUM TERM WITH EXTENSIONS	% FED	PROGRAM AMOUNT	NO. OF BIDS	DBE %
CD	D06	DENT	119	JCD0338	1,124	SCOUR REPAIR		0.104		80%			
		DENT	72	JCD0339	5,989	SCOUR REPAIR		0.057					
		DENT	FF	JCD0341	391	SCOUR REPAIR		0.047					
	LOW	H.R. QUADRI CONTRACTORS, LLC					$169,986.00				$1,050,000.00	5	0
		MIDWEST MECHANICAL AND WELDING, LLC					$195,912.75						
		BUILDTEC CONSTRUCTION, LLC					$237,140.00						
		ABOVE AND BELOW CONTRACTING, LLC					$424,976.90						
		WIDEL, INC.					$450,356.25						
SL	F01	VARIOUS	VARIOUS	J6P3510	VARIOUS	ADA IMPROVEMENTS, 2 MSE WALLS, AND BRIDGE REHABILITATION		0.000		80%			
	LOW	R. V. WAGNER, INC.					$7,897,560.50				$7,125,000.00	3	0
		LAMKE TRENCHING & EXCAVATING, INC.					$9,092,886.04						
		ABOVE AND BELOW CONTRACTING, LLC					$12,859,022.54						
SL	F02	ST. LOUIS	340	JSL0076B	31,188	COLDMILL, RESURFACE, AND ADA IMPROVEMENTS		7.890		80%			
	LOW	LAMKE TRENCHING & EXCAVATING, INC.					$4,119,819.98				$3,456,000.00	3	0
		N.B. WEST CONTRACTING COMPANY					$4,490,000.00						
		BYRNE & JONES ENTERPRISES, INC. DBA BYRNE & JONES CONSTRUCTION					$4,587,286.29						
SL	F03	ST. LOUIS	67	JSL0029	20,305	COLDMILL, RESURFACE, AND ADA IMPROVEMENTS		1.500		80%			
	LOW	N.B. WEST CONTRACTING COMPANY					$7,097,000.00				$5,745,000.00	4	0
		LAMKE TRENCHING & EXCAVATING, INC.					$7,175,980.92						
		GERSHENSON CONSTRUCTION CO., INC.					$7,381,631.89						
		BYRNE & JONES ENTERPRISES, INC. DBA BYRNE & JONES CONSTRUCTION					$7,696,369.25						
SL	F04	FRANKLIN	47	JSL0033	20,000	COLDMILL AND RESURFACE		1.568		80%			
	LOW	N.B. WEST CONTRACTING COMPANY					$1,397,000.00				$1,254,000.00	3	0
		BYRNE & JONES ENTERPRISES, INC. DBA BYRNE & JONES CONSTRUCTION					$1,667,504.57						
		GERSHENSON CONSTRUCTION CO., INC.					$1,815,610.65						
SL	F05	VARIOUS	VARIOUS	JSL0100	VARIOUS	JOB ORDER CONTRACT FOR FENCE REPAIR		0.000		STATE			
							FACTOR AMOUNT OF WORK						
	LOW	FREEDOM FENCE, LLC					0.950 $325,000.00		2		$650,000.00	3	0
		DIAMOND FENCE, LLC					1.120						
		COLLINS & HERMANN, INC.					1.550						
SL	F06	VARIOUS	VARIOUS	JSL0101	VARIOUS	JOB ORDER CONTRACT FOR GUARD CABLE REPAIR		0.000		80%			
							FACTOR AMOUNT OF WORK						
	LOW	FREEDOM FENCE, LLC					1.150 $500,000.00		2		$1,000,000.00	3	0
		DIAMOND FENCE, LLC					1.190						
		COLLINS & HERMANN, INC.					1.550						

SUMMARY OF BID OPENING

May 15, 2026

	CALL NO.	COUNTY	RTE.	JOB NO.	ADT	DESCRIPTION	BID	LENGTH	MAXIMUM TERM WITH EXTENSIONS	% FED	PROGRAM AMOUNT	NO. OF BIDS	DBE %
SL	F07	VARIOUS	VARIOUS	JSLM0083	VARIOUS	JOB ORDER CONTRACT FOR SIGNAL REPAIR		0.000		STATE			
							FACTOR AMOUNT OF WORK						
	LOW	REINHOLD ELECTRIC, INC.					1.400 $41,000.00		2		$82,000.00	2	0
		GERSTNER ELECTRIC, INC.					1.740						
SL	F08	FRANKLIN, JEFFERSON	I-44	JSL0103	VARIOUS	JOB ORDER CONTRACT FOR GUARDRAIL REPAIR		0.000		80%			
							FACTOR AMOUNT OF WORK						
	LOW	COLLINS & HERMANN, INC.					1.950 $1,000,000.00		2		$2,000,000.00	1	0
SW	G01	VERNON	VARIOUS	J7P3518	75 - 7,691	ADA IMPROVEMENTS		3.980		80%			
		HENRY, ST. CLAIR	VARIOUS	J7S3399	92 - 2,102	ADA IMPROVEMENTS		0.780					
	LOW	TI-ZACK CONCRETE, LLC					$1,471,013.40				$1,153,000.00	3	0
		SPROULS CONSTRUCTION, INC.					$1,499,831.50						
		HUNTER CHASE & ASSOCIATES, INC.					$1,642,000.00						
SW	G02	VARIOUS	VARIOUS	J7P3529	VARIOUS	SIGNAL REPLACEMENTS AND ADA IMPROVEMENTS		0.000		80%			
	LOW	MIDWEST TRAFFIC SIGNAL SERVICES, LLC					$2,944,668.23				$4,498,000.00	1	0
SW	G05	NEWTON	NN, H	JSR0075	6,448	1 BRIDGE REPLACEMENT AND 1 BRIDGE REMOVAL		0.082		STATE			
	LOW	BRANCO ENTERPRISES, INC.					$362,240.90				$490,000.00	5	0
		HARTMAN AND COMPANY, INC.					$387,000.00						
		SPROULS CONSTRUCTION, INC.					$406,608.00						
		WIDEL, INC.					$494,751.50						
		RL PERSONS CONSTRUCTION, INC.					$509,995.00						
SW	G06	BENTON	7	JSR0110	5,040	ROUNDABOUT AND ADA IMPROVEMENTS		12.568		90%			
	LOW	HARTMAN AND COMPANY, INC.					$3,760,000.00				$2,103,000.00	4	0
		CAPITAL PAVING & CONSTRUCTION, LLC					$3,865,454.94						
		RL PERSONS CONSTRUCTION, INC.					$4,479,995.00						
		EMERY SAPP & SONS, INC.					$4,667,566.95						
SW	G07	STONE	13	JSR0132	9,320	BRIDGE REHABILITATION		0.363		80%			
	LOW	GEMSTONE, LLC DBA GEMSTONE, LLC MO					$1,148,771.06				$1,497,000.00	2	0
		THOMAS INDUSTRIAL COATINGS, INC.					$5,203,000.00						
SW	G08	BATES	D	JSR0134	3,780	BRIDGE REPLACEMENT		0.187		80%			
	LOW	HARTMAN AND COMPANY, INC.					$3,499,999.00				$2,983,000.00	5	0
		LOUIS-COMPANY, LLC					$3,613,692.78						
		CAPITAL PAVING & CONSTRUCTION, LLC					$3,777,624.03						
		REALM CONSTRUCTION INC.					$3,799,796.65						
		CLARKSON CONSTRUCTION COMPANY					$4,181,191.94						

SUMMARY OF BID OPENING

May 15, 2026

	CALL NO.	COUNTY	RTE.	JOB NO.	ADT	DESCRIPTION	BID	LENGTH	MAXIMUM TERM WITH EXTENSIONS	% FED	PROGRAM AMOUNT	NO. OF BIDS	DBE %
SW	G09	VERNON	E	JSR0140	851	BRIDGE REPLACEMENT		0.160		80%			
	LOW	EMERY SAPP & SONS, INC.					$1,346,524.96				$1,158,000.00	5	0
		HARTMAN AND COMPANY, INC.					$1,375,000.00						
		LOUIS-COMPANY, LLC					$1,457,690.29						
		MERA EXCAVATING, LLC					$1,502,338.60						
		CROSSLAND CONSTRUCTION COMPANY INC.					$1,648,959.15						
SW	G10	MCDONALD	H	JSR0143	1,370	BRIDGE REPLACEMENT		0.056		80%			
	LOW	HARTMAN AND COMPANY, INC.					$1,075,000.00				$1,067,000.00	3	0
		EMERY SAPP & SONS, INC.					$1,214,470.25						
		CROSSLAND CONSTRUCTION COMPANY INC.					$1,330,926.04						
SW	G11	VARIOUS	VARIOUS	JSR0272	VARIOUS	JOB ORDER CONTRACT FOR GUARD CABLE AND GUARDRAIL REPAIR		0.000		80%			
							FACTOR AMOUNT OF WORK						
	LOW	MAR-JIM CONTRACTING, LLC					1.349 $1,750,000.00		2		$3,500,000.00	2	0
		JAMES H. DREW CORPORATION					1.380						
SW	G12	CHRISTIAN, GREENE	VARIOUS	JSU0273	VARIOUS	JOB ORDER CONTRACT FOR GUARD CABLE AND GUARDRAIL REPAIR		0.000		80%			
							FACTOR AMOUNT OF WORK						
	LOW	MAR-JIM CONTRACTING, LLC					1.349 $750,000.00		2		$1,500,000.00	2	0
		JAMES H. DREW CORPORATION					1.380						
SE	H01	DUNKLIN	84	J9P3839	9,653 - 10,978	COLDMILL AND RESURFACE		2.086		80%			
	LOW	APEX PAVING CO.					$844,593.80				$939,000.00	3	0
		ABOVE AND BELOW CONTRACTING, LLC					$1,022,675.47						
		BLACK DIAMOND PAVING, LLC DBA PAVING PROS					$1,420,480.11						
SE	H02	STE. GENEVIEVE	61	J9P3855	2,048	PAVEMENT IMPROVEMENT AND ADA IMPROVEMENTS		0.171		80%			
	LOW	FRONABARGER CONCRETERS, INC.					$789,456.72				$843,000.00	4	0
		KIMES CONTRACTING LLC					$803,750.40						
		RL PERSONS CONSTRUCTION, INC.					$989,995.00						
		N.B. WEST CONTRACTING COMPANY					$1,197,000.00						
SE	H03	PERRY	K	J9S3671	1,037	BRIDGE REPLACEMENT		0.140		80%			
		PERRY	C	JSE0056	1,289	BRIDGE REPLACEMENT		0.369					
	LOW	PENZEL CONSTRUCTION COMPANY, INC.					$3,366,393.23				$3,385,000.00	4	0
		ROBERTSON CONTRACTORS, INC.					$3,370,281.86						
		PLATTIN CREEK EXCAVATING, LLC DBA PCX CONSTRUCTION, LLC					$3,425,442.05						
		N.B. WEST CONTRACTING COMPANY					$3,598,276.00						
SE	H04	BUTLER, STODDARD	U	J9S3779	495	RESURFACE		11.634		80%			
	LOW	APEX PAVING CO.					$1,097,924.50				$1,408,000.00	2	0
		ABOVE AND BELOW CONTRACTING, LLC					$1,384,948.13						

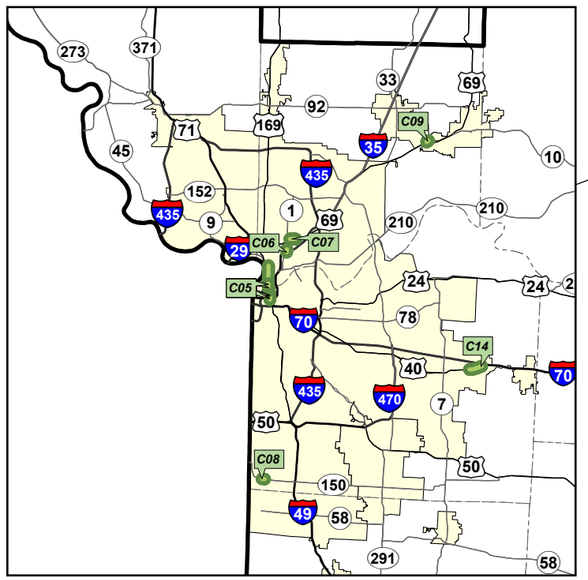
SUMMARY OF BID OPENING

May 15, 2026

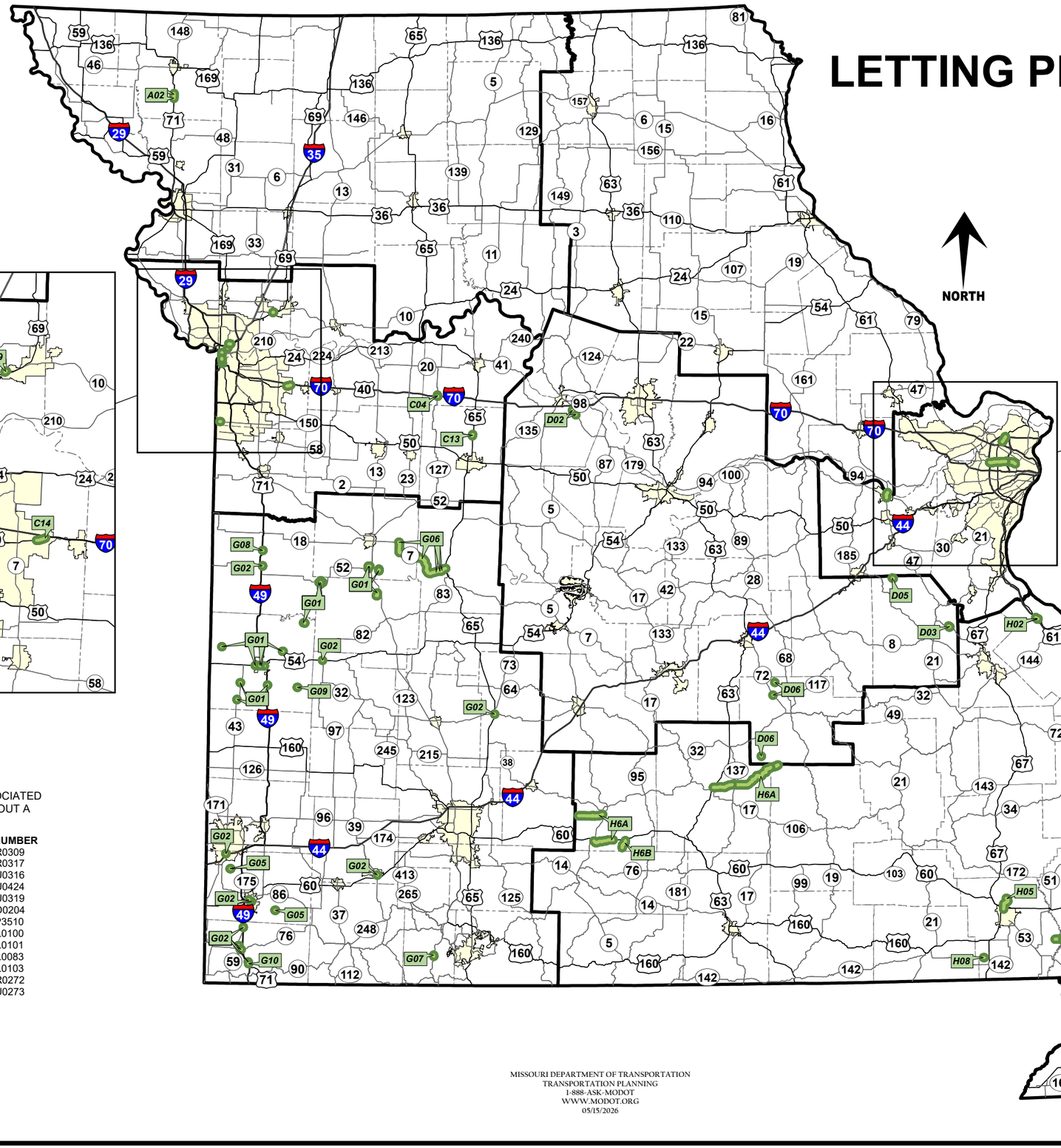
	CALL NO.	COUNTY	RTE.	JOB NO.	ADT	DESCRIPTION	BID	LENGTH	MAXIMUM TERM WITH EXTENSIONS	% FED	PROGRAM AMOUNT	NO. OF BIDS	DBE %
SE	H05	BUTLER	W	J9S3781	1,613 - 9,133	RESURFACE		4.025		80%			
	LOW	APEX PAVING CO.					$824,696.73				$813,000.00	3	0
		ABOVE AND BELOW CONTRACTING, LLC					$972,572.18						
		BLACK DIAMOND PAVING, LLC DBA PAVING PROS					$1,264,261.70						
SE	H07	PEMISCOT	DD	JSE0074	1,718 - 3,138	RESURFACE		6.481		80%			
		PEMISCOT	D	JSE0075	2,432 - 2,680	RESURFACE		6.016					
		PEMISCOT	J	JSE0105	2,055	RESURFACE		4.911					
	LOW	APEX PAVING CO.					$3,656,381.58				$2,818,000.00	3	0
		ABOVE AND BELOW CONTRACTING, LLC					$4,339,876.20						
		EMERY SAPP & SONS, INC.					$4,557,587.13						
SE	H08	BUTLER	MM	JSE0114	99	BRIDGE DECK REPLACEMENT		0.033		80%			
	LOW	ROBERTSON CONTRACTORS, INC.					$469,202.87				$457,000.00	2	0
		JOE'S BRIDGE & GRADING, INC.					$487,128.90						
SE	H6A	SHANNON, TEXAS	B	J9S3803	137	RESURFACE		22.175		80%			
		WRIGHT	V	J9S3804	354	RESURFACE		7.254		80%			
		WRIGHT	A	J9S3805	4,989	RESURFACE		6.000		80%			
	H6B	WRIGHT	PP	JSE0005	425	RESURFACE		2.470		STATE			
	LOW	BLEVINS ASPHALT CONSTRUCTION COMPANY, INC.					$4,744,500.00				$4,264,000.00	3	0
		EMERY SAPP & SONS, INC.					$5,723,851.30						
		ABOVE AND BELOW CONTRACTING, LLC					$6,585,820.93						
						LOW BID	**$90,192,312.59**				**$88,993,000.00**	**126**	
						CONTRACT AWARD AMOUNT WITH EXTENSIONS (PER JSP) FOR JOB ORDER CONTRACTS; FIXED BUDGET VALUE (PER JSP) FOR FIXED PRICE / VARIABLE SCOPE CONTRACTS	**$20,752,000.00**						
						TOTAL BID AMOUNT ADJUSTED TO REFLECT CONTRACT AWARD WITH EXTENSIONS ON JOB ORDER CONTRACTS AND FIXED BUDGET VALUES FOR FIXED PRICE / VARIABLE SCOPE CONTRACTS	**$94,578,312.59**						
						% DIFFERENCE			**6.3%**				

MAY 2026
LETTING PROJECT LOCATIONS

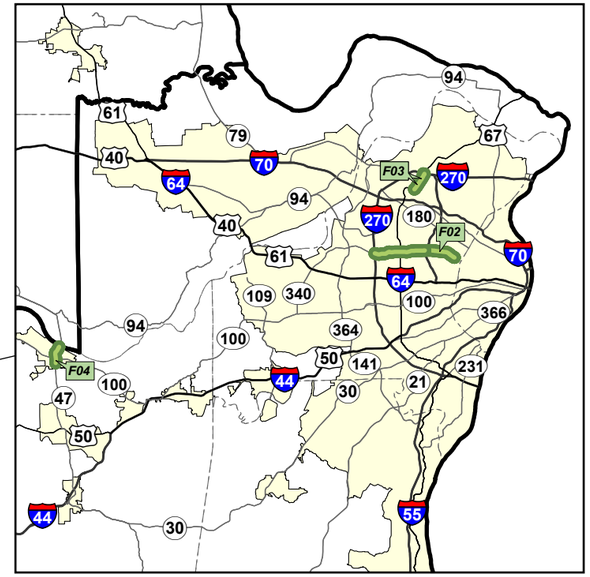
ATTACHMENT 2



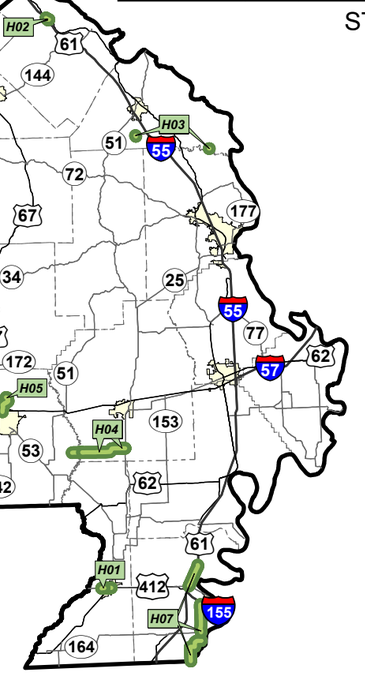
KANSAS CITY



NORTH



ST. LOUIS



ROUTE DESIGNATION
- Interstate
- US Route
- MO Route

BOUNDARIES
- District
- County
- Urban

CALL NUMBERS AND ASSOCIATED PROJECT NUMBERS WITHOUT A SPECIFIC LOCATION

CALL NUMBER	JOB NUMBER
C02	JKR0309
C03	JKR0317
C11	JKU0316
C12	JKU0424
C15	JKU0319
D04	JCD0204
F01	J6P3510
F05	JSL0100
F06	JSL0101
F07	JSL0083
F08	JSL0103
G11	JSR0272
G12	JSU0273

MISSOURI DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PLANNING
1-888-ASK-MODOT
WWW.MODOT.ORG

05/15/2026

OFFICIAL MoDOT AWARDS

The summary below represents the status of this month's awards, design-build project awards, state-fiscal-year-to-date awards and completed project costs. "STIP Projects" represents the projects included in the Highway & Bridge Construction Schedule portion of the Statewide Transportation Improvement Program. "Total all projects" includes all "STIP projects" and any of the following: contract maintenance projects funded with operations funds, Corps of Engineer access road projects or park road projects. All program and award amounts include 2% for construction contingencies.

April 17, 2026 Letting (May 6, 2026 Awards, SFY 2026)

	Number of Projects	Program Construction Estimate with Contingencies	Award Amount with Contingencies	% Difference
TOTAL ALL PROJECTS	36	$83,626,740	$81,278,517	-2.8
STIP PROJECTS	32	$80,077,140	$78,377,509	-2.1
FUNDING BY OTHERS				

	Number of Projects	Program Construction Estimate	Award Amount	% Difference
DESIGN BUILD PROJECTS	1	$30,300,000	$30,300,000	0.0
PROJECTS LET BY OTHERS	0			
PROJECTS LET BY DISTRICT	0			

Awards Year-to-Date for SFY 2026

	Number of Projects	Program Construction Estimate with Contingencies	Award Amount with Contingencies	% Difference
TOTAL ALL PROJECTS	378	$1,762,232,422	$1,613,024,613	-8.5
STIP PROJECTS	352	$1,737,854,422	$1,588,258,039	-8.6
FUNDING BY OTHERS	18	$20,207,993		

* Includes Design Build Projects

Completed Projects Year-to-Date for SFY 2026

	Program Constr. Est.	Final Project Cost	Difference	% Difference
STIP PROJECTS	$1,402,334,000	$1,107,951,000	($294,383,000)	-21.0

Completed Projects as Reported in the Annual Accountability Report

	No. of Projects	Program Construction Estimate	Final Project Cost	Difference	% Difference
STIP PROJECTS SFY 2025	461	$1,220,317,000	$1,317,531,000	$96,925,000	7.9
STIP PROJECTS SFY 2024	389	$794,917,000	$813,402,000	$18,485,000	2.3
STIP PROJECTS SFY 2023	377	$859,306,000	$834,472,000	($24,834,000)	-2.9
STIP PROJECTS SFY 2022	505	$972,133,000	$928,421,000	($43,712,000)	-4.5
STIP PROJECTS SFY 2021	440	$997,692,000	$954,892,000	($42,800,000)	-4.3
STIP PROJECTS SFY 2020	458	$947,494,000	$860,529,000	($86,965,000)	-9.2
STIP PROJECTS SFY 2019	368	$763,405,000	$732,075,000	($31,330,000)	-4.1
STIP PROJECTS SFY 2018	381	$897,599,000	$843,780,000	($53,819,000)	-6.0
STIP PROJECTS SFY 2017	385	$1,245,006,000	$1,238,314,000	($6,692,000)	-0.5
STIP PROJECTS SFY 2016	514	$1,094,935,000	$1,065,982,000	($28,953,000)	-2.6
ALL PROJECTS TOTAL	4278	$9,792,804,000	$9,589,398,000	($203,695,000)	-2.1

Program vs. Award SFY 2016 to SFY 2025 (STIP PROJECTS ONLY)

	No. of Projects	Program Construction Estimate	Award Amount	Difference	% Difference
STIP PROJECTS SFY 2025	429	$2,615,828,983	$2,514,056,445	($101,772,538)	-3.9
STIP PROJECTS SFY 2024	416	$1,513,886,000	$1,544,214,165	$30,328,165	2.0
STIP PROJECTS SFY 2023	440	$1,541,154,038	$1,829,466,011	$288,311,973	18.7
STIP PROJECTS SFY 2022	378	$1,196,528,100	$1,334,617,879	$138,089,779	11.5
STIP PROJECTS SFY 2021	417	$947,553,080	$886,655,637	($60,897,443)	-6.4
STIP PROJECTS SFY 2020	483	$1,140,034,580	$1,123,411,535	($16,623,045)	-1.5
STIP PROJECTS SFY 2019	425	$754,917,088	$725,101,495	($29,815,593)	-3.9
STIP PROJECTS SFY 2018	443	$924,996,126	$831,467,050	($93,529,076)	-10.1
STIP PROJECTS SFY 2017	389	$768,067,900	$706,240,778	($61,827,122)	-8.0
STIP PROJECTS SFY 2016	299	$559,268,280	$516,418,575	($42,849,705)	-7.7
STIP PROJECTS TOTAL	4119	$11,962,234,175	$12,011,649,570	$49,415,395	0.4


MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
UNITED WE STAND DIVIDED WE FALL
MDCCCXX

3

UPDATE FROM MODOT'S SOUTHWEST DISTRICT
-- Presented by Stacy Reese, Southwest District Engineer, 417-942-7804.

ISSUE: This presentation will provide a brief overview of the current state of roads, bridges, projects, and other critical issues in the Southwest (SW) District.

RECOMMEND that the Commission:
- This item is for information only and no action is required.

DEPARTMENT VIEW:
- The Southwest District is focusing its Statewide Transportation Improvement Program (STIP) funds and all available operation funds on maintaining existing roads and bridges as well as making significant safety and capacity improvements.
- The Southwest District's operating budget addresses activities including winter operations, emergency response, traffic incident management, mowing, litter control, signing and striping, in addition to maintaining roads and bridges.
- The Southwest District appreciates and fosters strong working relationships with the City of Springfield, City of Joplin, and all planning partners to ensure the priorities of the communities it represents are considered appropriately.

OTHER VIEWS:
- Not applicable.

MHTC POLICY:
- Commission – Staff Presentation.
- Organization – District Structure.

OTHER PERTINENT INFORMATION:
- The Southwest District is comprised of 21 counties in the southwest portion of the state, with a population of just over one million residents. The district maintains 14,889 lane miles of road and 1,850 bridges.
- The district will undertake 217 projects in the 2026-2030 STIP worth over $1.045 billion. The Draft 2027-2031 STIP includes 233 projects worth $1.094 billion.
- These projects are prioritized with the cooperation of the six planning organizations within the Southwest District including three Metropolitan Planning Organizations and three Regional Planning Councils.
- The district has several active projects at the moment including:
    - U.S. 60 / Route A Interchange in Webster County, which will construct a new interchange at U.S. 60 and Route A in Diggins, and connect Route A in Diggins with Route Z in Fordland with a new outer road.
    - The Kaysinger Bridge Bundle will replace or refurbish twenty bridges in the Kaysinger Basin region (Bates, Benton, Cedar, Henry, Hickory, St. Clair, and Vernon Counties). There are currently four bridges completed, six under construction, one to begin on June 15, and ten to begin between now and January 2027.

    - Greene County Route MM Realignment in Republic, which will realign Route MM from Farm Road 160 to U.S. 60 and add a new railroad overpass in Republic south of Haile Street. Construction began on the $40 million project on February 16 and is scheduled for completion in May 2028.
    - The Forward 44 corridor improvements have begun in Springfield with the widening project currently underway. Additional projects are planned, and we are excited to share more with you in a little bit.
- Anderson Maintenance crews worked to replace a culvert in McDonald County along Route K. This provided a cost-effective and efficient solution for this location.
- Crews have looked for many ways to efficiently maintain our highway system, utilizing seal coats where appropriate to extend the life of the pavement.
- The Southwest District spends a great deal of effort addressing roadside issues through customer calls reports including litter, and signage. So far in 2026, the district has completed 2,407 call reports for service. Crews have removed over 58,000 bags of litter, which equates to over 870,000 pounds of litter from Missouri roadways. Crews have also replaced more than 9,500 signs.
- District employees issued more than 1,300 permits for work on MoDOT right-of-way in 2025, including work for driveways, utilities, or other activities taking place on state right of way. They have issued over 500 already in 2026. The team also processed eighteen development reviews to date in 2026.
- The district has seen a 5.5 percent increase in fatalities year-to-date in 2026, with a rise from 54 to 57. However, four counties in the district have experienced zero fatalities in 2026 (Cedar, Henry, St. Clair, Vernon). The longest stretch without a fatality was ten days from April 11-April 20.
- Safety is important every day in the work that we do, and the district had twenty work groups awarded the Southwest District Trifecta Safety Stars Award. This is awarded to those work groups who achieved no backing incidents, no slip, trip, or fall injuries and no strain or sprain injuries for all of 2025. In addition, there were nine work units that had zero reported injuries in 2025, and thirteen that achieved perfect reports on their building inspections. We had one work unit, Branson Project Office, that achieved all three.
- The Route 66 Centennial Celebration events kicked-off in Springfield on April 30. Director Hassinger hosted a media event with guests including Federal Highways Administrator Sean McMaster, Governor Kehoe, Commissioner Baker, and Springfield City Administrator David Cameron. The group was joined by other Commissioners, city staff, and members of the Ozarks Transportation Commission to tour the Forward 44 project. MoDOT crews later took part in the Route 66 Centennial Parade on the evening of May 1.
- Southwest District staff attended the annual Build My Future event at the Ozark Empire Fairgrounds on April 1, 2026. The event aims to expose high school students to building and construction career paths. Over 2,000 students from across 25-counties in southern Missouri attended the event.
- The Southwest District was honored with three awards at the recent statewide Innovations Showcase and Awards in Columbia in April. The Drury Housing Partnership was a “Top 2” winner in the Projects category. The district was then honored with two

"Top 4" prizes – one in the Tools and Equipment category for the Sander Calibration Scale Team and one in the Productivity category for the Retrotek Team.

- The Southwest District has welcomed sixteen interns representing six universities this year. They will be working across eleven different departments in all areas of our district.
- The Southwest District also celebrates its peers through the ROADS Awards, a monthly peer-to-peer award to Recognize Outstanding Assistance & Dedicated Service. Our twelve honorees in 2025 represent all different departments and locations in the district.
- The District took time to celebrate our Family Connections in May, highlighting those who work together here at MoDOT now or in the past.

SOURCE OF FUNDING: Not applicable.



SOUTHWEST DISTRICT UPDATE

June 3, 2026

Stacy Reese, District Engineer

SOUTHWEST DISTRICT



- 21 counties
- Population of 1,012,654 (2025 Census)
- 13,000 square miles covered
- 14,889 lane miles of highway
- 1,850 bridges
- 217 projects in STIP
- $1.045 Billion Funds Programmed

PLANNING PARTNERS



3 Metropolitan Planning Organizations

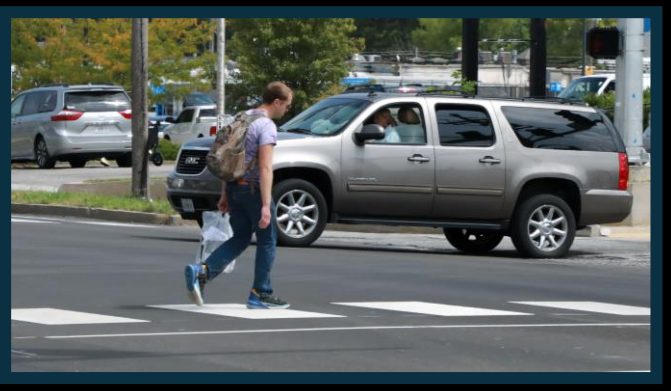
3 Regional Planning Commissions

- Ozarks Transportation Organization
- Joplin Area Transportation Study Organization
- Southwest Missouri Council of Governments
- Kaysinger Basin Regional Planning Commission
- Harry S Truman Coordinating Council
- Northwest Arkansas Regional Planning Commission



DELIVER THE PROGRAM

Active Projects



Chestnut Expressway ADA, Safety & Operational Improvements, Greene County

- Upgrade ADA pedestrian facilities
- Resurface Chestnut Expressway from I-44 to Eastgate Avenue
- Project Cost: $9.4 million. Completion Summer 2026.



Route 60 / Route A Interchange, Webster County

- Upgrade Install new interchange at US 60 and Route A in Diggins.
- Connect Route A in Diggins with Route Z in Fordland with a new Outer Road.
- Project Cost: $28.4 million. Completion Winter 2027.



Route 60, Roundabouts and Turn Lanes, Newton County

- Add roundabouts in Neosho at Route HH and in Yonkerville at Route 97.
- Add turn lanes at Routes M/W, Y and CC, Hammer Road, and Oakridge.
- Project Cost: $9.7 million. Completion Winter 2027.



Route MM Realignment, Republic, Greene County

- $40 million project which will realign Route MM from Farm Road 160 to Route 60
- Add a new railroad overpass in Republic, south of Haile Street.
- Construction began in February with scheduled for completion in May 2028.



Route 66 (7th Street) Safety Improvements, Jasper County

- $61.6 million project which includes safety, sidewalk, and pavement improvements between Route P (Schifferdecker Avenue) and Loop 49 (Range Line Road).
- Construction on the project began in March and is expected to be completed by December 1, 2028.





Bridge Bundle to replace or rehabilitate poor condition rated bridges within the Kaysinger Basin Regional Planning Commission area.

- **Bates, Benton, Cedar, Henry, Hickory, St. Clair, and Vernon Counties.**

$38 Million bundle contains 20 bridges:

- 12 Full Replacements
- 2 Superstructure Replacements
- 4 Re-decks
- 2 Bridge Eliminations (removed from the NBI as culverts)



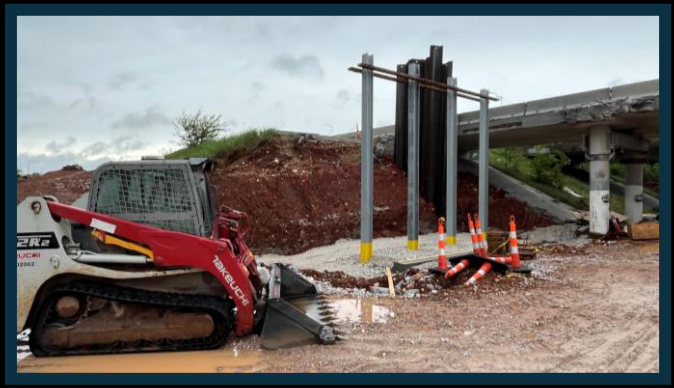
FORWARD 44 - PHASE 1



Springfield Improvements

- Widen I-44 to 6 lanes from Kansas to Route 65
- Pavement rebuild from Kansas to Route 65 (GR Funded)
- Build sound wall from Summit to National (south side)
- Install new pedestrian underpass
- Project Cost: $86.1 million, Completion date is Summer 2027









RESTORING OPERATIONS AND SAFETY

Southwest District

McDONALD CO. ROUTE K

Work completed by Anderson Maintenance Crews













MAINTENANCE OPERATIONS







MAINTENANCE OPERATIONS







Litter Efforts Supported







Southwest District employees from all departments picked up 40 bags of litter along James River Freeway between the YMCA and Glenstone interchange on March 25 in just two hours.

RESTORING OPERATIONS
By the Numbers

Customer Call Reports

2025

7,084

YTD 26

2,407

Litter

YTD 26

58,018 bags of litter
870,270 pounds of litter
$1,515,476



Signage

YTD 26

9,574 signs replaced
$1,057,322

RESTORING OPERATIONS
Permits & Developments

Traffic Permits Issued for Work on MoDOT Right of Way

2023	1,573
2024	1,419
2025	1,384
YTD 2026	543

2023	81
2024	65
2025	76
YTD 2026	18

Development Reviews

WORK SAFELY
By the Numbers

YTD 2026



57 FATALITIES

5.5% INCREASE
from 2025 (54)

SHOW-ME ZERO

YTD 2026

0 FATALITIES

Cedar County
Henry County
St. Clair County
Vernon County

APR

April 11 – April 20

10 Days
without a fatality crash

Southwest District Safety Awards

Trifecta Safety Star

Anderson Maintenance
Carthage Maintenance
Marshfield Maintenance
Republic Maintenance
Springfield Signals
Branson Project Office
Bradleyville Maintenance
Cole Camp Maintenance
Nevada Maintenance
Seymour Maintenance
Facilities
Clinton Project Office
Branson Maintenance
El Dorado Springs Maintenance
Osceola Maintenance
Warsaw Maintenance
Springfield Project Office
Butler Maintenance
Lamar Maintenance
Preston Maintenance

Awarded to **twenty** work units in 2025.



PUBLIC INVOLVEMENT and EMPLOYEE ACCOMPLISHMENTS

Focus on Customers

Route 66 Centennial Celebration Events

Hosted FHWA Administrator McMaster, Governor Kehoe

Media Event to Kick-off Route 66 Centennial Celebrations

Project tours of Forward 44 and City of Springfield projects

Route 66 Centennial Parade





CENTENNIAL
MISSOURI
1926
66
2026
CELEBRATION

build my future

April 1, 2026

- Over 75 schools in the 25-county area in Southern Missouri.
- Draws over 2,000 students.
- Exposes students to potential career opportunities in construction and building trades and other aligned careers.





Staff from Maintenance, Construction, Traffic, Design, Signals, Survey, General Services, Human Resources, and Communications took part in the annual event.

INNOVATIONS



The Drury Housing Partnership represented by Senior HR Specialist Heather Burnett.



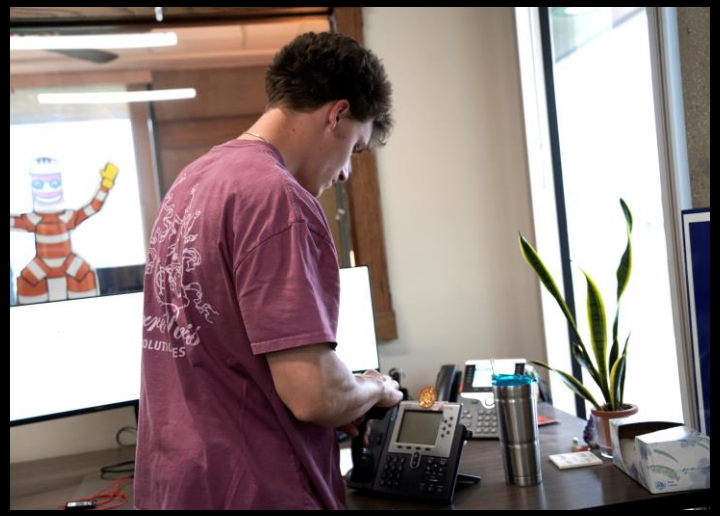
The Sander Calibration Scale Team represented by Ozark Maintenance.



The RetroTek Team represented by Joplin Signing & Striping.

INTERNS





Sixteen interns joined the Southwest District

- Working in across eleven departments.

Interns represent six different universities

- Missouri S&T
- Missouri State University
- College of the Ozarks
- Ohio State University
- Crowder College
- Texas Christian University

SOUTHWEST ROADS

RECOGNIZING OUTSTANDING ASSISTANCE & DEDICATED SERVICE

ROADS Awards 2025















Family Connections
















THANK YOU


MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
MDCCCXX

4

CONSIDERATION OF PROPOSALS FOR THE FORWARD 44: SOUTHWEST I-44 IMPROVEMENTS DESIGN-BUILD PROJECT

– Presented by Eric Schroeter, Deputy Director/Chief Engineer, 573-526-2903, and Kristi Bachman, Project Director, 417-829-8040.

ISSUE: Approval of the award of best value selection of the Forward 44: Southwest I-44 Improvements Design-Build Project in Newton, Jasper, Lawrence, Greene, Webster, and Laclede Counties, in the Southwest District, which will improve safety and reliability, maintain the serviceability of bridges and pavement, and minimize overall traffic impacts at various locations along the I-44 corridor.

RECOMMEND that the Commission:

- Accept the orally presented staff recommendation for award or rejection of the best value proposal of the Forward 44: Southwest I-44 Improvements Design-Build Project.
- Authorize the Director, Chief Engineer, Chief Financial Officer, or their designee to negotiate and execute a contract with the best value proposer subject to approval as to form by the Chief Counsel's Office and contingent on the transfer of funds to the State Road Fund I-44 Improvement Fund (SRF I-44 Improvement Fund).
- Authorize payment of the agreed stipend to the three unsuccessful proposing teams.

DEPARTMENT VIEW:

- Interstate 44 (I-44) is one of the nation's oldest freeways and is a vital east-west link across Missouri. Started in 1956 and completed in 1966, I-44 has served Missouri well. I-44 carries thousands of local, national, and even international travelers through the state of Missouri every day.
- The aging facility needs an upgrade to improve safety, reliability, and assets.
- On May 7, 2025, the Missouri Highways and Transportation Commission approved the use of Design-Build for the Forward 44: Southwest I-44 Improvements Project in Newton, Jasper, Lawrence, Greene, Webster, and Laclede counties.
    - **Procurement Process** – Four teams were prequalified on January 16, 2026 to compete for the contract. The Request for Proposals was issued on January 26, 2026. The MoDOT Design-Build team held eight confidential technical discussions with each team over a period of ten weeks to discuss their proposal ideas. Final proposals were due on May 6, 2026.
    - **Property Acquisition** – Right of way may be required for this project. All costs associated with any new right of way or easements will be at the Contractor's expense.
    - **Disadvantaged Business Enterprise Goal and Workforce Utilization** – MoDOT's Business Development and Compliance Officer established a 0 percent DBE goal for Construction Activities and a 0 percent DBE goal for Professional Services.
    - **Project Goals** – MoDOT established the following goals for the Project which were used in evaluating and determining the Best Value Proposal:
        1. Deliver the project within the programmed budget.

2. Maximize safety and reliability with innovative improvements that reduce crashes and promote economic development.
3. Construct a durable transportation facility that is compatible with freight movement and future expansion.
4. Minimize and mitigate delays to the traveling public while ensuring the highest level of safety for both workers and the public.
5. Deliver the project on or before November 15, 2031.

OTHER VIEWS:

- Missouri's FY2024 budget from the General Assembly signed into law by Governor Parson provided $20 million of General Revenue for an environmental study of more than 250 miles of the I-44 corridor from the Oklahoma state line to the Franklin County/St Louis County line. This study was a critical step in preparing for future projects, including this project, on I-44 and recommend prioritized segments for future in-depth study. *(Source: https://www.modot.org/forward44)*
- Two public meetings were held to inform the public about this Design-Build Project in Joplin on July 14, 2025 and in Springfield on July 15, 2025. The feedback was positive.
- Improvements on I-44 between Range Line Road and Main Street in Joplin were originally included in this Design-Build Project. These improvements were removed to be delivered separately in collaboration with a City of Joplin pedestrian underpass. The Joplin improvements will be delivered as JST0089B. An additional public meeting was held on March 26, 2026 in Joplin to communicate the update to the public.
- The project is being closely coordinated with departments within the cities of Springfield and Joplin and other communities along the corridor.
- Briefing Committee meetings with elected officials were held in Joplin and in Springfield on June 23, 2025.
- MoDOT held numerous stakeholder meetings between August 12, 2025 and September 15, 2025. Additional meetings will continue to take place as needed.
- No opposition to the Project has been voiced.

MHTC POLICY:

- Highways – Construction – Contract Awards.
- Execution of Documents.
- Design-Build Contracting.
- Highways – Construction – Bidding Process – Escrowing Bid Documents.
- State and Local Governmental Entities – General.
- Statewide Transportation Improvement Program (STIP) – Joint STIP Projects With State and Local Governmental Agencies – Execution of Documents.
- STIP – Environmental Approvals – Execution of Documents.
- STIP – Environmental Damage Mitigation – Execution of Documents.
- STIP – STIP Preparation and/or Implementation – Execution of Documents.
- Highways – Right of Way – Easements and Leases – Easements Across Commission Property.
- Highways – Right of Way – Easements and Leases – Lease of Property from Others.

- Multimodal – Railroads – Execution of Documents – Rail Industry Operations – Execution of Documents.
- Highways – Construction – Contract Administration – Construction Change Orders.
- Highways – Consultant Engineering Services.
- Highways – Construction – Contract Awards – Award of Construction Contracts.
- Commission – Delegation of Authority to Director and Chief Engineer.

OTHER PERTINENT INFORMATION:

- In Greene County, MoDOT is currently under contract to build new pavement and widen I-44 between MO 13 and U.S. 65 in Springfield. These improvements are within the limits of this proposed Project and will require coordination between the 2 contracts.
    - A pre-construction public meeting was held February 25, 2025 to provide the public with pre-construction information on the five STIP projects currently underway to replace pavement and widen I-44 between MO 13 and U.S. 65. No written comments were received, but general support of the project was observed.
- The Southwest District has completed two Design-Build projects on I-44, the I-44 Project Bridge Rebuild (PBR) and the I-44 Corridor Bridge Bundle (CBB) in the last few years. Both projects replaced or rehabilitated bridges on the I-44 corridor.

SOURCE OF FUNDING: The Missouri General Assembly and Governor approved $577,500,000 for fiscal year 2026, with $213,750,000 from General Revenue and $363,750,000 from bond proceeds to be used to fund I-44 improvements.

Total program funding for the project (JST0089) is $470.9 million. The Design-Build contract has a not-to-exceed project cost of $441 million. The remaining funds outside of the Design-Build contract will be used for Stipends, Contingency, Utilities, Right of Way, Construction Engineering, and Preliminary Engineering. Of this funding $328.2 million is from General Revenue legislatively designated for the Forward I-44 Project, $142.2 million is from STIP projects previously programmed. This total also includes $509,959.85 from the City of Springfield for aesthetic enhancements at the MO 13 and I-44 interchange.

Final Recommendation Report

Southwest I-44 Improvements Project

June 3, 2026



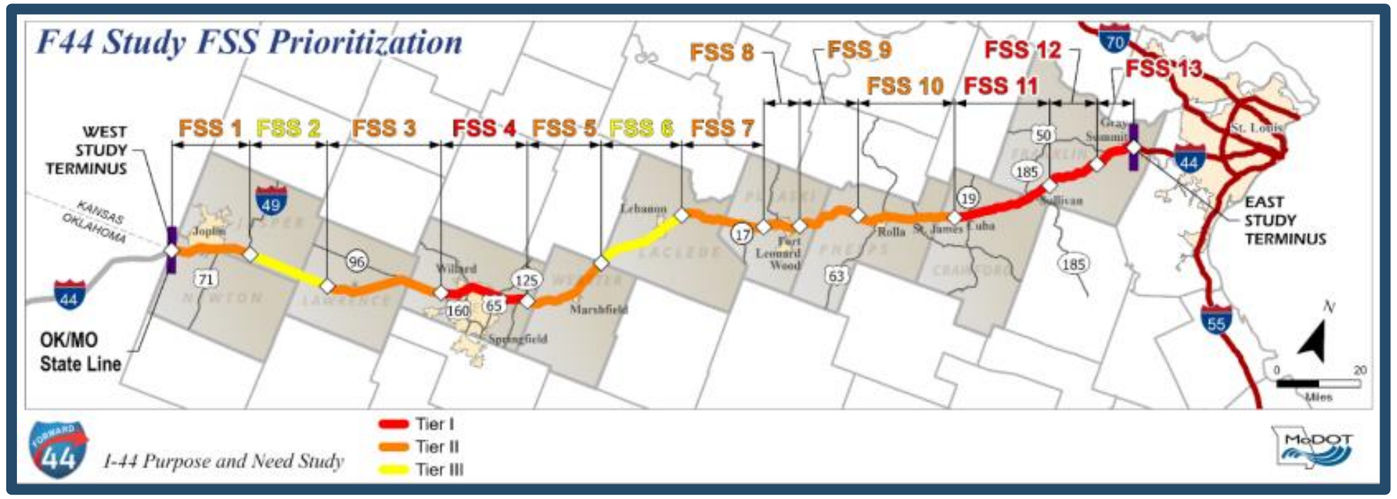
FORWARD 44

Southwest District

MoDOT

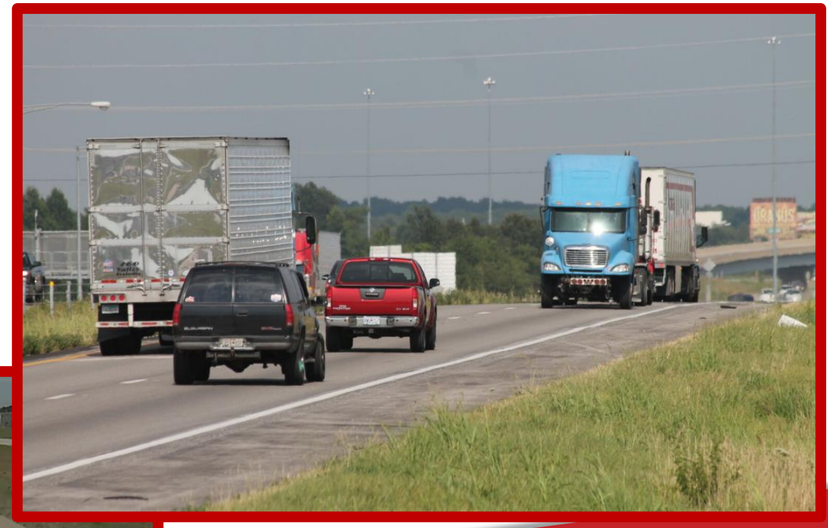
Missouri Department of Transportation

Project Needs: Safety & Reliability



- Roadway Capacity is Inadequate
- Degrading Safety Environment
- Deficient Interchanges, Operations, Safety and Geometrics
- Freight Traffic is an Essential Element
- Balance access, economic development and human/natural resources







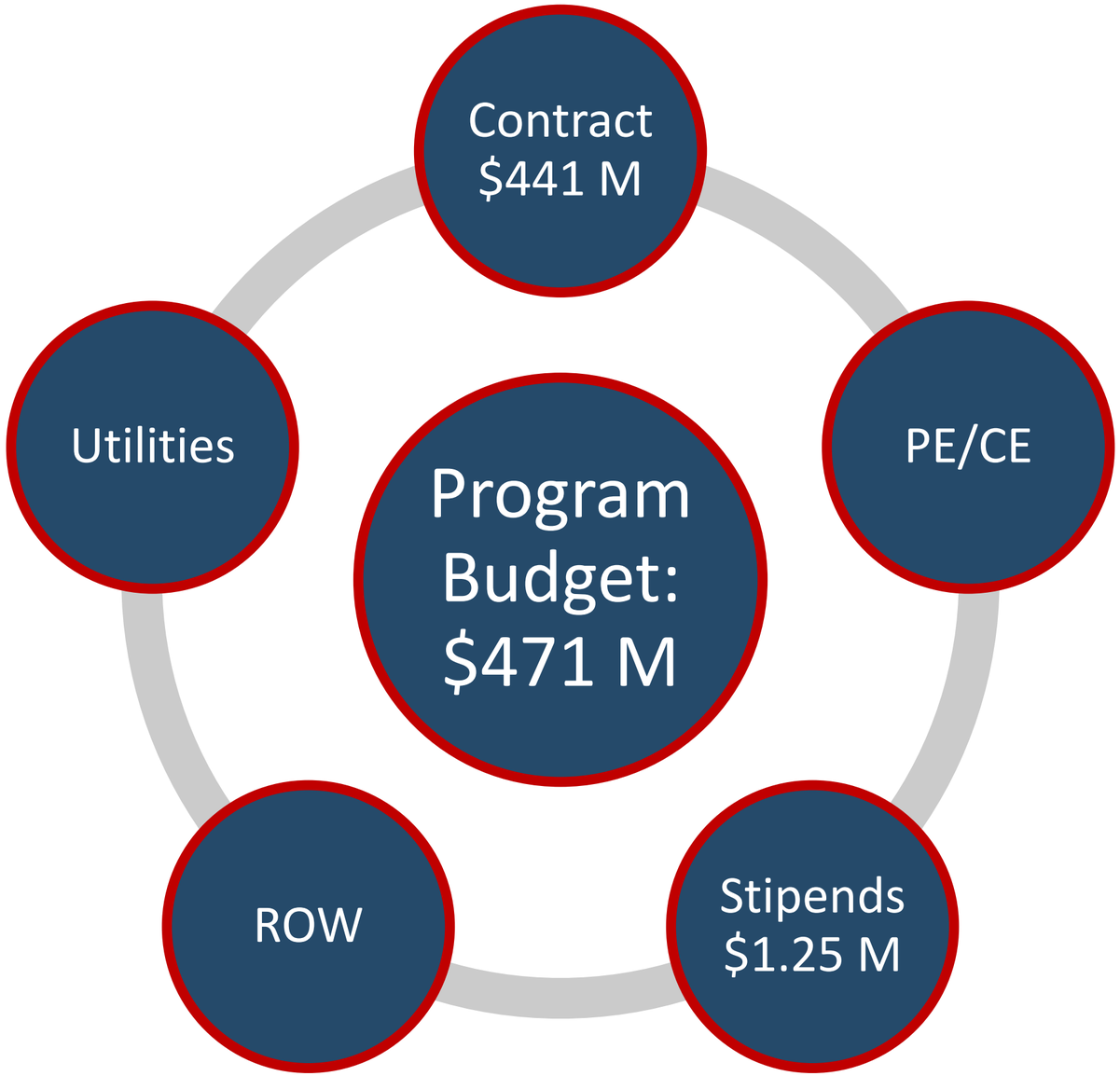
FORWARD 44 Southwest District

Missouri Department of Transportation

Project Goals

1. Deliver the project within the programmed budget
2. Maximize safety and reliability with innovative improvements that reduce crashes, and promote economic development
3. Construct a durable transportation facility that is compatible with freight movement and future expansion
4. Minimize and mitigate delays to the traveling public while ensuring the highest level of safety for both workers and the public
5. Deliver the project on or before November 15, 2031

Project Budget



Fixed Price – Best Value

DBE & Workforce Goals

DBE GOALS

Construction Activities	0%
Professional Services	0%

WORKFORCE GOALS

3	Construction OJTs at 1000 hours each

Project Schedule



Proposing Teams

Ames Millstone Weber JV

Ames Construction
MILLSTONE WEBER
Jacobs

Capital – CMT Team

CAPITAL
CMT

ESS Team

EMERY SAPP & SONS
Bartlett & West
CELEBRATING 75 YEARS 1951 2026
LOCHMUELLER GROUP

MasTec DB Team

WILLIAM CHARLES CONSTRUCTION
a MasTec company
AMERICAN STRUCTUREPOINT INC.
olsson
Koss CONSTRUCTION COMPANY

Evaluation Procedure

COMPLIANCE REVIEW

- Proposals reviewed for compliance with submittal requirements

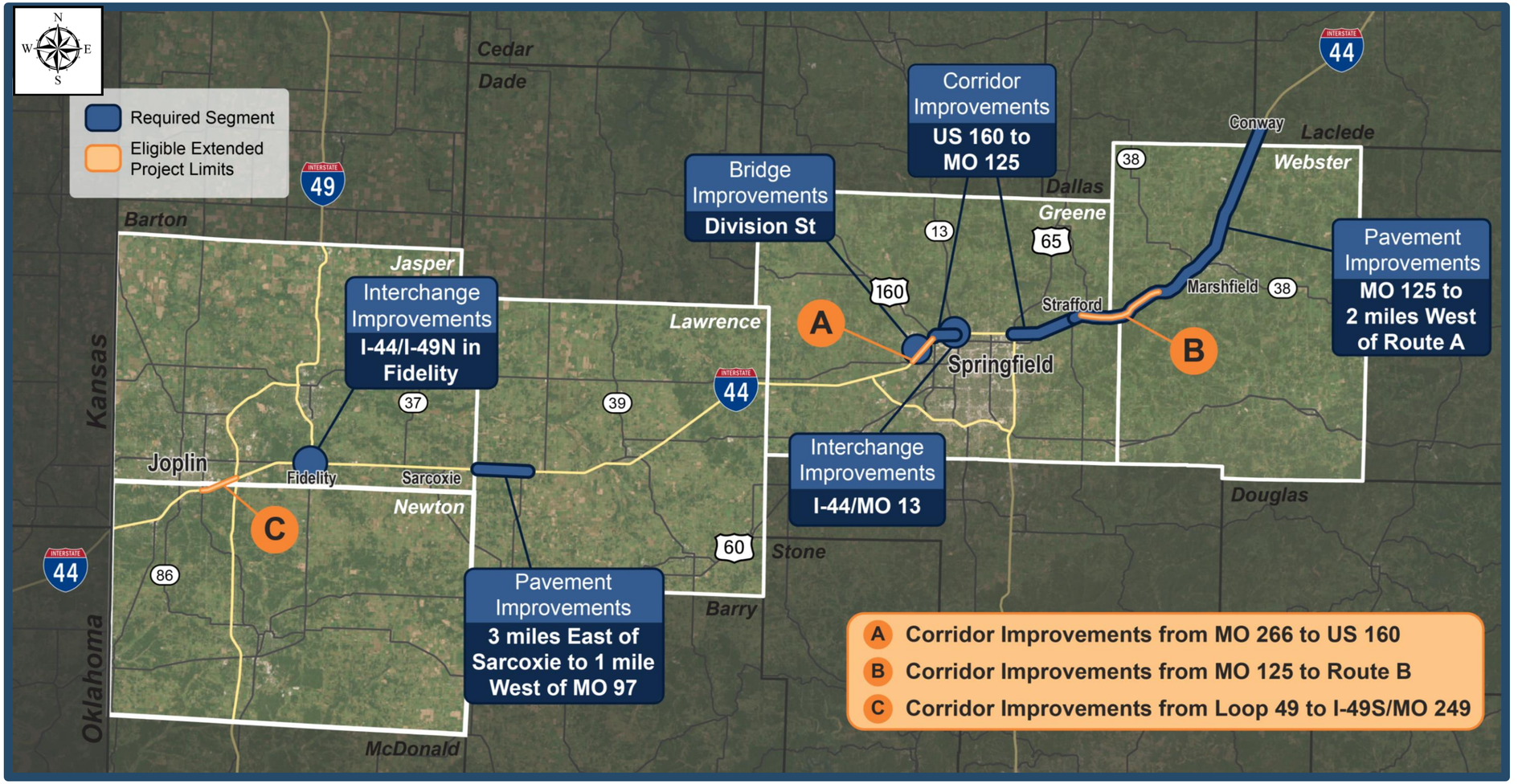
TECHNICAL REVIEW

- Proposals reviewed by separate teams of technical experts for each category

Technical Evaluation Categories

CATEGORY	AVAILABLE POINTS
Project Definition	75
Maintenance of Traffic & Schedule	25
TOTAL	100

Eligible Extended Project Limits



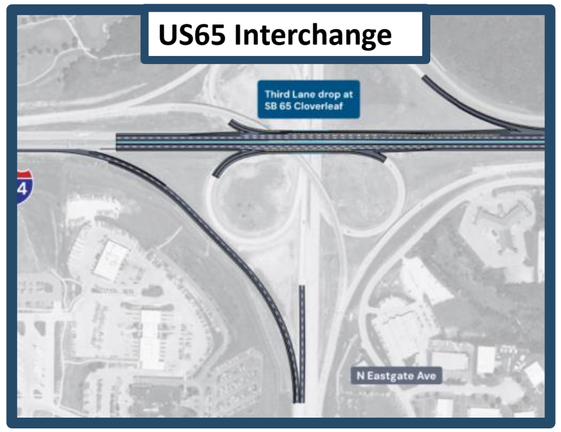
Best Value Proposer

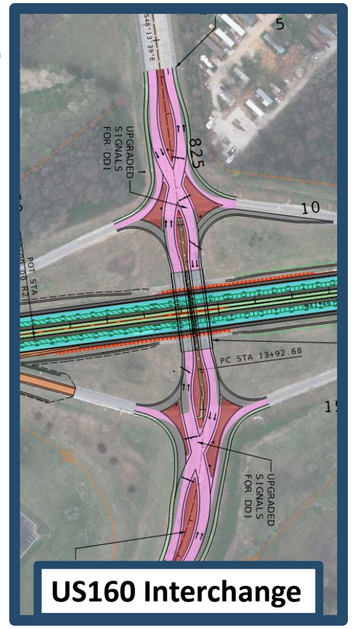
CAPITAL + CMT

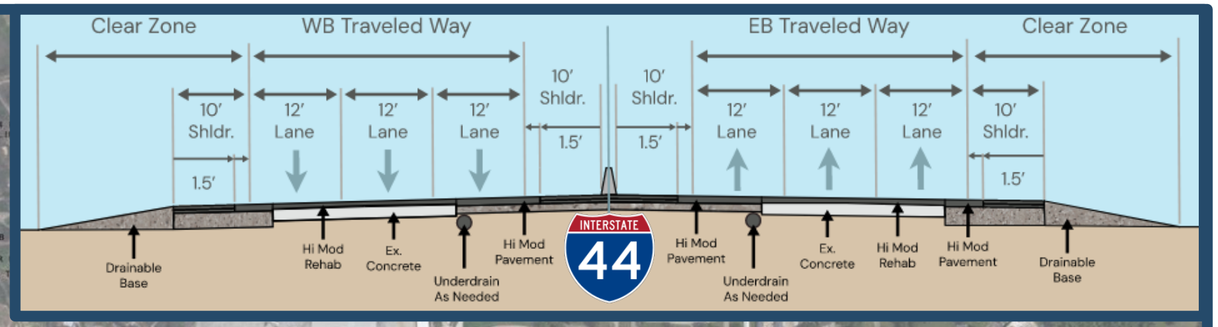
Capital – CMT Team Highlights

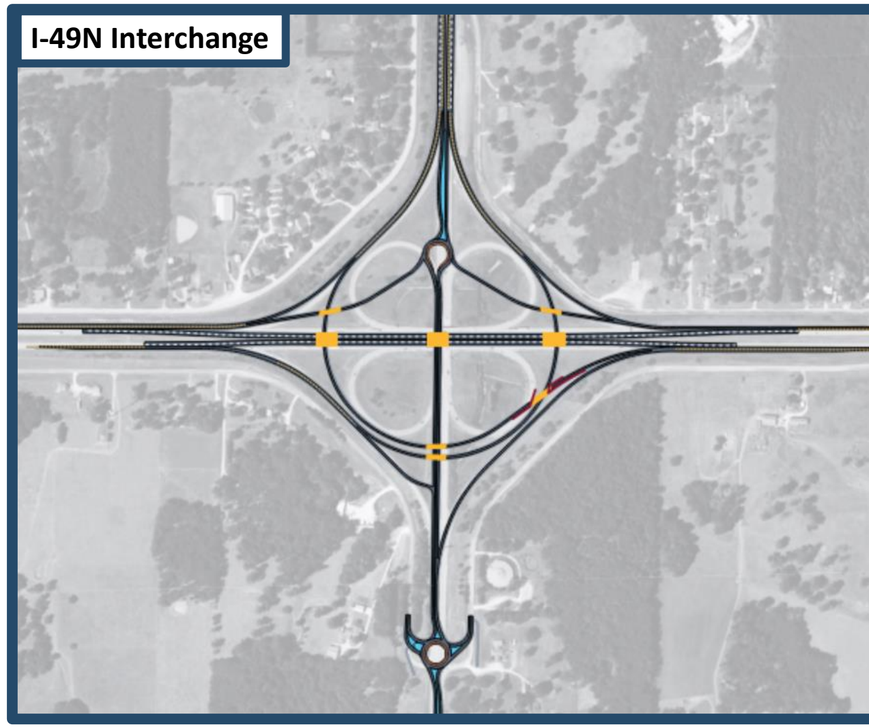
- 15 Miles of new 6-lanes on I-44
- Durable Pavement on I-44 (Hi-Mod Asphalt)
- Improved Pedestrian Connections
- Maintain 2 Lanes on I-44 During Construction
- **108 Fewer Fatal & Serious Injury Crashes**

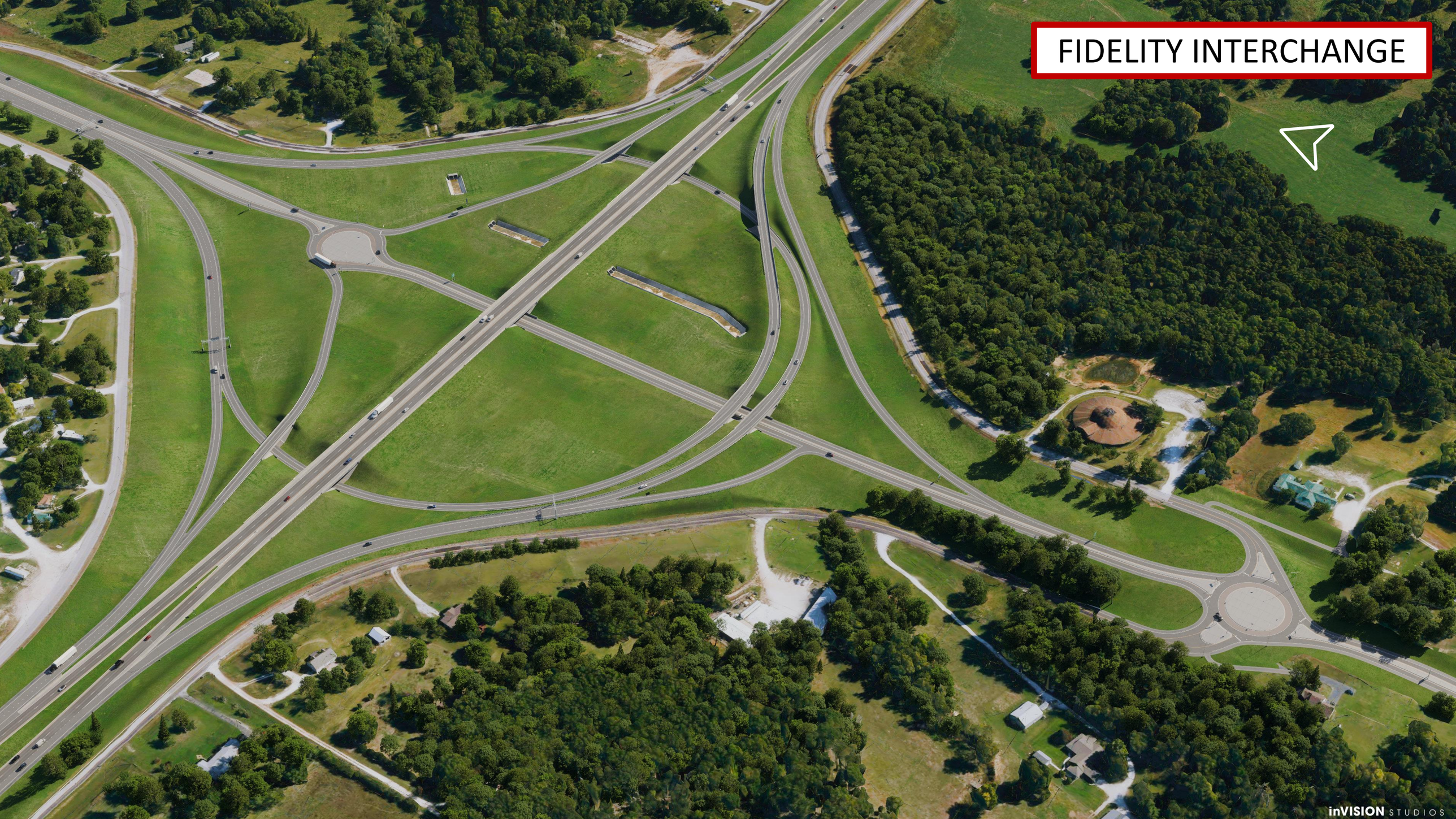
- Safe, Reliable, Resilient Interchanges:
  - I-49N
  - US160
  - MO13
  - Norton Road
  - Grant Street
  - US65










FIDELITY INTERCHANGE
inVISION STUDIOS

Video to be played during the meeting.
The video can be viewed by playing the recording of the entire meeting located at https://www.modot.org/past-meeting-recordings.



MO13 INTERCHANGE



Video to be played during the meeting.
The video can be viewed by playing the recording of the entire meeting located at https://www.modot.org/past-meeting-recordings.



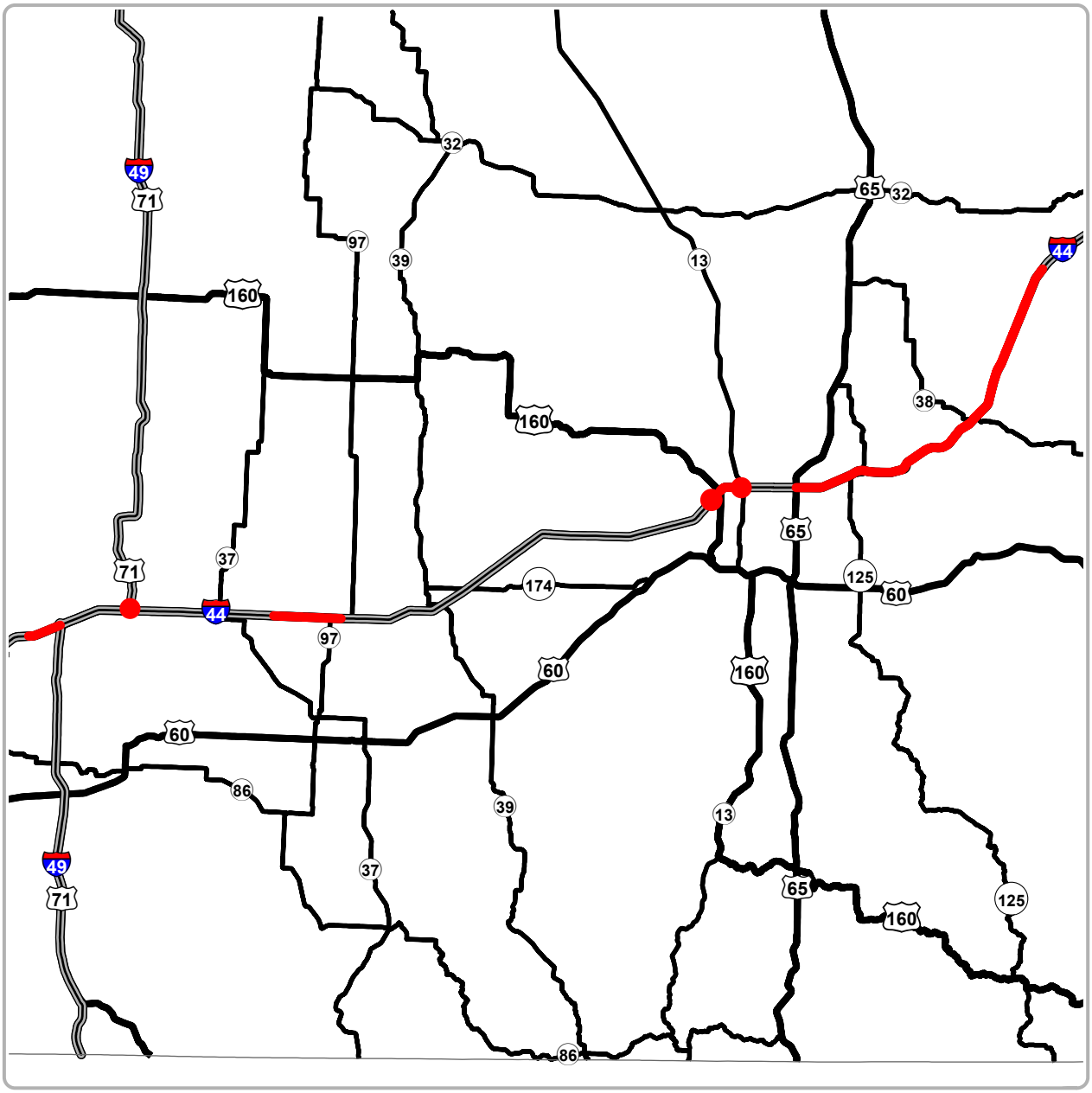
Recommendation of Best Value Proposer

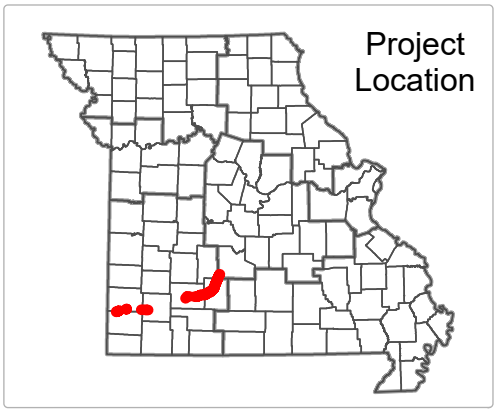
We Recommend that the Commission:

- Accept the orally presented staff recommendation for award or rejection of the best value proposal of the Forward 44: Southwest I-44 Improvements Design-Build Project



- Authorize the Director, Chief Engineer, Chief Financial Officer, or the designee to negotiate and execute a contract with the best value proposer subject to approval as to form by the Chief Counsel's Office and contingent on the transfer of funds to the State Road Fund I-44 Improvement Fund (SRF I-44 Improvement Fund).
- Authorize payment of the agreed stipend to the three unsuccessful proposing teams.





Project Location

FORWARD 44:
SOUTHWEST I-44 IMPROVEMENT PROJECT
JASPER, NEWTON, LAWRENCE, GREENE, WEBSTER, AND LACLEDE COUNTIES

0 30 Miles

N


MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
MDCCCXX

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FORWARD 44 PROJECT CONTRACT AUTHORIZATIONS
-- Presented by Brenda Morris, Chief Financial Officer, 573-522-5688.

ISSUE: In accordance with the Memorandum of Understanding (MOU) with the Office of Administration, the Commission must approve the award of the Forward 44 Project contracts to enable the transfer of monies from the Office of Administration I-44 Improvement Fund (OA I-44 Improvement Fund) to the State Road Fund I-44 Improvement Fund (SRF I-44 Improvement Fund). The Commission's approval of Forward 44 Project contracts is contingent upon transfer of monies from the OA I-44 Improvement Fund to the SRF I-44 Improvement Fund.

Pursuant to the Consideration of Proposals JST0089, the Commission approved the contingent award of contract number 260603-G01 to Capital – CMT Team based upon the transfer of funds from the OA I-44 Improvement Fund to the SRF I-44 Improvement Fund. This design-build contract includes Job Number JST0089, which constructs safety, capacity, and pavement improvements on I-44 in the Southwest District. The total construction contract is funded with $98,915,000 from the SRF I-44 Improvement Fund and the remainder is funded from the State Road Fund and the State Road Fund I-44 Improvement Bond Proceeds Fund (SRF I-44 Improvement Bond Proceeds Fund).

In addition, pursuant to the Consideration of Proposal JST0089, the Commission approved the payment of the agreed stipend to the three unsuccessful proposing teams contingent on the transfer of funds to the OA I-44 Improvement Fund to the SRF I-44 Improvement Fund. The unsuccessful proposing teams are Ames Millstone Weber Joint Venture, ESS Team, and MasTec DB Team. The total stipend is funded with $3,750,000 from the SRF I-44 Improvement Fund.

RECOMMEND that the Commission:

- Authorize the Director and Chief Financial Officer to request the transfer of funds from the OA I-44 Improvement Fund to the SRF I-44 Improvement Fund in the amount of $102,665,000.

DEPARTMENT VIEW:

- The General Assembly and the Governor approved $213.75 million of General Revenue be transferred to the OA I-44 Improvement Fund during the 2024 Legislative Session to be used to fund I-44 improvements.
- A SRF I-44 Improvement Fund has been created to account for the use of the funds on projects that accomplish the I-44 improvements.
- Office of Administration requires the Commission request the funds from the OA I-44 Improvement Fund to be deposited into the SRF I-44 Improvement Fund as projects are awarded to design and construct the project.

OTHER VIEWS:

- During the 2024 Missouri legislative session, the Missouri General Assembly addressed a top transportation need in the state, improving I-44. The General Assembly and Governor Parson provided General Revenue for the costs to plan, design, construct, reconstruct,

rehabilitate, and repair specific portions of I-44, as noted in the appropriations. These funds were reappropriated for fiscal year 2026.

MHTC POLICY:

- Financial-Budget-Operating Budget.
- Execution of Documents.

OTHER PERTINENT INFORMATION:

- I-44 remains a vital east west corridor for the state and the nation's economies. Of the approximately 35,500 daily vehicles, an average of 29 percent of the vehicles are trucks with some segments as high as 44 percent truck traffic.

SOURCE OF FUNDING: The General Assembly and Governor approved $577,500,000 for fiscal years 2025 and 2026, with $213,750,000 from the OA I-44 Improvement Fund and $363,750,000 from bond proceeds to be used to fund I-44 improvements.


MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
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MISSOURI DEPARTMENT OF TRANSPORTATION FISCAL YEAR 2027 BUDGET
-- Presented by Brenda Morris, Chief Financial Officer, 573-751-2803.

ISSUE: The Missouri Department of Transportation (MoDOT) fiscal year 2027 (July 1, 2026 – June 30, 2027) budget is presented for approval. The MoDOT budget is the department's spending plan.

RECOMMEND that the Commission:

- Approve the fiscal year 2027 budget totaling $7,414,165,000 as documented in Attachment 1, contingent upon approval by the Governor and all General Assembly Designated projects funded in this budget to be vetted through the planning process. Also, authorize expenditures in accordance with the Missouri Highways and Transportation Commission Financial – Budget – Operating Budget policy and Execution of Documents policy.

DEPARTMENT VIEW:

- The fiscal year 2027 budget is the Truly Agreed to and Finally Passed appropriations adjusted for restrictions. The fiscal year 2027 budget totals $7.4 billion. This budget is $533.5 million, or 6.7 percent, less than the fiscal year 2026 budget. The majority of the decrease is for reduced appropriations for the Improve I-70 Program for prior year expenditures.
- Personal services are $4.0 million, or 1.2 percent, more than the fiscal year 2026 budget due to the addition of 75 full-time equivalents (FTEs) for maintenance workers under Safety and Operations.
- Fringe benefits increased $2.2 million, or 0.7 percent, for the salaries and positions explained above.
- Expense and Equipment increased $5.9 million, or 1.2 percent, compared to the fiscal year 2026 budget. The increase includes the following:
    - Safety and Operations increased $2.9 million, or 0.9 percent, for additional asphalt and concrete repairs on roadways in accordance with the districts' work plans. This increase also supports tasks for the World Cup, roadside management activities, and safety measures.
    - Fleet, Facilities, and Information Systems increased $3.0 million, or 2.6 percent, to cover inflationary costs associated with fleet.
- Program decreased $545.7 million, or 8.1 percent, compared to the fiscal year 2026 budget. This decrease is due to the following:
    - Safety and Operations decreased $32.9 million, or 30.0 percent, compared to fiscal year 2026. The decrease is the net result of the following:
        - Decreased $36.9 million for the General Assembly Designated and Funded Project for the maintenance and repair of low-volume roads throughout the state due to the General Assembly appropriating $86.4 million in fiscal year 2026 compared to $49.5 million in fiscal year 2027. The fiscal year 2026 budget included $66.4 million in remaining funding from fiscal year 2025 and $20.0 million in new funding for fiscal year 2026. The fiscal year 2027 budget includes $9.5 million in remaining

funding from fiscal year 2025, $20.0 million in remaining funding from 2026, and $20.0 million in new funding for fiscal year 2027.
    - Increased $3.0 million for Motor Carrier Safety Assistance Program to account for pass-through payments of grant funds to the Missouri State Highway Patrol (MSHP). In anticipation of implementing the statewide Enterprise Resource Planning financial module (Missouri Vital Enterprise Resource System [MOVERS]), Motor Carrier Safety Assistance Program funds must now be recorded as revenue and subsequently as expenditures in MoDOT funds rather than deposited directly into MSHP's fund.
    - Increased $1.0 million for the Highway Safety for increases in federal grants.
  - Program Delivery decreased $481.3 million, or 7.5 percent for the following:
    - Increased $11.9 million for General Assembly Designated and Funded projects throughout the state, including road improvements in the City of Bolivar, Butler County, and U.S. Highway 412; right of way acquisition and utility improvements in the City of Thayer; and overpass improvements in the City of Seymour.
    - Decreased $363.7 million for prior year expenditures for General Assembly Designated and Funded projects and the Governor's Transportation Cost-Share, Improve I-70, and Forward 44 programs.
    - Decreased $129.5 million for fewer anticipated contractor payments for a slightly smaller construction program.
  - Multimodal decreased $25.3 million, or 6.7 percent, compared to the fiscal year 2026 budget. The decrease is the net result of the following:
    - Increased $310,000 due to the fiscal year 2026 budget including a three percent reserve of the General Revenue spending for various programs. Office of Administration Budget and Planning often reserves 3 percent of General Revenue appropriations as a practice. The reserve is usually identified when the Governor signs the budget bills.
    - Decreased $23.1 million for prior year expenditures for General Assembly Designated and Funded projects and the Railroad Grade Crossing Safety Program.
    - Decreased $3.6 million for federal transit and aviation appropriations, as a result of reductions to the appropriations based on actual historical expenditures.
    - Decreased $1.5 million for the Transit Mobility Pilot Program. The General Assembly approved $1.5 million for this program in fiscal year 2027 in comparison to $3.0 million in fiscal year 2026.
    - Decreased $1.1 million for State Match for Amtrak. The General Assembly approved one-time funding of $574,000 in fiscal year 2027 compared to one-time funding of $1.7 million appropriated in fiscal year 2026.
    - Decreased $2.5 million for State Transit Assistance Program.
- The state of Missouri received American Rescue Plan Act (ARPA) funding which could be appropriated to any state agency for various projects. In addition, the state of Missouri also received other federal funds because of Medicaid expansion that could be spent like

General Revenue. Using these funding sources, the General Assembly appropriated funds to various transportation projects to the Office of Administration for MoDOT. While MoDOT administers these projects, the Office of Administration is responsible for the expending of funds. A list of these projects is provided on Attachment 2.

OTHER VIEWS:

- MoDOT's budget is of interest to taxpayers, legislators, and our partners in the construction industry.

MHTC POLICY:

- Financial – Budget – Operating Budget.

OTHER PERTINENT INFORMATION:

- No known controversy.
- The General Assembly appropriated $490.2 million to the Missouri State Highway Patrol and $34.3 million to the Department of Revenue for fiscal year 2027 from the State Highways and Transportation Department Fund, which is funded by motor fuel tax revenue and a portion of the motor vehicle and driver's licensing fees.
- The Governor will need to take action on the Truly Agreed and Finally Passed budget bills for the amounts presented. Any actions taken by the Governor will be reflected in future budget amendments.

SOURCE OF FUNDING: Expenditures will be funded from the department's various funds.

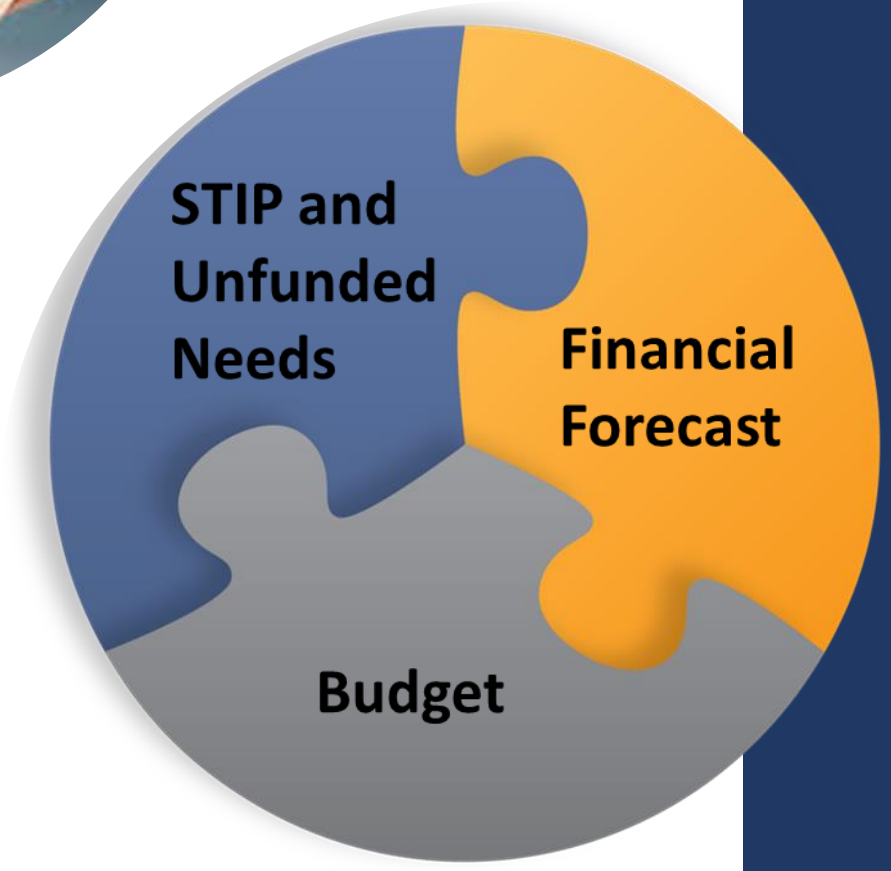


FISCAL YEAR 2027 BUDGET

Brenda Morris
Chief Financial Officer

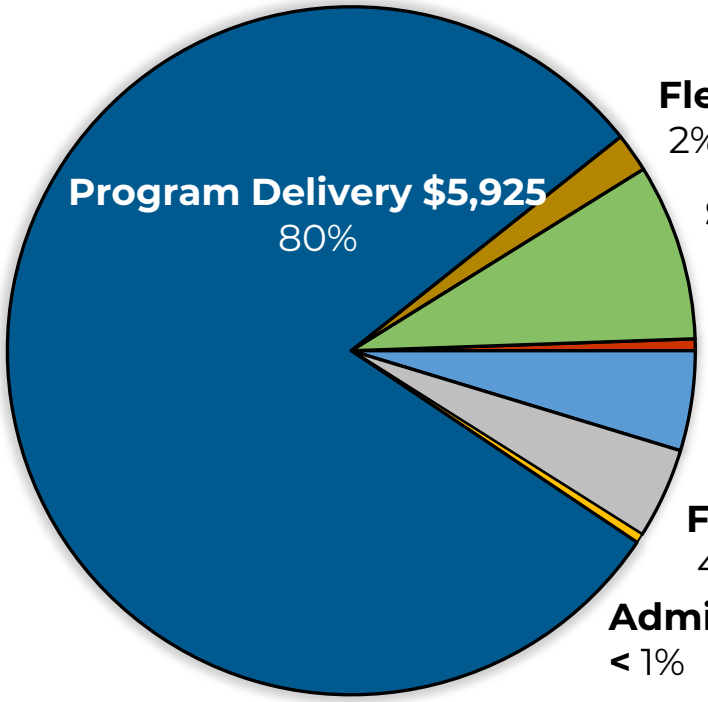


FINANCIAL PLANNING MODEL



FISCAL YEAR 2027 BUDGET

(MILLIONS)



Fleet, Facilities, & Information Systems $136
2%

Safety & Operations $615
8%

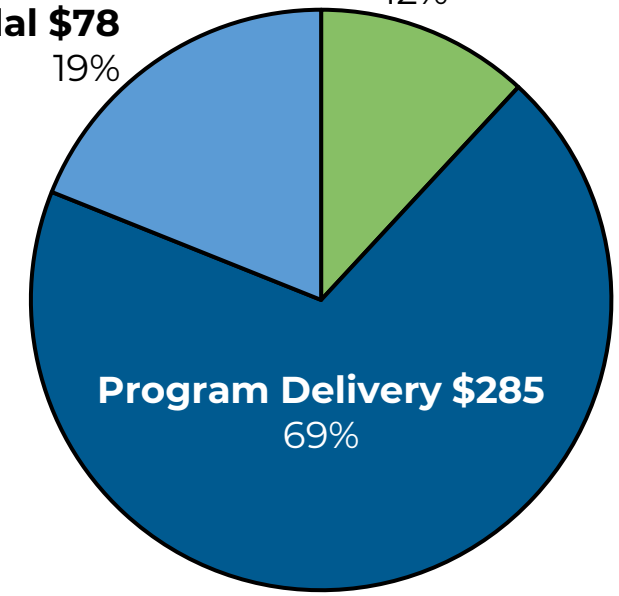
Refunds $41
1%

Multimodal $348
5%

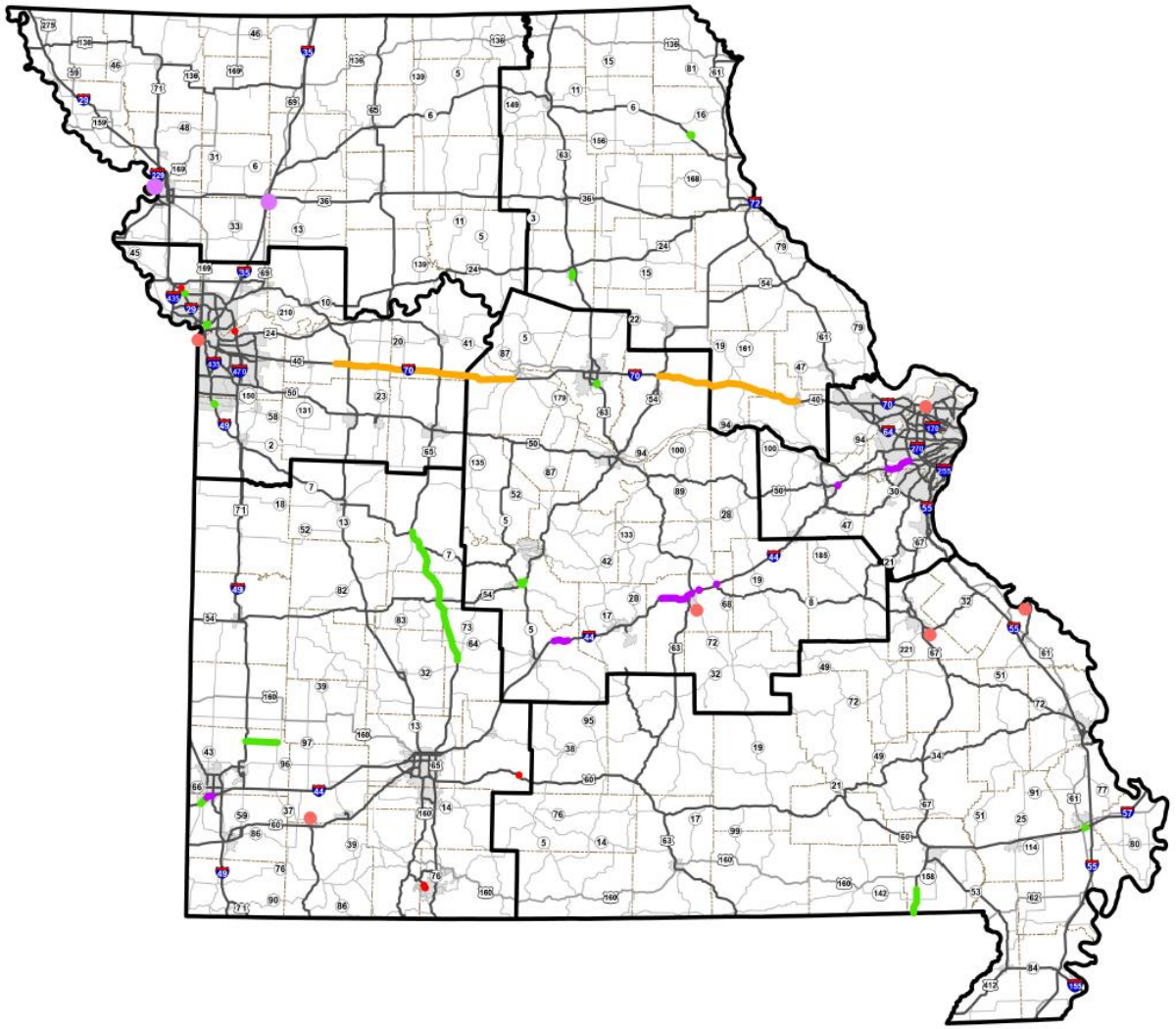
Fringe Benefits $317
4%

Administration $32
< 1%

GENERAL ASSEMBLY DESIGNATED/FUNDED PROJECTS

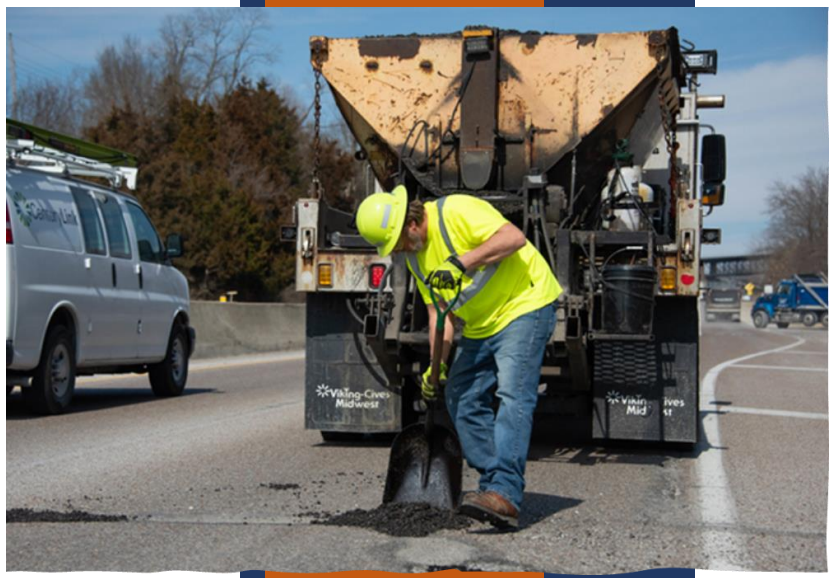


DELIVER THE PROGRAM



*This map does not include the five new General Assembly Designated and Funded projects for road improvements in the City of Bolivar, Butler County, and U.S. Highway 412; right of way acquisition and utility improvements in the City of Thayer; and overpass improvements in the City of Seymour.





RESTORE OPERATIONS

WORK SAFELY FOR OUR EMPLOYEES AND TRAVELING PUBLIC











FOCUS ON CUSTOMERS





RECOMMENDATION

Approve the fiscal year 2027 budget totaling $7,414,165,000 as documented in Attachment 1, contingent upon approval by the Governor and all General Assembly Designated projects funded in this budget to be vetted through the planning process. Also, authorize expenditures in accordance with the Missouri Highways and Transportation Commission Financial – Budget – Operating Budget policy and Execution of Documents policy.

Fiscal Year 2024-2026 Summary and Fiscal Year 2027 Budget

(Dollars in Thousands)

	Fiscal Year 2024 Actual	Fiscal Year 2025 Actual	Fiscal Year 2026 Budget[1]	Fiscal Year 2027 Budget[2]
Administration				
Personal Services	$ 21,606	$ 22,548	$ 24,865	$ 24,865
Expense and Equipment	2,970	3,342	6,647	6,647
Total Administration	24,576	25,890	31,512	31,512
Safety and Operations				
Personal Services	161,977	174,950	194,435	198,421
Expense and Equipment	264,343	281,763	328,348	331,246
Program	25,001	27,883	31,401	35,401
Low Volume Roads	38,999	33,633	86,367	49,464
Total Safety and Operations	490,320	518,229	640,551	614,532
Program Delivery				
Personal Services	80,040	86,226	99,688	99,688
Expense and Equipment	25,612	25,430	41,117	41,117
Program	2,185,848	2,182,364	2,771,408	2,623,449
Improve I-70 Program	50,670	177,603	2,622,397	2,299,476
Forward 44 Program	0	49	577,500	577,192
Gen. Assembly Designated/Funded Projects	581	73,584	295,540	285,435
Total Program Delivery	2,342,751	2,545,256	6,407,650	5,926,357
Fleet, Facilities, and Information Systems				
Personal Services	12,680	13,652	15,356	15,356
Expense and Equipment	97,825	102,886	117,457	120,457
Total Fleet, Facilities, and Information Systems	110,505	116,538	132,813	135,813
Multimodal				
Personal Services	2,415	2,611	3,358	3,358
Expense and Equipment	376	428	1,119	1,166
Program	117,745	159,879	275,123	265,830
Railroad Grade Crossing Safety Program	2,061	2,170	25,000	20,641
Gen. Assembly Designated/Funded Projects	1,734	13,026	74,844	57,035
Total Multimodal	124,331	178,114	379,444	348,030
Fringe Benefits				
Retirement & Long-Term Disability	156,120	150,897	193,706	190,082
Medical, Life Insurance, and EAP	46,819	53,579	59,769	60,521
Retiree Medical Insurance	17,950	19,650	21,865	23,840
Workers' Compensation	9,000	9,000	9,447	12,573
Other Fringe Benefits[3]	24,095	25,848	29,922	29,905
Total Fringe Benefits	253,984	258,974	314,709	316,921
Subtotal MoDOT Disbursements	**3,346,467**	**3,643,001**	**7,906,679**	**7,373,165**
Motor Carrier Refunds	24,316	23,378	41,000	41,000
Total MoDOT Disbursements	**$ 3,370,783**	**$ 3,666,379**	**$ 7,947,679**	**$ 7,414,165**

[1] Fiscal year 2026 budget is Truly Agreed to and Finally Passed appropriation amounts adjusted for vetoes, restrictions, reverted, and supplemental amounts.

[2] Fiscal year 2027 budget is Truly Agreed to and Finally Passed appropriation amounts adjusted for restrictions.

[3] Includes fringe benefits appropriated in House Bill 5 for social security, unemployment tax, and deferred compensation match, and the department's share for MoDOT employees who are enrolled in the Missouri Consolidated Health Care Plan (MCHCP) and Missouri State Employees' Retirement System (MOSERS).

State Administered ARPA[1] of 2021 and General Assembly Funded Projects[2] Fiscal Year 2025-2026 Summary and Fiscal Year 2027 Budget

(Dollars in Thousands)

	Fiscal Year 2024 Actual	Fiscal Year 2025 Actual	Fiscal Year 2026 Budget[4]	Fiscal Year 2027 Budget[5]
Projects[3]				
Waste Water Improvements[1]	$ 949	$ 2,667	$ 6,690	$ 0
Kirkwood Historic Train Station[1]	151	2,349	2,291	0
Carrollton Amtrak Station[1]	1	38	965	954
Washington County Airport[1]	0	102	1,000	144
Buffalo Municipal Airport Improvement[1]	0	205	687	260
Port Capital Improvement Projects[1]	7,495	4,732	10,990	7,618
New Madrid County Port Authority[1]	1,430	1,247	2,899	1,161
Elderly and Disabled Transit Assistance[1]	0	442	6,000	3,588
Highway 76 Road Improvements in Branson[2]	0	0	6,200	4,168
I-35, I-29, and US 169 Road Improvements[2]	0	0	30,000	29,695
Total Disbursements	**$ 10,026**	**$ 11,782**	**$ 67,722**	**$ 47,588**

[1] American Rescue Plan Act (ARPA) is federal funding to support public transportation systems as they respond to the pandemic.

[2] Budget Stabilization funding consists of funds received from the federal government and is a General Revenue look alike.

[3] These projects are being administered by Office of Administration (OA); however, MoDOT is overseeing the projects.

[4] Fiscal year 2026 budget is Truly Agreed to and Finally Passed appropriation amounts.

[5] Fiscal year 2027 budget is Truly Agreed to and Finally Passed appropriation amounts.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2026 LONG-RANGE TRANSPORTATION PLAN AND STATE FREIGHT AND RAIL PLAN

-- Presented by Britni O'Connor, Planning and Programming Coordinator, 573-751-6550; and Levi Woods, Administrator of Freight and Waterways, 573-526-5578.

ISSUE: The Missouri Department of Transportation is federally required to maintain a Long-Range Transportation Plan (LRTP) and State Freight and Rail Plan (SFRP). The update process for both plans has been underway since October 2024. A draft LRTP and SFRP was presented to the Missouri Highways and Transportation Commission on March 4, 2026. A public comment period was provided for the draft plans March 4 to April 3, 2026.

The LRTP and SFRP establish six goals as the vision for transportation in Missouri:

- **Stewardship** - Preserve the assets and services currently in place.
- **Safe** - Enhance safety for all users of the transportation network.
- **Reliable** - Ensure efficiency and reliability in the transportation network.
- **Connected** - Maximize mobility and connect communities through multimodal transportation options.
- **Innovative** - Leverage technology and creative solutions to build a future-ready transportation network.
- **Prosperous** - Drive economic growth through transportation investments.

RECOMMEND that the Commission:

- Approve MoDOT's 2026 LRTP, which consists of Attachment 1 (Executive Summary) and Attachment 2 (Long-Range Transportation Plan), and
- Adopt the 2026 SFRP, which consists of Attachment 1 (Executive Summary) and Attachment 2 (State Freight and Rail Plan).

DEPARTMENT VIEW:

- The LRTP was last approved by the Commission in 2018 and SFRP was last approved in 2022.
- The LRTP is an important planning tool used in the development of the annual Statewide Transportation Improvement Program (STIP).
- The SFRP is a deeper dive into the LRTP goals.
- The SFRP provides an update to information contained in the 2022 SFRP, which provides goals and strategies to help Missouri capitalize on its strengths for efficient freight movement.
- In addition to the federal requirements for the SFRP, this project included analysis of commercial motor vehicle parking and the economic impacts of passenger rail and public ports.
- The SFRP includes a listing of unfunded freight-focused projects for consideration in the STIP development process and for discretionary grant applications.
- MoDOT received 80 comments during the public comment period: 64 for LRTP, 12 for SRFP, and 4 for both LRTP and SFRP.
    - 18 responses received shared needs for multimodal
        - 11 Bicycle and pedestrian

        - 3 Transit
        - 3 Freight
        - 1 Passenger Rail
    - 7 responses received shared project needs for road and bridges
    - 3 responses received shared project needs for Passenger Rail
    - 8 responses received supported additional transportation funding for Missouri
    - 15 responses received supported continued focus on safety of the transportation network
    - 2 responses received support for maintaining transportation infrastructure
    - 20 responses received were general transportation comments
    - 7 responses received needed corrections/clarifications

OTHER VIEWS:

- The draft LRTP and SFRP will be of considerable interest to planning partners, transportation stakeholders, and the general public, especially those that participated in the process.

MHTC POLICY:

- Statewide Transportation Improvement Program – Long-Range Transportation Plan.
- Multimodal Operations.

OTHER PERTINENT INFORMATION:

- MoDOT used online surveys for the LRTP to engage over 2,500 Missourians that were spread over the entire state.
- Planning partners were involved in LRTP and SFRP update process and played a significant role in engaging Missourians.
- Paper copies and a Spanish version of the engagement survey were made available.
- MoDOT received 326 comments on goals and objectives for the LRTP and SFRP.

SOURCE OF FUNDING: Federal State Planning and Research Funding and State Funding.



LRTP Long-Range Transportation Plan

SFRP State Freight & Rail Plan

MoDOT Commission Presentation

Missouri Long-Range Transportation Plan and State Freight & Rail Plan Update

Long-Range Transportation Plan (LRTP) Documentation

- ✓ Full Document
- ✓ Executive Summary
- ✓ StoryMap

Strategic Goals

Stewardship
Preserve the assets and services currently in place

Safe
Enhance safety for all users of the transportation network

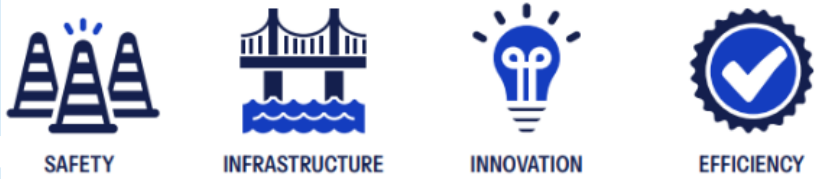
Reliable
Maintain a transportation network that is efficient and dependable

Connected
Maximize mobility and connect communities through multimodal transportation options

Innovative
Leverage technology and creative solutions to build a future-ready transportation network

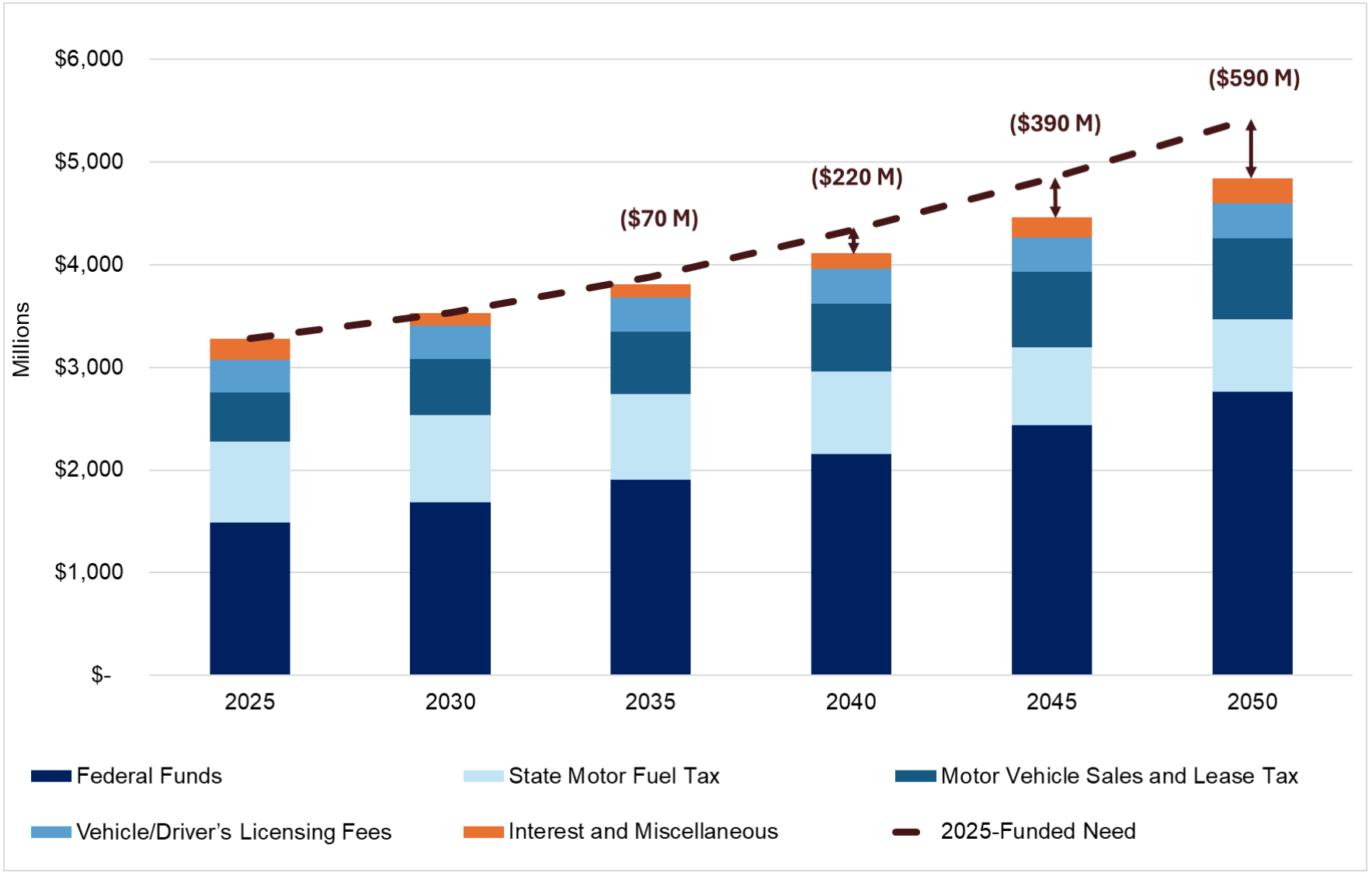
Prosperous
Drive economic growth through transportation investments

U.S. DOT Goals



Revenue Forecast Assessment

Road and Bridge 2025-Funded Program Needs



Public Comments

80

Total Comments

4 Both LRTP and SFRP
64 LRTP
12 SFRP

33 People Commented

8 Funding

4 Transit
1 Bike/Ped
1 Tolling
1 Passenger Rail
1 General Funding

10 Project Specific

7 Roads and Bridges
3 Passenger Rail

18 Multimodal

3 Transit
3 Freight
1 Passenger Rail
11 Bike/Ped

15 Safety

20 Miscellaneous

2 Maintenance

7 Corrections

Public Comments

Highlight of LRTP Comments and Themes

- **Corridor specific** improvements
- Increased frequency of **River Runner**
- Consideration of **highway speeds, safety improvements,** and **preserving infrastructure**
- Support of repository for **active transportation plans/resources** recommendation and additional encouragement to develop a Statewide Active Transportation Plan

Revisions to the Draft LRTP

- Further highlighted impacts of statewide **transit funding cuts** and acknowledged the ongoing **Statewide Intercity Bus Needs Assessment**
- Added detail on coordination with **regional and local planning partners**
- Feedback **strongly supported** the draft recommendations, resulting in minor refinements

State Freight and Rail Plan (SFRP) Documents

- Full Document
- Executive Summary
- Truck Parking Analysis
- Missouri River Runner Economic Impact Study
- Public Ports Economic Impact Study

PUBLIC COMMENTS

16 Total Comments

4 Both LRTP and SFRP

12 SFRP







Passenger Rail

Size and Location of Trucks

Planning Partner Coordination

Key Takeaways

- Value of Freight is outpacing the Weight of Freight
- Truck and Rail Major Modes
- Positioned well for emerging trends
- Truck Parking Shortage Continues
- 1st and Last Mile Connections Critical for Success

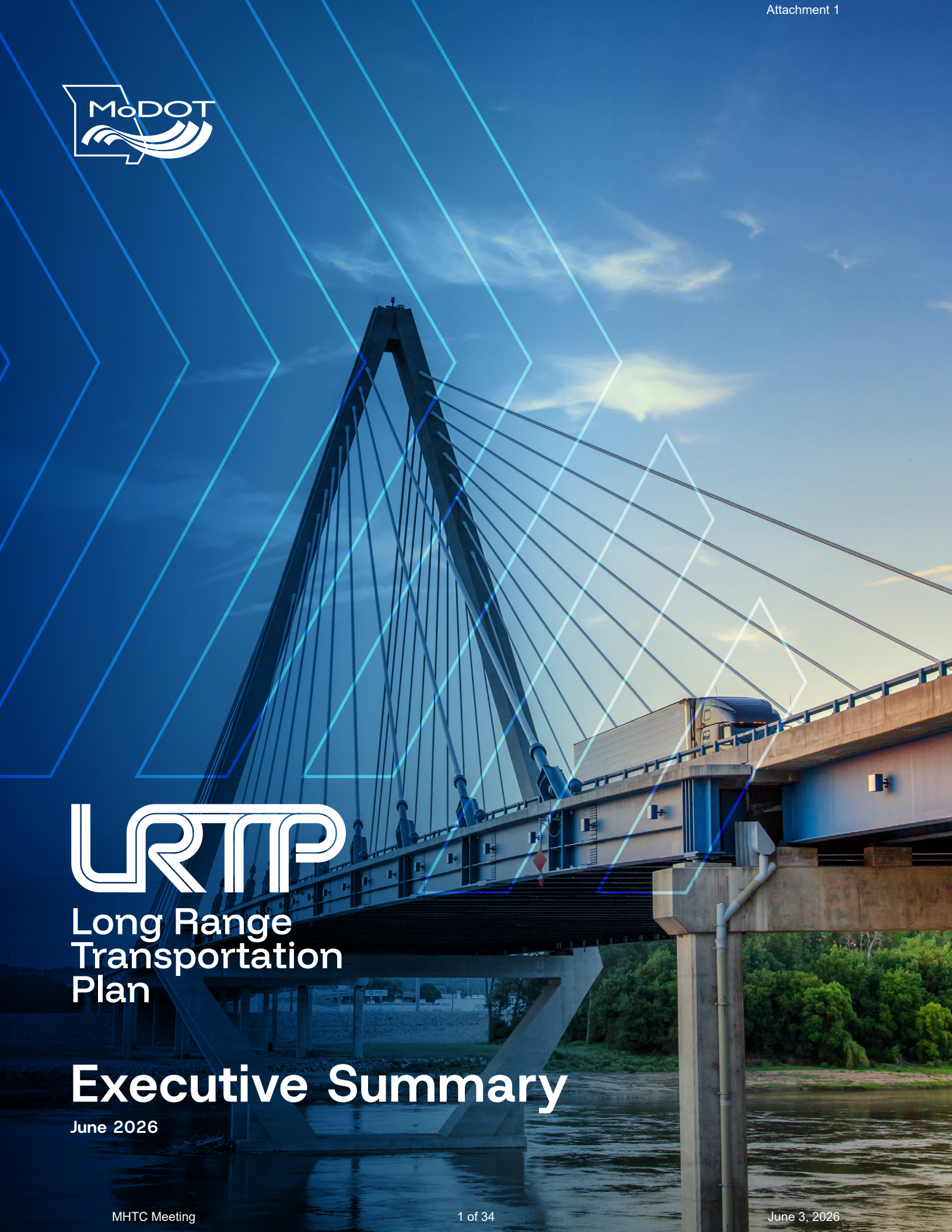
Freight in our daily lives







Recommendation:
Approve the 2026 Long-Range Transportation Plan
and
Adopt the 2026 State Freight and Rail Plan



LRTP

Long Range Transportation Plan

Executive Summary

June 2026

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Ed Hassinger, P.E.
Director of the Missouri
Department of Transportation

DIRECTOR'S LETTER

Our mission at the Missouri Department of Transportation (MoDOT) is to provide a world-class transportation system that is safe, innovative, reliable and dedicated to serving customers for a prosperous Missouri. That last part - serving customers - is a new addition to the mission statement, and it's an important one. When we say "customers" we mean every citizen, taxpayer and traveler on Missouri roads. Keeping our customers safe and making good on our commitment to provide a reliable transportation system is at the heart of what we do as an organization.

All of that takes planning. This document, the Long-Range Transportation Plan (LRTP), has come together over the last year and sets the vision for the state's transportation system for the next 25 years. The plan addresses Missouri's transportation needs through 2050 and builds on the goals and objectives outlined in the plan that was last updated in 2018.
Robust engagement was crucial to updating the state's transportation goals and priorities, making sure we get it right. Outreach included engaging with customers as well as planning organizations and committees from around the state. Informational booths were made available at the Missouri State Fair in Sedalia and at district meetings where visitors could find out about the plan updates and provide input via surveys and comment cards. Virtual public meetings were launched via MoDOT's external website and promoted statewide through the department's social media channels.

In all, thousands of survey responses were collected, helping to determine the goals and objectives outlined in this document. This feedback helps us deliver on the real needs of Missourians.

You spoke, and we've listened. The goals in this plan focus on preserving the assets we have, while also enhancing safety and reliability. At the same time an eye needs to be kept on the future, as we strive to connect communities through more transportation options and leverage new technologies.
All this drives economic growth statewide, making the proper funding and allocation of assets paramount as we move forward. The updated LRTP considers things like inflation and its potential effects on the funding mechanism over the next 25 years. Current and future revenues are broken down and an implementation plan is put forth, containing short-term and long-term goals.

I want to thank you for taking the time to make your voice heard and for working with us to deliver a safe and reliable transportation infrastructure. One that can successfully take us into the future. It's an exciting time and I'm glad you're here for the ride.

Introduction to the Plan

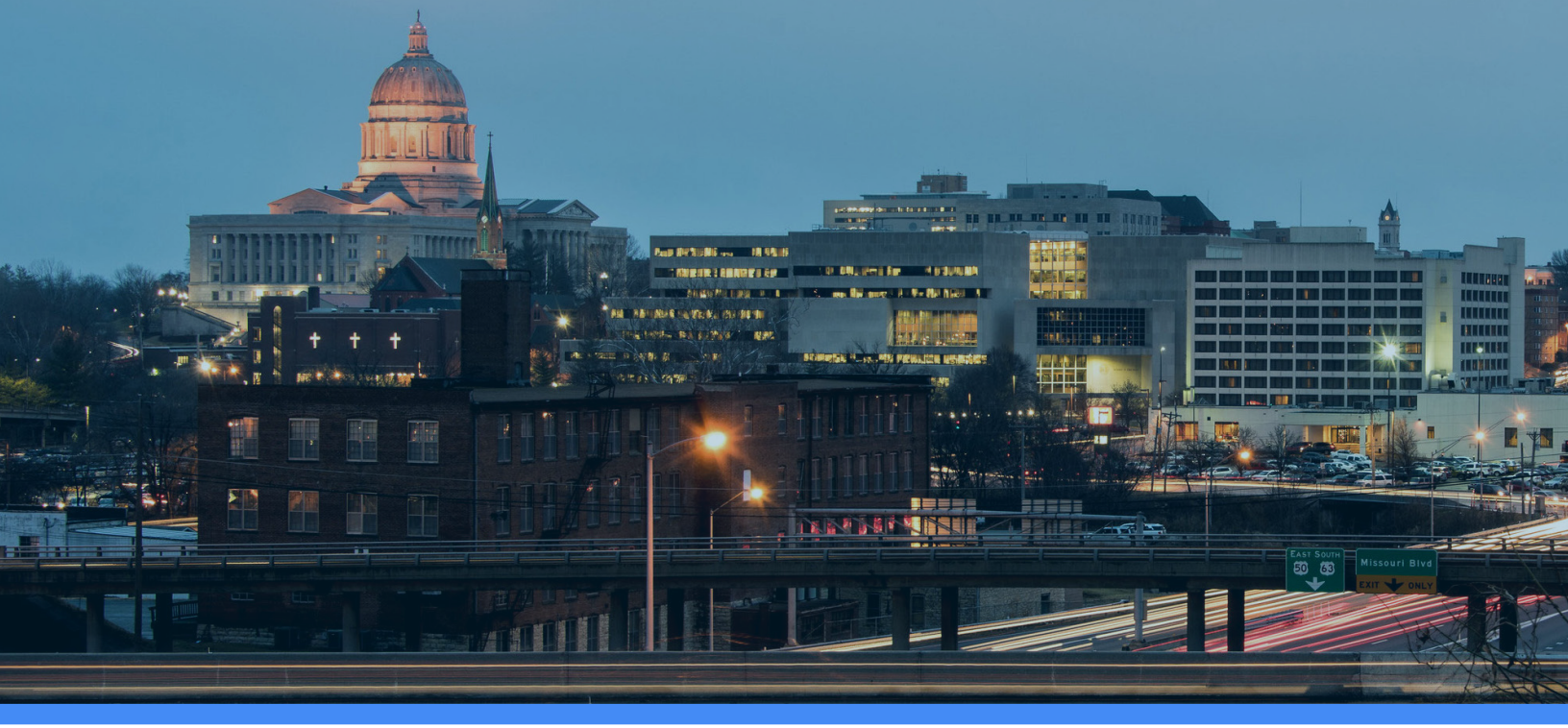
The 2026 Long-Range Transportation Plan (LRTP) serves as a comprehensive, policy-driven guide for the development of Missouri's transportation system through 2050.

Building upon the Missouri Department of Transportation's (MoDOT) 2018 LRTP, this document ensures compliance with state and federal regulations while addressing emerging trends and evolving needs across the entire network. The LRTP sets the vision and goals for Missouri's transportation future, utilizing a five-phase approach that includes Vision and Goal Setting, Needs Assessment, Scenario Planning, Cost Feasibility and Implementation and Plan Adoption. MoDOT's unique strategy of developing the LRTP alongside the State Freight and Rail Plan (SFRP) fosters a coordinated and well-informed process to shape the state's transportation landscape.

In alignment with the Federal Surface Transportation Act, the Infrastructure Investment and Jobs Act (IIJA), also known as the Bipartisan Infrastructure Law (BIL), the 2026 LRTP emphasizes performance-based, multimodal planning and maintains the core highway program structure from previous legislation.

Additionally, MoDOT has also developed a suite of strategic initiatives and performance-based programs that align with and support the goals of the Federal Surface Transportation Act.

- The Show-Me Zero Strategic Highway Safety Plan targets zero fatalities through education, enforcement, engineering and emergency response.
- The SAFER program proactively assesses roadway safety to guide improvements.
- MoDOT's 2024 Transportation Systems Management and Operations (TSMO) Program and Action Plan enhance system reliability and congestion management.
- Internal efforts such as Tracker performance metrics drive innovation, accountability and data-driven decision-making across the state's transportation system.





PUBLIC AND STAKEHOLDER **OUTREACH**

SUMMARY OF AGENCY ENGAGEMENT

The Study Team collaborated with a broad array of stakeholders, including Metropolitan Planning Organizations (MPOs), Regional Planning Commissions (RPCs), MoDOT Districts and the Modal Advisory Committee (MAC). By establishing early and consistent communication, the Study Team ensured that diverse perspectives and areas of expertise were integrated into each stage of the planning process. This collaborative approach provided critical input that shaped the LRTP's vision, goals and objectives.

A key component of agency coordination was the engagement with the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). The Study Team initiated the process by providing an overview of the LRTP update and inviting both FHWA and FTA to participate in the MAC. This proactive involvement enabled the agencies to offer technical guidance and highlight potential issues early, thereby strengthening the plan's quality, credibility and federal compliance. Additionally, various in-person and virtual meetings were held with Missouri MPOs and RPCs to discuss outreach frameworks, scenario planning and regional priorities.

Beyond state and federal agency coordination, the Study Team facilitated targeted meetings with MoDOT Districts and convened the MAC and its Executive subset. These groups, representing all transportation modes and major sectors, met multiple times to review existing conditions, provide feedback on goals and needs and guide scenario planning and investment strategies. This multilayered coordination ensured the LRTP addressed statewide priorities, accounted for regional nuances and incorporated expert guidance from both public agencies and modal representatives.



SUMMARY OF PUBLIC ENGAGEMENT

The Study Team conducted extensive public engagement to inform the LRTP, utilizing a mix of outreach methods including pop-up events, Virtual Public Information Meetings (VPIMs) and public surveys.

At the Missouri State Fair pop-up, attendees were introduced to the LRTP and SFRP, provided feedback through comment cards and surveys and discussed priorities such as improved safety, maintaining infrastructure, better community connections, and long-term funding. Comment cards highlighted the desire for expanded public transit, passenger rail, improved roadway conditions, and enhanced pedestrian and cyclist safety, underscoring a preference for both system preservation and diverse travel options.

17
Comment cards were received

321
Survey responses were received



Two VPIMs recreated the traditional public meeting experience online, allowing participants to explore stations, respond to questions, and provide digital feedback in both English and Spanish. Outreach included email blasts, newspaper ads, and social media posts, resulting in significant website engagement.

2,595
Website Visits

121 Optional sign-ins

Top priorities include safety, accessibility, multimodal travel and maintaining roads and bridges and other infrastructure assets

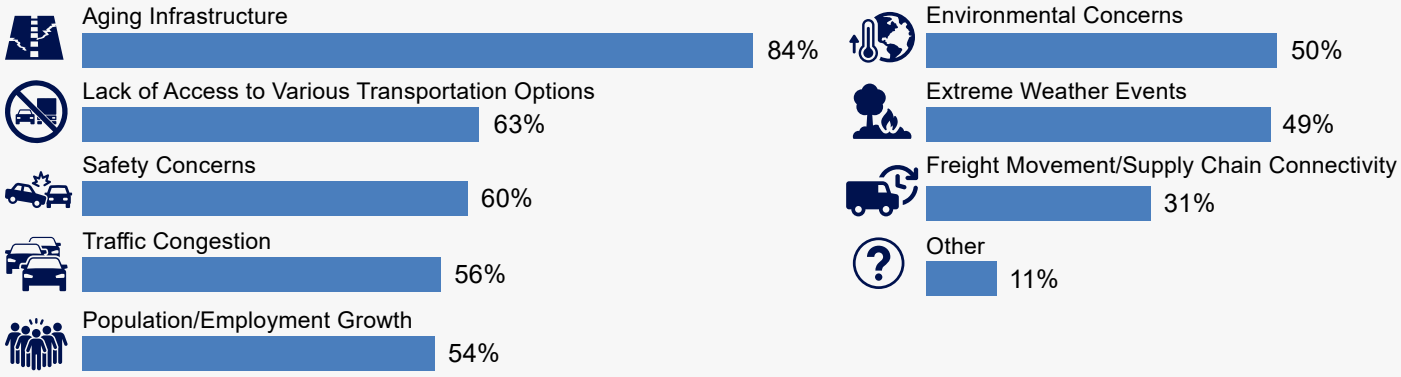
Survey responses collected throughout the process reflected strong support for road and bridge maintenance, safety, improved multimodal connectivity and cautious adoption of new technologies. Public input played a critical role in refining LRTP goals, ensuring the plan addressed local needs, safety concerns and economic development, while balancing multimodal/environmental priorities with traditional infrastructure focus.

2,000+
Survey responses collected

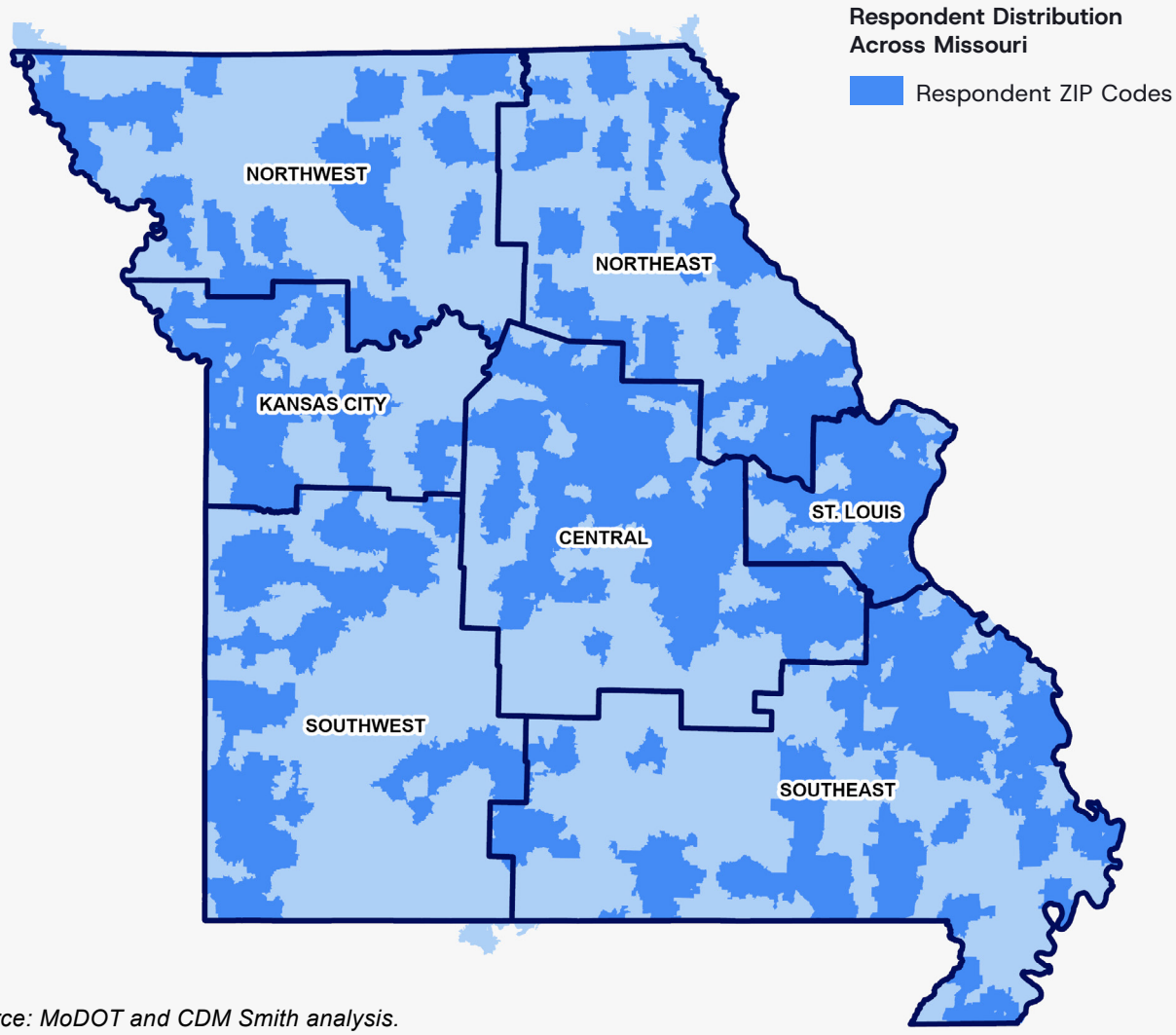
The Study Team launched a public survey in the Spring of 2025 to better understand existing transportation conditions and identify future priorities. Through this effort, respondents emphasized the importance of maintaining roadways and bridges, enhancing safety and expanding access to a range of travel options, reinforcing a shared focus on system preservation and improved mobility choices.

Insights from Missourians

What will impact your region's transportation system over the next 30 years?



Survey Responses



Source: MoDOT and CDM Smith analysis.



EXISTING SYSTEM TRENDS AND CONDITIONS

MISSOURI'S TRANSPORTATION SYSTEM

Missouri's transportation system includes a vast multimodal network of roads, bridges, buses, airports, railroads, waterways, ports, bicycle routes, and pedestrian facilities. The transportation system provides the necessary infrastructure to support a state economy 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.

Missouri's Transportation System

- **40.1** Million **Average Annual Transit Trip** between 2019 and 2023
- **23.5** Minutes **Average Commute Time**
- **120** Public-Use Airports
- **4** Amtrak Routes
- **18** Interstates
- **33,814** State-Maintained Centerline Miles
- **2** Navigable Rivers
- **21** Freight Railroads
- **1,050** Navigable River Miles
- **10,427** State-Maintained Bridges and Culverts
- **13** Amtrak Stations
- **600+** Miles of Bike Trails
- **19** River Ports

Source: MoDOT, Fast Facts.



Missouri's Multimodal Transportation Network



MoDOT

LRTP Long-Range Transportation Plan

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

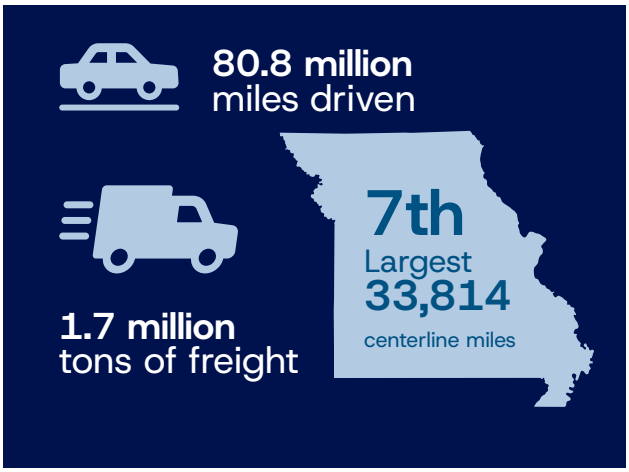
Bike Routes
Not Associated with Roadways

- Frisco Highline Trail
- Katy Trail
- Rock Island Trail

Source: MoDOT.

Highways

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. 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. Maintaining these high-traffic corridors in good condition is essential to preserving mobility, supporting freight movement and minimizing long-term repair cost. Even with continued maintenance efforts, small changes in pavement condition can occur as traffic volumes and system demands evolve.



Highways

Between 2021 and 2024, the number of major highways in good condition declined from 90% to 89%.

Major Highways

Interstates and most U.S. Routes.

5,560 miles

Minor Highways

Mostly lettered routes and primarily serve local and agricultural access.

17,903 miles

Low-Volume Highways

State-owned roads with less than 400 vehicles per day and primarily serve local transportation needs.

10,351 miles

Bridges

Missouri 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. Ensuring these structures remain in good condition is vital to keeping the state's transportation network safe and reliable.

Average bridge age
50 Years

10,427 bridges

Bridges

Between 2021 and 2024, the number of bridges in poor condition declined from 823 to 752, representing an 8.6% reduction.

Good Condition

No significant structural issues.

3,023 structures

Fair Condition

Moderate issues, may need minor repairs or maintenance.

6,652 structures

Poor Condition

Serious issues, requires major repairs or replacement.

752 structures



Public and Active Transportation

Public transportation provides an important alternative to personal vehicles, connecting Missourians to work, school and essential services. Most trips in the state occur on buses and vans, while some communities also have light rail and streetcars. Fewer than 1% of Missourians use public transportation for commuting, compared to the national average of 3.5%. Ridership has been declining since 2014 due to economic and structural factors, including greater access to vehicles, service cuts, labor shortages, less compact development, the rise of ride-hailing services and changes in commuting patterns during COVID-19.

Public Transit Overview

34
Transit Agencies in 2023

782,550
Annual Amtrak Ridership at Missouri Stations

40,800,000
Public Transit Ridership

Active transportation modes such as walking and bicycling contribute to mobility and access across the state. These facilities, which include sidewalks, shoulders, on-street bicycle lanes, crosswalks and trail systems, are managed by a variety of entities including cities, counties and MoDOT. Across all districts, pedestrian travel consistently exceeds cycling in total miles, highlighting the important role of local roadway networks in supporting active transportation and the need for pedestrian- and bicycle-friendly design on locally maintained streets.

Bicycle and Pedestrian Overview

MoDOT partners with regional planning partners to improve bicycle and pedestrian facilities and to bring **attention to nonmotorized transportation issues around the state**

600 Miles
Shared-use paths for bicyclist and pedestrians

705 Deaths
Bike and pedestrian deaths between 2020-2024

<2%
Less Than 2%
Of trips on Missouri roadways between 2020 and 2024 were made by bicycling or walking





DEMOGRAPHICS, SOCIOECONOMICS AND TRAVEL TRENDS

POPULATION TRENDS

A central step in developing the LRTP is understanding the demographic and socioeconomic forces that influence transportation needs. Where people live, work and carry out daily activities shapes the demand placed on the system.

- Population is getting older
- Cities are growing
- More interest in modal choice

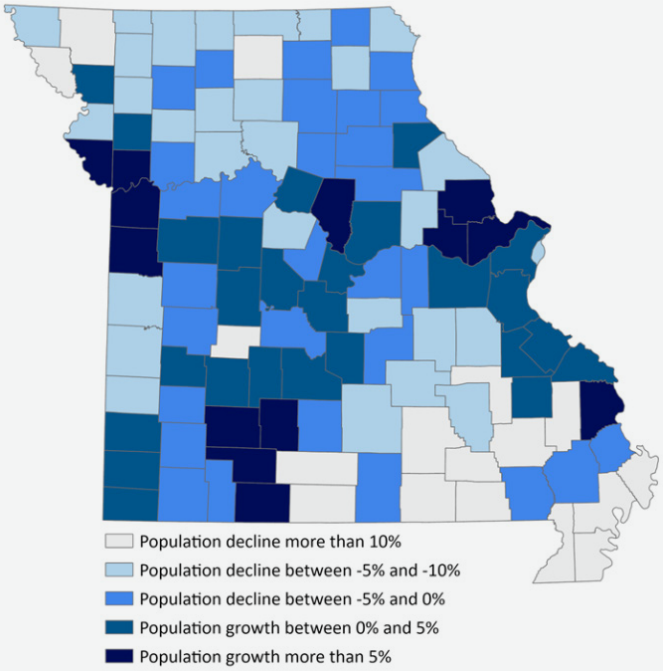
Missouri is projected to surpass 6.4 million people by 2034.

In 2023, the state's 65 and over population was 17.4% of the state's total population.

In 2023, the state's population of people ages 0 to 19 was 25.1% of the state's total population.

People 65 and over are more likely to want or need to use transportation options other than single-occupancy vehicles.

Population Change by County 2010-2020





ECONOMIC AND EMPLOYMENT TRENDS

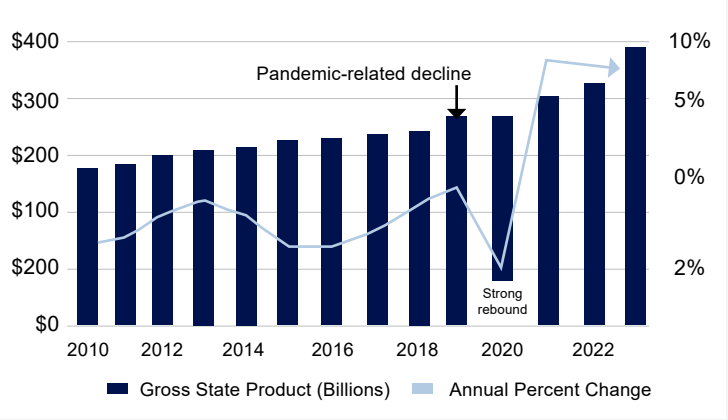
Gross State Product (GSP)

Missouri's GSP has had a monetary growth rate of 6.1% from 2019 to 2023.

The largest industry contributors to Missouri, excluding government enterprises, are **real estate and rentals, manufacturing and healthcare and social services.**

Missouri Gross State Product Has Grown Steadily Since 2010

Annual change shows sharp decline in 2020 followed by strong rebound



Note: GSP is the state level equivalent to Gross Domestic Project (GDP)

Economic activity, including business output and employment, directly shapes travel demand across the state. The GSP has grown steadily in recent years and is closely linked to travel patterns. Periods of economic slowdown or elevated unemployment, such as those experienced from 2020 through 2025, often correspond with reduced vehicle miles traveled (VMT), reflecting declines in commuting, freight movement, and overall travel.

Fuel prices also influence travel, affecting commuting, freight movement, and other transportation activity. The state's fuel prices from 1989 to 2021 fluctuated significantly, influenced by economic, geopolitical, and market factors. The largest drop occurred in early 2020, when prices briefly fell below $1.00 per gallon at the start of the COVID-19 pandemic due to plummeting demand and an oversupply of oil. These trends show how macroeconomic events, energy markets and global crises can directly affect travel behavior and the performance of Missouri's transportation system.

Fuel Price

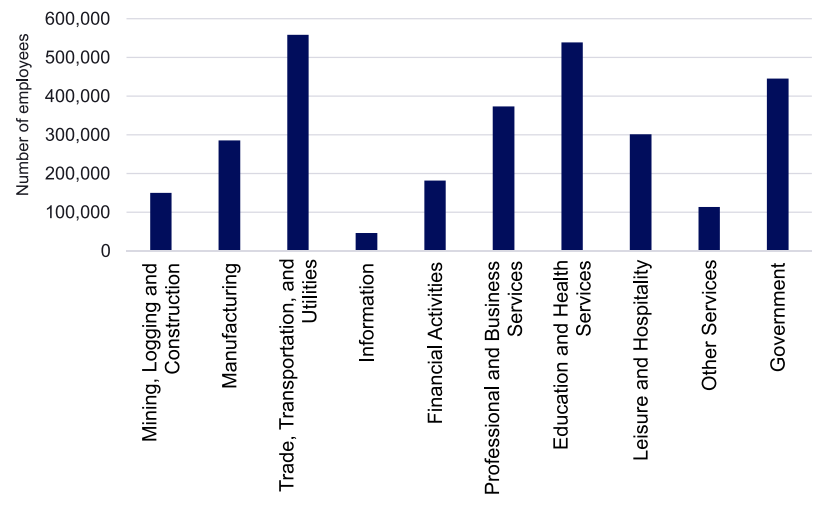
Missouri experienced a sharp fuel price rise in early 2000s due to global demand and oil prices.

Missouri fuel prices – Highlights, 1989–2021

- Late 1980s: Prices under $1 per gallon
- 2000s: Dramatic fluctations
- Early 2010s: Prolonged period of high prices(above $3 per gallon)
- 2021: Sharp increase in price

Economic and transportation patterns also influence workforce availability and employment across the state. The available workforce exceeds 3.1 million people, with nearly 3 million employed in sectors other than farming.

Workers by Industry, 2025



National projections for employment show an **increasing need for health care and social assistance, driven mainly by aging population trends.**

Missouri's unemployment rate has been steadily declining since 2010.

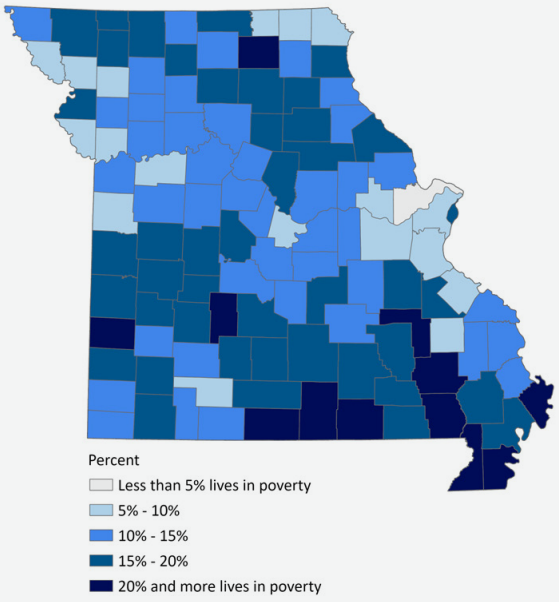
Unemployment peaked at 9.8% in 2010 to currently less than 4% statewide.

The real median income in Missouri was $68,920 in 2023, an increase of 4.5% from 2022. Even with this growth, 12% of the population lived below the poverty level, which can make accessing work and other essential destinations difficult. Lower-income individuals may have one or no vehicles available and those in rural areas often have limited public transportation options.

The state's median income, in inflation-adjusted dollars, was $68,920 in 2023.

Poverty rates are highest in Wayne County and Pemiscot County, where more than 25% of residents live below the poverty line.

Missouri Poverty Levels by County, 2023



TRAVEL TRENDS

Emerging trends, including an aging population, a growing younger population, increasing urbanization, the sharing economy and advances in technology, may combine in ways that significantly alter transportation needs. Existing patterns, such as growth in truck freight, continued preference for personal vehicles and rising VMT, will remain major factors shaping travel and the use of the transportation system across the state.

Travel Choices

Between 2019 and 2023, 10,439 Missourians stopped using public transit for their commute while 9,135 residents began biking or cycling to get to and from work.

Level of Travel Time Reliability (LOTTR)

Measures day-to-day travel time consistency, regardless of congestion. Roads with predictable delays are reliable. In 2024, 94.4% of Missouri Interstates and 97.6% of the National Highway System (NHS) were rated reliable.

State Vehicle Miles Traveled (VMT)

VMT rose significantly in 2021 to be slightly above the pre-pandemic level of 2019. After a decrease in 2022, VMT increased again in 2023 and 2024. VMT is projected to surpass 100 billion miles by 2044.

Fuel Efficiency

The trend toward more fuel efficient or all-electric vehicles, when combined with projections that the state's VMT will continue to increase, indicates there will be increased demand on the state's transportation system.

Vehicle Ownership

Motor vehicle registration in the state peaked in 2013, when Missourians registered 5.8 million private and commercial vehicles. In 2023, the state had 5.5 million registered vehicles, representing a 2.4% increase from 2022.

Commuting Patterns

Approximately 75% of commuters drive alone in a personal vehicle, while 8% use carpooling. Walking and cycling as commuting modes have decreased slightly over the past 10 years.





VISION, GOALS, OBJECTIVES, AND **PERFORMANCE MEASURES**



"You spoke, and we've listened. The goals in this plan focus on preserving the assets we have, while enhancing safety and reliability."

Director Hassinger

GOALS AND OBJECTIVES

The LRTP goals were developed through a multi-phase stakeholder engagement process using a variety of communication channels. Initial draft goals were created with the MoDOT Executive Leadership Team and refined based on feedback from key meetings and engagement activities.

93% of survey respondents agreed with goals.

Strategic Goals for Missouri's Transportation Future

Stewardship
Preserve the assets and services currently in place

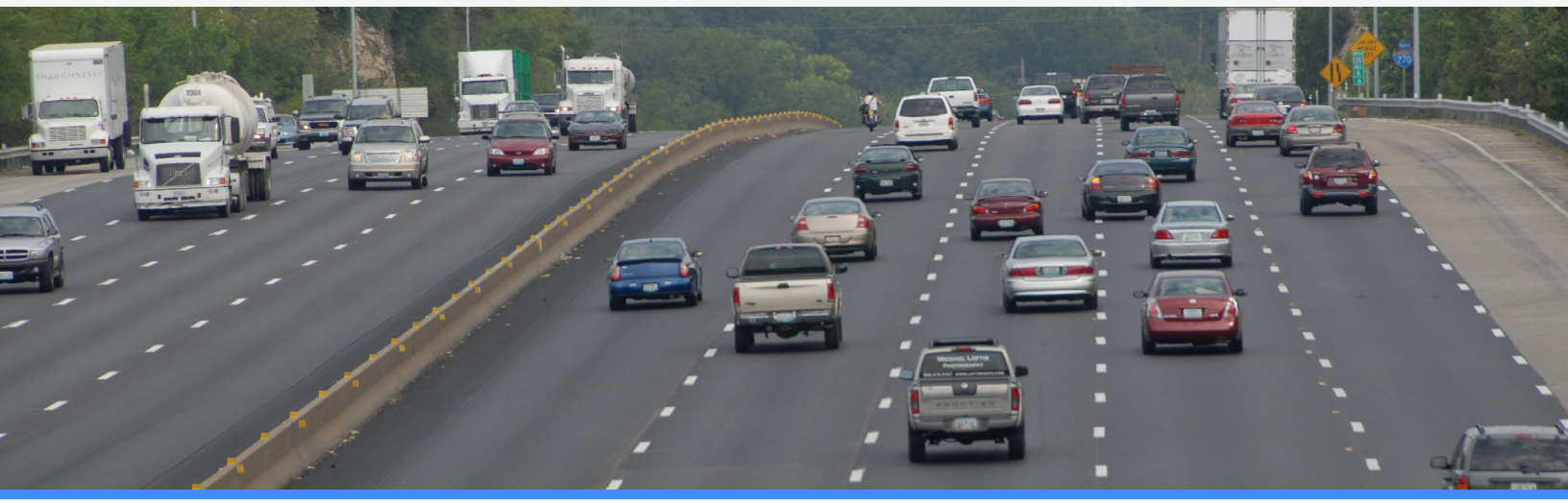
Safe
Enhance safety for all users of the transportation network

Reliable
Maintain a transportation network that is efficient and dependable

Connected
Maximize mobility and connect communities through multimodal transportation options

Innovative
Leverage technology and creative solutions to build a future-ready transportation network

Prosperous
Drive economic growth through transportation investments



Tangible Results

MoDOT will track the progress toward these goals using its publicly available performance management tool, Tracker. Tracker measures are updated quarterly to enhance transparency, evaluate agency performance and support fiscally constrained strategic decision-making. Performance measures are tied directly to MoDOT's values and tangible results within the focus areas of deliver the program, restore operations, work safely for ourselves and the traveling public and focus on customers.



Figure 1: MoDOT Values and Tangible Results

TANGIBLE RESULTS

Be Safe	Moving Missourians Safely and Doing So Safely at MoDOT

MoDOT VALUES

Be Accountable	Providing Outstanding Customer Service
Be Respectful	Delivering Efficient and Innovative Transportation Projects
Be Inclusive	Operating a Reliable Transportation System
Be Bold	Managing Our Assets
Be Better	Stabilizing Resources and Engaging our Workforce
Be One Team	Building a Prosperous Economy for All Missourians



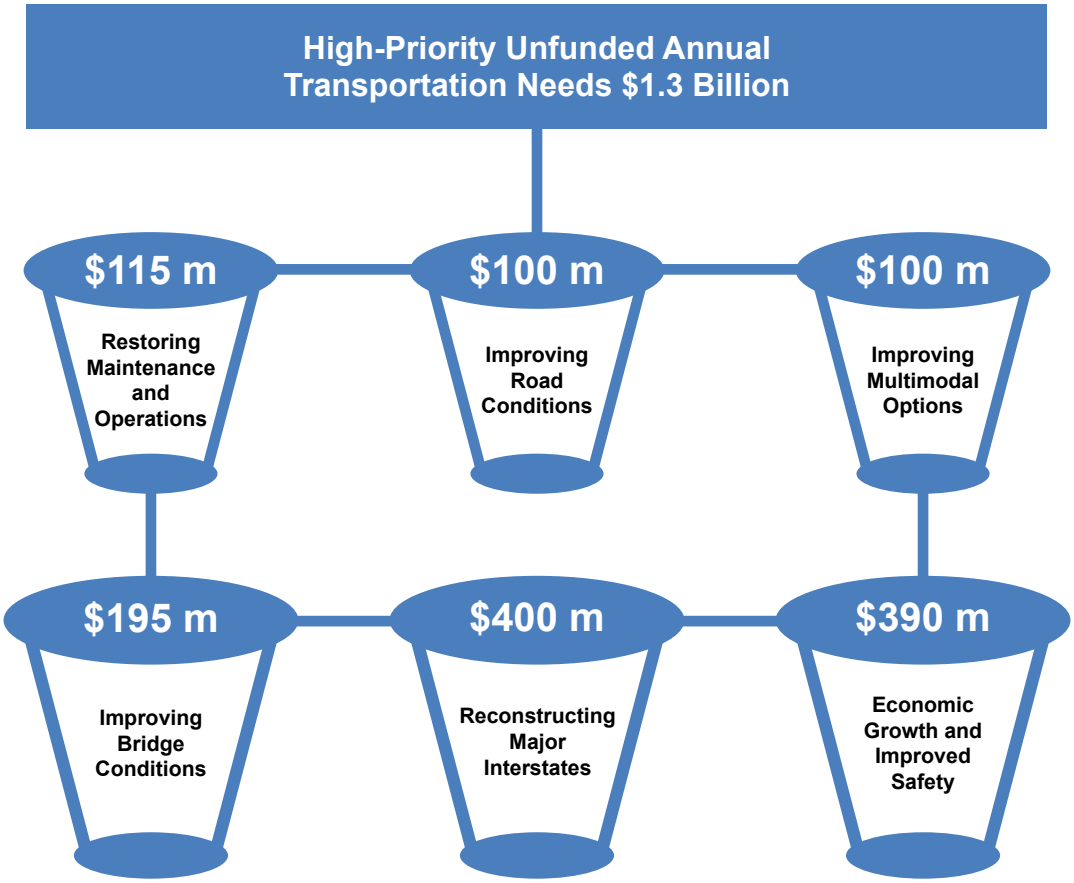


NEEDS ASSESSMENT

HIGH-PRIORITY UNFUNDED NEEDS

Missouri has made historic investments in its transportation system, but current resources require MoDOT to focus on preserving existing roads and bridges. Even with nearly all funding directed to asset management, certain areas may not see improvements beyond basic upkeep. This leaves a number of critical transportation needs unfunded, including safety enhancements, mobility upgrades, economic development projects and multimodal connections. Public input from the LRTP engagement process helped MoDOT prioritize these needs and adjust its Annual High-Priority Unfunded Needs "buckets".

Annual High-Priority Unfunded Needs



Source: MoDOT.



EMERGING TECHNOLOGIES

EMERGING TECHNOLOGY ASSESSMENT

Transportation technologies are advancing rapidly, reshaping how agencies plan, operate and invest in their systems. MoDOT is preparing for this shift by focusing on delivering the program, restoring operations, working safely for ourselves and the traveling public and prioritizing customers, while being informed by strategies in the Transportation Systems Management and Operations (TSMO) Plan. These efforts support innovation to enhance safety, deliver value to customers and maintain a reliable transportation system. MoDOT focuses on emerging technologies that advance the state's long-range goals of using innovation and stewardship to provide a safe, connected and efficient system that strengthens Missouri's economy.

Smart Infrastructure & Intelligent Transportation Systems (ITS)

Leverages sensors, networks and analytics to improve transportation safety, efficiency and sustainability through real-time traffic management and user information.

Smart Freight & Logistics

Uses Artificial Intelligence (AI), Internet of Things (IoT) and data analytics to optimize freight and logistics—from tracking to delivery—improving visibility, reducing costs, boosting efficiency and enhancing customer satisfaction.

Connected Vehicles and Automated Vehicles (CV/AV)

Uses sensors, AI and communication networks to improve safety, efficiency and mobility by analyzing surroundings and interacting with vehicles and infrastructure, reducing accidents, easing congestion and increasing access.

Digital Twins & Predictive Analytics

Virtual models of physical assets that use real-time data for monitoring and forecasting. When paired with predictive analytics, they help MoDOT simulate scenarios, assess risks and plan proactive maintenance.





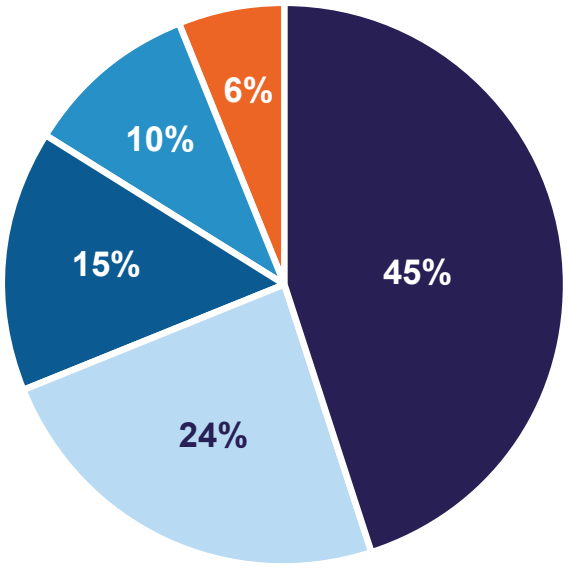
REVENUE FORECAST

CURRENT REVENUES

Missouri's transportation system is vital to the state's economy, safety and quality of life. Current revenue sources are not keeping pace with growing needs. Many funding streams are fixed and do not adjust with inflation and rising fuel efficiency along with the shift to hybrid vehicles (HVs) and electric vehicles (EVs) reduce fuel tax revenues dedicated to roads and bridges. The funding gap is calculated by subtracting forecasted needs from projected revenues. Revenue sources include gasoline and diesel taxes, sales and lease taxes, vehicle registration and licensing fees, and special fuel decal fees for EVs and plug-in hybrid electric vehicles (PHEVs).

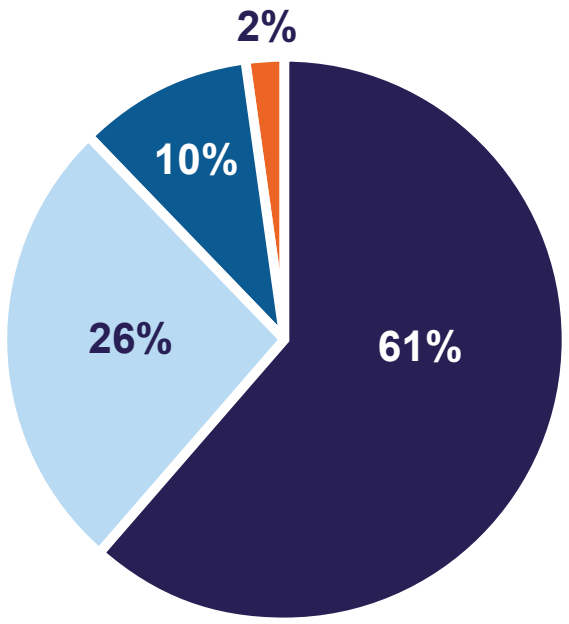
In fiscal year (FY) 2025, MoDOT's transportation revenues included $3.3 billion for roads and bridge improvements and $155 million for multimodal projects.

Transportation Category, FY2025



Road and Bridge Revenue $3.3 Billion

- Federal Funds
- State Motor Fuel Tax
- Motor Vehicle Sales and Lease Tax
- Vehicle and Driver Licensing Fees
- Interest and Miscellaneous



Multimodal Revenue $155 Million

- Federal Funds
- State Motor Fuel Tax
- Motor Vehicle Sales and Lease Tax
- Interest and Miscellaneous

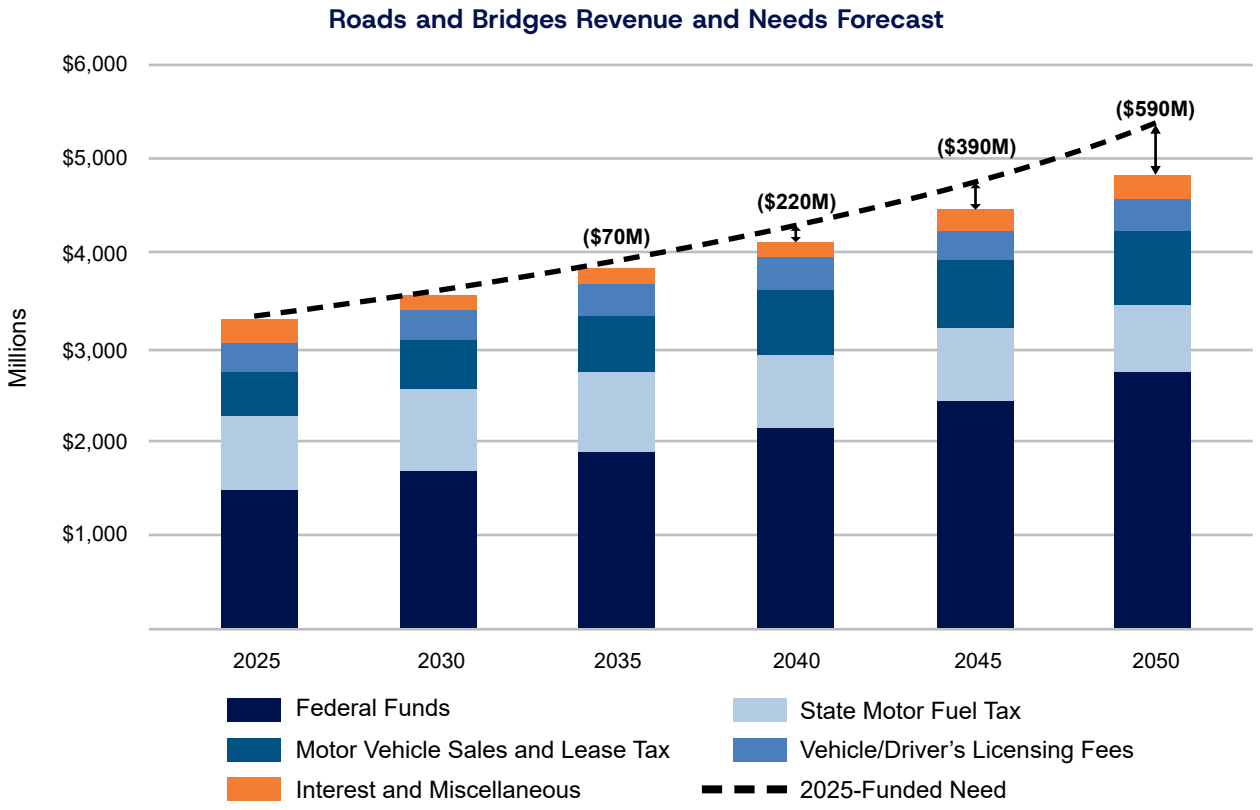
Note: Not to scale; one-time general revenue fund appropriations excluded from roads and bridges and multimodal; percentages may not equal 100% due to rounding

REVENUE AND NEEDS FORECAST

A revenue forecast was performed to estimate transportation revenues for roads and bridges and multimodal programs through 2050. Additionally, a needs forecast through 2050 was conducted for roads and bridges and multimodal programs. The needs analysis considered 2025-funded program needs as well as 2025-funded and unfunded needs. 2025-funded needs include only programs with committed funding, while funded and unfunded needs reflect the full level of investment required to maintain and improve the system.

Revenues for roads and bridges are projected to increase in nominal dollars through 2050, despite a steady decline in fuel tax revenues. Vehicle and driver licensing fees remain relatively flat, while sales and lease taxes and federal funding grow with inflation. Interest and miscellaneous revenues, including special fuel decal fees, are expected to rise as EVs and PHEVs become more common. Motor vehicle sales and lease taxes are projected to surpass fuel taxes as the largest state funding source for roads and bridges by 2047.

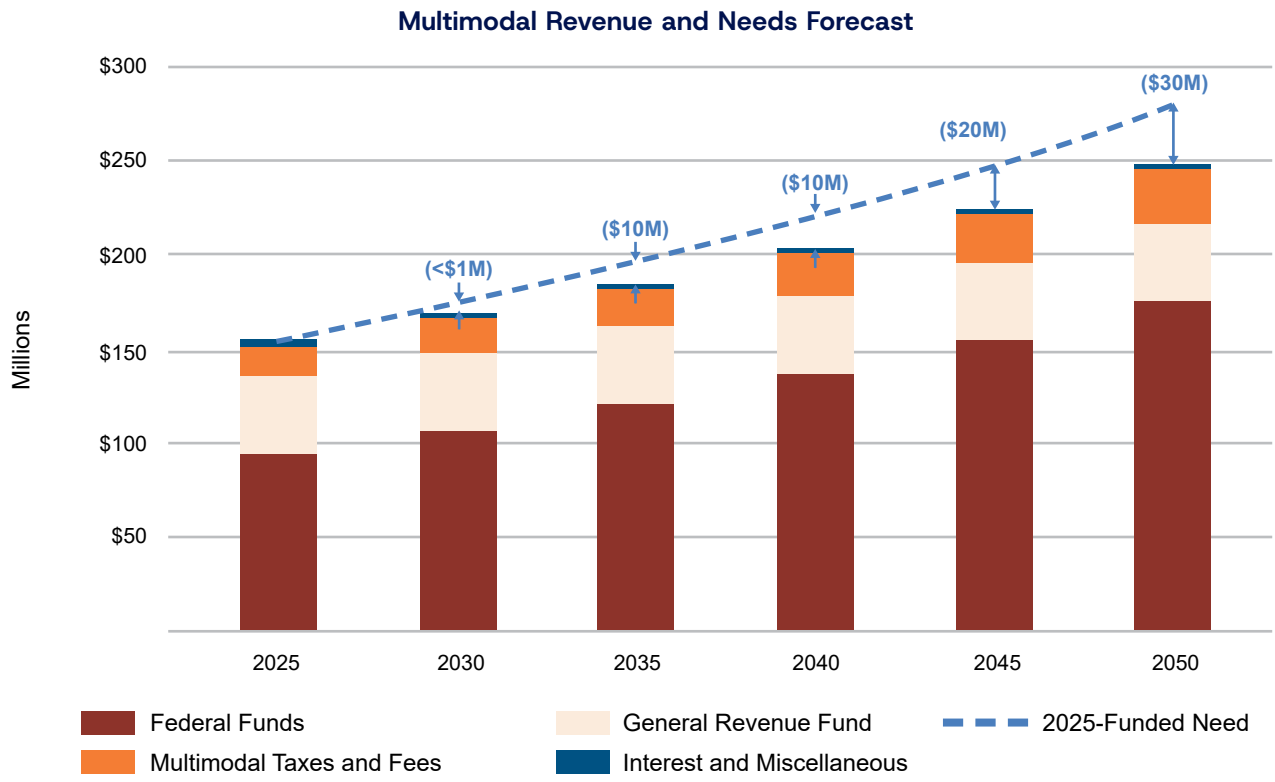
The 2025-funded program need forecast is shown as a line atop the revenue forecast. From 2025 to 2030, revenues will cover the 2025-funded program needs. However, in 2031, a funding gap emerges as cost inflation outpaces revenue growth. The funding gap increases to approximately $590 million per year in 2050.



Source: MoDOT, Historical Actuals; CDM Smith, Forecast.

Multimodal revenues are projected to grow with inflation, driven by federal funds and multimodal taxes and fees. General Revenue Funds and interest and miscellaneous revenues remain at a flat, fixed rate, even as multimodal needs continue to increase between 2025 and 2050.

The 2025-funded program needs forecast for multimodal is shown as a line atop the revenue forecast. Revenues are sufficient to meet the 2025-funded needs through 2029. However, a funding gap begins in 2030 and grows to almost $30 million by 2050.



Source: MoDOT, Historical Actuals; CDM Smith, Forecast.

Missouri faces growing shortfalls that challenge MoDOT's ability to maintain infrastructure and meet future needs. Roads and bridges 2025-funded and unfunded needs result in an immediate funding gap of $1.2 billion in 2025, which rises to $2.7 billion by 2050. Multimodal 2025-funded and unfunded needs result in a funding gap of $100 million in 2025, which grows to $220 million by 2050. Looking at the combined roads and bridges and multimodal 2025-funded and unfunded needs, there is a funding gap of $1.3 billion in 2025. This grows to $2.9 billion by 2050.

Funding Gap Based on Need Scenario ($ in Millions)

	Roads & Bridges		Multimodal		Total	
Year	2025-Funded Programs	2025-Funded + Unfunded Needs	2025-Funded Programs	2025-Funded + Unfunded Needs	2025-Funded Programs	2025-Funded + Unfunded Needs
2025	$ –	$1,150	$ –	$100	$ –	$1,250
2030	$ –	$1,300	< $1	$120	< $1	$1,420
2035	$70	$1,550	$10	$140	$80	$1,690
2040	$220	$1,890	$10	$170	$230	$2,060
2045	$390	$2,280	$20	$190	$410	$2,470
2050	$590	$2,720	$30	$220	$620	$2,940

Note: Numbers rounded to the nearest $10 million

Source: MoDOT.



IMPLEMENTATION **PLAN**

The Action Plan of the Implementation Plan translates the LRTP vision into a practical roadmap, outlining steps to achieve MoDOT's goals through 2050. It highlights critical issues such as safety risks, aging infrastructure, freight bottlenecks and funding constraints, while supporting collaborative planning and coordination among statewide stakeholders. The plan builds on existing programs and policies, including the Freight Enhancement Program, Show-Me Zero safety initiatives and multimodal connectivity strategies.

Recommendation	Associated Goal	Action Item
Short-Term (0-5 Years)		
Assess Future Revenue Scenarios To Inform Planning	Stewardship	Continue revenue impact analysis to forecast future funding gaps.
Advance Show-Me Zero And Vulnerable Road User (VRU) Safety Strategies Through Collaborative Efforts	Safe	Continue supporting and promoting Show-Me Zero and VRU strategies.
Explore Options For A Repository For Local Active Transportation Plans	Connected	Explore options for creating a repository for local active transportation plans to enhance collaboration.
Create A Shared Platform For Active Transportation Resources	Connected	Collaborate with regional partners to identify, compile and share active transportation resources such as plans, data and best practice through a coordinated approach that improves accessibility and supports regional connectivity.
Research Emerging Technologies Pilot Programs	Innovative	Assess potential pilot programs for emerging technologies that emphasize techniques and treatments from innovative initiatives such as Transportation Systems Management and Operations (TSMO) and the Missouri State Transportation Innovation Council (MoSTIC) and identify opportunities for future implementation.
Advance Freight Connectivity And Address Parking Needs	Prosperous	Collaborate with partners to assess freight bottlenecks at key intermodal hubs and explore strategies to improve efficiency and address truck parking challenges, as appropriate and subject to available resources.
Mid-Term (5-10 Years)		
Strengthen Long-Term Transportation Funding Stability	Stewardship	Evaluate strategies to address revenue challenges, including potential alternative funding mechanisms such as mileage-based user fees, tolling and congestion pricing.
Apply Advanced Technologies for Safer, Smarter Mobility	Safe	Leverage smart signal systems, intelligent transportation systems and data analytics to enhance safety and reliability.
Multimodal Focus	Reliable	Integrate additional intermodal connections to better move freight and people via rail, water and air, not just highways.
Leverage Technology and Broadband	Innovative	Look for opportunities to invest in technology to improve infrastructure, including leveraging broadband, intelligent transportation systems and advances in AI solutions.
Evaluate Cost Share Program Requirements	Prosperous	Evaluate cost share program requirements to identify opportunities for implementing strategies that expand fiscally constrained communities' participation in this highly beneficial program.
Long-Term (10+ Years)		
Explore Artificial Intelligence (AI) Technology	Reliable	Investigate, consider impacts and develop a framework which could identify and implement AI-driven traffic and incident management to continue increasing reliability of the system.
Strengthen Transit Funding & Modernize Statutes	Connected	Explore opportunities to strengthen transit funding and review statutory updates to support evolving mobility options.

Our Thanks

Planning Partners

Boonslick Regional Planning Commission
Bootheel Regional Planning and Economic Development Commission
Capital Area Metropolitan Planning Organization
Columbia Area Transportation Study Organization
East-West Gateway Council of Governments
Green Hills Regional Planning Commission
Harry S Truman Coordinating Council
Joplin Area Transportation Study Organization
Kaysinger Basin Regional Planning Commission
Lake of the Ozarks Council of Local Governments
Mark Twain Regional Council of Governments
Meramec Regional Planning Commission
Mid-America Regional Council
Mid-Missouri Regional Planning Commission
Mo-Kan Regional Council
Northeast Missouri Regional Planning Commission
Northwest Arkansas Regional Planning Commission
Northwest Missouri Regional Council of Governments
Ozark Foothills Regional Planning Commission
Ozarks Transportation Organization
Pioneer Trails Regional Planning Commission
South Central Ozark Council of Governments
Southeast Metropolitan Planning Organization
Southeast Missouri Regional Planning and Economic Development Commission
Southwest Missouri Council of Governments
St. Joseph Area Transportation Study Organization

Key Stakeholders

Bikewalk KC
Burlington Northern Santa Fe Railway (BNSF)
City of Kirkwood
Federal Highway Administration (FHWA)
Federal Transit Administration (FTA)
Inland Rivers, Ports, & Terminals, INC. (IRPT)
Kansas City International Airport (MCI)
Kansas City Port Authority (Port KC)
Missouri Association of Councils of Government (MACOG)
Missouri Department of Economic Development (MO DED)
Missourians for Responsible Transportation (MRT)
Missouri Port Authorities Association (MPAA)
Missouri Trucking Association (MoTA)
MoDOT District Offices
Owner-Operator Independent Drivers Association (OOIDA)
Perry County Economic Development Authority (PCEDA)
Springfield-Branson National Airport (SGF)
St. Louis Lambert International Airport (STL)
Union Pacific Railroad (UP)
University of Central Missouri (UCM)
Visit Hermann

2026 Long-Range Transportation Plan

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Source: MoDOT

Chapter 1: Public and Stakeholder Outreach


Source: MoDOT

Stakeholder input is critical to the success of both the Long-Range Transportation Plan (LRTP) and State Freight and Rail Plan (SFRP). The Missouri Department of Transportation (MoDOT) is committed to meaningful engagement throughout the outreach process, giving Missourians the opportunity to help shape future transportation decisions.

Stakeholder engagement for the LRTP and SFRP took place simultaneously, aligning with the key milestones for the development of both plans. This coordinated approach supports compliance with the state's public involvement procedures and Federal Highway Administration (FHWA) regulations under 23 CFR 450.210. To maximize efficiency and leverage resources, the stakeholder engagement established a comprehensive communications framework that includes:

Strategic Touchpoints

These were set at key milestones for feedback from stakeholders. Each touchpoint provided a meaningful chance to influence the direction of both plans.

Specific Key Outreach Activities

These activities were designed to match each stage of both plans, making sure engagement fit the stage of the project.

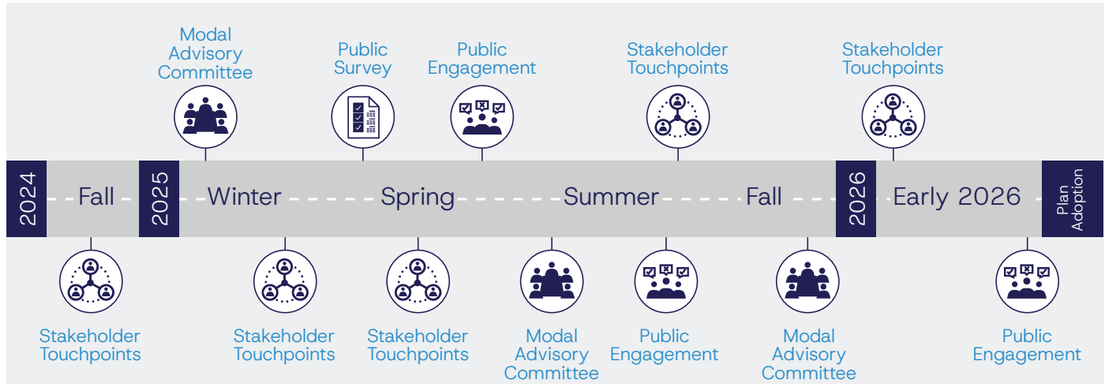
Continuous Adaptation

The engagement approach stayed flexible, using new methods and technologies as the outreach plan moved forward to improve outreach and better capture community input.

Broaden Outreach

Data was collected and reviewed to support broad, inclusive outreach, with a focus on geographic balance.

LRTP Public Involvement Overview



LRTP Public Involvement Activities

Agency Coordination

Agency coordination played an important role in developing MoDOT's LRTP and SFRP, helping transportation strategies reflect a range of expertise and align with state and federal priorities. The Study Team initiated the process by providing an overview of the LRTP update and inviting both FHWA and FTA to participate in the MAC. This proactive involvement enabled the agencies to offer technical guidance and highlight potential issues early, thereby strengthening the plan's quality, credibility and federal compliance.

Stakeholder Engagement

The Study Team worked closely with a wide range of stakeholders through strong agency coordination and collaboration. This approach helped bring key perspectives into the study at every stage. During this process, the Study Team engaged with:

- **Director's Advisory Committee**
- **Metropolitan Planning Organizations (MPOs)**
- **Regional Planning Commissions (RPCs)**
- **Missouri Department of Transportation (MoDOT) Districts**
- **High-Priority Unfunded Needs (HPUN) Meetings**
- **Modal Advisory Committee (MAC):** Consisted of a large group of stakeholders that represented all transportation modes
  - **Executive MAC:** A subset of the MAC that offered targeted input on LRTP components

Director's Advisory Committee Meetings

The Study Team presented and/or provided project updates during MoDOT's Director's Advisory Committee meetings. Details of the information presented at these meetings are as follows:

1 May 28, 2025

- Provide relevant project updates for both LRTP and SFRP
- Update on the project components and schedule
- Present an overview of the draft goals
- Summarize the gathered feedback from freight outreach

2 Oct. 29, 2025

- Provide updates on the following project items:
  - Number of public survey responses
  - Virtual Public Information Meeting (VPIM) and State Fair overview
  - High-level MAC meetings summary
  - Scenario planning overview
  - SFRP-specific updates
  - Public comment period

Metropolitan Planning Organization and Regional Planning Commission Coordination

The Study Team provided project updates to Missouri's MPOs and RPCs during various in-person and virtual meetings. This included attending two coordination meetings with the Missouri Association of Councils of Governments (MACOG), a statewide association that includes Missouri's 16 RPC's. The Study Team also attended the MoDOT Statewide Planning Partners Meeting, an annual event hosted by MoDOT for its MPO's, RPC's and other transportation industry partners. MoDOT also hosts monthly virtual calls with its MPOs and RPCs. Details of each of these meetings are as follows:

1 Oct. 29, 2024

MACOG Meeting – Introductions and present an overview of the LRTP and SFRP

- Outline the public and stakeholder outreach framework
- Review next steps in the planning process
- Discuss regional challenges:
  - Roadway expansion and funding
  - Multimodal and access issues
  - Economic development and planning
- Discuss regional opportunities:
  - Planning grants and land use
  - Quality of place and recreational opportunities
  - Economic development through trails and ports

2 Feb. 27, 2025

Statewide Planning Partner Meeting - Present on draft goals and gather input including:

- Tech-driven change and funding/ workforce challenges
- Multimodal investment, technology and maintenance focus
- Goals aligned but limited by funding and workforce constraints

3 Oct. 7, 2025

MACOG Meeting – Review of the scenario planning process and selected scenarios

- Highlight feedback on multimodal investments, grant strategies and coordination with the United States (U.S.) Economic Development Administration (EDA), including support for freight, safety and infrastructure
- Discuss future planning scenarios

Ongoing

- Provide project updates through monthly MoDOT Planning Partners calls

1 Feb. 11, 2026

- Meramec RPC Technical Advisory Committee

2 Feb. 19, 2026

- Statewide Planning Partner Meeting

3 March 3, 2026

- Meramec RPC Multimodal Technical Advisory Committee

4 March 4, 2026

- Mid-Missouri RPC Technical Advisory Committee

District Meetings

To better understand the specific needs of MoDOT's districts, the Study Team held two district outreach meetings. Both sessions focused on collaborating with district staff to help shape future transportation priorities. A total of 70 participants attended, including district engineers, planners and specialists from all seven MoDOT districts. The first district meeting was held on July 21, 2025 and the second on July 31, 2025.

Identify top themes: aging infrastructure, safety and growing multimodal needs

Prioritize asset management and system preservation

Recognize that safety and preservation outrank capacity expansion

Call for full interstate and bridge reconstruction in many districts

Focus safety efforts on pedestrians, bicyclists and rail crossings

Address the need for sustained funding and corridor-wide safety upgrades

Acknowledge ongoing challenges, including congestion and unfinished corridors

Resolve freight bottlenecks and truck parking shortages

Consider transit access needs, including urban expansion and rural service limitations

Assess resiliency risks, such as flooding and low-water crossings

High-Priority Unfunded Needs Meetings

During a series of public meetings regarding Missouri's HPUN, presenters provided a short update on the project. A total of ten meetings were held covering each of the seven MoDOT Districts. Details of the information presented at these meetings are as follows:

1-10 Aug. 5 – Aug. 28, 2025

- Present the plan's draft goals and objectives
- Provide general description of an LRTP
- Explain the connection between the LRTP and HPUN


Source: MoDOT

Modal Advisory Committee Meetings

The MAC was established to support the development of the LRTP. The committee comprised 32 representatives from major transportation modes and related sectors, including trucking, aviation, waterways, freight and passenger rail, transit, bicycle and pedestrian interests, planning partners, FHWA and economic development organizations. A list of the MAC members is provided in **Appendix A**. Details of each MAC meeting are as follows:

The MAC was convened to provide modal perspectives, needs and priorities to be incorporated throughout the planning process.

1 July 7, 2025

- Focus on existing conditions
- Draft LRTP goals and objectives
- Overview of freight cargo flows and bottleneck
- Summary of stakeholder input from earlier outreach efforts

2 Aug. 5, 2025

- Review updated goals and objectives
- VPIM 1 feedback
- District meeting themes
- Identification of transportation needs
- Overview of upcoming outreach activities

3 Oct. 16, 2025

- Summary of the Second Executive MAC Meeting
- Feedback from the Missouri State Fair on the LRTP goals and objectives
- Summary of modal group meetings
- Input from the HPUN meetings
- Introduction to scenario planning, including investment policies and strategies for the next phase

4 Nov. 21, 2025

- Develop policy levers for selected scenarios to guide the scenario planning process

5 Feb. 2, 2026

- Overview of the content that will be presented during VPIM 2

Executive Modal Advisory Committee Meetings

An Executive MAC was also formed, consisting of approximately 18 members. The Executive MAC is a smaller subset of the larger MAC with one representative from each transportation mode. The Executive MAC offered more focused input on the HPUN list, scenario planning and investment strategies. A list of the Executive MAC members is provided in **Appendix A**. The Executive MAC met three times throughout the study; details of each meeting are as follows:

1 May 29, 2025

Provided an overview of the LRTP and SFRP, along with the draft LRTP goals.

2 Oct. 15, 2025

Reviewed MoDOT's HPUN needs, the scenario planning process and feedback from the MACOG meeting on the scenarios.

3 Nov. 13, 2025

Focused on the final scenarios, investment funding and associated policies.



Source: MoDOT

Public Engagement

In addition to targeted stakeholder engagement, the Study Team actively gathered input from the public through a variety of outreach methods, including pop-up events, VPIMs and surveys. These efforts helped capture the priorities and needs of Missourians, making sure their voices were reflected in the vision for Missouri's transportation system.

Pop-Up Events

To engage the public, the study team hosted a pop-up booth at the Missouri State Fair held Aug. 7-17, 2025 in Sedalia, Missouri to introduce the LRTP and SFRP, share information about Missouri's transportation system and gather input to help guide plan development. Volunteers were available to answer questions, explain the goals and objectives of the LRTP and encourage participation through information boards, fact sheets, promotional items, comment cards and a public survey.

17 Comment cards were received

321 Survey responses were received

- **Survey results showed strong support for:**
  - Improved safety
  - Maintaining existing infrastructure
  - Better community connections
  - Long-term funding
- **Comment cards highlighted interest in:**
  - Public transit expansion
  - Passenger rail expansion
  - Improved roadway conditions
  - Pedestrian and cyclist safety



Source: CDM Smith

Virtual Public Information Meetings

The Study Team hosted two VPIMs, which recreated the experience of in-person public meetings, to gather input on transportation priorities for the LRTP and SFRP. During the VPIMs, participants could explore virtual stations, answer optional questions and submit digital feedback. Both meetings were held on CDM Smith's Gather 360-degree virtual platform, were accessible through the project website and provided materials in English and Spanish. The VPIMs introduced updates to the LRTP and SFRP, shared existing conditions and draft plans and gathered community feedback to help guide Missouri's transportation planning over the next 25 years. Details for the two VPIMs are as follows:

1 Open from June 2 – 30, 2025

1,179 Website visits

89 Optional sign-ins

- **Outreach methods: email blasts (E-blasts) to over 393 stakeholders, newspaper ads (six publications) and Facebook and Instagram posts**
- **Eight topic stations: goals, system overview, trends, performance, technology, freight and rail, study schedule and public comments**
- **Public comment summary:**
  - Top priorities include safety, accessibility, multimodal travel and maintaining roads and bridges or assets
  - Concerns include aging infrastructure, limited transit and congestion
  - Preference for maintaining and modernizing roads, bridges and transit over highway expansion
  - Support for expanded transit, passenger rail, bike lanes and sidewalks
  - Freight and rail priorities include better passenger service, safer crossings and reliable deliveries
  - Cautious adoption of new technologies
  - Overall call for sustainable, connected and resilient transportation investments across Missouri

2 Open from Mar. 3 – Apr. 4, 2026

1,416 Website visits

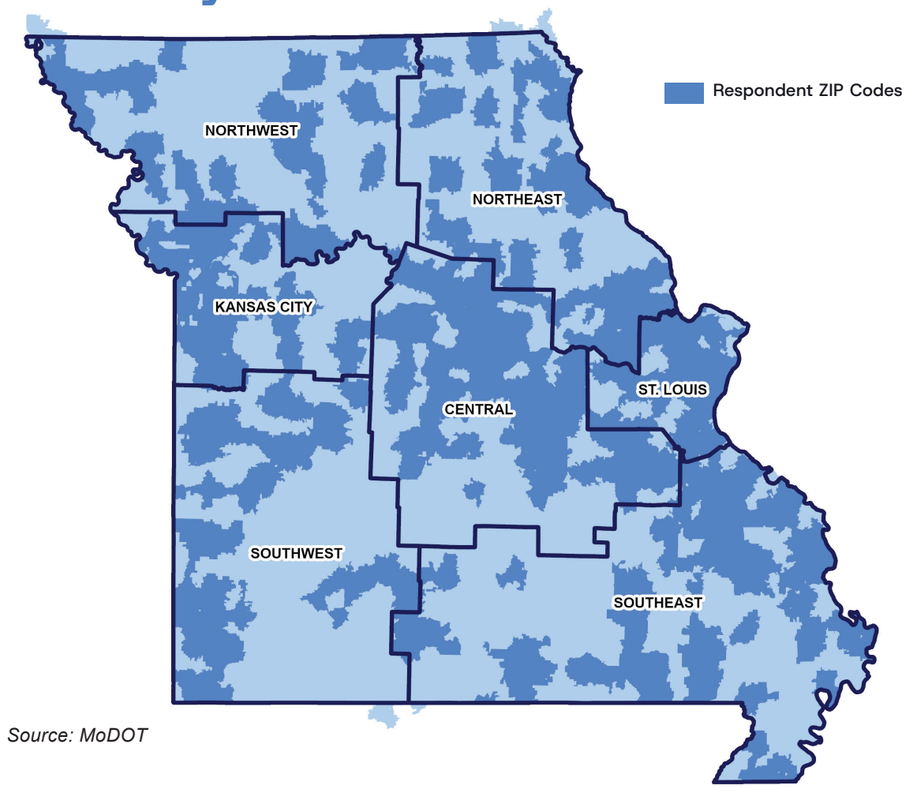
32 Optional sign-ins

- **Outreach methods: E-blasts to 495 stakeholders and Facebook and Instagram posts**
- **Seven stations for the draft LRTP and five stations for the draft SFRP.**
- **Public comment summary:**
  - Advancing corridor-specific transportation improvements
  - Increasing frequency of Amtrak Missouri River Runner service
  - Opposing increases to interstate speed limits
  - Prohibiting trucks in the third lane on I-70
  - Supporting the Statewide Active Transportation Plan
  - Opposing elimination of the income tax
  - Establishing a centralized repository for active transportation plans and resources



Source: CDM Smith

Respondent Distribution Across Missouri for All Surveys Conducted



Source: MoDOT

Surveys

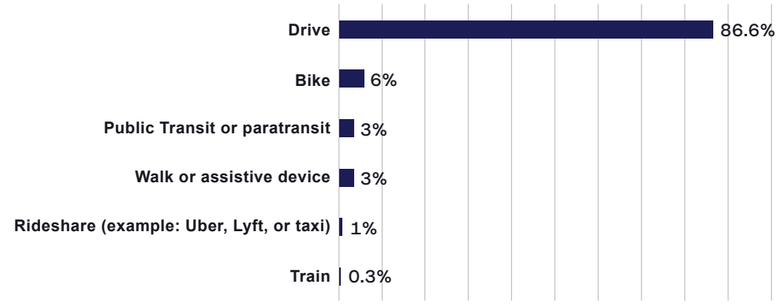
Two surveys were conducted to gather public input during the planning process. Details for each of the surveys are as follows:

1 Mar. 13 – Apr. 25, 2025:

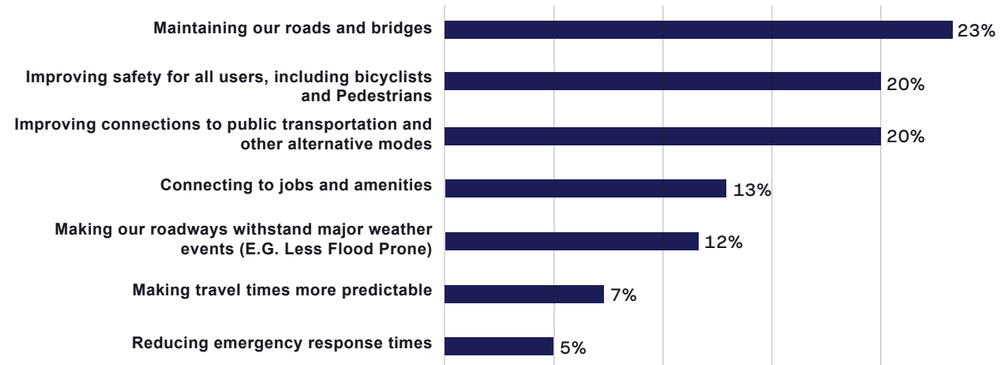
- Survey topics:
  - Regional transportation priorities
  - Local issues and needs
  - Modes used and commute patterns
  - Desired future improvements

2,000+ Survey responses collected

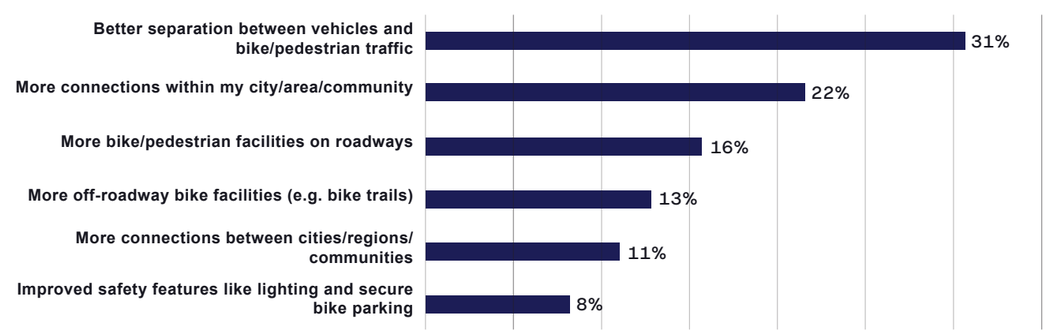
- Survey Questions:
  - What form of transportation do you use most frequently?



  - Choose the top 3 transportation system improvements you would like to see.



  - Which bike/pedestrian improvements are most important to you? (select up to two)



- What are the three most significant transportation issues affecting your region?

Response	Percent
Road And Bridge Maintenance	22%
Access To Transportation Options	20%
Safety	19%
Traffic Congestion	14%
Population And Employment Growth	10%
Other	5%
Emergency Preparedness	4%
New Technology Advancements	4%
Delivery Of Packages And Other Goods	3%
Total	**100%**

- Survey response results:
  - Top priorities include road and bridge maintenance and safety and access to travel options
  - Driving remains the dominant mode
  - Transit viewed as limited in coverage and reliability
  - Key choice factors are availability, reliability, accessibility and location
  - Most commutes are moderate or not applicable
  - Strong support for bike and pedestrian improvements
  - Focus on infrastructure upkeep, safety and dependable travel
  - Less emphasis on transit expansion or long distance travel

2 Aug. 7 – 17, 2025:

300+ Survey responses collected

- Survey topics:
  - Suggested changes to LRTP goals
  - Local transportation priorities
  - System needs and improvement preferences
  - Themes of funding, equity and accountability
- Survey response results:
  - General support for LRTP goals
  - Top priorities include safety, road and bridge maintenance and improving multimodal community connectivity
  - Support for optimizing and funding the existing system over large scale expansion and clear, practical, fiscally responsible funding strategies
  - Balanced feedback between multimodal/environmental priorities and traditional infrastructure focus
  - Consistent emphasis on vulnerable road user safety (VRU), people-focused design and efficient maintenance
  - Cautious sentiment toward connected and automated vehicle technology
  - Desire for system preservation alongside modernization

SFRP Public Involvement Activities

While the LRTP addresses broad statewide transportation goals and multimodal needs, the SFRP focuses specifically on freight and rail priorities. Stakeholder engagement was central to the SFRP's development, following a collaborative approach that drew on industry experts, modal advisory committees and public feedback. This process supported coordination with the LRTP and alignment with Missouri's long-term transportation vision, while providing targeted insights to assess infrastructure needs and guide responsive recommendations. Stakeholders engaged in the SFRP included representatives from trucking, rail, waterways and aviation sectors. For more detailed information on SFRP outreach, refer to **Appendix F** of the SFRP.

Trucking

Feedback from the trucking industry was collected through a series of meetings and a survey. Additional information on the truck parking activities can be found in the **SFRP 4.02 Truck Parking Technical Memorandum**.

Through these discussions, truck parking consistently emerged as a key concern, shaping priorities during the early stages of the plan's development.

Truck Driver Survey for Missouri Truck Parking Study (March 2025)

A survey was conducted from March 3-16, 2025 with 84 respondents which revealed the following:

- Statewide need for more truck parking
- 70% spent over 30 minutes searching for parking
- Frustration with paid third-party parking and capacity limits
- Desire for early notification of parking availability
- Priority amenities: restrooms and lighting

In-Person Engagement (Summer 2025)

In-person industry engagement was conducted to supplement and validate survey data. Multiple meetings were held and a total of 37 participants were engaged throughout all efforts; the findings for each are as follows:

Trucking Roundtable: This meeting was held on July 11, 2025 via an online meeting. It included eight attendees, five of whom represented the trucking sector. Four of those five participants are active, long-term, long-haul truck drivers. This meeting validated the survey findings, with participants emphasizing:

- The need for additional truck parking over enhanced amenities
- Frustration with limited parking availability near industrial areas and distribution centers
- Concerns related to third-party parking options

Truck Modal Meetings: The meeting was held on June 16, 2025 via an online meeting. It included 16 attendees, seven of whom represented the trucking sector, all at the management level. This meeting further reinforced feedback, highlighting the importance of early coordination with industry stakeholders, with participants emphasizing:

- Concerns about the shortage of safe and convenient truck parking
- Evolving driver expectations
- Global trade distribution
- Emerging technologies

Missouri Trucking Association Safety Council Meeting: The in-person meeting was held on July 17, 2025. It included approximately 20 attendees, the majority of whom were safety officers at motor carrier companies based in or operating terminals in Missouri. The discussions addressed parking amenities such as lighting and restrooms. When presented with trade-offs, the group unanimously prioritized increasing the number of parking spaces over amenity improvements.

One-On-One Discussions With Law Enforcement: The interviews were conducted in mid-Oct. 2025 via telephone and indicated that truck parking along I-70 generates relatively few service requests and presents a low concern for cargo theft.



Source: MoDOT

Rail

Rail engagement included outreach to Class I railroads, short line railroads, passenger rail representatives and rail-focused advisory groups through virtual meetings. The meetings focused on gathering feedback from each Class I railroad individually on rail trends and outlook and rail priorities.

Grade crossing safety, infrastructure constraints and the value of early and ongoing coordination with MoDOT were consistently identified as key issues across the rail network.

Class I Railroads (Aug. 27 2025 – Sept. 5, 2025)

This engagement included:

- Burlington Northern Santa Fe Railway (BNSF)
- Canadian Pacific Kansas City (CPKC)
- Norfolk Southern (NS)
- Union Pacific Railroad (UP)

This engagement emphasized the need for:

- Improved grade crossing safety
- Closures and grade separations to provide the largest safety benefits
- Advanced technologies to address safety and infrastructure challenges
- Early coordination with MoDOT

Participants also identified infrastructure limitations creating operational bottlenecks including:

- Bridge clearance restrictions
- Drainage issues
- Capacity constraints
- Substandard interchanges

Short Line Railroads (Sept. 3, 2025 and Sept. 8, 2025)

This engagement identified priorities that differed from those of Class I carriers, focusing on:

- Grade crossing maintenance
- Aging infrastructure
- Rising costs associated with signal and track improvements
- Capacity constraint
- Operational inefficiencies
- Competition from other transportation modes
- Need for sustainable funding
- Continued coordination with MoDOT

Passenger Rail

The engagement was conducted through the Missouri Rail Passenger Advisory Committee (MORPAC) meetings from Dec. 2024 to Dec. 2025. An Amtrak station manager survey was distributed and remained open from Dec. 2024 to March 2025. The meetings and survey focused on:

- Platform improvements
- Service frequency, on-time performance
- First- and last-mile connectivity
- Fare affordability

Waterways

Waterways stakeholders were engaged through coordination with the Missouri Port Authorities Association (MPAA), modal meetings and the development of port-specific outreach materials. Waterways stakeholders emphasized the critical but often underrepresented role of waterborne freight in Missouri's transportation system and the need for its impacts to be clearly reflected in the SFRP.

The Study Team participated in two MPAA meetings in 2025 with port directors representing nearly all public port authorities in Missouri, which included:

1 June 26, 2025

Introduced the SFRP and outlined upcoming engagement efforts

2 July 2, 2025

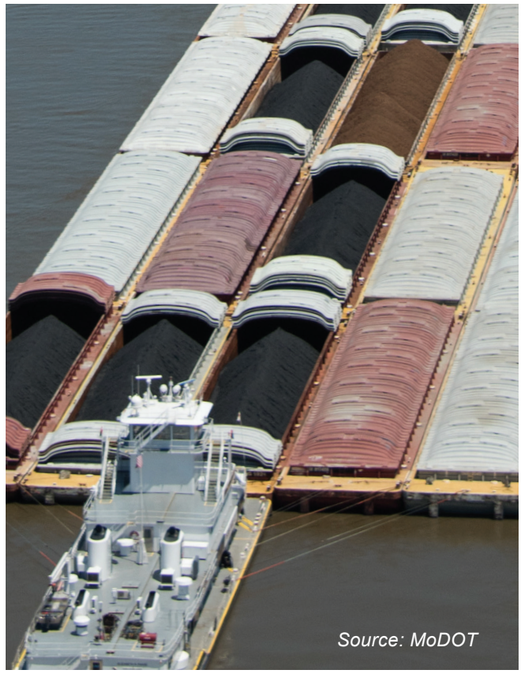
Shared preliminary findings from the Missouri Public Ports Economic Impacts Study and held during MPAA's annual summer meeting in Kansas City.

Participants at both meetings provided feedback including:

- How to represent port activity and economic impact in the SFRP
- Preference for highlighting total economic output, not added value alone

Key concerns raised included:

- Aging lock and dam infrastructure on the Upper Mississippi River
- Environmental impacts on port operations and system reliability including flooding and drought



Aviation

1 June 23, 2025

The Study Team conducted one-on-one meetings with aviation stakeholders such as St. Louis Lambert International Airport (STL), Kansas City International Airport (MCI) and Springfield Branson Airport (SGF). The aviation stakeholders highlighted the following:

- Aviation cargo demand strongly tied to growth in manufacturing and distribution centers
- Tonnage and cargo value identified as key metrics for SFRP aviation freight
- Federal Aviation Administration (FAA) funding requirements and limited state funding constrain facility improvements
- Major automation and AI impacts not expected in Missouri aviation in the near term
- Physical roles like cargo offloading largely protected from automation



Freight Attractors and Generators

1 April 2025

The Study Team conducted one-on-one discussions with statewide freight-attraction organizations. Details of these discussions are as follows:

- Freight attraction organizations engaged: St. Louis Freightway, Kansas City SmartPort (KC SmartPort), Missouri Department of Economic Development (MO DED) and Missouri Partnership
- Discussion focuses on targeted industries, regional strengths and challenges, multimodal connectivity, workforce needs and transportation system performance

Key Themes:

- Automation is occurring primarily within manufacturing facilities rather than in freight transportation
- Congestion levels are relatively low across the state
- Intermodal access is essential to support new businesses and maintain efficient freight movement

Chapter 2: Existing System Trends and Conditions



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

40.1 Million
Average Annual Transit Trip between 2019 and 2023

23.5 Minutes
Average Commute Time

120
Public-Use Airports

4
Amtrak Routes

33,814
State-Maintained Centerline Miles

18
Interstates

2
Navigable Rivers

21
Freight Railroads

13
Amtrak Stations

10,427
State-Maintained Bridges and Culverts

600+
Miles of Bike Trails

19
River Ports

1,050
Navigable River Miles

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



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.

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]

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

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

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

40,800,000
Public Transit Ridership

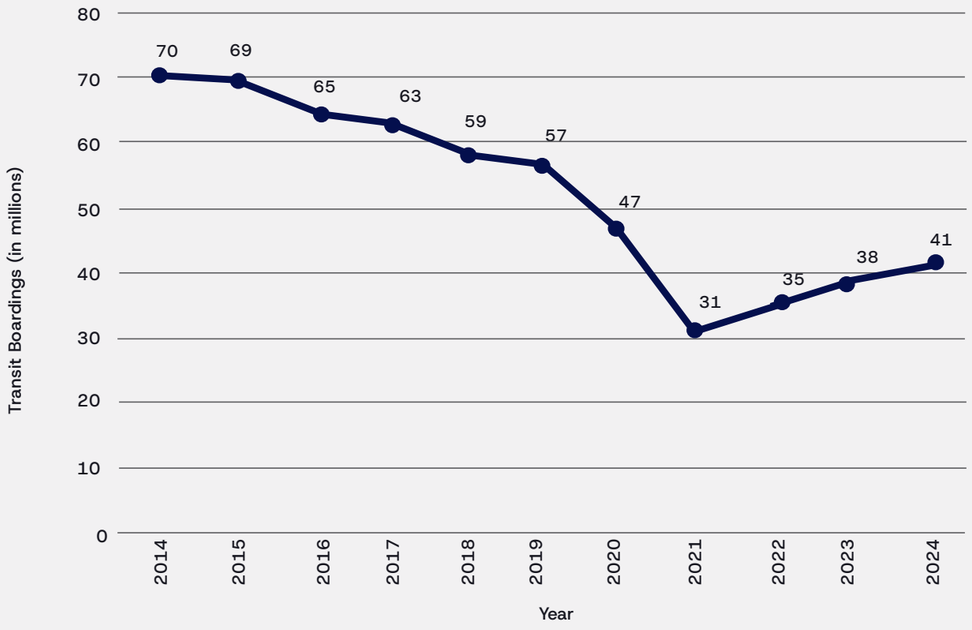
Source: MoDOT, 2024.

[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

St. Joseph Transit "The Ride"
- Eight routes
- Mon. through Fri. from 8:30 a.m. to 4:30 p.m.
- Sat. from 9 a.m. to 1:10 p.m.
- Services for mobility limited passengers

Columbia Transit
- Six fixed routes
- Mon. through Sat. from 6 a.m. to early evening
- Paratransit for elderly and mobility limited passengers

Metro Transit in St. Louis
- Sixty routes
- Two MetroLink light rail lines
- Seven days a week from 5 a.m. to 11 a.m.
- Call-A-Ride paratransit services for elderly and mobility limited passengers

City of Independence
- IndeBus: Previous fixed route bus system – now replaced by IRIS
- RideKC – Paratransit service
- IRIS: On-demand app-based service
- Mon. through Sat. 6 a.m. to 6 p.m.

The Charley and Ride St. Charles
- The Charley provides in-town public transportation service
- The Charley operates Mon. through Fri. from 9 a.m. to 4 p.m.
- The Ride St. Charles (STC) – service to and from the Metro Route 34 – Earth City/Rider Trail Stop
- The Ride STC operates Mon. through Fri. from 6:30 a.m. to 6 p.m.



The Kansas City Area Transportation Authority (KCATA)
- Sixty-eight routes
- Two rapid bus routes
- Seven days a week from 5:30 a.m. to 1 a.m.
- Paratransit for elderly and mobility limited passengers
- MetroFlex, a demand-response bus service vanpool program

Cape Girardeau County Transit Authority
- Two bus routes within City of Cape Girardeau
- Regular hours of operation: Mon. to Fri. from 8 a.m. to 4 p.m.

Demand response service hours of operation:
- Mon. through Thurs. from 5 a.m to 10 p.m.
- Fri. and Sat. from 5 a.m. to 12 a.m.
- Sun. from 5 a.m. to 2 p.m.

Joplin – Sunshine Lamp Trolley
- Three one-hour loop routes that cover nearly the entire city
- Mon. through Fri. from 6 a.m. to 6 p.m.
- On-call and paratransit for elderly and mobility limited passengers through Metro Area Public Transit (MAPS)

City Utilities Transit in Springfield
- Fourteen day routes
- Four evening routes
- Seven days a week from Mon. through Sat. from 6 a.m. to 10:10 p.m.
- Sun. and Holidays from 8 a.m. to 5:10 p.m.
- Offers paratransit services for elderly and mobility limited passengers through Access Express

Jefferson City "JeffTran"
- Nine routes
- Mon. through Fri. from 6:40 a.m. to 6 p.m.
- Paratransit services for elderly and mobility limited passengers through Handi Wheels

Source: MoDOT.

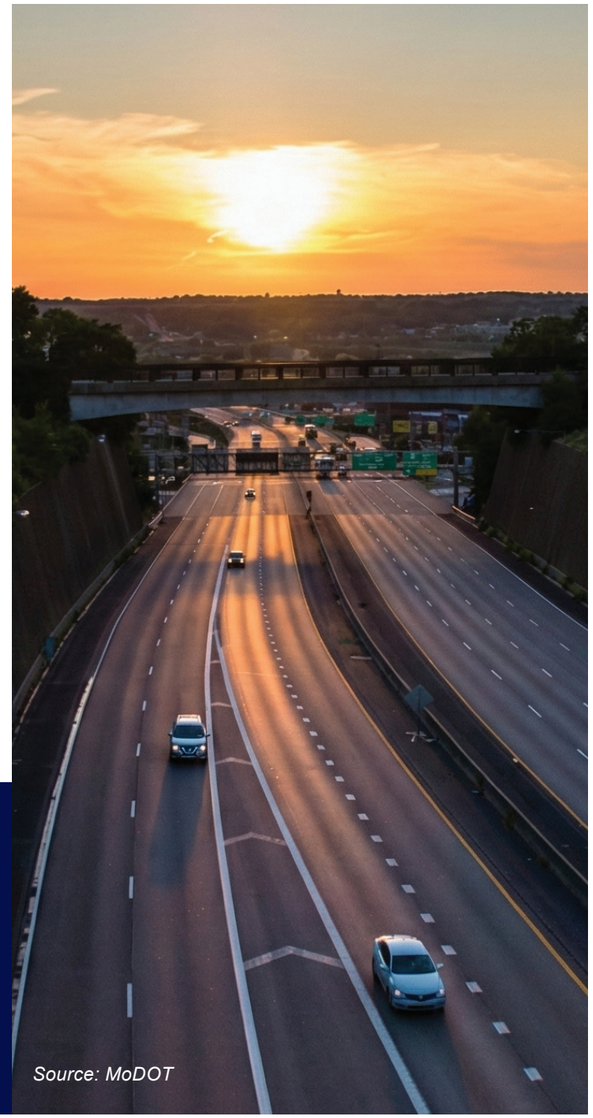
[12]U.S. Department of Transportation (USDOT) FTA, "NTD Transit Agency Profiles", accessed June 5, 2025, https://www.transit.dot.gov/ntd/transit-agency-profiles?field_geography_target_id=All&field_address_administrative_area=MO&combine=.

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.

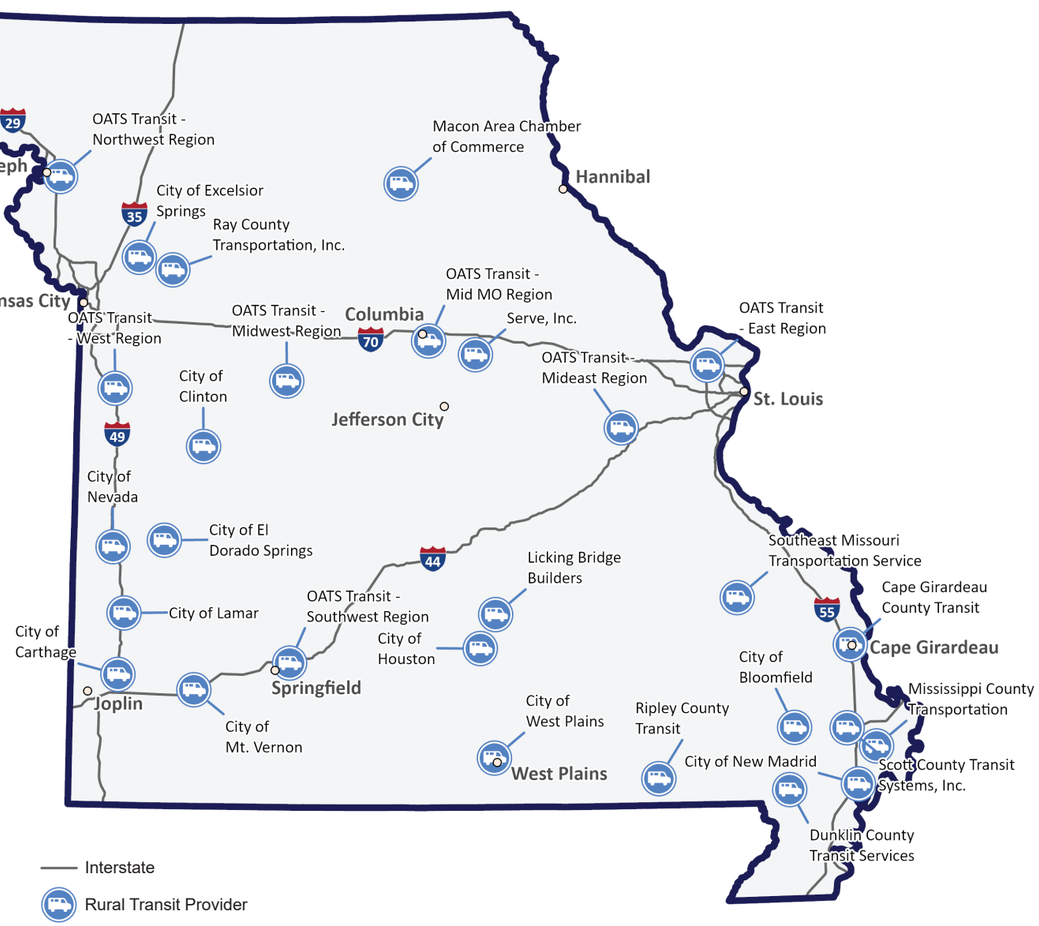
Services offered vary and include local buses, intercity bus services, taxi coupon programs and paratransit (which is a service that does not follow fixed routes or schedules). Transit services are available throughout the state; however, depending on the county, service may be limited in days and hours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

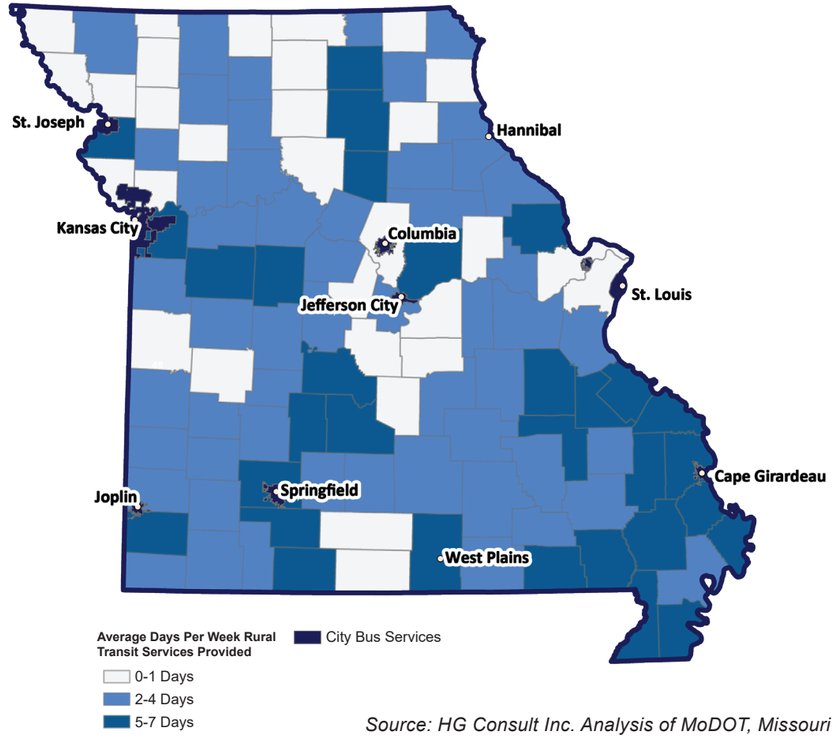


Source: MoDOT, Missouri Rural Transit Map, 2025.

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.

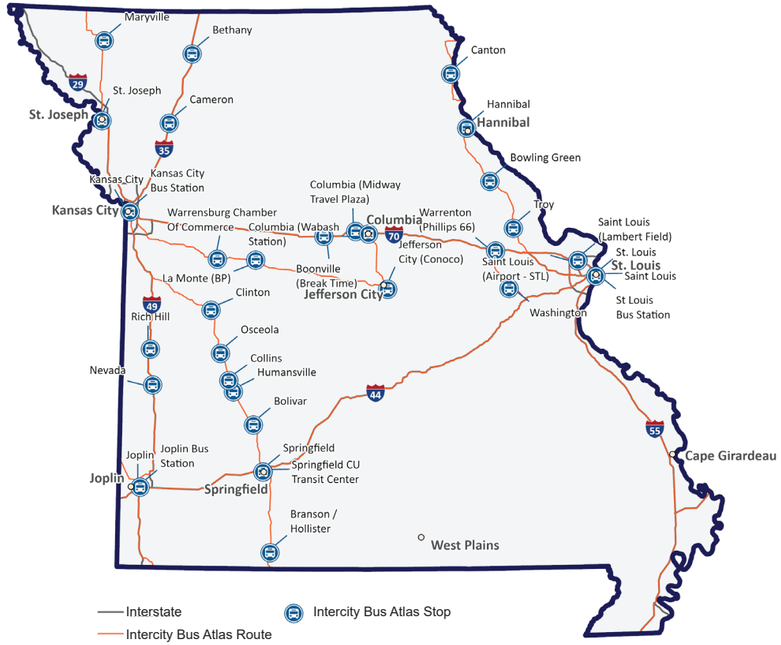
Intercity Bus

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. MoDOT is currently conducting a Statewide ICB Needs Assessment to help determine the level of need and current utilization of ICB service in Missouri.

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/modoticbreport-final042710ch1-2.pdf.

[15]HDR Engineering, Inc., "Missouri Intercity Bus Study," April 27, 2010, https://www.modot.org/sites/default/files/documents/multimodal/modoticbreport-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.

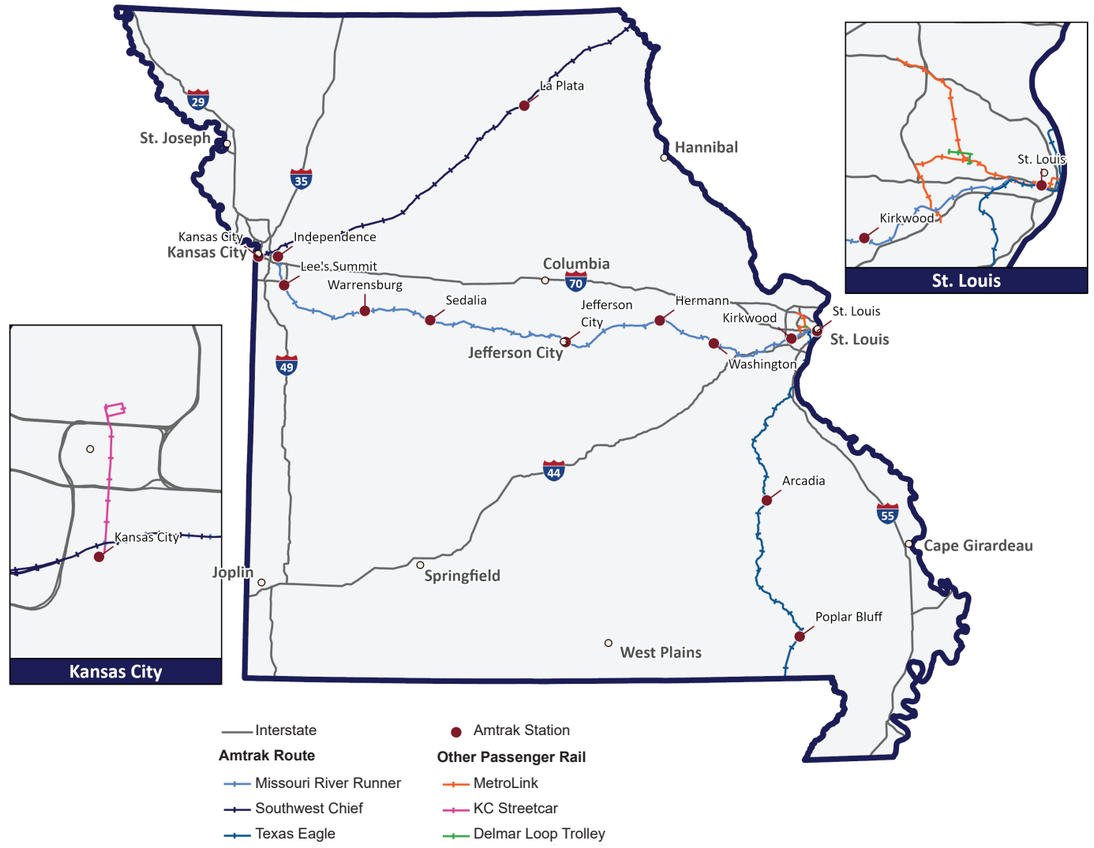
The Missouri River Runner operates two round trips per day across 283 miles of track between the Gateway Transportation Center in St. Louis and Union Station in Kansas City, providing connection to the Southwest Chief and Texas Eagle routes, with stops in Kirkwood, Washington, Hermann, Jefferson City,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



Source: MoDOT

[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]U.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



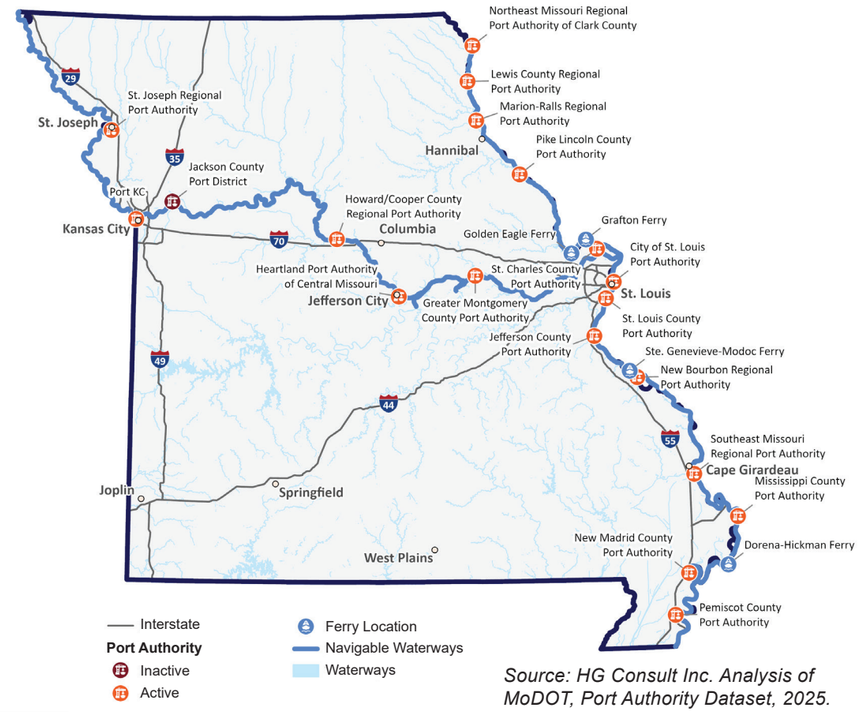
Source: U.S. Maritime Administration (MARAD), U.S. Marine Highway Program Routes Map, 2025

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



Source: HG Consult Inc. Analysis of MoDOT, Port Authority Dataset, 2025.

[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, UP, NS, CSX Transportation (CSX) and 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



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

Figure 22 – Missouri's Class I Freight Railroads



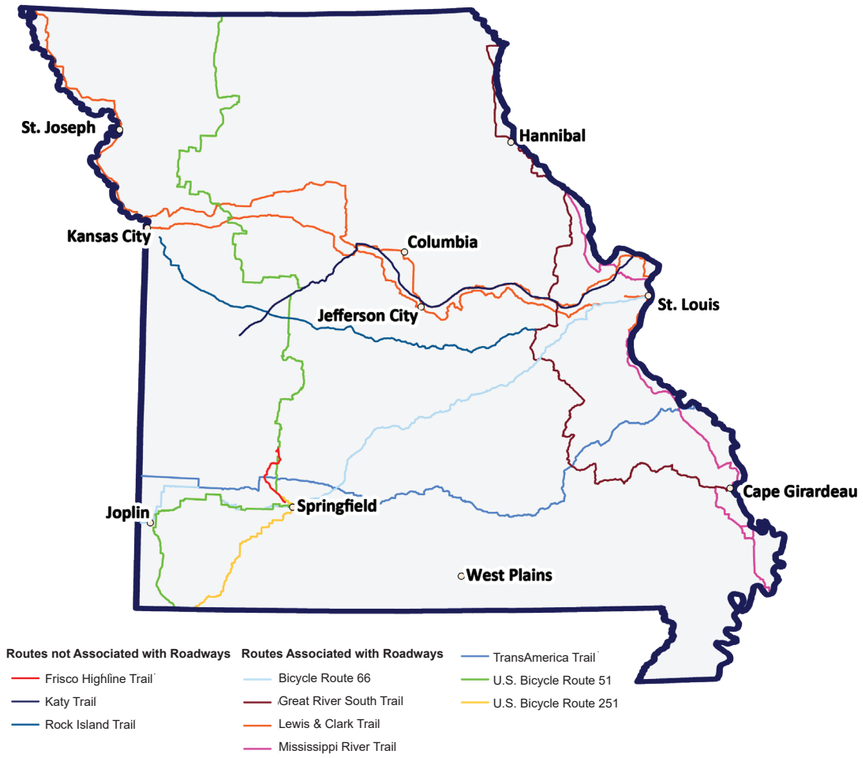
Source: HG Consult Inc. Analysis of MoDOT, Freight Railroads, 2025.

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



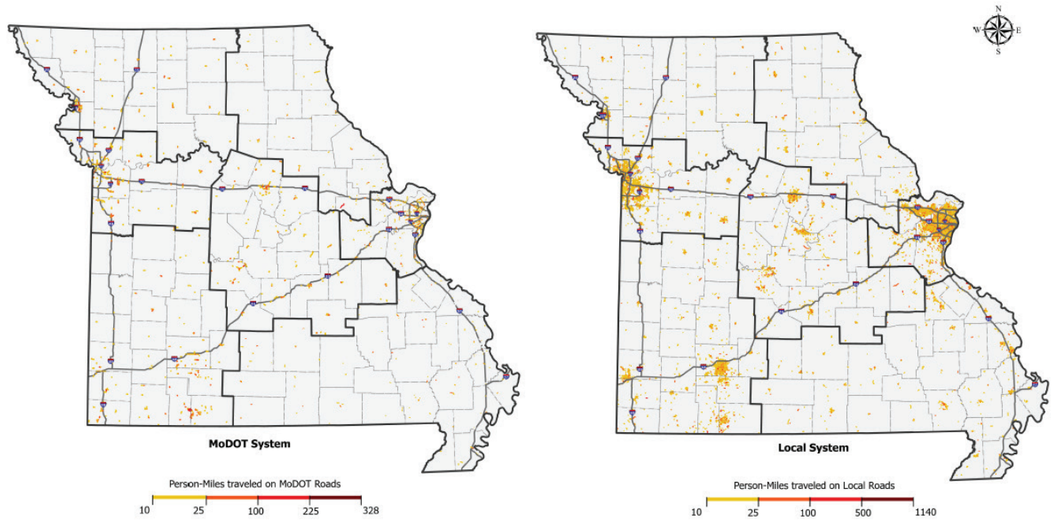
Source: HG Consult Inc. Analysis of MoDOT, Multimodal Bike/Ped, 2025; Adventure Cycling Association, U.S. Bicycle Route System Maps and Route Resources, 2025.

[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.

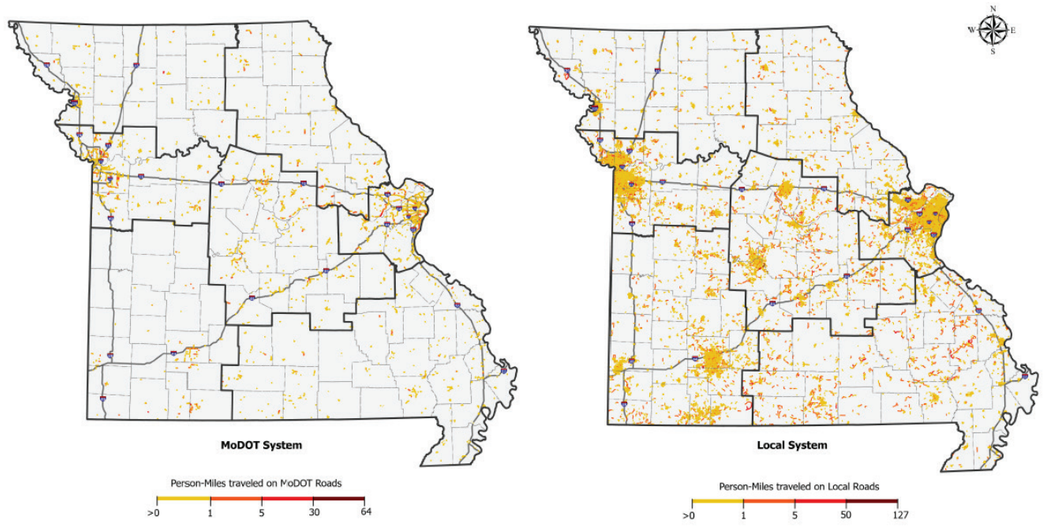
Urban districts, particularly St. Louis and Kansas City record the highest overall volumes for both modes and the lowest shares on MoDOT roads, reflecting dense local street networks that support walking and biking. In contrast, rural districts such as the Northwest and Southeast show higher proportional 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

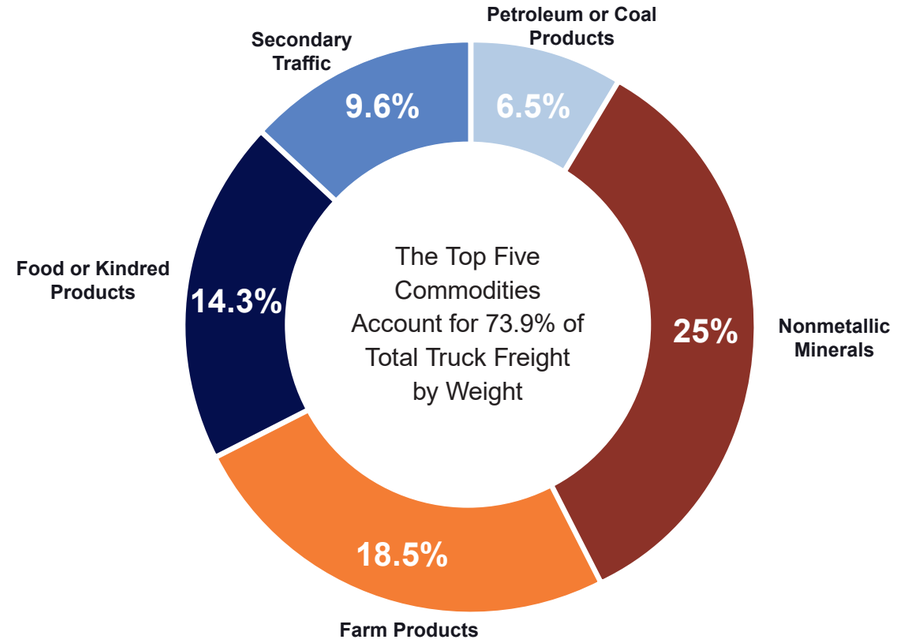
[46]Transeearch, 2023.

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: Transeearch, 2023.

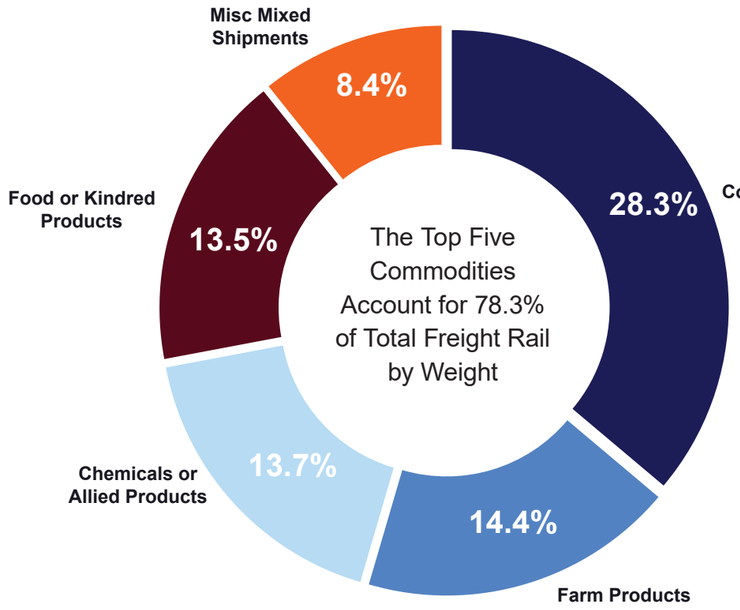
[47]Transeearch, 2023.

[48]Transeearch, 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



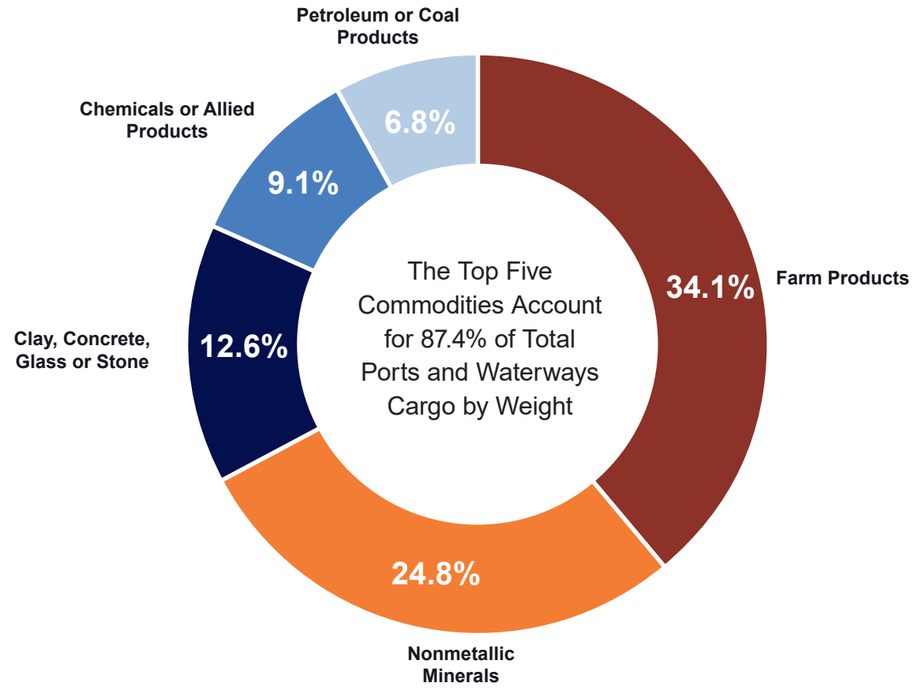
Source: Transearch, 2023.

[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



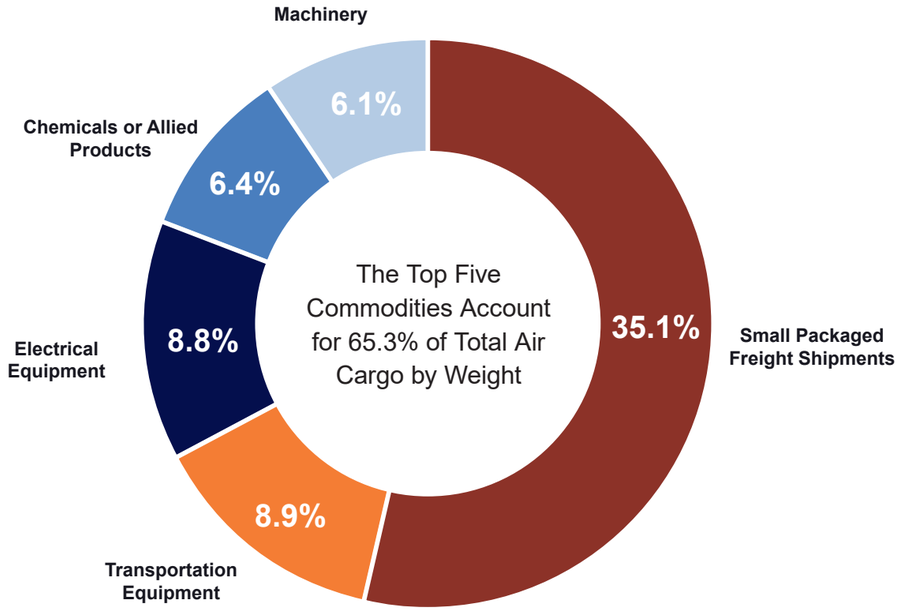
Source: Transearch, 2023.

[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.

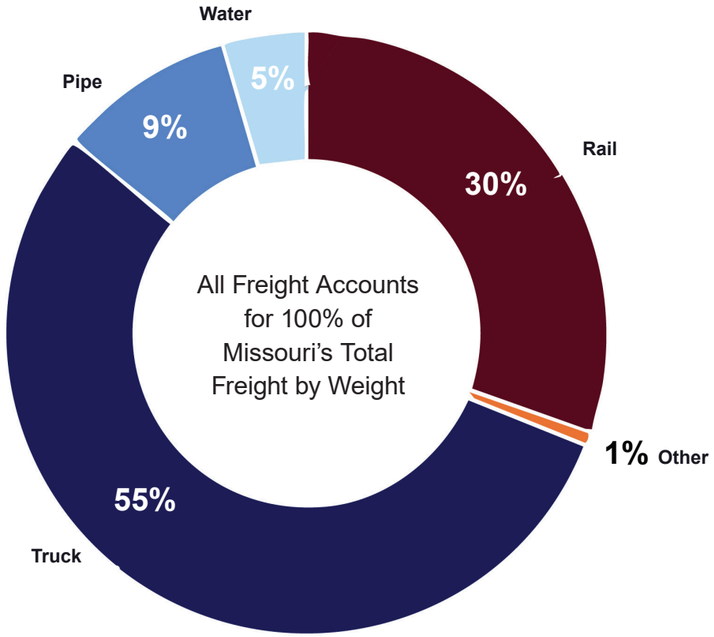
Table 4 – Missouri Freight and Rail Overview

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 55% while movement by water accounted for 5%. Both pipeline and rail movement accounted for 39% of all freight movement by weight.

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



Source: Transearch, 2023.



Chapter 3: Demographics, Socioeconomics and Travel Trends


Source: MoDOT

The state of Missouri's transportation system is a critical resource that:

- **Supports the state's economy, communities and quality of life.**
- **Provides residents with access to jobs, schools, healthcare and essential services while connecting businesses to suppliers and customers.**
- **Helps visitors reach destinations across the state, reinforcing the state's role as both a regional hub and a national connector.**

A central step in developing the Long-Range Transportation Plan (LRTP) is understanding the demographic and socioeconomic forces that influence transportation needs. Where people live, work and carry out daily activities shapes the demand placed on the system.

This chapter examines existing and emerging trends including changes in population, employment, income, education and household characteristics to provide a foundation for forecasting future conditions and planning transportation investments.

The state's population is expected to continue growing, surpassing 6.7 million residents by 2050. Growth will not be uniform: urban and suburban areas around Kansas City, St. Louis, Springfield, Columbia and Cape Girardeau are projected to see the largest increases, while many rural regions will experience population decline.

At the same time, the state's age profile is shifting. The number of residents over 65 will rise sharply through 2030, creating greater demand for mobility options beyond personal vehicles. Meanwhile, the proportion of young people is projected to decline, altering long-term patterns of school-related and household travel.

Economic activity also plays a defining role. The state's gross state product (GSP) has grown steadily in recent years, led by industries such as real estate, manufacturing and healthcare. These sectors rely heavily on efficient freight movement and workforce commuting. Employment trends highlight continued growth in healthcare and professional services, while cross-border commuting in the Kansas City and St. Louis metropolitan areas underscores the need for regional coordination in transportation planning. Personal income levels, poverty rates and educational attainment vary across the state, shaping both access to transportation and reliance on it.

Changing travel patterns add another layer of complexity. Vehicle miles traveled (VMT) are projected to rise through 2050, intensifying concerns about congestion, safety and system maintenance. While most Missourians still commute by personal vehicle, remote work has increased significantly and alternative modes such as cycling are growing modestly. Shifts toward fuel-efficient and electric vehicles promise benefits but also create challenges for transportation funding, which has traditionally relied on motor fuel taxes.

By analyzing these interconnected demographic and socioeconomic dynamics, this chapter provides a clearer picture of the opportunities and constraints facing the state's transportation system. These insights are essential to promoting future policies and investments to support a safe, reliable and resilient network capable of meeting the needs of a changing population and economy.


Source: MoDOT

Demographics

People rely on and use the state's transportation system every day. The way people utilize transportation changes as their characteristics, needs and preferences evolve.

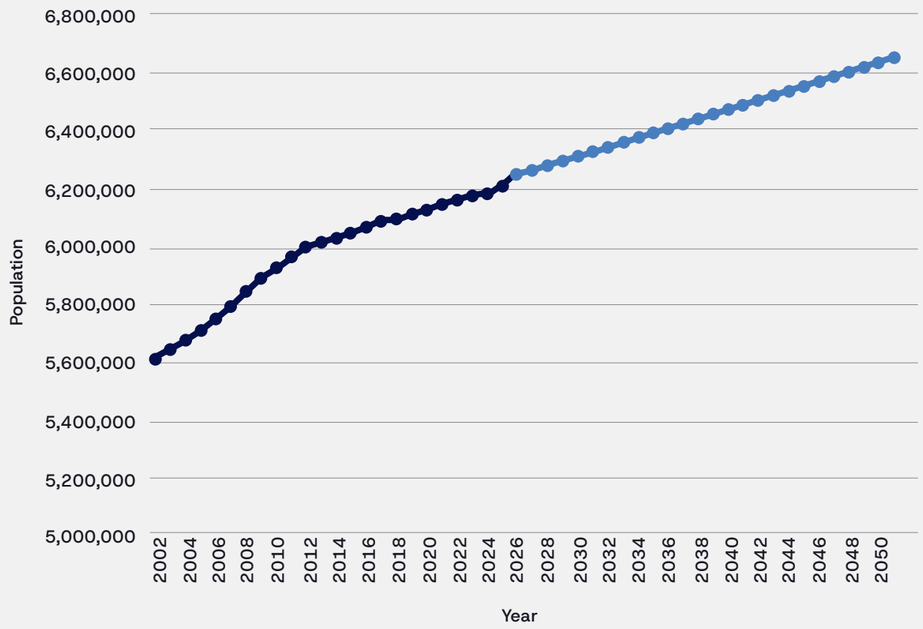
Transportation demand increases or decreases based on changes in demographics, like the age and size of the population.

Being able to forecast population size and age, among other characteristics, allows for improved ability to anticipate potential impacts on the transportation system and how the transportation system would need to adapt to address these changes.

Population Trends and Projections Through 2050

As shown in **Figure 31,** the state is projected to continue growing during the next 30 years, with a total population approaching 6.7 million people by 2050, compared to 6.1 million in 2024. The state is projected to surpass 6.4 million people by 2034. The projected growth rate remains positive and the state's net population increase will be primarily attributable to natural increases (births minus deaths) with slight gains in net migration. The state's projected population growth will continue to increase VMT throughout the state. With an increasing population and VMT, congestion, safety and maintenance will continue to be primary transportation concerns.

Figure 31 – Historic Population and Projected Growth in Missouri, 2002–2050



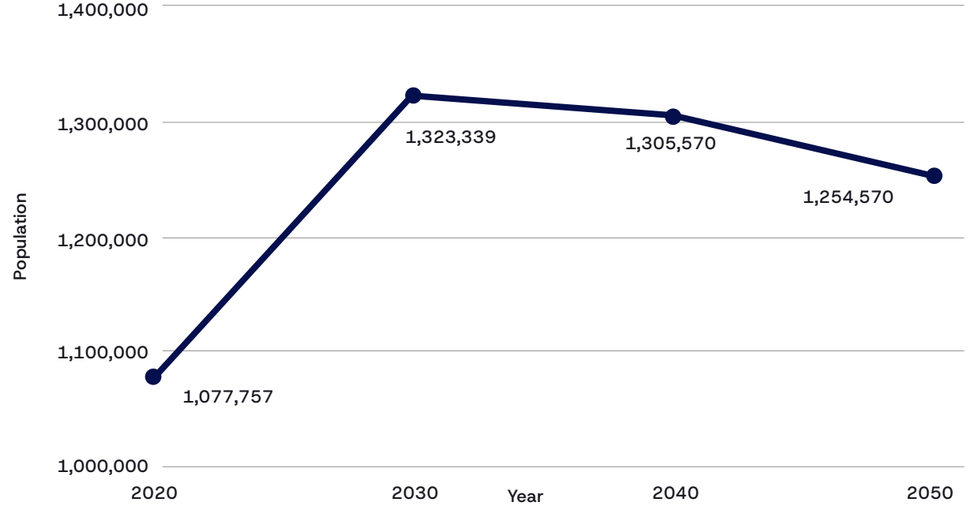
Source: Missouri Census Data Center (MCDC), State/County Annual Population Change, 2025.

Population Trend One – An Aging Population

The United States (U.S.) population of persons aged 65 and over is one of the fastest growing segments. Populations 65 and over reached 55.8 million, or 16.8% of the U.S. population, in 2020.[52] The state mirrors the national trend of an increasing population for this age group. In 2023, the state's 65 and over population was 17.4% of the state's total population.[53] It is estimated that by 2030 this group will represent more than one-fifth of Missourians (21%).[54] However, it is projected the population of persons aged 65 and over will peak by 2030 with projections for 2040 and 2050 being lower, as shown in **Figure 32.**

Changes in the state's over 65 population will likely have the greatest impact on the state's travel demand of any changes seen among the various age groupings through 2030 with less impact between 2030 and 2050. This population is more likely to want or need to use transportation options other than single occupancy vehicles. In the near-term, as this age group increases, the state will need to explore how to best provide mobility options for the needs of those who decide to stop or reduce their driving. The added number of older drivers encourages investments in highway maintenance and makes safety paramount for the transportation system.

Figure 32 – Missouri's Projected Older Population, 2020–2050



Source: University of Virginia, Weldon Cooper Center for Public Service, National Population Projections, 2025.

[52]U.S. Census Bureau, "U.S. older Population Grew from 2010 to 2020 at Fastest Rate Since 1880 to 1890," May 25, 2023, https://www.census.gov/library/stories/2023/05/2020-census-united-states-older-population-grew.html.

[53]U.S. Census Bureau, "Demographic and Housing Estimates," American Community Survey (ACS), ACS 5-Year Estimates Data Profiles, Table DP05, 2023, https://data.census.gov/table/ACSDP5Y2023.DP05?q=Missouri+population&g=040XX00US29.

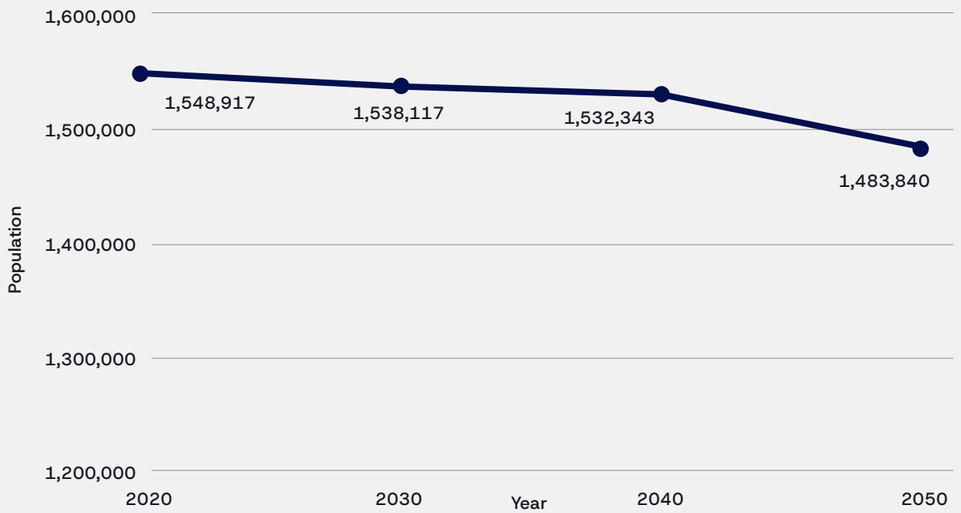
[54]Missouri Office of Administration, Division of Budget and Planning, "Population Trends," accessed June 5, 2025, https://budplan.oa.mo.gov/demographic-information/population-trends.

Population Trend Two – A Decreasing Younger Population

As shown in **Figure 33**, from 2020 to 2050 the state's younger population, those ages 0 to 19, is projected to decrease at an average rate of 1.41%, with the biggest decrease occurring between 2040 and 2050. In the mid-2040s, the state's younger population is projected to fall to under 1.5 million people. In 2023, the state's population of people ages 0 to 19 was 25.1% of the state's total population.[55] It is estimated that by 2030 this group will drop to 24.5% of the state's total population, still representing approximately one-quarter of Missourians. Overall, the younger population is projected to decrease by approximately 65,000 by 2050.[56]

This projected decrease in the state's younger population contrasts with the projected increase in the younger population nationally. Nationally, the younger population is expected to increase from 2020 to 2050, approaching close to 90 million people in 2050.

Figure 33 – Missouri's Projected Younger Population, 2020–2050



Source: University of Virginia, Weldon Cooper Center for Public Service, National Population Projections, 2025.

[55]U.S. Census Bureau, "ACS Demographic and Housing Estimates," American Community Survey, ACS 5-Year Estimates Data Profiles, Table DP05, 2023, https://data.census.gov/table/ACSDP5Y2023.DP05?q=Missouri+population&g=040XX00US29.

[56]University of Virginia, Weldon Cooper Center for Public Service, "National and 50-State Population Projections," 2024, https://coopercenter.org/national-population-projections.

Population Trend Three – Concentration of Population and County Trends

Since 2010, the population living in the state's urban areas has increased to 65% of the state's total population.[57] The southeastern portion of the state experienced the greatest population decline. All population projections expect to see a continued migration of people moving from rural regions to urbanized areas, as shown in **Figure 34**.

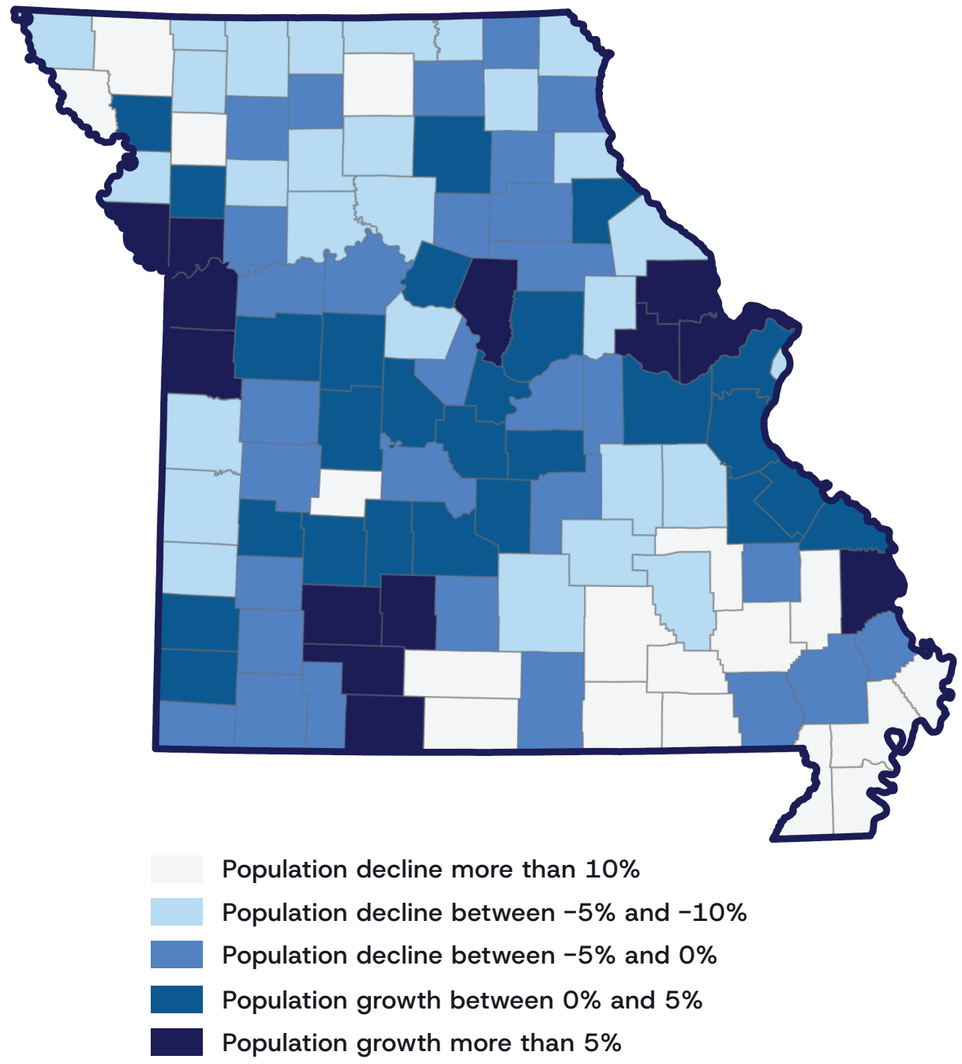
The suburbs and the counties surrounding the state's major urban areas of Kansas City, Springfield and St. Louis, are the locations projected to have the highest population gains. Migration trends indicate a continuing decrease in population will occur in the rural areas located in the northern and southeastern portions of the state.

Census projections show the state's 10 fastest growing counties are those within the Metropolitan Planning Areas of Cape Girardeau, Columbia, Kansas City, Springfield and St. Louis. Current growth patterns indicate the primary locations of population increases will be suburban and adjacent rural areas in those counties. The metropolitan planning organizations (MPOs) in Kansas City and St. Louis continue to adopt strategies prioritizing transportation system improvements that support their increasing populations. Travel in urbanized areas is expected to increase in tandem with an increase in statewide VMT, which will prolong periods of congestion and increased traffic during peak travel times.



[57]MCDC, "Population Trends, 2010 to 2020," accessed June 5, 2025, https://mcdc.missouri.edu/applications/population/trends/report.php?y=2010-2020&g=29all&d=total.

Figure 34 – Population Change by County, 2010–2020

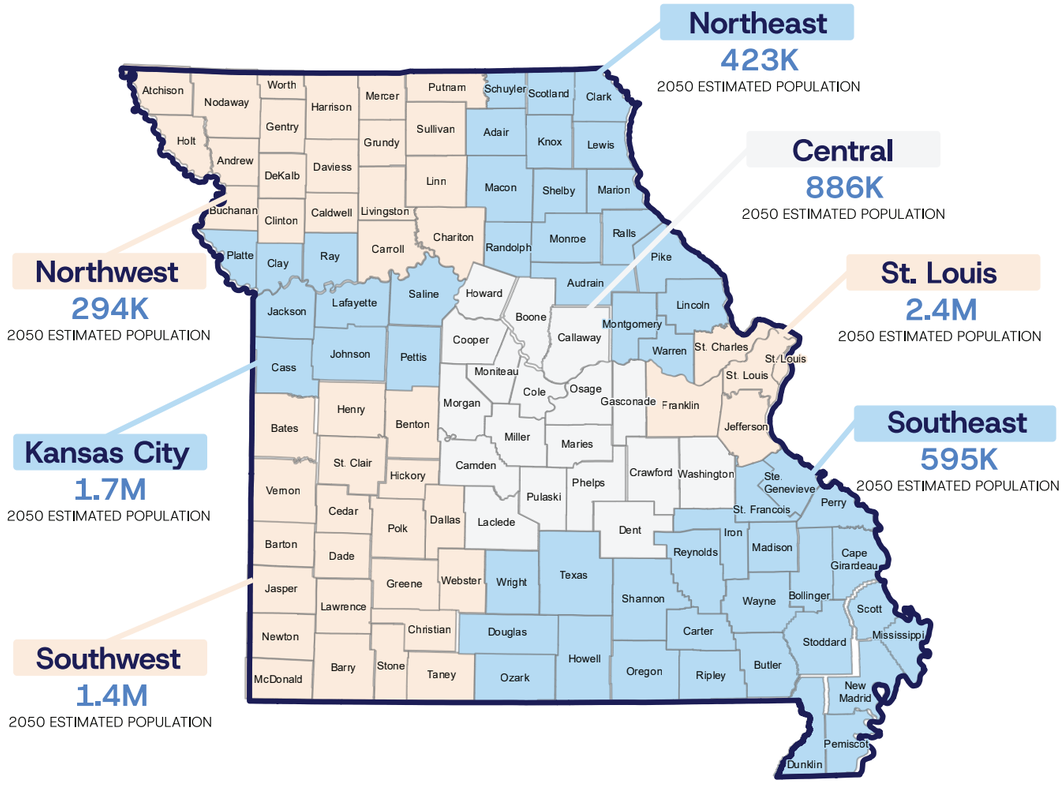


Source: HG Consult Inc. analysis of MCDC, State/County Annual Population Change, 2025.

Population Trends by MoDOT District

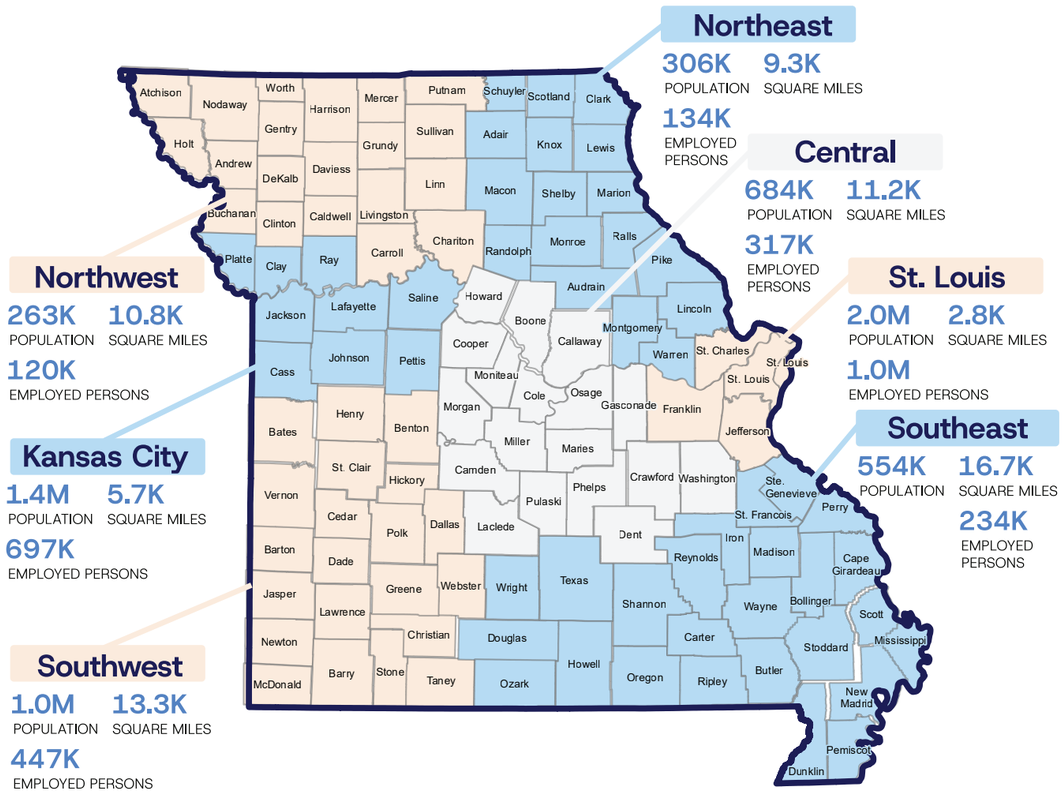
Figure 35 presents Missouri Department of Transportation (MoDOT) District population estimates through 2050. As shown in **Figure 36,** which is based on U.S. Census County population totals from 2020 to 2024, the Central, Kansas City, St. Louis, Northeast, Southwest and Southeast Districts are projected to experience population growth, while the Northwest District is expected to see a decline in its population share.

Figure 35 – MoDOT District Population Estimates, 2050



Source: Missouri Office of Administration, Division of Budget and Planning.

Figure 36 – MoDOT District Population, Square Miles and Employment



Source: U.S. Census Bureau 2020–2024 Estimates.

[58]U.S. Census Bureau, "County Population Totals and Components of Change: 2020-2024," March 2025, https://www.census.gov/data/tables/time-series/demo/popest/2020s-counties-total.html.

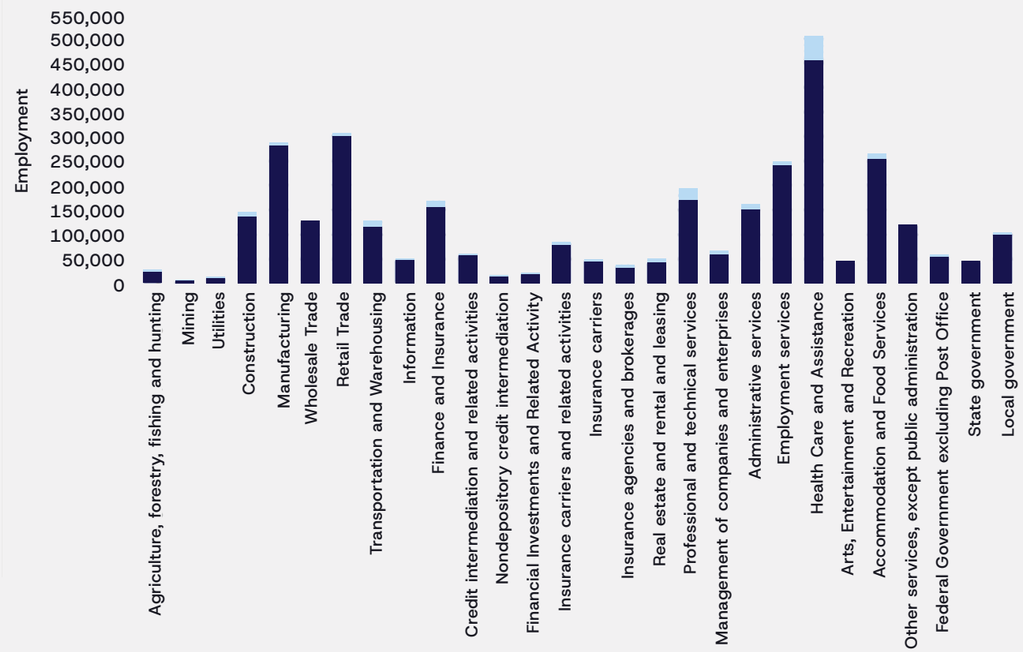
Economics and Employment

Economic activity and employment levels are critical drivers of transportation system performance. GSP, as an indicator of overall business activity, is closely linked to travel demand. Periods of economic slowdown or elevated unemployment, such as those experienced from 2020 through 2025, often correlate with reduced VMT, reflecting decreased commuting, freight movement and overall travel. **Figure 37** highlights industry employment projections between 2022 and 2032.

A distinctive aspect of the state's transportation story is the presence of two major bi-state metropolitan areas, St. Louis and Kansas City, as well as several smaller bi-state regions. As a result, many individuals who work in the state reside in neighboring states. To a lesser extent, Missourians also commute out of state for work. This daily "import" of workers has important implications for the state's transportation system.

The high volume of cross-border commuting increases demand on the state's highways, bridges and transit systems, particularly during peak travel times. It also contributes to wear and tear on infrastructure without necessarily generating corresponding tax revenue, since many commuters do not pay income or property taxes in the state. Additionally, coordinating transit services, traffic management and infrastructure investments with neighboring states becomes more complex. These dynamics underscore the importance of regional planning, interstate collaboration and targeted investment in corridors that serve bi-state travel patterns.

Figure 37 – Industry Employment Projections in Missouri 2022 and 2032

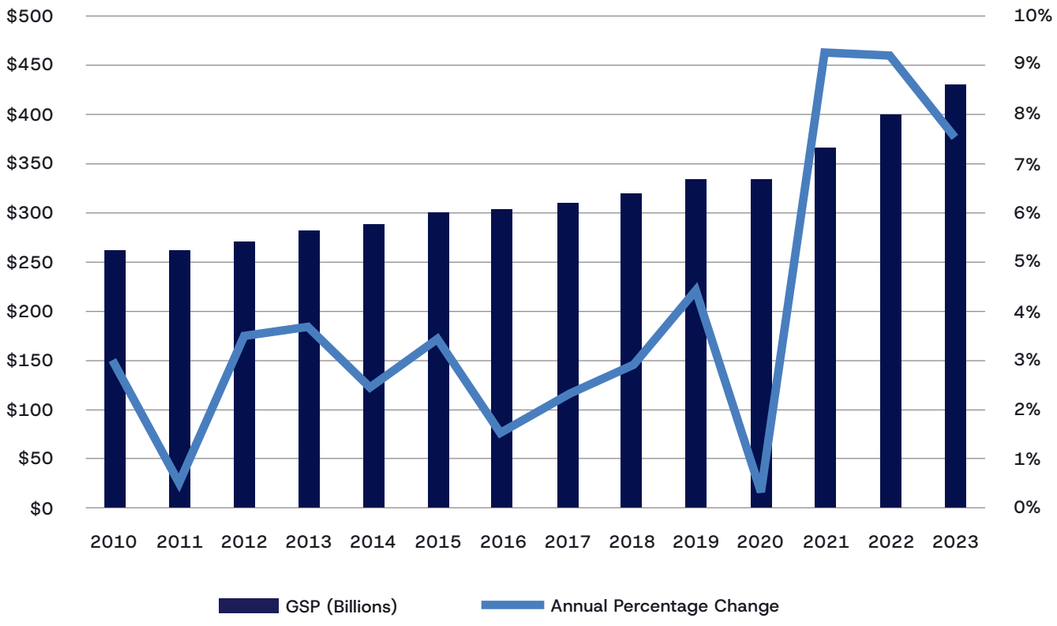


Source: Missouri Economic Research and Information Center (MERIC), Industry Employment Projections 2025.

Gross State Product Trends

GSP represents the total economic output of the state's economy and serves as a primary indicator of overall economic health and business activity within the state. As shown in **Figure 38**, the state's GSP has had a nominal growth rate of 6.1% over the past five years (2019 to 2023). Adjusted for inflation, the growth rate averaged 2.1% over the same period. Disregarding the 2020 values as an outlier data point due to the COVID-19 pandemic, the growth percentages are 7.6% (nominal) and 3.1% (inflation adjusted) respectively.

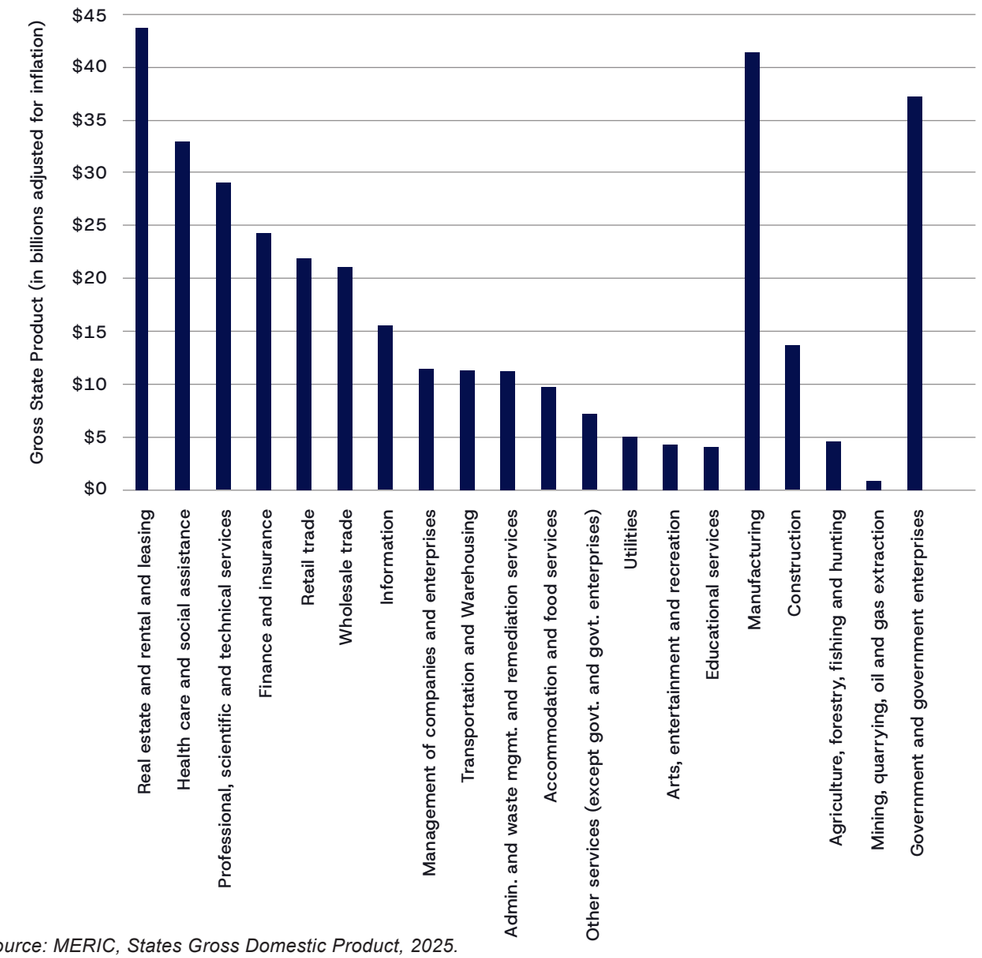
Figure 38 – Missouri Gross State Product, 2010–2023



Source: MERIC, States Gross Domestic Product, 2025.

The state's GSP by industry type is shown in **Figure 39**. The largest industry contributors to the state are real estate/rentals, manufacturing and healthcare social services when excluding government enterprises. When analyzing these largest industries in the state, there is a direct relationship between manufacturing and the need for transportation corridors to move these physical goods from their points of origin to their destination.

Figure 39 – Missouri Gross State Product by Industry, 2023



Source: MERIC, States Gross Domestic Product, 2025.

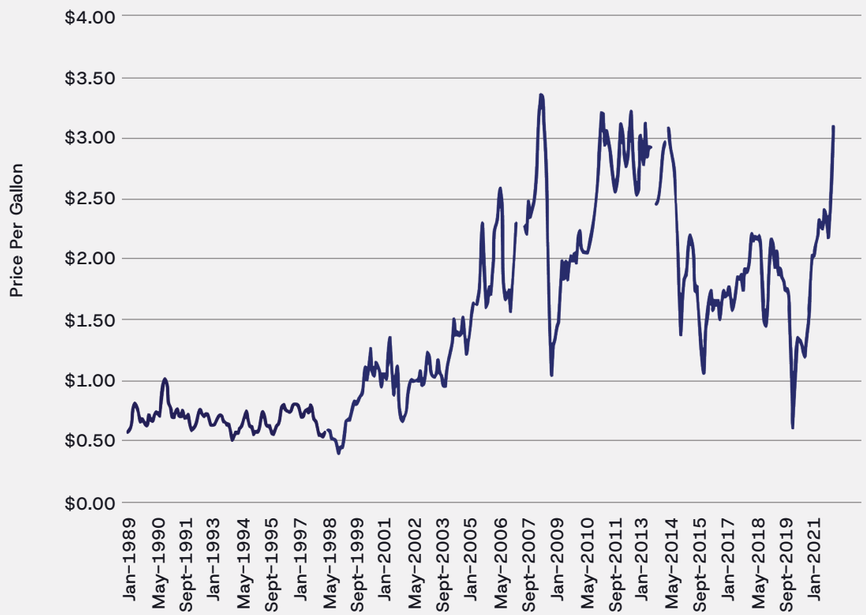
Fuel Price Trends

The state's fuel price trends displayed in **Figure 40** show gas prices from 1989 to 2021. Over this period, gas prices have shown significant fluctuations, shaped by a range of economic, geopolitical and market factors. From 1989 through the late 1990s, gas prices in the state remained relatively stable, generally fluctuating between $0.70 and $1.20 per gallon. A sharp upward trend began in the early 2000s, driven by increasing global demand, geopolitical tensions and rising crude oil prices. By mid-2008, gas prices peaked at over $3.70 per gallon, representing the highest level observed during the period.

The sharp drop in prices during late 2008 reflects the global financial crisis, which led to a significant decline in demand. Prices recovered and remained volatile throughout the 2010s, with another peak approaching $3.50 per gallon around 2012 to 2013, followed by a decline beginning in 2014 due to increased oil production and a softening global economy. The most dramatic decline occurred in early 2020 during the onset of the COVID-19 pandemic, when prices briefly fell below $1.00 per gallon due to plummeting demand and an oversupply of oil. However, prices quickly rebounded in 2021 and surged into 2022, surpassing $3.00 per gallon, driven by global supply chain disruptions, recovering demand and geopolitical instability.

Overall, the graph reflects the strong influence of macroeconomic events, energy markets and global crises on fuel costs, with direct implications for consumer behavior and transportation system performance in the state.

Figure 40 – Missouri's Fuel Prices, 1989–2021



Source: Adapted from U.S. Energy Information Administration (EIA), Missouri Gasoline Midgrade Wholesale/Resale Price by Refiners, 1989-2021.

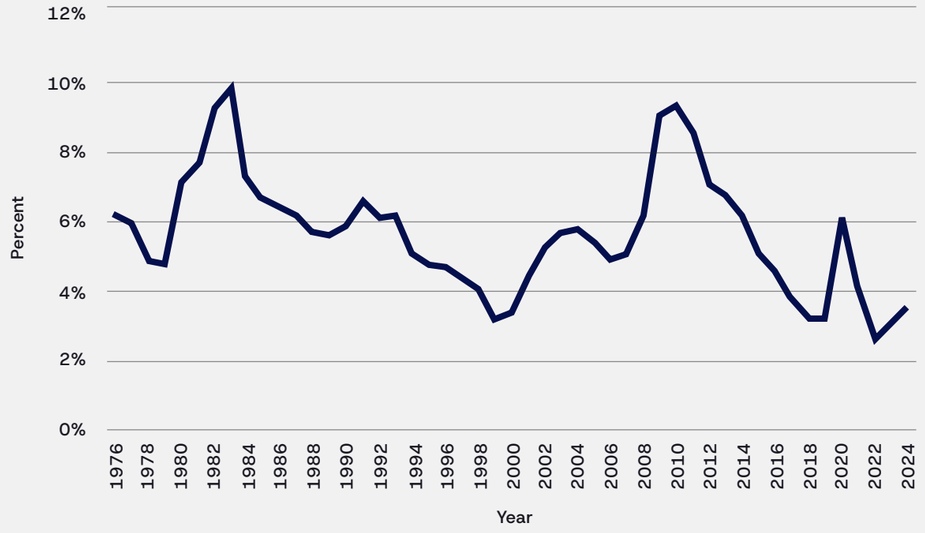
Employment and Socioeconomics Characteristics

The available workforce in the state exceeds 3.1 million people with nearly 3 million people employed in sectors other than farming. As shown in **Figure 41**, the unemployment rate has been steadily declining since peaking at 9.8% in the first quarter of 2010 to currently less than 4% statewide. This trend impacts MoDOT's ability to recruit and retain its workforce. According to the American Community Survey (ACS), 19%, or one out of every five employed Missourians, work in the trade, transportation and utilities industries. Other industry sectors that have large contributions to the state's employment base include education (18%), government (15%), professional and business services (12%), manufacturing (10%) and leisure and hospitality (10%).



Source: MoDOT

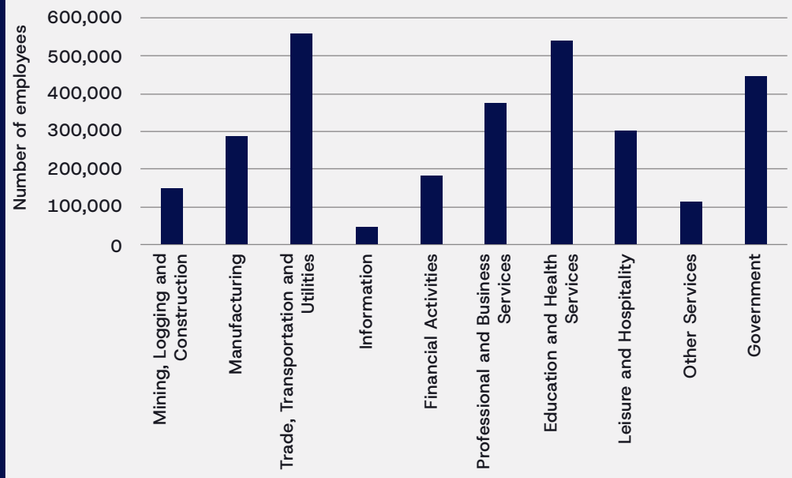
Figure 41 – Missouri Unemployment Rate, 1976–2024



Source: Bureau of Labor Statistics (BLS), Local Area Unemployment Statistics, 2025.

Figure 42 illustrates employment by industry in the state for the year 2025. National projections for employment across the nation show an increase in the need for health care and social assistance due mainly to aging population trends. The state is expected to follow this national trend over the coming years.

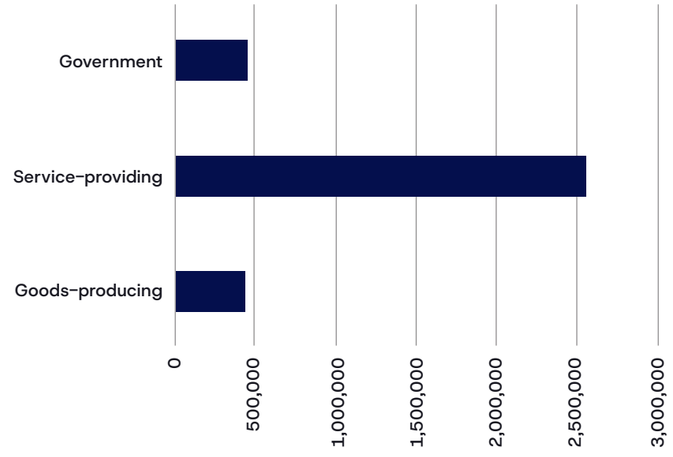
Figure 42 – Missouri Workers by Industry, 2025



Source: MERIC, Current Employment Statistics, 2025.

Figure 43 illustrates the largest employment sectors in the state in 2025. Goods-producing (12.9%) and service-providing (74.4%) sectors of the workforce are often related to the shipment of goods and provision of services that utilize the state's transportation system. Shipment of goods within and to destinations outside the state use the state highway system, water ports and airports to receive, transport and deliver raw, unfinished and finished goods. Service-sector employment is important to the state transportation system for a wide variety of reasons, ranging from employee commuting to for-hire transportation services, e-commerce delivery and other transport activities.

Figure 43 – Largest Employment Sectors in Missouri, 2025

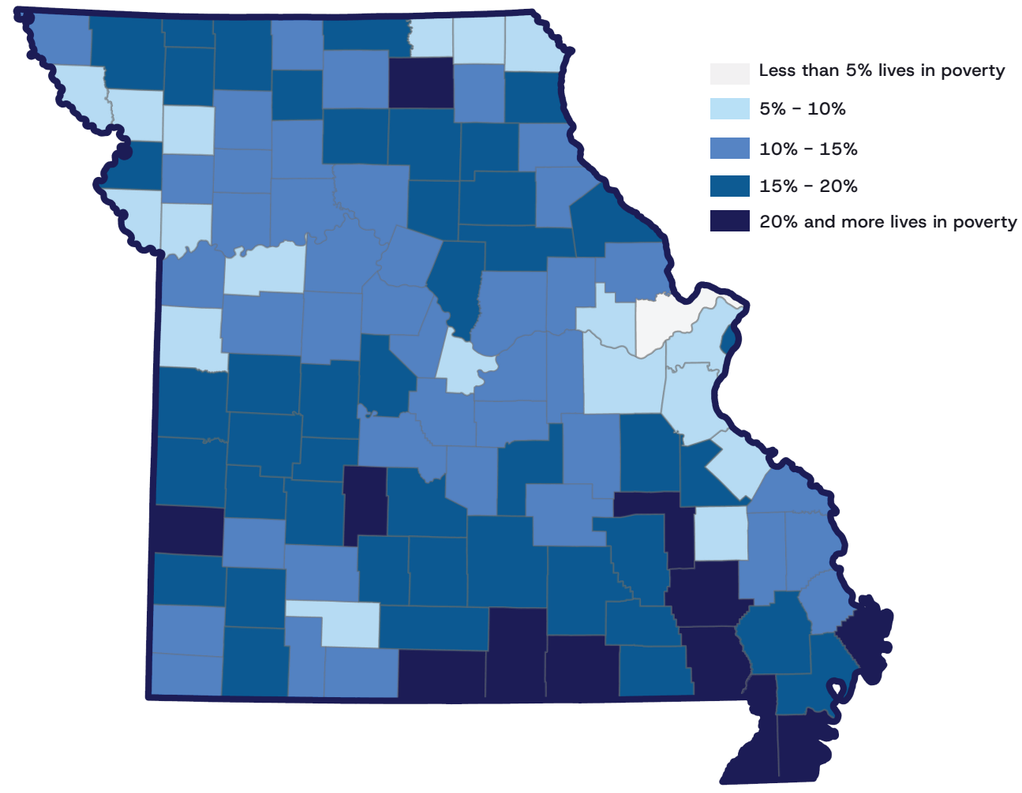


Source: MERIC, Current Employment Statistics, 2025.

Personal Income and Poverty Statistics

The real median income in the state was reported to be $68,920 in the year 2023.[59] This was an increase of 4.5% from the reported real median income of 2022. Even with the increase of median income, 12% of the state's population lived below the poverty level at some point during the year 2023, according to ACS statistics.[60] Poverty percentages are highest in Wayne County and Pemiscot County where more than 25% live below the poverty line, as displayed in **Figure 44**. For many living below the poverty line, it can be difficult to find transportation to and from a job or seek a prospective job, with limited transportation choices. Lower income individuals may have one or no vehicles available and those in rural areas typically have limited public transit options.

Figure 44 – Missouri Poverty Levels by County, 2023



Source: U.S. Census Bureau, Poverty Status in the Past 12 Months, American Community Survey, ACS 5-Year Estimates Subject Tables, Table S1701, 2023.

[59]U.S. Census Bureau, "Median Income in the Past 12 Months (in 2023 Inflation-Adjusted Dollars)," American Community Survey, ACS 5-Year Estimates Subject Tables, Table S1903, 2023, https://data.census.gov/table/ACSST5Y2023.S1903?t=Income+(Households,+Families,+Individuals)&g=040XX00US29.

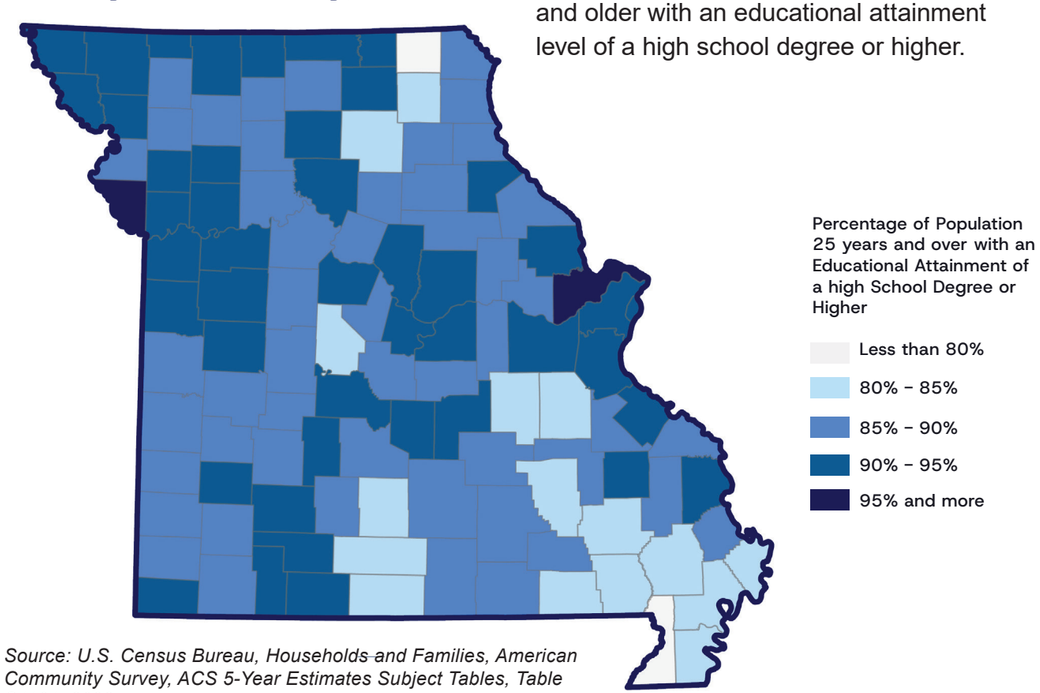
[60]U.S. Census Bureau, "Poverty Status in the Past 12 Months," American Community Survey, ACS 5-Year Estimates Subject Tables, Table S1701, 2023, https://data.census.gov/table/ACSST5Y2023.S1701?t=Poverty&g=040XX00US29.

Educational Attainment

In 2023, according to ACS statistics, the percentage of persons 25 years and older with an educational attainment level of a high school degree or higher for the state of Missouri was 91.6%. This was an increase of 0.3% from 2022's percentage of persons 25 years and older with an educational attainment level of a high school degree or higher. The state's 2023 percentage of persons 25 years and older was over 2% higher than the national percentage of 89.4%.

The percentage of persons 25 years and older with an educational attainment level of a high school degree or higher was highest in Platte County with 96.7%. Scotland County had the lowest percentage of persons 25 years and older with an educational attainment level of a high school degree or higher at 78.4%. Transportation availability can influence access to education and job opportunities. A well-functioning transportation system with a variety of available and reliable transportation options may remove barriers to higher levels of educational attainment. **Figure 45** shows each county's percent of population 25 years and older with an educational attainment level of a high school degree or higher.

Figure 45 – Educational Attainment Levels by Missouri County, 2023



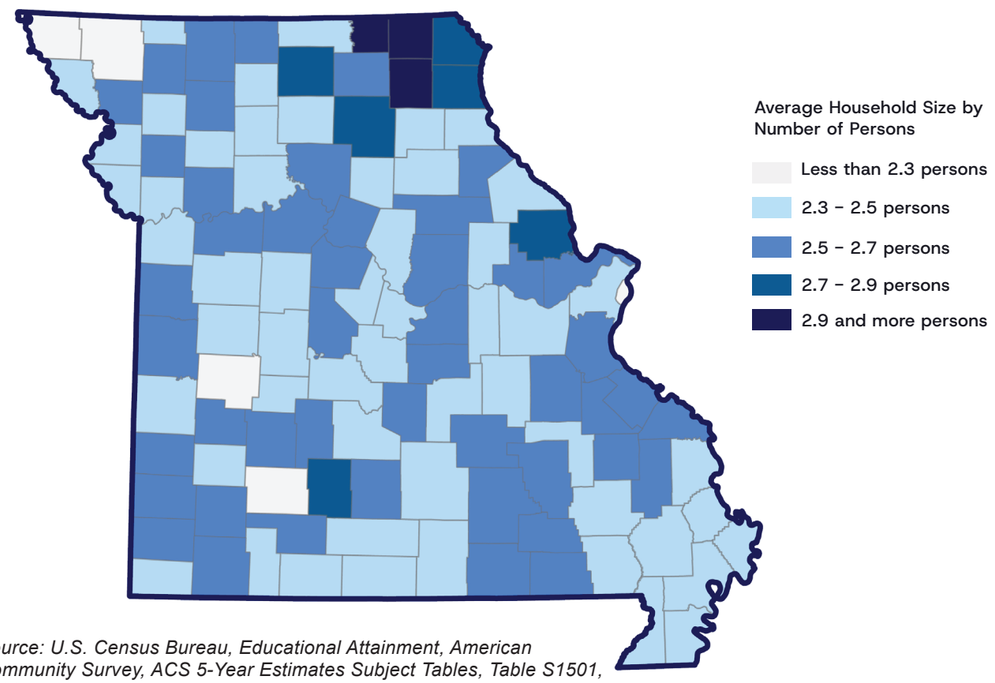
Source: U.S. Census Bureau, Households and Families, American Community Survey, ACS 5-Year Estimates Subject Tables, Table S1101, 2023.

Persons and Children Per Household

The average number of persons per household in the state for 2023, according to ACS statistics, was 2.42 persons. The state's 2023 average household size was 0.02 persons less than 2022's value of 2.44 persons. For 2023, the state's average number of persons per household was 0.1 persons less than the national number of 2.54 persons. Schuyler County had the highest average number of persons per household with 3.2 persons and St. Louis City has the lowest average number of persons per household with 1.96 persons. A larger household may indicate a greater number of transportation users than a smaller household. The greater the number of transportation users a household has the more reliant that household is on the transportation system. **Figure 46** shows each county's average number of persons per household.

In 2023, the percentage of the state's households with one or more people under 18 years old was 28.7%, 0.1% less than in

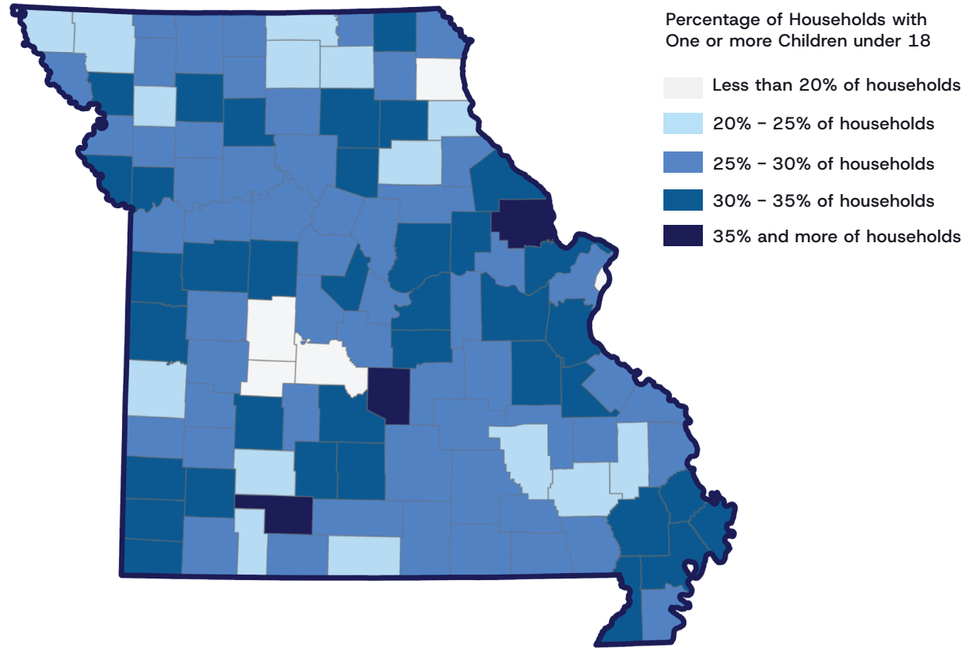
Figure 46 – Average Household Size by Missouri County, 2023



Source: U.S. Census Bureau, Educational Attainment, American Community Survey, ACS 5-Year Estimates Subject Tables, Table S1501, 2023.

2022 (28.8%). The state's 2023 percentage of households with one or more people under 18 years old was 1.2% less than the national percentage of 29.9%. According to 2023 ACS statistics, Christian County had the largest percentage of households with one or more people under 18 years old at 39%. Hickory County was the county with the smallest percentage of households with one or more people under 18 years old at 12.4%. Children rely on other household members for transportation to and from school and other activities. Children may also rely on school provided transportation services as well as public transportation. The more children a household has, the more reliant that household may be on the transportation system. Having a dependable transportation system and providing a variety of accessible transportation services benefits all transportation users and may benefit households with people under 18 more. **Figure 47** shows the percentage of households with one or more people under 18 for each county in the state.

Figure 47 – Missouri Percentage of Households with One or More Children by County, 2023



Source: U.S. Census Bureau, Households and Families, American Community Survey, ACS 5-Year Estimates Subject Tables, Table S1101, 2023.

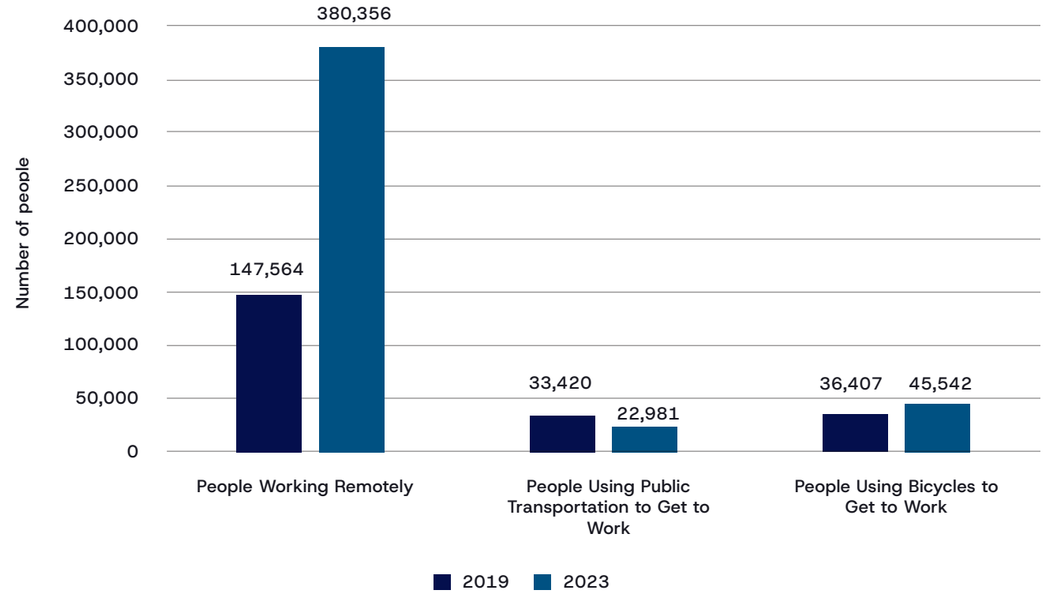
Travel Trends

Emerging trends including an aging population, a growing younger population, increasing urbanization, the sharing economy and advanced technology may combine in ways that would significantly alter transportation needs. Moreover, existing trends include anticipated growth in truck freight, commuters preferring to travel in private vehicles and increasing VMT would continue to be significant contributing factors to the use of the transportation system and travel patterns in the state.

Travel Choices in Missouri Are Changing

Travel by personal vehicle is still the primary transportation mode of choice both in the state and nationally. However, there are changing trends in travel choices seen in the state. From 2019 to 2023, the percentage of Missourians who work remotely increased by 158% (380,356). Exploring other commuter modes, 10,439 Missourians stopped using public transit to commute to and from work and an increase of 9,135 started biking or cycling to commute to and from work. See **Figure 48** below.

Figure 48 – Travel Choices in Missouri, 2019 and 2023



Source: MoDOT, Fast Facts, 2025; Adapted from MoDOT, Transportation Systems Management and Operations (TSMO) Program and Action Plan, 2024.

Roadway

While the personal automobile is the primary transportation mode of choice both in the state and nationally, this section examines trends in travel choices being made today and how these trends may influence overall transportation system usage.

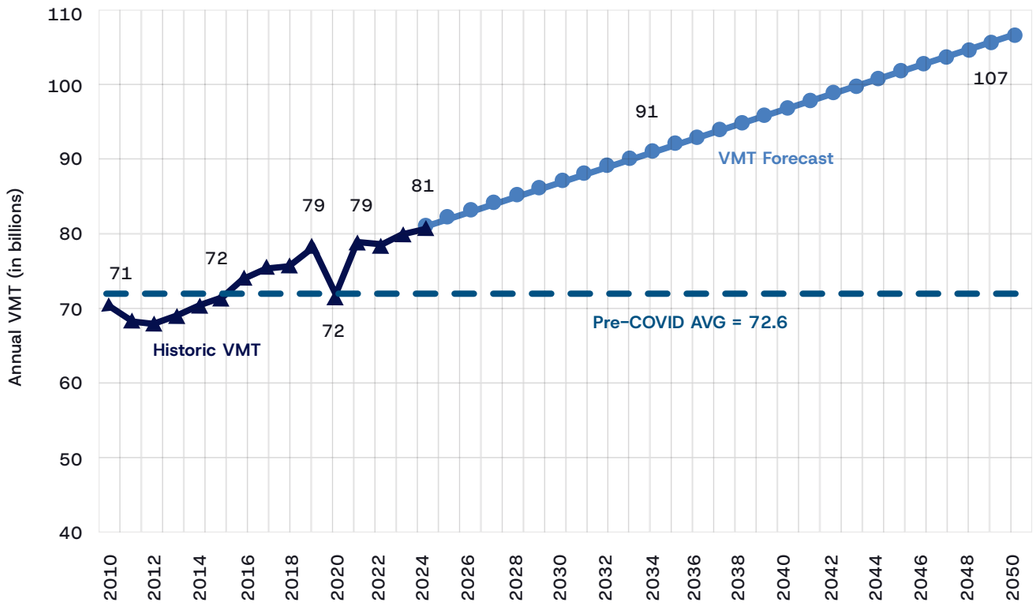
Recent State VMT Trends

Figure 49 shows annual VMT trends between 2010 and 2024 and includes projections through 2050. Since 2012, VMT has experienced a slight increase annually, followed by a noticeable decrease in 2020.

The drastic drop of roughly seven billion VMT, in 2020, coincided with the COVID-19 pandemic. VMT rose significantly in 2021 to be slightly above the pre-pandemic level of 2019. After a decrease in 2022, VMT increased in 2023 and 2024. In the future, VMT is expected to grow annually. VMT is projected to surpass 100 billion by 2044.

The growth in VMT may be attributed to a number of factors including shifting populations, suburban sprawl and increased delivery trucks on the road.

Figure 49 – Annual Vehicle Miles Traveled

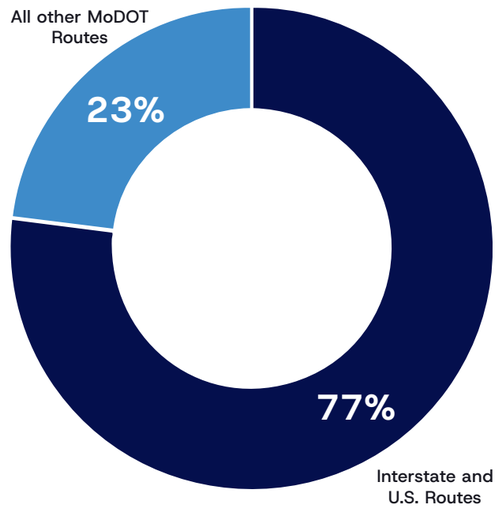


Source: MoDOT, Fast Facts, 2025; Adapted from MoDOT, TSMO Program and Action Plan, 2024.

Percentage of Travel by Route Type

The Missouri state highway system spans over 33,800 miles and is categorized by route type based on usage and traffic volume. As shown in **Figure 50,** which illustrates the percentage of total traffic carried by each route category, a significant portion of travel is concentrated on a relatively small segment of the network. Interstate and U.S. Routes, totaling approximately 5,560 miles, accommodate 77% of all highway traffic in the state. In contrast, all other MoDOT routes, which include around 28,254 miles of minor and low-volume roads, carry the remaining 23%. This distribution highlights the critical role of major routes in supporting the state's transportation demands despite their limited share of the total roadway mileage.[61]

Figure 50 – Percent of Statewide Traffic by Route Type



Source: MoDOT, Fast Facts, 2025.


Source: MoDOT

[61]MoDOT, "Fast Facts," accessed June 5, 2025, https://www.modot.org/fast-facts.

Existing Traffic – Congestion Hotspots

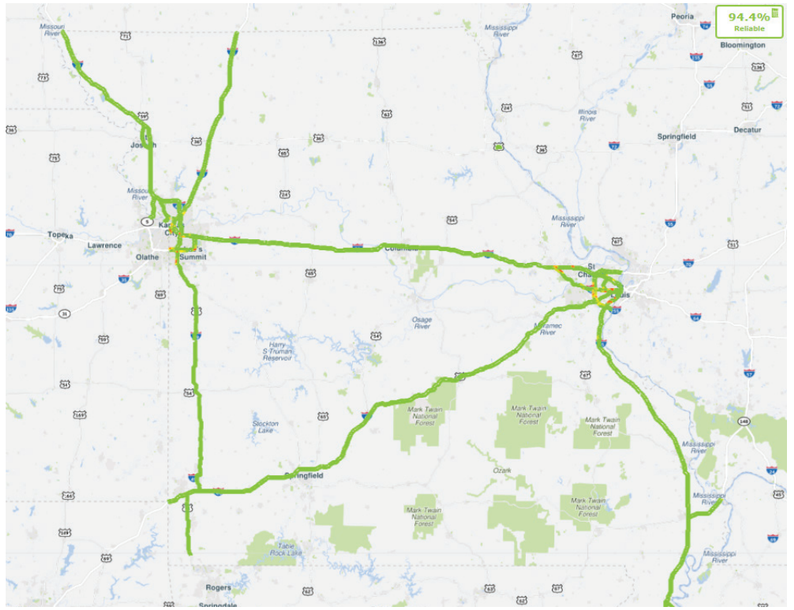
MoDOT uses real-time traffic information from third-party data sources to help monitor congestion and identify bottlenecks on the statewide roadway network. Bottlenecks are locations on the roadway where conditions have fallen below a certain percentage of the free-flow speed for an extended period of time. Simply put, these are areas where recurring congestion typically occurs.

For this analysis, traffic information from 2024 was evaluated for all routes designated as U.S. or state routes to help identify bottlenecks by looking at total delay and congestion metrics. Total delay is the amount of time drivers spend on a roadway in excess of the amount of time they would have been on the roadway in free-flow conditions. In other words, if a trip normally takes 10 minutes but congestion caused the trip to take 15 minutes, the delay would be five minutes. The top 10 areas of total delay in the state are shown in **Appendix E**.

Congestion is similar to total delay, except that it is for individual vehicles and not the cumulative amount of delay for all drivers. This metric helps identify bottlenecks regardless of how much traffic uses a particular roadway. The top 10 areas of congestion in the state are shown in **Appendix F**.

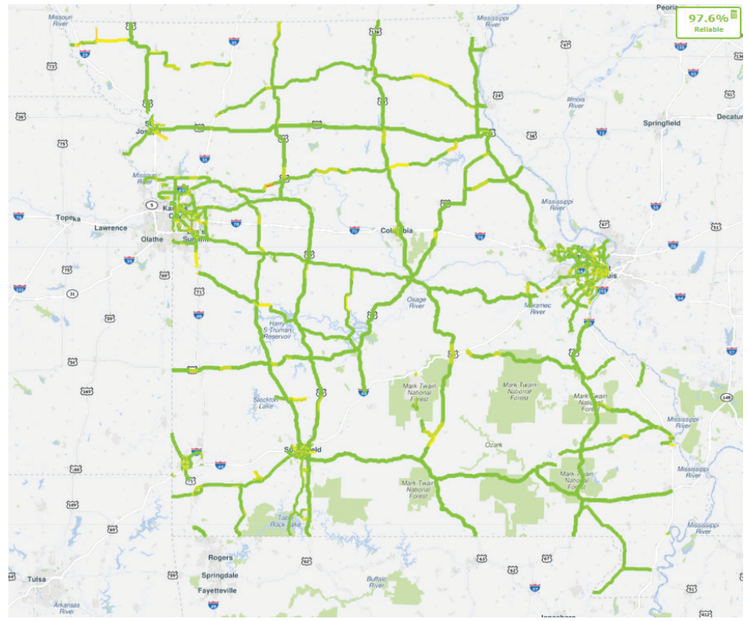
Finally, the Level of Travel Time Reliability (LOTTR) assesses the consistency or dependability of travel times from day to day regardless of whether congestion is a recurring incidence. Even if a road segment experiences recurring congestion, if the level of congestion is similar from day to day, the segment would have a high level of reliability. In contrast, road segments that sporadically have high levels of congestion are considered to be unreliable. As shown in **Figure 51**, 94.4% of interstate routes in the state of Missouri are considered reliable. As shown in **Figure 52**, 97.6% of non-interstate National Highway System (NHS) routes are considered reliable.

Figure 51 – Interstate Travel Time Reliability for Missouri, 2024



Source: MoDOT Analysis of HERE Data, 2024.

Figure 52 – Non-Interstate National Highway System Travel Time Reliability for Missouri, 2024



Source: MoDOT Analysis of HERE Data, 2024.

Fuel Efficiency and Revenue Impact

As referenced in the **Revenue Forecast Chapter**, the per gallon motor fuel tax is a significant source of revenue for the state. Effective July 1, 2025, the motor fuel tax rate will be $0.295 per gallon.[62] The fuel tax collections are distributed to cities based on population and to counties based on road mileage and land valuation, while the remainder is transferred to MoDOT.

The trend toward more fuel efficient or all electric vehicles, when coupled with projections that the state's VMT will continue to increase, indicates there will be increased demand on the state's transportation system. All while less fuel tax is being generated per mile traveled.

To account for this shift towards more fuel-efficient vehicles and make up for less fuel tax revenue, in 2022, the Missouri Department of Revenue implemented an annual special fuel decal fee. All passenger vehicles, commercial and buses (includes public school buses but not shuttle buses) must display a special fuel decal if they are powered by the following: Liquefied Petroleum (LP)/Propane; Electricity; Plug-in Hybrid Electric Vehicle (PHEV) - Model years 2018 and newer; or Natural Gas. The revenue generated from the purchase of special fuel decals is deposited into the State Road Fund.

Since 1975, National Corporate Average Fuel Economy (CAFE) standards have been established with the goal to reduce energy consumption of passenger cars and light duty trucks. Fuel efficiency standards continue to increase. In June 2024, the National Highway Traffic and Safety Administration (NHTSA) announced the final rule establishing CAFE standards that would require an industry-wide fleet average of approximately 50.4 miles per gallon (mpg) in model year 2031 for passenger cars and light trucks and an industry fleet-wide average for heavy-duty pick-ups and vans of roughly 2.851 gallons per 100 miles in model year 2035.[63] While the NHTSA finalized updated CAFE standards in June 2024, subsequent legislative and administrative actions have significantly undermined their enforceability. In June 2025, the U.S. Department of Transportation (USDOT) issued an interpretive rule declaring the 2024 standards legally invalid, citing the inclusion of electric vehicles in fuel economy calculations as inconsistent with federal law.



Source: MoDOT

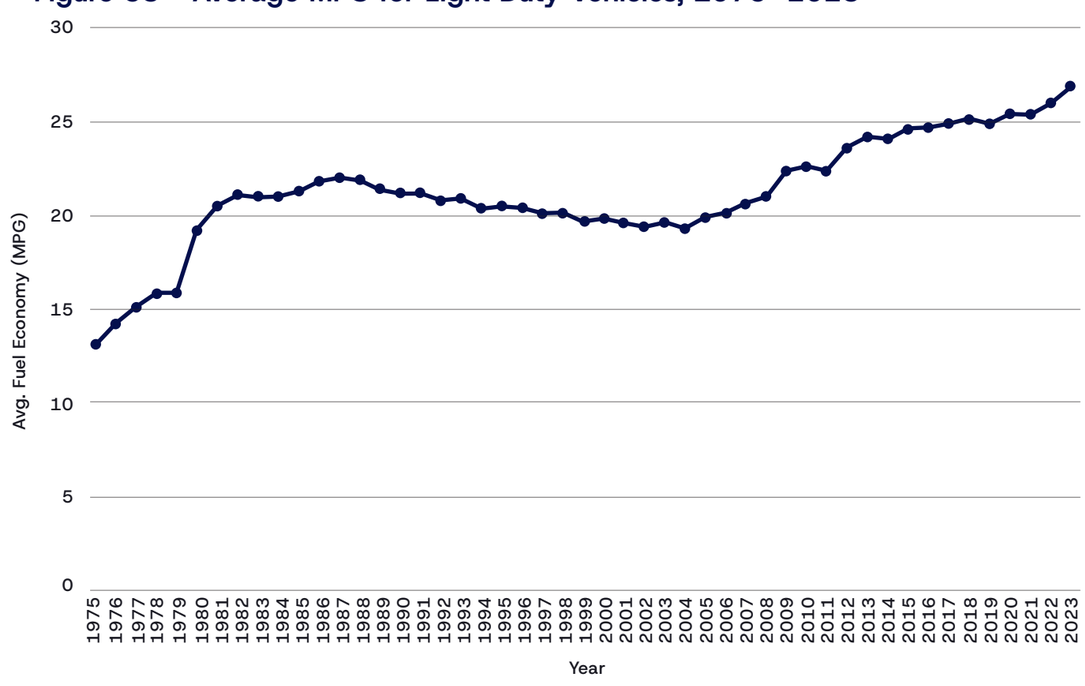
[62]Missouri Department of Revenue, "Motor Fuel Tax FAQ," accessed June 5, 2025, https://dor.mo.gov/faq/taxation/business/motor-fuel.html.

[63]U.S. Department of Transportation National Highway Traffic Safety Administration, "Corporate Average Fuel Economy," June 7, 2024, https://www.nhtsa.gov/laws-regulations/corporate-average-fuel-economy.

Around the same time, Congress passed a federal budget package that eliminated financial penalties for noncompliance and removed key enforcement mechanisms, effectively nullifying the program's regulatory power. Additionally, lawmakers have introduced measures under the Congressional Review Act to formally repeal the 2024 standards, which, if successful, would further weaken or eliminate the CAFE program altogether. **Figure 53** displays the average MPG for light duty vehicles from 1975 to 2023 which has continuously increased over the course of time.

Many automakers have made independent commitments to expand electric vehicle (EV) production and to deploy autonomous vehicle fleets equipped with advanced electronic systems. If these more fuel-efficient and alternative-fuel vehicles become a larger share of the state's rolling stock, overall fuel consumption may decline. If this transition accelerates, the resulting reduction in fuel demand could significantly impact transportation funding, particularly in a state where per-gallon motor fuel taxes remain a primary revenue source. As fuel-efficient technologies continue to advance, the state may need to consider alternative or supplemental funding mechanisms to support the sustainability of its transportation infrastructure.

Figure 53 – Average MPG for Light Duty Vehicles, 1975–2023



Source: Adapted from U.S. Environmental Protection Agency (EPA), "2024 EPA Automotive Trends Report Greenhouse Gas Emissions, Fuel Economy and Technology since 1975," 2024.

Vehicle Ownership

As shown in **Figure 54**, motor vehicle registrations in the state peaked in 2013 when Missourians registered 5.8 million total private and commercial vehicles. In 2023, the state had 5.5 million registered vehicles, an increase of 2.4% from 2022.

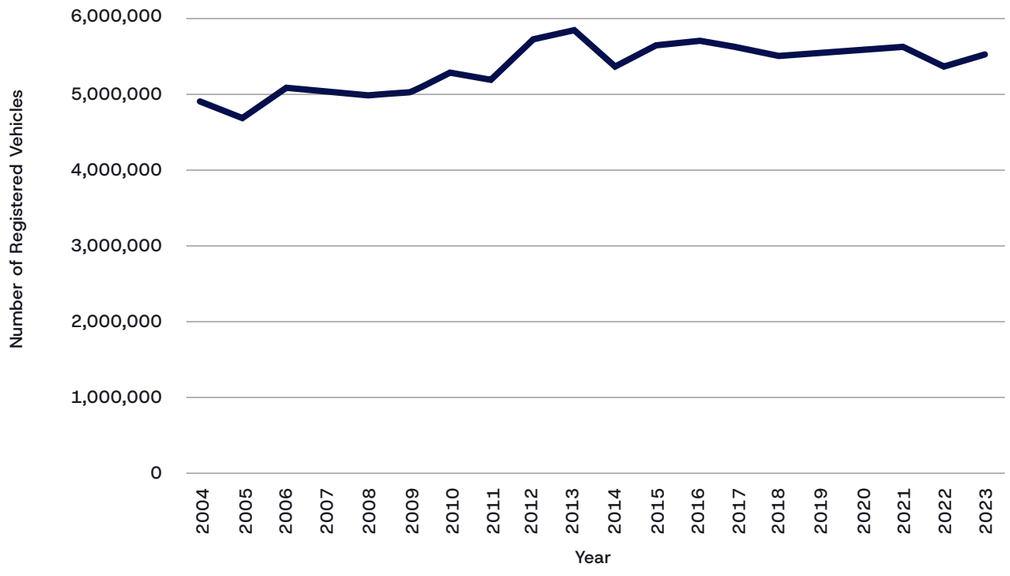
Based on ACS data, in 2023, the county with the largest percentage of households with zero vehicles was St. Louis City at 17.9%. Knox County has the lowest percentage of households having zero vehicles at 1.8%. The percentage of zero vehicle households for each county in the state is shown in **Figure 55**. Overall, 6.6% of households in the state have no vehicle, which is less than the National percentage of 8.3%.

Today, not owning a vehicle poses less of a hindrance to a person's transportation mobility. With the rise of ride-share apps that allow riders to simply pay to ride on-demand services, there are now more alternatives to owning personal vehicles.



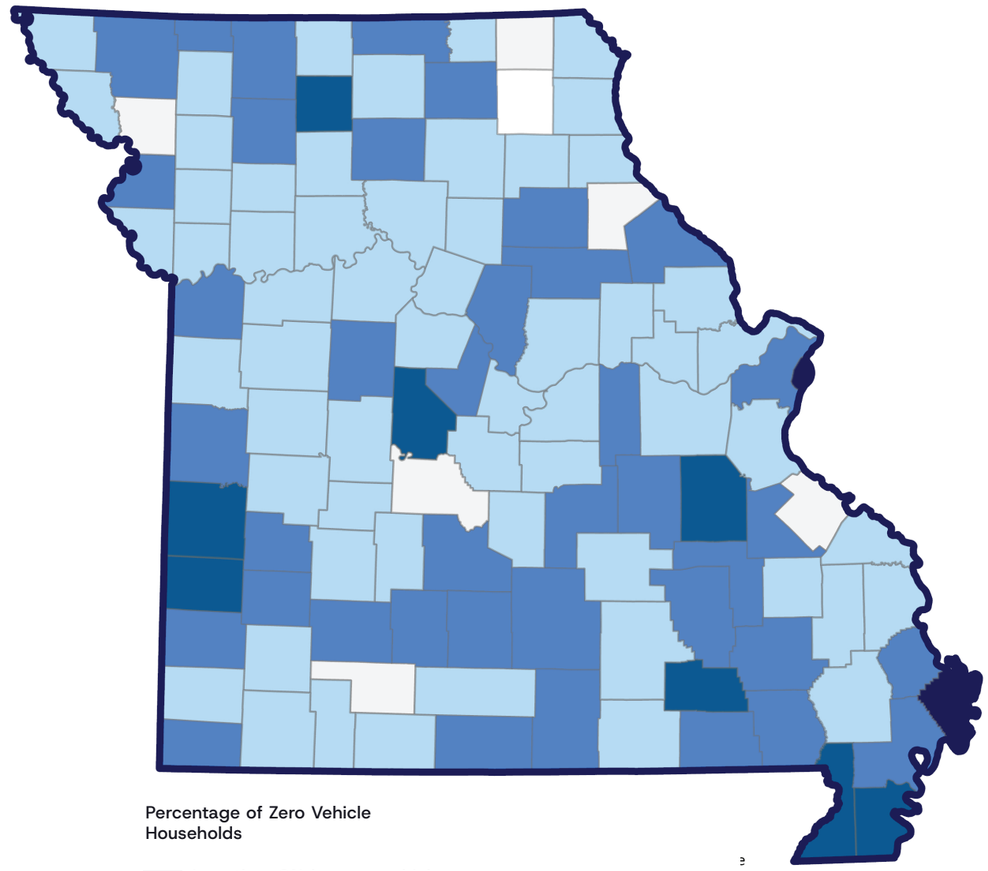
Source: MoDOT

Figure 54 – Total Number of Private and Commercial Vehicles Registered in Missouri, 2004–2023



Source: Adapted from Federal Highway Administration (FHWA), Office of Highway Policy Information, Motor Vehicle Registrations, (1990-2023).

Figure 55 – Zero Vehicle Households in Missouri by County, 2023



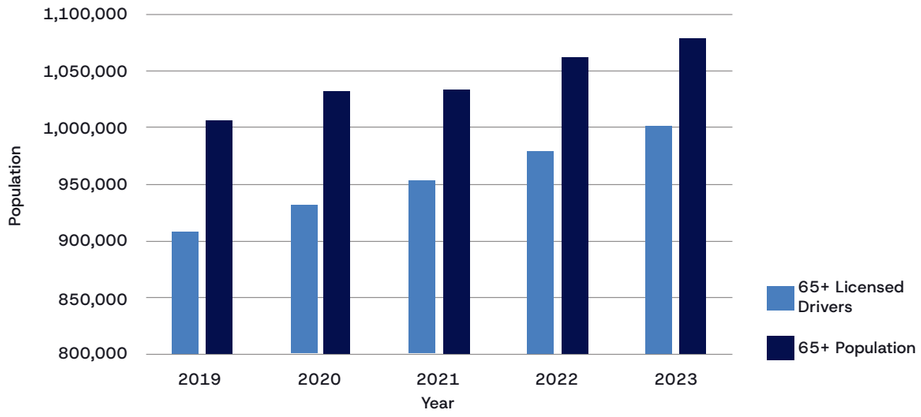
Source: U.S. Census Bureau, Household Size by Vehicles Available, American Community Survey, ACS 5-Year Estimates Subject Tables, Table B08201, 2023.

Licensed Drivers

In 2023, the state had more than 4.3 million licensed drivers, this is an increase of 0.4% from 2022. The 4.3 million licensed drivers are approximately 70% of the state's total population eligible to become a licensed operator. Since 2020, the overall trend for the number of licensed drivers in the state has been increasing.[64]

The Federal Highway Administration (FHWA) classifies young drivers as individuals with a driver's license between the ages of 16-to-24. Of the more than 4 million licensed drivers in the state, 12% of them were in the 16-to-24 age group. In contrast to the classification of young drivers, FHWA classifies older drivers as individuals with driver's license over the age of 65. As the state's population of people 65 and older has grown, so has the number of licensed drivers in this age group. **Figure 56** shows the number of the state's residents 65 years and older with a vehicle operating license. In 2023, of the state's 4.3 million licensed drivers 1 million (23%) of them were 65 years old or older. This was the first time the number of licensed drivers aged 65 or older surpassed 1 million. Older drivers (age 65 and up) have been involved in 16-18% of all the state's fatal and serious injury crashes in the past three years. This is primarily due to the growing population in this age group.[65]

Figure 56 – Missouri Residents Aged 65 and Older with an Operating License, 2019–2023



Source: FHWA Policy and Governmental Affairs Office of Highway Policy Information, Highway Statistics Licensed Drivers, by State, Sex and Age Group, 2023; Source: Adapted from FHWA, Policy and Governmental Affairs Office of Highway Policy Information, Highway Statistics Licensed Drivers, by State, Sex and Age Group, 2022; Source: FHWA, Policy and Governmental Affairs Office of Highway Policy Information, Highway Statistics Licensed Drivers, by State, Sex and Age Group, 2021; Source: FHWA, Policy and Governmental Affairs Office of Highway Policy Information, Highway Statistics Licensed Drivers, by State, Sex and Age Group, 2020; Source: FHWA, Policy and Governmental Affairs Office of Highway Policy Information, Highway Statistics Licensed Drivers, by State, Sex and Age Group, 2019.

[64] FHWA, Office of Highway Policy Information, "Highway Statistics 2023," accessed March 20, 2025, https://www.fhwa.dot.gov/policyinformation/statistics/2023.

[65] MoDOT, "Save MO Lives, Older Drivers," accessed June 5, 2025. https://www.savemolives.com/mcrs/older-drivers.

Commuting Patterns

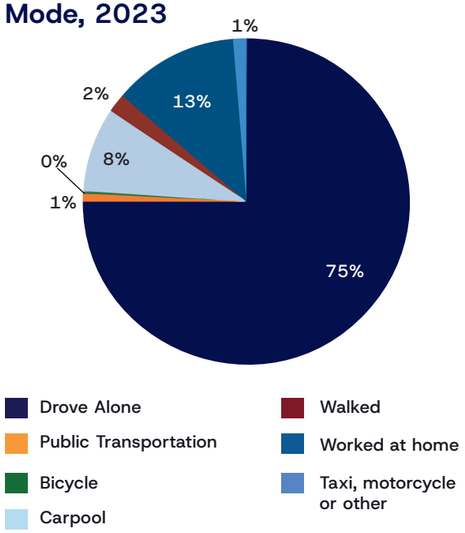
Approximately 75% of those who commute to work do so alone, in a personal vehicle and 8% use carpooling in a personal vehicle. The percentage of commuters carpooling has remained relatively consistent over the last 10 years with only a 0.5% decrease. The percentage of commuters driving alone has decreased 6.8% during the last 10 years; this decrease is the largest among seven commute modes.[66]

Figure 57 highlights the preferred commute mode for Missourians. The percentage of Missourians working from home has increased 8.1% over the last 10 years. In 2023, approximately 13% of Missourians worked from home, making it the second largest commute mode that year. The largest increase in the percentage of workers working from home occurred between 2019 and 2020. An 8% increase occurred between those years, likely tied to the COVID-19 pandemic and continued improvements in communication technologies.

The commuting modes of walking and cycling have decreased slightly over the last 10 years. In 2023, around 0.3% of Missourians commuted via bicycle and 1.8% walked. The use of public transit among commuters has fallen steadily over the last 10 years from its peak of 1.6% of commuters in 2014, with only 0.8% of commuters opting for this mode in 2023.

When compared to national trends, Missourians drive alone to work at a rate nearly 6% above the national average and commute by public transit at a rate of 2.8% less than the national average. The remaining commute modes are close to the national average. Independent of travel mode, Missourians average 23.7 minutes of travel time to work.[67]

Figure 57 – Missourians' Commute Mode, 2023



Source: BTS, Commute Mode, 2023.

[66] BTS, "Commute Mode 2023," accessed June 5, 2025, https://www.bts.gov/browse-statistical-products-and-data/state-transportation-statistics/commute-mode.

[67] U.S. Census Bureau, "QuickFacts Missouri," accessed June 5, 2025, https://www.census.gov/quickfacts/fact/table/MO/PST045224.

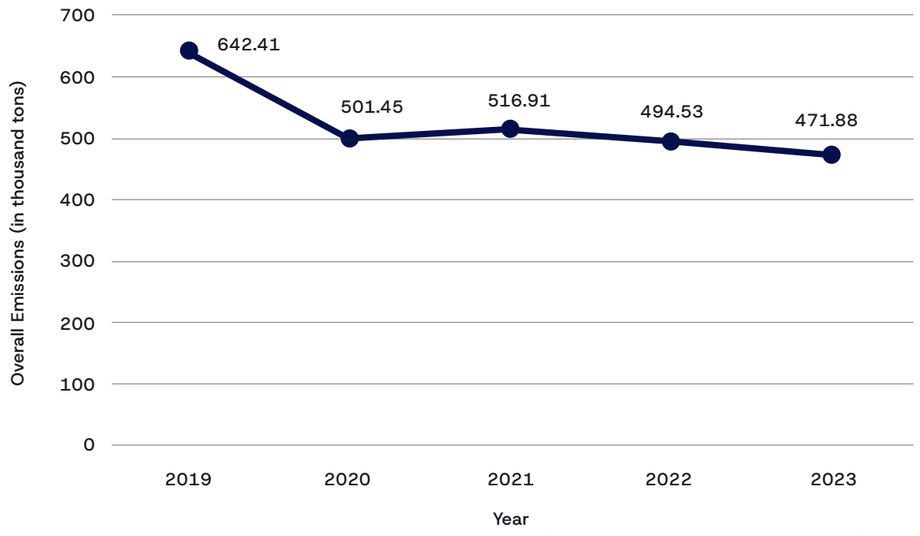
Environmental Resources and Resiliency

Sustainability and Carbon Reduction

Each year the state, along with other states and their delegated local agencies, submit emissions data to the Environmental Protection Agency (EPA) for the National Emissions Inventory. One of the key emissions inventoried is on-road mobile source emissions. On-road mobile source emissions result from motorized vehicles operating on public roadways. Motorized vehicles encompass buses, light-duty trucks, heavy-duty trucks and passenger cars.

As shown in **Figure 58**, there was a 27% decrease in the state's total on-road mobile source emissions from 2019 to 2023. On-road mobile source emissions produce several pollutants, but the pollutant contributing the most to the total number of on-road mobile source emissions is Carbon Monoxide (CO). CO forms from on-road vehicles when carbon-based fuels like gasoline are not burned completely. CO accounted for 79% of the state's total emissions from on-road mobile sources in 2023.[68]

Figure 58 – Missouri's Total On-Road Mobile Source Emissions, 2019–2023



Source: Adapted from U.S. Environmental Protection Agency, State Tier 1 Criteria Air Pollutants (CAPs) Trends, 1990-2024.

[68]EPA, "Air Pollutant Emissions Trends Data," April 28, 2025, https://www.epa.gov/air-emissions-inventories/air-pollutant-emissions-trends-data.

Resiliency

The state's transportation system has similar challenges and associated risks when compared to other neighboring states. These challenges and risks have the potential to impact the system's operation regarding safety and reliability. MoDOT has multiple processes in place to aid in mitigating this risk including the use of an asset management plan.

MoDOT's approach to asset management is built upon the foundation of its primary goal being to take care of the transportation system and services available today. In 2016, MoDOT's asset management planning evolved from a statewide plan to individual district models. Since 2016, each of MoDOT's seven districts has maintained an asset management plan for pavements and bridges. These plans have been developed and updated regularly by multidisciplinary teams.[69]

As part of the asset management plans, MoDOT has identified assets vulnerable to extreme weather due to recent flooding events occurring throughout the state. The assets vulnerable to flooding include several National Highway System (NHS) bridges and pavements, some of which are located on interstates. Locations that have been identified as having a risk due to natural disaster or extreme weather events are documented and, in 2020, MoDOT updated the Transportation Management System (TMS) to include records of all locations (NHS and all other routes) affected by natural disasters which resulted in repairs. There is consideration of potential mitigation strategies with each project programmed in these identified locations.

Air Quality

When it comes to air quality, MoDOT is responsible for implementing the conformity regulation for transportation actions in



[69]MoDOT, National Highway System Transportation Asset Management Plan, 2022, https://www.modot.org/sites/default/files/documents/Federal%20Transporation%20Asset%20Management%20Plan_508Compliant.pdf.

attainment and nonattainment areas. For the Missouri ozone nonattainment area, the East-West Gateway Council of Governments conducts conformity analyses whenever a regionally significant project is added to the Transportation Improvement Program (TIP). These analyses ensure consistency with the State Improvement Plan (SIP) developed by the Missouri Department of Natural Resources. Areas that do not meet the primary standard for any one or more of the six criteria pollutants are designated nonattainment areas and must implement a SIP that includes measures to reduce emissions.

Ozone is the primary transportation-related pollutant for which Missouri currently has nonattainment areas, particularly concentrated in and around St. Louis in the eastern part of the state. All Missouri counties that are designated nonattainment areas for ozone and other pollutants are shown in **Figure 59**.[70] MoDOT coordinates with East-West Gateway and Mid-America Regional Council Air Quality Committees to ensure consistency with the Air Quality regulations and to coordinate with State and Federal Environmental Agencies.

Environmental Resource Constraints

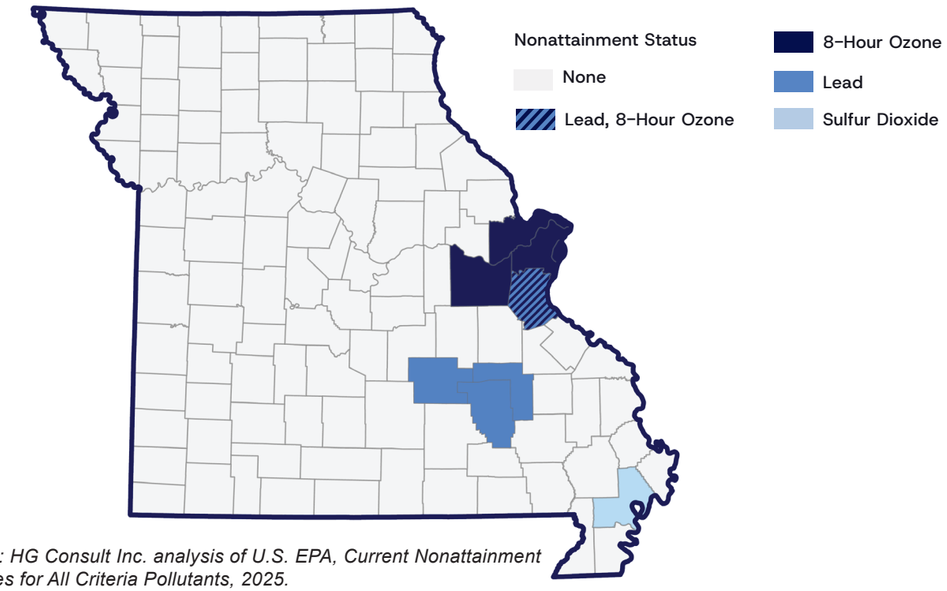
The state of Missouri is home to an abundance of unique environmental resources. The state is nicknamed the "Cave State," with approximately 7,500 recorded caves in the state.[71] The state's unique karst geology allows for these caves to form as well as springs and sinkholes.

The state contains the two longest rivers in the U.S. The Missouri River bisects the state west to east and the Mississippi River forms the state's eastern border. Accompanying those two rivers is the first national park area to protect a river system, Ozark National Scenic Riverway. All three of these riverways boast and support numerous natural resources, economic resources and recreational resources specific to the state.

The state has approximately 45 federally listed threatened and endangered plant and animal species.[72] The state is also home to Mark Twain National Forest, which encompasses 1.5 million acres in 29 counties. Complementing Mark Twain National Forest are the state's 57 state parks and 36 historic sites. Two National Historic Trails cross through the state, the Trail of Tears and the Butterfield Overland Trail.

MoDOT's policy is to avoid impacts on natural resources where feasible. Federal policy guides the proposed mitigation on potential impacts to natural resources such as streams, wetlands and farmland.

Figure 59 – Missouri Counties in Nonattainment, 2025



Source: HG Consult Inc. analysis of U.S. EPA, Current Nonattainment Counties for All Criteria Pollutants, 2025.

[70]EPA, "Current Nonattainment Counties for All Criteria Pollutants," May 31, 2025, https://www3.epa.gov/airquality/greenbook/ancl.html.



Source: MoDOT

[71]Missouri Department of Natural Resources (DNR), "Caves," accessed June 5, 2025, https://dnr.mo.gov/land-geology/geology/karst-missouri/caves#:~:text=With%20approximately%207%2C500%20recorded%20caves,be%20easily%20dissolved%20by%20water.

[72]MoDOT, "Environmental Studies – Threatened and Endangered Species," accessed June 5, 2025, https://www.modot.org/threatened-and-endangered-species#:~:text=Missouri%20has%20approximately%2045%20federally,found%20on%20the%20USFWS%20website.

Transportation Implications

The state's demographic and socioeconomic projections underscore the complexity of transportation planning through 2050. The state's population is expected to surpass 6.7 million by mid-century, with urban and suburban regions, particularly Kansas City, St. Louis, Springfield, Columbia and Cape Girardeau, driving the majority of growth while many rural areas continue to decline. The proportion of residents over 65 will peak at more than 21% by 2030, while the population under 20 is projected to decrease by 65,000 by 2050, signaling significant shifts in travel demand, mobility preferences and household transportation reliance. Concurrently, VMT is projected to exceed 100 billion annually by 2044, amplifying congestion, safety and maintenance concerns.

Economics and workforce dynamics reinforce these challenges. GSP has grown at an inflation-adjusted rate of 2.1% since 2019, led by manufacturing, healthcare and real estate, all sectors dependent on efficient freight and commuter networks. Cross-border commuting in the Kansas City and St. Louis metropolitan areas continues to place disproportionate strain on the state's infrastructure without equivalent revenue returns. At the same time, fuel efficiency gains and adoption of electric vehicles, while beneficial for sustainability, threaten to erode per-gallon motor fuel tax revenues that remain the state's primary funding source. Compounding these fiscal pressures, fiscal year (FY) 2026 state budget actions reduced transit operating assistance by roughly 42%, cutting $5 million from prior allocations. These interlinked demographic, economic and travel trends make clear that the state's future transportation strategy must prioritize system resiliency, capacity expansion in high-growth corridors, alternative funding mechanisms and equitable access to mobility for an increasingly diverse and aging population.



Source: MoDOT

Chapter 4: Goals, Objectives and Performance Measures


Source: MoDOT

The 2026 Long-Range Transportation Plan (LRTP) addresses the statewide planning requirements under the Federal Surface Transportation Act–the Infrastructure Investment and Jobs Act (IIJA), also known as the Bipartisan Infrastructure Law (BIL). IIJA/BIL emphasizes performance-based, multimodal planning and retains the core highway program structure established under prior legislation. IIJA supports the following:

- Promoting economic vitality
- Improving safety and security for all users
- Enhancing accessibility and mobility for people and freight
- Strengthening multimodal connectivity
- Promoting efficient operations
- Preserving existing infrastructure in a state of good repair
- Increasing resiliency and reliability while reducing congestion
- Accelerating project delivery

Additionally, the Missouri Department of Transportation (MoDOT) has also developed a suite of strategic initiatives and performance-based programs that align with and support the goals of the Federal Surface Transportation Act. The Show-Me Zero Strategic Highway Safety Plan targets zero fatalities by heightening the safety of people, vehicles, speeds, infrastructure and crash responses. The *SAFER* program proactively assesses roadway safety to guide improvements. MoDOT's 2024 Transportation Systems Management and Operations (TSMO) Program and Action Plan enhance system reliability and congestion management. Internal efforts like Tracker performance metrics drive innovation, accountability and data-driven decision-making across the state's transportation system.

MoDOT Mission Statement



Source: MoDOT

Goals and Objectives Development

A goal is a broad, overarching aspiration that defines a desired outcome, while an objective is a specific, measurable action or milestone undertaken to achieve that goal. The goals and objectives were shaped through a comprehensive, multi-phase stakeholder engagement process utilizing a variety of communication channels. Initial draft goals were created in collaboration with the MoDOT Executive Leadership Team.

These preliminary goals were then refined based on feedback gathered during key meetings and engagement activities. Comprehensive information from these meetings is summarized in the **Public and Stakeholder Outreach Chapter**.

Stakeholder and Engagement Groups

- MoDOT Executive Leadership Team
- MoDOT Statewide Planning Partners Meeting
- MoDOT LRTP Virtual Public Information Meeting (VPIM)
- Modal Advisory Committee (MAC): A larger group representing various modes, safety and industry representatives within Missouri who provide input and feedback
- Executive Modal Advisory Committee (Executive MAC): A smaller group selected from MAC to provide direction, decision-making and guidance, particularly around scenario planning
- Public outreach events at the Missouri State Fair
- MoDOT High-Priority Unfunded Needs (HPUN) meetings



Source: MoDOT

To ensure broad public participation, online surveys were made available during the VPIM and at State Fair events. This allowed Missourians to share their perspectives and contribute to the planning process. Through this iterative approach, a final set of goals and objectives emerged which reflect a shared mission for the future of transportation across the state.

LRTP Goals and Objectives

MoDOT's performance-based planning and programming process begins with the LRTP. To ensure the successful implementation of Missouri's transportation vision, MoDOT revisited the foundational elements of its mission and vision, specifically its goals and objectives. Informed by federal and state planning requirements, a review of multimodal transportation plans and inclusive stakeholder engagement, MoDOT identified long-range goals that reflect statewide priorities and address transportation needs through 2045. Each goal is supported by specific objectives that outline actionable strategies MoDOT can lead or support to achieve the desired goals. These goals and objectives guide project prioritization and investment decisions within MoDOT's performance based planning and programming framework. This includes the Statewide Transportation Improvement Program (STIP), which directs the development of transportation projects over a multi-year horizon. MoDOT identified the following six goals to guide the LRTP:

Stewardship - **Preserve the assets and services currently in place**

Safe - **Enhance safety for all users of the transportation network**

Reliable - **Ensure efficiency and reliability in the transportation network**

Connected - **Maximize mobility and connect communities through multimodal transportation options**

Innovative - **Leverage technology and creative solutions to build a future-ready transportation network**

Prosperous - **Drive economic growth through transportation investments**

Stewardship

Preserve the Assets and Services Currently in Place

Provide a transportation system in a state of good repair through meeting or exceeding established performance targets. (*Performance target details are in the **Existing System Trends and Conditions Chapter***).

Explore and secure stable funding to support the current system and services for each mode of transportation.

Maintain system resilience by adapting to changing life cycle costs, advancing technologies, an evolving workforce and a growing multimodal transportation demand.

Enhance the transportation system by avoiding, minimizing or mitigating impacts on natural and cultural resources.

Advance the Missouri State Freight and Rail Plan Stewardship objectives.



Source: MoDOT

Safe

Enhance Safety for All Users of the Transportation Network

Invest in system-wide safety improvements to reduce fatalities and serious injuries for all modes and support driver education.

Enhance transportation safety with a focus on the Show-Me Zero – Missouri Strategic Highway Safety Plan emphasis areas.

Enhance safety and security at transportation mode connection points such as transit hubs and pedestrian/cyclist crossings.

Expand partnerships with safety advocates and citizens around the state to identify and implement safety improvements.

Reduce barriers to access and provide protection for vulnerable road users.

Advance the Missouri State Freight and Rail Plan Safety objectives.



Source: MoDOT

Reliable

Maintain a Transportation Network That Is Efficient and Dependable

Take a practical/life cycle approach to highway system capacity expansion, given financial constraints.

Increase reliability of the transportation system in bottleneck areas.

Enhance transportation infrastructure resilience to maintain the movement of people and goods during traffic disruptions.

Provide reliable and accessible multimodal transportation options for all users.

Enhance emergency and alternative routes.

Advance the Missouri State Freight and Rail Plan Reliable objectives.



Source: MoDOT

Connected

Maximize Mobility and Connect Communities Through Multimodal Transportation Options

Provide an accessible and connected transportation system for all users.

Promote preservation and provision of additional multimodal connectivity during project development.

Maximize multimodal transportation system with options and connections throughout the state.

Advance the Missouri State Freight and Rail Plan Connected objectives.



Source: MoDOT

Innovative

Leverage Technology and Creative Solutions to Build a Future-Ready Transportation Network

Explore technology and develop business practices that result in lower life-cycle costs.

Support automated and connected vehicle technology by advancing the MoDOT Connected and Automated Vehicle Action Plan.

Understand and deploy innovative work zone warning and protection devices.

Identify and plan alternative funding sources to recoup gas tax revenue lost from alternatively fueled vehicles.

Integrate traffic management systems and vehicle detection systems to monitor and improve traffic congestion.

Advance the Missouri State Freight and Rail Plan Innovation objectives.



Source: MoDOT

Prosperous

Drive Economic Growth Through Transportation Investments

Increase partnership coordination with local communities, regional and metropolitan planning organizations, businesses, transportation service providers and other sectors to identify and partner on transportation projects that can better support local economies.

Support projects that provide long-term economic benefits.

Focus federal grants on transformational projects with high economic impacts which stimulate the local economy and strengthen the competitiveness of Missouri's regions.

Advance the Missouri State Freight and Rail Plan Prosperous objectives.



Source: MoDOT

Performance Measures

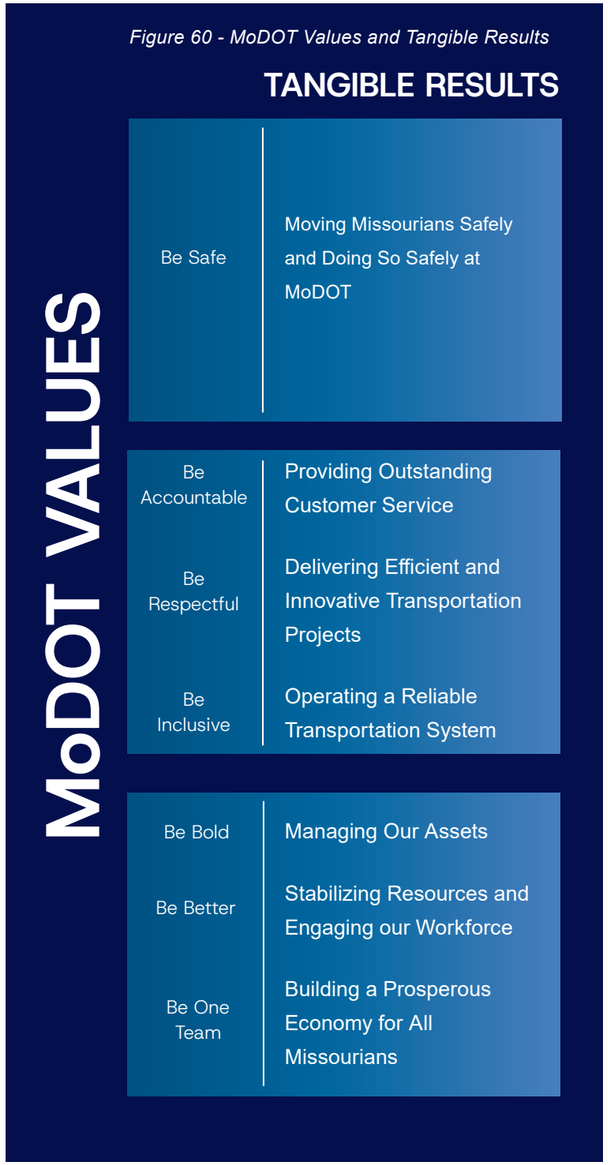
MoDOT has been a national leader in performance management processes for decades when they developed their performance management tool (Tracker) that tracks performance through tangible results. Monitoring and reporting progress toward LRTP goals and objectives and statewide performance measures are central to MoDOT's performance-based planning. For comprehensive details on data collection methods, measurement criteria and methodologies, please refer to MoDOT's Tracker system website which is updated quarterly. MoDOT tracks performance at two levels:

- State-level Tracker metrics: Aligned with strategic goals and objectives
- Federal metrics: Established under 23 CFR 450

MoDOT Agency Performance Measures

MoDOT's publicly available Tracker measures are updated quarterly to enhance transparency, evaluate agency performance and support fiscally constrained strategic decision-making. Tracker performance measures are tied directly to MoDOT's values and tangible results within the focus areas of deliver the program, restore operations, work safely for ourselves and the traveling public and focus on customers highlighted in **Figure 60.**

Figure 60 - MoDOT Values and Tangible Results



Stewardship

Preserve the Assets and Services Currently in Place

Associated Tangible Results

Managing our Assets

Delivering Efficient and Innovative Transportation Projects

Stabilizing Resources and Engaging our Workforce

Safe

Enhance Safety for All Users of the Transportation Network

Associated Tangible Results

Moving Missourians Safely and Doing So Safely at MoDOT

Reliable

Maintain a Transportation Network That Is Efficient and Dependable

Associated Tangible Results

Operating a Reliable Transportation System

Delivering Efficient and Innovative Transportation Projects

Building a Prosperous Economy for All Missourians

Connected

Maximize Mobility and Connect Communities Through Multimodal Transportation Options

Associated Tangible Results

- Operating a Reliable Transportation System
- Stabilizing Resources and Engaging our Workforce
- Providing Outstanding Customer Service

Innovative

Leverage Technology and Creative Solutions to Build a Future-Ready Transportation Network

Associated Tangible Results

- Operating a Reliable Transportation System
- Stabilizing Resources and Engaging our Workforce

Prosperous

Drive Economic Growth Through Transportation Investments

Associated Tangible Results

- Building a Prosperous Economy for All Missourians
- Operating a Reliable Transportation System

Federal Performance Measures

The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) have established performance measures to enhance transportation performance management nationwide. These measures support state-level efforts and help agencies track progress toward achieving national planning goals set by Congress.

MoDOT aligns its goals with these federal priorities in areas such as safety, infrastructure and vehicle condition, system performance and reliability. The System Performance Report in **Appendix G**, reports on progress toward federally required performance measure targets, ensuring continued compliance and eligibility for federal funding.



Source: MoDOT

Chapter 5: Needs Assessment

Traverse a small stretch of Missouri's roadways and you are likely to encounter the investments being made in transportation infrastructure. Missouri's transportation system is a tremendous asset to the citizens of Missouri. The system consists of 33,814 miles of state highways and 10,427 bridges, ranking it as the 7th largest state highway system with the 6th most bridges in the country. Identifying and prioritizing the needs of the system is essential to keeping it operational. There are two levels of needs identification, regional and statewide, both of which are identified through the Long-Range Transportation Plan (LRTP) planning process.

Statewide Needs

- Involve public outreach that occurs during long-range plan development
- Typically crosses multiple District boundaries
- Often involve interstates and major highways

Regional Needs

- Are defined by the seven Missouri Department of Transportation (MoDOT) Districts in collaboration with:
  - Local and regional elected officials
  - Community officials
  - Metropolitan planning organizations
  - Regional planning commissions
- Are reviewed and updated throughout the year

Prioritizing Needs

Is the process of deciding which problems from the list of identified needs should be addressed first

Can be challenging due to wide range of needs and varying time frames

Requires coordinated effort from many groups

Immediate needs do not automatically receive higher priority

Subject areas include:



Integrating Regional Planning

Federal regulations (23 CFR 450) require Missouri's transportation planning process to be continuing, cooperative and comprehensive. MoDOT works closely with MPOs, RPCs and local jurisdictions to understand community priorities and corridor needs.

MPO plans offer detailed corridor analysis and regional priorities within metropolitan areas. RPC and local plans provide additional context on community development patterns, land use and mobility needs. Together, these efforts help shape a more complete picture of Missouri's transportation needs.

MoDOT considers regional and local planning information during project scoping and development to ensure statewide investments reflect both system-level priorities and the needs of the communities they serve.


Source: MoDOT

Funded Needs

MoDOT funds both statewide and regional transportation needs through the Statewide Transportation Improvement Program (STIP).

Present Day (2025)

- The largest STIP in MoDOT history
- The busiest construction season on record, with more than $2 billion in awarded contract work
- Delivery of large-scale transportation projects, including Improve I-70 and Forward 44

Over the Last 10 Years

- 4,099 projects completed
- $9.7 billion total investment

Looking Forward (Next Five Years)

- $13.3 billion in federal and state revenues available for all transportation modes
- $9.5 billion allocated for road and bridge contractor awards
- Maintaining the existing system is the focus of the 2026–2030 STIP, as taxpayers requested
- Many regions will only have enough funding to maintain current pavement and bridge conditions rather than improve them



Source: MoDOT

Needs prioritization is based on the goals in Missouri's long-range transportation plan. MoDOT Districts work with planning partners to prioritize regional needs annually. Each district develops a program that first focuses on asset management goals to maintain existing condition. If a district has funds remaining after programming the work needed to meet condition goals, then other regional needs may be considered and prioritized.

More information about revenue sources can be found in the **Revenue Forecast Chapter** of this document and the Citizen's Guide to Transportation Funding in Missouri, available at the MoDOT website: http://www.modot.org/guidetotransportation/.

$2.83B

Missouri 2024 expenditures for state roads and bridges

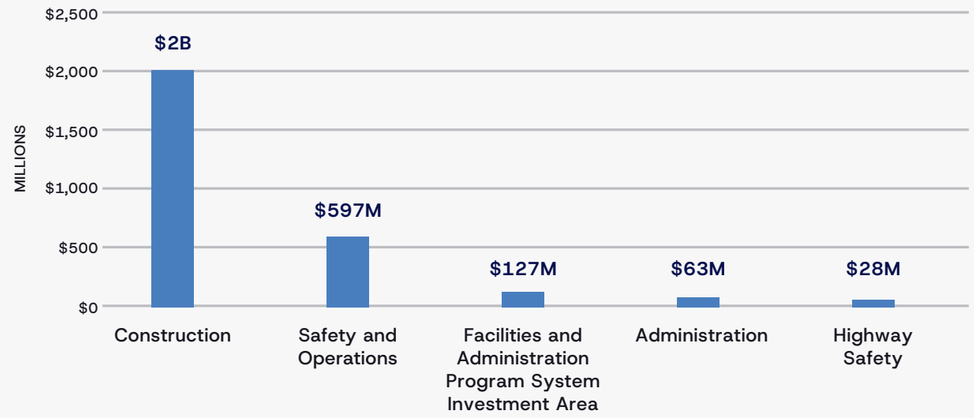
$174M

Administered and overseen by MoDOT in 2024 for multimodal improvements

State Roads and Bridges Funded Needs

Funding needs for Missouri's state roads and bridges include investments to design, construct, operate and maintain these facilities throughout state. The state road and bridge investments are divided into five categories. **Figure 61** illustrates the distribution of the total investments and details each of the categories.

Figure 61 – MoDOT Transportation Funded Expenditures, 2025



Source: MoDOT, Financial Snapshot (2025).

Construction

Largest area of investment that includes:

- Payments to contractors for projects that maintain and improve the transportation system
- MoDOT engineering costs for administering and monitoring the construction program
- Payments to engineering design consultants
- Costs of acquiring right of way and relocating utilities

Safety and Operations

Investments that include:

- Snow plowing, mowing and other routine maintenance services
- Pavement upkeep on approximately 5,100 miles of lower-volume routes not eligible for federal reimbursement
- Utilities, tools and materials for maintenance buildings statewide
- Bridge maintenance, signing, striping, sweeping, rumble strips and lighting
- Traveler information and incident-management services

Facilities and Administration Program System Investment Area

Investments that include:

- Purchasing MoDOT's fleet of trucks
- Constructing and maintaining MoDOT buildings
- Providing information technology needed for maintenance and engineering functions

Administration

Administrative costs are the fifth lowest in the nation and include salaries, wages and benefits for:

- Human resources
- Accounting
- Legal services
- Executive management
- Customer service
- Other support services

Highway Safety

Investments that include:

- Road and bridge features designed to reduce fatalities and serious injuries
- Salaries, wages and benefits for highway safety personnel

Multimodal Funded Needs

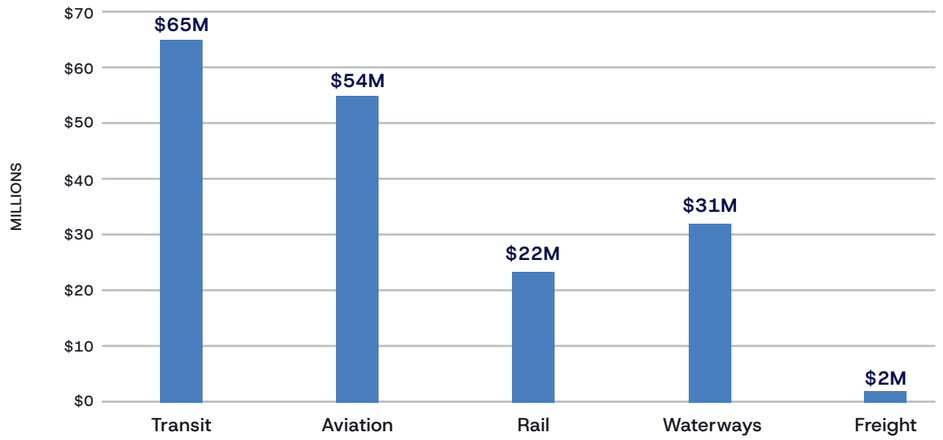
Multimodal refers to non-highway modes of transportation including transit, aviation, railroads, waterways and freight. Most of the transportation revenue is constitutionally required to be spent on state roads and bridges, leaving limited funds to support these services and facilities. Unlike roads and bridges, the State does not own multimodal facilities but instead administers the funding and provides oversight for multimodal investments.

The distribution of the total investments for each of the non-highway modes of transportation for fiscal year (FY) 2025 is shown in **Figure 62**, followed by funding details for each mode.



Source: MoDOT

Figure 62: MoDOT Multimodal Investments, 2025



Source: MoDOT, Financial Snapshot, 2025.

Transit (Fiscal Year 2025)

- $65 million in transit funds administered by MoDOT
- Most funding came from federal programs supporting operating costs and bus purchases for transit agencies statewide
- A small portion came from state and General Revenue funds to support operating costs

Aviation (Fiscal Year 2025)

- $54 million in aviation funds administered by MoDOT
- Missouri uses dedicated aviation fuel taxes to fund improvements to public-use airports
- MoDOT also administers federal funding for:
  - Airfield pavement and lighting improvements
  - Obstruction removal
  - Expansion projects

Rail (Fiscal Year 2025)

- $22 million in rail funds administered by MoDOT
- Funds support:
  - The Amtrak service between St. Louis and Kansas City (funded by General Revenue)
  - Safety improvements at railroad crossings (funded by state and federal sources)

Waterways (Fiscal Year 2025)

- $31 million in waterways funding administered by MoDOT
- Funds provided operating and capital assistance to Missouri's river ports and ferry boat operators

Freight (Fiscal Year 2025)

- $2 million administered by MoDOT for its Freight Enhancement Program supporting non-highway capital projects that improve freight flow efficiency
- Eligible recipients include public, private and nonprofit entities

Unfunded Needs

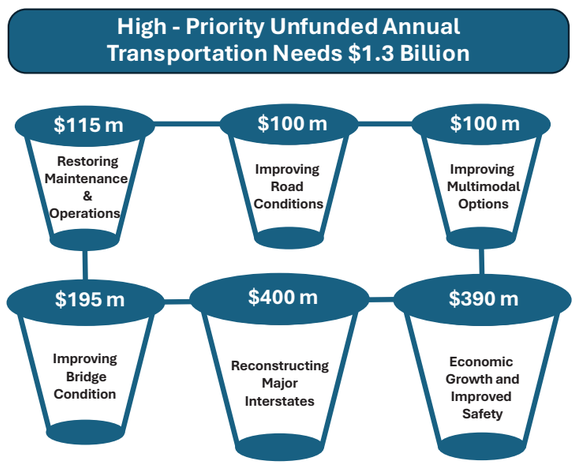
What Are Missouri's Transportation Needs?

Missouri has made historic investments in its transportation system, but with MoDOT's current available resources, the department must focus on preserving the existing system. Maintaining today's conditions requires nearly all available funding—and in some districts, every dollar is dedicated to keeping roads and bridges in good condition. Even with this focus, some areas will still lose ground over time.

This reality leaves a number of transportation needs unfunded. These needs represent critical improvements that go beyond basic maintenance—such as safety enhancements, mobility upgrades, economic development opportunities and multimodal connections.

Through the LRTP public engagement process, Missourians helped identify and prioritize these needs. Based on this input, MoDOT has adjusted its **Annual High-Priority Unfunded Needs** "buckets" to reflect what matters most to the public and stakeholders as shown in **Figure 63**.

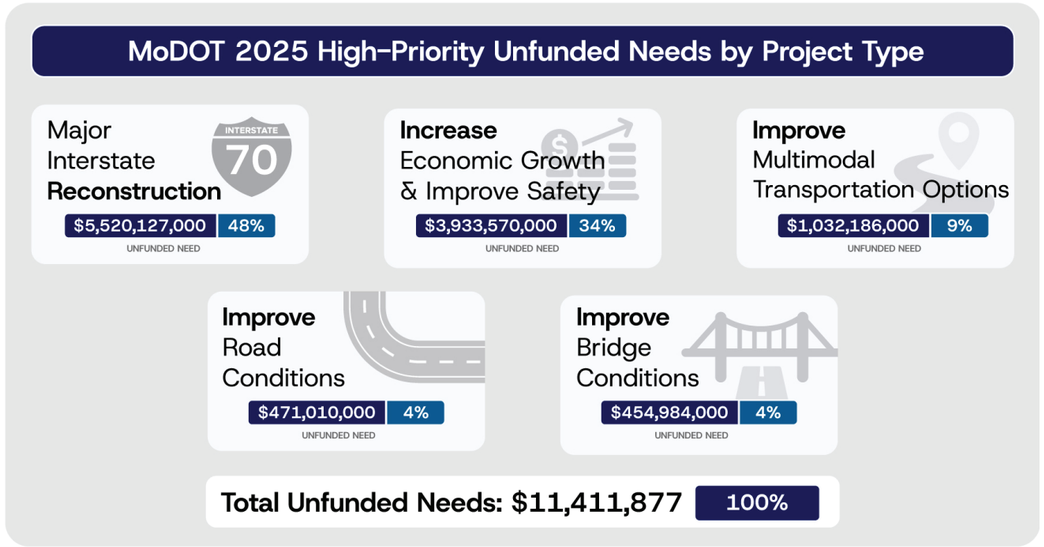
Figure 63 – Annual High-Priority Unfunded Needs



10-Year High Priority Unfunded Needs

While the State has made a historic investment in transportation, MoDOT must continue to prioritize using its existing resources to preserve the current condition of the transportation system. As a result, many MoDOT districts must devote all available funding to maintaining existing roads and bridges, leaving limited capacity to address additional needs. These unmet needs are documented in the 2025 High-Priority Unfunded Needs (HPUN) and represent a 10-year list of unfunded transportation needs across the state. To clearly communicate these challenges, the HPUN have been organized into high-priority categories. **Figure 64** summarizes the 10-year HPUN by category.

Figure 64 – 10-Year High-Priority Unfunded Needs



Source: MoDOT, Missouri High Priority Unfunded Needs, 2025.

Improve Road and Bridge Conditions

- Additional $1 billion needed in roads, bridges and maintenance that could:
  - Enable all MoDOT Districts to adequately maintain their existing systems
  - Reduce the number of poor condition bridges across the state
  - Improve overall road conditions statewide
  - Stabilize MoDOT's maintenance and operations to keep pace with inflationary cost increases

Increase Economic Growth and Improve Safety

- Additional $3.9 billion needed to support economic growth and safety
- Includes projects sought by communities statewide but that are unaffordable
- Includes:
  - New interchanges
  - Adding shoulders with rumble strips
  - Adding lanes to existing roads
- Benefits include:
  - Reduced congestion
  - Economic growth
  - Improved safety, reducing fatalities and serious injuries

Major Interstate Highway Reconstruction

- Additional $5.5 billion needed to reconstruct interstates
- Interstate considerations:
  - The interstate system is 65 years old, originally built with a 20-year life expectancy
  - Recent General Revenue investment supports improvements to 200 miles of I-70 through reconstruction and added capacity
  - Key Freight Corridors include I-44, I-70, I-55, I-57 and I-270. These corridors are projected to see moderate but steady growth in both tonnage and value, reflecting their importance to regional supply chains

Improve Multimodal Transportation Options

- Additional $1 billion investment needed to address key needs for Missouri's transit, railroads, ports, waterways, airports and bicycle/pedestrian facilities
- MoDOT would collaborate with system owners, stakeholders and regional planning partners
- Goal: Identify and fund the highest-priority multimodal improvements statewide

District Meeting Themes

Each MoDOT District also had the opportunity to provide feedback on the needs of their district. This feedback resulted in seven themes across all or most of the districts. These seven themes are:



Capacity and safety projects are needed to address congestion and improve traffic flow



Transit and modal accessibility needs were identified, including ports, airports, transit and passenger rail



Vulnerable road user safety is a high priority



Truck parking facilities are insufficient across the state



Asset management and maintenance funding resources are needed for bridges, pavement and operational infrastructure



Resiliency investments are needed to address flooding hazards



Intelligent Transportation System (ITS) infrastructure improvement needs were identified

Chapter 6: Emerging Technologies



Source: MoDOT

Transportation technologies are advancing quickly, reshaping how transportation agencies plan, operate and invest in their systems. The Missouri Department of Transportation (MoDOT) is preparing for this shift, guided by its core pillars of Safety, Service and Stability and informed by the strategies outlined in the MoDOT Transportation Systems Management and Operations (TSMO) Plan. Together these provide the innovation to enhance public safety, deliver value to customers and sustain a reliable transportation system for the future. MoDOT focuses on a core set of emerging technologies that support the state's long-range goals to use innovation and stewardship to deliver and maintain a safe, reliable and connected transportation system that will strengthen Missouri's economy.

In Missouri, These Innovations Could

- Reduce congestion across Missouri's transportation network
- Extend the life of critical transportation assets
- Enhance safety for all roadway users
- Strengthen Missouri's economy by ensuring reliable and efficient movement of people and goods
- Align with MoDOT's TSMO strategies and core pillars
- Support proactive, data-driven management of Missouri's multimodal transportation system

Missouri's Transportation System

- Includes 33,814 miles of state highway and 10,427 bridges, making it one of the largest networks in the United States.
- Supports essential industries such as agriculture, manufacturing and logistics.
- Connects major metropolitan areas—including St. Louis, Kansas City and Springfield with rural communities throughout the state.
- Serves as a central freight corridor for the Midwest, positioned at the intersection of I-70, I-44, I-55 and I-35, which places it at the center of national goods movement.

Emerging technologies present an opportunity for MoDOT to strengthen its strategic role while improving safety, reliability and economic competitiveness. Through its Stability pillar and TSMO plan, MoDOT emphasizes system reliability, asset management and workforce readiness to support the sustainability of operational and technological advancements over time.

MoDOT is well positioned to learn from peer states and national leaders in technology deployment while tailoring solutions to Missouri's urban, suburban and rural communities. MoDOT is preparing for a transportation future that is both data-driven and user-focused, with initiatives in varying phases of implementation such as adaptive traffic signals, smart work zones, truck platooning pilots, predictive maintenance and freight corridor digital twins. These efforts directly support the TSMO plan's focus areas of safety, reliability and efficiency, demonstrating MoDOT's service commitment to innovation and customer value while upholding its Safety and Stability pillars across all communities.

As the Long-Range Transportation Plan (LRTP) establishes a long-term vision for investment across all modes, emerging technologies will play a critical role in addressing challenges related to congestion, safety, system condition and accessibility. By integrating the TSMO framework and the Safety, Service and Stability pillars, MoDOT can support technology deployment that complements operational strategies, performance management and public trust.

This chapter will examine four technology areas most relevant to Missouri:

- **Smart Infrastructure and Intelligent Transportation Systems (ITS)**
- **Connected Vehicles and Autonomous Vehicles (CV/AV)**
- **Digital Twins and Predictive Analytics**
- **Smart Freight and Logistics**

For each area, the chapter will review benefits, challenges and costs of implementation, drawing on case studies from peer states.

Definitions and Examples

Smart Infrastructure and Intelligent Transportation Systems

Smart Infrastructure and Intelligent Transportation Systems (ITS) applies advanced technologies, such as sensors, communication networks and data analytics, to improve the safety, efficiency and sustainability of transportation networks by enabling real-time management of traffic flow, optimizing journeys and providing user information.



Source: MoDOT

Opportunities for Statewide Expansion

Missouri's existing Transportation Management Centers (TMCs) in St. Louis, Kansas City and Springfield already provide a strong foundation for ITS expansion. By building on these successes, MoDOT can:

- **Expand Smart Corridor Management:** Scale up successful KC Scout and Springfield pilots statewide
- **Integrate ITS into Rural Highways and Freight Corridors:** Enhance safety and reliability, especially in areas affected by frequent weather and work zone disruptions
- **Improve Real-Time Safety:** Deploy technology for proactive incident detection and response
- **Optimize Freight Movement:** Support efficient goods transport across Missouri's extensive highway network, including truck parking

Connected and Autonomous Vehicles

Connected and Autonomous Vehicles (CV/AV) are transformative transportation technologies that operate autonomously, use sensors, artificial intelligence (AI) and communication networks to enhance safety, efficiency and mobility. They analyze their surroundings and communicate with other vehicles and infrastructure to navigate and control themselves, with the goal of reducing accidents, alleviating traffic congestion and expanding transportation access for various users.

MoDOT's Connected and Automated Vehicle Action Plan

MoDOT's Connected and Automated Vehicle Action Plan was published in 2025. It established a foundation for CV/AV readiness and advancement in Missouri.[73] The key elements of CV/AV in Missouri outlined in this plan are provided in **Table 5**.

Table 5 – MoDOT's Connected and Automated Vehicle Action Plan Elements

Element	Details
Strategic Advantage	Missouri's geographic and economic profile makes it ideal for automated freight and CV/AV technology testing
Significant Freight Generators	Kansas City SmartPort and St. Louis multimodal logistics hubs
Advanced Initiatives	Truck platooning and vehicle-to-infrastructure pilots to provide immediate safety and fuel efficiency benefits
Key Collaborations	University of Missouri and Missouri University of Science and Technology for simulation modeling and readiness assessments
Major Deployment Corridors	I-70, I-55, I-49, I-44 and I-35

Source: MoDOT, Connected and Automated Vehicle Action Plan, 2025.

[73]MoDOT recently began using the term "Connected and Autonomous Vehicles" instead of "Connected and Automated" to align with terminology used by other state Departments of Transportation and agencies.

Data Exchange Pooled Fund Study (MoDOT-Led)

The Data Exchange Pooled Fund Study, led by MoDOT and initiated in December 2024, supports the development of a scalable, public-private transportation data exchange framework. The study is intended to enable interoperable data sharing across jurisdictions and industry partners, with a particular emphasis on supporting data-driven transportation technologies.

Study Partner States

- **Missouri**
- **California**
- **Connecticut**
- **Hawaii**
- **Kansas**
- **New Jersey**
- **Pennsylvania**
- **Texas**
- **Wisconsin**

Study Focus

- The study concentrates on the planning, design and governance of a shared data exchange environment, including:
  - Developing a multi-agency data exchange platform to support advanced transportation applications along multi-state transportation corridors
  - Establishing a public-private transportation data exchange center to enable secure, real-time data sharing and interoperability between public agencies and private sector partners
  - Identifying data standards, architectures and governance models that promote consistency, scalability and reuse across participating states
  - Advancing collaborative approaches to data sharing among DOTs, technology providers and mobility stakeholders

Study Objectives

- The primary objectives of the Data Exchange Pooled Fund Study include:
  - Facilitating seamless and secure information flow between infrastructure systems, vehicles, traffic management centers and operators
  - Improving transportation safety, mobility and operational efficiency through enhanced data availability and integration
  - Reducing duplication of effort by enabling shared solutions and best practices among participating agencies
  - Preparing Missouri and partner states' transportation corridors for broader deployment of emerging, data-dependent technologies

Digital Twins and Predictive Analytics

Digital twins and predictive analytics are virtual models of physical assets or systems that integrate real-time data for monitoring, analysis and forecasting.

When paired with predictive analytics, digital twins allow MoDOT to simulate scenarios, assess risks and make smarter investments. These tools support proactive maintenance and future-proof planning.

Statewide Digital Twin Pilot

Building on MoDOT's Transportation Asset Management Plan (TAMP), a statewide digital twin pilot could enhance transportation asset management, utility coordination and autonomous ride-sharing expansion by providing the following benefits:

- **Integrated Platform:** Link bridge condition, pavement performance and weather data into one system
- **Visualization:** Engineers can see system-wide vulnerabilities and test investment strategies
- **Forecasting:** Predict asset needs and plan maintenance proactively
- **Pilot Focus:** Target high-traffic freight corridors like I-70 for initial implementation

Digital Twin Technology for Utility Management

Digital twin technology also offers significant benefits for utility management within highway right of way, providing MoDOT with enhanced capabilities to document, visualize and coordinate underground and above ground utility assets by providing the following benefits:

- Improves the accuracy of utility location records for MoDOT
- Proactively identifies potential utility conflicts during project planning and design
- Minimizes unexpected utility impacts during construction
- Helps reduce project delays, control costs and maintain construction schedules
- Supports more efficient plan development in utility management
- Enhances safety throughout the project lifecycle

Autonomous Ride-Sharing Expansion

Investing in digital twin technology presents valuable opportunities for ride-sharing in Missouri.

- **Market Opportunity:** Digital twins for Kansas City and St. Louis make these regions attractive for autonomous rideshare companies
- **Potential Providers:** Innovative companies like Waymo and Tesla can leverage local digital twin data
- **Regional Impact:** Positions Missouri communities as leaders in advanced transportation technology



Source: MoDOT

Smart Freight and Logistics

Smart Freight and Logistics is a technology-driven approach that uses AI, internet of things (IoT) and data analytics to optimize the entire freight and logistics process, from tracking and management to delivery and resource use. This method enhances supply chain visibility, reduces operational costs, increases efficiency and speed and improves customer satisfaction.

Opportunities in Missouri

- **Chokepoints along I-70, I-44 and I-55** could benefit from real-time freight monitoring and truck parking technology.
- **Expanding truck parking availability and electrification**, particularly along the I-70 and I-44 corridors, can:
  - Reduce idling
  - Improve driver safety
  - Support sustainability
- **MoDOT can leverage partnerships** with private carriers, railways and river port authorities to:
  - Enhance intermodal connectivity
  - Strengthen digital freight management systems

Transportation Systems Management and Operations Capability Areas

MoDOT organizes its Transportation Systems Management and Operations (TSMO) Program around several capability areas that reflect where emerging technologies deliver the greatest operational benefits:

- **Traffic Incident Management (TIM):** Coordinated detection, response and clearance of roadway incidents
- **Work Zone Management (WZM):** Safe and efficient traffic movement through construction and maintenance zones
- **Traffic Signal Coordination:** Optimizing timing and coordination to enhance mobility and reliability
- **Planned Special Events Management:** Coordinated planning to manage travel demand during major events
- **Road Weather Management:** Monitoring and responding to weather impacts through a road weather information system (RWIS) and decision-support tools
- **Freight and Logistics Operations:** Enhancing efficiency for freight corridors, ports and intermodal connections

Table 6 – Emerging Technologies and TSMO Capability Areas

	Emerging Technologies			
Capability Areas	Smart Infrastructure and ITS	CV/AV	Digital Twins and Predictive Analytics	Smart Freight and Logistics
TIM	X	X	X	X
WZM	X	X	X	X
Traffic Signal Coordination	X	X	X	X
Planned Special Events Management	X			
Road Weather Management	X	X	X	X
Freight and Logistics Operations	X			X

Table 6 aligns how the emerging technologies discussed above align with these TSMO capability areas.

Across all capability areas, emerging technologies strengthen MoDOT's institutional capacity by improving business processes, system interoperability and performance-based decision making. They enhance:

- **Business Processes:** Data integration and performance-based investment prioritization
- **Systems and Technology:** Interoperable architecture enabling real-time information exchange
- **Performance Measurement:** Metrics for travel time reliability, clearance times and weather response
- **Culture and Workforce:** Building technical proficiency and data literacy
- **Collaboration:** Shared platforms and partnerships with public safety, freight and local agencies

Together, these innovations enable a connected, adaptive and resilient transportation system that anticipates conditions, coordinates responses and optimizes performance for all users.

LRTP Goals and Objectives

MoDOT's performance-based planning and programming framework begins with the LRTP, which sets the vision for how Missouri will invest in and manage its transportation system through 2050. As part of this effort, MoDOT has identified emerging technologies as critical tools to achieve its long-term goals. The emerging technologies identified support MoDOT's strategic goals as discussed below.

Stewardship: Technology strengthens asset management and financial stewardship by enabling data-driven decisions that extend infrastructure life and optimize resources

Safe: Emerging technologies collectively enhance roadway safety by enabling earlier detection, faster response and prevention of crashes

Reliable: Technologies improve travel time consistency and system resilience under changing conditions

Connected: Connectivity supports Missouri's transportation system serves all users and modes seamlessly

Innovative: Innovation drives continuous improvement through collaboration, testing and learning

Prosperous: Emerging technologies drive economic growth by improving freight efficiency, reliability and statewide connectivity

Case Studies

This section presents comparative case studies illustrating how state Departments of Transportation (DOTs) across the United States (U.S.) are integrating technology, data and innovation into long-range transportation planning. Each example highlights a distinct yet complementary approach to preparing for an evolving mobility landscape.

- **The I-10 Corridor Coalition,** uniting DOTs from California, Arizona, New Mexico and Texas, demonstrates how CV/AV and Smart Freight technologies enhance corridor safety and reliability. Its Truck Parking Availability System (TPAS) leverages real-time connected vehicle data and roadside sensors to guide drivers to open parking, reducing unsafe stops and improving freight efficiency through coordinated, multistate TSMO strategies.
- **The Wisconsin Department of Transportation (WisDOT)** demonstrates how Smart Infrastructure and ITS can be embedded into a statewide vision for safety and efficiency.
- **The Michigan Department of Transportation (MDOT)** focuses on CV/AV as transformative tools for improving roadway performance and safety.
- **The Iowa Department of Transportation (Iowa DOT)** showcases how digital twins, predictive analytics and freight focused ITS applications can enhance logistics and system reliability.
- **The Pennsylvania Department of Transportation (PennDOT)** emphasizes Smart Freight and Logistics technologies as a foundation for multimodal connectivity and economic competitiveness.



Source: MoDOT

MoDOT aligns closely with these agencies in its strategic direction. Like Wisconsin, Iowa and Pennsylvania, Missouri recognizes that the future of transportation depends on leveraging technology to build a system that is safer, more efficient and more operationally resilient. The following case studies demonstrate how MoDOT's initiatives in connected vehicle readiness, intelligent corridor management and multimodal freight integration parallel national best practices. Collectively, they provide insight into how states are adapting to technological change, addressing shared challenges such as broadband access and funding and building collaborative frameworks to modernize transportation networks across both urban and rural settings.

I-10 Corridor Coalition

The I-10 Corridor Coalition, a partnership among the DOTs in California, Arizona, New Mexico and Texas, demonstrates how multistate collaboration and emerging technologies can modernize freight mobility and highway operations. Spanning more than 2,500 miles, the coalition focuses on improving safety, reliability and efficiency along one of the nation's busiest freight corridors. Its flagship initiative, the TPAS, integrates real-time monitoring, sensor networks and connected data platforms to identify open truck parking spaces and share that information through dynamic message signs, traveler information systems and in-cab communication tools that connect drivers to dispatch.

Program Elements

- TPAS funded by a $6.85 million U.S. Department of Transportation Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD) grant, with matching funds from participating states
- Two TSMO capability areas of smart infrastructure and freight technology supporting freight operations and incident management for safe and efficient corridor performance
- Shared data architecture, coordinated operations and consistent technology standards extending TSMO benefits beyond state borders
- Governance structure emphasizing interoperability, real-time information exchange and joint performance evaluation

Program Goals and Outcomes

- Reducing illegal shoulder parking, optimizing rest area use and strengthening driver safety
- Lowering emissions by decreasing vehicle idling and search time
- Making freight deliveries more predictable across state lines

Considerations for Missouri

- Adapt I-10 framework for major freight corridors: I-70, I-44, I-55, I-49, I-35
- Implement real-time parking availability and harmonized data sharing across states
- Apply corridor-based TSMO strategies to enhance freight reliability and reduce congestion
- Advance connected and automated freight technologies using the I-10 Coalition framework

WisDOT (Connect 2050) – Smart Infrastructure and ITS

WisDOT's Connect 2050 Vision Plan serves as a roadmap for building and modernizing Wisconsin's transportation system over the next three decades. Recognizing the rapid pace of technological change, the plan integrates CV/AVs, adaptive traffic management and ITS as core elements of a safe and efficient future network.



Source: WisDOT

Plan Elements

- Recognition of Smart Infrastructure as both a challenge and an opportunity under Goal Five of the plan, Maximizing Technology Benefits
- Collaboration through the Wisconsin Automated Vehicle External Advisory Committee (WAVE) engaging industry, local agencies and advocacy groups
- Expansion of ITS and automated traffic management to reduce congestion, improve safety and enhance disaster response
- Deployment of connected vehicle technologies including lane departure assistance, adaptive cruise control and Vehicle-to-Infrastructure (V2I) communication to transform personal travel and freight operations
- Strong partnerships to support CV/AV research, adaptive traffic management and real-world implementation across Wisconsin and Missouri

Considerations for Missouri

- Collaborate with Missouri Center for Transportation Innovation (MCTI) to support innovation on I-70 and I-44
- Address limited rural broadband access and connectivity challenges
- Mitigate high ITS implementation costs impacting deployment
- Plan transition from dedicated short-range communications (DSRC) to cellular vehicle-to-everything (C-V2X) communications
- Balance urban congestion management with rural connectivity and access
- Combine technological investment with collaborative planning for safer, more reliable and responsive systems

MDOT – CV/AVs

MDOT views CV/AVs as transformative tools, reshaping how transportation systems are planned, designed and operated. In its 2045 Long-Range Transportation Plan, Michigan Mobility 2045 (MM2045), MDOT identifies automation, electrification and data connectivity as key drivers influencing safety, infrastructure performance, travel behavior and economic competitiveness.

Michigan Department of Transportation
Michigan 2045 Mobility
A transportation plan for a connected future #MM45

Source: MDOT

- Statewide readiness for AVs, V2I and truck platooning through integrated planning
- Strategic investments in EV charging, broadband and intelligent traffic systems
- Partnerships with the University of Michigan's Mcity testing facility and the American Center for Mobility for CV/AV testing and policy alignment
- Alignment with Moving Ahead for Progress in the 21st Century Act (MAP-21) and Fixing America's Surface Transportation (FAST) Act priorities on safety, reliability and multimodal sustainability
- CV/AV technologies to reduce crashes and improve freight efficiency
- Emphasis on connected freight corridors and truck automation to maintain mobility leadership
- Cross-sector collaboration to support workforce development and adaptive infrastructure
- Innovation-driven approach balancing system preservation with automation readiness
- Long-term vision for a connected transportation network supporting economic growth through 2045

Considerations for Missouri

- Manage high infrastructure upgrade costs
- Address cybersecurity risks and data management challenges
- Expand rural broadband coverage to enable technology deployment
- Foster collaboration among government, academia and private sectors for harmonization and adaptive planning
- Balance system preservation with readiness for future automation
- Leverage strategic investments in ITS, EV infrastructure and partnerships (e.g., Michigan's approach)

Iowa DOT – Digital Twins and Predictive Analytics

Freight mobility is central to Iowa's transportation strategy, reflecting its agricultural and manufacturing economy and its critical role in national supply chains. The Iowa in Motion 2050 plan emphasizes that efficient freight systems are vital to economic growth and regional connectivity. It identifies key freight corridors, intermodal hubs and rural–to–urban links as essential for reliability and performance.

Plan Elements

- Integration of technology, operations and policy to enhance freight efficiency, safety and sustainability
- Deployment of ITS for real-time monitoring, data collection and information sharing with carriers
- Management of congestion, improvement of incident response and generation of predictive insights
- Alignment with national freight goals under MAP-21 and the FAST Act
- Promotion of real-time truck parking information systems
- Fostering public-private partnerships to expand truck parking facilities
- Improvement of safety and reduction of idling
- Strengthening multimodal connectivity by linking highways, rail and river ports
- Advancement of data-driven, multimodal freight strategies and enhancement of Iowa's competitiveness in global markets

Considerations for Missouri

- Resolve truck parking shortages
- Support economy through efficient movement of agricultural and manufactured goods
- Align MoDOT's Freight and Rail Plan with Iowa's focus on ITS, predictive analytics and intermodal integration
- Build on existing investments: I-70 freight improvements, river port expansion, logistics technology
- Advance technology, policy and planning for efficient, sustainable freight systems supporting long-term growth

PennDOT – Smart Freight and Logistics

Freight is a central component of Pennsylvania's transportation system and economy. Positioned between the Northeast and Midwest, the state serves as a major national freight hub connecting highways, rail lines, ports and airports. In PA On Track, PennDOT recognizes that this strategic role drives economic growth but also places heavy demands on aging infrastructure.

PA On Track
PA'S LONG RANGE TRANSPORTATION & COMPREHENSIVE FREIGHT MOVEMENT PLAN

Source: PennDOT

Program Elements

- Adoption of smart freight and logistics technologies such as real-time data platforms, connected logistics hubs and intelligent corridor management systems
- Emphasis on tools to improve supply chain visibility, reduce bottlenecks and enhance efficiency
- Promotion of safety, congestion reduction and environmental sustainability
- Strengthening coordination among truck, rail and port systems to support reliable access in urban and rural areas
- Alignment with MAP-21 and FAST Act priorities focusing on safety, reliability and economic vitality
- Initiatives such as truck platooning and corridor monitoring to prepare the state for automation and digital logistics

Considerations for Missouri

- Coordinate with private partners to manage complexity
- Modernize infrastructure while balancing growth with community and environmental goals
- Maintain Missouri's role as a key freight gateway with highways, river ports and rail systems critical to commerce
- Align MoDOT Freight and Rail Plan with PennDOT's technology-driven logistics approach
- Continue investment in real-time tracking, predictive analytics and multimodal integration to create resilient freight networks

Strategic Framework for Implementing Emerging Transportation Technologies

Policy and Regulatory Context

Federal and state policies play a critical role in shaping how emerging transportation technologies are planned, funded and implemented.

At the National Level:

- Guidance from the Federal Highway Administration (FHWA) and the Infrastructure Investment and Jobs Act (IIJA) encourages states to adopt technology-driven solutions that enhance safety, efficiency, accessibility and sustainability.
- Programs such as the Advanced Transportation Technology and Innovation (ATTAIN) Program, SMART Grants and various formula funding streams provide vital support for deploying ITS, CV/AV and data-driven infrastructure management tools.

At the State Level:

- Missouri's Show-Me Zero Strategic Highway Safety Plan aligns directly with the deployment of technologies that reduce crashes through automation, real-time alerts and advanced analytics.
- The Missouri Broadband Strategic Plan complements these efforts by expanding connectivity across rural corridors as an essential foundation for statewide ITS and CV/AV readiness.
- MoDOT's TSMO CV/AV research indicates that Missouri needs CV/AV enabling legislation to attract emerging technology and integrating these initiatives with the LRTP supports technology investments to improve safety and accessibility across all regions.

Missouri continues preparing for technology adoption by:

- **Expanding broadband**
- **Advancing transportation safety initiatives that are underway**
- **Fostering partnerships with universities and industry to support innovation**
- **Aligning the LRTP with federal guidance and state strategies to keep MoDOT eligible for funding**
- **Coordinating investments across agencies and jurisdictions is a priority**
- **Adapting strategies as federal rules and standards change, especially for connected vehicle communications, data sharing and cybersecurity**
- **Focusing efforts on maintaining consistency with national best practices to support a safe, connected and future-ready transportation system**

Future Scenarios and Strategic Foresight

Strong partnerships are essential for successful technology deployment. MoDOT will need to consider:

- Collaboration with universities, industry leaders, regional planning organizations, local governments and community groups to share knowledge and coordinate efforts
- Partnerships with academic institutions to support research on digital twins and CV/AV readiness
- Working with the freight industry can help design logistics solutions that meet both public and private needs

Engaging stakeholders early and often helps build public understanding, identify community priorities and develop solutions that reflect local contexts. These partnerships:

- Help promote interoperability
- Align investments
- Leverage outside expertise to strengthen Missouri's transportation technology strategy

Fair Access, Inclusive Design and Workforce Readiness

MoDOT must support the deployment of emerging technologies that promote fair access, inclusive design and workforce readiness across all communities. As tools such as CV/AVs, smart infrastructure and advanced data analytics reshape the transportation landscape.

Accessibility should remain a core design principle. Infrastructure, vehicles and digital systems must follow universal design standards that serve users of all ages and abilities. Emerging technologies should expand mobility options for people with disabilities, older adults and those without access to private vehicles by improving multimodal connections and creating accessible digital interfaces.

The transition to technology-driven operations will also demand a skilled and adaptable workforce. DOTs should:

- Invest in training, reskilling and forming partnerships with educational institutions and industry to prepare employees for new roles in automation, data management and systems integration
- Embed fairness, accessibility and workforce development at every stage of planning, procurement and implementation to support technological innovation that brings widespread and lasting benefits to Missouri's transportation system

In Missouri, workforce readiness is particularly critical given the state's aging labor base. MoDOT can collaborate with community colleges and the University of Missouri System to develop specialized training in data analytics, automation systems and cybersecurity, ensuring the next generation of transportation professionals is prepared for a data-driven future.

Partnerships and Stakeholder Engagement

To help technology investments deliver meaningful results, MoDOT should consider using performance measures to evaluate outcomes over time. These measures may include:

- **Safety:** Reduction in crashes, injuries and fatalities linked to ITS and CV/AV deployments
- **Reliability:** Improvements in travel time consistency on key corridors
- **Stewardship:** Reduced lifecycle costs from predictive maintenance and smarter asset management
- **Accessibility:** Expansion of broadband access and improved transportation options for underserved communities
- **Environmental:** Decreases in emissions or fuel consumption from freight and traffic management strategies

Establishing clear metrics and tracking progress regularly will help MoDOT adjust strategies, make the case for future funding and communicate benefits to the public.

Performance tracking can be integrated into MoDOT's Tracker Framework, allowing emerging technology outcomes to be measured alongside existing performance indicators. For example, MoDOT could track adaptive signal efficiency under 'Reliable Travel,' digital twin use under 'Stewardship,' and crash reduction tied to CV/AV pilots under 'Safe Transportation.' Aligning new technological metrics with Tracker will streamline internal reporting and demonstrate accountability to the public.



Source: MoDOT

Data Governance, Cybersecurity and Privacy

Emerging technologies depend on reliable, secure and well-managed data. MoDOT's existing asset management systems already collect large amounts of information on pavement condition, bridges and traffic patterns. As technologies like digital twins, CV/AV and advanced ITS expand, the volume and sensitivity of this data will increase significantly. To manage this effectively, MoDOT will need to continue to build strong data governance policies that address how data is collected, stored, shared and protected.

Cybersecurity is also a growing concern. Connected infrastructure and vehicles introduce new vulnerabilities that must be managed to protect both users and the transportation system. Future strategies will need to include:

- Strengthened cybersecurity frameworks
- Regular risk assessments and working with public and private partners to set data-sharing agreements that respect privacy while enabling innovation
- Building public trust through clear policies and transparent practices

Funding and Implementation Pathways

Bringing emerging technologies into Missouri's transportation network requires sustained investment and strategic planning. In addition to existing state and federal funding, MoDOT will need to explore opportunities such as:

- Competitive grant programs including:
  - ATTAIN
  - Strengthening Mobility and Revolutionizing Transportation (SMART)
  - Infrastructure for Rebuilding America (INFRA)
- Partnerships with the private sector
- Coordination with regional planning partners, local governments and freight stakeholders to help align funding sources and priorities



Source: MoDOT

Resilience and Sustainability

Emerging technologies can play a powerful role in making Missouri's transportation system more resilient to extreme weather, changing travel patterns and other disruptions. By integrating resilience and environmental performance into technology planning, MoDOT can support these investments that strengthen the transportation system for decades to come. For this, the following technologies should be considered:

Predictive analytics and digital twins can help planners model the effects of climate scenarios and identify vulnerable corridors before problems occur.

Smart infrastructure can provide real-time information during storms or floods, improving incident response and keeping travelers safe.

Technologies like **truck platooning, adaptive traffic management and optimized freight routing** can reduce emissions, improve fuel efficiency and support the state's broader sustainability goals.

Missouri's climate variability from flooding in the Mississippi Basin to winter ice events makes resilience planning valuable. Integrating predictive analytics into floodplain corridors such as I-29 and I-55 could improve incident management and recovery times. MoDOT's ongoing efforts to modernize stormwater systems and enhance weather-responsive management can be further supported by these tools.



Innovation Priorities and Challenges

Smart Infrastructure and Intelligent Transportation Systems

Missouri's highway and bridge network is one of the largest in the country, carrying more than 200 million tons of freight each year and connecting both dense urban corridors and rural farming communities. MoDOT has already laid the foundation for smarter real-time alerts through TMCs, highway cameras and dynamic message signs and operational decision-making by using data from TMCs and connected systems into MoDOT's operational response and resource allocation. However, the demand on the system continues to grow and technology is evolving that can be used today to assist in modernizing corridors.

Moving forward, the following priorities and challenges should be considered:

Priorities

- Expanding broadband and roadside unit deployment to promote seamless connectivity for passenger vehicles and freight carriers
- Piloting adaptive signal systems statewide for real-time signal adjustments based on changing traffic conditions, enhancing safety and reducing delays
- Integrating multimodal ITS applications for buses, freight carriers and passenger vehicles to share real-time information, increasing system reliability for all users
- Modernizing and optimize existing assets to meet next-generation needs while maximizing use of current infrastructure

Challenges

- Limiting broadband access and traffic management in many rural areas, especially during incidents in St. Louis and Kansas City
- Facing high upfront costs for smart infrastructure such as upgraded traffic signals, roadside sensors and broadband connections
- Managing ongoing maintenance required to keep systems reliable
- Resolving compatibility issues among equipment from different vendors due to varying standards
- Justifying investment in rural areas with low traffic volumes
- Handling large data volumes, increasing responsibilities for storage, security and staff training

Connected and Autonomous Vehicles

As a freight crossroads with I-70, I-44, I-55, I-49 and I-35, Missouri plays a critical role in national goods movement. This makes the state a natural testing ground for CV/AVs. The state already has a strong focus on safety through programs like Show-Me Zero, but preparing for automation requires a different type of readiness.

Moving forward, the following priorities and challenges should be considered:

Priorities

- Maintaining pavement markings that are highly visible and ensuring signage is clear
- Strengthening digital infrastructure for autonomous vehicle operations
- Adding corridor readiness assessments to statewide asset management
- Conducting truck platooning pilots on major freight corridors such as I-70, I-55, I-49 and I-44 to reduce fuel costs, cut emissions and make freight movement more efficient
- Leveraging targeted pilots and corridor assessments to build confidence in CV/AVs
- Aligning initiatives with MoDOT's LRTP goals of safety and reliability
- Developing a clear statutory framework for testing and operation of autonomous vehicles

Challenges

- Meeting higher infrastructure standards for CV/AV operations
- Maintaining roads, pavement markings and signage to required levels with limited budgets
- Addressing interoperability across different manufacturers and systems
- Protecting against cybersecurity risks and data breaches
- Clarifying liability in the event of autonomous vehicle crashes
- Securing legislative action to establish statutory frameworks for autonomous vehicles
- Overcoming public skepticism and building trust in autonomous systems
- Managing aging infrastructure while preparing for new technologies
- Proactively addressing financial, legal and social challenges for a safe and accessible transition to CV/AV technology

Digital Twins and Predictive Analytics

MoDOT already manages one of the most comprehensive asset inventories in the nation. With more than 33,814 miles of road and 10,427 bridges, asset condition data is collected using advanced pavement sensors, automatic road analyzer (ARAN) vehicles and GIS systems. These existing tools provide a solid foundation for more advanced predictive approaches. However, the MoDOT Statewide TAMP shows many bridges are nearing the end of their design life and maintaining these assets with limited funding will be a growing challenge.

Moving forward, the following priorities and challenges should be considered:

Priorities

- Continuing to build statewide digital data exchanges to combine available data and data sources into a single system for better decision-making
- Piloting pavement lifecycle and crash-risk models to forecast maintenance needs and identify high-risk corridors before issues develop
- Training staff in data analytics and AI integration to help the workforce effectively use advanced tools
- Shifting Missouri's asset management approach further away from reactive maintenance to proactive planning building on the desire to keep good assets in good condition

Challenges

- Collecting and managing large volumes of data from diverse sources such as traffic counts, pavement conditions, crash records and weather systems
- Integrating data into a unified platform, which requires significant funding and technical expertise
- Maintaining and updating the system regularly to keep it accurate, resulting in ongoing costs
- Training staff to use new data and analytics tools, which requires additional effort and resources
- Addressing the risk that predictive forecasts might not account for sudden changes, potentially affecting the accuracy of decisions

Smart Freight and Logistics

Freight is the backbone of Missouri's economy. Every day, more than 1.5 million tons of goods move across the state's highways, railways and waterways. Yet the system faces challenges that limit efficiency, including shortages of truck parking, weather-related disruptions on interstates and congestion around freight hubs. MoDOT's Freight Plan has identified these issues, but new technology offers opportunities to address them in smarter ways.

Moving forward, the following priorities and challenges should be considered:

Priorities

- Expanding ITS on freight corridors to provide truckers with real-time information on weather, construction and traffic conditions to support safer and more efficient routing decisions
- Investing in truck parking electrification and logistics hubs to address the lack of rest areas and emissions from idling
- Equipping parking facilities with electrification technology to reduce pollution and offer essential services to drivers
- Strengthening intermodal coordination with rail and ports to enhance Missouri's role as a national trade hub and facilitate seamless movement of goods across modes
- Adopting strategies that reduce bottlenecks, lower emissions and maintain reliable freight movement through the state

Challenges

- Coordinating across agencies, private trucking companies and logistics providers due to the system's size and multi-regional nature
- Securing substantial funding for building, operating and maintaining smart freight corridors, truck parking with electrification and upgraded logistics hubs
- Addressing uneven adoption of advanced systems since not every trucking company can afford new technologies right away
- Managing unpredictable factors like weather, congestion and other unexpected issues that require constant monitoring to support smooth system performance

Overcoming Implementation Challenges and Next Steps

A phased implementation roadmap outlining a conceptual MoDOT approach to advancing smart infrastructure and ITS, CV/AVs, digital twins and predictive analytics and smart freight and logistics initiatives over the next decade is summarized in **Table 7**. It is organized into three implementation phases, each representing a stepwise progression from readiness to full statewide deployment:

- **Phase 1: Foundation (0–5 years)** - Focuses on planning, assessments and data readiness.
- **Phase 2: Pilot and Integration (6–10 years)** - Introduces field pilots, technology integration and early analytics applications.
- **Phase 3: Expansion and Optimization (10+ years)** - Scales successful strategies statewide and embeds digital transformation into daily operations.

Using these three implementation phases, each of the emerging technology focus areas outlined are:

- **Smart Infrastructure and ITS** focuses on expanding broadband connectivity, deploying adaptive signal control and improving interoperability of existing systems. This enables real-time traffic management, enhances reliability and supports connected vehicle communications statewide.
- **CV/AV** uses the MoDOT Connected and Automated Vehicle Action Plan as a framework and initial actions for the MoDOT TSMO program's CV/AV team to prepare Missouri's highway system for emerging CV/AV technologies by strengthening corridor readiness, improving pavement markings and digital infrastructure and piloting truck platooning on key freight routes. These efforts aim to enhance freight efficiency, safety and energy savings.
- **Digital Twins and Predictive Analytics** leverages data integration and modeling to move MoDOT further from reactive maintenance to proactive, data-driven asset management. Pilot projects will develop corridor-level digital twins and predictive models to forecast pavement, bridge and safety needs before problems occur.
- **Smart Freight and Logistics** expands upon Missouri's role as a national freight hub by promoting connected freight technologies, logistics data-sharing and intermodal coordination. Long-term actions establish statewide smart freight corridors and predictive freight demand systems to enhance supply chain reliability and competitiveness.

Table 7 – Emerging Technologies Phased Implementation Roadmap

Emerging Technology Focus Area	Phase 1: Foundation (Short–Term 0–5 Years)	Phase 2: Pilot and Integration (Mid–Term 6–10 Years)	Phase 3: Expansion and Optimization (Long–Term 10+ Years)
Smart Infrastructure and ITS	Expand rural broadband planning Audit ITS systems for interoperability Develop data governance policies and staff training	Deploy adaptive signal pilots Begin roadside unit (RSU) installations Integrate TMC, sensor and weather data into regional dashboard	Statewide adaptive signal control Rural broadband expansion to freight routes Establish statewide mobility data hub
CV/AVs	Pass CV/AV enabling legislation including truck platooning Conduct CV/AV readiness assessments Develop CV/AV Asset Readiness Index Plan truck platooning pilots	Launch I-70/I-44/I-55 pilot corridors Implement cybersecurity framework Establish CV/AV test zones with universities	Full CV/AV corridor upgrades Develop liability and insurance frameworks Public education and acceptance campaigns
Digital Twins and Predictive Analytics	Inventory data and gaps Initiate data integration roadmap Staff training in analytics and AI tools	Develop corridor-level digital twins Pilot predictive maintenance and crash-risk models Establish performance metrics	Expand to statewide digital twin system Integrate predictive models across assets Institutionalize data-driven decision making
Smart Freight and Logistics	Map freight corridors and data sources Engage industry stakeholders and ports Assess freight signal and broadband needs	Pilot connected truck and logistics data-sharing Test dynamic freight routing and signal priority Develop intermodal freight data exchange	Establish statewide smart freight corridors Deploy predictive freight demand models Implement public-private data collaboration network

Cross-cutting enablers support all phases and focus areas of the roadmap. These enablers represent the policies, partnerships and organizational capabilities required to support the long-term success of Missouri's transportation technology initiatives.

- **Funding Strategy**: Establishes a stable and diverse investment framework that combines state funding, federal programs such as the IIJA and Federal Highway Administration Intelligent Transportation Systems (FHWA ITS) grants and private-sector investment to sustain deployment and modernization efforts.
- **Public-Private Partnerships (P3s):** Enables collaboration with telecommunications providers original equipment manufacturers (OEMs), freight carriers and universities to accelerate research, development and implementation of emerging transportation technologies.
- **Cybersecurity and Data Privacy:** Embeds "security-by-design" principles into all digital platforms, ensuring the protection of transportation data and infrastructure from cyber threats while maintaining public trust and compliance with data protection standards.
- **Interoperability Standards:** Promotes open data and communication protocols, including the National Transportation Communications for Intelligent Transportation System Protocol (NTCIP), the Society of Automotive Engineers (SAE) and the Institute of Electrical and Electronics Engineers (IEEE) standards, to support seamless integration across vendors and systems statewide.



Source: MoDOT

- **Systems Engineering and Lifecycle Planning:** Emphasizes the application of systems engineering principles within TSMO to support technology deployments that are needs based, interoperable and sustainable. Supports structured processes for defining requirements, verifying performance and managing technology assets through their full lifecycle, including maintenance, updates and replacement planning, to enhance reliability, efficiency and long-term system integration statewide.
- **Performance Management:** Emphasizes tracking measurable outcomes in safety, system reliability, congestion reduction and cost efficiency to guide ongoing improvement and accountability.
- **Workforce Development:** Helps equip MoDOT staff with the knowledge and skills to manage emerging technologies by providing training in AI, data analytics and digital asset management tools, strengthening workforce readiness to support TSMO through data-driven analysis, informed operational decision-making and effective interdepartmental coordination.

Collectively, these enablers provide the institutional, technical and workforce foundation necessary for MoDOT to deliver a connected, data-driven and resilient transportation network capable of meeting the needs of Missouri's residents, businesses and visitors for years to come.



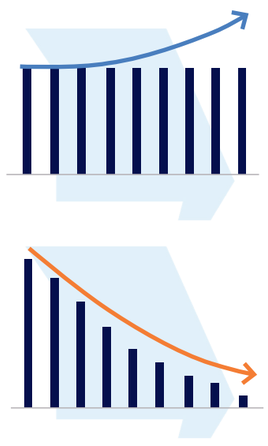
Source: MoDOT

Chapter 7: Revenue Forecast


Source: MoDOT

Sustainable and predictable funding provides critical support for maintaining and enhancing Missouri's transportation system. This chapter assesses the Missouri Department of Transportation's (MoDOT) funding based on current revenue sources and projected needs. The analysis indicates that revenues are not keeping pace with needs for two primary reasons:

- Several MoDOT funding sources are fixed and do not adjust with inflation, while the cost of addressing needs continues to rise. This challenge affects both road and bridge needs as well as multimodal programs.
- As vehicle fuel economy improves and more drivers switch to hybrid vehicles, plug-in hybrid vehicles (PHEVs) and electric vehicles (EVs), fuel consumption and fuel excise tax revenues decline. This primarily affects the roads and bridges program, since fuel tax revenues are dedicated to road and bridge needs.



Together, these trends create growing gaps between available revenues and the state's transportation needs. Furthermore:

- Aging infrastructure (e.g. bridges, pavements) requires high-cost maintenance to support safety and service quality.
- Fiscal Year (FY) 2026 state budget actions reduced transit operating assistance by roughly 42%, cutting $5 million from prior allocations.
- Combined pressures on the roads and bridges program and the multimodal program (including transit) limit the state's ability to meet transportation needs and leverage federal funds.
- Projected shortfalls emphasize the need to incorporate revenue and cost trends into long-term planning.
- Alternative funding strategies may help MoDOT keep Missouri's transportation system safe and efficient.

The primary objective of this funding assessment is to identify the timing and magnitude of MoDOT's long-term funding gap. This analysis quantifies when revenues are expected to fall short of documented needs and the scale of those shortfalls over the 2025 to 2050 planning horizon. This information provides a quantitative foundation to inform future discussions of investment prioritization and/or funding alternatives.

Methodology

This section describes the methodology used to develop the transportation revenue and needs forecasts.

The revenue analysis uses MoDOT financial data and incorporates key assumptions about future trends, including:

- **Population growth**
- **Vehicle fleet growth**
- **Improvements in vehicle fuel economy**
- **Adoption of alternative fuel vehicles**

The needs analysis is based on:

- **The Statewide Transportation Improvement Program (STIP)**
- **The latest MoDOT Financial Forecasts**
- **MoDOT's High-Priority Unfunded Needs List (HPUN)**
- **Additional needs identified through consultation with MoDOT**

Appendix H contains assumptions used in the revenue and needs forecasts. The funding gap is calculated by subtracting projected revenues from forecasted needs:

Funding Gap =

Forecasted Needs - Projected Revenues

Forecasting Approach for Revenues

Revenue forecasts are based on MoDOT's existing revenue sources based on future economic and demographic trend assumptions, vehicle fleet composition, vehicle fuel economy and travel demand. The methodology began by defining each source of transportation revenue, then identifying the primary drivers that influence how those revenues are expected to change over time. Revenue forecasts assume that tax and fee rates for all existing sources remain unchanged throughout the forecast period. **Table 8** summarizes the existing rates.

Table 8 – Revenue Mechanism Rates

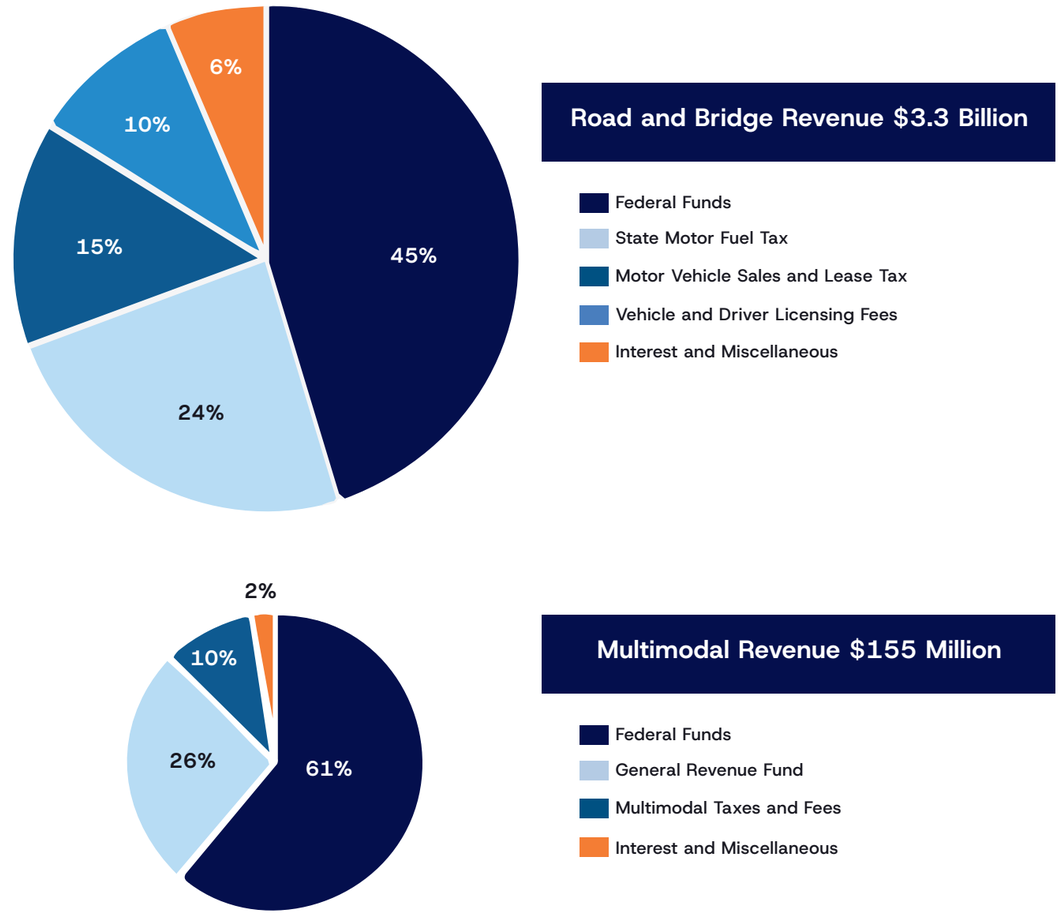
Revenue Mechanism	Existing Rate
Gasoline and Diesel Tax	$0.295
Sales and Lease Tax	4.225%
Passenger Vehicle Registration	Varies by vehicle horsepower
Commercial Vehicle Registration	Property-carrying vehicles: rate varies by vehicle weight Passenger-carrying vehicles: rate varies by seating capacity
Licensing Fees	Varies by type of license
Special Fuel Decal EV Fee	$150
Special Fuel Decal PHEV Fee	$75

Source: Missouri Department of Revenue, Motor Fuel Tax, accessed September 2, 2025; Missouri Department of Revenue, Motor Vehicle Fees, accessed September 2, 2025; Missouri Department of Revenue, Permit/Driver License/ Nondriver ID Fees, accessed September 2, 2025; Missouri Department of Revenue, Special Fuel Decals, accessed September 2, 2025.

Revenue Sources

Figure 65 shows MoDOT's transportation revenue of $3.3 billion for road and bridge improvements and $155 million for multimodal improvements in FY 2025, as well as a breakdown of those revenues by category. Details for each of the funding categories and the assumptions for each follow.

Figure 65 – Transportation Revenues by Category, FY 2025



Note: Not to scale; one-time general revenue fund appropriations excluded from roads and bridges and multimodal

Federal Funds



Largest Source of Total MoDOT Transportation Revenue

Funded by:

Federal motor fuel tax

Tire taxes

Heavy truck and trailer sales taxes

Heavy vehicle use tax

Transfers from federal general revenue

Distributed Through the Federal Highway Trust Fund Via:

Formula programs

Discretionary grant programs[74]

Dedicated to:



Roads and Bridges



Multimodal Transportation

Forecast Assumptions

- Based on historical funding levels
- Accounts for periodic increases from federal reauthorizations (e.g., Infrastructure Investment and Jobs Act - (IIJA) also known as the Bipartisan Infrastructure Law (BIL)
- Historical trends:
  - 13-year average annual growth: **4.5%**
  - 2021–2024 average annual growth: **12.5%** (post-IIJA)
- Forecast growth rate reduced to **2.5% annually** because:
  - IIJA funding is not expected to continue
  - No new major federal funding sources are anticipated

[74]MoDOT, "Financial Snapshot – November 2025," (appendix to the Citizen's Guide to Transportation Funding in Missouri),2025, https://www.modot.org/sites/default/files/documents/2025%20Financial%20Snapshot_Final_0.pdf.

State Motor Fuel Tax



Largest Source of State-Generated Transportation Revenue[75]

Levied per Gallon of Fuel Sold in Missouri, Including:

Gasoline and diesel

Motor fuel blends

Compressed and liquefied natural gas

Propane



Dedicated to:



Roads and Bridges

Forecast Assumptions

- Based on:
  - Vehicle miles traveled (VMT)
  - Average fleet fuel efficiency
  - Historical and forecasted vehicle counts
- Passenger vehicle fuel economy assumptions:
  - **23.0 miles per gallon (mpg) in 2025**
  - **31.5 mpg by 2050**

[75]Missouri Department of Revenue, "Financial and Statistical Report," 2024, https://dor.mo.gov/revenue-annual-financial-report/documents/financialstatreport24.pdf.

State Vehicle Sales and Lease Tax

Sales Tax:

Applied to the purchase price minus trade-in value



Lease Tax:

Applied to each monthly lease payment



Dedicated to:

Roads and Bridges

Forecast Assumptions

- Based on:
  - Historical revenues
  - Passenger vehicle fleet growth
  - Average vehicle value
- Average vehicle value:
  - Approximately $20,000 in 2025
  - Approximately $30,000 in 2050
- National vehicle turnover (2024): **18.1%**[76]
- Missouri forecast vehicle turnover assumption: **15%**
  - Adjusted for economic variability, vehicle longevity and consumer behavior

[76]AP News, "US Vehicle Sales Rose 2.7% in 2024," https://apnews.com/article/auto-sales-us-increase-deals-c686d72dfbeddfd136bfe03f5f0d587a; National Independent Automobile Dealers Association, "Used Vehicle Sales Expected to Increase in 2025," https://niada.com/dashboard/used-vehicle-sales-expect-to-increase-in-2025/; Hedges Company, "Automotive Market Research Statistics," https://hedgescompany.com/automotive-market-research-statistics/auto-mailing-lists-and-marketing/.

Vehicle and Driver's Licensing Fees

Vehicle Registration Fees

Collected every one or two years

Fee varies by:

- Passenger vehicle horsepower
- Commercial vehicle gross weight
- Passenger-carrying commercial vehicle seating capacity[77]

Driver Licensing Fees

Driver licenses and renewals

Commercial licenses

Identification cards and instruction permits

Processing, reinstatement and miscellaneous fees[77]

Dedicated to:

Roads and Bridges

Forecast Assumptions

- Registration revenues:
  - Historical registration counts
  - Vehicle fleet forecast
  - Population growth
- Licensing fee revenues:
  - Historical revenues
  - Vehicle registration trends
  - Population growth

[77]Missouri Department of Revenue, "Financial and Statistical Report 2024," https://dor.mo.gov/revenue-annual-financial-report/documents/financialstatreport24.pdf.

Interest and Miscellaneous Revenues

Includes:

Interest earned on invested funds

Sale of surplus property

Excess right of way and construction reimbursements

Also includes special fuel decal fees:

- Annual fees paid by owners of alternative-fuel vehicles (e.g., electric, propane)
- Paid in lieu of motor fuel tax

Dedicated to:

Roads and Bridges

Multimodal Transportation

Forecast Assumptions

- Based on historical data
  - Informed by discussions with MoDOT
  - Special fuel decal revenues based on the vehicle fleet forecast

State General Revenue Funds

Missouri's Primary Operating Fund

Major Revenue Sources:

Individual income tax

Corporate income tax

State general sales tax

Transfers to Transportation:

Determined annually through legislative appropriations

Core transfers support multimodal programs

Forecast Assumptions

- Based on current funding needs
- One-time appropriations removed from historical baseline
- Future transfers assumed to remain constant
  - Reflects a conservative approach due to funding uncertainty

Multimodal Taxes and Fees

Includes:

Aviation fuel taxes

Multimodal program fees

Multimodal sales taxes

Aviation Fuel Taxes:

Collected on fuel used by aircraft

Multimodal Fees

User fee revenues from non-highway transportation programs

Multimodal Sales Tax

Sales-tax-derived funds that are directed to non-highway transportation programs

Dedicated to:

Multimodal Transportation

Forecast Assumptions

- Based on historical collections
- Informed by discussions with MoDOT to reflect a reasonable outlook

Forecast of Missouri State Fuel Tax Revenues

This section conducts a deeper analysis of fuel tax forecasting. Fuel taxes are the largest source of state-generated revenue and are experiencing significant change due to improvements in vehicle fuel economy and the adoption of alternative fuel vehicles, unlike other revenue sources. To estimate motor fuel tax revenues, both a fleet forecast and a motor fuel tax forecast were developed. Conventional passenger gasoline vehicles are becoming increasingly fuel-efficient, meaning drivers purchase less fuel to travel the same distances. At the same time, the vehicle fleet is shifting toward PHEVs and EVs, which use little or no gasoline. As the number of these vehicles grows, motor fuel tax revenues are expected to continue declining on a per-vehicle and per-mile-traveled basis. The next two sections explore these factors in more detail.



Source: MoDOT

Impacts of MPG Improvements on Fuel Tax Receipts

MPG is a nonlinear metric. Fuel savings are greater for each one MPG fuel economy improvement among relatively lower-MPG vehicles. For example, as shown in **Figure 66**, a Ford F-150 improving from 15 to 25 MPG saves 267 gallons of fuel over 10,000 miles (about $79 in tax revenue), while a Honda Accord improving from 25 to 48 MPG saves much less, only 192 gallons (about $57). Even though the Accord's MPG gain increment is greater, the decline in motor fuel consumed and tax paid is smaller. Hybrid vehicles and EVs add to the trend, but improvements in regular internal combustion engine vehicles are already driving declines in fuel tax revenue.



Source: MoDOT

Figure 66 – Non-Linear Impact of Vehicle Efficiency on Fuel Consumption



FORD F-150



HONDA ACCORD

MPG IMPROVEMENT FROM 2010 TO 2025:	15 ⟶ 25	25 ⟶ 48
GALLONS SAVED OVER 10K MILES OF DRIVING:	267	192
ANNUAL FUEL TAX LOST:	$79	$57

Source: U.S. Environmental Protection Agency (EPA), 2010 Ford F150 Pickup, 2010; EPA, Fuel Economy of 2025 Ford Vehicles, 2025; EPA, 2010 Honda Accord, 2010; EPA, Fuel Economy of 2025 Honda Vehicles, 2025; Future Analysis, CDM Smith, 2025.

Forecasted Increase in Zero-Emission Vehicles for Missouri's Passenger Fleet

In addition to ongoing gains in fuel efficiency among internal combustion engine vehicles, the growing adoption of EVs and PHEVs further reduces motor fuel consumption and related tax revenues. As these vehicles gradually replace traditional gasoline vehicles, fuel purchases and the taxes they generate decline.

To estimate future fuel tax revenues in Missouri, the state's passenger vehicle fleet was projected through 2050 using national EV and PHEV forecasts combined with Missouri's existing passenger vehicle counts.

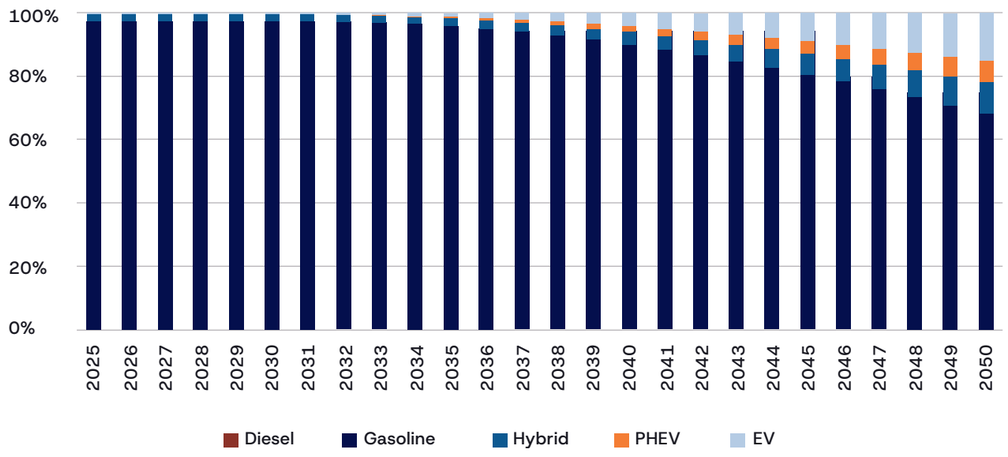
Key trends shown in **Figure 67** include:

- **Highest in 2025:** Gasoline vehicles dominate the fleet.
- **Growth over time:** Adoption of hybrids, PHEVs and EVs steadily increases.
- **Fastest growth:** EVs grow more rapidly than other vehicle types.
- **Smallest share:** Diesel vehicles remain a very small share of the fleet and contribute minimally to fuel tax revenues.

2050 Fleet Composition (Forecast):

- **Internal combustion engine vehicles:** approximately 68%
- **EVs:** approximately 16%
- **Hybrids and PHEVs (combined):** approximately 16%

Figure 67 – Missouri Fleet Forecast , 2025 – 2050



Source: EvAdoption; MoDOT; CDM Smith Analysis and Figure.
Note: Diesel vehicles are included in the figure but are not visible due to their minimal share of the fleet

Response to Declining Fuel Taxes

In response to concerns about declining fuel tax due to improved vehicle fuel economy and increased PHEV and EV purchases, Missouri enacted an increase to its existing motor fuel tax in 2021 through Senate Bill 262, the first adjustment to the fuel tax rate in more than 25 years.[78] The legislation phased in a 2.5-cent-per-gallon increase each year over five years, beginning in October 2021, raising the gasoline and diesel fuel tax rate from 17 cents to 29.5 cents per gallon by July 1, 2025 (FY 2026). No additional rate increases have been enacted.

A key component of Senate Bill 262 is a provision that allows purchasers of motor fuel for highway use to request a refund for the amount of the tax increase they paid. These refund amounts are subtracted from the gross fuel tax revenue, which impacts the net revenue available for transportation projects.

State Fuel Tax Revenue Distribution

- 72% → State Road Fund
- 15% → Cities
- 13% → Counties[79]

Scope of This Analysis

- Focuses only on the state's share
- Includes 72% of total fuel tax revenue allocated to the State Road Fund

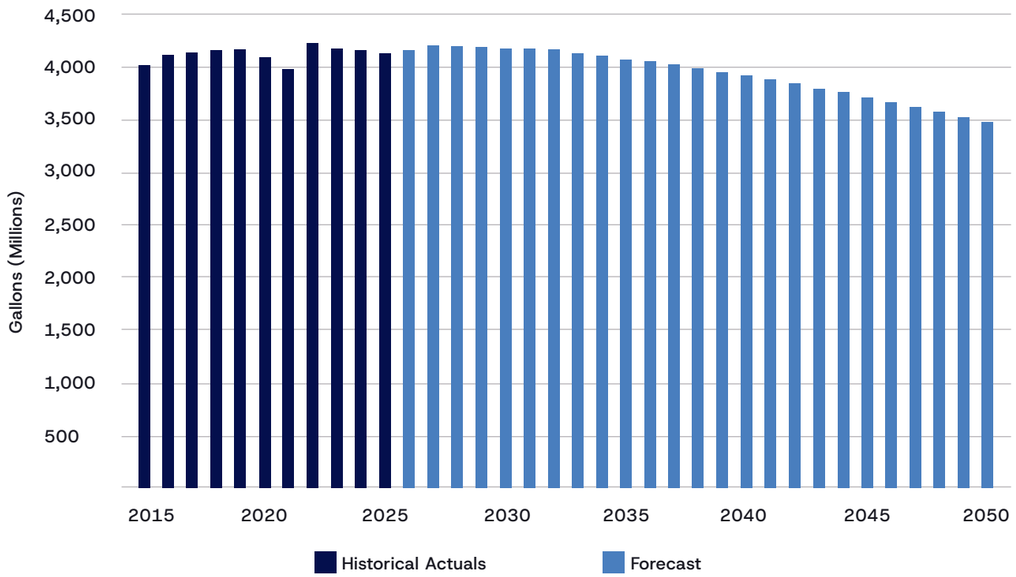


Source: MoDOT

[78]Missouri Senate, SS #2/SCS/SB 262—Modifies Provisions Relating to Transportation, 2021 Regular Session, Senate Bill 262 (signed by Governor July 13, 2021; effective with emergency clause), Missouri Senate website, accessed September 5, 2025, https://www.senate.mo.gov/BillTracking/Bills/BillInformation?year=2021&billid=54298589

[79]Missouri Department of Revenue, "Financial and Statistical Report," 2024, https://dor.mo.gov/revenue-annual-financial-report/documents/financialstatreport24.pdf

Figure 68 – Gallons of Motor Fuel Taxed, 2015 – 2050



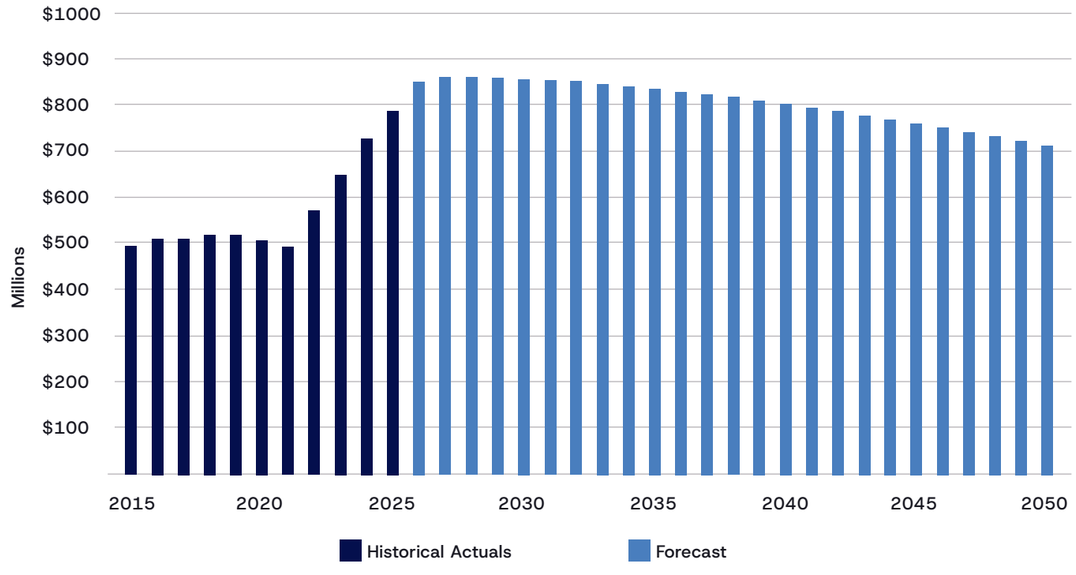
Source: MoDOT, Historical Actuals; CDM Smith, Forecast.

Gallons of Motor Fuel Taxed

Figure 68 illustrates the historical and projected number of gallons of motor fuel taxed in Missouri. The trend shows a gradual but steady decrease over time, which directly correlates with the increasing fuel economy of the vehicle fleet and the rising number of EVs and PHEVs. The figure highlights the core challenge facing transportation funding: the tax base itself is shrinking.

While Senate Bill 262 increased the tax rate, the total number of taxable fuel gallons purchased continues to decline.

Figure 69 – State Motor Fuel Tax Revenue, 2015 – 2050



Source: MoDOT, Historical Actuals; CDM Smith, Forecast.

Figure 69 shows the resulting revenue from the taxed gallons of motor fuel. The graph indicates a slight increase in revenue from 2015 to 2018, a minor decline in revenue from 2019 to 2021. The increase in the per-gallon tax rate from 2022 through 2026 leads to a short-term revenue boost, with revenues peaking in 2027. After that point, the forecast projects a renewed, long-term decline as tax rates stabilize and fewer gallons are sold over time.

While Senate Bill 262 provided a short-term boost to motor fuel tax revenues, the long-term downward revenue trend remains.

Forecasting Approach for Needs

This section provides an overview of the methodology used to forecast transportation needs in Missouri. Two scenarios were developed: 2025-funded needs and 2025-funded and unfunded needs. For each scenario, this section defines the concept and explains the approach followed. Examining both scenarios helps illustrate the gap between what can be accomplished with existing funding resources and what is needed to meet the state's long-term transportation goals. For a more detailed breakdown of road and bridge and multimodal needs, see the **Needs Assessment Chapter**.

2025-Funded Program Needs

2025-funded program needs represent the transportation projects and programs for which funding has already been identified and committed. For this analysis, 2025-funded needs are based on the 2025 funded programs, which draw from multiple categories and data sources listed in **Table 9.** The total cost of these programs in 2025 is then projected forward through 2050 using inflation to create the funded needs forecast.

Understanding 2025-funded needs is a useful baseline because it shows the portion of transportation system needs that are funded with today's existing resources, but it does not consider present or future unfunded needs.

Table 9 – 2025-Funded Programs Definition and Source

Category	Definition	Document
Construction Needs	Funding for roads, bridges and other improvement projects	2026-2030 STIP
Debt Service	Paying back bonds that were used to fund past and present construction projects	2026-2030 STIP
Operations and Maintenance	The daily costs of keeping our roads and bridges in good working condition	MoDOT Operations and Maintenance (O&M) Plan
Multimodal Operations	Funding for transportation options other than highways, such as public transit, airports and rail	2026-2030 STIP
Internal Operating Costs	The administrative costs to run the department, including salaries, IT and office expenses	2025 Financial Snapshot

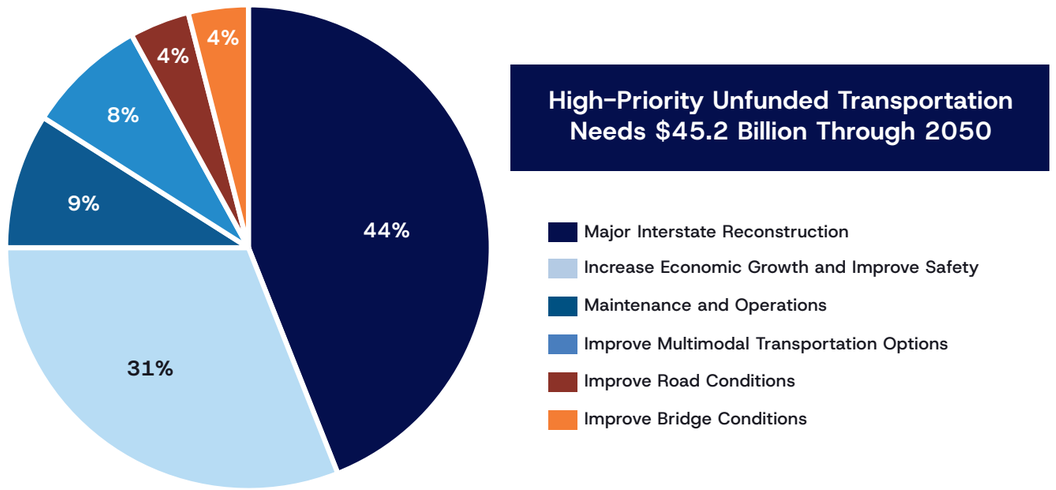
2025-Funded and Unfunded Needs

2025-funded and unfunded needs reflect the total transportation investment required to meet all documented transportation needs in Missouri. 2025-funded needs come from the methodology described in the preceding section. Unfunded needs are taken from the 2025 Missouri High-Priority Unfunded Needs, which provides 10 years of non-inflated estimates.[80] The unfunded needs were divided over the 10-year period and then inflated in the outer years of the 10-year forecast. Finally, this forecast was extended through 2050 to cover the full analysis period. This resulted in a total of $45.2 billion in unfunded needs from 2025 to 2050, which is depicted by category in **Figure 70.**



Source: MoDOT

Figure 70 – Unfunded Needs



Source: High-Priority Unfunded Needs 2025, MoDOT; CDM Smith.

[80]MoDOT, "Missouri High-Priority Unfunded Needs," 2025, https://www.modot.org/sites/default/files/documents/High-Priority%20Unfunded%20Needs%202025Oct.pdf.

Findings

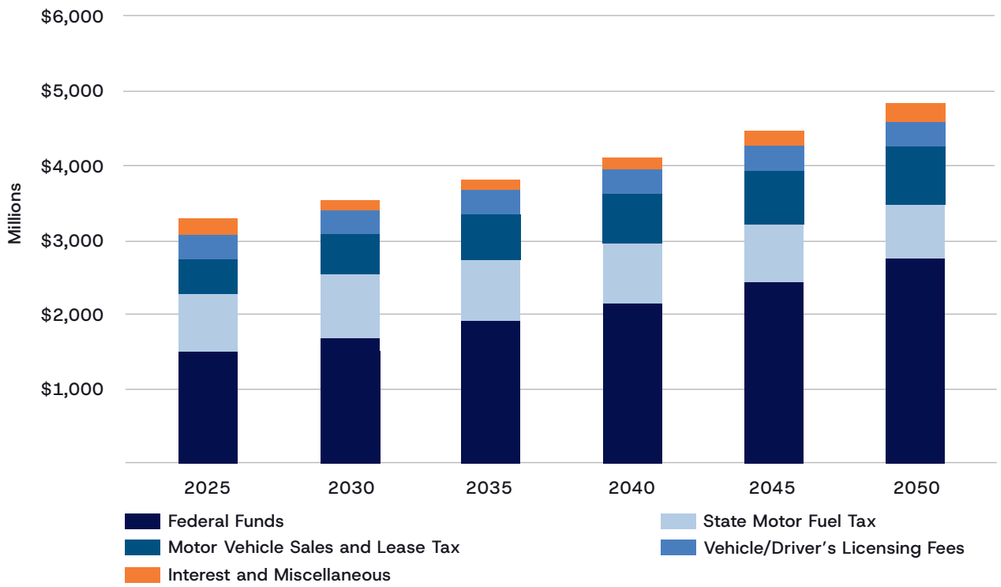
The following section presents the key findings of the analysis. First, the revenue forecast is presented, highlighting how various funding sources are projected to change over time. Next, the transportation needs forecasts are overlaid on the revenue forecast to illustrate when funding gaps are likely to emerge.

Revenue Forecast Through 2050

Figure 71 illustrates 2025 actuals and the 2026 to 2050 revenue forecast for roads and bridges. The analysis shows that overall funding levels are likely to increase in nominal dollars. However, the forecast includes a steady decline in fuel tax revenues. Vehicle and driver licensing fee revenues remain relatively flat over time. Sales and lease tax revenues (based on vehicle values) and federal funds increase in future years with inflation. Interest and miscellaneous revenues, which include special fuel decal fees, grow over time as EV and PHEV adoption grow.

Motor vehicle sales and lease taxes are projected to overtake motor fuel taxes as the largest source of state funding for roads and bridges by 2047.

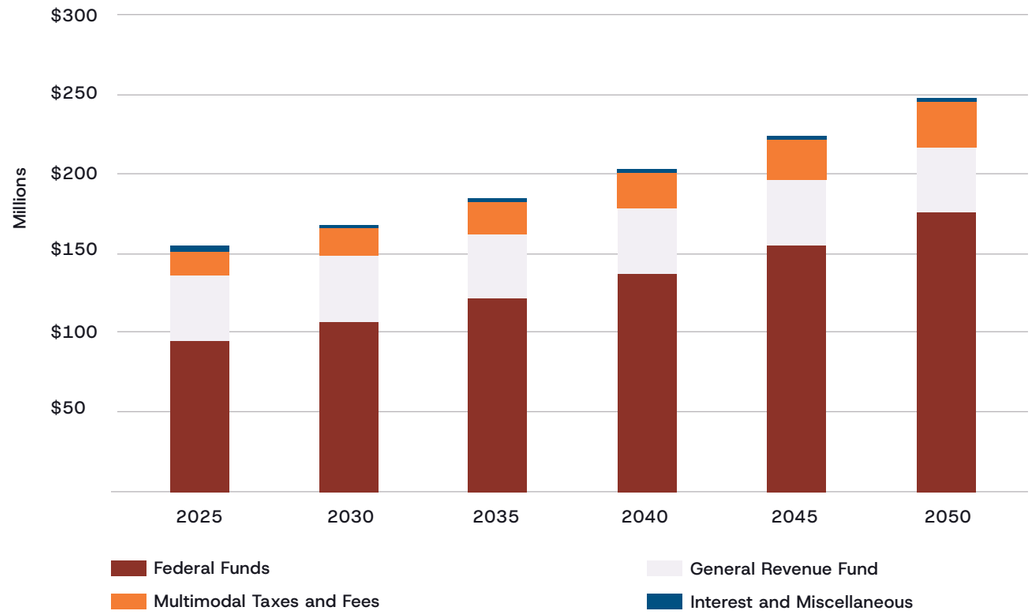
Figure 71 – Roads and Bridges Revenue Forecast, 2025 – 2050



Source: MoDOT, Historical Actuals; CDM Smith, Forecast.

Figure 72 illustrates 2025 actuals and the 2026 to 2050 revenue forecast for multimodal. Federal funds and multimodal tax and fee revenues increase with inflation over time. General revenue funds and interest and miscellaneous revenues remain at a flat fixed rate. A detailed table of the revenue forecast findings for both roads and bridges and multimodal can be found in **Appendix I.**

Figure 72 – Multimodal Revenue Forecast, 2025 – 2050



Source: MoDOT, Historical Actuals; CDM Smith, Forecast.

General Revenue Funds and interest and miscellaneous revenues remain at a flat, fixed rate, even as multimodal needs continue to increase between 2025 and 2050.

Needs Forecast Through 2050

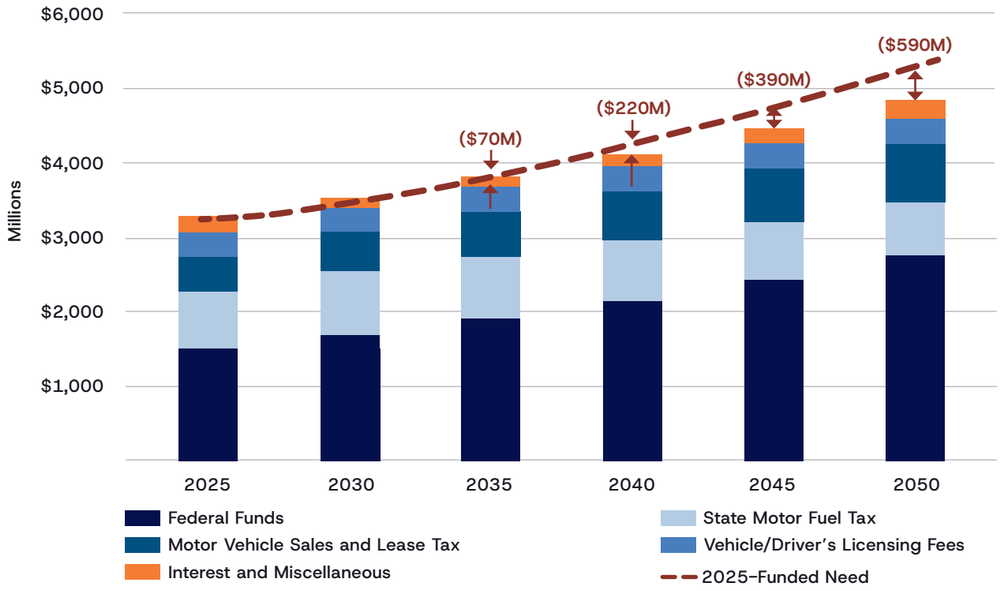
The needs forecast evaluates Missouri's transportation requirements under two distinct scenarios:

- 2025-funded needs consider only programs with committed funding
- 2025-funded and unfunded needs reflect the full level of investment required to maintain and improve the system

2025-Funded Program Needs

Figure 73 illustrates the 2025-funded program needs forecast for roads and bridges as a line atop the revenue forecast. From 2025 to 2030, revenues will cover the 2025-funded program needs. However, in 2031, a funding gap emerges as cost inflation outpaces revenue growth. The funding gap for roads and bridges increases to approximately $590 million per year in 2050.

Figure 73 – Roads and Bridges 2025-Funded Program Needs

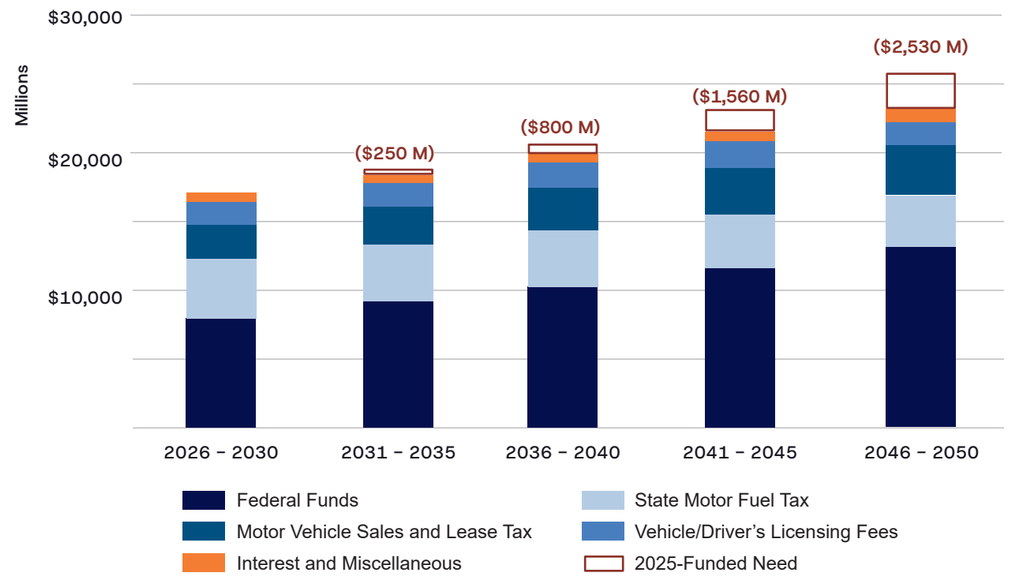


Source: MoDOT, Historical Actuals; CDM Smith, Forecast.

The funding gap for roads and bridges increases to approximately $590 million per year in 2050.

Figure 74 illustrates the 2025-funded program needs forecast for roads and bridges over 5-year increments to demonstrate the funding gap associated with future STIP cycles. While the 2031–2035 period faces a $250 million shortfall, this deficit scales significantly over the planning horizon. By the 2046–2050 interval, the projected funding gap expands to $2.5 billion.

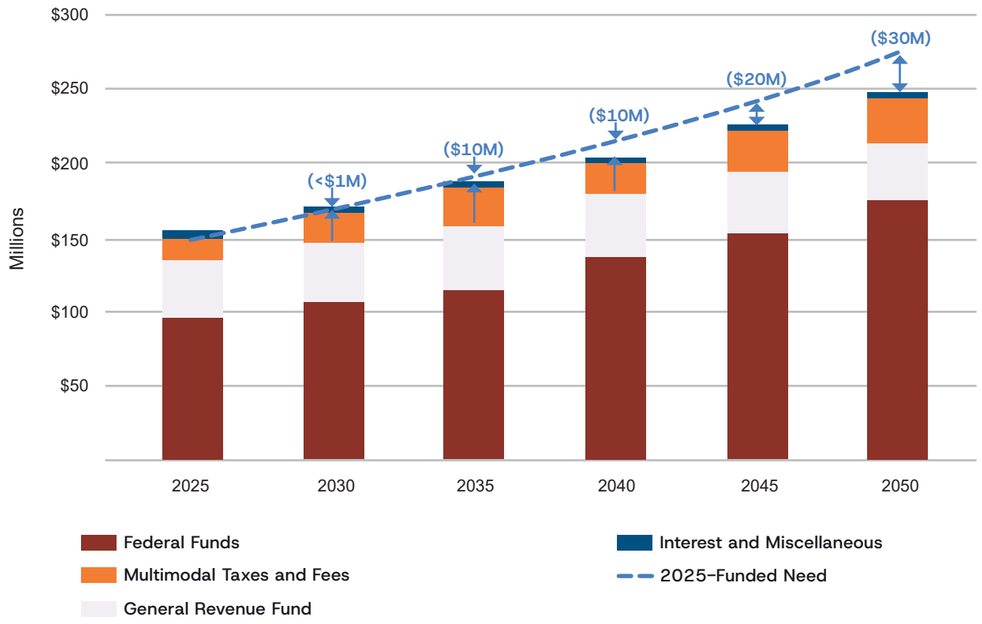
Figure 74 – Roads and Bridges 5-Year 2025-Funded Program Needs



Source: MoDOT, Historical Actuals; CDM Smith, Forecast.

Figure 75 illustrates the 2025-funded program needs forecast for multimodal. Revenues are sufficient to meet the 2025-funded needs through 2029. However, a funding gap begins in 2030. A table of the 2025-funded roads and bridges and multimodal program needs can be found in **Appendix I**.

Figure 75 – Multimodal 2025-Funded Program Needs



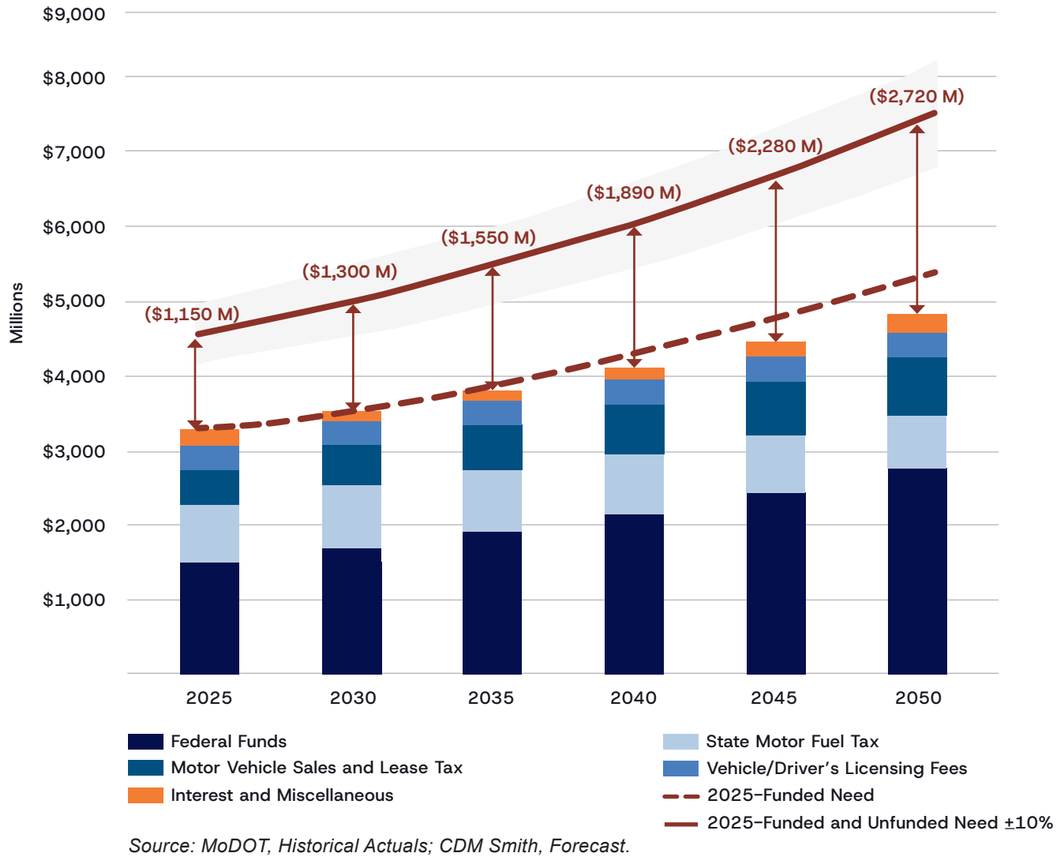
Source: MoDOT, Historical Actuals; CDM Smith, Forecast.

The funding gap for multimodal increases to almost $30 million by 2050.

2025-Funded and Unfunded Needs

Figure 76 illustrates the 2025-funded + unfunded needs forecast for roads and bridges. As of 2025, there is a funding gap of approximately $1.2 billion, reflecting the fact that the demand for transportation improvements exceeds the funding currently available, requiring prioritization of projects that provide the greatest benefit to taxpayers. The projected funding gap grows to approximately $2.7 billion by 2050 Similar to 2025-funded program needs, unfunded needs are expected to increase with inflation. However, evaluating unfunded needs involves greater uncertainty due to the broader assumptions required, so an error margin of ±10% is applied to illustrate the potential variance in these estimates (illustrated as a gray area above or below the 2025-Funded and Unfunded Need ±10% trend line).

Figure 76 – Roads and Bridges 2025-Funded and Unfunded Needs

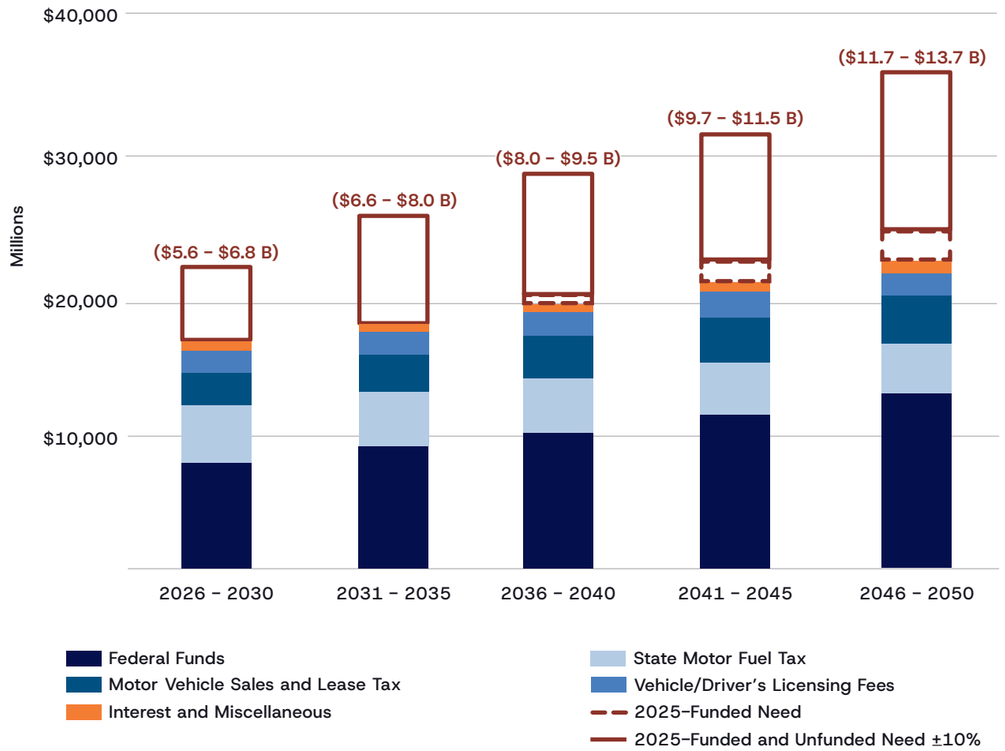


Source: MoDOT, Historical Actuals; CDM Smith, Forecast.

The projected funding gap for 2025-funded and unfunded needs for roads and bridges grows to approximately $2.7 billion by 2050.

Figure 77 illustrates the 2025-funded and unfunded program needs forecast for roads and bridges over 5-year increments to demonstrate the funding gap associated with future STIP cycles. While the immediate 2025–2029 period faces a deficit of $5.6–$6.8 billion, this shortfall nearly doubles over the life of the plan. By the final 2046–2050 interval, the projected funding gap reaches a peak of $11.7–$13.7 billion.

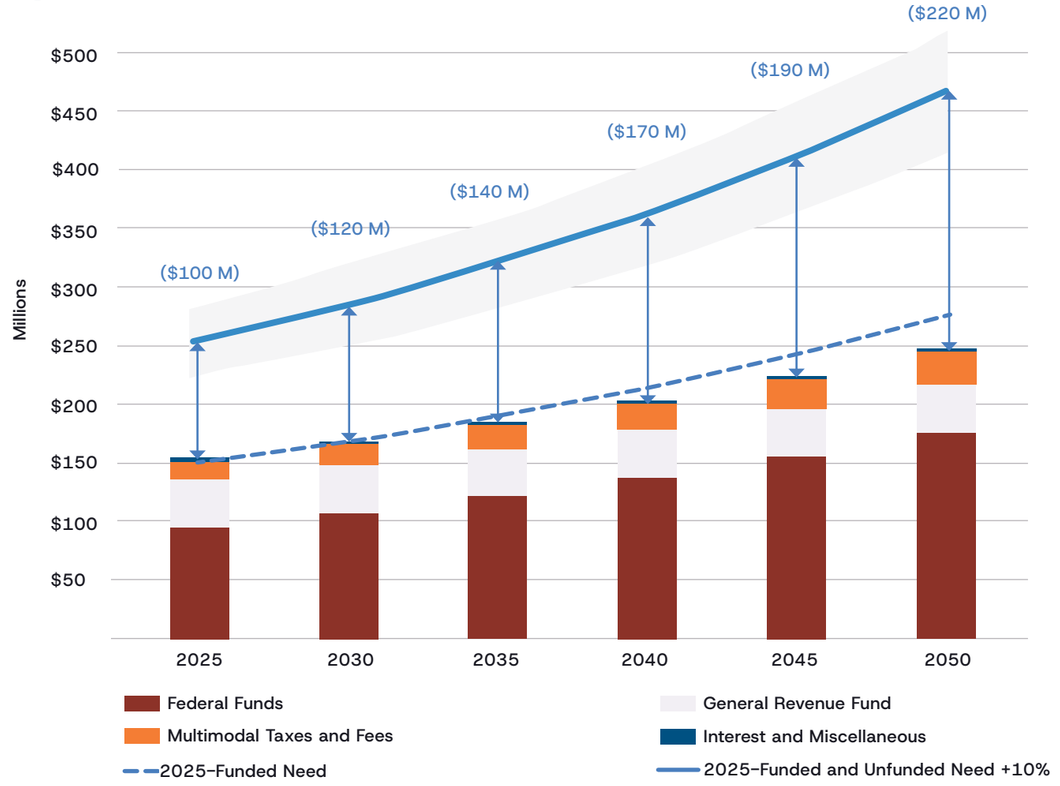
Figure 77 – Multimodal 5-Year 2025-Funded + Unfunded Needs



Source: MoDOT, Historical Actuals; CDM Smith, Forecast.

Figure 78 illustrates the 2025-funded and unfunded needs forecast for multimodal. As of 2025, there is a funding gap of approximately $100 million. The projected funding gap grows to approximately $220 million by 2050. Evaluating unfunded needs involves uncertainty due to the broader assumptions required, so an error margin of ±10% is applied to illustrate the potential variance in these estimates (illustrated as a gray area above or below the 2025-Funded and Unfunded Need ±10% trend line). A table of the 2025-funded and unfunded needs for roads and bridges and multimodal can be found in **Appendix I.**

Figure 78 – Multimodal 2025-Funded and Unfunded Needs



Source: MoDOT, Historical Actuals; CDM Smith, Forecast.

The projected funding gap for 2025-funded and unfunded needs for multimodal grows to approximately $220 million by 2050.

Implications for Missouri's Transportation Funding

Missouri's transportation system is essential to the state's economy, safety and quality of life. The state will face growing shortfalls that challenge MoDOT's ability to maintain existing infrastructure and meet future needs. Maintaining and improving the system depends on reliable, long-term funding. This chapter highlights two primary reasons why revenues are not keeping pace with needs:

- **Revenues do not keep up with inflation:** Most state revenues sources are set at fixed rates and are not adjusted for inflation. Meanwhile, construction, maintenance and operating costs continue to rise each year. Over time, this creates a widening gap between flat revenues and growing expenses.
- **Vehicles are using less fuel:** As vehicles become more fuel-efficient and as adoption of PHEVs and EVs grows, people are buying less gasoline and diesel. Missouri relies heavily on the motor fuel tax for transportation funding and fewer gallons sold means less fuel tax revenue collected.

Table 10 summarizes the findings from the report as projected funding gaps for both



Source: MoDOT

needs scenarios. Road and bridge revenues are expected to cover 2025-funded program needs through 2030. Beginning in 2031, however, a shortfall emerges, growing to $220 million by 2040 and $590 million by 2050. When both 2025-funded and unfunded needs are considered together, Missouri faces a $1.2 billion funding gap in 2025. That shortfall is projected to increase to $1.3 billion in 2030, $1.9 billion in 2040 and $2.7 billion in 2050.

Multimodal revenues are sufficient to meet 2025-funded needs through 2029. A funding gap begins in 2030 and grows to about $30 million by 2050. Looking at combined 2025-funded and unfunded needs, a funding gap of $100 million is present as of 2025. This funding gap grows to $220 million by 2050.

Table 10 – Funding Gap Based on Need Scenario ($ in Millions)

Year	Roads & Bridges		Multimodal		Total	
	2025-Funded Programs	2025-Funded and Unfunded Needs	2025-Funded Programs*	2025-Funded and Unfunded Needs	2025-Funded Programs	2025-Funded and Unfunded Needs
2025	$ –	$1,150	$ –	$100	$ –	$1,250
2030	$ –	$1,300	< $1	$120	< $1	$1,420
2035	$70	$1,550	$10	$140	$80	$1,690
2040	$220	$1,890	$10	$170	$230	$2,060
2045	$390	$2,280	$20	$190	$410	$2,470
2050	$590	$2,720	$30	$220	$620	$2,940

Note: Numbers rounded to the nearest $10 million.

In summary, Missouri faces a substantial and widening funding gap. This shortfall will challenge the state's ability to preserve existing infrastructure, invest in safety improvements and support future mobility needs. Critically, the state's buying power is increasingly constrained. While Missouri may maintain consistent levels of nominal contractor awards, the rising costs of materials and labor, compounded by declining fuel tax revenues, mean these investments will yield fewer completed projects. Addressing this challenge will require prioritization of investments during the time frame of this long-range plan. At the same time, by outlining the level of investment Missouri requires to address needs, this chapter provides a foundation for understanding the magnitude of possible funding solutions that can support the state's long-term transportation system.

Chapter 8: Implementation Plan

The Implementation plan bridges the gap between vision and reality, detailing how to achieve Long-Range Transportation Plan (LRTP) goals and objectives by outlining specific actions, scenarios, stakeholder engagement, funding and resource strategies and priorities aligned with statewide programs and policies.



Source: MoDOT

The development of this Implementation Plan reflects an extensive, year-long process that began with revisiting MoDOT's mission, vision and goals to guide long-range planning through 2050. Starting in early 2025, MoDOT and its partners conducted a multi-phase stakeholder engagement effort, including outreach to Metropolitan Planning Organizations (MPOs), Regional Planning Commissions (RPCs), district offices and the Modal Advisory Committee (MAC), as well as public input through surveys, virtual meetings and events like the Missouri State Fair. The feedback and insights gathered during these activities helped shape Missouri's goals, objectives, vision and the scenario planning process.

Using baseline snapshots, "future headlines" and policy level discussions, the scenario planning process explored future conditions across four key topics: funding and investments, safety, economic growth and rural and aging communities.

By late 2025, MAC meetings and executive reviews refined priorities and identified actionable strategies aligned with statewide programs and policies. This collaborative approach culminated in the Action Plan, which organizes recommendations into short-, mid- and long-term timeframes and provides a roadmap for implementing the LRTP and State Freight and Rail Plan (SFRP) goals.

Action Plan

The Action Plan translates the LRTP vision into a practical roadmap for implementation, providing clear steps to achieve MoDOT's established goals and objectives through 2050. It outlines general recommendations and identifies critical issues, such as safety risks, aging infrastructure, freight bottlenecks and funding constraints, while strengthening a collaborative planning process that supports effective communication and coordination among statewide stakeholders. It builds on statewide programs and policies, including the Freight Enhancement Program, Show-Me Zero safety initiatives and multimodal connectivity strategies.

Recommended Implementation Strategies Address:

- POLICY
- OPERATIONS
- PROJECT DEVELOPMENT
- COMMUNICATIONS

For Fiscally Responsible Investments, Funding and Resource Considerations Integrate:

- STATE/FEDERAL PROGRAMS
- CROSS-SECTOR PARTNERSHIPS
- PERFORMANCE-BASED PRIORITIZATION

Action Plan Aligns With Performance Trends and Targets, Supporting MoDOT's Statewide Goals For:

- SAFETY
- RELIABILITY
- STEWARDSHIP
- ECONOMIC VITALITY

Long-Range Transportation Plan

Several recommendations for achieving the goals and objectives of the LRTP have been established, as shown in **Table 11**. Recommended action items are categorized by:

- **Short-term (0–5 years)**
- **Mid-term (5–10 years)**
- **Long-term (10+ years)**

Table – 11 Recommendations and Action Items to Support LRTP Goals and Objectives

Recommendation	Associated Goal	Action Item
Short-Term (0–5 Years)		
Assess Future Revenue Scenarios to Inform Planning	**Stewardship**	Continue revenue impact analysis to forecast future funding gaps.
Advance Show-Me Zero and Vulnerable Road Users (VRU) Safety Strategies Through Collaborative Efforts	**Safe**	Continue supporting and promoting Show-Me Zero and VRU strategies.
Explore Options for a Repository for Local Active Transportation Plans	**Connected**	Explore options for creating a repository for local active transportation plans to enhance collaboration.
Create a Shared Platform for Active Transportation Resources	**Connected**	Collaborate with regional partners to identify, compile and share active transportation resources—such as plans, data and best practices—through a coordinated approach that improves accessibility and supports regional connectivity.
Research Emerging Technologies Pilot Programs	**Innovative**	Assess potential pilot programs for emerging technologies that emphasize techniques and treatments from innovative programs—Transportation System Management and Operations (TSMO) and the Missouri State Transportation Innovation Council (MoSTIC)—and identify opportunities for future implementation.
Advance Freight Connectivity and Address Parking Needs	**Prosperous**	Collaborate with partners to assess freight bottlenecks at key intermodal hubs and explore strategies to improve efficiency and address truck parking challenges, as appropriate and subject to available resources.
Mid-Term (5–10 Years)		
Strengthen Long-Term Transportation Funding Stability	**Stewardship**	Evaluate strategies to address revenue challenges, including potential alternative funding mechanisms such as mileage-based user fees, tolling and congestion pricing.
Apply Advanced Technologies for Safer, Smarter Mobility	**Safe**	Leverage smart signal systems, intelligent transportation systems and data analytics to enhance safety and reliability.
Multimodal Focus	**Reliable**	Integrate additional intermodal connections to better move freight and people via rail, water and air, not just highways.
Leverage Technology and Broadband	**Innovative**	Look for opportunities to invest in technology to improve infrastructure, including leveraging broadband, intelligent transportation systems and advances in artificial intelligence (AI) solutions.
Evaluate Cost Share Program Requirements	**Prosperous**	Evaluate cost share program requirements to identify opportunities for implementing strategies that expand fiscally constrained communities' participation in this highly beneficial program.
Long-Term (10+ Years)		
Explore AI Technology	**Reliable**	Investigate, consider impacts and develop a framework which could identify and implement AI-driven traffic and incident management to continue increasing reliability of the system.
Strengthen Transit Funding and Modernize Statutes	**Connected**	Explore opportunities to strengthen transit funding and review statutory updates to support evolving mobility options.

These action items drew support from stakeholders for the following reasons:

- Strengthening financial sustainability and stewardship of transportation resources
- Enhancing system safety, reliability and real time responsiveness
- Expanding multimodal options and improving access across geographies and user groups
- Advancing innovation to modernize infrastructure and improve statewide mobility

State Freight and Rail Plan

As discussed in the SFRP, the Missouri Freight Action Plan establishes a proactive, statewide framework to guide freight planning and investment decisions over the next 20 years.

As discussed in the SFRP, the Missouri Freight Action Plan builds on the analyses and recommendations specified in the SFRP providing strategic, actionable guidance to address anticipated freight growth, evolving patterns and critical challenges such as truck parking, multimodal connectivity and infrastructure resiliency. The plan aligns with the LRTP and SFRP goals, Reliability, Innovation, Stewardship, Safety, Prosperity and Connectivity and fosters collaboration among MoDOT, MPOs, RPCs, ports, railroads and private-sector partners to support efficient goods movement and economic competitiveness.



Source: MoDOT

MoDOT

2026

LRTP

Long-Range Transportation Plan



Appendices

Appendix A – Modal Advisory Committee and Executive Modal Advisory Committee Members

Modal Advisory Committee (MAC) Members			
Attendee Name	Agency	Attendee Name	Agency
Aimee Andres	Inland Rivers, Ports & Terminals, INC. (IRPT)	Jon Stephens	Kansas City Port Authority (Port KC)
Bailey DeJonge	East-West Gateway Council of Governments (EWG)	Lesley Rone	Missouri Department of Economic Development (MO DED)
Ben Jones	Union Pacific Railroad (UP)	Lewie Pugh	Owner-Operator Independent Drivers Association (OOIDA)
Bonnie Prigge	Meramec Regional Planning Commission (RPC)	Liz Gibbons	City of Kirkwood
Brent Stevens	Workforce Dev Board of N. Missouri	Melissa Cooper	Kansas City International Airport (MCI)
Brian Weiler	Springfield Branson National Airport (SGF)	Michael Kelley	BikeWalkKC
Cecelie Cochran	Federal Highway Administration (FHWA)	Mike Latuszek	FHWA
Chance Gallagher	St. Joseph Area Transportation Study Organization (SJATSO)	Randall Aulbur	Missouri Department of Transportation (MoDOT) Central District
Crystal Jones	Perry County Economic Development Authority (PCEDA)	Rhonda Hamm-Niebruegge	St. Louis Lambert International Airport (STL)
David Pearce	University of Central Missouri (UCM)	Ron Achelpohl	Mid-America Regional Council (MARC)
Geri Doyle	Federal Transit Administration (FTA)	Stefan Herron	MO DED
Jackson Hotaling	Missourians for Responsible Transportation (MRT)	Tammy Bruckerhoff	Visit Hermann
Jeff Davis	Burlington Northern Santa Fe Railway (BNSF)	Tom Blair	MoDOT St. Louis District
Jeremy Tanz	Southeast Missouri Regional Planning and Economic Development Commission (SEMO RPC) and Missouri Association of Councils of Government (MACOG)	Tom Crawford	Missouri Trucking Association (MoTA)
John Ferguson	Missouri Port Authorities Association (MPAA)	Tom Evers	MoDOT St. Louis District
John Miller	FHWA	Zachary Young	MoDOT Southwest District

Executive Modal Advisory Committee (MAC) Members			
Attendee Name	Agency	Attendee Name	Agency
Bailey DeJonge	EWG	Jackson Hotaling	MRT
Ben Jones	UP	Jeremy Tanz	MACOG and SEMO RPC
Bonnie Prigge	Meramec RPC	John Ferguson	MPAA
Brent Stevens	Workforce Dev Board of N. Missouri	Randall Aulbur	MoDOT Central District
Brian Weiler	SGF	Ron Achelpohl	MARC
Cecilie Cochran	FHWA	Tammy Bruckerhoff	Visit Hermann
Chance Gallagher	SJATSO	Tom Blair	MoDOT St. Louis District
Crystal Jones	PCEDA	Tom Crawford	MoTA
Gerri Doyle	FTA	Tom Evers	MoDOT St. Louis District
Bailey DeJonge	EWG		

Appendix B – Intercity Bus Service Routes

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.

Burlington Trailways

An exceedingly small portion of Burlington Trailways service occurs in the state, through a connection from Iowa south along the Missouri-Illinois border, with a southern terminus in St. Louis. Burlington Trailways has six stops in the state in addition to St. Louis: Canton, Hannibal, Bowling Green, Troy, Wentzville and the St. Louis-Lambert Airport.

Greyhound

Greyhound routes through the state fall on largely east-west transcontinental routes. There are three routes specifically carried by Greyhound and these routes follow I-70, I-44 and I-55. Each of these routes includes St. Louis. In addition, Greyhound has 10 other stops in the state. Along I-70 there are stops in Columbia, Boonville and Kansas City. Along I-44, there are stops in Rolla, Ft. Leonard Wood, Lebanon, Springfield and Joplin. Along I-55, there are stops at Cape Girardeau and Sikeston.

Jefferson Lines

Within the state, Jefferson routes run primarily along the western border of the state. Jefferson has 22 bus stops, the most of any provider within the state of Missouri. From north to south, stops are located at Rock Port, Maryville, Bethany, St. Joseph, Cameron, Kansas City (three stops – Kansas City International Airport, Union Station and Greyhound Station), Warrensburg, Peculiar, Harrisonville, Clinton, Butler, Rich Hill, Osceola, Nevada, Collins, Humansville, Bolivar, Springfield, Joplin and Anderson.

Megabus

There is currently only one Megabus route through the state, along I-70, with stops in Kansas City, Columbia and St. Louis. Megabus has a unique operating style compared to the other three major ICB providers in the state. Megabus exclusively provides point-to-point service with very minimal stops (generally no rural access). There are no bus stations/terminals operated by Megabus. Their stop locations are primarily curbside, although they are generally near local transit.

Appendix C – Intercity Bus Stops/Stations

- St. Louis – The St. Louis Greyhound bus terminal is in the Gateway Multimodal Transportation Center. There are MetroBus and MetroLink (light rail) stops at this location. Megabus also stops near Union Station.
- Kansas City – The Kansas City Greyhound terminal (which serves both Greyhound and Jefferson Lines) is situated along several Kansas City Area Transit Authority (KCATA) routes, including the 12th Street (12), Troost (25), 9th Street (109) and Woodland/Brooklyn (110) routes. Megabus stops in Kansas City at the 3rd and Grand KCATA MetroCenter. The MetroCenter is a major park-and-ride location, which is served by four different local bus routes, including the MAX (Bus Rapid Transit). However, as Kansas City continues to strive to develop Union Station as a multimodal hub, it might make sense to consider consolidating ICB operations to this location, for true intermodal connectivity.
- Columbia – The Greyhound station is located along the “101 N Orange” transit line. However, the station is not specifically listed as a transit stop. The closest scheduled stop is located at Providence Road and Leslie Lane, which is approximately one mile from the Greyhound station. Megabus stops in Columbia at Wabash Station, the main transit hub in Columbia. All bus lines are routed through Wabash Station. Although the Greyhound terminal in Columbia is a stand-alone building that clearly represents a past investment, it may not be sited in the best place for true multimodal integration. Together with the other alternative modes in Columbia, ICB providers should work to determine a suitable location for a true multimodal hub (whether at Wabash Station or some other location). This is the kind of consolidation that might not occur without state encouragement and investment.
- Springfield – The former Greyhound terminal in Springfield has moved to Springfield City Utilities (CU) Transit Center at N. Main St. in between West College St. and West Olive St. This is the only Greyhound bus stop in Springfield. The Greyhound terminal was relocated to the CU Transit Center as of late 2022, which provides a central location for passengers to transfer between different bus routes. This station would not be considered true multimodal integration in the sense of offering connections to numerous other transportation modes in one facility. Together with the other alternative modes in Springfield, ICB providers should work to determine a suitable location for a true multimodal hub. This is the kind of consolidation that might not occur without state encouragement and investment.

- Joplin – The ICB stop location is located at a gas station near Route 249 and Route 66 in the Village of Duenweg. The Greyhound station stops in the parking lot of the Phillips 66 right off 7th St. This station is about 6 miles from the nearest Sunshine Lamp Trolley located on Main St. This constitutes fairly good modal integration.
- St. Joseph – The St. Joseph transit system has a transfer station at 6th and Angelique, through which all city transit lines are routed. The St. Joseph ICB bus stop is at that transfer station, an example of perfect integration of these modes. In summary, working to better integrate modes in Columbia, Springfield and Kansas City with ICB would create true intermodal connectivity. St. Joseph is a good model for this type of geographic integration.

Appendix D – Bicycle Routes/Trails

- **The Frisco Highline Trail** - Winds 35 miles through the scenic Ozarks and it connects Springfield to Bolivar, Missouri. The trail was designated a National Recreation Trail by the National Park Service and American Trails in 2004. The trail is feasible due to donors and members of Ozark Greenways, who named and own this Ozarks' Premier Scenic Rail Trail.[1]

- **The Great River Bicycle Trail** - Runs from Muscatine, Iowa to New Orleans, Louisiana. The Great River Bicycle Trail enters the state at Hannibal and traverses the east side of the state before exiting the state at Cape Girardeau. There is a trail spur leading into St. Louis. The Great Rivers South Bicycle Route provides the traveler with the subtle beauty of the state's farmland, woods and rivers.[2]

- **Katy Trail -** Is the longest developed rail to trail facility in the country. Katy Trail State Park attracts users of all ages, interests and riding abilities. The trail offers a place to enjoy nature and an opportunity to discover the rich history from the past. The trail is popular among bicyclists, walkers, equestrians, nature lovers and history buffs. Built on the former Missouri-Kansas-Texas Railroad, the Katy Trail is 240 miles long between Clinton and Machens and contains 26 trailheads and four fully restored rail depots. The Cooper County to St. Charles County section has been designated as an official segment of the Lewis and Clark National Historic Trail. In addition, the Katy Trail is part of the American Discovery Trail, designated as a Millennium Legacy Trail and is in the Rails-to-Trails Conservancy Hall of Fame.[3]

- **Lewis and Clark Trail Bicycle Routes -** Was created to celebrate the anniversary of the Corps of Discovery's 1803-1806 historic journey and offers cyclists the opportunity to follow the path of the explorers Captains Meriwether Lewis and William Clark. The main route of the Lewis and Clark Bicycle Trail is made up of paved roads, bike paths and unpaved rail-trails, with occasional short sections of gravel roads. The trail enters the state near St. Charles and exits the state north of Kansas City into Atchison, Kansas. The Lewis and Clark Trail runs

[1] Ozark Greenways, "Frisco Highline Trail," accessed June 5, 2025, https://www.ozarkgreenways.org/explore/greenway-trails/frisco-highline-trail/.
[2] Adventure Cycling Association, "Great Rivers South Bicycle Route", accessed June 5, 2025, https://www.adventurecycling.org/routes-and-maps/adventure-cycling-route-network/great-rivers-south/.
[3] Missouri State Parks, "Katy Trail State Park," accessed June 5, 2025, https://mostateparks.com/park/katy-trail-state-park.

concurrently with a segment of the Katy Trail. Near Boonville, the two trails diverge.[4]

- **Mississippi River Trail (MRT)** - The MRT stretches from the headwaters at Lake Itasca in Minnesota to its near-mouth in Venice, Louisiana, offering a continuous riverside route along the Mississippi River. The Missouri portion follows the river's eastern bank as the route enters the state, traces scenic levees, historic river towns and riverfront greenways and then exits toward the next state south. Riders experience expansive river views, seasonal floodplain forests and the blend of river heritage and natural landscapes. Much of the route uses paved shoulders on roads and multi-use trails rather than fully separated rail-trails, making it accessible to a broad range of riders seeking a long-distance journey along America's greatest waterway.[5]
- **Route 66 Trail -** In the state, the Route 66 Trail travels through St. Louis and Springfield and exits near Joplin along a bike-friendly version of Historic Route 66. Like the Historic Route 66, the trail generally parallels I-44. The Riverfront Trail leads cyclists into the city and past the Gateway Arch commemorating the launch of the Lewis and Clark Corps of Discovery Expedition. Once through the suburbs on city and county roads, Bicycle Route 66 begins paralleling I-44 mostly on frontage roads and some county highways. Not far out of St. Louis, cyclists will encounter the rolling hills of the northern reaches of the Ozark Mountains. West of Springfield, Missouri, the route leaves Historic 66 in favor of quieter county roads and state highways. Bicycle Route 66 rejoins Historic Route 66 east of Joplin.[6]
- **Transamerica Trail Bicycle Route -** Crosses the country from Astoria, Oregon to Yorktown, Virginia. The trail enters the state along Route 126 east of Pittsburg, Kansas and exits the state into Kaskaskia, Illinois south of St. Genevieve. In western Missouri, the riders experience going from flat and dry terrain to a roller coaster ride as the route gets hillier as they approach the Ozarks Mountain Range. The Ozarks themselves contain many steep grades and tight curves. The Ozark National Scenic Riverways is a national park that provides riders with

[4] National Park Service, "Lewis and Clark Trail Cycle Route," June 2, 2021, https://www.nps.gov/places/lewis-and-clark-trail-cycle-route.htm.
[5] Missouri Bicycle and Pedestrian Federation, "The Mississippi River Trail (MRT)," Nov 11, 2002 https://mobikefed.org/2002/11/the-mississippi-river-trail-mrt.php
[6] Adventure Cycling Association, "Bicycle Route 66," accessed June 5, 2025, https://www.adventurecycling.org/routes-and-maps/adventure-cycling-route-network/bicycle-route-66/.

scenic rivers and forests. East of Farmington, riders travel down the bluffs of the Mississippi River and down into the floodplain.[7]

- **U.S. Bicycle Route 51** - Runs the length of Missouri, beginning at the Missouri-Iowa state line near the U.S. 69 crossing and ending in Alma, Arkansas. With visions to extend from Minnesota to New Orleans, Louisiana, the trail currently travels approximately 554 miles through rolling farmland, small historic towns and the scenic Ozark region. The route uses a combination of existing roadways and segments of local trails, providing riders with a mix of rural countryside, forested hills and river landscapes. USBR 51 is an emerging long-distance touring route that enhances the state's bicycle tourism potential and links several recreational and historical areas.[8]
- **U.S. Bicycle Route 251** - Serves as a southwestern spur of USBR 51, beginning near the Springfield and Cassville region and continuing south through the Ozarks to the Missouri-Arkansas border. Covering approximately 90 miles in the state, the route travels through rural southwest Missouri, offering a quieter alternative to the main spine of USBR 51. The corridor features rolling hills, forested landscapes, scenic back roads and access to smaller communities in Barry and McDonald Counties before reaching the state line. Primarily following rural county roads with fewer developed trail segments, USBR 251 provides cyclists with the opportunity to explore the rugged character and natural beauty of the Ozark region, while creating additional loop and connection options into Arkansas' growing trail and cycling network.[9]

[7] Adventure Cycling Association, "TransAmerica Trail," accessed by June 5, 2025, https://www.adventurecycling.org/routes-and-maps/adventure-cycling-route-network/transamerica-trail/.
[8] Adventure Cycling Association, " New USBRS Announcements for Fall 2024," Dec 10th, 2024, https://www.adventurecycling.org/member_news/new-usbrs-announcements-for-fall-2024/
[9] Missouri Bicycle and Pedestrian Federation, "U.S. Bicycle Route 251," Sept 11, 2025, https://mobikefed.org/2025/09/ask-modot-support-wayfinding-signage-us-bicycle-routes-51-251-and-66-across-missouri

Appendix E – Total Delay Hotspots – Top 10

Statewide	Roadway	Approximate Location
1	I-55 S at Reavis Barracks Rd/Exit 199	St. Louis
2	I-64 W at I-70	Lake St. Louis
3	I-270 S at MO-100/Manchester Rd/Exit 9	Des Peres
4	MO-47 N at U.S. 61	Troy
5	I-70 E at Sterling Ave/Exit 10	Kansas City
6	U.S. 71 N at E Gregory Blvd	Kansas City
7	MO-152 W at I-35/U.S. 69	Liberty
8	I-270 S at MO-Ab/Ladue Rd/Exit 13	Creve Coeur
9	I-64 W at Clayton Rd/Oakland Ave/Exit 34	St. Louis
10	I-70 W at Tr Hughes/Belleau Crk/Exit 219	O'Fallon
MoDOT Northwest District	Roadway	Approximate Location
1	MO-31 N at U.S. 36 (North)	Stewartsville
2	MO-13 S at MO-P	Hamilton
3	U.S. 36 W at I-229/U.S. 59	St. Joseph
4	MO-13 N at U.S. 36-Br/Old U.S. 36 E/Berry St	Hamilton
5	MO-13 S at U.S. 36	Hamilton
6	U.S. 36 E at MO-31/SW Spruce Rd	Stewartsville
7	I-35 N at U.S. 69/Exit 48	Cameron
8	I-35 S at MO-116/Exit 44	Lathrop
9	I-229 N at Edmond St/Exit 6A	St. Joseph
10	I-29 N at I-229/Exit 43	St. Joseph
MoDOT Kansas City District	Roadway	Approximate Location
1	I-70 E at Sterling Ave/Exit 10	Kansas City
2	U.S. 71 N at E Gregory Blvd	Kansas City
3	MO-152 W at I-35/U.S. 69	Liberty
4	I-435 CW at Stadium Dr	Kansas City
5	I-435 CCW at Raytown Rd/Exit 63	Kansas City
6	I-29/I-35 S at I-29 End Freeway/Exit 4	Kansas City
7	U.S. 56 N at Ward Pky*	Kansas City
8	U.S. 50 W at Main St/Main St Rd	Sedalia
9	U.S. 71 S at 155Th St/Exit 176	Grandview
10	MO-92 W at I-35	Kearney

*Includes a non-MoDOT owned segment

MoDOT Southwest District	Roadway	Approximate Location
1	MO-13 N at I-44	Springfield
2	MO-66 W at MO-P/S Schifferdecker Ave	Joplin
3	MO-76 E at MO-165/Gretna Rd*	Branson
4	MO-76 E at U.S. 65-Br/Veterans Blvd (North)*	Branson
5	MO-76 W at MO-165/Gretna Rd*	Branson
6	I-44 W at MO-13/Kansas Expy/Exit 77	Springfield
7	MO-171 W at U.S. 71-Br/S Madison St	Webb City
8	MO-76 E at U.S. 65*	Branson
9	U.S. 60 W at MO-M/MO-MM	Republic
10	I-44 W at MO-125/Exit 88	Strafford
MoDOT Central District	Roadway	Approximate Location
1	U.S. 63 N at MO-PP/Clark Ln	Columbia
2	U.S. 63 S at I-70	Columbia
3	I-44 W at MO-V/Exit 189	Rolla
4	U.S. 63 S at U.S. 50-Br/Missouri Blvd	Jefferson City
5	U.S. 63 S From Clark Ave to Cedar Creek	Jefferson City
6	U.S. 54 W at W Main St	Jefferson City
7	I-44 W at MO-28/Exit 163	St. Robert
8	I-44 E at MO-68/Exit 195	St. James
9	U.S. 50 E From Clark Ave to MO-179	Jefferson City
10	MO-AC W at S Bearfield Rd	Columbia
MoDOT Southeast District	Roadway	Approximate Location
1	U.S. 61 S at I-57/U.S. 60	Sikeston
2	U.S. 160 W at U.S. 63-Br/MO-17/E Broadway St	West Plains
3	MO-17 S at U.S. 160/U.S. 63-Br/Broadway St	West Plains
4	MO-K W at S Mt Auburn Rd	Cape Girardeau
5	MO-K E at S Mt Auburn Rd	Cape Girardeau
6	MO-K E at S Silver Springs Rd	Cape Girardeau
7	I-55 N at MO-Ee/Exit 40	Portageville
8	I-55 N at U.S. 61/MO-162/Exit 32	Portageville
9	U.S. 61 N at U.S. 61-Br/N Kingshighway	Sikeston
10	U.S. 61 N at U.S. 61-Br/S Kingshighway	Sikeston

*Includes a non-MoDOT owned segment

MoDOT St. Louis District	Roadway	Approximate Location
1	I-55 S at Reavis Barracks Rd/Exit 199	St. Louis
2	I-64 W at I-70	Lake St. Louis
3	I-270 S at MO-100/Manchester Rd/Exit 9	Des Peres
4	I-270 S at MO-Ab/Ladue Rd/Exit 13	Creve Coeur
5	I-64 W at Clayton Rd/Oakland Ave/Exit 34	St. Louis
6	I-70 W at Tr Hughes/Belleau Crk/Exit 219	O'Fallon
7	I-170 S at Galleria Pky	Clayton
8	I-270 N at I-64/U.S. 40/U.S. 61/Exit 12	Creve Coeur
9	I-270 S at Dougherty Ferry Rd/Exit 8	Kirkwood
10	I-64 E at Boland Pl	Richmond Heights
MoDOT Northeast District	Roadway	Approximate Location
1	MO-47 N at U.S. 61	Troy
2	I-70 E at MO-47/Exit 193	Warrenton
3	I-70 W at MO-F/MO-J/Exit 200	Wright City
4	I-70 W at MO-E/MO-Y/Exit 183	Jonesburg
5	I-70 W at MO-47/Exit 193	Warrenton
6	I-70 W at Wildcat Dr/Exit 199	Wright City
7	I-70 W at MO-A/MO-B/Exit 188	Pendleton
8	I-70 E at MO-F/Exit 179	High Hill
9	I-70 E at MO-E/MO-Y/Exit 183	Jonesburg
10	I-70 E at Warren/St Charles County Line	Foristell

Appendix F – Congestion Hotspots – Top 10

Statewide	Roadway	Approximate Location
1	U.S. 50 W at Main St/Main St Rd	Sedalia
2	MO-47 N at U.S. 61	Troy
3	MO-13 N at U.S. 36-Br/Old U.S. 36 E/Berry St	Hamilton
4	MO-13 S at MO-P	Hamilton
5	I-64 W at I-70	Lake St. Louis
6	MO-13 N at I-44	Springfield
7	MO-92 W at I-35	Kearney
8	U.S. 61 S at I-57/U.S. 60	Sikeston
9	MO-152 W at I-35/U.S. 69	Liberty
10	MO-66 W at MO-P/S Schifferdecker Ave	Joplin
MoDOT Northwest District	Roadway	Approximate Location
1	MO-13 N at U.S. 36-Br/Old U.S. 36 E/Berry St	Hamilton
2	MO-13 S at MO-P	Hamilton
3	MO-31 N at U.S. 36 (North)	Stewartsville
4	MO-13 S at U.S. 36	Hamilton
5	U.S. 36 E at MO-31/SW Spruce Rd	Stewartsville
6	U.S. 36 W at I-229/U.S. 59	St. Joseph
7	U.S. 136 W at MO-K (West)	Unionville
8	I-35 N at U.S. 69/Exit 48	Cameron
9	I-229 N at Edmond St/Exit 6A	St. Joseph
10	I-35 S at MO-116/Exit 44	Lathrop
MoDOT Kansas City District	Roadway	Approximate Location
1	U.S. 50 W at Main St/Main St Rd	Sedalia
2	MO-92 W at I-35	Kearney
3	U.S. 56 N at Ward Pky*	Kansas City
4	MO-152 W at I-35/U.S. 69	Liberty
5	MO-92 E at I-29/U.S. 71	Platte City
6	I-70 E at Sterling Ave/Exit 10	Kansas City
7	U.S. 71 N at E Gregory Blvd	Kansas City
8	I-435 CW at Stadium Dr	Kansas City
9	MO-92 E at MO-33/S Jefferson St	Kearney
10	MO-7 S at I-49 (North)	Harrisonville

*Includes a non-MoDOT owned segment

MoDOT Southwest District	Roadway	Approximate Location
1	MO-13 N at I-44	Springfield
2	MO-66 W at MO-P/S Schifferdecker Ave	Joplin
3	MO-76 E at MO-165/Gretna Rd*	Branson
4	MO-76 W at MO-37-Br/Main St	Cassville
5	MO-171 W at U.S. 71-Br/S Madison St	Webb City
6	MO-76 E at U.S. 65-Br/Veterans Blvd (North)*	Branson
7	MO-76 W at MO-165/Gretna Rd*	Branson
8	U.S. 60 W at MO-M/MO-Mm	Republic
9	MO-165 S at Green Mountain Dr	Branson
10	MO-66 E at U.S. 71-Br/Range Line Rd	Joplin
MoDOT Central District	Roadway	Approximate Location
1	U.S. 63 N at MO-Pp/Clark Ln	Columbia
2	U.S. 63 S at I-70	Columbia
3	U.S. 50 W at MO-100	Linn
4	I-44 W at MO-V/Exit 189	Rolla
5	I-44 W at MO-28/Exit 163	St. Robert
6	I-44 E at MO-68/Exit 195	St. James
7	U.S. 63 S From Clark Ave to Cedar Creek	Jefferson City
8	U.S. 50 E From Clark Ave to MO-179	Jefferson City
9	U.S. 54 W at W Main St	Jefferson City
10	U.S. 63 S at U.S. 54/MO-94/Red Whaley Exp/Bluff Rd	Jefferson City
MoDOT Southeast District	Roadway	Approximate Location
1	U.S. 61 S at I-57/U.S. 60	Sikeston
2	U.S. 160 W at U.S. 63-Br/MO-17/E Broadway St	West Plains
3	MO-17 S at U.S. 160/U.S. 63-Br/Broadway St	West Plains
4	MO-5 S at U.S. 160/Cr-815/Cr-805/Old U.S. 160	Gainesville
5	U.S. 160 W at MO-5 (West)	Gainesville
6	U.S. 160 W at Cr-303/Cr-404	Alton
7	I-55 N at MO-EE/Exit 40	Portageville
8	U.S. 61 N at MO-162	Portageville
9	U.S. 63 S at MO-VV/E Main St	West Plains
10	MO-K E at S Silver Springs Rd	Cape Girardeau

*Includes a non-MoDOT owned segment

MoDOT St. Louis District	Roadway	Approximate Location
1	I-64 W at I-70	Lake St. Louis
2	MO-A W at Pounds Rd	Festus
3	I-55 S at Reavis Barracks Rd/Exit 199	St. Louis
4	MO-100 W at S Kingshighway Blvd*	St. Louis
5	I-270 W at Riverview Dr/Exit 34	Riverview
6	MO-100 E at McCausland Ave*	St. Louis
7	I-70 W at Tr Hughes/Belleau Crk/Exit 219	O'Fallon
8	I-64 W at Clayton Rd/Oakland Ave/Exit 34	St. Louis
9	MO-47 S at MO-100/Franklin St	Washington
10	I-170 S at Galleria Pky	Clayton
MoDOT Northeast District	Roadway	Approximate Location
1	MO-47 N at U.S. 61	Troy
2	I-70 E at MO-47/Exit 193	Warrenton
3	U.S. 61 S at MO-N/Palmyra Rd	Hannibal
4	I-70 W at MO-E/MO-Y/Exit 183	Jonesburg
5	I-70 W at MO-F/MO-J/Exit 200	Wright City
6	I-70 W at MO-A/MO-B/Exit 188	Pendleton
7	U.S. 61 N at MO-168	Hannibal
8	I-70 W at MO-47/Exit 193	Warrenton
9	I-70 E at MO-F/Exit 179	High Hill
10	I-70 E at MO-E/MO-Y/Exit 183	Jonesburg

*Includes a non-MoDOT owned segment

Appendix G – System Performance Report Federal Performance Metrics

Federal System Performance Metrics

This appendix provides an overview of the performance management process and the federal statewide targets established by the Missouri Department of Transportation (MoDOT) in coordination with the Federal Highway Administration (FHWA), Federal Transit Administration (FTA) and Metropolitan Planning Organizations (MPOs). These efforts are undertaken to meet federal requirements.

The federal performance metrics in this appendix assess the condition and effectiveness of the federal transportation system relative to the applicable federal performance targets for each area. These areas include Highway Safety; Highway Assets, specifically Pavement and Bridge Condition; System Performance, covering the Interstate and National Highway System (NHS), Freight Movement on the Interstate System and the Congestion Mitigation and Air Quality Improvement (CMAQ) Program; as well as Transit Asset Management and Transit Safety. An overview of MoDOT's federal performance targets is also provided.

Safety Performance

Safety Condition Performance Measures

The federal Safety Performance Measures establish requirements for state departments of transportation (DOTs) to assess safety on the transportation system by setting targets for the number of fatalities, the fatality rate per 100 million vehicle miles traveled (MVMT), the number of serious injuries, the serious injury rate per 100 MVMT and the number of non-motorized fatalities and serious injuries.

Safety Performance Versus Targets

The 5-year rolling average for fatalities increased steadily over the analysis period, rising from 910 in 2019 to 1,001 in 2024 **(Figure 1)**. Although fatalities declined in 2024, the continued increase in the rolling average indicates that long-term fatality trends remain elevated. The upward trajectory of the 5-year average reflects sustained increases over multiple years, even as recent annual performance shows improvement.

The 5-year rolling average fatality rate increased from 1.21 per 100 MVMT in 2019 to 1.28 in 2024. While year-to-year rates fluctuated, the rolling average demonstrates an

overall upward trend. This sustained increase highlights continuing long-term challenges in reducing the fatality rate despite short-term progress in 2024.

The 5-year rolling average for serious injuries rose consistently from 4,682 in 2019 to 5,156 in 2024 **(Figure 3)**. The steady increase in rolling averages underscores a persistent upward trend in serious injury outcomes statewide. Even in years where annual performance stabilized, the rolling average reflects cumulative growth in serious injuries over time.

The 5-year rolling average serious injury rate increased from 6.21 per 100 MVMT in 2019 to 6.56 in 2024 **(Figure 4)**. This gradual but continuous rise indicates that the rate of serious injuries has trended upward. The sustained increase in the rolling average suggests that long-term progress toward reducing injury severity has not yet been achieved.

The 5-year rolling average for non-motorized fatalities and serious injuries increased from 463 in 2019 to 603 in 2024 **(Figure 5)**. The consistent upward movement in the rolling average reflects long-term growth in crashes involving vulnerable road users. The rolling average indicates that long-term improvements remain necessary to reverse the overall trend.

Safety Performance Progress

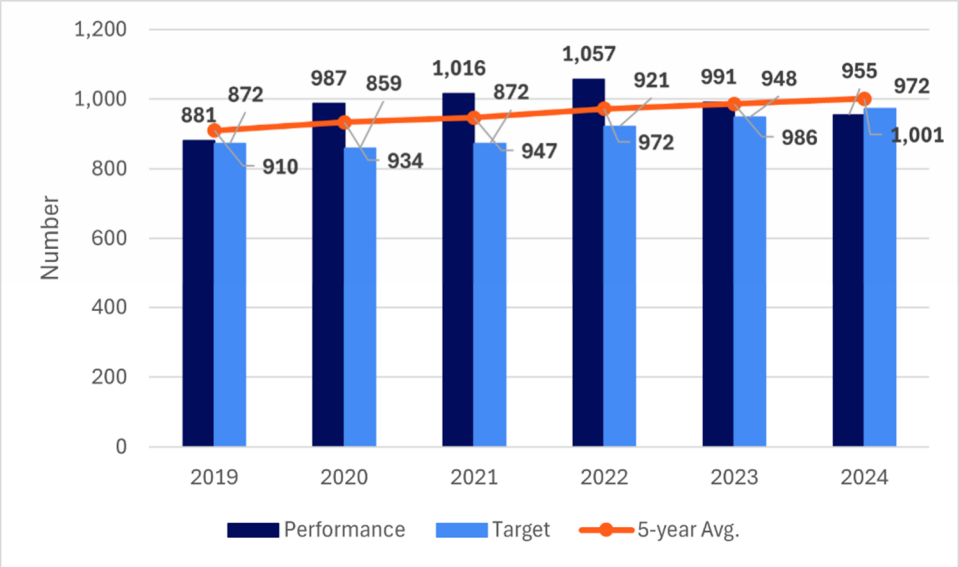
Safety is MoDOT's primary goal for Missouri citizens and MoDOT workers, so everyone goes home safe every day. MoDOT's 2026-2030 Strategic Highway Safety Plan (SHSP) titled Show-Me Zero serves as the strategic plan for agencies and organizations working to improve roadway safety and reduce fatalities and serious injuries on Missouri's transportation system. The plan takes a holistic approach to improving safety by considering the elements of the Safe Systems Approach – Safer People, Safer Vehicles, Safer Speeds, Safer Infrastructure and Safer Response. The Missouri Coalition for Roadway Safety (MCRS) leads the implementation of these efforts alongside several safety partners including MPOs, RPCs, community leaders, health care providers, legislators, educators, law enforcement, emergency responders, engineers and concerned citizens. The goal of the Show-Me Zero plan is to have zero traffic fatalities in Missouri. An interim goal of getting to half of the fatalities seen in 2024 by 2045 has been identified to help evaluate the efforts and strategies implemented.

Missouri has seen an overall increase in fatalities from 2015 to 2024, from 870 in 2015 to 955 in 2024. However, Missouri has seen a recent decrease in fatalities from 987 in 2020 to 955 in 2024. MoDOT looks for systemic safety issues and determines what can be done to mitigate them. MoDOT engages in significant public outreach efforts using the focus areas from the Show-Me Zero plan. While these efforts have proven to save

lives, there is still more to do to improve the safety of roadways in Missouri. One area with increased attention is those crashes involving vulnerable road users (VRUs). VRU crashes have been on the rise in Missouri over the last several years. Strategies identified in the VRU Safety Assessment are reviewed for implementation.

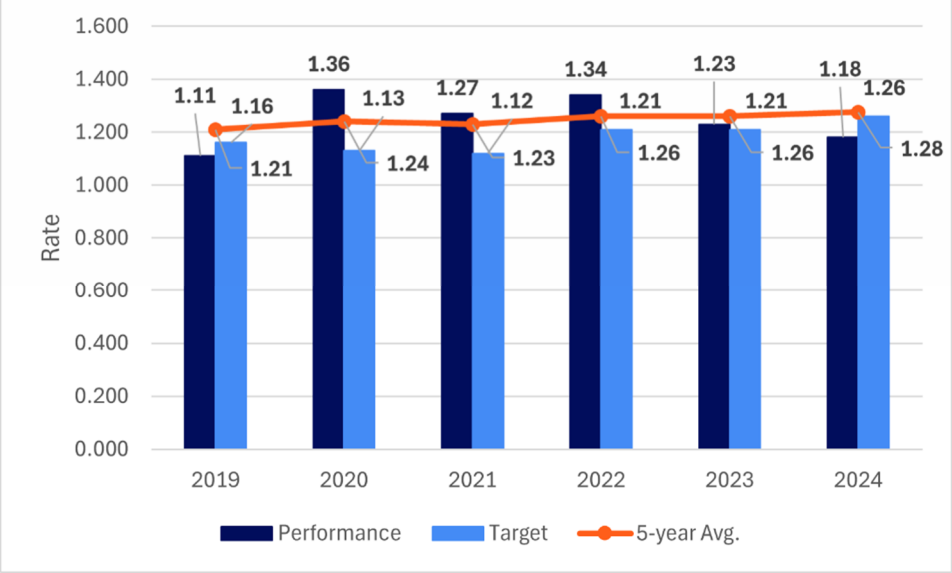
MoDOT launched a campaign in 2017 called Buckle Up, Phone Down (BUPD) to increase the percentage of seat belt usage and minimize the amount of distracted driving. The primary message of this campaign is: use a seat belt each time while either driving or riding in a vehicle and hands-free use of the phone, if needed, when driving. MoDOT has challenged the general public, local schools, community leaders, along with businesses and others to take the BUPD challenge by signing a commitment to make Missouri roads safe. As of January 2026, there have been over 65,000 individuals and over 775 businesses taking the pledge. This campaign has also gained national attention with many states adopting, or creating their own, program.

Figure 1 – Number of Fatalities, 2019 – 2025



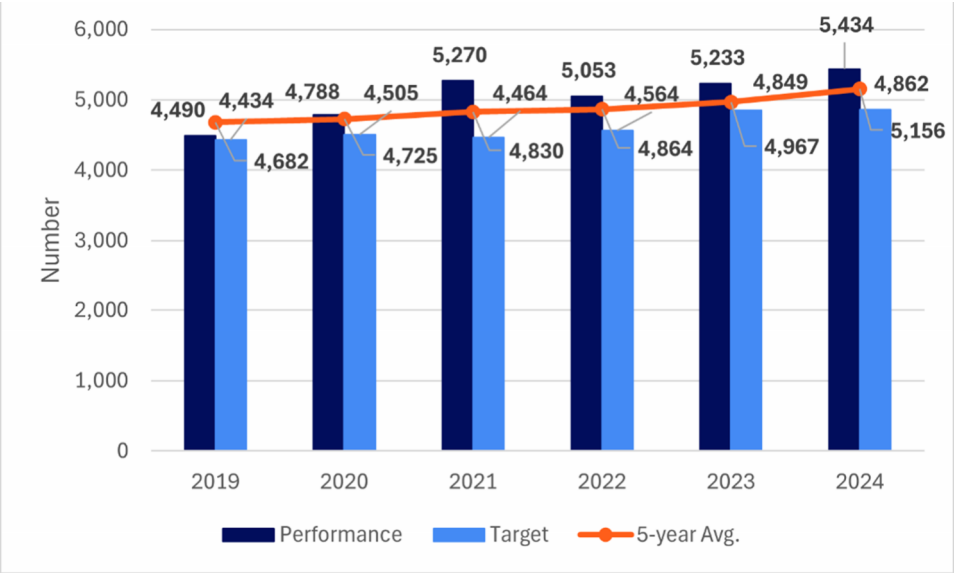
Source: FHWA, State Highway Safety Report, Number of Fatalities, 2019-2025.

Figure 2 – Fatalities Rate (per 100 MVMT), 2019 – 2025



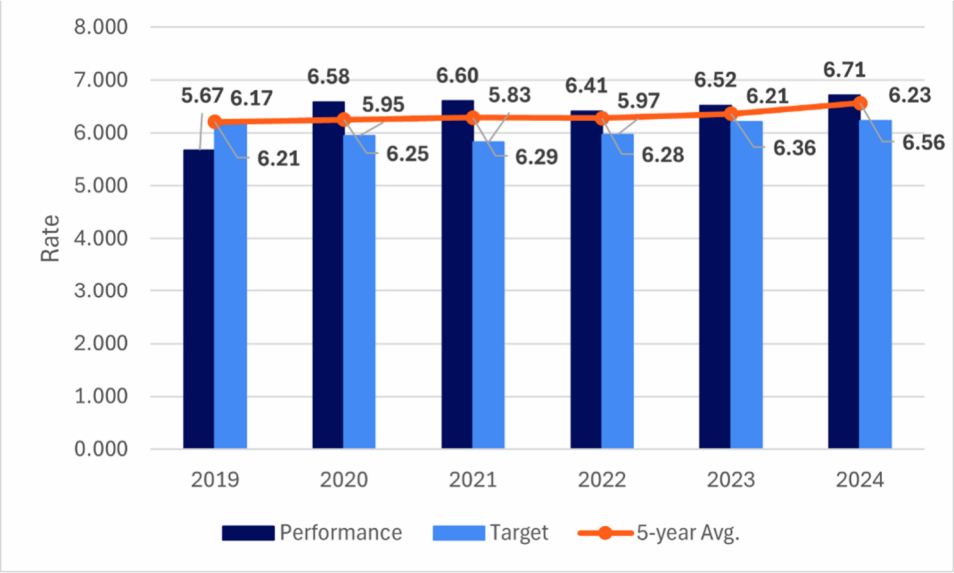
Source: FHWA, State Highway Safety Report, Fatality Rate (per 100 million VMT), 2019-2025.

Figure 3 – Number of Serious Injuries, 2019 – 2025



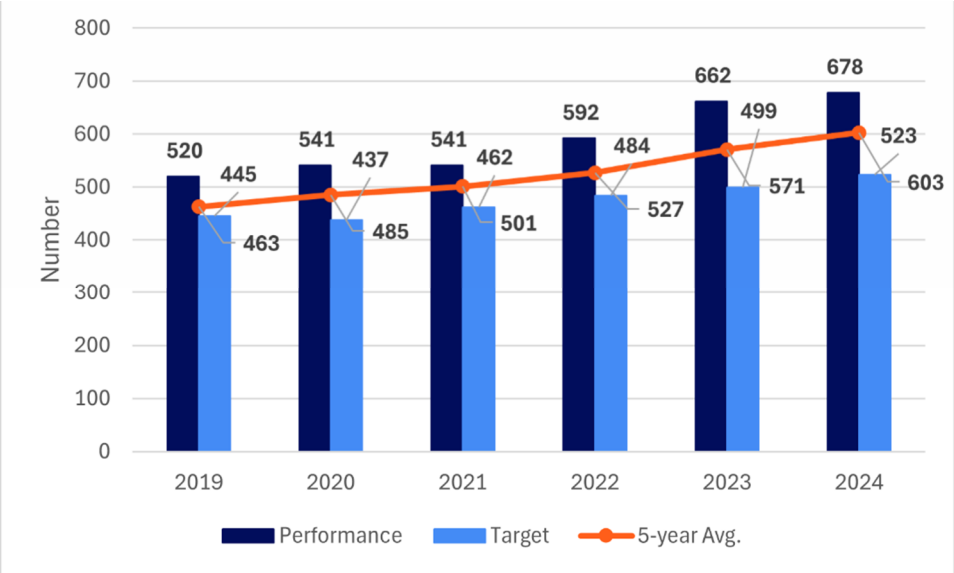
Source: FHWA, State Highway Safety Report, Number of Serious Injuries, 2019-2025.

Figure 4 – Rate of Serious Injuries (per 100 MVMT), 2019 – 2025



Source: FHWA, State Highway Safety Report, Rate of Serious Injuries (per 100 million VMT), 2019-2025.

Figure 5 – Number of Non-Motorized Fatalities and Serious Injuries, 2019 – 2025



Source: FHWA, State Highway Safety Report, Number of Non-Motorized Fatalities and Serious Injuries, 2019-2025.

Pavement and Bridge Condition Performance

Pavement and Bridge Condition Performance Measures

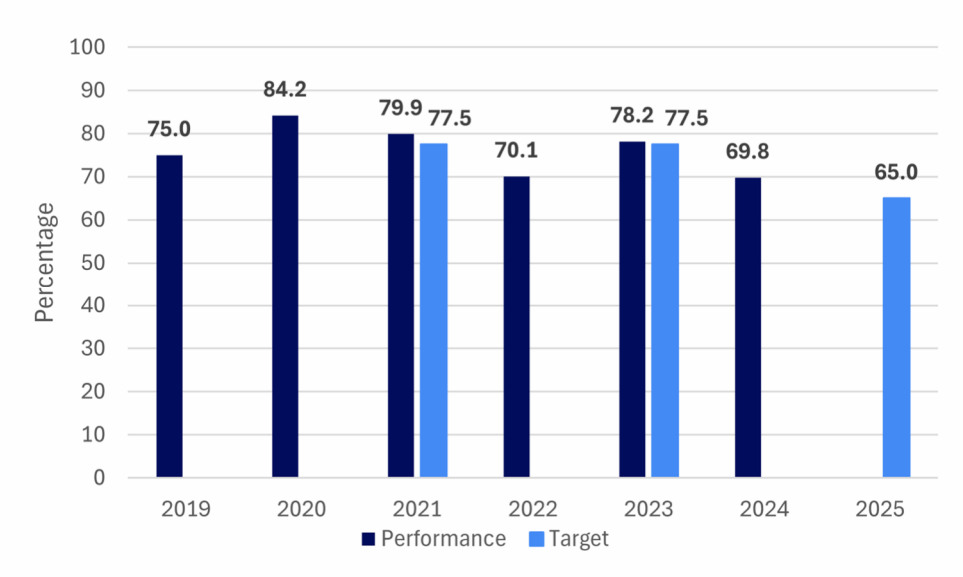
The federal Pavement and Bridge Condition Performance Measures require state DOTs to assess pavement conditions on both Interstate and non-Interstate NHS roadways, as well as the condition of NHS bridges and to set targets for six areas: the percent of Interstate pavements in good and poor condition, the percent of non-Interstate NHS pavements in good and poor condition and the percent of NHS bridge deck area classified as in good and poor condition.

Figure 6 through **Figure 9** below display actual performance data annually through 2024 in comparison to the 2021 and 2023 targets. Observing trends through 2023, the Interstate pavement in good condition (78.2%) exceeded the target of 77.5% and the Interstate pavement in poor condition met the target of 0.1%. In 2023, the NHS (Non-Interstate) pavement good condition target was not met, with actual performance at 52.6% compared to the target of 61.1% and the poor condition target was also not met, with 1.6% exceeding the target of 1.0%.

Pavement Condition Performance Progress

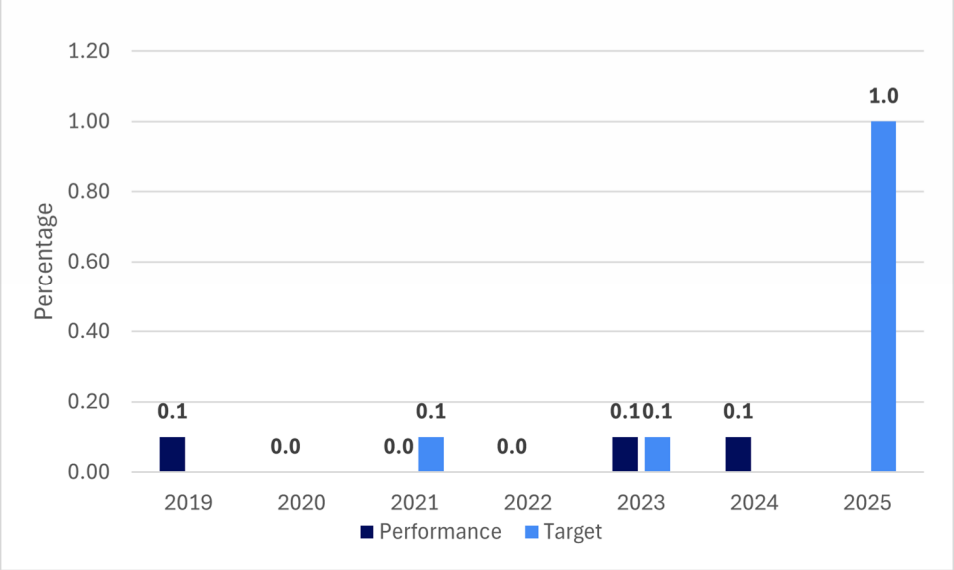
Missourians have consistently asked MoDOT to prioritize taking care of what we have, so our investments focus on taking care of our assets. While the percentage of poor pavements has been relatively flat, there was a recent decrease in the percentage of good pavements. This is due to new equipment with more sensitive cracking detection capabilities. The percentage of good pavement remains a focus with investments on the I-70 and I-44 corridors. Keeping the system in good condition remains a top priority for MoDOT.

Figure 6 – Interstate Pavement: Performance vs. Targets (Good Condition), 2019 – 2025



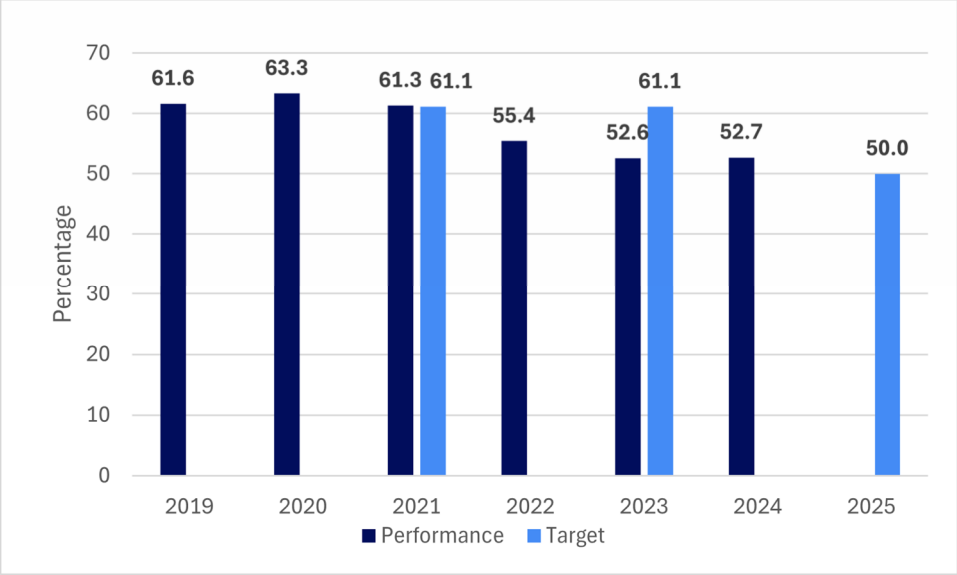
Source: FHWA, State Highway Infrastructure Report, Interstate Pavement in Good Condition, 2019-2025.

Figure 7 – Interstate Pavement: Performance vs. Targets (Poor Condition), 2019 – 2025



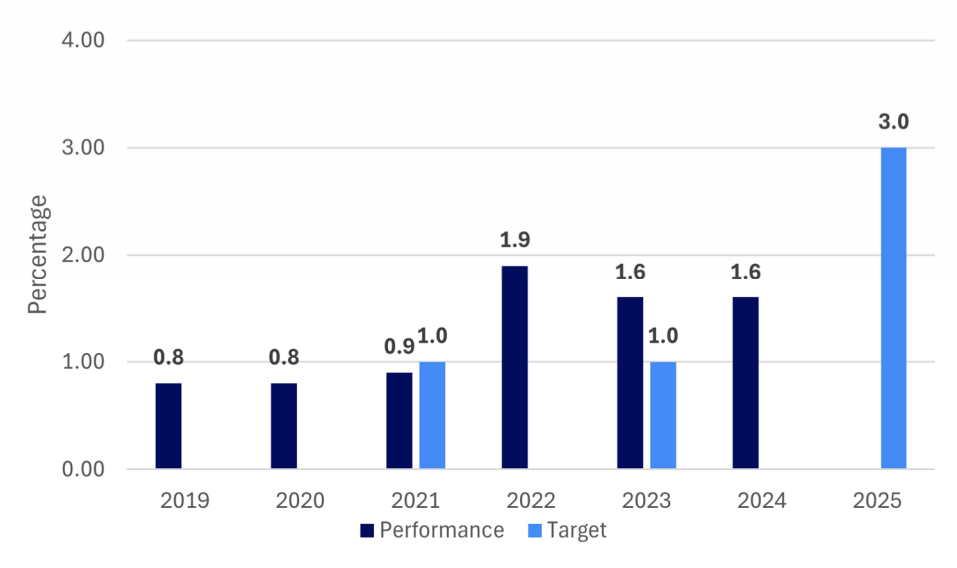
Source: FHWA, State Highway Infrastructure Report, Interstate Pavement in Poor Condition, 2019-2025.

Figure 8 – NHS (Non-Interstate) Pavement: Performance vs. Targets (Good), 2019 – 2025



Source: FHWA, State Highway Infrastructure Report, NHS (Non-Interstate) Pavement in Good Condition, 2019-2025.

Figure 9 – NHS (Non-Interstate) Pavement: Performance vs. Targets (Poor), 2019 – 2025



Source: FHWA, State Highway Infrastructure Report, NHS (Non-Interstate) Pavement in Poor Condition, 2019-2025.

Bridge Performance Versus Targets

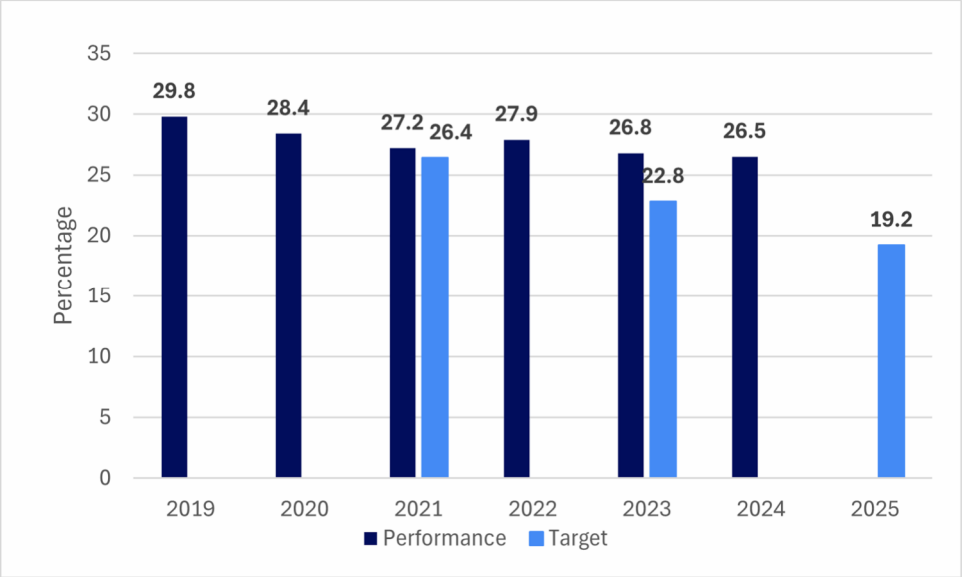
Figure 10 and **Figure 11** below display actual performance data annually through 2024 in comparison to the 2021 and 2023 targets.

Observing trends through 2023, the share of NHS bridges in good condition (26.8%) met and improved upon the 22.8% target, while the share in poor condition (6.0%), met and improved upon the 7.7% target.

Bridge Condition Performance Progress

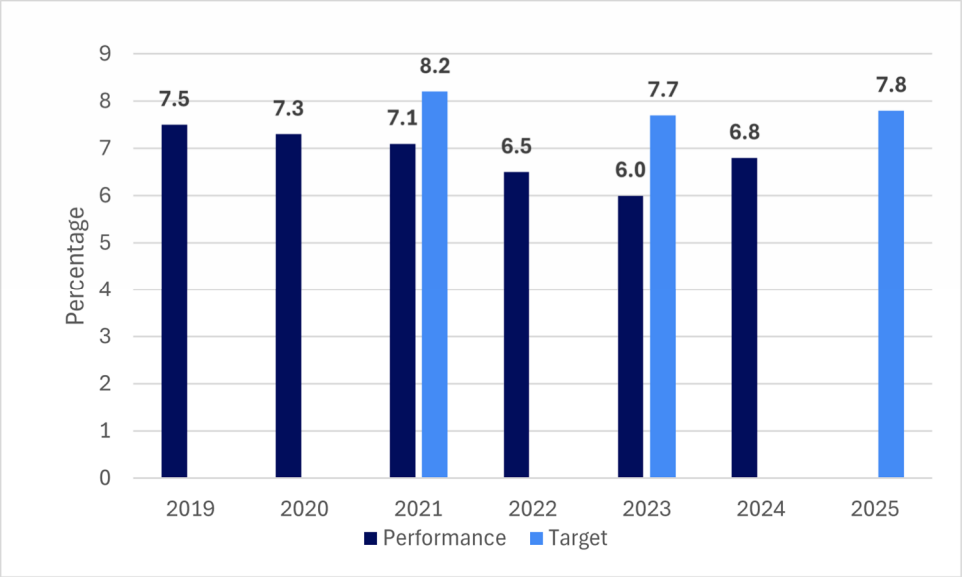
Missourians have consistently asked MoDOT to prioritize taking care of what we have, so our investments focus on taking care of our assets. Year-to-year shifts in the percentage of good and poor deck area are primarily driven by the larger or major bridges on the NHS. Poor bridge deck area remains a focus with multiple projects on major bridges currently under construction for either replacement or rehabilitation of the structures, especially with the I-70 rebuild. Keeping the system in good condition remains a top priority for MoDOT.

Figure 10 – NHS Bridges: Performance vs. Target (Good)



Source: FHWA, State Highway Infrastructure Report, NHS Bridges in Good Condition, 2019-2025.

Figure 11 – NHS Bridges: Performance vs. Target (Poor)



Source: FHWA, State Highway Infrastructure Report, NHS Bridges in Poor Condition, 2019-2025.

System Reliability, Freight and Environmental Performance

State DOTs are required to establish federal targets for system reliability, freight and environmental performance measures including Interstate Travel Time Reliability (TTR), NHS TTR and freight reliability measured by the Truck Travel Time Reliability (TTTR) Index. Under the CMAQ Program State DOTs and applicable MPOs must also set targets for Peak Hour Excessive Delay (PHED), Mode Share (Non-SOV) and Emission Reductions.

System Reliability and Freight Performance Versus Targets

Figure 12 through **Figure 14** below display actual performance data annually through 2024 in comparison to the 2021 and 2023 targets.

In 2023, performance satisfactorily exceeded targets across all three TTR measures. Interstate TTR achieved 95.9% compared to a target of 87.1% and Non-Interstate TTR reached 93.4% versus the 87.8% target. For the TTTR Index, 2023 performance was 1.21, outperforming the target of 1.45 (lower is better).

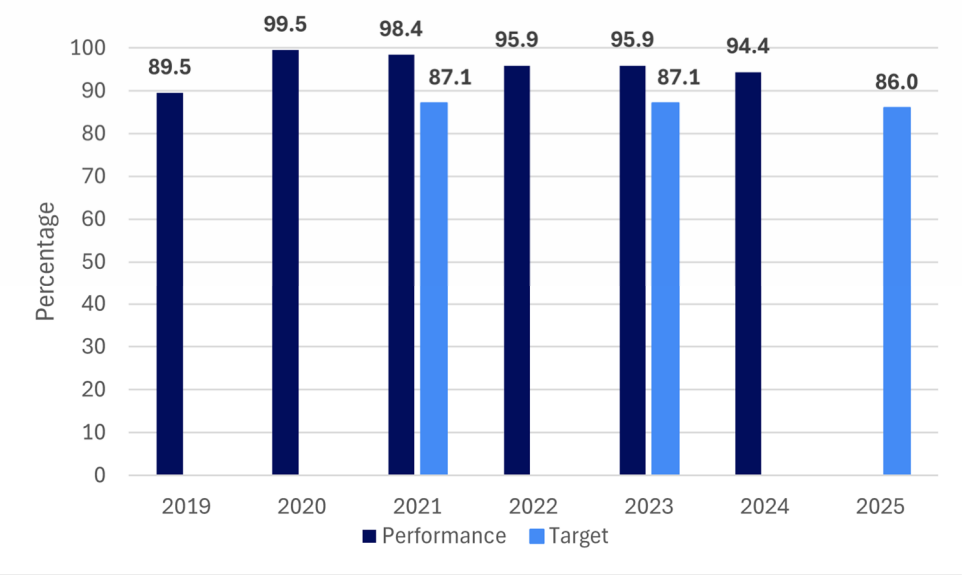
TTR and TTTR Performance Progress

A stated goal in MoDOT's mission is to provide a reliable transportation system. Interstates are the primary routes for moving people and goods across the state and nation. Interstate and Non-Interstate NHS TTR has remained steady as MoDOT implements Transportation Systems Management and Operations (TSMO) strategies. Major MoDOT projects on I-70, I-55 and I-44 have improved TTR by adding capacity. However, as more improvements are made, disruptions in reliability may occur. To

minimize these disruptions, MoDOT reviews TSMO strategies to execute in these work zones, such as smart work zones and traffic incident management strategies.

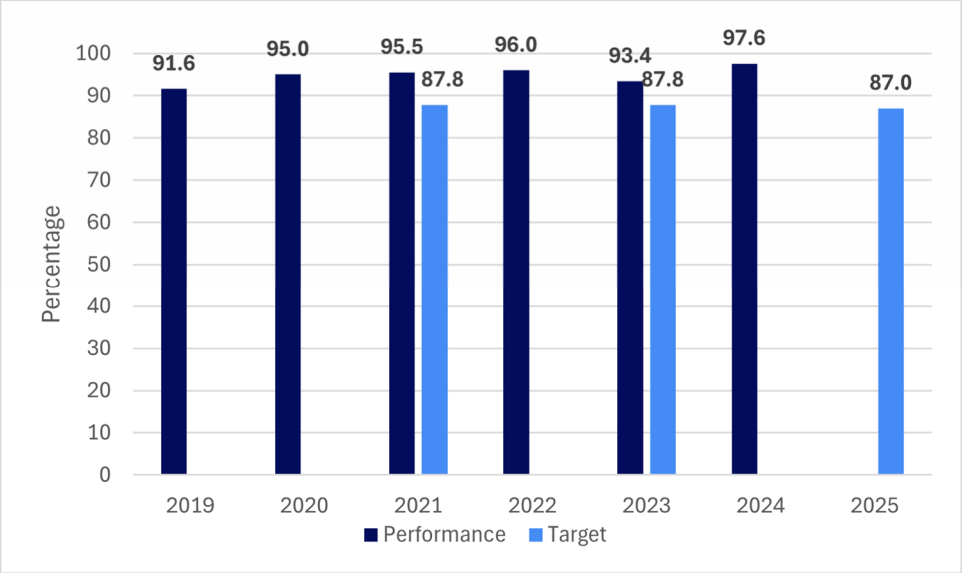
TTTR in Missouri has remained relatively stable. Since few interstate projects are specifically designed to address freight reliability concerns, improvement is found with major MoDOT projects on I-70, I-55 and I-44. MoDOT reviews and implements strategies identified in State Freight and Rail Plan (SFRP).

Figure 12 – TTR (Interstate): Performance vs. Target



Source: FHWA, State Highway Infrastructure Report, Interstate Highway Truck TTR Performance, 2019-2025.

Figure 13 – TTR (Non-Interstate): Performance vs. Target



Source: Source: FHWA, State Highway Infrastructure Report, Non-Interstate Truck TTR Performance, 2019-2025.

Figure 14 – TTTR Index: Performance vs. Target



Source: Source: FHWA, State Highway Infrastructure Report, Interstate Highway Truck TTTR Performance, 2019-2025.

CMAQ Program Performance

Congestion and air quality are central focus areas of the CMAQ Program. The following summarizes the key federal performance measures and targets associated with PHED and Non-SOV in urbanized and congested areas and emissions reductions for applicable pollutants and precursors.

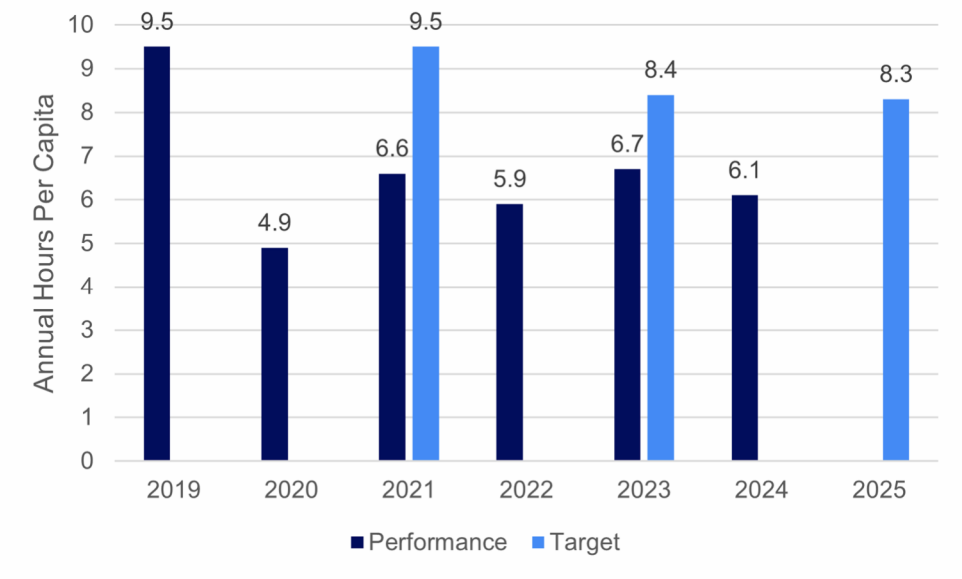
The St. Louis urbanized area is the only area in Missouri required to measure and report the PHED and Non-SOV travel federal performance measures.

CMAQ Program Performance Versus Targets

Peak Hour Excessive Delay (PHED)

Figure 15 through **Figure 18** below display annual performance data through 2023 in comparison to the applicable targets. In 2023, PHED performance was 6.7 annual hours per capita, which was below and improved upon the target of 8.4. Mode Share (Non-SOV) performance in 2023 was 23.8%, which exceeded and improved upon the target of 18.0%. For the CMAQ Emissions Reduction measures, volatile organic compound (VOC) reductions in 2023 were 7.011 kilograms per day, exceeding and improving upon the target of 2.940 kilograms per day and the nitrogen oxide (NOx) reductions in 2023 were 146.193 kilograms per day, exceeding and improving upon the target of 8.836 kilograms per day.

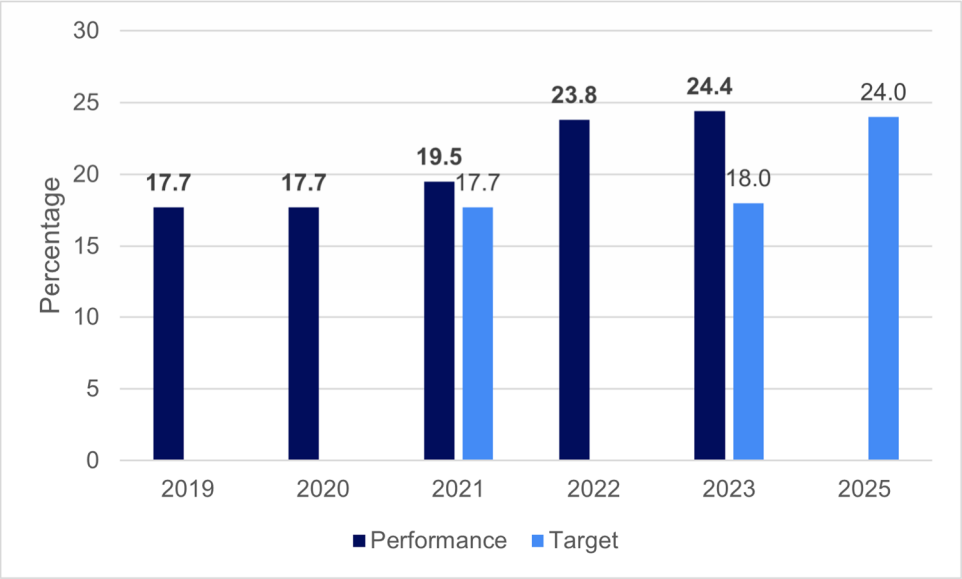
Figure 15 – PHED Performance vs. Target, 2019 – 2025



Source: FHWA, St. Louis Missouri-IL Urbanized Area Congestion Report, Annual Hours of PHED per Capita, 2019-2025.

Mode Share (Non-SOV)

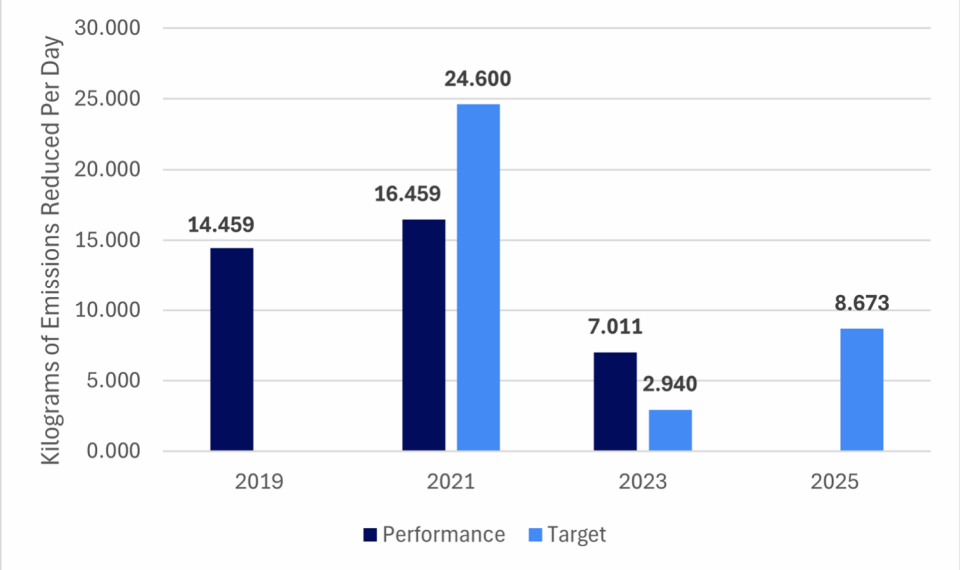
Figure 16 – Mode Share (Non-SOV) Performance vs. Target, 2019 – 2025



Source: FHWA, St. Louis Missouri-IL Urbanized Area Congestion Report, Non-SOV Travel, 2019-2025.

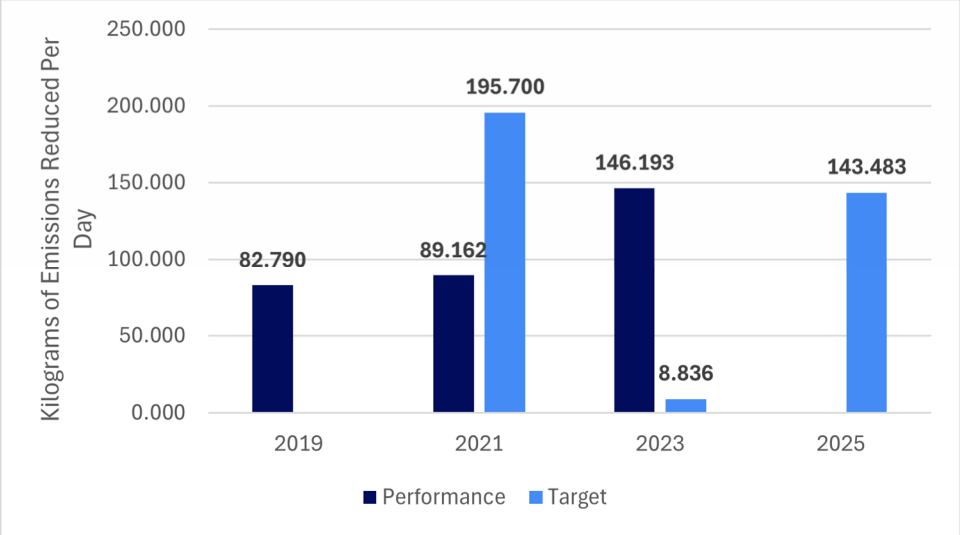
Emissions Reduction

Figure 17 – CMAQ Emissions Reduction Performance for VOCs, 2019 – 2025



Source: FHWA, State On-Road Mobile Source Emissions Reductions Report - Missouri, Emission Reductions for VOC through CMAQ Projects, 2019-2025.

Figure 18 – CMAQ Emissions Reduction Performance for NOx, 2019 – 2025



Source: FHWA, State On-Road Mobile Source Emissions Reductions Report - Missouri, Emission Reductions for NOx through CMAQ Projects, 2019-2025.

Transit Asset Management Performance

The FTA requires all recipients of federal transit funding to develop and implement a Transit Asset Management (TAM) Plan. Established under 49 U.S.C. § 5326 and codified in 49 CFR Part 625, this requirement ensures that transit agencies maintain their capital assets, such as vehicles, facilities and infrastructure, in a State of Good Repair (SGR). The overarching goal is to enhance safety, reliability and cost-effectiveness across the nation's transit systems through strategic, data-driven asset management practices.

A TAM Plan must include four core elements:

1. **An inventory of capital assets**
2. **Condition assessments for those assets**
3. **Decision-support tools** to analyze and prioritize investments
4. **A prioritized list of projects** based on asset needs

These components enable agencies to understand the current condition of their assets and make informed decisions about maintenance, replacement and upgrades. By institutionalizing asset management, the FTA aims to extend asset life, minimize service disruptions and optimize the use of public funds.

MoDOT Sponsored Group TAM Plan

The following agencies participated in MoDOT's group sponsored TAM Plan:

- Cape Girardeau County Transit Authority
- City of Columbia
- City of Jefferson
- CU – Springfield
- City of Bloomfield
- City of Carthage
- City of Clinton
- City of El Dorado Springs
- City of Excelsior Springs
- City of Houston
- City of Lamar
- City of Mt. Vernon
- City of Nevada
- City of New Madrid
- City of West Plains
- Dunklin County Transit Service, Inc.
- Licking Bridge Builders, Inc.
- Macon Area Chamber of Commerce
- Mississippi County Transit System
- New Bourbon Port Authority
- Older Adults Transportation Service, Inc. (OATS)
- Ray County Transportation, Inc.
- Ripley County Transit, Inc.
- Scott County Transit System, Inc.
- SERVE, Inc.
- Southeast Missouri Transportation Service, Inc. (SMTS)
- Southeast Missouri State University

Referring to **Table 1** below, buses have an FTA established useful life benchmark of 14 years, the target is that no more than 45% of the fleet is beyond the useful life benchmark (ULB) established by the FTA. Referring to the table below, the actual result is 42% of the fleet beyond the ULB, meaning the target has been met. Group TAM participants achieved ULB targets for all fleet vehicle types except for minivans/vans. Buy America requirements and supply issues have made vehicle acquisition in this area difficult.

Table 1 – Rolling Stock Inventory and Performance Targets – Group TAM Plan

Vehicle Type	Number of Vehicles	% of Vehicles at or Past ULB	Performance Measure Target
Automobiles	21	44%	45%
Minivans/ Vans	380	44%	45%
Cutaways	699	39%	45%
Buses	69	42%	45%
Ferry Boats	1	0%	30%

Source: MoDOT Sponsored Group TAM Plan, October 2022.

All facilities operated by the transit providers in the group sponsored TAM Plan are rated at the target of 3.0 or better, meaning all facilities meet and exceed the established targets as shown in **Table 2**.

Table 2 – Facility Inventory and Performance Targets – Group TAM Plan

Asset Type	Units	Facilities Rated Below 3	Target
Admin/Passenger Building	19	0%	30%
Maintenance Facilities	12	0%	25%
Parking/Passenger Facilities	7	0%	30%

Source: MoDOT Sponsored Group TAM Plan, October 2022.

Individual TAM Plans

There are six transit providers that prepare individual TAM Plans. These are:

- KCATA, including City of Lee's Summit
- Metro Bi-State – (St. Louis area)
- City of Joplin
- City of St. Joseph

- Kansas City Streetcar
- Loop Trolley Transportation Development Authority (St. Louis)

The fleets for these six agencies and associated performance targets are shown in **Table 3.** There are two vehicle types that do not meet ULB average performance targets. These are cutaways and light rail vehicles.

Table 3 – 2024 Vehicle Inventory and Performance Targets – Individual TAM Plans

Vehicle Type	Fleet Vehicles	% of Vehicles at or Past ULB	Performance Measure Target
Kansas City Area Transportation Authority			
Bus	394	27.03%	29.00%
Cutaway	36	13.33%	13.00%
Minivan	153	0.00%	0
Van	31	0.00%	0
Bi-State Development Agency			
Articulated Bus	14	0.00%	0
Bus	389	0.00%	19.44%
Cutaway	138	37.46%	34.15%
Light Rail Vehicles	84	35.14%	29.30%
City of Joplin			
Bus	1	0.00%	0.00%
Cutaway	15	0.00%	10.00%
City of St. Joseph			
Bus	26	0.00%	8.00%
Cutaway	1	0.00%	0.00%
Loop Trolley Transportation Development District			
Vintage Trolley	2	0.00%	0.00%
Kansas City Streetcar			
Light Rail Vehicles	6	0.00%	0.00%

Source: FTA, National Transit Database, 2024 Revenue Vehicle Inventory, 2024 Performance Measure Targets and A-90 Forms, 2024.

As shown in **Table 4**, most transit facilities in the state meet performance targets except passenger/parking facilities and administrative/maintenance facilities.

Table 4 – 2024 Facility Inventory and Performance Targets – Individual TAM Plans

Facility Type	Number or Facilities	Facility Rating Below 3	Performance Measure Target
Kansas City Area Transportation Authority			
Passenger/Parking Facilities	4	0.00%	0.00%
Administrative/ Maintenance Facilities	2	0.00%	0.00%
Bi-State Development Agency			
Passenger/Parking Facilities	92	11.24%	2.90%
Administrative/ Maintenance Facilities	10	8.33%	0.00%
City of Joplin			
General Purpose Maintenance Facility/Depot	2	0.00%	0.00%
City of St. Joseph			
Passenger/Parking Facilities	1	0.00%	0.00%
Administrative/ Maintenance Facilities	1	0.00%	0.00%
General Purpose Maintenance Facility/Depot	1	0.00%	0.00%
Loop Trolley Transportation Development District			
Administrative/ Maintenance Facilities	1	0.00%	0.00%
Simple At-Grade Platform Station	13	0.00%	0.00%
Kansas City Streetcar			
General Purpose Maintenance Facility/Depot	2	0.00%	0.00%
Other, Administrative & Maintenance	2	0.00%	0.00%

Source: FTA, National Transit Database, 2024 Facility Inventory, 2024 Performance Measure Targets and A-90 Forms, 2024.

As shown in **Table 5**, the Bi-State Development Agency does not meet the performance target for light rail facilities.

Table 5 – 2024 Transit Way Mileage Condition – Individual TAM Plans

Mode	Miles of Revenue Track with Capital Responsibility	% of Track Miles Under Performance Restriction	Performance Measure Target
Bi-State Development Agency			
Light Rail	96.39	12.00%	4.15%
Loop Trolley Transportation Development District			
Streetcar	3.1	0.00%	0.00%
Kansas City Streetcar			
Streetcar	4.4	0.00%	0.00%

Source: FTA, National Transit Database, 2024 Transit Way Mileage, Performance Measure Targets and A-90 Forms, 2024.

Transit Safety

The FTA requires urban transit providers to implement Public Transportation Agency Safety Plans (PTASPs) incorporating Safety Management System (SMS) principles and setting performance targets in key areas:

- **Fatalities** (total and per 100,000 Vehicle Revenue Miles [VRM])
- **Injuries** (total and per 100,000 VRM)
- **Safety Events** (total and per 100,000 VRM)
- **System Reliability** (meaning distance between major mechanical failures)

Data for these measures comes from the FTA's National Transit Database (NTD). Targets are reviewed and updated annually as part of ongoing safety planning and continuous improvement.

PTASP Performance Versus Targets Summary

Here are the Missouri transit agencies that develop PTASPs and report safety, security and vehicle maintenance information to the FTA as full reporters:

- Bi-State Development
- Kansas City Area Transportation Authority
- GoComo Transit (Columbia)
- CU Transit

- Kansas City Streetcar

In addition, there are the Missouri small urban and rural transit agencies that do not submit Full Reporter data to the FTA:

- Cape Girardeau County Transit Authority
- JeffTran (Jefferson City)
- MAPS Transit & Sunshine Lamp Trolley (City of Joplin)
- St. Joseph Transit

Table 6 shows the 2024 safety and reliability targets by mode set in the agency PTASPs as well as the 2024 reported fatalities, injuries and safety events. Also shown is the PTASP target for reliability along with the 2024 reported vehicle failure rate.

Bi-State's MetroLink and MetroBus exceed the target values for fatalities. The target for fatalities is always zero and any incidence of fatality will exceed the target. In addition, the safety events on Bi-State's MetroLink and Call-A-Ride both exceed the target rates. Vehicle reliability for both MetroBus and MetroLink did not meet target rates.

The Kansas City Area Transportation Authority service meets all the safety, security and vehicle requirements identified in the agency's PTASP. GO COMO meets all PTASP targets except for demand response reliability.

Springfield's CU Transit set PTASP targets for fatalities, injuries and safety in terms of the rate per 250,000 vehicle revenue miles rather than the typical rate per 100,000 vehicle revenue miles. The agency meets all targets except for bus service reliability.

Kansas City Streetcar sets PTASP targets in terms of rates per 1,000 vehicle revenue miles rather than the typical rate per 100,000 vehicle revenue miles. The agency achieved the zero-fatality target but did not meet targets in terms of injuries, safety events, or vehicle failures.

Table 6 - Safety and Reliability PTASP Targets and Reporting

		Fatality		Injury		Safety event		Reliability
Agency/ Service Type		Number	Rate (per 100k VRM)	Number	Rate (per 100k VRM)	Number	Rate (per 100k VRM)	Distance Between Failures (miles)*
Bi-State Development	**MetroLink**							
	Target	0	0.00	34	1.53	7	0.25	29,781
	Actual	1	0.02	13	0.26	16	0.31	20,655
	MetroBus							
	Target	0	0.00	145	1.25	55	0.53	23,537
	Actual	4	0.03	57	0.45	31	0.24	20,108
	Call-A-Ride							
	Target	0	0.00	8	0.23	4	0.11	24,239
	Actual	0	0.00	11	0.19	11	0.19	8,713
Kansas City Area Transportation Authority	**Demand Response**							
	Target	0	0.00	4	1.38	1	0.35	1,186
	Actual	0	0.00	1	0.02	1	0.02	63,654
	Bus							
	Target	0	0.00	31	8.64	13	3.62	1,962
	Actual	0	0.00	19	0.31	13	0.21	11,872

		Fatality		Injury		Safety Event		Reliability
Agency/Service Type		Number	Rate (per 100k VRM)	Number	Rate (per 100k VRM)	Number	Rate (per 100k VRM)	Distance Between Failures (miles)*
GoComo Transit (Columbia)	**Demand Response**							
	Target	0	0.00	1	0.38	0	0.00	9,373
	Actual	0	0.00	0	0.00	2	0.67	6,984
	Bus							
	Target	0	0.00	1	0.31	0	0.00	6,151
	Actual	0	0.00	5	2.20	3	1.32	5,162
CU Transit	**Demand Response**							
	Target	0	0.00	5	0.10	5	0.10	16,233
	Actual	0	0.00	0	0.00	0	0.0	17,413
	Bus							
	Target	0	0.00	20	4.61	20	4.61	7,229
	Actual	0	0.00	8	1.86	6	1.39	2,940
Kansas City Streetcar	**Streetcar**							
	Target	0	0.00	2	0.015	6	0.045	11,220
	Actual	0	0.00	4	0.038	9	0.080	8,885

Source: 2024 Target Information from PTASPs and actual data from 2024 NTD Safety & Security data set and 2023 Vehicle Maintenance data set.
**2024 target reliability shown with 2024 actual reliability data.*

Table 7 presents the PTASP performance targets for systems that are not required to submit a full FTA NTD report with corresponding actual performance data.

Table 7 - Safety and Reliability PTASP Targets

	Fatality		Injury		Safety Event		Reliability
Agency/ Service Type	Number	Rate (per 100k VRM)	Number	Rate (per 100k VRM)	Number	Rate (per 100k VRM)	Distance Between Failures (miles)*
Cape Girardeau County Transit Authority							
Demand Response	0	0.00	2	0.20	2	0.50	80,000
JeffTran (Jefferson City)							
Demand Response	0	0.00	3	0.30	38	1.60	Not Available
Bus	0	0.00	2	0.15	32	0.74	Not Available
MAPS Transit & Sunshine Lamp Trolley (City of Joplin)							
Data Not Available							
St Joseph Transit							
Deviated Fixed Route	0	0.00	1	0.12	6	0.75	28,500

Source: PTASPs, 2024.

Appendix H – Revenue and Needs Forecast Assumptions

Revenue Forecast Assumptions

Inflation: An inflation rate of 2.5% was selected and used for all inflation calculations, based on Federal Reserve Economic Data (FRED), specific to the state of Missouri.[10]

Federal Funds: Federal funds are projected to grow 2.5%, based on historical trends. The past 13 years show an average growth of 4.5%, with 12.46% average growth from 2021 to 2024 following the passage of the Infrastructure Investment and Jobs Act (IIJA). However, the growth rate used in the forecast was reduced to 2.5% per year to reflect that IIJA funding is not expected to continue and no new major sources of federal funding are anticipated.

General Funds: One-time General Fund appropriations to multimodal programs are removed from the baseline and are not carried forward in future year estimates. Forecasted General Fund transfers are held constant at the baseline level, with no growth or escalation assumed.

Needs Forecast Assumptions

All revenues considered in this forecast represent state-specific income and do not include taxes or funds allocated to counties or local municipalities. The revenue projections are based on rates established under existing legislation. No additional motor fuel tax rate increases are forecasted after FY 2026.[11] No motor fuel tax repeals are forecasted.[12] Similarly, no further increases in the Special Fuel Decal fee rates are assumed after FY 2026.[13]

[10] U.S. Bureau of Labor Statistics, *Consumer Price Index for All Urban Consumers: Midwest* [series CUUR0200SA0], retrieved from FRED, Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org/series/CUUR0200SA0
[11] Missouri Department of Revenue, “Motor Fuel Tax,” accessed September 2, 2025, https://dor.mo.gov/taxation/business/tax-types/motor-fuel/.
[12] Missouri Department of Revenue, “Motor Fuel Tax,” accessed September 2, 2025, https://dor.mo.gov/taxation/business/tax-types/motor-fuel/.
[13] Missouri Department of Revenue, “Special Fuel Decals,” accessed September 2, 2025, https://dor.mo.gov/motor-vehicle/fuel-decals.html.

Appendix I – Revenue and Needs Forecast Detailed Findings

Revenue Forecast

Table B.1 – Roads and Bridges Forecasted Revenues ($ in Millions)

	2025 (Actuals)	2030	2035	2040	2045	2050
Federal Funds	$1,490	$1,680	$1,910	$2,160	$2,440	$2,760
State Motor Fuel Tax	$790	$850	$830	$800	$760	$710
Motor Vehicle Sales and Lease Tax	$480	$540	$610	$670	$730	$790
Vehicle/Driver's Licensing Fees	$320	$330	$330	$340	$340	$340
Interest and Miscellaneous	$210	$130	$130	$160	$190	$240
Total	**$3,290**	**$3,530**	**$3,810**	**$4,130**	**$4,460**	**$4,840**

Note: Numbers rounded to the nearest $10 million. Forecasted totals do not include discretionary funds.

Table B.2 – Multimodal Forecasted Revenues ($ in Millions)

	2025 (Actuals)	2030	2035	2040	2045	2050
Federal Funds	$90	$110	$120	$140	$160	$180
General Fund	$40	$40	$40	$40	$40	$40
Multimodal Taxes and Fees	$20	$20	$20	$20	$30	$30
Interest and Miscellaneous	$0	$0	$0	$0	$0	$0
Total	**$150**	**$170**	**$180**	**$200**	**$230**	**$250**

Note: Numbers rounded to the nearest $10 million. Interest and miscellaneous totals are not actually $0, but round down to $0. Forecasted totals do not include discretionary funds.

Needs Forecast

Table B.3 – Roads and Bridges Forecasted Needs ($ in Millions)

Year	2025-Funded Needs	2025-Funded + Unfunded Needs	2025-Funded + Unfunded Needs (+/-10%)
2025	$3,280	$4,440	$3,990 to $4,880
2030	$3,530	$4,840	$4,350 to $5,320
2035	$3,890	$5,360	$4,830 to $5,900
2040	$4,340	$6,010	$5,410 to $6,610
2045	$4,850	$6,740	$6,060 to $7,410
2050	$5,430	$7,570	$6,810 to $8,320

Note: Numbers rounded to the nearest $10 million.

Table B.4 – Multimodal Forecasted Needs ($ in Millions)

Year	2025-Funded Needs	2025-Funded + Unfunded Needs	2025-Funded + Unfunded Needs (+/-10%)
2025	$150	$250	$230 to $280
2030	$170	$290	$260 to $310
2035	$190	$320	$290 to $360
2040	$220	$370	$330 to $400
2045	$240	$410	$370 to $450
2050	$280	$470	$420 to $510

Note: Numbers rounded to the nearest $10 million.



SFRP
State Freight & Rail Plan

Executive Summary

April 2026

SFRP



As Missouri's freight and rail networks handle nearly a billion tons of goods each year, the investments we make today will help shape our economy tomorrow. This updated State Freight and Rail Plan (SFRP) provides that roadmap — grounded in data, shaped by public input and designed for our transportation future. With the freight and rail systems helping to facilitate such a strong economic engine for the state, putting together a detailed and accurate plan that addresses current needs and anticipates those of the future is an important part of what we do as an organization.

The SFRP is a strategic document that outlines the vision, goals and priorities of Missouri's freight and passenger rail systems. It takes a look at both where we are in terms of current infrastructure conditions and where we're headed, providing goals for improving and enhancing that infrastructure, especially as technology continues to remake how business is done.

Engagement was a crucial aspect of this plan's updates. Outreach included engaging with customers as well as planning organizations and committees from around the state. Informational booths were made available at the Missouri State Fair in Sedalia, and at district meetings where visitors could find out about the plan updates and provide input via surveys and comment cards. Virtual public meetings were launched via MoDOT's external website and promoted statewide through the department's social media channels. Thousands of survey responses were collected, helping to determine the needs faced by businesses, communities and users of the freight and rail systems.

We want to address real needs, which is why this plan looks at subjects like truck parking and identifies emerging trends and opportunities, all while developing Missouri's freight story, one that we want to get right.

This year's update process was unique. Over the last year, the SFRP has been updated in tandem with MoDOT's Long-Range Transportation Plan (LRTP), which serves as a roadmap for the state's transportation network through 2050. This plan looks at the needs that impact the entire system and sets up Missouri for the future of transportation. Updating both plans together allows us to zoom out, plan big, and look at how both the roadway system and the freight system come together to benefit not only Missourians, but the whole country.

It's an exciting time to be a part of the transportation planning process. Investments lead to improvements, and improvements lead to a better future. Thank you for taking the time to make your voice heard and for working with us to deliver this plan. I'm glad you're here for the ride.

Regards,

Ed Hassinger, P.E.
Executive Director



FREIGHT NEVER SLEEPS

Morning, noon and night, trucks, trains, barges, planes and pipelines crisscross Missouri bringing supplies to, through and beyond our borders. The produce of our mines, fields and factories travel the world. Daily supplies arrive on shelves – and even on our doorsteps.

Freight movement often seems invisible. But it's not magic. ***Careful planning and thoughtful investment create and maintain reliable transportation systems.*** It's that reliability that keeps transportation costs in check. It's that reliability that attracts new business and supports job expansion.

It's also a process. If we want a robust intermodal freight system (we do!), it must be maintained and expanded in anticipation of tomorrow's needs.

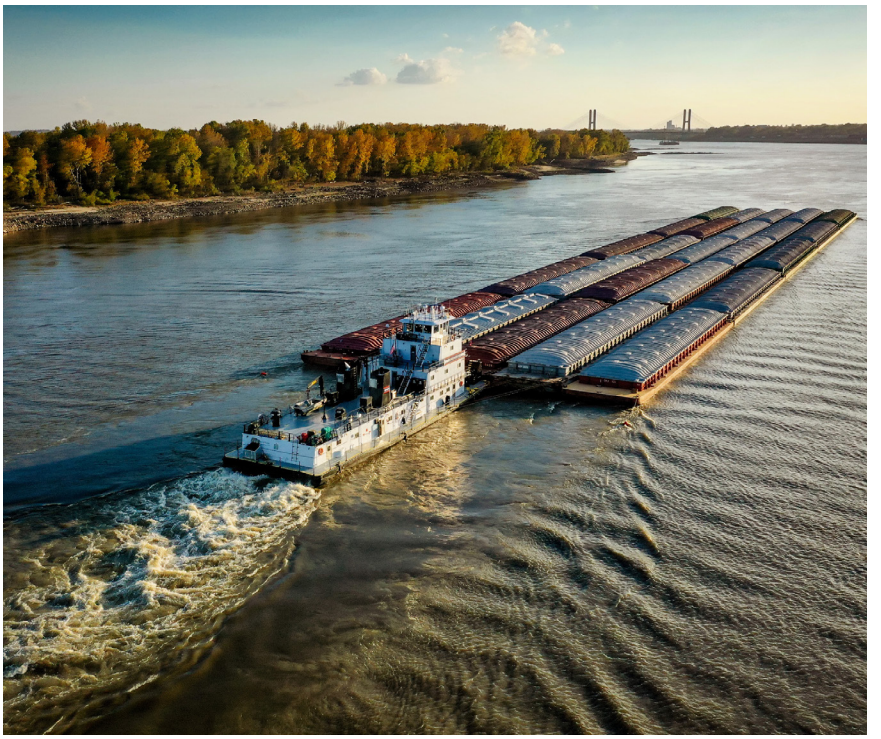
With the help of stakeholders, and based on Missouri's Long-Range Transportation Plan, ***MoDOT designed this freight and rail plan to sustain today's freight infrastructure and to steer investments toward innovative and strategic future opportunities***.

Missouri's freight transportation network performance is the backbone of our economy and is key to Missourians' quality of life.

SFRP

THE FREIGHT PLAN'S GOALS

MoDOT leadership carefully considered the needs of Missouri's transportation system, looked to federal goals and objectives as well as MoDOT's own strategic vision to draft goals and objectives for this effort. The department presented and discussed the draft with local, state, regional and national stakeholders, who offered comments and refinements. The goals and objectives of the 2026 SFRP are the same as those included in the LRTP. ***MoDOT identified six goals to steer the SFRP, each with specific and actionable objectives to help MoDOT reach those goals***.



STEWARDSHIP
Preserve the assets and services currently in place.

SAFE
Enhance safety for all users of the transportation system.

RELIABLE
Maintain a transportation network that is efficient and dependable.

CONNECTED
Maximize mobility and connect communities through multimodal transportation options.

INNOVATIVE
Leverage technology and creative solutions to build a future-ready transportation network.

PROSPEROUS
Drive economic growth through transportation investments



Freight in our daily lives...

Morning Cereal

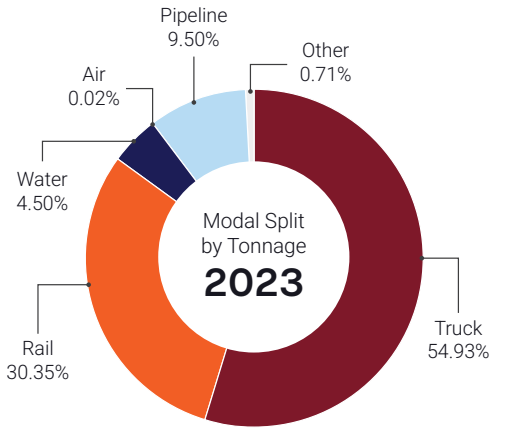
I reach for my cereal. It's made in Missouri. There wasn't a lot of freight involved, right? Let's check.

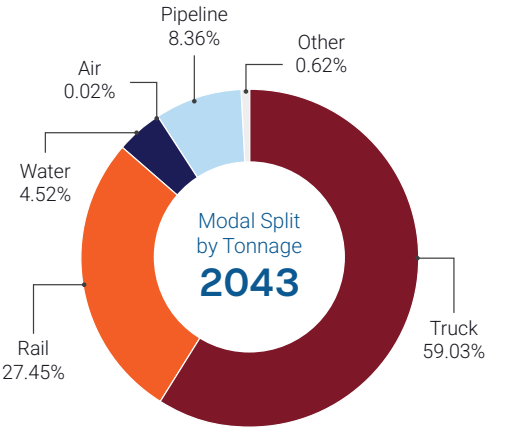
Rail
Truck
Barge/Ship
Car
Delivery Truck
Drone

MISSOURI SUPPLY & DISTRIBUTION: CEREAL

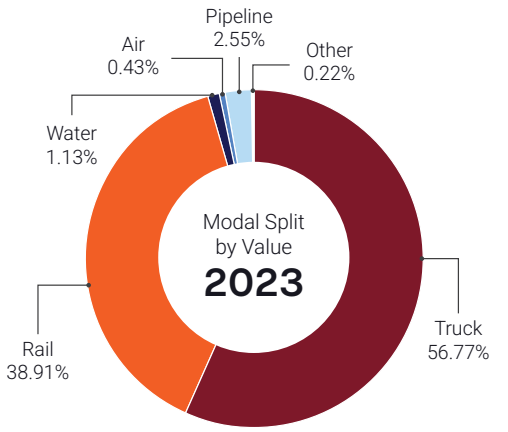


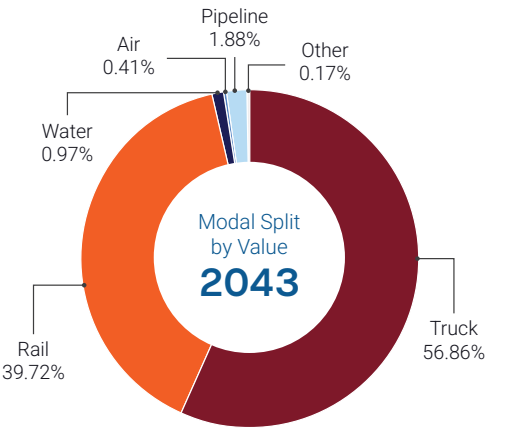
Freight Movement by Tonnage



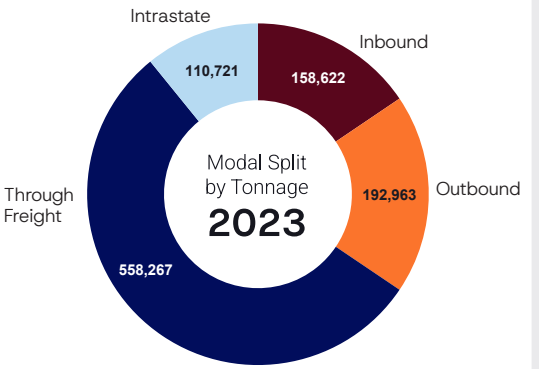


Freight Movement by Value

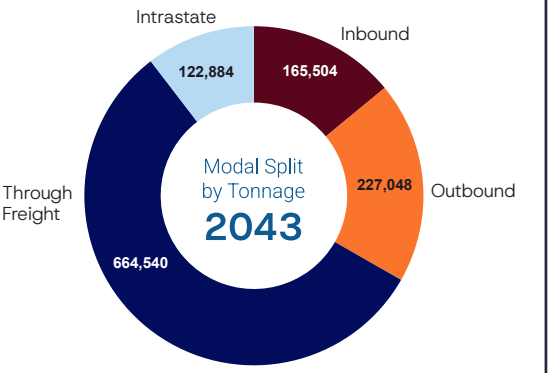




Freight Flows by Tonnage



Total Tonnage: 1,020,572



Total Tonnage: 1,179,976

MISSOURI'S FREIGHT SYSTEM

Missouri is a place of convergence. It's where the mighty rivers, the Missouri and Mississippi meet, where roads and railroads intersect, then spread again in a network of options. Freight moves in, out and through.

Along the way, expansive warehouses, distribution centers and even cave systems hold goods in store, shortening travel times from order to delivery.

Turning points and options abound, making Missouri a point of collection, connection and flexibility in the nationwide flow of freight.

A free-flowing system attracts new business and injects vitality into Missouri's economy. As the volume of freight grows, as is expected during the next 20 to 30 years, investment in infrastructure can address and even prevent congestion and bottlenecks. This is vital because in freight, as is true in so many cases, time is money. ***Keeping transportation systems reliable and smooth is key to attracting and retaining businesses and the jobs on which we rely.***



A robust freight network supports and builds Missouri agriculture, healthcare and all manner of business, attracting investment and desirable jobs.

SFRP

CURRENT AND FUTURE CHALLENGES

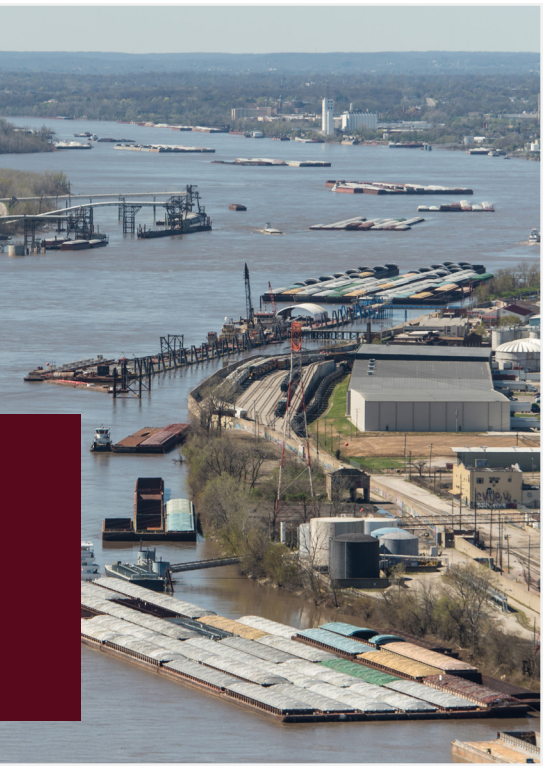
Missouri Freight by the Numbers

7th **largest highway system**	Approximately 34,000 centerline miles with nearly 1,384 miles of designated interstate system.
11th **largest rail network in the U.S**	Approximately 6,300 miles of rail network with more than 5,300 at-grade road crossings.
5 **Class I freight railroads**	Missouri freight railroads include BNSF, CPKC, CSX, NS, and UP with 13 Amtrak stations.
10th **in the nation for inland waterway miles**	The State of Missouri contains 1,050 miles of navigable waterways.
19 **public river port authorities +** **+** **200** **private ports/docks/ terminals**	Connects shippers and receivers to the Ohio, Tennessee and Illinois Rivers and Gulf Coast ports.
3 **primary commercial service airports – cargo airports**	Freight aviation rapidly moves high value and time-sensitive goods across the state and beyond. Kansas City International Airport (MCI), St. Louis Lambert International Airport (STL), Springfield-Branson National Airport (SGF)

Transload Facilities

Privately owned transload facilities transfer goods between trucks, trains and barges, strengthening Missouri's competitiveness by allowing shippers nimble flexibility among transportation options.

Missouri features several key transload facilities offering rail-to-truck transfer services that handle diverse commodities, including dry/cold storage, agricultural products, and industrial materials.







SFRP

MISSOURI'S PUBLIC PORTS ECONOMIC ACTIVITY:

6.4 Million Tons in Annual Freight	**$2.7 Billion** in Freight Value
$1.5 Billion in Labor Income	**$5.6 Billion** in Statewide Economic Output
31,000 in Port Operation / Port-Dependent Jobs	**$475.9 Million** Annual State and Local Tax Revenues

MISSOURI RIVER RUNNER ECONOMIC ACTIVITY:

$97.7 Million Annual Income	**1,789** Jobs in Missouri
$478.9 Million Annual Economic Output	

ECONOMIC IMPACT OF FREIGHT TO THE STATE OF MISSOURI

Missouri's public ports generate substantial economic activity by serving as multimodal freight hubs that connect industries across the state to national and international markets through the Mississippi and Missouri River systems. ***Public ports handle an average of approximately 6.4 million tons of freight annually valued at more than $2.7 billion, supporting key sectors such as agriculture, manufacturing, mining, and construction.*** Port operations and port-dependent industries collectively support nearly 31,000 jobs, generate approximately $1.5 billion in labor income, and contribute roughly $5.6 billion in statewide economic output, while also producing more than $475 million annually in state and local tax revenues.

The Missouri River Runner generates approximately $478.9 million in annual economic activity statewide, supporting 1,789 jobs and $97.7 million in annual income.

Freight in our daily lives...

Midday Medicine

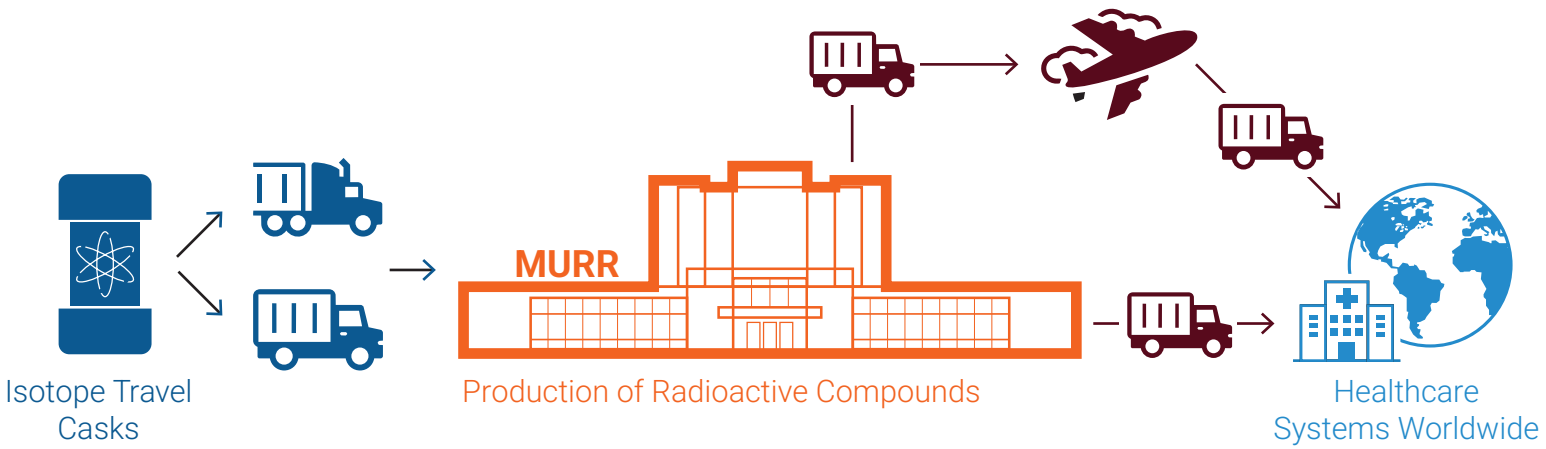
I check in with my cousin who is undergoing skin cancer treatment in Phoenix. He tells me the radiotherapy is having an effect. I smile, knowing that the medicine at the center of his treatment originates in Missouri.

The University of Missouri Research Reactor (MURR®) is the source of a broad base of nuclear products key to many types of cancer research, diagnosis and treatment. These high-value, time-sensitive products are shipped nationwide and beyond in casks that contain the products' radioactivity – even in the event of a crash.

Truck | Delivery Truck | Cargo Aircraft



MISSOURI SUPPLY & DISTRIBUTION: MEDICAL SUPPLIES



RECOMMENDATIONS

RECOMMENDATION:
Expand truck parking spaces along Missouri freight corridors to increase safety and reduce operational costs.

Though MoDOT pioneered conversion of weigh stations and rest areas to truck parking, a shortage remains. The gap between an already inadequate supply and demand is projected to grow substantially by 2050. A recent discretionary grant to increase parking availability on I-70 will reduce this gap.

RECOMMENDATION:
Add welcome center, rest area and public truck parking sites to the MoDOT Traveler Information Map and/or update the existing rest area, welcome center and truck parking map.

Truck drivers and other motorists would benefit from improved visibility of parking information on MoDOT's web resources, particularly during emergencies.

RECOMMENDATION:
Modify at-grade railroad crossing prioritization framework to address awkward intersection approach grades, skewed visual angles and other physical factors that impede sightlines and increase safety risks.

State and federal funds are set aside for at-grade railroad crossing projects. Modifying MoDOT's prioritization process to emphasize factors reflecting travelers' ability to see oncoming trains will continue to address safety risks at these crossings.

RECOMMENDATIONS

RECOMMENDATION:
Support development of intermodal and transload facilities to strengthen modal shift opportunities, reduce roadway deterioration from heavy vehicle movements, and enhance connections between Missouri's highway, rail, waterway, and air freight networks.

Being able to easily transfer bulk cargo and standardized freight containers between rail, water and highway modes gives shippers cost effective transportation options, but only when the means to transfer them from one mode to another exist. Developing more locations to distribute cargo throughout Missouri's freight system could increase efficient movement and reduce risk to travelers.

RECOMMENDATION:
Partner with Class III railroads for funding to upgrade trackage to accommodate industry standard railcars and increase safety at grade crossings.

Class III railroads directly serve many agricultural and industrial sites such as grain elevators, factories and warehouses on lines built before today's larger rail cars existed. An infrastructure boost could re-ignite capacity and allow more freight to move from first mile to last mile by rail. Limited capital investment resources delay or prevent Class III railroads' ability to address efficiency and active rail crossing warning system upgrades. Missouri, acting in partnership with Class III rail lines, could reduce cost and congestion for shippers, receivers and highway travelers.

RECOMMENDATION:
Prioritize targeted improvements in partnership with Amtrak and railroads to maintain and improve on-time performance for the Missouri River Runner and other shared use corridors.

Competing interests between freight and passenger rail can pose operational challenges along shared use corridors. Targeted investments can help alleviate chokepoints along these critical corridors.

SFRP

RECOMMENDATIONS

RECOMMENDATION:
Incorporate freight infrastructure resilience into project prioritization and scoping.

Reliability is a key factor for goods movement. Extreme weather events reduce reliability. Optimizing resources through interagency coordination can provide clearer understanding of system risk, guide investment prioritization, and enhance emergency preparedness.

RECOMMENDATION:
Incorporate trucking industry perspectives into work-zone standard protocols for construction and maintenance operations to improve freight safety and reliability.

Considering truck drivers' needs in work-zone design, such as careful planning of lane widths, could reduce crash risks and increase operational efficiency. Improvements in communication about active construction, including real-time messaging, could also enhance safety and freight reliability.

RECOMMENDATION:
Work with regional planning organizations to identify locations needed for truck staging to reduce congestion, unauthorized parking, and improve effectiveness of state-provided long-term parking.

Drivers often need to pull off the road to wait for a dock appointment time at their next stop. Having staging areas at or near major freight generating sites, rather than many miles away allows commercial drivers to make best use of their time. Imagine, fewer trucks on the road during peak congestion periods and enough long-term parking so drivers aren't forced to rest on highway ramps and shoulders.

RECOMMENDATION:
Incorporate freight infrastructure resilience into the project prioritization and scoping.

Reliability is a key factor for goods movement. Extreme weather events reduce reliability. Optimizing resources through interagency coordination can provide clearer understanding of system risk, guide investment prioritization, and enhance emergency preparedness.

RECOMMENDATIONS

RECOMMENDATION:
Establish a coordinated statewide freight data and governance framework to support continuous collaboration among MoDOT, MPOs, Regional Planning Commissions (RPCs), ports, railroads, and private-sector partners.

Though cities, counties, regional organizations and transportation modes work together to produce periodic transportation and freight plans, ongoing coordination could generate better outcomes for all. Missouri can build a framework statewide freight practitioners can use to share collected data; coordinate project prioritization; and measure system performance.

RECOMMENDATION:
Support development and marketing of "freight-ready" industrial sites adjacent to multimodal corridors.

Missouri Partnership, the Missouri's Department of Economic Development, SmartPort, and Freightway all have programs to identify properties ready for freight generator development. MoDOT can coordinate with local and regional partners to advance site readiness for logistics-focused industries.

RECOMMENDATION:
Encourage reliable investment in first- and last-mile non-highway freight infrastructure to reduce highway congestion and improve statewide system efficiency.

What's the biggest sticking point for freight in any mode? The first and last mile of its movement. That's where the most handling activities occur, often within tight quarters. MoDOT's support of streamlined grant program requirements could result in quick completion of high-impact projects that make freight movement more nimble and resilient.

RECOMMENDATION:
Continue monitoring TPIMS and TPAS efforts nationwide to evaluate whether these technologies are appropriate and cost-effective for implementation in Missouri.

Adequate truck parking is essential for the safety of all travelers. Strict Federal regulations limit truck drivers' on-duty hours so they can obtain adequate rest. However, a nationwide truck parking shortage makes it difficult for truck drivers to find safe and reliable parking spaces. Missouri can build more truck parking inventory while monitoring other states' efforts to notify drivers of available parking. It can also explore public-private partnerships, other agreements and crowd-sourced data platforms.



Freight in our daily lives...

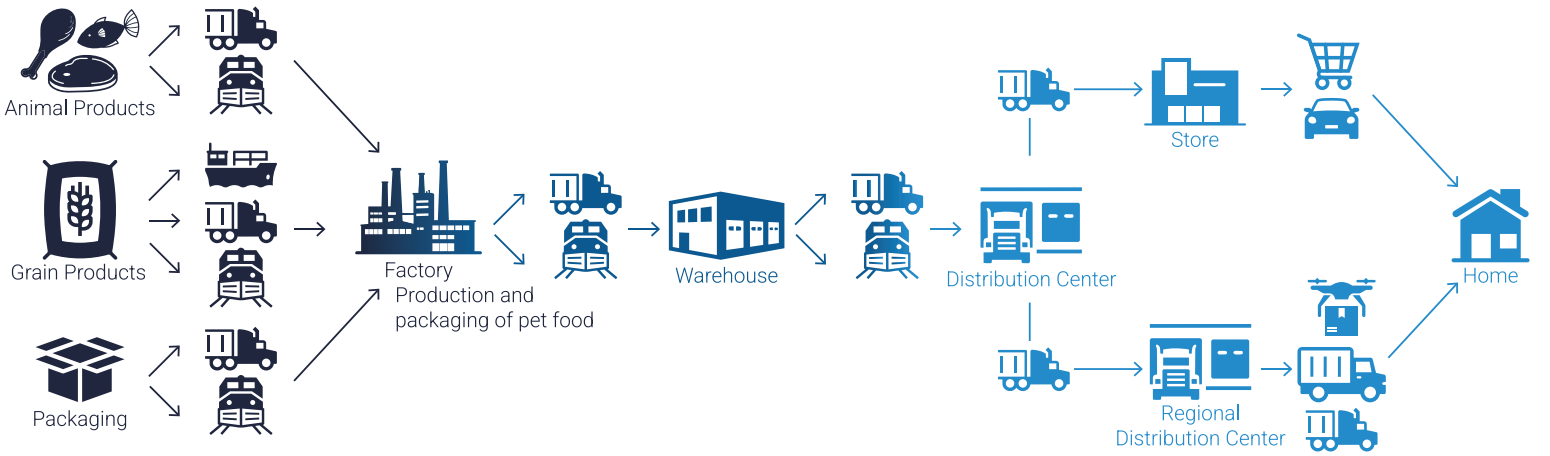
Work Begins

I'm met at the door by a chorus of hungry cries. It's dinnertime for my pets. The only delivery system they're concerned about is the package-to-bowl kind. I'm thankful those packages arrive directly on my threshold.

Rail | Truck | Barge/Ship

Car | Delivery Truck | Drone

MISSOURI SUPPLY & DISTRIBUTION: PET FOOD





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SFRP
State Freight & Rail Plan
2026

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Chapter 1. Goals, Objectives and Performance Metrics

The Missouri Department of Transportation (MoDOT) developed this State Freight and Rail Plan (SFRP) to guide its multimodal freight and passenger rail investment for the next 20 years. Grounded in data and reinforced by stakeholder support, this plan aims to capitalize on Missouri's freight transportation and passenger rail advantages to energize the state's economy and boost its competitiveness. **Figure 1** displays MoDOT's performance-based planning cycle, which the SFRP follows.

Moving people and goods in Missouri is more than providing a network of transportation options. It also involves aligning state and national policies. When federal guidelines, MoDOT's mission and goals, Missouri's Long-Range Transportation Plan (LRTP) and SFRP are aligned and supported by robust, meaningful performance measures the path to progress is smooth.

Missouri's plans and initiatives help create its freight action agenda, which focuses on improving the performance and efficiency of the freight transportation system. The goals and objectives of the SFRP build on previous planning efforts, with a focus on safe and efficient movement of freight and rail passengers today and in the decades to come. These goals will drive performance measures and inform multimodal freight and passenger rail investment decision-making. The SFRP interconnects with and shares goals with other MoDOT plans and statewide efforts. Summaries of these plans appear in **Appendices A, B, C, D and E.** They include:

- 2018 Missouri Long-Range Transportation Plan
- 2018 Missouri State Freight Plan
- 2021 Missouri State Rail Plan
- 2022 Missouri SFRP
- Show Me Zero: 2026-2030
- MoDOT Transportation Systems Management and Operation Program and Action Plan
- MoDOT Transportation Asset Management Plan
- Missouri Governor's Supply Chain Task Force

Figure 1 – Performance Based Planning Cycle



Source: MoDOT, Planning Framework for Transportation



SFRP Goals and Objectives

MoDOT leadership carefully considered the needs of Missouri's transportation system, looked to federal goals and objectives as well as MoDOT's own strategic vision to draft goals and objectives for this effort. The department presented and discussed the draft with local, state, regional and national stakeholders, who offered comments and refinements. The goals and objectives of the 2026 SFRP are the same as those included in the LRTP. MoDOT identified six goals to steer the SFRP, each with specific and actionable objectives to help MoDOT reach those goals. SFRP goals are described below and objectives are described in **Table 1.**

- **STEWARDSHIP** - Preserve the assets and services currently in place
- **SAFE -** Enhance safety for all users of the transportation system
- **RELIABLE -** Maintain a transportation network that is efficient and dependable
- **CONNECTED -** Maximize mobility and connect communities through multimodal transportation options
- **INNOVATIVE -** Leverage technology and creative solutions to build a future-ready transportation network
- **PROSPEROUS -** Drive economic growth through transportation investments

Table 1 – SFRP Goals and Objectives

SFRP Goals	SFRP Objectives
1. Stewardship	1.1 Provide a transportation system in **a state of good repair** through meeting or exceeding **established performance targets.**
	1.2 Explore and secure stable funding to **support the current system and services** for each mode of transportation.
	1.3 Maintain system resilience by adapting to **changing life cycle costs**, advancing **technologies**, an evolving **workforce** and growing **transportation demand.**
	1.4 Enhance the transportation system by avoiding, **minimizing, or mitigating impacts to natural and cultural resources.**
2. Safe	2.1 Invest in **system-wide** safety improvements to reduce fatalities and serious injuries for all modes.
	2.2 Enhance transportation safety with a focus on the **Show-Me Zero – Missouri Strategic Highway Safety Plan** emphasis areas.
	2.3 Enhance safety and security at **transportation mode connection points.**
	2.4 Expand partnerships with safety advocates around the state to **identify and implement safety improvements.**
	2.5 Reduce barriers to **access** and provide **protection** for **vulnerable road users.**
	2.6 Consider **truck parking utilization and gaps** during **multimodal needs identification and project development.**
3. Reliable	3.1 Take a **practical/life cycle approach** to highway system capacity expansion.
	3.2 **Increase reliability** of the transportation system in **bottleneck areas.**
	3.3 Enhance **transportation infrastructure resilience** to **maintain** the **movement of people and goods** during **traffic disruptions**.
	3.4 Provide **reliable and accessible** multimodal transportation **options for all users**.
	3.5 Enhance **emergency and alternative routes.**
4. Connected	4.1 Provide an **accessible and connected** transportation system for **all users**.
	4.2 Consider preservation and provision of **additional multimodal connectivity** during **project development.**
	4.3 Expand and improve the **multimodal transportation system** with options and connections throughout the state.
	4.4 Consider **first-and last-mile multimodal freight connections** during **needs identification and project development.**
5. Innovative	5.1 Explore **technology** and develop **business practices** that result in **lower life-cycle costs**.
	5.2 Support **automated and connected vehicle technology** by advancing the **Connected and Automated Vehicle Action Plan.**
	5.3 Understand and deploy innovative **work zone warning** and **protection devices**.
	5.4 Identify and plan for **alternative funding sources** to recoup **gas tax revenue lost** from alternatively fueled vehicles.
	5.5 Integrate **traffic management systems** and **vehicle detection systems** to monitor and **improve traffic congestion.**
6. Prosperous	6.1 **Increase partnership coordination** with local communities, regional and metropolitan organizations, businesses, transportation service providers and other sectors to identify what transportation projects can better **support local economies.**
	6.2 **Support** projects that provide **economic benefit.**
	6.3 Focus federal discretionary grant applications on transformational projects with a **high economic impact** that stimulate the local economy and **strengthen the competitiveness of Missouri's regions.**

Goals and Objectives

MoDOT's SFRP is a strategic document that outlines the mission, goals and priorities of Missouri's freight and passenger rail systems. This plan builds on goals established in other efforts, including U.S. Department of Transportation (USDOT) freight and rail plans, prior Missouri freight and rail plans, MoDOT's LRTP and Missouri's Statewide Transportation Improvement Plan (STIP) creating a continuum of goals, objectives and strategies for Missouri into the future.

As a comprehensive assessment of current conditions, the SFRP provides short-and long-term goals to improve and enhance Missouri's freight and passenger rail infrastructure. Clear objectives support the six goals of the SFRP and will guide MoDOT to successful execution.

Review of Existing MoDOT Goals

When setting goals, vision and direction for the SFRP and its 20-year outlook, MoDOT first reexamined its own departmental goals. MoDOT's departmental goals are referred to as Tangible Results, grouped into the pillars of Safety, Service and Stability.

Shown below, Tangible Results address the ways the agency's customers perceive and experience MoDOT's performance. They are the goals that bring the organization's values and mission into focus.

MoDOT Tangible Results

- Moving Missourians Safely and Doing So Safely at MoDOT
- Providing Outstanding Customer Service
- Delivering Efficient and Innovative Transportation Projects
- Operating a Reliable Transportation System
- Managing Our Assets
- Stabilizing Resources and Engaging Our Workforce
- Building a Prosperous Economy for All Missourians

As an early adopter of using performance measures to drive results, MoDOT centered its metrics on its Tangible Results. Each quarter, the resulting 48 measures are published online in MoDOT's Tracker document. Using Tracker, MoDOT assesses the level of success toward achieving its mission and living its values.

Comparison of MoDOT and National Best Practices

After examining the department's goals, MoDOT reviewed USDOT national multimodal freight and rail plan goals and objectives. These included the USDOT's National Multimodal Freight Policy Goals; National Highway Freight Program Goals (NHFP); and State Rail Plan Goals. See **Table 2** for a synthesized list of these goals.

MoDOT then considered the system and strategic goals of past planning efforts. System goals consider the physical condition, needs and issues involved in building and maintaining infrastructure, while increasing connectivity and usefulness of the system. These include consideration for system maintenance, safety, support for economic growth and connectivity and mobility. Strategic goals support planning, stakeholder collaboration and plan implementation. These include reducing or mitigating environmental impacts of freight movement, organizational and process policies that support the freight system and improved coordination and partnership with freight stakeholders.

The 2022 SFRP's goals recognized that multimodal freight and passenger rail system strategic goals often work in tandem. Its seven goals included focus on maintenance; safety; economic growth and competitiveness; connectivity and mobility; equity and environmental resiliency; process and innovation; and customers and partnerships.

These documents were considered when developing the draft goals. MoDOT presented the draft goals to stakeholders, including the Missouri Chamber of Commerce, Missouri Public Ports, Missouri Trucking Association (MoTA), Missouri Rail Passenger Advisory Committee (MORPAC), Class 1 Rail Carriers and Shortline Rail Carriers. The stakeholders helped refine the draft goals into the current vision for Missouri's transportation system. The resulting six goals drive Missouri's 20-year vision for both the SFRP and LRTP. They will guide formation of strategies to achieve desired outcomes for Missouri through 2050.



Table 2 – Comparison of National and MoDOT Plan Goals and Objectives

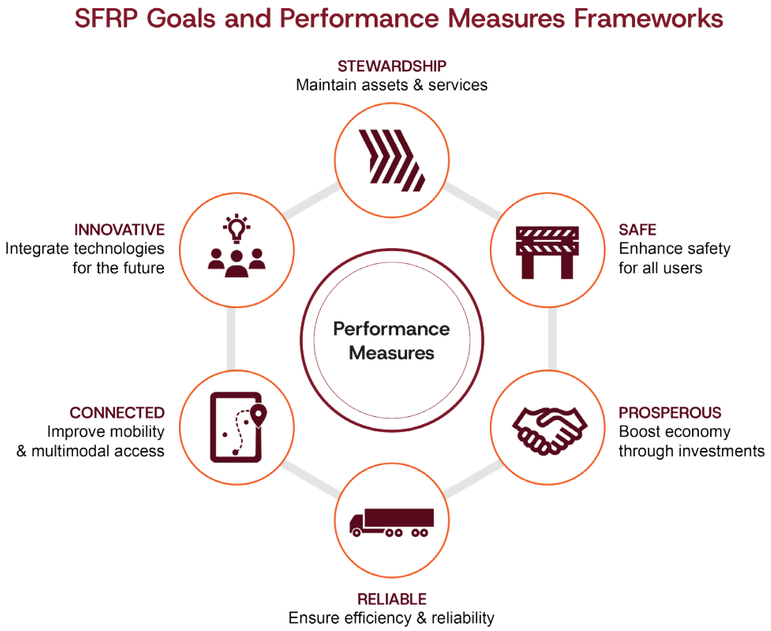
	Synthesis of National Multimodal Freight Policy Goals; National Highway Freight Program Goals; and State Rail Plan Goals	MoDOT Goals	2026 LRTP	2022 SFRP	2026 SFRP
Safety	Improve safety, security, reliability and resiliency of multimodal freight transportation Use innovation and advanced technology to improve the safety, efficiency and reliability of the National Multimodal Freight Network (NMFN)	Move Missourians safely and do so safely at MoDOT	**Safe:** Work to enhance the safety of the transportation system for all users	**Safety:** Improve safety and security of the multimodal freight and passenger rail system by supporting efforts to decrease the number and severity of freight vehicle crashes, increase truck parking options and improve safety throughout the multimodal freight system and the passenger rail network	**Safe:** Enhance safety for all users of the transportation network
Service	Reduce congestion Eliminate bottlenecks Maintain a state of good repair Improve short- and long- distance movement of goods Reduce adverse environmental impacts of freight movement on the National Multimodal Freight Network (NMFN) Multimodal connectivity	Provide Outstanding Customer Service Deliver Efficient and Innovative Transportation Projects Operate a Reliable Transportation System	**Reliable:** Promote efficiency and reliability in the transportation network **Connected:** Improve mobility and connect communities through expanded multimodal choices	**Connectivity and Mobility:** Improve the connectivity and mobility of the multimodal freight and passenger rail system by reducing congestion on the roadways; increasing reliability of the roadways and passenger rail network; supporting improved efficiency of rails, waterways and airports; and improving connections between freight modes and between passenger rail and other passenger travel modes **Equity and Environmental Resiliency:** Support equity and environmental resiliency of the multimodal freight and passenger rail system **Customers and Partnership:** Improve coordination and collaboration with regional planning partners and multimodal freight and passenger rail stakeholders	**Reliable:** Maintain a transportation network that is efficient and dependable **Connected:** Maximize mobility and connect communities through multimodal transportation options
Stability	Strengthen economic competitiveness Increase productivity and economic efficiency, particularly for domestic industries and businesses that create high value jobs	Manage our assets Stabilize resources and engage our workforce Build a prosperous economy for all Missourians	**Stewardship:** Maintain current assets and services we have today. **Prosperous:** Boost the economy through transportation investments **Innovative:** Integrate emerging technologies to make our transportation system prepared and future-ready	**Maintenance:** Maintain the multimodal freight and passenger rail system in good condition by keeping highways and bridges in good condition and supporting the maintenance of railways, waterways, airports and multimodal connections **Economy:** Support economic growth and competitiveness in Missouri through strategic improvements to the multimodal freight network and passenger rail system **Process and Innovation:** Institute policies and practices that support the multimodal freight and passenger rail systems, encourage innovation and promote an efficient use of resources	**Stewardship:** Preserve the assets and services currently in place **Prosperous:** Drive economic growth through transportation investments **Innovative:** Leverage technology and creative solutions to build a future-ready transportation network

Freight and Passenger Rail Performance Measures

Overview

Performance measures provide a way to evaluate progress toward achieving the goals of the SFRP. By monitoring system conditions and outcomes, MoDOT can determine whether investments and policies are advancing its vision for the freight and rail transportation network. The performance measures in this plan are organized around six goals: Stewardship, Safe, Prosperous, Reliable, Connected and Innovative (**Figure 2**). Each goal establishes a broad aspiration for the freight and passenger rail system, while the associated performance measures track progress in a consistent and transparent way. Together, these measures will help promote accountability, guide decision-making and demonstrate the value of rail investments to stakeholders and the public alike.

Figure 2 – Categories of Freight Performance Measures



Source: GFT.

Performance Measures

MoDOT's Tracker provides solid documentation which the Missouri Highways and Transportation Commission (MHTC) and MoDOT leadership can use to assess current conditions and respond with approval, additional guidance or course corrections. With this tool they can assess its freight infrastructure investment and performance.

In order to be included in the Tracker system, the measures must meet the following rules.

- Assess conditions under MoDOT's control or influence
- Be clear
- Be quantifiable
- Be based on established results
- The value of the information generated must justify the effort and/or funds spent on data collection efforts

Table 3 through **Table 8** outline proposed SFRP performance measures and describe how these measures meet the Missouri SFRP goals and objectives. The tables also indicate which performance measures are federally required, which measures currently exist in MoDOT's Tracker performance management tool and the sources of data that might be used to measure performance toward goals.



Source: MoDOT

Table 3 – Stewardship Performance Measures

Goal	Objective	Performance Measure (Proposed)	Federally Required[1]	Existing MoDOT Tracker Measure	Data Source
Stewardship	1.1 State of Good Repair	% of pavement in good condition on freight-significant highways (MoDOT's freight network)	X	Condition of state highways – 5c	Smoothness and pavement structural data – MoDOT
	1.1 State of Good Repair	Number of weight restricted bridges on MoDOT's freight network	X		MoDOT bridge data
	1.1 State of Good Repair	Condition of Major bridges on MoDOT's freight network	X	Statewide condition of all bridges and statewide condition of major bridges – 5a Tracker	MoDOT
			X	% of structurally deficient deck area on National Highway System – 5b Tracker	MoDOT
	1.1 State of Good Repair	Airport pavement condition at cargo airports (Minnesota)[2]	X		Bureau of Transportation Statistics (BTS) – United States (U.S.) Airport Runway Pavement Conditions
	1.4 Natural and Cultural Resources	Navigable River Ports, Locks and Dams Service Life (Minnesota)[3]			MoDOT and U.S. Army Corps of Engineers (USACE)

[1]FHWA, "National Performance Management Measures; Assessing Performance of the National Highway System, Freight Movement on the Interstate System and Congestion Mitigation and Air Quality Improvement Program," Accessed September 16, 2025. https://www.federalregister.gov/documents/2017/01/18/2017-00681/national-performancemanagement-measures-assessing-performance-of-the-national-highwaysystem.

[2]Minnesota Department of Transportation (MnDOT), "Minnesota GO: Planning Minnesota's Transportation Future," Accessed September 16, 2025. https://www.minnesotago.org/final-plans/state-freight-plan/appendix-b.

[3]MnDOT, "Minnesota GO: Planning Minnesota's Transportation Future," Accessed September 16, 2025. https://www.minnesotago.org/final-plans/state-freight-plan/appendix-b.

Table 4 – Safe Performance Measures

Goal	Objective	Performance Measure (Proposed)	Federally Required	Existing MoDOT Tracker Measure	Data Source
Safe	2.1 System-Wide Safety	Overall freight-involved fatalities	X		Missouri State Highway Patrol (MSHP)/ Statewide Traffic Accident Records System (STARS) data and MSHP Water Patrol
	2.2 Show-Me Zero	Number and rate of fatalities involving Commercial Motor Vehicles	X	MoDOT Tracker Measure 1e	MSHP/STARS data
	2.1 System-Wide Safety	Number of truck parking spaces (publicly and privately owned)			MoDOT Facilities Management Data, SFRP Truck Parking Profile and Private sector (search for U.S. Route private inventory and consider including spaces at parking only private facilities)
	2.3 Mode Connection Points	Number of at-grade railroad crossing fatalities			MSHP/STARS data
	2.3 Mode Connection Points	Number of at-grade railroad crossing serious injuries			MSHP/STARS data
	2.3 Mode Connection points	Number of at-grade incidents by warning device (Kansas)[4]			MSHP/STARS data and MoDOT Traffic information
	2.6 Truck Parking Gaps Identification	Proportion of transportation studies and plans including consideration of truck parking issues			MoDOT

[4]Kansas Department of Transportation (KSDOT), "Kansas State Freight Plan," Accessed September 16, 2025. https://www.transportation.gov/sites/dot.gov/files/2023-12/KS_StateFreightPlan_FHWA_Approved.pdf.

Table 5 – Prosperous Performance Measures

Goal	Objective	Performance Measure (Proposed)	Federally Required	Existing MoDOT Tracker Measure	Data Source
Prosperous	3.2 Economic Benefit	Benefit ratio for every dollar invested in STIP projects	X	Economic return from transportation investment – 7a Tracker	MoDOT – Impact Analysis for Planning Model
	3.1 Support Local Economy	Jobs created annually through transportation investment in STIP projects	X	Economic return from transportation investment – 7a Tracker	MoDOT – Impact Analysis for Planning model
	3.3 Strengthen Economy	% of economic development funds committed to projects – Tracker 7b	X	% of economic development funds committed to projects – Tracker 7b	MoDOT, Missouri Department of Economic Development (MoDED) and local entities
	3.2 Economic Benefit	Cost savings through reduced bottlenecks	X		Federal Highway Administration (FHWA) Bottleneck Tracker (Freight Mobility Trends Analysis Tool); Regional Integrated Transportation Information System (delay cost reporting tool; U.S. Bureau of Labor Statistics (BLS) (passenger car delay cost per hour); American Transportation Research Institute (ATRI) (delay cost per truck by hour)
	3.3 Strengthen Economy	Number of Oversize and Overweight (OSOW) barriers removed (Minnesota)[5]			Identify barriers using MoDOT traffic management system (TMS)/MoDOT Carrier Express to catalog OSOW width and height barriers, geometric issues and weight restricted structures that prevent use of otherwise acceptable routing
	3.1 Support Local Economies	Number of interstate and intrastate motor carriers based in Missouri by number of registered trucks			MoDOT

[5]MnDOT,"Minnesota GO: Planning Minnesota's Transportation Future," https://minnesotago.org/.

Table 6 – Reliable Performance Measures

Goal	Objective	Performance Measure (Proposed)	Federally Required	Existing MoDOT Tracker Measure	Data Source
Reliable	4.2 Increase Reliability	% of interstate providing reliable travel times	X	Reliability on major routes – 4a	Annual Hours of Truck Delay – National Performance Management Research Data Set
		Cost of congestion for commercial motor vehicles	X	Cost of congestion on selected state roads – 4b	Regional Integrated Transportation Information System, BLS and ATRI
	4.2 Increase Reliability	% of rural interstate providing reliable travel times	X	Unplanned incidents on major routes – 4d	FHWA Bottleneck Tracker
	4.2 Increase Reliability	Truck travel time reliability on top 100 bottlenecks	X		FHWA Bottleneck Tracker
	4.3 Infrastructure Resilience	Clearance time for incidents/crashes/ hazardous material incidents		Average time to clear traffic incidents – 4c	MoDOT Traffic Management Centers (TMC)
	4.4 Multimodal Transportation	Number of truck parking areas and their capacities (public and private)			MoDOT Facilities Management Data, Truck Parking Profile, inventory of truck parking spaces at water, rail and air transfer facilities, search for U.S. Route privately owned truck parking inventory
	4.4 Multimodal Transportation	OSOW barriers that exist on freight network highways			MoDOT Carrier Express, MoDOT Traffic Management System
	4.4 Multimodal Transportation	% of rail tracks with 286,000-pound railcar capacity rating			BTS* Survey of Missouri railroads
	4.4 Multimodal Transportation	Tons of traffic arriving/ departing at a public water port			Missouri public port records
	4.4 Multimodal Transportation	% of on-time departures and arrivals at cargo airports			BTS TranStats database; USDOT Air Travel Consumer Report

Table 6 continued

Goal	Objective	Performance Measure (Proposed)	Federally Required	Existing MoDOT Tracker Measure	Data Source
Reliable	4.3 Infrastructure Resilience	Identify portions of freight network vulnerable to natural disruptors. (Flood – GIS map layer 100-500-year flood. Earthquake overlay. Number of reported deer strikes. Extreme heat, Extreme cold. National Oceanic and Atmospheric Administration (NOAA) – data)	X		National Oceanic and Atmospheric Administration (NOAA) (flooding, extreme temperatures), Missouri Department of Natural Resources (earthquake), Missouri Department of Conservation (deer strikes)
		Reduce adverse environmental impacts of freight movement on the NMFN (Requirement of the National Multimodal Freight Policy Goals)			

**The % of rail tracks with 286,000-pound capacity was not found on the BTS website. This is likely due to recent review of federal website data.*

Table 7 – Connected Performance Measures

Goal	Objective	Performance Measure (Proposed)	Federally Required	Existing MoDOT Tracker Measure	Data Source
Connected	5.1 Accessible and Connected	% of major generators with roadway right-sized access to interregional corridors and major highways			MoDED
	5.3 Multimodal Transportation System First- and Last-Mile	% of major freight generators with rail access			MoDED
	5.2 Multimodal Transportation System	Number of intermodal facilities (rail)			BTS
	5.3 Multimodal Transportation System First- and Last-Mile	Availability of container-handling capability and/or bulk transfer capability at public water port			Missouri public port records

Table 7 continued

Goal	Objective	Performance Measure (Proposed)	Federally Required	Existing MoDOT Tracker Measure	Data Source
Connected	5.2 Multimodal Connectivity During Project Development	Proportion of transportation studies and plans including consideration of freight modal issues. (Minnesota)[6]			MoDOT, Metropolitan Planning Organizations (MPOs), Regional Planning Commissions (RPCs), local municipalities

Table 8 – Innovative Performance Measures

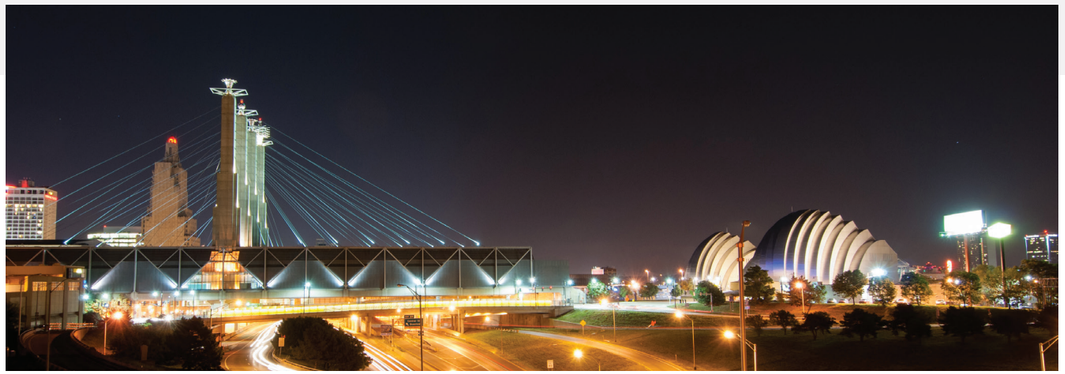
Goal	Objective	Performance Measure (Proposed)	Federally Required	Existing MoDOT Tracker Measure	Data Source
Innovative	6.1 Lower Life-Cycle Costs	Project value by contracting method		Innovative contracting and value engineering – 3e Tracker	
	6.1 Lower Life-Cycle Costs	% of OSOW permits auto issued			MoDOT statistics



Source: MoDOT

[6]MnDOT," Minnesota GO: Planning Minnesota's Transportation Future," https://minnesotago.org/.

Chapter 2. Missouri's Freight and Rail Context



Source: MoDOT

The Missouri SFRP serves as a strategic blueprint for enhancing the state's freight transportation network, supporting economic growth, global competitiveness and innovation. As a vital transportation hub in the heart of the United States, Missouri plays a crucial role in connecting key domestic and international markets through its comprehensive multimodal freight system, including highways, railroads, waterways and airports. This updated plan reflects the evolving needs of Missouri's industries, incorporates the latest technological advancements and aligns with national freight goals to address current and future challenges.

With Missouri's central location and well-established infrastructure, it is positioned as a critical gateway for goods traveling across the United States (U.S.) and beyond. This plan aims to improve the efficiency and safety of freight movement, enhance regional connectivity, reduce congestion and promote economic development across all sectors. From agriculture and manufacturing to energy and retail, Missouri's freight system supports a diverse economy, moving billions of tons of goods annually.

This updated Missouri SFRP builds on past achievements, addressing the pressing need for infrastructure improvements, reducing congestion and implementing innovative solutions. By prioritizing investments in key corridors and fostering collaboration among public and private stakeholders, the plan will strengthen Missouri's freight network, ensuring it remains resilient, reliable and ready to meet the demands of a rapidly evolving global economy.

National Freight Planning

The USDOT defines the vision and goals of the national multimodal freight system in the National Freight Strategic Plan (NFSP). The USDOT uses the NFSP to "guide national freight policy, programs, initiatives and investments.[7]" The NFSP demonstrates a vision to enhance the national freight system's safety, efficiency and competitiveness. It addresses infrastructure challenges, supply chain disruptions and increasing freight demand, particularly as e-commerce and global trade grow. See **Table 9** for the NFSP goals and strategies.

Relative to Missouri, the NFSP emphasizes the importance of inland waterways, rail corridors and intermodal hubs, in addition to highway corridors. The Mississippi and Missouri Rivers play a key role in agricultural exports and St. Louis serves as a critical freight gateway. This plan highlights highway and rail investments to support Missouri's agricultural and manufacturing industries.

By 2043, national freight demand is expected to grow significantly, requiring strategic investments to maintain economic growth and global competitiveness.



Source: MoDOT

[7]U.S. Department of Transportation, 2020 National Freight Strategic Plan (Washington, DC: U.S. Department of Transportation, 2020), https://www.transportation.gov/freight/NFSP.

Table 9 – NFSP Goals and Strategies

Goals	Strategies
Safety - Improve the safety, security and resilience of the Nation's freight system.	Support the development and adoption of automation, connectivity and other freight safety technologies.
	Modernize safety oversight and security procedures.
	Minimize the effects of fatigue and human error on freight safety.
	Reduce conflicts between passenger and freight traffic.
	Protect the freight system from natural and human-caused disasters and improve system resilience and recovery speed.
Infrastructure - Modernize freight infrastructure and operations to grow the economy, increase competitiveness and improve quality of life.	Fund targeted investments in freight capacity and national goals.
	Improve consideration of freight in transportation planning.
	Prioritize projects that improve freight intermodal connectivity and enhance freight flows on first- and last-mile connectors and at major trade gateways.
	Develop a methodology for identifying freight bottlenecks across modes.
	Advance freight system management and operation practices.
	Stimulate job growth and economic competitiveness in rural and urban communities.
	Mitigate the impacts of freight movement on communities.
Innovation - Prepare for the future by supporting the development of data, technologies and workforce capabilities that improve freight system performance.	Support the development and adoption of automation and connectivity, including vehicles to everything (V2X) technologies.
	Support the safe deployment of unmanned aircraft systems (UAS) technology.
	Streamline or eliminate regulations to improve governance, efficiency and economic competitiveness.
	Improve freight data, modeling and analytical tools and resources.
	Strengthen workforce professional capacity.
	Invest in freight research.
	Support regulatory frameworks that foster freight innovation.

Missouri's Context

In the context of national freight planning, Missouri is integral to enhancing the efficiency and resilience of the U.S. supply chain. The state supports crucial industries, including agriculture, manufacturing and energy, making it a central player in moving billions of tons of goods each year. Missouri's participation in national freight initiatives ensures alignment with broader goals, such as improving safety, reducing congestion and promoting innovation.

Highway Network

Missouri has approximately 34,000 miles of MoDOT- owned roads, with nearly 10,000 miles designated as part of the Interstate System. The state is a key player in the national highway network, with major routes such as those listed to the right:

In addition to these freight intensive interstate routes, Missouri is served by additional interstates plus an extensive network of state highways, which are essential for local and regional freight movement.

Interstate 70: A critical east-west corridor running from St. Louis to Kansas City, facilitating a significant portion of freight traffic across the state and nation.

Interstate 44: Connecting St. Louis to Tulsa, Oklahoma and extending into Texas, this corridor is vital for freight movement from the Midwest to the southern U.S.

Interstate 435: A critical beltway around the Kansas City Metro area connecting I-29, I-35, I-70 and I-49.

Interstate 29: A corridor connecting Kansas City to Sioux Falls, South Dakota and Fargo, North Dakota before connecting to the Manitoba Province in Central Canada.

Interstate 55: Running from Chicago through St. Louis to the Gulf Coast, this route is essential for freight traffic between the Midwest and the South.

Interstate 35: A major north-south route from Laredo, Texas, near the Mexican border, through Kansas City, to Duluth, Minnesota, just south of the Canadian border.

Interstate 49: Beginning in Kansas City and running along the western edge of Missouri and extending to Lafayette, Louisiana, near the Gulf Coast.

Interstate 270: A critical beltway around St. Louis connecting with I-70, I-44 and I-55.

Rail Network

Missouri boasts one of the most extensive rail networks in the U.S., with over 3,700 miles of track. This system serves both passenger and freight needs, making it crucial for industries such as agriculture and manufacturing. There are five Class I railroads operating in Missouri, including:

- Burlington Northern Santa Fe Railway (BNSF)
- Canadian Pacific Kansas City
- CSX Transportation
- Norfolk Southern Corporation
- The Union Pacific Railroad (UP) and Norfolk Southern Corporation's proposed merger had not yet been approved at the time of this plan's creation. Therefore, for the purposes of this plan, they are treated as separate entities.)

Additionally, several Class III short line switching, terminal and tourist railroads operate in Missouri. The state's rail system is integral for transporting bulk commodities such as agricultural products and manufactured goods.

20

FREIGHT RAILROADS

13

AMTRAK STATIONS

4

AMTRAK ROUTES

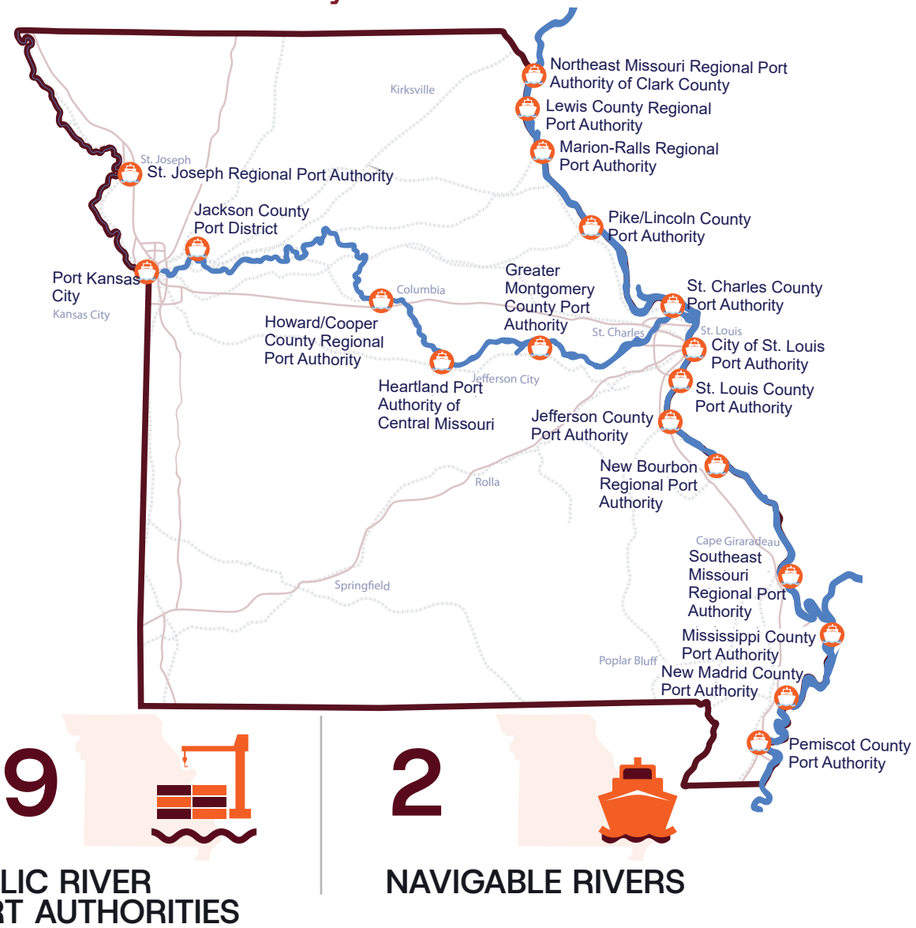


Source: MoDOT

Waterways

Missouri's position along the Mississippi and Missouri Rivers makes it a key player in inland waterway freight movement. The state has 1,050 miles of navigable waterways, as seen in **Figure 3**. The Mississippi River serves as an important artery for barge traffic, especially for bulk commodities like grain, coal and petroleum. Missouri's waterways move an average of $19.2 billion of cargo annually.[8] With over 200 private ports, 19 public port authorities and one tri-state commission, Missouri has a thriving waterborne freight industry.

Figure 3 – Missouri's Waterways and Ports



19

PUBLIC RIVER PORT AUTHORITIES

2

NAVIGABLE RIVERS

[8]Transearch. Transearch 2023 data. Data analyzed by Gannett Fleming (GFT) 2023.

Airports

Freight aviation is a key component of Missouri's transportation network, facilitating the rapid movement of goods across the state and beyond. Major airports, including St. Louis Lambert International (STL), Kansas City International (KCI) and Springfield-Branson National Airport (SGF) serve as critical hubs for air cargo operations. Air freight is essential for industries requiring fast, reliable shipping, such as manufacturing, healthcare and e-commerce. Missouri's central location enhances distribution efficiency, supporting economic growth. Investing in airport infrastructure and improving connectivity strengthens supply chains and attracts businesses. By expanding freight aviation capabilities, Missouri can maintain its role as a vital logistics hub in the Midwest.

Transload Facilities

Missouri's intermodal and transload facilities connect the state's extensive highway and rail systems and enable the transfer of goods between trucks, trains and barges. These facilities are operated by private companies as a service to their customers. Intermodal and transload facilities can affect the overall cost of logistics, increase efficiency, reduce congestion and burden on the highway system and generate greater returns on public and private infrastructure investments.[9] For these reasons, these facilities strengthen Missouri's ability to compete domestically and internationally.[10]

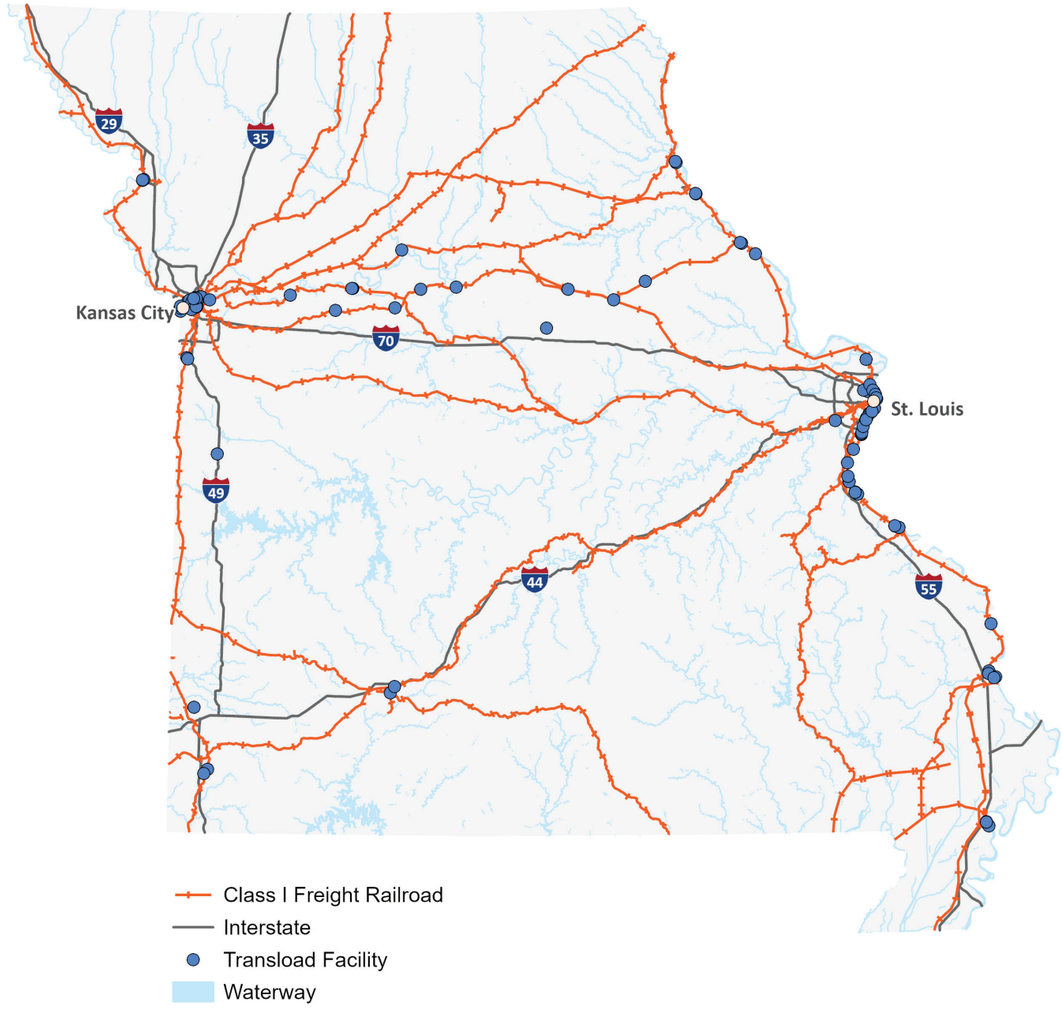
3 CARGO AIRPORTS (STL, MCI AND SGF)




Source: MoDOT

[9]Missouri Chamber Foundation, Transportation 2030: Making Missouri a Leading Logistics Hub, 15 (Jefferson City, MO: Missouri Chamber of Commerce and Industry, 2020), https://mochamber.com.
[10]Missouri Department of Transportation, Missouri State Freight Plan (2017). Chap. 3, 3–13, https://www.modot.org/sites/default/files/documents/.

While these facilities are distributed across the state, the majority of intermodal and transload activity occurs in metropolitan areas, most notable in the Kansas City and St. Louis metropolitan areas. These facilities include:



MoDOT's Statutory Guidance

The passage of The Passenger Rail Investment and Improvement Act of 2008 led to requirement of states to develop State Rail Plans under Federal Rail Administration guidance. Later in 2015, the Fixing America's Surface Transportation Act required states to develop State Freight Plans in accordance with Federal Highway Administration guidance. In 2021, the Infrastructure Investment and Jobs Act (IIJA) provided further direction for the state freight plans. Together, these Acts encourage the development of policies, priorities and strategies to plan, fund and operate passenger rail and multimodal freight service across the U.S.

The State of Missouri provides additional guidance through state statutes, supplementing federal requirements, on how the state plans, funds and operates multimodal freight and passenger rail activities. These statutes, passed by the Missouri legislature, are laws that abide by the state constitution. The state constitution provides the framework and gives structure.The Code of State Regulations guide how to implement statutes.

Appendix A provides details on the numerous legal statutes and sections creating the framework for Missouri rail service. Missouri Port Authorities Association (MPAA) actions are guided by Chapter 68 of the Missouri Revised Statutes. Aviation is guided by Missouri Revised Statutes section 305.230.

MoDOT's Existing Freight and Rail Plans

2022 Missouri State Freight and Rail Plan

In 2022, the MoDOT elected to combine the state freight and rail plans. Previously, the rail plan was updated in 2012 and the freight plan in 2017. The combined plan outlined an integrated strategy for freight and rail transportation with three pillars: Safety, Service and Stability. This plan addresses post-pandemic supply chain disruptions, trends like near-shoring and renewable energy and critical infrastructure challenges such as bottlenecks and truck parking shortages.

For the full list of recommendations, refer to the 2022 Missouri SFRP.

Bordering States' Freight Plans

Missouri shares its borders with eight states, making it a critical hub for freight movement in the region. Given the interconnected nature of freight transportation, it is essential to understand the strategies and priorities of neighboring states. This section and **Table 10** provides an overview of each bordering state's freight plan, highlighting their goals, objectives and key connections to Missouri's transportation network. By examining these plans, Missouri can align its freight strategies to enhance regional coordination, improve efficiency and support economic growth.

Table 10: Bordering States' Freight Plan Overviews

State	Goals	Objectives	Key Connections to Missouri
Kansas	Enhance economic growth and competitiveness. Improve safety, security and resilience. Maintain and improve freight network conditions. Reduce environmental impacts.	Identify and address freight bottlenecks Invest in infrastructure supporting key industries. Enhance multimodal connectivity. Promote sustainable freight practices.	Emphasize collaboration with neighboring states. Identifies opportunities for joint projects along I-70 corridor.
Nebraska	Enhance economic growth. Improve safety and resilience. Maintain freight infrastructure. Protect the environment.	Address infrastructure bottlenecks. Improve multimodal connectivity. Ensure the freight system supports economic development. Reduce environmental impacts of freight movement.	Highlights opportunities for coordination and collaboration with Missouri along shared networks such as the Missouri River, I-29 and intermodal facilities.
Oklahoma	Support economic vitality. Improve safety and resilience. Maintain infrastructure in good condition. Enhance system reliability. Protect the environment.	Identify and address freight bottlenecks. Improve safety at high-risk locations. Invest in infrastructure that supports key industries. Enhance multimodal connectivity. Promote sustainable freight operations.	Highlights regional freight connections in Missouri through I-44 and rail links. Emphasizes improving supply chain efficiency and strengthen economic ties with Missouri.

State	Goals	Objectives	Key Connections to Missouri
Arkansas	Enhance economic competitiveness. Improve safety and security. Maintain infrastructure. Enhance mobility and reliability. Protect the environment.	Address critical freight bottlenecks. Improve safety across all freight modes. Invest in infrastructure supporting economic growth. Enhance multimodal connections. Reduce environmental impacts of freight movement.	Identifies that Missouri ranks among Arkansas's top trading partners, with 15.1 million tons of goods transported via key corridors I-55 and I-49.
Illinois	Develop policies and deploy innovative technologies. Foster public-private partnerships. Improve safety, resilience and reliability. Use data-driven approaches for asset management. Promote sustainability.	Prioritize freight-related plans and policies. Foster collaboration to enhance freight movement. Improve safety and reliability. Use data to inform decision-making. Ensure freight investments consider environmental and community impacts.	Strengthens regional economic ties through robust infrastructure investments.
Iowa	Enhance economic vitality. Improve safety, security and resilience. Maintain infrastructure Enhance reliability and efficiency. Protect the environment.	Identify and address freight bottlenecks. Improve safety across all freight modes. Invest in infrastructure supporting economic growth. Enhance multimodal connectivity. Promote sustainable freight practices.	Supports regional connectivity and economic ties with Missouri via the Avenue of the Saints.
Tennessee	Support economic growth. Enhance safety and resilience. Maintain infrastructure. Improve system reliability and efficiency. Protect the environment.	Address critical freight needs. Improve reliability and efficiency. Invest in infrastructure supporting technological advancements. Minimize negative environmental impacts.	Recognizes Missouri's role in Tennessee's freight network, with major corridors like I-55 and rail links facilitating trade between the states.
Kentucky	Enhance economic growth and competitiveness. Improve safety, security and resilience. Maintain and improve freight system conditions. Protect and enhance the environment.	Address infrastructure bottlenecks. Improve multimodal connectivity. Support economic development. Reduce environmental impacts.	Indirect benefit to regional trade through the development of the Interstate 69 Ohio River Crossing.

Regional Freight Studies

In addition to state and national freight planning efforts, several regional studies have been conducted that provide valuable insights into freight movement within Missouri. These studies play a crucial role in understanding regional transportation trends, challenges and opportunities. This section examines key regional freight studies, highlighting their findings and implications for Missouri's freight network.

2013 St. Louis Regional Freight Study

The 2013 St. Louis Regional Freight Study outlines a strategic plan to enhance freight transportation, economic growth and infrastructure efficiency in the region. It recommends establishing a bi-state Freight Transportation Authority to oversee freight infrastructure, issue bonds and coordinate investments across Missouri and Illinois. This was implemented in 2014 as the St Louis Regional Freightway.Key priorities include improving freight corridors, modernizing rail, highway and river transport and aligning industrial land use with transportation hubs. The study identifies 23 key industrial areas for redevelopment and proposes a five-year capital investment plan. It also promotes trade expansion through Foreign Trade Zones and public-private collaboration to streamline logistics and attract businesses.

Source: MoDOT



Environmental sustainability is emphasized, with strategies to reduce emissions and improve infrastructure efficiency. Challenges include financial constraints, bi-state coordination and regulatory hurdles, requiring a well-structured governance model.

By incorporating the strategies outlined in the 2013 St. Louis Regional Freight Study, this plan aims to create a more efficient, sustainable and competitive freight network, ensuring long-term economic benefits for the St. Louis region.

2020 Heartland Freight Technology Plan

The 2020 Heartland Freight Technology Plan, sponsored and led by the Heartland Freight Technology Consortium, provides a roadmap for integrating emerging freight technologies across the Central Plains, covering parts of Illinois, Iowa, Kansas, Missouri and Nebraska. The plan aims to harmonize regulations, improve data sharing and enhance multimodal freight transportation. Key components include:

- Stakeholder Collaboration: Establishing a consortium to guide implementation.
- Economic Nodes & Drivers: Identifying critical freight corridors and economic hubs.
- Technology Integration: Evaluating automation, electrification and data-driven freight solutions.
- Data Management: Standardizing data sharing between agencies and private sector partners.
- Implementation Blueprint: Outlining short-, medium- and long-term actions to advance regional freight technology.



Source: MoDOT

The plan prioritizes Advanced Driver Assistance Systems (ADAS), electric truck infrastructure and intermodal freight improvements, promoting economic competitiveness and sustainability.

2022 Rail Corridor Identification and Development

The Federal Railroad Administration (FRA) awarded up to $500,000 each to two Missouri rail projects under its Fiscal Year 2022 Corridor Identification and Development Program.[11] The Hannibal Extension proposes extending the existing Illinois Zephyr/Carl Sandburg route from Quincy, Illinois, to Hannibal, Missouri, enhancing connectivity to Chicago.

The Kansas City to St. Joseph Corridor aims to establish a new passenger rail link between Kansas City and St. Joseph, Missouri, with integration into the Missouri River Runner route to St. Louis. Additionally, this corridor is being studied to enhance service along the existing St. Louis to Kansas City line. Both the Hannibal and St. Joseph extension projects are under development.



Source: MoDOT

[11]U.S. Department of Transportation, Federal Railroad Administration, FY22 Corridor Identification and Development Program Selections (February 26, 2025), https://railroads.dot.gov/elibrary/fy22-CID-program-selections.

2025 Connected Freight KC 2050 – A Plan in Action

The Kansas City region's MPO, the Mid-America Regional Council (MARC) completed their regional freight plan update in April 2025. MARC's plan explores the many impacts freight movement will have in the Kansas City region over the next 25 years and how local communities can manage these impacts. Connected Freight KC 2050 – A Plan in Action considers four critical issues in freight impacting the Kansas City region:

- Balancing rural and urban representation of freight needs, policies and project prioritization
- Harmonizing regional freight policies to elevate freight within the project selection process
- Providing resources to educate local governments on the expected impacts of freight development and goods movement
- Developing public policies that integrate land use and transportation planning reflective of the Kansas City region's geographic advantages

The report also describes seven planning goals of the document:

- Transportation Options and Economic Vitality
- Safety, Security and Resiliency
- Maintenance and Service
- Mobility and Reliability
- Public Health and Equity
- Environment and Energy Conservation
- Innovation

The plan was crafted with the input of MARC's Goods Movement Committee, a public forum for regional freight stakeholders to discuss critical issues facing their industry in the region.

Freight Organizations in Missouri

MoDOT participates in multiple freight planning organizations that play a vital role in planning, coordination and advocacy for the state's freight network. These organizations contribute to infrastructure development, policy recommendations and industry collaboration to enhance freight efficiency and economic competitiveness. This section provides an overview of these freight organizations, outlining their roles, initiatives and impact on the state's transportation system.

Freightway

The St. Louis Regional Freightway focuses on strengthening the region's freight infrastructure, enhancing global connectivity and supporting economic growth through strategic logistics development. Key goals include improving transportation access, advancing multimodal freight systems and fostering job creation in the manufacturing and logistics sectors. Strategies emphasize workforce development, investment in infrastructure projects and the promotion of the region as a hub for businesses in freight, logistics and distribution. Freightway works to align regional resources and stakeholders to boost the region's competitive edge in the global supply chain.



Source: MoDOT

Mid-America Freight Coalition

The Mid-America Freight Coalition (MAFC) includes representatives from the 10 state Mid-America Association of State Transportation Officials (MAASTO) Department of Transportation (DOTs) and works to enhance freight movement across the region, focusing on efficient transportation strategies and innovation. Through MAFC, states analyze barriers to develop collaborative solutions. In Missouri, MAFC supports regional collaboration on infrastructure improvements, safety, economic growth, strengthening key trade corridors, addressing freight bottlenecks and improving multimodal connectivity. By aligning with regional stakeholders, the MAFC aims to provide reliable, safe and cost-effective movement of goods, benefiting both Missouri's economy and broader regional supply chains. MAFC also acts as a resource to regional partners and stakeholders, through information sharing, connecting agencies to resources and providing a forum for discussion of freight related issues.

The Institute for Trade and Transportation Studies

The Institute for Trade and Transportation Studies (ITTS) is a non-profit state corporation that represents 10 states across the southeast US including Missouri. ITTS is dedicated to providing research, data and expert insights on the impact of commercial freight movements on infrastructure, transportation needs and safety. In Missouri, ITTS collaborates with regional stakeholders to enhance freight planning and operations. ITTS hosts annual conferences, workshops and peer exchanges and provides research and planning support to member states. Through these initiatives, ITTS plays a vital role in advancing freight transportation research and fostering collaboration among stakeholders in Missouri, contributing to the development of a more efficient and safe freight system. ITTS will cease operations at the end of 2025.

MoDOT Adopted Plans Shaping the SFRP

Truck Parking Investment for Missouri

The Truck Parking Investment for Missouri report was initially adopted as part of the 2022 State Freight and Rail Plan and continued to be developed through Truck Parking Investment studies in 2023 and updated in 2025. The Truck Parking report examines both existing inventory and projected need for both public and private truck parking in Missouri. Truck parking is a critical component to the over-the-road freight transportation system due to the regulatory environment and the general nature of the industry. There are five primary types of truck parking, each with their own set of challenges.



Source: MoDOT

The 2022 adopted plan found that there was a deficiency in the amount of parking needed for roadway freight haulers in Missouri. Across all districts there were about 1500 additional truck parking spots needed. The subsequent 2023 report recommended locations to construct truck parking in each district.

Connected and Autonomous Vehicles

MoDOT has not adopted statewide guidance nor a formal plan for Connected and Autonomous Vehicle considerations. Therefore, it is important that MoDOT stays updated with these rapidly evolving technologies both with freight vehicles and how they interact with MoDOT infrastructure in the physical and digital context. It is suggested MoDOT keeps current with policies and frameworks suggested through USDOT, FHWA, National Highway Traffic Safety Administration and USDOT Office of the Assistant Secretary for Research and Technology. FHWA guidance notes that freight Automated Driving Systems integration requires managing access to intermodal facilities and transfer yards, handling Automated Driving System (ADS) activation/deactivation and communicating freight-related network changes such as road geometry, bridge clearances, traffic diversions, or charging stations.[12] These highlight a few of the considerations regarding Connected and Autonomous Vehicle (CAV) in this plan and as MoDOT develops future CAV guidance.

Transportation Systems Management and Operations

MoDOT's Transportation Systems Management and Operations (TSMO) Program and Action Plan applies integrated strategies to optimize the performance of existing infrastructure through the implementation of systems, services real time information and programs designed to preserve capacity and improve the safety and reliability of transportation systems.[13] The TSMO examines past and current efforts, plans and organizational structures of the previous iterations of the TSMO and where the TSMO is headed. The TSMO has a steering committee internal to MoDOT consisting of members of the Highway Safety and Traffic Division, Maintenance, Safety and Emergency Management, Information Systems and one or more district engineers as needed.

[12]U.S. Department of Transportation, Federal Highway Administration, Roadway Automated Driving Systems Integration – Concept of Operations for Transportation Agencies: Version 1, FHWA-HOP-22-052 (Washington, DC: Federal Highway Administration, 2022).

[13]Missouri Department of Transportation, Transportation Systems Management and Operations: Program and Action Plan (June 2024), https://www.modot.org/sites/default/files/documents/2024%20MoDOT%20TSMO%20Program%20Plan.pdf.

Missouri Highway – Rail Grade Crossing State Action Plan

With the passage of the 2015 Fixing America's Surface Transportation (FAST) Act, the USDOT required that all states create and implement a State Action Plan (SAP) to address highway-rail or pathway-rail crossings that have experienced crashes and identify specific strategies to improve safety in these locations. The Missouri Highway – Rail Grade Crossing State Action Plan is MoDOT's iteration of this plan and was last updated in 2022. Any highway-rail or pathway-rail crossings that have experienced at least one crash in the previous 3 years, more than one in the past five years, or are high-risk as defined by the plan, must be included in the State Action Plan. The plan has led to success in eliminating or improving rail crossings in Missouri, resulting in about 30 projects per year from 2017-2024. Missouri has 3,264 public at-grade crossings and 2,080 private at-grade crossings,[14] underscoring the need to examine the safety of these crossings and make improvements where possible.

3,624

PUBLIC AT-GRADE CROSSINGS

2,080

PRIVATE AT-GRADE CROSSINGS



Source: MoDOT

[14]Federal Railroad Administration, FRA Crossing Inventory Data, downloaded April 23, 2025, https://data.transportation.gov/stories/s/Crossing-Inventory-Listing/ejv6-cpdh/.

Missouri State Airport System Plan Update

While not specifically focused on the movement of freight, the Missouri State Airport System Plan Update is critically important to the current and future state of the aviation sector in Missouri.[15] Missouri is home to 120 public use airports, 107 of these are publicly owned, nine of which are commercial service for public use. These airports are essential to the state transportation infrastructure and are important to the state and local economy and the efficient movement of people and goods.

The 2019 Plan Update continued the work of the System Plan developed in 2017, by including a comprehensive data collection effort, forecasted future aviation needs in Missouri, an evaluation of the existing system, what roles individual airports play, understanding the state of existing airport facilities and how they are performing, anticipated costs for future aviation needs and the creation of a plan to address these critical needs.

Governor's Supply Chain Task Force

The Governors Supply Chain Task Force was created in 2021 by Governor Parson in response to the global supply chain issues caused by the COVID-19 pandemic.[16] Understanding that Missouri's multimodal freight network plays a central role in the national supply chain, the Task Force set out to determine how the State should expand, maintain and protect the supply chain before and during a crisis.

The Task Force was made up of seven individuals from across Missouri, all leaders representing relevant private industry and State agencies. To help inform their work, the task force convened stakeholder meetings comprised of many other companies and organizations from across Missouri. The Task Force and stakeholders met seven times during 2022. The resulting report focused on three main areas: supply chain regulatory response during crisis, workforce challenges and barriers, Missouri freight assets, demand and performance and preparing Missouri for future trends and opportunities.

[15]Missouri Department of Transportation, Missouri State Airport System Plan Update, accessed November 10, 2025, https://www.modot.org/aviation-general-information.

[16]Missouri Department of Transportation, Governor's Supply Chain Task Force, accessed November 10, 2025, https://www.modot.org/supplychaintaskforce.

Chapter 3: Missouri's Freight System

Missouri's freight system is a critical driver of the state's economy, linking agricultural production, advanced manufacturing, distribution centers and global markets through its multimodal network. To assess how future business growth, site selection activity and commodity demand will shape this system, the consultant team engaged with the Missouri Department of Economic Development (MoDED), St. Louis Regional Freightway, Kansas City SmartPort (KC SmartPort) and Missouri Partnership. Input from these organizations was paired with quantitative analysis of 2023 Transearch data. Transearch, developed by S&P Global, is a comprehensive freight data system that integrates proprietary industry data, commodity flow data, public datasets and forecasts based on employment, output and consumption trends.[17] From this dataset, district-level commodity flow results were developed to highlight variations in freight patterns across the seven MoDOT districts.

This combined approach provides both qualitative insight into Missouri's economic development priorities and quantitative evidence of how freight demand is likely to evolve. The following sections summarize:

- Business targeting and site selection trends, as identified by state and regional partners
- Freight generators and existing clusters that currently drive network demand
- Commodity and supply chain analysis based on Transearch
- District-level commodity flows, including projected cumulative and compound annual growth rate (CAGR) changes through 2050
- Network and corridor implications for Missouri's future freight system

[17]Adapted from S&P Global, "Transearch," accessed December 12, 2025, https://www.spglobal.com/market-intelligence/en/solutions/products/transearch-freight-transportation-research.

Freight-Based Business Targeting and Site Selection

Missouri's economic development partners are actively pursuing industries and business clusters that align with the state's freight strengths. Discussions with the St. Louis Regional Freightway, KC SmartPort, MoDED and Missouri Partnership revealed consistent emphasis on advanced manufacturing, agriculture, food and beverage, automotive, aerospace and emerging energy-related industries. Each organization also highlighted unique regional opportunities and site requirements that directly influence freight demand.

St. Louis Regional Freightway

St. Louis Regional Freightway identified agriculture exports, advanced manufacturing, aerospace, automotive and metals as priority clusters. Location quotient analysis confirms the region's competitive concentration of these industries. Infrastructure investments, such as port expansions, new grain crushing facilities and rail improvements along Hall Street, are expected to strengthen the export of soybeans, corn and related commodities, while positioning the region to compete for electric vehicle (EV) battery manufacturing.

KC SmartPort

KC SmartPort emphasized Kansas City's growing role as a hub for industrial manufacturing, food and beverage production, plastics, automotive components and batteries. The region benefits from Foreign Trade Zone status, which allows businesses to defer or reduce customs duties and streamline international trade processes, enhancing the region's competitiveness for global investment and export-oriented industries. Kansas City also benefits from relatively uncongested freight corridors and proactive partnerships with Union Pacific Railroad (UP) and Norfolk Southern Railway (NS) to expand intermodal access. Recent land acquisitions, including a 400-acre NS site and large tracts owned by UP, have added to the portfolio of rail-served industrial sites. Stakeholders also noted rising demand for automated "dark facilities," which are highly automated warehouses and production sites that operate with minimal human presence using only robotics and Artificial Intelligence (AI). These facilities are reshaping freight patterns by increasing throughput while shifting workforce needs toward more advanced technical and maintenance roles, further reinforcing Kansas City's position as a hub for next-generation logistics and industrial activity.

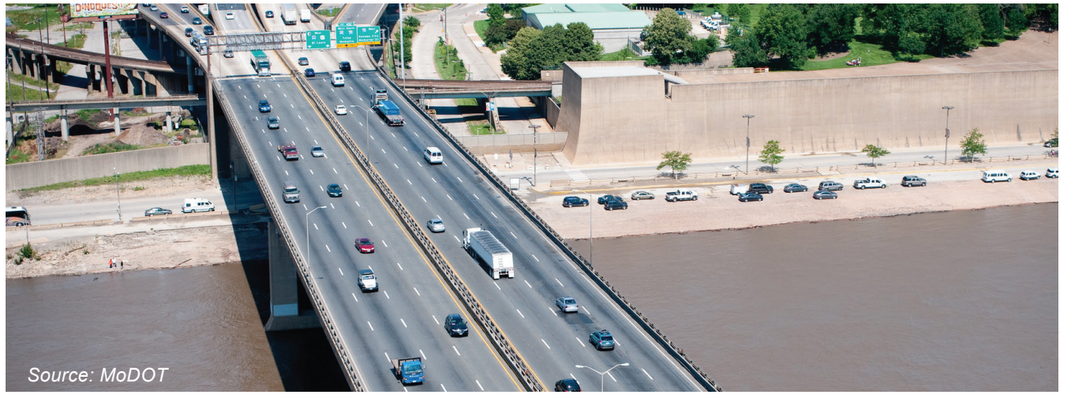
Missouri Department of Economic Development

The MoDED described a statewide strategy centered on transportation and defense, advanced materials, food and beverage, biotechnology and financial services. These clusters leverage Missouri's established strengths in raw materials, chemicals and value-added manufacturing while underscoring the importance of information technology (IT) and logistics as enabling industries. The state is also assessing "mega site" readiness, with utilities, four-lane highway access and rail connectivity identified as critical factors for attracting new large-scale employers.

Missouri Partnership

Missouri Partnership, which serves as the primary point of contact for site selectors (working directly with approximately 70% of prospects), confirmed ongoing interest in agricultural technology firms, food and beverage companies, metals and recycling operations and distribution centers. Companies consistently highlight requirements for reliable power supply, multilane highway access and major airport and workforce availability within one to two hours. While rail access is not universally required, firms seeking it are typically satisfied if new spurs can be delivered within a 12-month timeframe. Community amenities, including schools and childcare, were also cited as increasingly important for workforce attraction and retention.

Together, these perspectives highlight the close connection between Missouri's business attraction strategy and its freight system. Target industries not only depend on efficient multimodal connectivity but also drive investment in infrastructure that will shape long-term freight flows.



Source: MoDOT

Freight Generators and Existing Business Clusters

Missouri hosts a diverse set of freight-intensive industries that generate significant demand on the state's multimodal network. These freight generators include both established industrial clusters and emerging facilities, which together influence commodity flows, modal requirements and corridor priorities.

- **St. Louis Region:** The region's freight activity is anchored by chemical manufacturing, food and beverage production and advanced aerospace and automotive facilities. Notable generators include Boeing, Anheuser-Busch InBev, General Motors and specialty chemical and plastics plants. America's Central Port is developing new crushing facilities, while the Jefferson County Port is being considered for EV battery production due to its industrial zoning and proximity to critical minerals such as magnesium, nickel and copper.
- **Kansas City Region:** The region's freight activity is driven by major automotive assembly plants, data centers and large distribution hubs. Key generators include General Motors in Fairfax and Ford in Claycomo. Kansas City's rail-served industrial sites and Foreign Trade Zone status enhance the region's competitiveness for inbound components and outbound manufactured goods.
- **Rural Areas:** Freight activity across rural Missouri is dominated by agricultural production. Grain, soybeans and other farm products move through processing facilities and river terminals, placing strong demand on highways, rail and inland waterways.

Table 11 summarizes prominent freight generators, associated commodities and possible modal requirements. These generators not only shape current network utilization but also provide insight into future infrastructure and capacity needs.

By mapping these freight generators to commodity flows and modal requirements, the analysis identifies both high-demand corridors and strategic opportunities for investment. These clusters serve as anchors for Missouri's freight system while also signaling emerging areas of growth, such as EV battery production and advanced manufacturing, which will require targeted multimodal support.

Table 11 – Freight Generators, Industry Clusters and Modal Needs

Freight Generator Industry/ Cluster	Primary Location(s)	Associated Commodities	Modal Needs
Aerospace Manufacturing	St. Louis Region	Aircraft parts and precision metals	Air cargo, truck and rail
Automotive Manufacturing	Kansas City (Fairfax)	Finished vehicles and inbound auto parts	Rail and truck
Automotive Manufacturing	Kansas City (Claycomo)	Finished vehicles and inbound auto parts	Rail and truck
Food & Beverage	St. Louis	Beverages and packaging materials	Truck, rail and cold chain (temperature controlled supply chain)
Agricultural Technology	Kansas City/ Statewide	Biotechnology inputs for crops	Truck and air cargo (research and development inputs)
Intermodal/Agribusiness	Granite City (Metro East, Illinois)	Grain, soy, fertilizer and industrial cargo	Barge, rail and truck
Port/Industrial	Jefferson County, Missouri	Agriculture products, metals and EV battery materials	Barge, rail and truck
Information/Logistics	Kansas City Region	Energy-intensive electronics hardware	Highway access, high-capacity power
Chemicals & Allied Products	St. Louis Region/ Statewide	Chemicals, plastics and allied materials	Rail, truck and pipeline
Logistics & Warehousing	St. Louis & Kansas City Metro Areas	Consumer goods, secondary traffic	Truck, rail (intermodal)

Source: GFT Analysis of Transearch Data, 2023; Stakeholder Meetings (STL Freightway, KCSmartPort, MoDOT DED, Missouri Partnership, 2025

Commodity and Supply Chain Analysis

District-level analysis of Transearch data confirms the central role of Missouri's key industry clusters in shaping freight flows. Across the state, farm products, food and kindred products and nonmetallic minerals consistently rank among the top commodities by tonnage, reflecting the continued strength of agriculture and construction-related industries. By contrast, commodities with higher growth in value, such as chemicals, transportation equipment and secondary traffic, dominate in the Kansas City, St. Louis and Southwest districts, highlighting the expansion of advanced manufacturing and distribution hubs. Declines in petroleum and coal products are evident across multiple districts, aligning with broader national energy transitions.

Building on stakeholder input and commodity data, five supply chains emerge as critical to Missouri's future freight system. These supply chains are summarized below. **Table 12** provides an analysis of each supply chain**:**

Agriculture Exports – Soybeans, corn and other grains flow through central and southeast Missouri farms and river ports. Dominant transportation modes include barge, rail and truck, with strong projected export growth requiring resilient river infrastructure.

Aerospace Manufacturing – Aircraft parts and precision metals generated by Boeing and its supplier network in the St. Louis region rely on air cargo, truck and rail. This high-value sector is expanding, with significant export potential.

Automotive Production – Finished vehicles and inbound auto parts from General Motors (GM), Ford and suppliers statewide are transported primarily via rail and truck. Long-term demand is stable, with particular emphasis on inbound logistics efficiency.

Chemicals and Allied Products – Concentrated mainly in St. Louis and statewide manufacturing clusters, these commodities are transported via rail, truck and pipeline. The sector is experiencing rapid growth and is essential to Missouri's value-added manufacturing base.

Food and Beverage – Processed foods and beverages, including those from Anheuser-Busch and Pivot Bio, rely on truck, rail and refrigerated facilities. Demand remains high and underscores the importance of cold chain logistics —the temperature-controlled supply chain that promotes perishable goods, such as food and beverages, remain safe and high-quality from production through distribution.

These supply chains illustrate a balance between Missouri's traditional economic base and targeted growth industries, providing a framework for understanding current and future freight demand. Promoting efficient multimodal connectivity across truck, rail, barge, pipeline and air travel will be essential to sustain investment, enabling competitiveness and supporting the state's evolving economy.

Table 12 – Stakeholder Input Supply Chain Analysis

Supply Chain	Key Commodities/ Inputs	Primary Generators/ Locations	Dominant Modes	Growth Outlook
Agriculture Exports	Soybeans, corn and grains	Central/Southeast MO farms; river ports	Barge, rail and truck	Strong export growth; requires river resiliency
Aerospace Manufacturing	Aircraft parts and precision metals	Boeing (St. Louis), supplier base	Air cargo, truck and rail	Expanding cluster; high-value exports
Automotive Production	Finished vehicles and auto parts	GM (KC), Ford (KC), suppliers statewide	Rail and truck	Stable long-term demand; focus on inbound parts logistics
Chemicals & Allied	Chemicals, refined products and plastics	St. Louis cluster; statewide producers	Rail, truck and pipeline	Rapid growth; essential to manufacturing
Food & Beverage	Processed foods, beverages and cold storage	Statewide producers; Anheuser-Busch; Pivot Bio (Ag Tech)	Truck, rail and refrigerated facilities	High demand; requires cold chain infrastructure

Source: GFT Analysis of Transearch Data, 2023; Stakeholder Meetings (STL Freightway, KCSmartPort, MoDOT DED, Missouri Partnership, 2025.

District Level Commodity Flow Analysis

Commodity flow patterns vary across the seven MoDOT districts, reflecting differences in industrial activity, agricultural production, population density and multimodal freight infrastructure. To capture these variations, district-level analyses were developed using 2023 Transearch data.[18] For each district, the analysis identifies the top five commodities by tonnage and by value, along with the projected percentage change between 2023 and 2043, reported as both the cumulative change and the CAGR. This approach provides a clear indication of current freight movement profiles and expected long-term shifts in demand.

[18]Transearch integrates public and proprietary sources—including the Surface Transportation Board's Waybill Sample, Census Bureau commodity flow data and modal statistics—reconciled through a commodity-based freight demand modeling framework. The dataset represents modeled estimates rather than direct observations but is widely recognized as the industry standard for state and regional freight planning.



Commodity classifications are reported using the Standard Transportation Commodity Code (STCC) system at the 2-digit level, which allows for consistent aggregation and comparison of commodity groups across districts and modes. This level of detail provides meaningful insights into dominant freight categories while avoiding over-fragmentation of the data.

Table 13 through **19** present district-specific commodity flow profiles. For each MoDOT district, the tables highlight the top five commodities by tonnage and value in 2023, along with the projected cumulative change and CAGR through 2043. These summaries illustrate both the current composition of freight movements and anticipated long-term shifts in demand at the district level. While the analysis provides a high-level overview, **Appendix G** contains more detailed district-level tables that expand the view to the top ten commodities by mode, offering additional insight into modal distributions and commodity-specific growth patterns.

While not specifically called out in the commodity flow profiles per district, a declassified discussion of military freight is included later in this chapter. Each MoDOT district supports military freight corridors that provide efficient travel within and through the state. The districts of Kansas City, Northwest, Central and St. Louis are home to key military installations that support the nation's defenses. MoDOT consistently prioritizes maintaining these corridors in a state of good repair and expanding capacity to meet statewide and nationwide military operations.

Table 13 – Central District All Modes Freight Data; Top Commodities Ranked by 2023 Tonnage and Value with Projected 2043 Growth

Tonnage				Value			
Rank	Commodity	% Change	CAGR	Rank	Commodity	% Change	CAGR
1	Nonmetallic Minerals	41%	1.7%	1	Food or Kindred Products	28%	1.2%
2	Farm Products	26%	1.1%	2	Farm Products	23%	1.0%
3	Food or Kindred Products	30%	1.3%	3	Secondary Traffic	21%	1.0%
4	Petroleum or Coal Products	-15%	-0.8%	4	Chemicals or Allied Products	80%	3.0%
5	Secondary Traffic	22%	1.0%	5	Transportation Equipment	43%	1.8%

Source: GFT Analysis of Transearch Data, 2023.

Table 14 – Kansas City District All Modes Freight Data; Top Commodities Ranked by 2023 Tonnage and Value with Projected 2043 Growth

Tonnage				Value			
Rank	Commodity	% Change	CAGR	Rank	Commodity	% Change	CAGR
1	Nonmetallic Minerals	22%	1.0%	1	Secondary Traffic	17%	0.8%
2	Coal	-80%	-7.7%	2	Transportation Equipment	36%	1.5%
3	Secondary Traffic	21%	1.0%	3	Food or Kindred Products	37%	1.6%
4	Food or Kindred Products	37%	1.6%	4	Misc. Mixed Shipments	32%	1.4%
5	Farm Products	25%	1.1%	5	Chemicals or Allied Products	41%	1.7%

Source: GFT Analysis of Transearch Data, 2023.

Table 15 – Northeast District All Modes Freight Data; Top Commodities Ranked by 2023 Tonnage and Value with Projected 2043 Growth

Tonnage				Value			
Rank	Commodity	% Change	CAGR	Rank	Commodity	% Change	CAGR
1	Nonmetallic Minerals	17%	0.8%	1	Farm Products	38%	1.6%
2	Farm Products	36%	1.5%	2	Petroleum or Coal Products	-17%	-0.9%
3	Petroleum or Coal Products	-18%	-1.0%	3	Food or Kindred Products	35%	1.5%
4	Coal	-79%	-7.4%	4	Chemicals or Allied Products	56%	2.2%
5	Food or Kindred Products	43%	1.8%	5	Primary Metal Products	46%	1.9%

Source: GFT Analysis of Transearch Data, 2023.

Table 16 – Northwest District All Modes Freight Data; Top Commodities Ranked by 2023 Tonnage and Value with Projected 2043 Growth

Tonnage				Value			
Rank	Commodity	% Change	CAGR	Rank	Commodity	% Change	CAGR
1	Farm Products	34%	1.5%	1	Farm Products	38%	1.6%
2	Nonmetallic Minerals	27%	1.2%	2	Petroleum or Coal Products	-17%	-0.9%
3	Food or Kindred Products	40%	1.7%	3	Food or Kindred Products	35%	1.5%
4	Chemicals or Allied Products	49%	2.0%	4	Chemicals or Allied Products	56%	2.2%
5	Secondary Traffic	31%	1.4%	5	Primary Metal Products	46%	1.9%

Source: GFT Analysis of Transearch Data, 2023.

Table 17 – Southeast District All Modes Freight Data; Top Commodities Ranked by 2023 Tonnage and Value with Projected 2043 Growth

Tonnage				Value			
Rank	Commodity	% Change	CAGR	Rank	Commodity	% Change	CAGR
1	Crude Petrol or Natural Gas	1%	0.0%	1	Crude Petrol or Natural Gas	1%	0.0%
2	Nonmetallic Minerals	15%	0.7%	2	Secondary Traffic	20%	0.9%
3	Farm Products	23%	1.0%	3	Farm Products	21%	1.0%
4	Petroleum or Coal Products	-21%	-1.2%	4	Petroleum or Coal Products	-24%	-1.4%
5	Clay, Concrete, Glass or Stone	0%	0.0%	5	Primary Metal Products	51%	2.1%

Source: GFT Analysis of Transearch Data, 2023.

Table 18 – Southwest District All Modes Freight Data; Top Commodities Ranked by 2023 Tonnage and Value with Projected 2043 Growth

Tonnage				Value			
Rank	Commodity	% Change	CAGR	Rank	Commodity	% Change	CAGR
1	Nonmetallic Minerals	8%	0.4%	1	Secondary Traffic	18%	0.8%
2	Farm Products	13%	0.6%	2	Transportation Equipment	51%	2.1%
3	Food or Kindred Products	42%	1.8%	3	Food or Kindred Products	40%	1.7%
4	Secondary Traffic	24%	1.1%	4	Farm Products	19%	0.9%
5	Chemicals or Allied Products	50%	2.0%	5	Chemicals or Allied Products	49%	2.0%

Source: GFT Analysis of Transearch Data, 2023.

Table 19 – St. Louis District All Modes Freight Data; Top Commodities Ranked by 2023 Tonnage and Value with Projected 2043 Growth

Tonnage				Value			
Rank	Commodity	% Change	CAGR	Rank	Commodity	% Change	CAGR
1	Nonmetallic Minerals	13%	0.6%	1	Secondary Traffic	30%	1.3%
2	Petroleum or Coal Products	-13%	-0.7%	2	Chemicals or Allied Products	40%	1.7%
3	Coal	-73%	-6.3%	3	Transportation Equipment	39%	1.7%
4	Farm Products	19%	0.9%	4	Petroleum or Coal Products	-14%	-0.8%
5	Secondary Traffic	41%	1.7%	5	Food or Kindred Products	29%	1.3%

Source: GFT Analysis of Transearch Data, 2023.

Across the seven MoDOT districts, the commodity flow data reveals both commonalities and regional distinctions in freight demand. Several trends are evident:

- **Consistent Top Commodities by Tonnage:** Farm products, food and kindred products and nonmetallic minerals dominate, reflecting Missouri's continued strength in agriculture and construction-related industries.
- **Value-Driven Growth:** Districts with strong manufacturing and distribution activity, including Kansas City, St. Louis and Southwest, show significant growth in chemicals, transportation equipment and secondary traffic, underscoring the role of these regions as industrial and logistics hubs.
- **Declining Sectors:** Petroleum and coal products decline across multiple districts, aligning with broader national energy transitions and shifts in regional consumption patterns.
- **Origin and Destination Flows:** These data highlight not only commodities produced within each district but also goods moving through the state to serve regional, national and international markets, providing insight into Missouri's strategic freight corridors.

Together, these findings indicate that while Missouri's freight network will continue to support its traditional strengths in agriculture and natural resources, future growth will be increasingly concentrated in higher-value manufacturing and distribution commodities. This underscores the importance of a freight system that balances bulk commodity movements with the infrastructure, multimodal connectivity and operational capacity required to support expanding value-added industries.

By linking district-level flows to supply chain priorities and business generators, these results inform corridor planning, multimodal investment strategies and targeted economic development initiatives. They provide a foundation for identifying Critical Urban and Rural Freight Corridors, prioritizing infrastructure improvements and aligning Missouri's multimodal network with anticipated changes in freight demand through 2043.



Source: MoDOT

Key Freight Corridors

While district-level commodity flows highlight regional production and consumption patterns, truck freight activity in Missouri remains concentrated along a limited number of high-volume highway corridors that serve as the backbone of the state's multimodal freight network and support national defense mobility. I-44 and I-70 are Missouri's most heavily utilized freight corridors, carrying a significant share of all highway freight tonnage and value moving across the state. In 2023, each corridor supported more than 85 million tons of freight, a figure projected to grow by roughly 20-30% by 2043. This increase reflects Missouri's central position within national supply chains and the continuing importance of these east-west corridors for both regional and long-haul freight movements.

In terms of freight value, both I-44 and I-70 handle the highest-value shipments in the state, each with 2023 totals exceeding $145 billion annually and projected to rise by more than 50% by 2043. These corridors play a critical role in linking major metropolitan centers, including St. Louis, Columbia, Springfield and Kansas City, to national markets and global gateways. Their strategic alignment along key manufacturing, distribution and logistics hubs underscores their role in supporting Missouri's economic competitiveness.

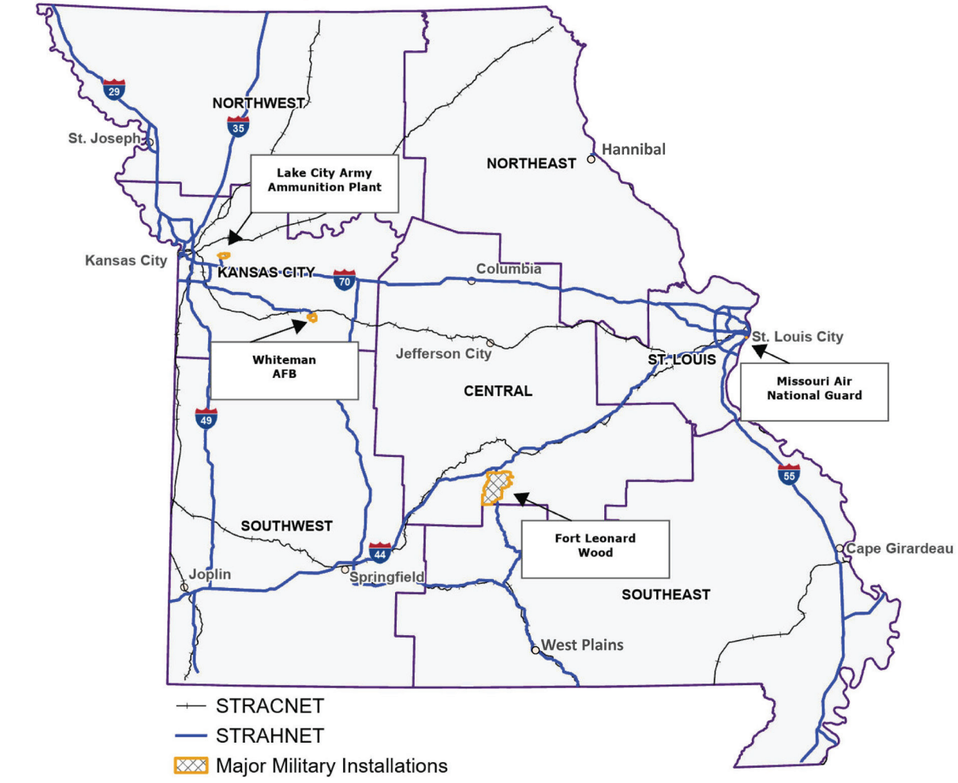
Other important freight routes, including I-55, I-57 and I-270, complement the function of I-44 and I-70 by facilitating north–south movements and regional connectivity. I-55 and I-57 provide vital access to southern markets and Gulf Coast ports, while I-270 serves as a major circumferential route supporting intermodal transfers and urban freight distribution in the St. Louis region. These corridors are projected to see moderate but steady growth in both tonnage and value, reflecting their importance to regional supply chains and last-mile distribution.

Collectively, Missouri's top highway freight corridors form the structural foundation of the state's multimodal transportation system. Anticipated increases in both tonnage and value by 2043 highlight the importance of maintaining corridor reliability, addressing congestion at key urban interchanges and advancing targeted capacity and safety improvements to continue supporting efficient and resilient freight movement statewide.

Military Freight

MoDOT coordinates with the USDOT, the FRA, the FHWA and the U.S. Department of Defense's U.S. Transportation Command (USTRANSCOM) to support key facilities and corridors that support military readiness and deployment operations.

Figure 4 – Missouri Military Facilities



Source: Missouri Spatial Data Information Service.

Missouri's multimodal freight system supports multiple military facilities shown in **Figure 4,** including:

- Fort Leonard Wood (United States [U.S.] Army Training and Maneuver Center)
- Whiteman Air Force Base (U.S. Air Force Global Strike Command)
- Lake City Army Ammunition Plant
- Missouri Air National Guard facilities in St. Joseph and St. Louis
- Naval Operational Support Center (NOSC) Kansas City (not shown)
- USTRANSCOM and Air Mobility Command located at Scott Air Force Base, Illinois, which relies on Missouri's transportation infrastructure for deployment support (not shown)

In addition to installations, key transportation assets identified by USTRANSCOM within and adjacent to Missouri include the Strategic Highway Network (STRAHNET), Strategic Rail Corridor Network (STRACNET) and strategic airports and seaports that facilitate defense logistics. These networks, described below, collectively allow Missouri to support both origin and pass-through military cargo movements essential for national readiness.

Strategic Highway Network

Missouri contains several Strategic Highway Network (STRAHNET) routes that link major military installations to the Interstate system. These include I-44 (connecting Fort Leonard Wood to St. Louis and Tulsa), I-70 (east-west corridor connecting Kansas City, Columbia and St. Louis) and I-49 (north-south corridor providing access from Fort Leonard Wood to western deployment points). These corridors accommodate heavy and oversized military equipment, such as armored vehicles, which require special permitting and route coordination.

Strategic Railway Corridor Network

Missouri's rail network includes several Strategic Railway Corridor Network (STRACNET) routes that are essential for the rapid deployment of military equipment and supplies. These corridors provide connectivity between military installations and key ports, depots and mobilization centers across the U.S. STRACNET within Missouri includes portions of major Class I railroads, such as UP, BNSF Railway and Canadian Pacific Kansas City. These routes provide critical east-west and north-south linkages for military freight transiting through or originating in Missouri.

Missouri's STRACNET facilities connect directly with military installations, including Fort Leonard Wood and Whiteman Air Force Base. Rail access to these installations facilitates the transport of heavy military vehicles, training equipment and supplies. Additionally, STRACNET routes intersect with key intermodal terminals and freight yards that provide transfer capabilities between modes, enhancing the efficiency of defense logistics operations.

MoDOT has incorporated FRA's guidance into its rail planning process by identifying STRACNET segments on the State Rail Map. Consideration of military freight needs has been integrated into long-range rail investment strategies, so these corridors remain reliable, resilient and capable of handling future defense mobility demands. This includes maintaining weight limits, bridge conditions and clearance restrictions along STRACNET corridors meet federal standards for military loadings.

Airports and Inland River Ports

Missouri's three major commercial airports – Kansas City International (MCI), St. Louis Lambert International (STL) and Springfield-Branson National Airport (SGF) – provide cargo handling capabilities that may be used in support of defense logistics. Additionally, the Mississippi River port in St. Louis and the Missouri River port in Kansas City are strategically positioned for barge transport of military goods, providing alternative multimodal deployment options.



Coordination and Planning

Military freight, like other types of freight, may pass through Missouri's transportation network without originating or terminating within the state. Therefore, MoDOT considers both through traffic and local military shipments when planning infrastructure improvements. The agency coordinates regularly with federal partners and neighboring states to support corridors providing defense mobility by providing well-maintained infrastructure and addressing bottlenecks or infrastructure constraints.

MoDOT's freight planning process includes consultation with the Department of Defense Surface Deployment and Distribution Command (SDDC), now known as the U.S. Army Transportation Command (ARTRANS) and U.S. Transportation Command (USTRANSCOM), as well as with installation transportation offices. These partnerships help planned infrastructure projects, such as bridge rehabilitations or interchange improvements, consider military load and clearance requirements.

Network and Corridor Implications

The synthesis of district-level commodity flows, supply chain priorities and stakeholder input highlights several strategic priorities for Missouri's multimodal freight network. Key findings include:

Critical Corridors: I-70 and I-44 consistently emerge as vital arteries for both high-tonnage agricultural and construction commodities and high-value manufactured goods. These corridors require ongoing capacity enhancements, modernization and safety improvements to accommodate projected growth.

Inland Waterways: The Mississippi and Missouri Rivers remain a comparative advantage for bulk commodity movements, particularly agricultural exports. Stakeholders emphasized the importance of resiliency measures, such as levee maintenance, flood mitigation and innovative tools like digital twins to monitor water levels and optimize cargo flows.

Rail Connectivity: Rail access continues to differentiate manufacturing and distribution hubs. Class I congestion, particularly in St. Louis, highlights the need for additional rail spurs, improved dispatching and coordination with private operators to support chemical, automotive and high-value cargo flows.

Urban and Rural Priorities: Urban areas require targeted investments to connect major industrial hubs, including Boeing, GM and intermodal terminals, to the broader freight network. In rural areas, infrastructure should support agricultural production, processing facilities and emerging industries, such as EV battery manufacturing near Rolla and in Jefferson County.

Multimodal Integration: The District-level commodity data underscores the need for seamless modal transitions among truck, rail, barge, pipeline and air cargo. Investments should prioritize connectivity that supports both high-volume bulk commodities and smaller, high-value goods.

Military Freight: Missouri's freight transportation system plays a critical role in supporting national defense and the movement of military freight, personnel and oversized vehicles. The state's location at the geographic center of the nation, combined with its robust highway, rail, air, waterways and military installations makes it vital for military logistics.

By aligning corridor improvements with high-growth supply chains, freight generators and district-level commodity flows, Missouri can enhance network reliability, reduce congestion and maintain competitiveness in national and global markets. Overall, this analysis demonstrates that strategic infrastructure investment, multimodal integration and freight-responsive planning will be essential to accommodate projected shifts in commodity flows and support Missouri's targeted economic growth through 2043.

Freight Implications

Across Missouri's districts, the commodity flow data reveals both shared patterns and regional distinctions in freight demand. Farm products, food and kindred products and nonmetallic minerals consistently rank among the top commodities by tonnage, highlighting the enduring importance of agriculture and construction-related industries. In contrast, districts with strong manufacturing and distribution activity, such as Kansas City, St. Louis and Southwest, show notable growth in chemicals, transportation equipment and secondary traffic, reflecting their roles as industrial and logistics hubs. Declines in petroleum and coal products are observed across multiple districts, consistent with broader national energy transitions. Stakeholder feedback underscores the importance of multimodal access, reliable power and supportive community infrastructure for site selection and business expansion.

These district-level results capture both origin and destination flows, encompassing commodities produced within Missouri as well as goods moving through the state's corridors to serve regional, national and international markets. While Missouri's freight network will continue to support its traditional strengths in agriculture and natural resources, future growth is expected to concentrate in higher-value manufacturing and distribution commodities. This underscores the need for a freight system that balances bulk commodity movements with multimodal connectivity, infrastructure resilience and operational capacity to support expanding value-added industries.

Missouri also serves oversized and overweight military freight to move equipment, supplies and personnel, providing a system that promotes the movement of interstate commerce and national defense. By integrating targeted business attraction strategies, freight generator analysis, supply chain prioritization and corridor planning, Missouri can position its multimodal network to sustain economic competitiveness, attract new investment and respond effectively to evolving national and global freight demand.

Chapter 4. Condition and Performance

The condition and performance of Missouri's multimodal freight system plays a vital role in supporting the state's economy, linking producers to markets and connecting communities to the global supply chain. As a central hub in the national freight network, Missouri supports the movement of goods across highways, railroads, inland waterways and air cargo facilities. This chapter presents a comprehensive analysis of the condition, reliability and safety of the freight transportation system across all modes.

The analysis evaluates physical infrastructure conditions, bottlenecks, level of service (LOS), safety performance and system constraints that influence freight mobility. It draws from state and federal data sources, stakeholder interviews and prior planning efforts. This data is measured against the goals, objectives and performance measures detailed in **the Goals, Objectives and Performance Metrics chapter** to assess the freight transportation system.

Scope and Data Sources

This chapter synthesizes findings from a variety of sources, including but not limited to:

- S&P Global's Transearch database
- Surface Transportation Board waybill data
- FHWA Freight Bottleneck Tool
- MoDOT Tracker performance system
- MoDOT's Highway-Rail Grade Crossing State Action Plan (SAP)
- United States (U.S.) Army Corps of Engineers (USACE) waterway data
- U.S. Coast Guard (USCG) marine safety records
- Stakeholder input

All data reflects the most recent available reporting (2020-2024) and is organized by freight mode. All Transearch data is reported in 2023 numbers or 2043 projections.

Freight System Overview

Missouri's freight network spans four primary transportation modes: highways, rail, inland waterways and air cargo. Together, these modes form a cohesive and competitive freight system with modal flexibility for shippers and receivers.

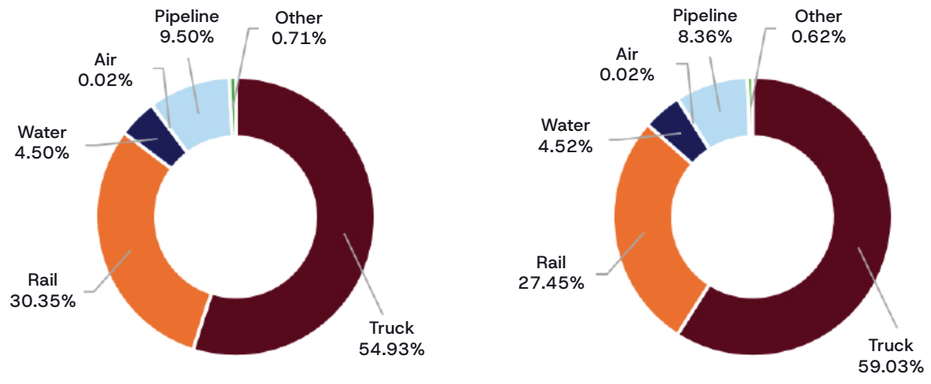
- **Highways:** Missouri's highway network includes over 33,000 miles of state-owned roads with critical freight corridors, such as Interstates 70, 44, 29, 55 and 49, forming the backbone of truck freight movement. Missouri is home to 1,521 miles of the National Highway Freight Network (NHFN).
- **Railroads:** The state is served by five Class I railroads, multiple short line railroads and major intermodal terminals. These rail assets link at hubs in St. Louis and Kansas City to provide nationwide connectivity and direct access to seaports on all three coasts, in addition to Mexico and Canada.
- **Waterways:** Missouri boasts 1,050 miles of navigable waterways, including segments of the Mississippi and Missouri Riversand is home to 19 public port authorities and one port commission. Missouri's ports also provide multimodal connectivity via roadway and rail links.
- **Air Cargo:** While Missouri's air cargo footprint is smaller than its surface modes, it is an essential transportation means for high-value and time-sensitive freight. Airports in St. Louis (STL), Kansas City (MCI) and Springfield (SGF) provide commercial air cargo service, while several regional and business airports offer specialized logistics support.

More than 1.1 billion tons of freight were shipped to, from or within Missouri in 2023 and volumes are expected to grow to 1.30 billion tons by 2043, with 2023 and 2043 freight values of $1.70 trillion and $2.30 trillion, respectively.[19] Whether by rail, truck, barge or air cargo, these networks not only sustain key industries but also support tens of thousands of jobs in logistics, warehousing and operations. The 2023 and forecasted 2043 modal split by tonnage and value is shown in **Figure 5** and **Figure 6**.



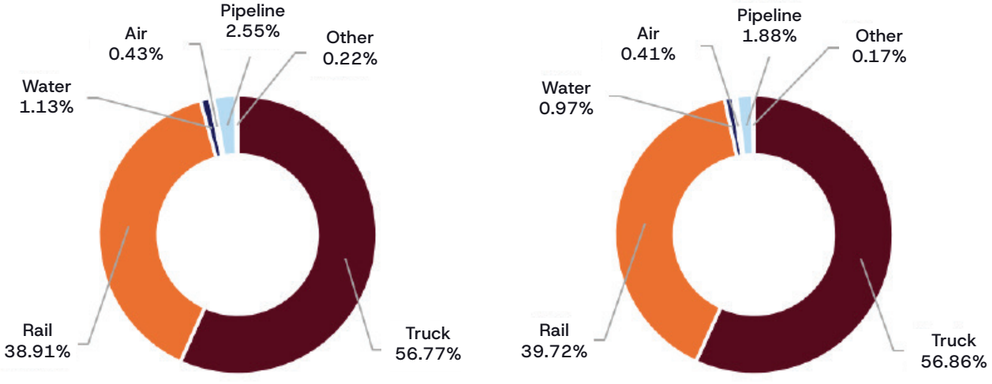
[19]Data from Transearch (2023), calculations by GFT (2025).

Figure 5 – Modal Split by Tonnage, 2023 (left) and 2043 (right)



Source: GFT Analysis of Transearch Data, 2023.

Figure 6 – Modal Split by Value, 2023 (left) and 2043 (right)



Source: GFT Analysis of Transearch Data, 2023.

Highway

Highways form the backbone of Missouri's freight system, carrying the majority of goods by tonnage and value. Highways also link the state's producers, consumers and distribution centers to regional, national and global markets. Missouri contains over 5,500 miles of major highways, more than 18,000 miles of minor highways and over 10,000 bridges on the state

highway system. Despite significant investments, recurring congestion, pavement deterioration and truck parking shortages remain challenges that impact reliability and safety. This section reviews highway system conditions, identifies freight bottlenecks using national datasets, such the FHWA Freight Bottleneck Tooland evaluates safety, crash data and performance metrics to assess how well Missouri's highway network is serving freight needs.

Overview

Missouri has the seventh largest state highway system in the U.S., totaling 33,814 centerline miles. Each day, 80.80 million miles are driven and 1.50 million tons of freight are hauled on this system.[20] Missouri's state highway network is divided into major routes, minor routes and low-volume routes. Major highways, which include interstates, comprise 5,555 miles, or 16% of the total 33,814 highway miles in Missouri, but account for 77% of the system's traffic. Part of the state system includes the NHFN that is essential for long-haul freight movement, as well as last-mile connectivity to rail terminals, ports and airports as shown in **Figure 7**.

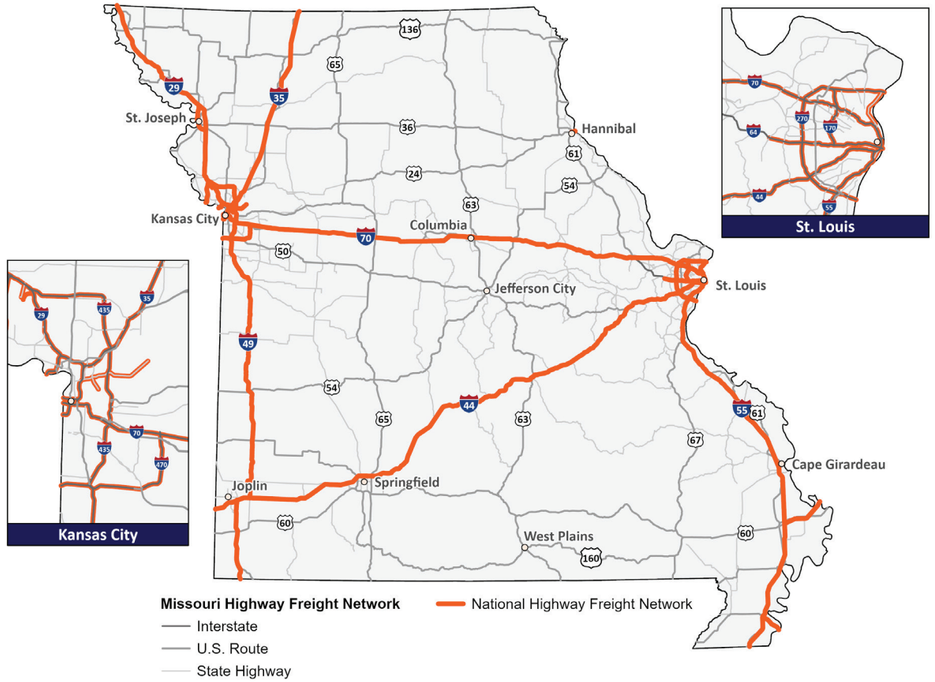
The St. Louis Regional Freightway developed the St. Louis Regional Needs Analysis and Freight Development Plan in 2017. This study evaluated the freight-related role of roadway assets beyond the interstate system, identifying important freight corridor segments. The corridors are classified as Freight Connectors, Intra-Regional Connectors and Emerging Connectors, totaling 112 segments regionwide.

This plan complements the SFRP by focusing on the non-interstate roadway connections that support and enhance access to key freight assets, such as intermodal rail yards and ports. Together, they provide a more comprehensive view of the multimodal freight network.



[20]FHWA, "Table VM-2 – Highway Statistics 2023," Policy Information, accessed June 20, 2025, https://www.fhwa.dot.gov/policyinformation/statistics/2023/vm2.cfm.

Figure 7 – Missouri Highway and National Highway Freight Networks

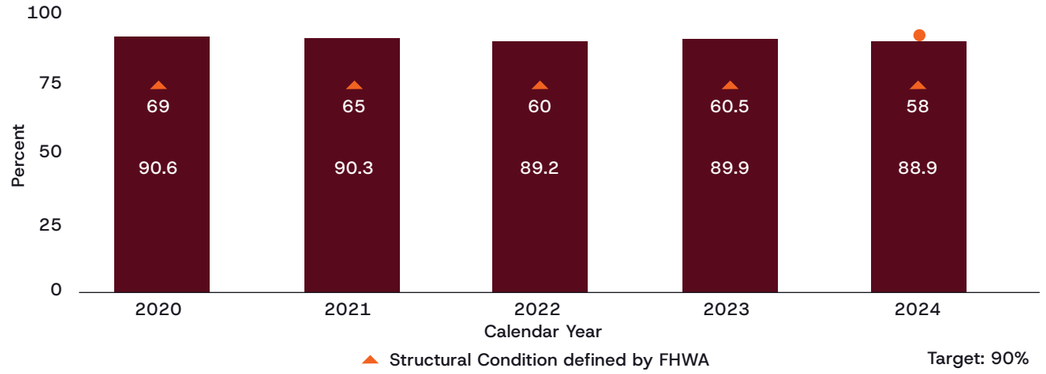


Source: FHWA, 2025.

Level of Service

Missouri's state highway system is generally in good condition. Since 2021, major highways in good condition decreased from 90 to 89%, slightly below the state target of 90% (see **Figure 8**). Recently passed legislation to increase funding for interstate improvements is likely to increase major highway conditions to exceed the state target in coming years.

Figure 8 – Percent of Major Highways in Good Condition, 2020–2024



Source: MoDOT, Condition of State Highways - 5c, 2025.

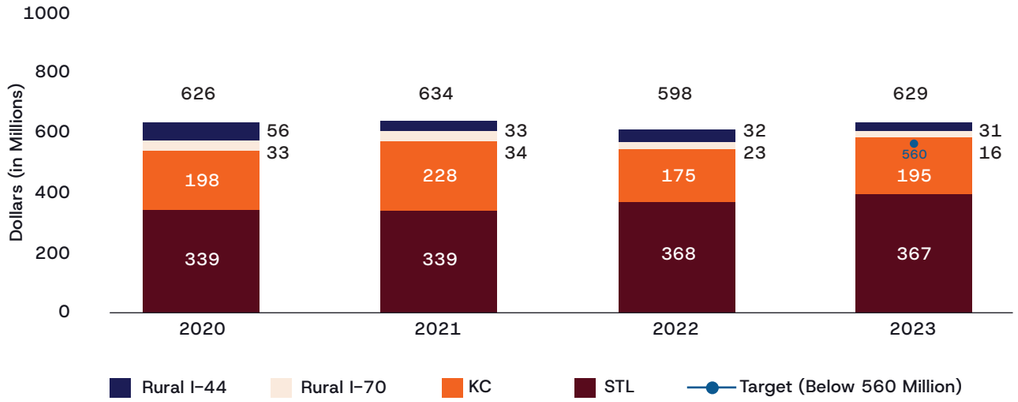
From a level of service (LOS) perspective, Missouri's highways continue to experience congestion and reliability issues despite relatively strong pavement conditions. High truck volumes on interstates and at key interchanges reduce efficiency and increase travel times, particularly in urban areas. First- and last-mile connections to ports, rail terminals and airports also experience localized bottlenecks. While recent improvements have addressed some of these constraints, growth in e-commerce and freight demand is expected to put additional strain on highway capacity, underscoring the need for continued monitoring and targeted investments.

St. Louis and Kansas City are two major freight centers in Missouri that experience the most congestion in the state. The state target is no more than 10 additional minutes of travel time during peak rush hour conditions. For the third quarter of 2025, the most recent Missouri Tracker reliability data, St. Louis reported the morning peak was 8 seconds less and the evening peak was 40 seconds greater than peak targets. In Kansas City, the morning peak was 8 seconds greater and the evening peak was 57 seconds greater than peak targets.[21]

Congestion has financial costs that are passed on to drivers and consumers. In 2023, the estimated cost of congestion in St. Louis, Kansas City and rural I-70 and I-44 freight corridors was $629 million, surpassing the statewide target by $69 million. The total cost of congestion saw a large increase from 2022, as seen in **Figure 9**, returning to levels previously seen in 2020 and 2021.

[21]MoDOT, "Reliability on Major Routes -4a," accessed October 2, 2025, https://www.modot.org/reliability-major-routes-4a.

Figure 9 – Cost of Congestion on Selected State Roads, 2020–2023



Source: MoDOT, Cost and Impact of Traffic Congestion -4b, 2025.

While peak congestion is predictable, there is unplanned congestion that also impacts reliability of the state highway system. Traffic incidents lock travel lanes and temporarily reduce the number of vehicles that can travel on the road. Traffic crashes are the most impactful source of unplanned congestion. Two major freight corridors, I-70 and I-44, have higher than expected crash rates, indicating a need for improvements.

The speed of incident clearance is essential to the highway system returning to normal conditions and improving the reliability of the system. Delays on the highway network can lead to missed intermodal connections, scheduling conflicts or cascading disruptions throughout the freight system.

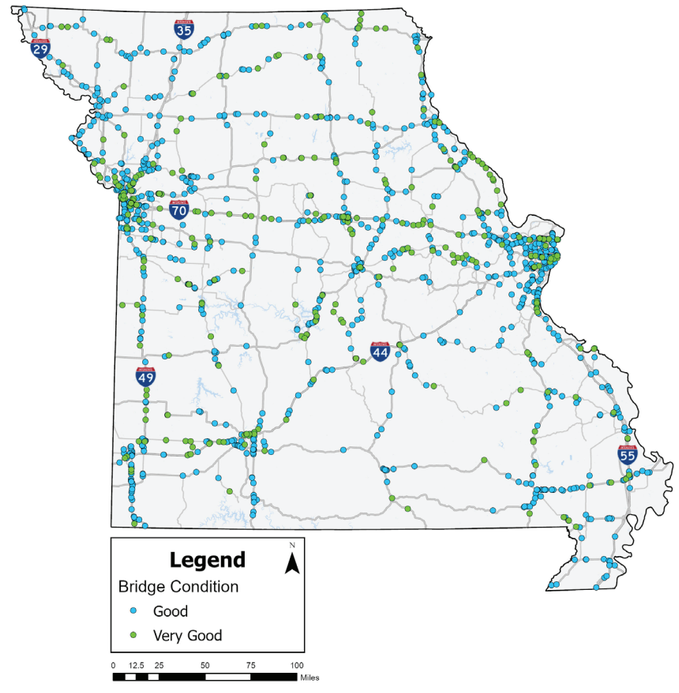
To monitor and improve this aspect of system performance, MoDOT tracks trends in incident clearance. One key performance measure tracked by MoDOT is how quickly MoDOT and emergency responders remove obstructions and restore normal operations.[22] MoDOT set targets on average time to clear incidents, which account for the number of incidents and the actual time to clear. The 2024 actual average clearance times for St. Louis (28.40 minutes), Kansas City (30.40 minutes) and Springfield (33.50 minutes) were slightly higher than the targets, which range from 25.00 to 29.60 minutes. In contrast, the actual clearance times for rural I-70 (72.20 minutes) and rural I-44 (85.10 minutes) were much higher than the target clearance time of 60 minutes.

[22]MoDOT, "Average Time to Clear Traffic Incidents -4c," accessed October 2, 2025, https://www.modot.org/average-time-clear-traffic-incidents-4c.

Bridges

In addition to the huge network of highways, Missouri has 10,427 bridges and culverts of varying sizes, including 209 major bridges that are longer than 1,000 feet. In 2024, the average bridge age in Missouri was 50 years. From 2019 to 2024, the number of bridges in poor condition was reduced from 8.6% to 7.2%.[23] This improvement from 2019 to 2024 reflects investments made through MoDOT's asset management program and the Governor's Focus on Bridges program. To combat aging infrastructure, MoDOT has a target of no more than 900 bridges being in poor condition. **Figure 10** shows the location of Missouri bridges in good or very good condition, while **Figure 11** shows the location of Missouri bridges in fair, poor or very poor condition.[24]

Figure 10 – Missouri Bridges in Good or Very Good Condition

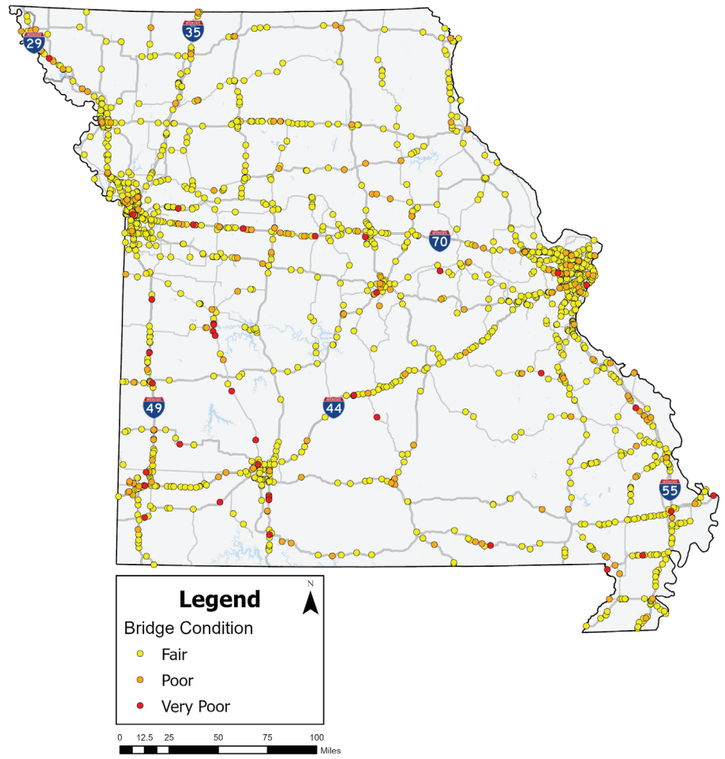


Source: MoDOT Bridge Dataset, 2025.

[23]MoDOT, "Condition of State Bridges -5a," accessed June 5, 2025, https://www.modot.org/condition-state-bridges-5a.

[24]Both figures exclude bridges without ratings.

Figure 11 – Missouri Bridges in Fair, Poor or Very Poor Condition



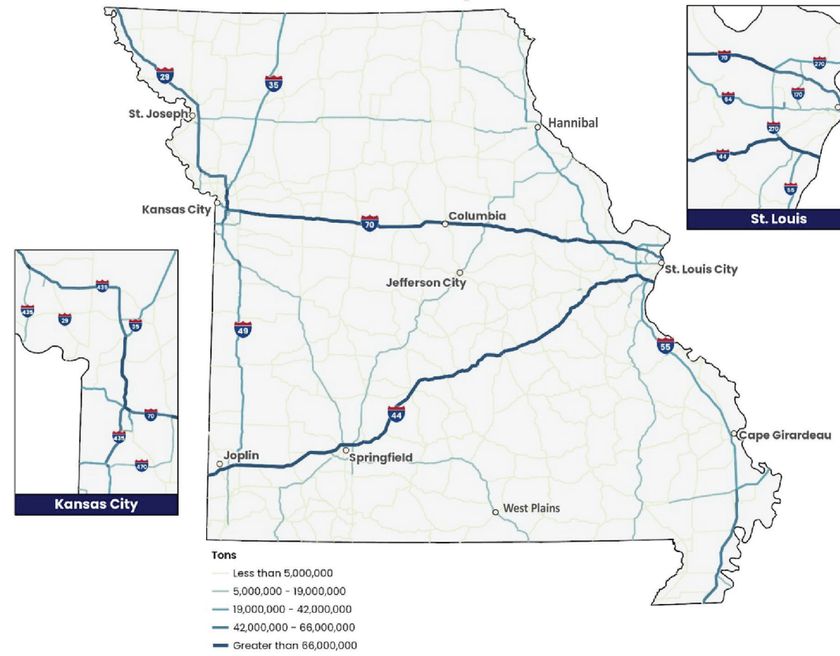
Source: MoDOT, Bridge Dataset, 2025.

The performance of all state bridges is important to review versus those only on the National Highway System (NHS) or NHFN due to the importance of agriculture to the state and the significant barrier a weight-posted or closed bridge can have on freight movements. Bridges in poor or very poor condition often have weight limit postings to maintain safety while avoiding closing the structure. Weight-limited bridges require farmers to choose between making more trips with lighter loads to market or taking detours to travel on roads with no load-posted bridges. Both options increase the farmers' transportation cost and lower available profits.

Truck Freight

The state's central location and extensive highway network make it a critical crossroad for long-haul freight moving east-west and north-south across the country. More specifically, truck movements account for 55% of the total freight tonnage and are forecasted to increase to 59%, from 624 million in 2023 to 765 million in 2043.[25] **Figure 12** shows the state's 2023 cargo flows and **Figure 13** shows the 2023 top five truck freight commodities by tonnage.

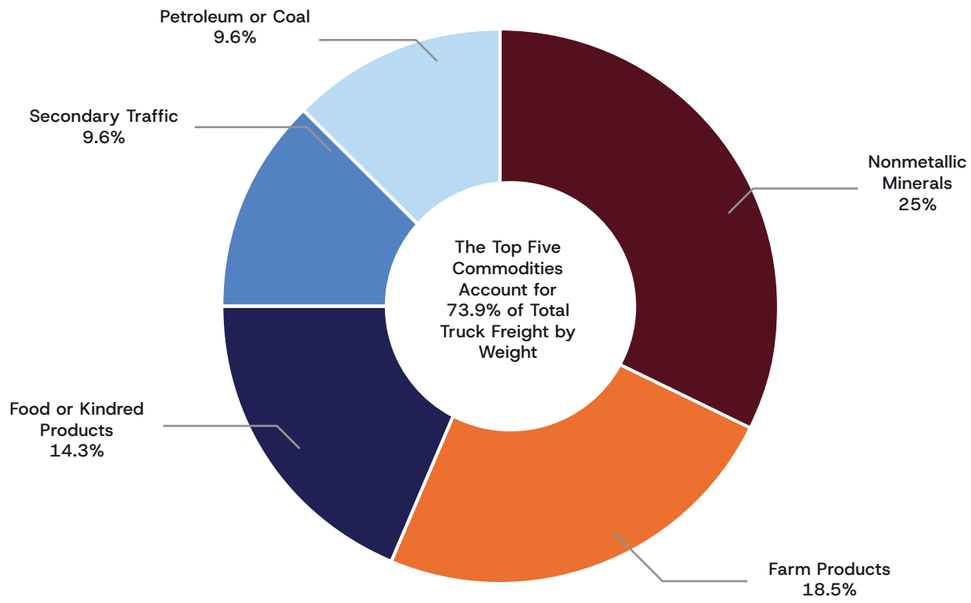
Figure 12 – Truck Cargo Flows, 2023



Source: GFT Analysis of Transearch Data, 2023.

[25]Transearch, 2023.

Figure 13 – Top Five Commodities by Weight (Percent) for Truck Freight, 2023



Source: GFT Analysis of Transearch Data, 2023.

Bottlenecks

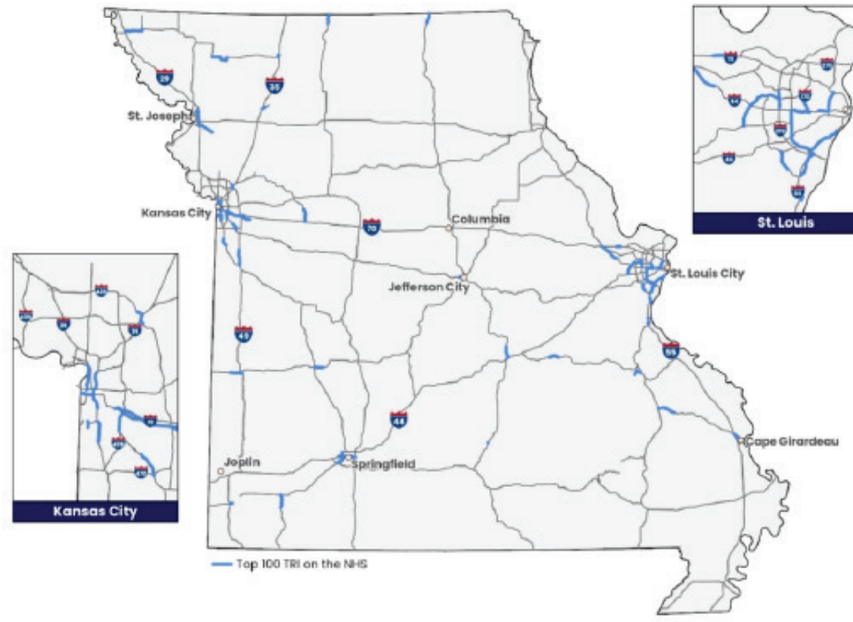
The American Transportation Research Institute (ATRI) publishes an annual report evaluating the top truck bottlenecks. The evaluation methodology involves comparing an assumed free-flow speed of 55 mph to the measured truck speed, then multiplying the difference by the hourly vehicle volume to obtain an hourly freight congestion value. The total freight congestion value is the summation for 24 hours in the day. Missouri has two locations listed in the top 100 truck bottlenecks: I-64/I-55 at I-44 in St. Louis and I-70/I-670 at U.S. 71 in Kansas City. While informative, the congestion value does not measure reliability, a key factor for freight shippers when planning routes for cargo.

The FHWA measures bottlenecks through six different indicators. The industry standard for measuring freight bottlenecks is the Truck Reliability Index (TRI), which compares the 95th percentile travel time to the 50th percentile travel time for specific times of the day.[26] The

[26]Truck Reliability Index is also known as Truck Travel Time Reliability Index (TTTRI).

TRI scores begin at one, indicating a perfectly reliable system and scores greater than one indicating an unpredictable system. However, reliability does not indicate free-flow traffic. For example, a roadway can be heavily congested, but if it is consistent and predictably congested, it will have a favorable TRI score. **Figure 14** shows Missouri NHS segments included in the top 100 bottleneck locations based on TRI scores. **Table 20** lists the top 10 bottlenecks with congestion cost and Freight Analysis Framework (FAF) commodity values. A full list of the top 100 bottlenecks is included in **Appendix A**.

Figure 14 – Missouri National Highway System Segments with Top 100 Truck Reliability Index Scores



Source: GFT Analysis of FHWA Bottleneck Tool, 2025.

Table 20 – Top 10 Truck Reliability Index Bottlenecks on the National Highway System in Missouri

Rank	Truck Reliability Index Value	Roadway	District	Congestion Cost	Freight Analysis Framework Value
1	3.16	I-670	Kansas City	$2.4M	$28.2B
2	2.33	U.S. 169	Northwest	$1.4M	$1.2B
3	2.22	I-64	St. Louis	$4.5M	$29.2B
4	2.08	U.S. 169	Northwest	$1.8M	$1.2B
5	2.07	U.S. 61	St. Louis	$0.2M	$0.4B
6	1.89	I-70	Kansas City	$5.1M	$44.1B
7	1.82	I-270	St. Louis	$2.5M	$32.5B
8	1.77	U.S. 40	Kansas City	$0.1M	$0.4B
9	1.77	U.S. 50	St. Louis	$0.1M	$2.2B
10	1.72	MO-72	Southeast	$0.1M	$1.1B

Source: GFT Analysis of FHWA Bottleneck Tool, 2025.

FHWA tracks interstate truck travel through its Truck Travel Time Reliability Index (TTTRI), with each state establishing a two- and four-year target and a goal of all states trending to a value of 1.00.[27] Missouri has a target TTTRI of 1.45, with the most recently reported TTTRI of 1.23 in 2022 compared to 1.30 in 2019. Based on this metric, Missouri's interstates are more reliable than Illinois, Oklahoma, Tennessee and Kentucky, while slightly less reliable than Iowa, Nebraska, Kansas and Arkansas.

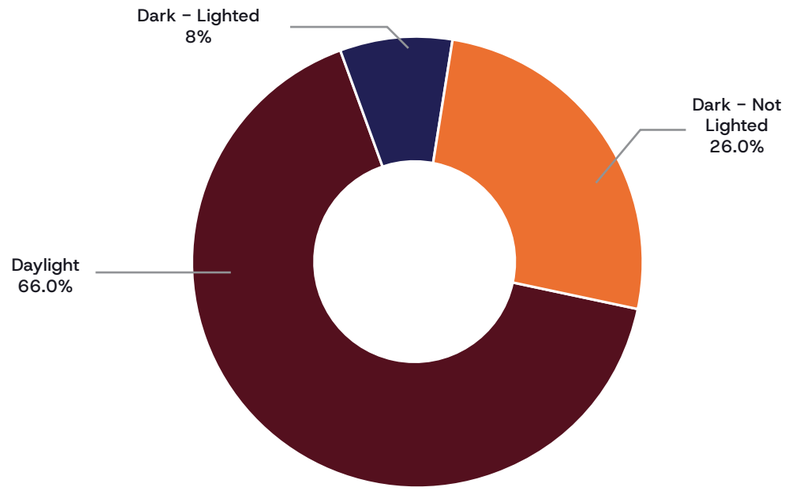
Safety

The Missouri State Highway Patrol (MSHP) manages the Missouri Crash Analysis Reporting System (MCARS), which is a comprehensive resource of traffic crashes. Highway freight-related crashes include those that involve a single truck, a combination of trucks and personal

[27]FHWA, "Transportation Performance Management," accessed October 6, 2025, https://www.fhwa.dot.gov/tpm/reporting/state/state.cfm?state=Missouri.

vehicles and/or trains. Per the MCARS, there were 136,838 total crashes in Missouri in 2023, of which 15,453 (11.30%) involved a Commercial Motor Vehicle (CMV). CMVs are only slightly overrepresented in the expected share of fatalities with 130 (13.10%) fatalities in 2023. A summary of light conditions at the time of fatal CMV crashes is provided in **Figure 15**.

Figure 15 – Light Conditions for Fatal Commercial Motor Vehicle Crashes, 2023



Source: GFT Analysis of MHSP data, 2023.

When compared to 2019 data, the 2024 total number of crashes involving CMVs decreased by 1.97% and fatal crashes decreased by 2.42%. This indicates safer operations, thanks to Missouri's multi-disciplined approach to achieving safer roads through education, public policy, enforcement, engineering and emergency response.

Existing Performance Metrics

The highway condition and performance assessment provides a snapshot of current assets. The assessment measures pavement and bridge condition, congestion and roadway safety factors that highlight how the system is performing.

Highway performance is guided by the six SFRP goals: stewardship, safe, prosperous, reliable, connected and innovative. The new goals and their associated metrics, are described in the **Goals, Objectives and Performance Metrics chapter.**

Rail

Freight trains are a vital component of Missouri's multimodal transportation network, providing cost-effective, long-haul movement of bulk goods, manufactured products and intermodal containers, while also sharing corridors with passenger train services. This section examines the condition and performance of Missouri's rail system, including bottlenecks, LOSand safety considerations.

Overview

Missouri consistently ranks among the top rail states in the nation, carrying the fourth-largest volume of freight tonnage in the country. In 2023 alone, 7.30 million railcars carried 344.90 million tons of freight valued at $663 billion, representing nearly 39.20% of the total value of goods shipped in the state.[28]

Missouri has the 11th-largest rail network in the U.S., with approximately 3,800 miles of track (in addition to 2,500 miles of railyard track) and more than 6,500 public and private highway-rail crossings (4,381 public and 2,183 private). The state is served by 20 freight railroads, including five Class I carriers: Burlington Northern Santa Fe Railway (BNSF), Canadian Pacific Kansas City (CPKC), CSX, Norfolk Southern (NS) and Union Pacific Railroad (UP). Further, 15 short line railroads maintain 566 miles of track, providing critical first- and last-mile service to rural shippers and local industries. Collectively, these railroads moved 30% of all freight in Missouri in 2023 and volumes are projected to increase in the future.

Additional Considerations: Military Vehicle Size, Weight and Infrastructure Needs

Military freight movements often involve oversized and overweight vehicles, including tanks, armored personnel carriersand heavy transport equipment. Missouri's infrastructure planning must provide adequate pavement strength, bridge load ratingsand route clearances to support movement of these vehicles. Strategic Highway Network (STRAHNET) and Strategic Rail Corridor Network (STRACNET) routes are prioritized for investment to maintain these capabilities. In addition, MoDOT's Freight and Highway Safety Divisions coordinate with the MSHP to streamline oversize/overweight permitting processes for military convoys and to manage temporary closures or route adjustments during deployment activities.

[28]MoDOT,"Missouri Highway-Rail Grade Crossing State Plan," 2022, https://www.modot.org/sites/default/files/documents/MoDOT_SAP_JAN_2022_REV0927.pdf.

Freight trains are a vital component of Missouri's multimodal transportation network, providing cost-effective, long-haul movement of bulk goods, manufactured products and intermodal containers, while also sharing corridors with passenger train services. This section examines the condition and performance of Missouri's rail system, including bottlenecks, LOS and safety considerations.

The state's rail infrastructure extends beyond mainline tracks, encompassing thousands of highway-rail grade crossings, active and inactive spurs and shared freight-passenger corridors. This extensive rail system provides a foundation for Missouri's economy and workforce.

Rail Freight

Rail carries the second largest share of goods in Missouri by both weight and value. Kansas City and St. Louis anchor this rail system as nationally significant hubs, ranked the second- and sixth-largest rail transportation centers in the nation, respectively, with concentrations of key intermodal and switching facilities.[29] These hubs connect Missouri to domestic shippers, Canadian and Mexican trade partners and global markets through ocean ports. Railroads support industries such as agriculture, chemicals, mining and automotive manufacturing, while ensuring efficient connections between producers and consumers. In 2023, around 345 million tons of rail freight moved in Missouri, reflecting 30% of all freight movement. This freight volume is forecast to increase in 2043 to 356 million tons, but the relative share is forecast to decrease slightly to 27%.

In 2022, Missouri ranked sixth nationally in freight rail employment, emphasizing the sector's economic footprint on Missouri freight movements.[30] **Figure 16** shows the Missouri rail freight network and Figure 17 shows the top five commodities by tonnage transported via rail in 2023.

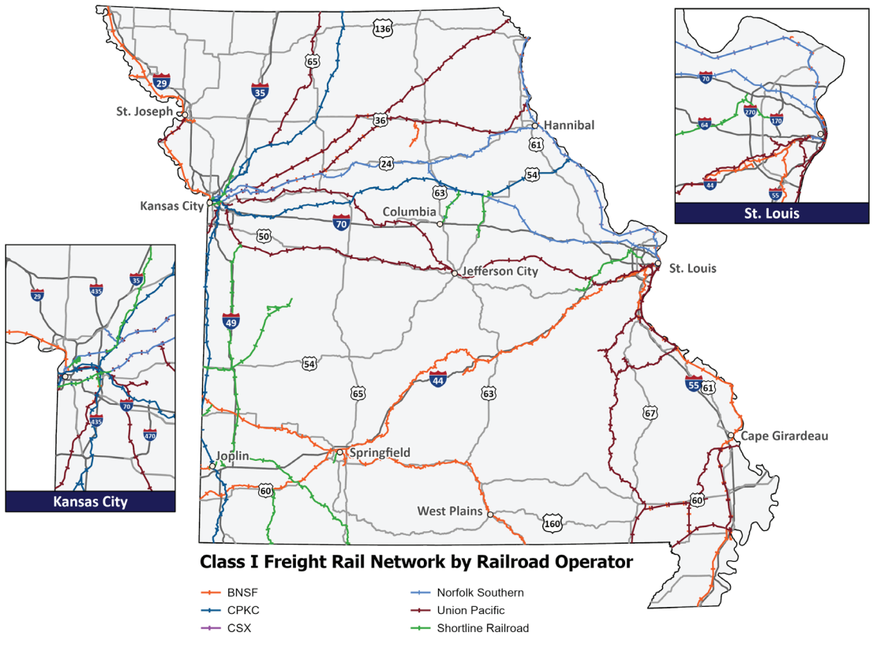


Source: MoDOT

[29]MoDOT, "Freight Railroads," accessed October 6, 2025, https://www.modot.org/freight-railroads.

[30]Association of American Railroads, "Missouri State Fact Sheet, 2023," https://www.aar.org/wp-content/uploads/2025/01/AARMissouri-State-Fact-Sheet.pdf.

Figure 16 – Missouri Rail Freight Network

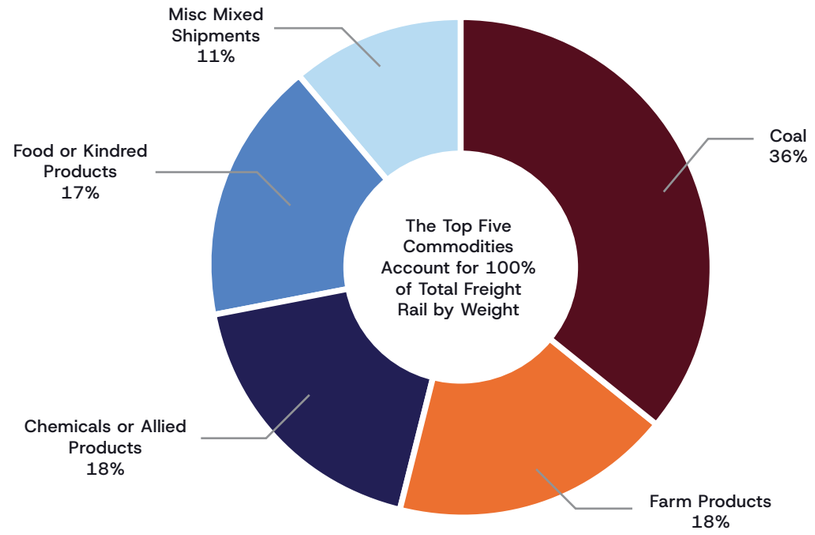


Source: MoDOT, Freight Railroads, 2025.



Source: MoDOT

Figure 17 – Top Five Commodities by Weight (Percent) for Freight Rail, 2023



Source: GFT Analysis of Transearch Data, 2023.

Level of Service

Understanding rail system performance in Missouri requires both quantitative measures of capacity and qualitative input from rail carriers. While LOS is not defined uniformly across the rail industry, carriers in Missouri generally assess system performance through data such as operational restrictions, volume-to-capacity balance and intermodal terminal congestion.

Discussions with Class I operators highlighted recurring bottlenecks in urban areas, such as Kansas City, St. Louis and Sedalia. Several railroads highlighted that much of their traffic in Missouri is passing through rather than having an origin or destination within the state, emphasizing the state's strategic role in national freight corridors. NS, UP and CPKC all stressed that performance issues in Missouri can affect service well beyond state lines. Railroads also noted that intermodal and yard congestion, low-profile crossings and bridge clearance limitations can create localized constraints that affect throughput. Railroad stakeholder feedback emphasized that LOS is ultimately reflected in service reliability to customers and that coordination with MoDOT on project prioritization and early planning is critical to addressing capacity constraints before they become more costly chokepoints, as further discussed in the Bottlenecks/Chokepoints section below. Class I railroad stakeholders identified specific locations where freight mobility and safety concerns negatively impact operations and LOS, as summarized in **Table 21**.

Table 21 – Rail Chokepoints Identified by Stakeholders

Location	Freight Mobility/Safety Concern
Grain Valley and Nowell	Blocked crossings caused by sidings intersecting major roadways; need for siding relocation to improve freight and community mobility.
Various Locations	Railroad-owned highway overpasses present maintenance and jurisdiction challenges; slow orders impact reliability.
High Hill/I-70	Bridge strike due to lack of vertical clearance created major infrastructure failure; resulted in rail rerouting and interstate closure, disrupting both freight and highway mobility.
Hannibal Area	River crossing capacity constraints create operational challenges.
Pevely Crossing, MO (DOT 445875R)	Low-profile crossing design causes vehicles to get stuck; creates recurring blockage and safety risks.
NuCor Steel near Sedalia (Washington St.)	Increased freight and passenger traffic at grade crossing; safety risks for adjacent school and housing; bridge constraints limit emergency vehicle access.
Southwest Ave. Bridge, DeSoto Sub (St. Louis)	Vertical clearance limitations; bridge upgrades needed to support freight efficiency.
Missouri River Runner Route	Corridor capacity enhancements and siding expansion needed to support freight and passenger mobility.
Independence Ave. (Kansas City)	Grade separation functions adequately currently; insufficient track capacity for future growth.
Springfield	Chokepoint coming in and out of intermodal facilities in the area.

Source: GFT Discussions at Rail Stakeholder Meetings.

Bottlenecks/Chokepoints

Railroad bottlenecks, commonly referred to as “chokepoints,” are locations along the freight rail network that constrain efficiency and contribute to the delay in the movement of goods. These chokepoints can be broadly categorized into two types: structural and operational. Structural chokepoints include physical constraints, such as low-clearance bridges and track segments with weight limits or slow orders. Operational or congested chokepoints arise from issues like limited capacity at intermodal yards, scheduling conflicts or shared-use corridors where freight and passenger trains compete for track time.

Structural Chokepoints

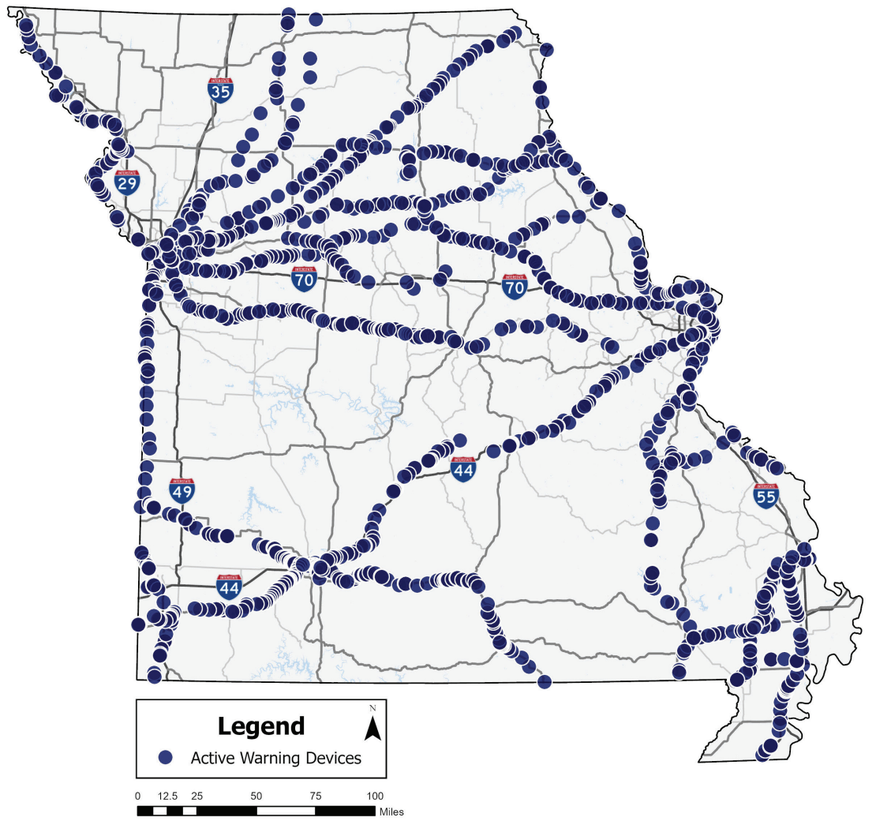
- **Low-Clearance Areas and Bridges with Size Restrictions:** Bridges can lead to chokepoints by limiting capacity through slow orders as bridges age, limited ability to add additional trackage and height restrictions. Both UP and BSNF provide guidance on the permanent vertical clearance under a structure, with the minimum allowable clearance being 23 feet 4 inches (UP) or 23 feet 6 inches (BNSF).[31]
- **Slow-Order Tracks:** Permanent slow-order track segments require trains to slow down below normal operating speed, disrupting scheduled movements and increasing total travel time. Because trains spend more time traversing the slow-order segment, fewer trains can move through that segment, creating a bottleneck effect. This effect can be exacerbated in already congested areas, such as near intermodal facilities or on shared corridors.
- **Weight-Limit Tracks:** The industry standard maximum railcar weight, including the weight of commodities and the railcar, is 286,000 pounds. Weight-restricted segments limit the flow of higher-capacity trains and can create chokepoints, especially in otherwise high-capacity corridors or near terminals and interchange points. While most of Missouri’s rail freight network can accommodate heavy axle railcars, there are a few segments with a weight restriction. Additionally, the short line rail carriers noted multiple segments with less than the 286,000-pound capable rail, which can limit their ability to serve customers.

[31]BNSF, “UP - BNSF Railway Guidelines for Railroad Grade Separation Projects,” published January 5, 2016, https://www.bnsf.com/bnsf-resources/pdf/in-the-community/uprr-bnsf-joint-guidelines-railroad-grade-separation-projects.pdf.

Operational Chokepoints

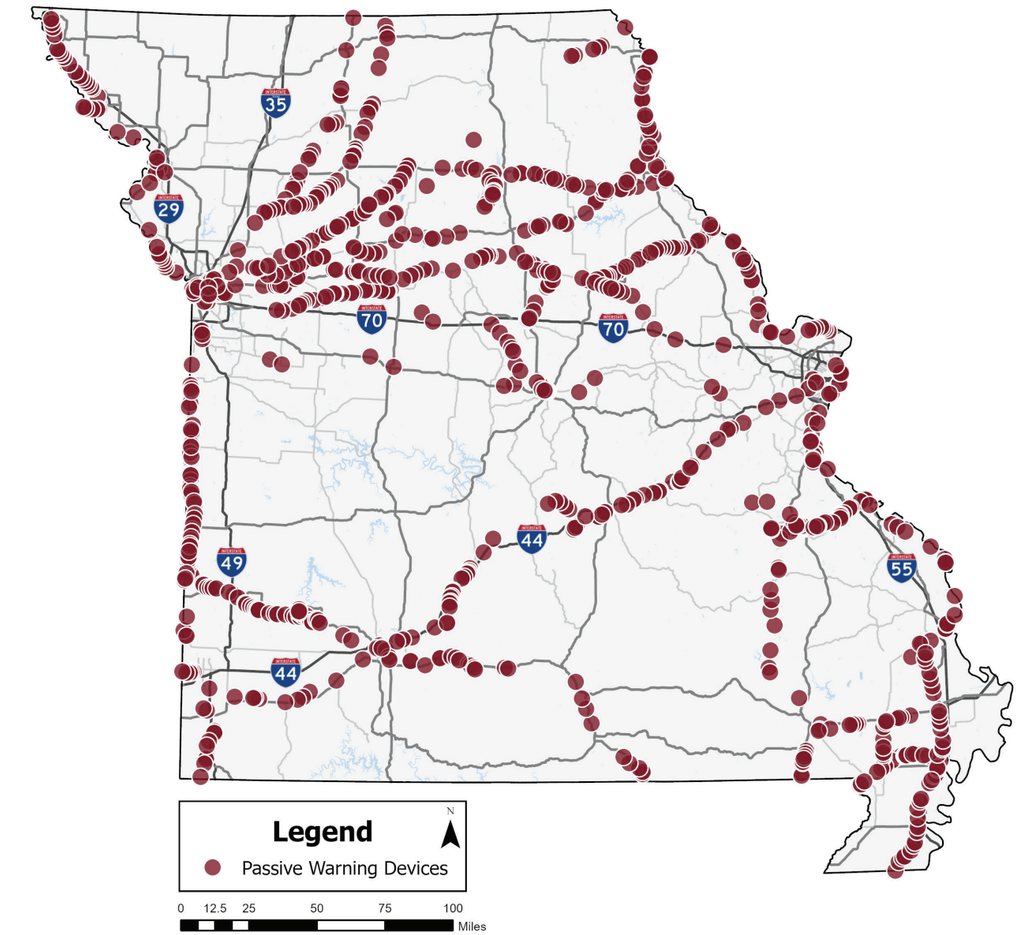
☾ **At-grade Crossings:** Trains often reduce speed when approaching at-grade crossings in populated or high-traffic areas, increasing overall travel time and reducing network efficiency. These crossings also risk being occupied, which can disrupt both rail and truck freight movement. While a single crossing may have minimal impact, the cumulative effect of multiple at-grade crossings can create significant chokepoints that constrain capacity and delay freight flow. **Figure 18** and **Figure 19** illustrate the density of active and passive warning at-grade crossings across Missouri, respectively. This highlights areas of higher concentration and safety features that can increase the potential for delays and operational disruption.

Figure 18 – Active Warning At-Grade Crossings



Source: GFT Analysis of Federal Railroad Administration (FRA) Crossing Inventory Data, 2025.

Figure 19 – Passive Warning At-Grade Crossings

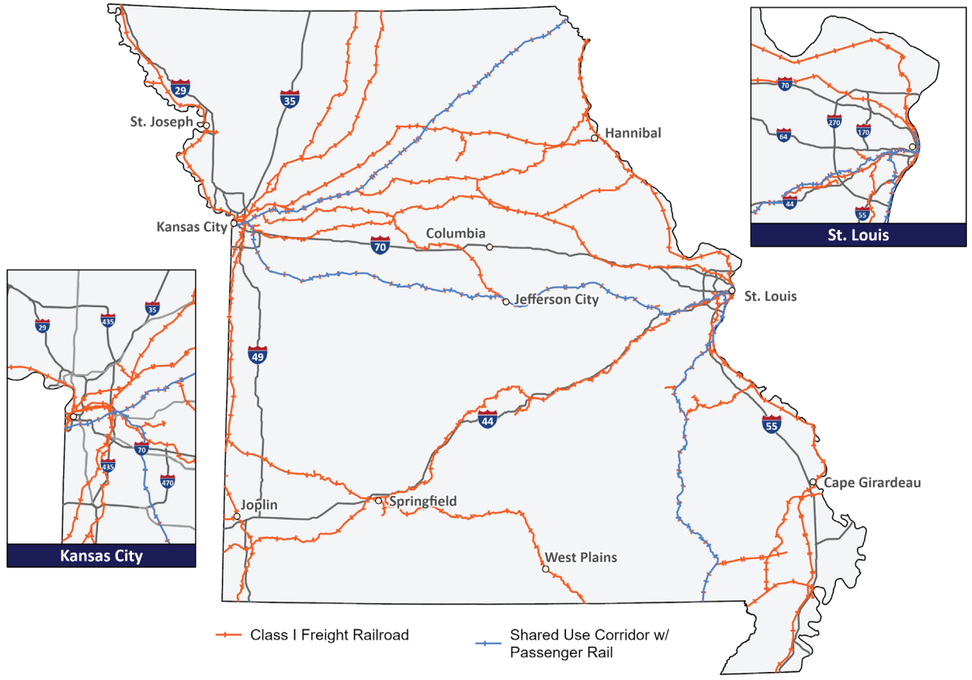


Source: GFT Analysis of FRA Crossing Inventory Data, 2025.

Shared-Use Corridors: Competing interest between freight and passenger rail can pose operational challenges along shared use corridors. Four passenger routes exist in Missouri: the Texas Eagle, Southwest Chief, Lincoln Service and the Missouri River Runner. Passenger rail generally requires strict on-time performance windows, which can constrain freight movement and reduce available capacity for heavier or slower trains. These operational restrictions increase the likelihood of service delays and can create chokepoints. **Figure 20** depicts shared-use rail corridors in Missouri.

Operational Challenges: A number of unexpected operational challenges can also contribute to the presence of chokepoints. Delays at interchange points can occur when traffic volumes exceed the handling capacity of junctions. Railyards and intermodal facilities can become congested when inbound volumes exceed processing capacity. Other circumstances, such as documentation issues or misplaced railcars, can delay individual shipments.

Figure 20 – Shared-Use Rail Corridors



Source: FRA, 2025.

Safety

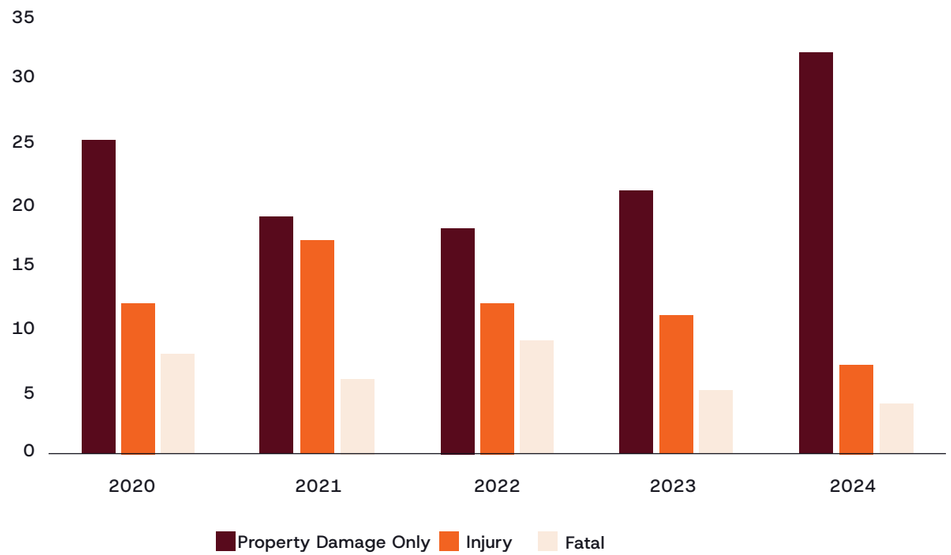
The safety of all who use Missouri's transportation network is MoDOT's number one priority. Rail safety performance is a critical factor in evaluating both operational reliability and public risk. System characteristics, such as the design and level of protection at grade crossings and public awareness about rail safety, directly influence outcomes. Active Grade Crossings have active warning and control devices, such as bells, flashing lights and gates, in addition to passive warning devices, such as crossbucks, yield or stop signs and pavement markings. Passive Grade Crossings have only passive warning devices. Active warning and control devices can help improve the safety of at-grade rail crossings and MoDOT strongly supports the installation of active warning systems at high-risk locations. However, conversations with Class III railroads indicate that limited financial resources to maintain the active warning system often prevent these short line operators from making necessary upgrades. As emphasized in rail safety discussions with Class I railroads, "the safest crossing is a closed crossing."[32]

Highway-rail at-grade crossings represent points of mode and user conflict carrying inherent risks, such as collisions, occupied crossings, trespassing and disrupted access to emergency services. The public reports when a train is blocking an at-grade crossing, revealing impacts to train arrivals, emergency access, public mobility or freight delivery. Since 2020, there have been 2,764 blocked-crossing reports in the state of Missouri. The majority of these incidents involved UP trains (60%), followed by BSNF (19%). Nearly 25% of these crossings were blocked anywhere from one hour to more than one day. While blocked crossings were lowest in 2020, likely due to a decrease in road users, a steep decrease of 73% was observed in blocked crossing reports since 2021, reflecting the collaborative focus of the railroads and MoDOT to identify solutions for this issue.

Missouri maintains 3,311 public at-grade highway-rail grade crossings, many of which are located on key freight corridors in both urban and rural areas. Over the past five years, there were a total of 59 injuries and 32 fatalities at at-grade crossings, as shown in **Figure 21**. In 2023, there were 11 injuries and 4 fatalities, a 14% decrease and 33% increase, respectively, from 2019. These numbers have remained consistent, except in 2022 when a truck collided with an Amtrak train at an at-grade crossing causing the train to derail and leading to 4 fatalities and 123 injuries.

[32]GFT's Railroad Stakeholder Meeting Conversation, 2025.

Figure 21 – Public Highway-Rail Grade Crossings Incidents by Severity, 2020-2024



Source: MoDOT, 2025.

To mitigate safety concerns and improve outcomes, Missouri participates in a range of activities, including:

- **Missouri Highway-Rail Grade Crossing State Action Plan (SAP):** The SAP identifies highway-rail and pathway-rail grade crossings that have experienced recent incidents and identifies specific strategies for improving safety at grade crossings.
- **Education and Outreach:**
  - Rail Safety Week: Missouri promotes education and messaging about highway-rail safety during Rail Safety Week, an industry-led initiative focused on promoting rail safety during a dedicated week in June.
  - Operation Lifesaver: Missouri adopted the Operation Lifesaver program, a non-profit organization committed to preventing collisions, injuries and fatalities on railroad tracks and at highway-rail grade crossings. Missouri Operation Lifesaver promotes rail safety through public awareness campaigns and education initiatives.

- **Funding Programs:** MoDOT receives federal and state funding to support investments in highway-rail grade crossing safety improvements through programs such as the Railway-Highway Crossing Program (Section 130) and the Grade Crossing Safety Account (GCSA). In 2023, Missouri allocated $50 million from the general revenue fund to address passive rail crossings across the state.

Existing Performance Metrics

The condition and performance assessment of rail underscores the importance of Missouri's freight and passenger rail system in supporting industry, safety and mobility. The performance metrics described in the **Goals, Objectives and Performance Metrics** chapter will be used to assess the condition and performance of the rail freight system.

Ports and Waterways

Missouri's rivers provide a cost-effective and energy-efficient freight option, playing a role in reducing highway congestion by diverting heavy loads from roadways. This section reviews the condition of the state's port and waterway system, key chokepoints, safety and regulatory issues and the adequacy of existing metrics to measure both the economic and systemwide benefits of waterborne freight.

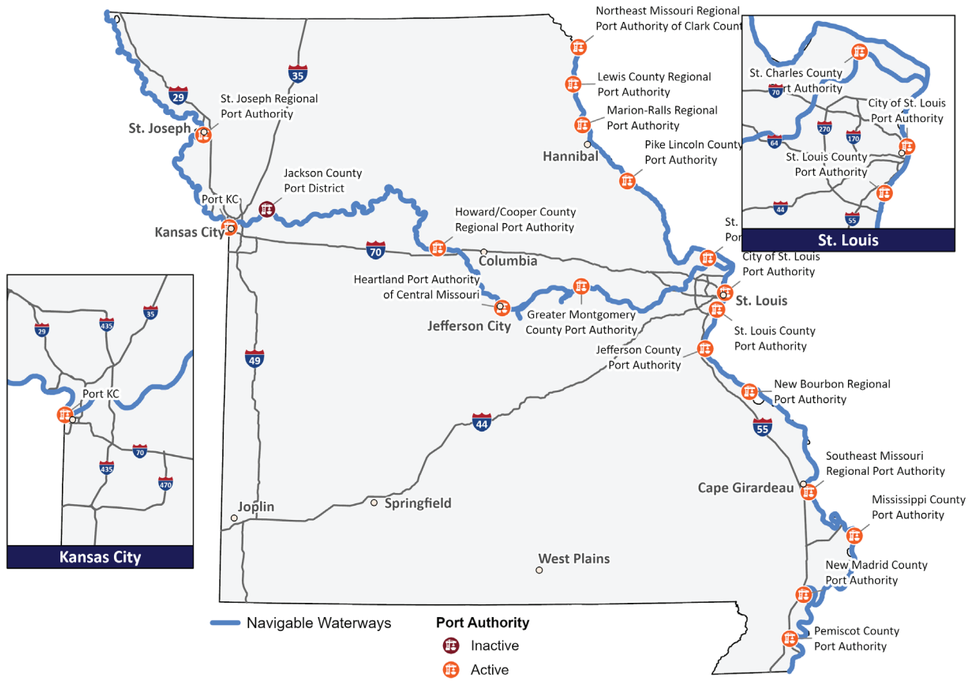
Overview

An annual average of $19.20 billion in cargo is transported on waterways in or adjacent to Missouri.[33] The state has 1,050 miles of navigable rivers, including almost 500 river miles of the Mississippi River and over 550 river miles of the Missouri River. Missouri statutes allow for the formation of port authorities. MoDOT's waterways unit assists cities and counties in forming port authorities to foster local economic development. MoDOT also assists in capital and administrative funding for public port authorities, along with other technical assistance.

The 19 public port authorities and more than 200 private terminals moved 5% of the state's total freight onto or off the Missouri and Mississippi Rivers, reducing the number of trucks on the roadways by more than 2 million. Missouri's public port authority locations are shown in **Figure 22**.

[33]Transearch, 2023.

Figure 22 – Missouri Public Port Authorities and Navigable Waterways



Source: Data from MoDOT, 2025.

Missouri has four nationally designated marine highways, which generally shadow the interstate highway system along the Mississippi and Missouri Rivers. Designated marine highways can receive preferential treatment for federal assistance from the U.S. Department of Transportation's (USDOT's) Maritime Administration (MARAD). The marine highway system has been designed 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 within the surface transportation system.

Marine highways serving Missouri, displayed in **Figure 23**, include the following:

- M-29 consists of the Missouri River from Kansas City to Sioux City, Iowa.
- M-70 consists of the Missouri River from Kansas City to St. Louis.
- M-35 includes the Upper Mississippi River from the Twin Cities to St. Louis.
- M-55 includes the Illinois River from Chicago to St. Louis, then the entirety of the Mississippi River downriver (south) of St. Louis to the Gulf.

Figure 23 – U.S. Marine Highway Routes



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

Missouri also has four toll ferry services that cross the Mississippi River: Golden Eagle, Grafton, Ste. Genevieve-Modoc and Dorena-Hickman. 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 owning and maintaining the Illinois landing; the Dorena-Hickman Ferry is owned and operated by the Mississippi County Port Authority (Missouri). The locations of Missouri's ferry services are shown in **Figure 24**. These ferries often transport freight trucks, reducing the number of miles traveled on the highways.

Figure 24 – Ferry Locations and U.S. Marine Highways in Missouri

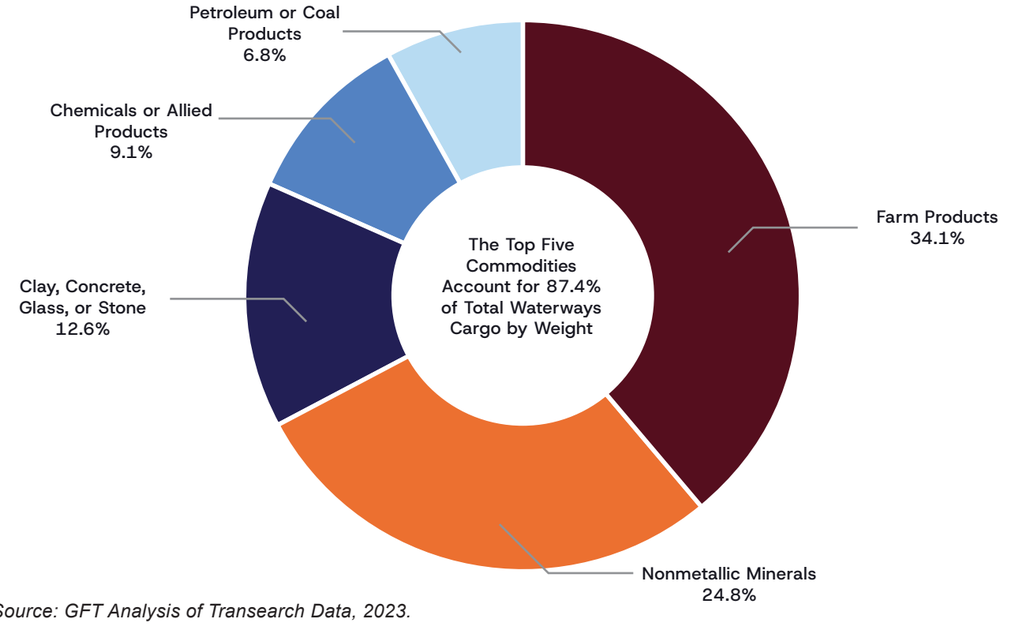


Source: MARAD, 2025; MoDOT, 2025.

Waterborne Freight

Commodities transported by barge on the Missouri River include agricultural products, fertilizers, petroleum products, road salt, aggregates and iron/steel. The top five commodities by tonnage (%) transported by barge on Missouri waterways are presented in **Figure 25**. 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.

Figure 25 – Top Five Commodities by Weight (Percent) for Waterways, 2023



Source: GFT Analysis of Transearch Data, 2023.

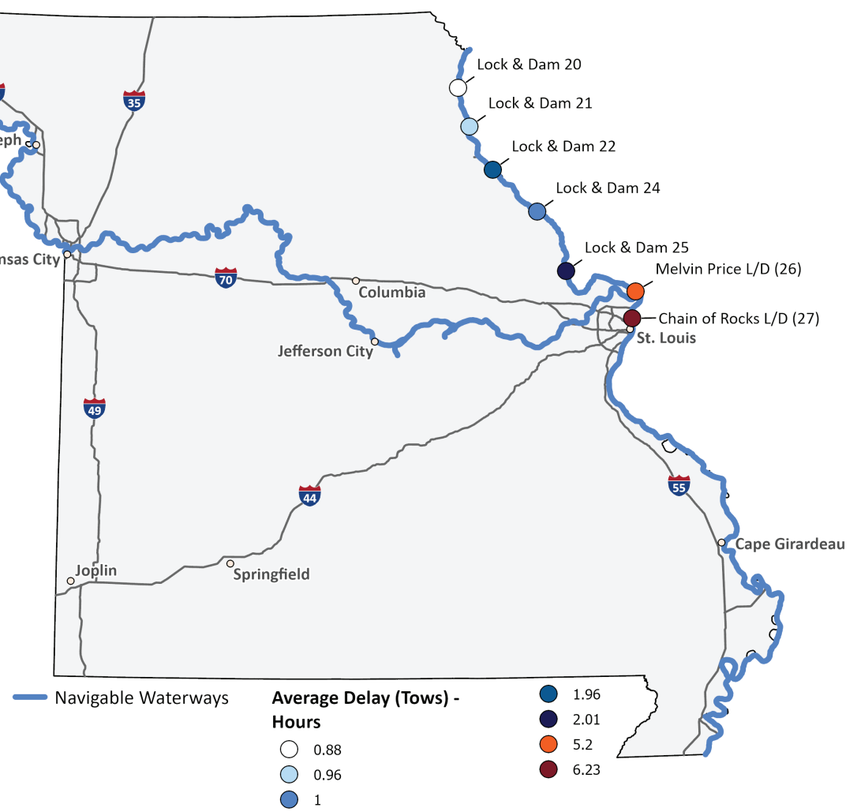
In 2023, 51.10 million tons of freight were moved on waterways through or adjacent to Missouri, of that, 32 million tons of freight originated on Missouri waterways. By 2043, Missouri waterways freight tonnage is forecast to increase to 58.60 million tons, which is a cumulative increase of 14.50% and a compounded annual growth rate of 0.7%. The value of this freight is expected to increase to $22.60 billion by 2043, which is a cumulative increase of 17.50% over 2023 freight value. Note, this freight moves on Missouri waterways, but it does not necessarily originate or terminate at a Missouri public port or private river terminal.

Level of Service

The current average age of the seven Mississippi River locks/dams in Missouri is 77 years, or an average of 84 years when the newest lock/dam is excluded. With a design lifespan of 50 years, maintenance and repairs of the locks/dams have the potential to negatively impact barge freight mobility more frequently. When they occur, impacts are primarily in the form of delays in processing barge tows through the locks or the locks not being available at all for a period of time, either of which causes cargo owners to consider a modal shift to rail or truck.

For reference, a barge(s) and accompanying push boat are referred to as a “barge tow” in the industry. When a barge tow arrives at a lock, it is registered to the queue by the lock personnel. The USACE defines “delay” as the time a barge tow spends in the queue awaiting lockage. Based on USACE Lock Performance Monitoring System (LPMS) data, the average delay per barge tow in 2023 at each of the seven Mississippi River lock/dams in Missouri is shown in **Figure 26**.

Figure 26 – Lock Average Delay, 2023

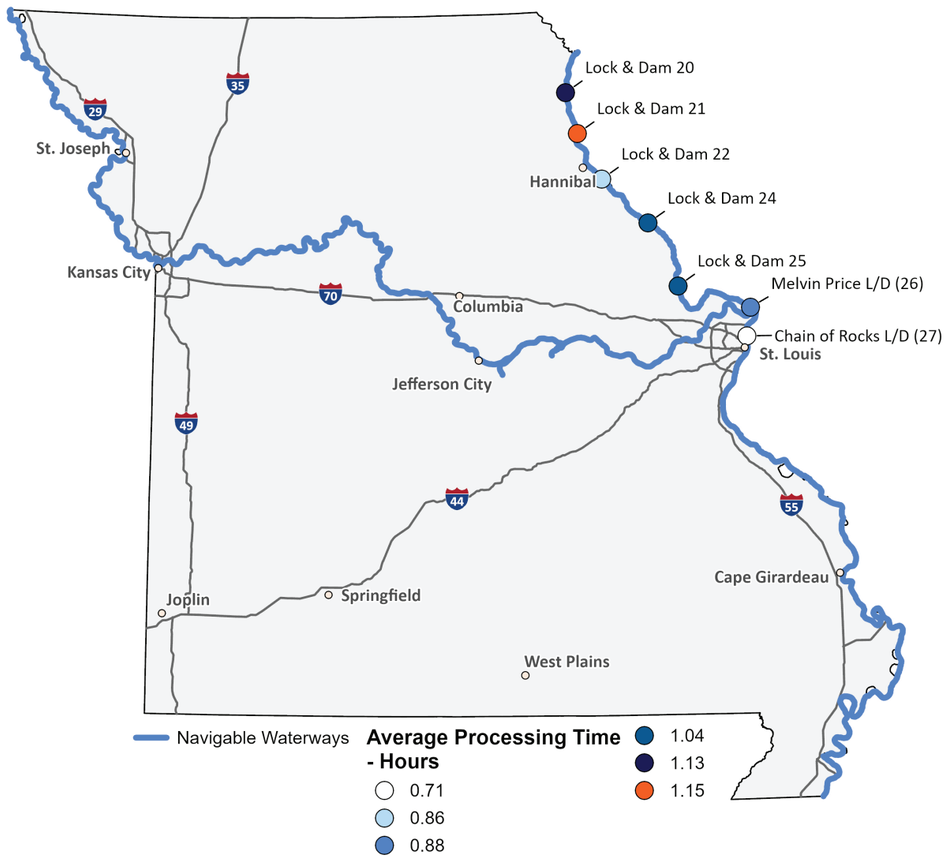


Source: USACE, Lock Performance Monitoring System (LPMS) Dataset, 2023.

As indicated, the average delay per barge tow is generally lower at upstream locks and higher at downstream locks. This is expected, as the downstream locks are effectively the bottlenecks of the system – all barge traffic with an origin upriver of St. Louis and a destination downriver of St. Louis (or vice versa) must pass through Locks and Dam 27, for example. As shown in **Figure 26**, the average delay per barge tow at Lock and Dams 20, 21 and 24 is about one hour, Lock and Dams 22 and 25 is about two hours and Lock and Dams 26 and 27 is over five hours per barge tow.

Per USACE nomenclature, lock processing time starts when a barge tow reaches the front of the queue and begins the process of “locking through.” Processing time ends when a barge tow completes “locking through” and has completely exited the lock. Based on USACE data, the average processing time per barge tow in 2023 at each of the seven Mississippi River lock/dams in Missouri is shown in **Figure 27.** As indicated, all seven of the Missouri locks had an average processing time of about one hour per barge tow.

Figure 27 – Lock Average Processing Time, 2023



Source: USACE, LPMS Dataset, 2023.

In addition to the preceding lock performance metrics, the USACE also tracks the amount of time each lock is unavailable to process barge tows (i.e., the lock is shut down). Further, the USACE tracks both scheduled and unscheduled lock unavailability time.

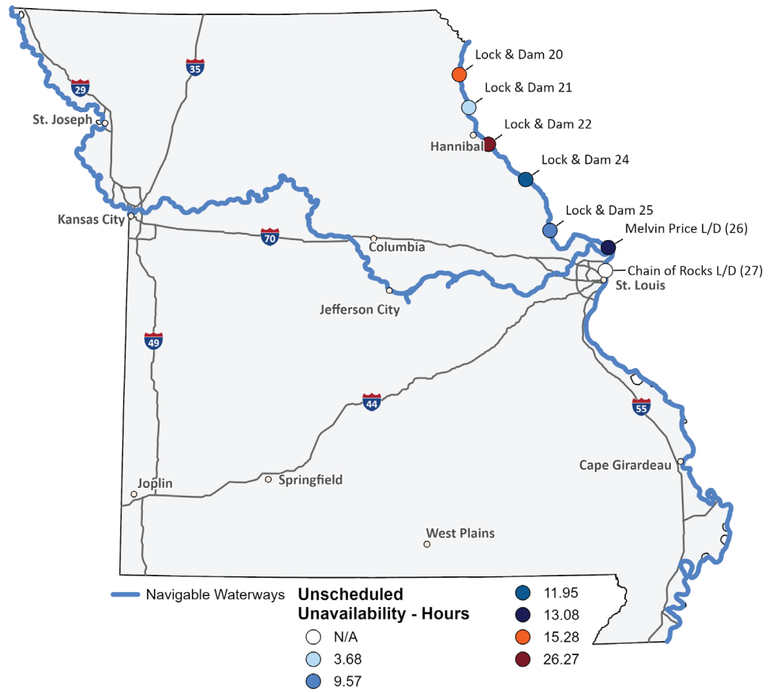
Scheduled lock unavailable time generally corresponds to planned maintenance and/or proactive repairs. The USACE minimizes the impact of scheduled lock unavailable time by disseminating notice of planned outages to barge operators in advance, allowing barge operators to plan accordingly.

However, unscheduled lock unavailability can have significant negative impacts on barge operators and freight mobility. Based on USACE data, the average unscheduled unavailable time in 2023 at each of the seven Mississippi River locks/dams in Missouri is shown in **Figure 28**. Note, unscheduled unavailable time in 2023 for Lock and Dam 27 was not available from the USACE data. Unscheduled unavailable time in 2023 for the other six locks ranged from about 4 hours (Lock and Dam 21) to over 26 hours (Lock and Dam 22), with an average of about 13 hours.



Source: MoDOT

Figure 28 – Unscheduled Lock Unavailable Time, 2023



Source: USACE, LPMS Dataset, 2023.

For reference and to add context to the unscheduled unavailability time, USACE Rock Island District locks in Missouri (Lock and Dams 20, 21 and 22) operate 24 hours per day, seven days per week during the navigation season, which is generally early March through early December and St. Louis District locks in Missouri (Lock and Dams 24, 25, 26 and 27) operate 24 hours per day, seven days per week year-round. Thus, considering the potential total operational hours, an average of about 13 hours of unscheduled unavailable time per lock is relatively low.

Extended periods of high or low river levels can have a significant negative impact on waterborne freight levels of service. During periods of high river levels, barge transportation can be impacted by vertical clearance reduction under bridges. More commonly, high river levels can also produce dangerous currents that may result in barge traffic being completely shut down for safety reasons by the USCG. During periods of low river levels, the navigation channel width and/or depth can be reduced. Narrowed channel width often results in narrower barge tows (i.e., fewer barges per tow) and reduced navigation channel depth often results in barges being light-loaded (i.e., loaded at less than full capacity) to reduce barge draft. Both

scenarios, especially when barge tows must be both narrowed and light-loaded, result in reduced system efficiency.

Another issue that can have a significant negative impact on waterborne freight levels of service is sedimentation. Particularly during periods of high river levels, sediment can be deposited in the navigation channel and the slackwater harbors in which some of Missouri's ports operate on the Mississippi River. During subsequent periods of low river levels, the built-up sediment effectively decreases the navigation channel and/or slackwater harbor depth needed for normal barge operations.

For reference, a slackwater harbor is a natural or man-made harbor area that is typically perpendicular to a river and provides an operations area generally free from river current. To maintain adequate operational depth, particularly during periods of low river levels, slackwater harbors must be dredged periodically. Maintenance dredging is typically a large expenditure for slackwater harbor ports, but without it, barges cannot be filled to maximum capacity, thus decreasing efficiency and revenue for ports and/or their tenants. In extreme cases, a slackwater harbor can become completely inaccessible without maintenance dredging.

A similar scenario is realized when sediment build-up occurs within a river's navigation channel, resulting in the need for dredging. Again, without dredging sediment that has built up in the navigation channel, it may not be feasible to fill barges to maximum capacity, thus decreasing efficiency and revenue for ports and/or their tenants. In extreme cases, a shallow area within the navigation channel caused by sedimentation could completely shut down that portion of the river to navigation. The portion of the Missouri River that traverses Missouri, as well as the portion of the Mississippi River south of the St. Louis area, relies on river training structures (dikes, revetments, etc.) to self-scour the navigation channel, maintain depths and minimize the need for dredging. For this reason, maintenance of the river training structures



Source: MoDOT

is essential to maintaining adequate navigation channel depth on the Missouri River and the portion of the Mississippi River downriver from the St. Louis area. Maintenance of river training structures and navigation channel depth/dredging is the responsibility of the USACE.

Bottlenecks/Chokepoints

The Mississippi River is free flowing with no locks and dams downriver (south) of St. Louis. Navigation on this portion of the river is generally free of the bottlenecks/ chokepoints described above and typically only impacted negatively by periods of very high or very low river levels caused by flooding or drought, respectively. However, upriver of St. Louis, Mississippi River flow and navigation channel depth is regulated by a series of 29 locks and dams and as stated previously, seven of these locks and dams span the Missouri/Illinois border.

Per the USACE, each of the seven Mississippi River locks/dams in Missouri has one lock chamber that measures 600 feet long by 110 feet wide. Each of the two most downriver locks/ dams (26 and 27) has a second lock chamber that measures 1,200 feet long by 110 feet wide, with the smaller lock chamber used as a backup during outages of the larger lock chambers. The engineering design of a second larger lock chamber is currently underway at the most downriver lock/dam that currently has only one smaller lock chamber (25). The locations and lock chamber lengths for the seven locks/dams in Missouri are shown in **Figure 29**. The smaller lock chambers limit the number of barges that can be processed during each lock cycle, forcing large barge tows to be broken apart, thus decreasing the efficiency of the system.

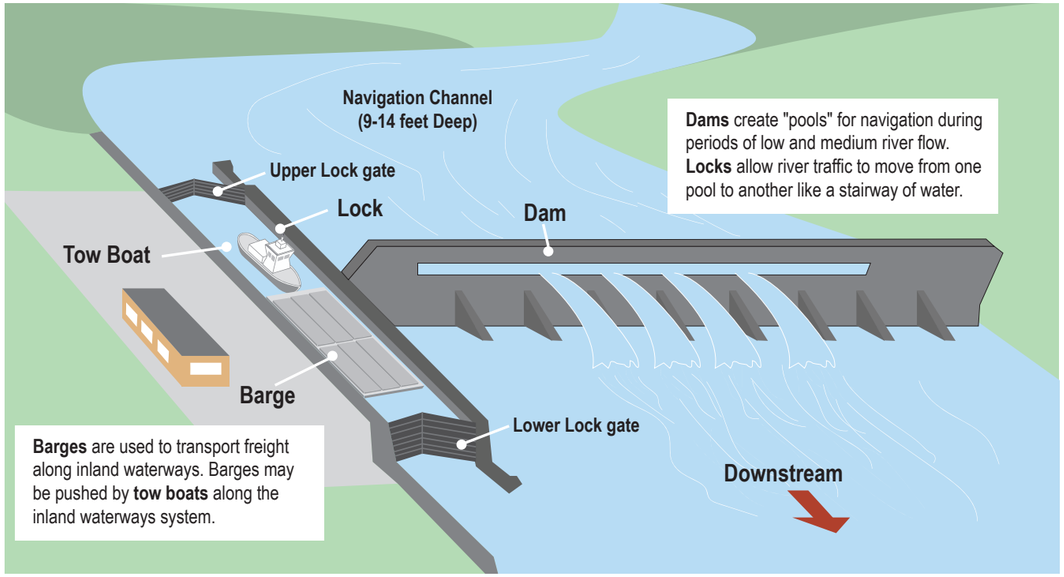


Figure 29 – Lock/Dam Locations and Lock Chamber Lengths



Source: USACE Geospatial Open Data, Locks Dataset, 2025.

According to the USACE, five of the Mississippi River locks/dams in Missouri began operations between 1935 and 1940, one began operations in 1953 and the most recently constructed lock/dam of the seven (26) began operations in 1989. Considering all seven locks/dams in Missouri, as stated previously, the average age is 77 years, or an average of 84 years when the newest lock/dam is excluded. The design lifespan of the locks/dams is 50 years, so all but the newest are well beyond their expected lifespan.

Each of the seven Mississippi River locks/dams in Missouri represent potential bottlenecks. The smaller lock chambers at five of the locks/dams are currently considered bottlenecks and decrease waterway transportation system efficiency, because they limit the number of barges that can pass through the lock at one time. Further, due to the age of this infrastructure, all seven of the Mississippi River locks/dams in Missouri can also become chokepoints when

unplanned repairs are required. These situations effectively shut down all navigation through whichever lock/dam requires repairs.

Similar to the portion of the Mississippi River downriver from St. Louis that is free of locks/dams, the portion of the Missouri River in Missouri is free of locks/dams and relies on river training structures (dikes, revetments, etc.) to maintain adequate depth in the navigation channel. For this reason, bottlenecks/chokepoints on the Missouri River in Missouri are typically only created by periods of very high or very low river levels caused by flooding or drought, respectively.

Safety

A review of available USCG data indicates only two incidents occurred on waterways in or adjacent to Missouri in the last two decades (2004 to 2024).[34] Both incidents involved the loss of life of a barge crew member when they fell overboard into the Mississippi River while transiting a lock/dam. One incident occurred in 2022 at Lock/Dam 25 and the other incident occurred in 2023 at Lock/Dam 27. Although these incidents are tragic, the low total number of incidents indicates that barge transportation on the inland waterway system is relatively safe.

Existing Performance Metrics

The ports and waterways condition and performance assessment highlights the value of ports and waterways in moving commodities efficiently and linking the state to global trade. The performance metrics described in **the Goals, Objectives and Performance Metrics chapter** will be used to assess the condition and performance of the waterborne freight system.

Aviation

Missouri's aviation system plays a strategic role in the state's freight network, moving relatively small volumes of cargo by weight but disproportionately high-value goods that support e-commerce, manufacturing and time-sensitive supply chains. Stakeholders emphasized that while aviation offers competitive advantages in speed and value, the sector continues to face infrastructure constraints, funding gaps and workforce shortages that influence overall performance. In assessing condition and performance, this section examines air cargo trends, key bottlenecks and safety considerations. The locations of Missouri's commercial airports are shown in **Figure 30**.

[34]Data from USCG, "Marine Casualty Reports," accessed August 13, 2025, https://www.dco.uscg.mil/Our-Organization/Assistant-Commandant-for-Prevention-Policy-CG-5P/Inspections-Compliance-CG-5PC-/Office-of-Investigations-Casualty-Analysis/Marine-Casualty-Reports/.

Figure 30 – Commerical Airports in Missouri



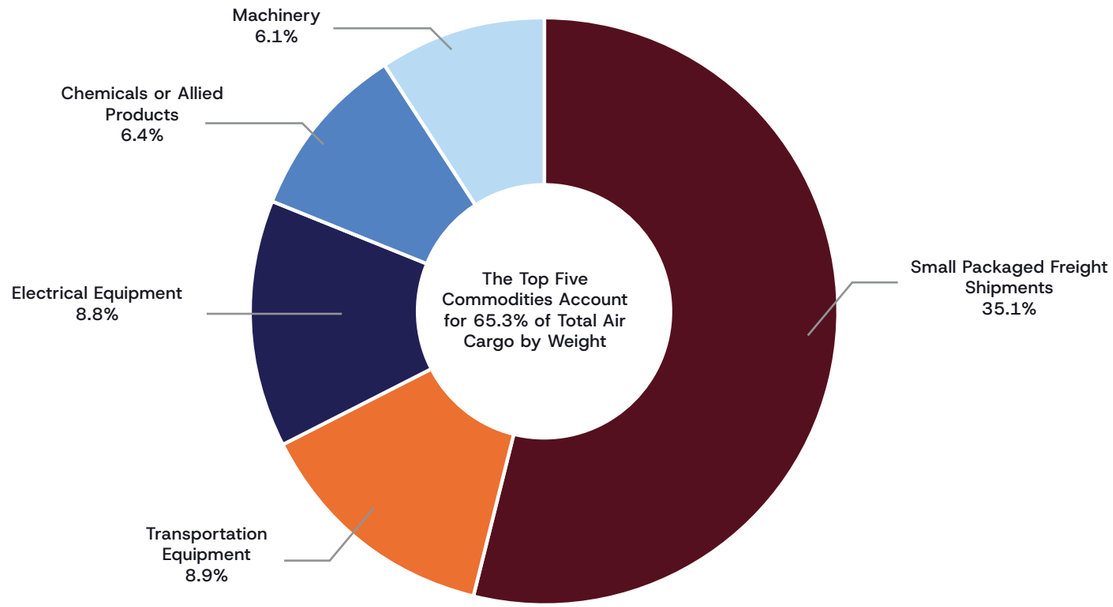
Source: MoDOT, 2025.

Air Cargo

Missouri has 120 public-use airports, with only three of those handling freight cargo. Missouri's three freight airports are Kansas City International Airport (MCI), St. Louis Lambert International Airport (STL) and Springfield-Branson National Airport (SGF), which combined support the transportation of over 400 million pounds of freight each year. STL, the region's primary cargo airport, moved 160 million pounds of cargo in 2023 for dedicated freight carriers such as UPS, FedEx, Amazon, DHL and more, as well as belly cargo moved on passenger airlines. In the same year, SGF moved 31.2 million pounds for dedicated daily freight carriers such as FedEx and UPS, whereas MCI moved 233.5 million pounds of total freight. MCI's primary cargo carriers also include FedEx, Amazon, UPS and DHL.

While the overall volume of freight moved by air in Missouri is relatively modest compared to other modes, it represents a disproportionately high value per ton. Understanding the types of goods that move by air provides additional insight into aviation's role in the multimodal system. **Figure 31** highlights the top five commodities carried by air, illustrating the concentration on high-value, time-sensitive products that depend on fast and reliable delivery.

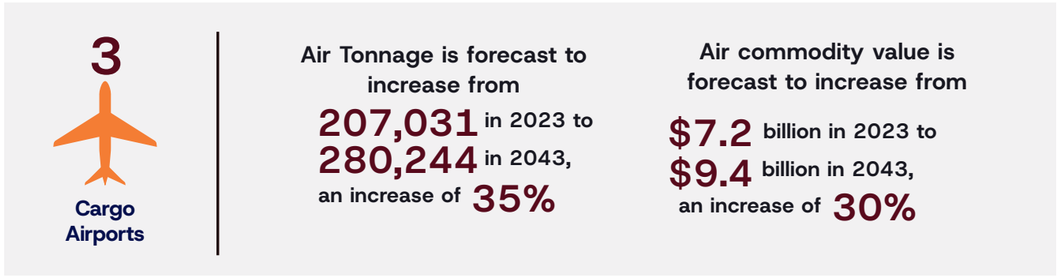
Figure 31 – Top Five Commodities by Weight (Percent) for Air Cargo, 2023



Source: GFT Analysis of Transearch Data, 2023.

As shown in **Figure 32**, according to Transearch data, air cargo is forecast to increase in value and tonnage from 2023 to 2043.

Figure 32 – Existing Facilities and Air Tonnage (2023) and Value Forecasts (2043)



Source: GFT Analysis of Transearch Data, 2023.

In 2023, SGF was ranked as the 123rd busiest airport in the U.S., STL ranked as 34th and MCI was ranked as 40th. On average, the Aviation program totals $30-35 million per year. For fiscal year (FY) 2025, MoDOT received appropriations of $98.10 million in federal funds and $38.40 million in state funds to support rehabilitation and capital projects and improvements mostly focused on the general use airports, with the three cargo airports receiving funds directly from Federal Aviation Administration (FAA).

Air Cargo Bottlenecks

Although not considered bottlenecks in a traditional sense, Missouri's air cargo sector faces several infrastructure and funding-related bottlenecks that constrain growth. The most pressing challenges include aging cargo ramps in need of major reconstruction, cargo apron areas that are already nearing capacity and access limitations to connecting rail and truck facilities. While recent investments have supported improvements at some facilities, stakeholders emphasized that funding programs, such as FAA/Air Improvement Program (AIP), often prioritize passenger-related infrastructure over cargo needs, leaving gaps in support for freight-focused projects. These constraints highlight the need for additional investment in air cargo infrastructure to meet the growing demands of e-commerce, express delivery and belly cargo operations.

Safety

There have not been any crashes in Missouri associated with major passenger or air cargo carriers. Aviation safety measures, such as crash rates or statistics, are challenging to quantify. For example, many of the aircraft that fly over the state and have an emergency or incident are not based in Missouri. Additionally, an aircraft incident over Missouri does not necessarily reflect any infrastructure or service issues in the state.

Existing Performance Metrics

The aviation condition assessment highlights the statewide importance of airports in supporting passenger travel and freight movement. The performance metrics described in **Goals, Objectives and Performance Metrics chapter** will be used to assess the condition and performance of the air freight system.

Chapter 5. Truck Parking

Trucks can operate anywhere there is a road, making them the most flexible means of transport in the nation's supply chain. Trucks move more goods in Missouri than any other mode, with 55% of all goods moved by truck in 2023, increasing to 59% by 2043.

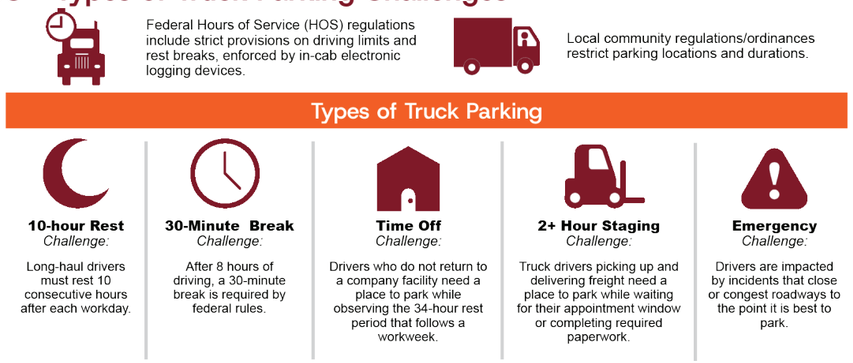
For an industry that is known for movement, it can be surprising that one of a truck driver's most critical tasks is finding a safe, convenient place to park for rest and breaks with only one dedicated parking space for every 11 trucks in the United States (U.S.), the demand for truck parking far exceeds the supply. To read the full analysis, see the **Truck Parking Analysis Technical Memorandum** and associated appendices.

Why Truck Parking is Needed:

Federal Hours of Service (HOS) regulations exist to prevent driver fatigue. They limit the time a driver can operate prior to mandatory rest periods. As a result, drivers often park well before their full hours are spent, foregoing productivity to remain in compliance, as shown in **Figure 33**.

State roadside accommodations and privately owned truck stops offer parking spaces, but drivers often find these locations filled beyond capacity. Some turn to parking on highway ramps and shoulders, local streets and other unauthorized locations.

Figure 33 – Types of Truck Parking Challenges



Source: Adapted from Texas Department of Transportation, El Paso/Far West Texas Truck Parking Action Plan, 2024.

Truck Parking Analysis

This study's data-driven approach updates Missouri's rural interstate truck parking supply and demand information. As seen in **Table 22**, 8,925 truck parking spaces were identified on Missouri's rural interstate corridors and on U.S. Route 36.

Table 22 – Missouri's Truck Parking Supply by Corridor, 2025

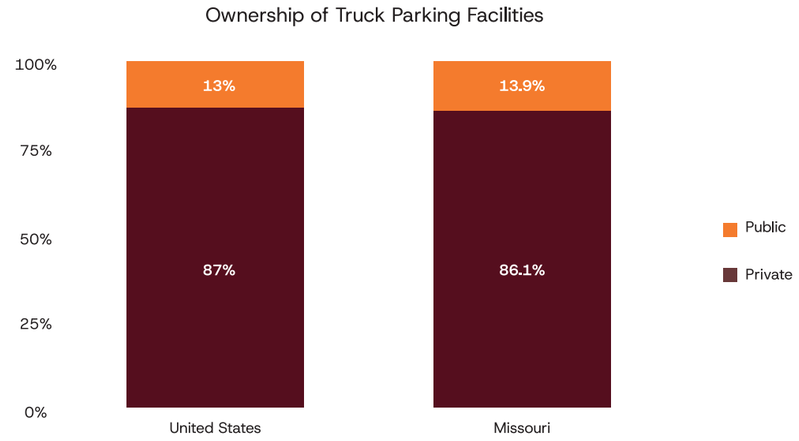
Corridor	Number of Truck Parking Facilities		Number of Truck Parking Spaces		Total Truck Parking Spaces
	Public	Private	Public	Private	
I-29	7	10	169	450	
I-35	8	11	143	521	
I-44	12	23	375	2,592	
I-49	1	15	15	877	
I-55	8	19	255	1,150	
I-57	1	2	16	124	
I-70	10	20	250	1,961	
I-155	1	0	11	0	
U.S. 36	2	0	16	0	
TOTAL	50	100	1,250	7,675	8,925

Source: GFT Analysis of MoDOT Data and Truck Parking Websites and Applications, 2025.

Privately owned truck stops provide most of Missouri's truck parking spaces. The public/private ownership split in Missouri mirrors the nationwide split. **I**n the U.S., 87% of truck parking spaces are privately owned,while that figure for Missouri's rural interstates is 86.1%, as shown in **Figure 34** and **Figure 35**.[35]

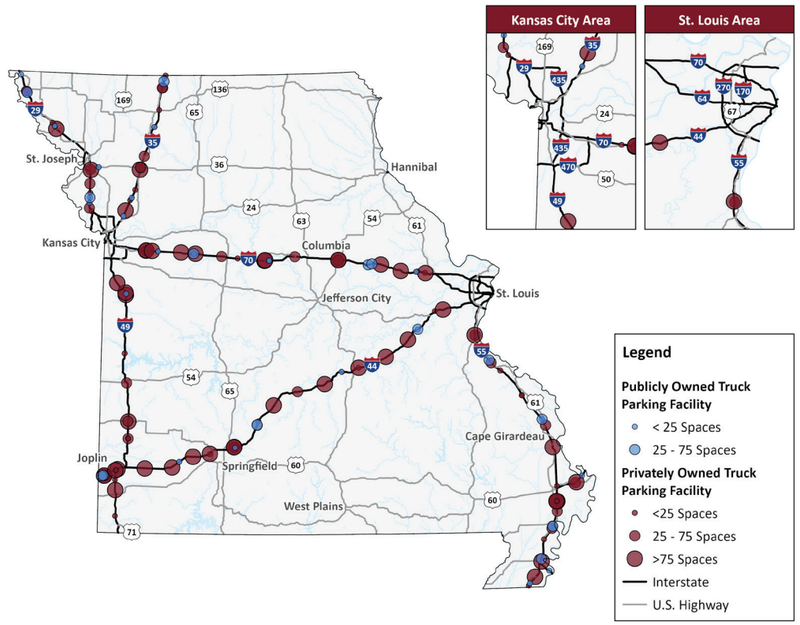
[35]Federal Highway Administration (FHWA), Office of Freight Management, "Jason's Law Commercial Motor Vehicle Parking Survey and Comparative Assessment," December 1, 2020, https://www.txdot.gov/content/dam/docs/division/tpp/actionplan-truck-parking-el-paso-west-texas.pdf.

Figure 34 – Ownership of Truck Parking Facilities in the United States and in Missouri



Source: FHWA; MoDOT, Truck Parking Websites and Applications; GFT Inventory Analysis, 2025.

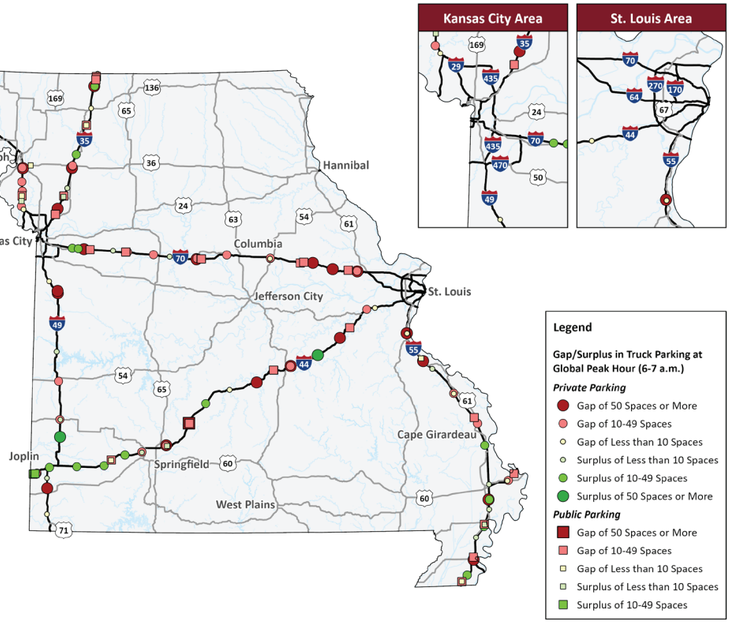
Figure 35 – Missouri's Truck Parking Supply Locations and Spaces, 2024



Source: MoDOT, Truck Parking Websites and Applications; GFT Inventory Analysis; CDM Smith Demand Analysis, 2025.

In Missouri, truck parking demand exceeds supply between midnight and 11 a.m. The peak hour of demand is 6 to 7 a.m. As depicted in **Figure 36**, at this hour, 88% of public truck parking areas are at or exceed capacity. During the peak hour at private facilities, 61% are at or above capacity. Of I-70 private parking, 85% of lots are at least 90% full.

Figure 36 – Public and Private Truck Parking Global Peak Hour Gap and Surplus

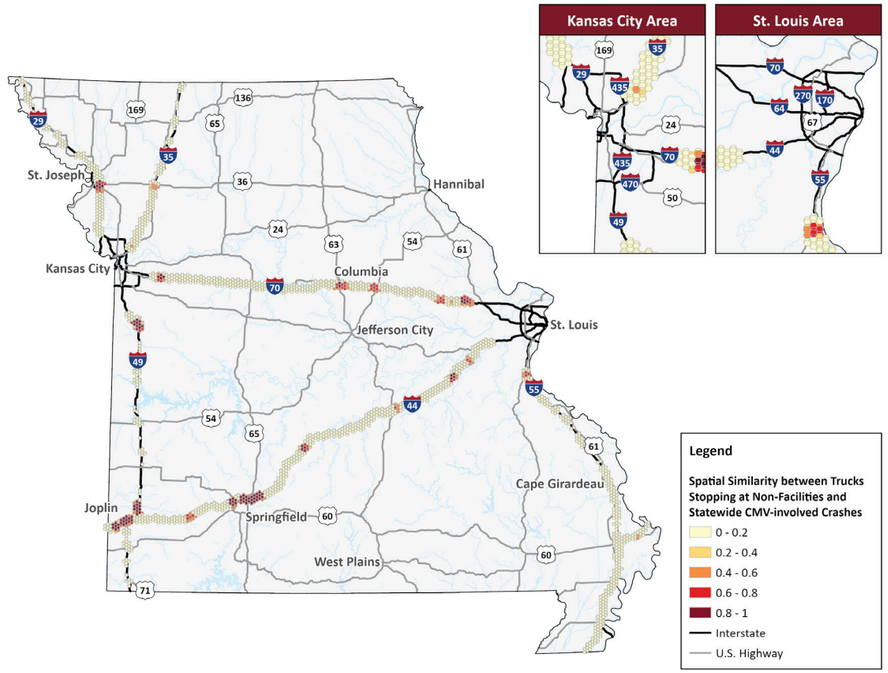


Source: MoDOT, Truck Parking Websites and Applications; GFT Inventory Analysis, 2025; CDM Smith Demand Analysis, 2025.



Safety hotspots shown in **Figure 37,** are the result of comparing the sites of crashes involving commercial motor vehicles with the locations of often used, non-facility truck parking areas such as shoulders and ramps. Where the correlation is strong, additional truck parking supply has the potential to reduce fatigue and parked truck-related crashes.

Figure 37 – Statewide Similarity of Non-Facility Parking Demand Hot Spots and 2020-2024 Commercial Motor Vehicle Involved Crash Hot Spots



Source: American Transportation Research Institute (ATRI), 2024; MoDOT Commercial Motor Vehicle (CMV) Involved Crash Data, 2020-2024; GFT Inventory Analysis; CDM Smith Demand Analysis, 2025.

Truck Parking Outreach

While data captures truck parking behavior, engaging with drivers broadens the understanding of truck parking issues. MoDOT connected with truck drivers through a web-based survey and spoke with drivers and industry experts to gather additional information and to confirm findings.



Source: MoDOT

Trends Affecting Future Truck Parking

Increasing Freight Volumes

An increasing share of the growing freight volume forecasted for Missouri indicates parking supply gaps will also increase from 875 public spaces in 2024 to 1,450 spaces in 2050 and from 2,542 private spaces in 2024 to 5,010 spaces in 2050.

Connected and Autonomous Vehicles

Connected and Autonomous Vehicles (CV/AV) technologies are rapidly advancing in the private sector and research institutions. Benefits of connected vehicle technology include safety, reliability and mobility, modernization of infrastructure and sustainability through reduced idling and eco-friendly travel choices.

If CV/AVs grow to dominate highway freight, the ability to operate on a nearly 24-hour basis could reduce demand for traditional truck parking. However, experts say that day is many years away, due to remaining technological challenges, variation among states' laws and regulations and a forecasted growth in trucking demand that could require the use of both traditional and autonomous vehicles.

Truck Parking Management Systems

Making best use of the existing parking spaces is the aim of Truck Parking Information Management System (TPIMS) and Truck Parking Availability Systems (TPAS) efforts. Many states are piloting technology-based solutions. Some early TPIMS/TPAS adopter states identified issues related to reliability and long-term maintenance.

Missouri trucking industry stakeholders consistently noted a preference for a significant increase in the truck parking inventory prior to implementation of an electronic system. Until parking spaces are added, monitoring other states' efforts can help the MoDOT find best practices and technologies, should it decide to commit to a TPIMS/TPAS system.

Regional Distribution and Nearshoring of Supply Chains

The explosive growth of e-commerce and supply chain disruptions attributed to the COVID-19 pandemic reshaped long-established national and international trade patterns. Sourcing goods from Canada, Mexico, Central America, the Caribbean and South America combats risks associated with cultural variation and long transport times.

Mexico passed China as the largest U.S. trading partner in 2023.[36]

Missouri's central location helps attract logistical businesses. From Missouri, goods can arrive from and reach more than half of the continental U.S. in one day's drive. Most other states are reachable in less than two.[37] As regional distribution centers rise, demand for staging parking near the facilities grows. Overnight parking is also in high demand as long-haul traffic moves through Missouri to and from international gateways at the Canadian and Mexican borders and Gulf ports.

Cargo Theft in Trucking

The U.S. Department of Homeland Security estimates nationwide annual cargo theft losses of $15-35 billion.[38] Organized theft groups, criminal organizations that target freight carried by rail and truck, are responsible for the great majority of the loss.

Cargo is mainly exposed to theft during transit and handoffs like at warehouses, carrier terminals, parking lots and truck stops. Missouri is not a hotspot for cargo theft according to law enforcement officers and stakeholders contacted as part of this study. As cargo thieves are quick to adapt their methods, this might not remain the case.

[36]U.S. Census Bureau, "Top Trading Partners – December 2023," accessed June 11, 2025, https://www.census.gov/foreign-trade/statistics/highlights/top/top2312yr.html.

[37]Missouri Missouri Partnership, "Missouri is a Booming Epicenter of Commerce," accessed June 11, 2025, https://missouripartnership.com/why-missouri/perfect-location/.

[38]U.S. Immigration and Customs Enforcement (ICE), "Operation Boiling Point," last modified August 25, 2025, https://www.ice.gov/about-ice/hsi/news/hsi-insider/op-boiling-point.

Innovations to Address the Truck Parking Gap

Enterprising businesses are addressing the truck parking issue. These range from parking management companies monetizing some previously free parking spaces, to private landowners' creation of parking-only facilities, to third-party apps that allow drivers to crowd-share parking availability information.

Public-private partnerships also allow the public and private sectors to contribute their unique strengths to address the truck parking shortage. State DOTs or local government entities can provide land, regulatory support and initial funding for parking projects. Private companies bring innovation, management expertise and funding to the table.

Good lighting counters feelings of vulnerability. "If you don't feel safe, you won't rest well — and that affects performance."

— Driver interview

Key Points from Driver Interviews

Staging needs are most critical in metropolitan areas, however industrial and logistical centers in rural Missouri draw significant commercial truck traffic.

Drivers and safety officers listed features and amenities they appreciate:

- Lighting for visibility and security
- Weather warning systems and shelters
- Angled, pull-in/pull-through parking
- Curb-free parking areas
- Vault toilets — when use frees funding for more truck parking spaces
- Maximized space especially, for truck parking and dedicated areas for large loads
- Promotion of weigh stations as parking areas
- Longer acceleration and deceleration lanes
- More truck parking in/near urban areas

Industry parking concerns include:

- Industrial areas and distribution centers with little or no parking within/nearby
- Mixed responses regarding TPIMS and TPAS

Best practices identified by these groups include:

- The Kentucky Transportation Cabinet's "Rest Havens" at several weigh stations
- Indiana and Ohio's thoughtfully rebuilt rest areas



Source: MoDOT

Chapter 6. Needs Assessment

Missouri's role as a national freight crossroads makes it essential to evaluate both current freight conditions and the ability of the state's multimodal system to meet future demand. Freight volumes are projected to grow significantly over the next two decades, shaped by shifts in commodity flows, emerging technologies and evolving supply chains. This growth presents both opportunities and challenges for Missouri's highways, railroads, waterways and air cargo facilities.

The purpose of this section is to provide a comprehensive needs assessment and freight forecast that:

- Establishes a baseline profile of current freight activity using 2023 Transearch data
- Identifies projected freight flows through 2043, including modal trends and commodity shifts
- Compares current system capacity to forecasted demand, highlighting infrastructure bottlenecks, regional pressures and at-risk corridors
- Assesses emerging trends, such as e-commerce, near-shoring, connected and automated vehicles and energy transitions, that will influence Missouri's future freight system
- Links performance gaps and capacity constraints to the SFRP's goals and objectives of promoting a Stewardship-driven, Safe, Prosperous, Reliable, Connected and Innovative freight system

This analysis serves as the foundation for identifying targeted investments and strategies to enable Missouri's freight network to remain resilient, competitive and responsive to future economic growth. By understanding where the system is today, how it is projected to evolve and where pressures will emerge, Missouri can align its freight and rail strategies with both statewide priorities and national freight trends.

Current Freight Volumes

Missouri's multimodal transportation system moved over 1.10 billion tons of freight in 2023, underscoring its role as a critical hub for regional, national and international supply chains. Understanding these current volumes are essential to assessing system performance and identifying future needs. The data presented in this section is derived from 2023 Transearch data to provide a comprehensive view of freight activity across the state.

The discussion is organized into subsections by mode: truck, rail, water and air. For each mode, tables summarize total inbound, outbound, intrastate and through volumes in terms of tonnage and value. Additional tables highlight the top five commodities transported by that mode, reported in two-digit Standard Transportation Commodity Codes (STCCs) to provide a consistent basis for comparison across commodity groups.

This current freight profile establishes the baseline conditions against which future growth projections and needs assessments are evaluated, providing insight into how each mode contributes to the overall performance of Missouri's freight transportation system.

Highway

Highways carry most of Missouri's freight in both value and tonnage, reflecting the state's central location and extensive interstate network. **Table 23** and **Table 24** below summarize truck-based freight activity by movement type and identify the top five commodities transported by truck in 2023.

Table 23 – Missouri Highway Freight Movement, 2023

Freight Movement	Tons (000's)	Value ($M)
Inbound	94,976	128,417
Outbound	133,201	157,138
Throughput	297,929	627,950
Intrastate	98,213	53,302
Total	**624,319**	**$966,807**

Source: GFT Analysis of Transearch Data, 2023.

Table 24 – Missouri Top Five Commodities Transported by Truck, 2023

Ranking	Commodity	Tons (000's)
1	Nonmetallic Minerals	156,338
2	Farm Products	115,769
3	Food or Kindred Products	89,230
4	Secondary Traffic	60,082
5	Petroleum or Coal Products	40,696

Source: GFT Analysis of Transearch Data, 2023.

Rail

Missouri's freight rail system plays a vital role in moving bulk commodities such as coal, farm products and chemicals. **Table 25** and **Table 26** present 2023 rail volumes by movement type and highlight the top commodities supported by rail.

Table 25 – Missouri Rail Freight Movement, 2023

Freight Movement	Tons (000's)	Value ($M)
Inbound	57,682	54,181
Outbound	32,609	48,967
Throughput	247,087	557,522
Intrastate	7,518	1,993
Total	**344,897**	**662,663**

Source: GFT Analysis of Transearch Data, 2023.

Table 26 – Missouri Top Five Commodities Transported, 2023

Ranking	Commodity	Tons (000's)
1	Coal	97,453
2	Farm Products	49,556
3	Chemicals or Allied Products	47,398
4	Food or Kindred Products	46,682
5	Misc Mixed Shipments	29,140

Source: GFT Analysis of Transearch Data, 2023.

Waterway

The Mississippi and Missouri Rivers continue to support barge movements of bulk commodities, particularly farm products and construction materials. Waterway volumes and top commodities for 2023 are shown below in **Table 27** and **Table 28**.

Table 27 – Missouri Waterway Freight Movement, 2023

Freight Movement	Tons (000's)	Value ($M)
Inbound	5,857.90	4,603
Outbound	27,052.70	5,974
Throughput	13,250.60	8,388
Intrastate	4,988.80	255
Total	**51,150**	**19,220**

Source: GFT Analysis of Transearch Data, 2023.

Table 28 – Missouri Top Five Commodities Transported by Water, 2023

Ranking	Commodity	Tons (000's)
1	Farm Products	17,466
2	Nonmetallic Minerals	12,688
3	Clay, Concrete, Glass, or Stone	6,430
4	Chemicals or Allied Products	4,659
5	Petroleum or Coal Products	3,467

Source: GFT Analysis of Transearch Data, 2023.



Source: MoDOT

Air Cargo

Although representing a small share of total tonnage, air cargo supports the movement of high-value and time-sensitive goods. **Table 29** and **Table 30** below show Missouri's 2023 air cargo volumes and leading commodities.

Table 29 – Missouri Air Cargo Movement, 2023

Freight Movement	Tons (000's)	Value ($M)
Inbound	106	3,620
Outbound	100	3,577
Throughput	0	1
Intrastate	1	48
Total	**207**	**7,246**

Source: GFT Analysis of Transearch Data, 2023.

Table 30 – Missouri Top Five Commodities Transported by Air, 2023

Ranking	Commodity	Tons (000's)
1	Small Packaged Freight Shipments	72.60
2	Transportation Equipment	18.40
3	Electrical Equipment	18.10
4	Chemicals or Allied Products	13.20
5	Machinery	12.60

Source: GFT Analysis of Transearch Data, 2023.

Future Freight Volumes

Looking ahead, Missouri's multimodal transportation system is projected to handle nearly 1.30 billion tons of freight by 2043, reflecting continued growth in both traditional bulk commodities and higher-value manufactured goods. These forecasts, derived from Transearch data, provide insight into how freight demand is expected to evolve across modes and commodity groups over the next two decades.

As with the current freight volumes analysis, this section is organized into subsections by truck, rail, water and air. For each mode, tables present projects inbound, outbound, intrastate and through volumes in terms of tonnage and value. Additional tables highlight the top five commodities by mode in 2043, reported in two-digit STCCs to maintain comparability with current data.

These projections establish a forward-looking baseline for the needs assessment, highlighting where Missouri's freight network will need to expand capacity, improve reliability and strengthen multimodal connections to support economic growth and maintain competitiveness in a changing marketplace.

Highway

Highways are projected to continue carrying most of Missouri's freight by 2043, with growth driven by both bulk and manufactured goods. **Table 31** and **Table 32** below summarize projected truck freight activity and highlight the top five commodities by tonnage.

Table 31 – Projected Missouri 2043 Highway Freight Movement, 2023

Freight Movement	Tons (000's)	Value ($M)
Inbound	121,027	173,370
Outbound	157,886	204,740
Throughput	372,222	877,846
Intrastate	114,088	63,924
Total	**765,223**	**1,319,880**

Source: GFT Analysis of Transearch Data, 2023.

Table 32 – Projected Missouri 2043 Top Five Commodities Transported by Truck, 2023

Ranking	Commodity	Tons (000's)
1	Nonmetallic Minerals	180,776
2	Farm Products	146,031
3	Food or Kindred Products	116,734
4	Secondary Traffic	74,019
5	Chemicals or Allied Products	43,928

Source: GFT Analysis of Transearch Data, 2023.

Rail

Rail freight in Missouri is expected to experience notable shifts, with declines in coal offset by growth in chemicals, food products and transportation equipment. **Table 33** and **Table 34** below present projected 2043 rail volumes and leading commodities.

Table 33 – Projected Missouri 2043 Rail Freight Movement, 2023

Freight Movement	Tons (000's)	Value ($M)
Inbound	37,487	76,817
Outbound	34,917	61,669
Throughput	280,634	781,316
Intrastate	2,879	2,323
Total	**355,917**	**922,125**

Source: GFT Analysis of Transearch Data, 2023.

Table 34 – Projected Missouri 2043 Top Five Commodities Transported by Rail, 2023

Ranking	Commodity	Tons (000's)
1	Chemicals or Allied Products	74,434
2	Food or Kindred Products	73,958
3	Farm Products	60,220
4	Misc Mixed Shipments	40,055
5	Transportation Equipment	20,512

Source: GFT Analysis of Transearch Data, 2023.

Waterway

Missouri's inland waterways will remain essential for the movement of bulk commodities, especially farm products and nonmetallic minerals. **Table 35** and **Table 36** below show projected 2043 barge volumes and top commodities.

Table 35 – Projected 2043 Missouri Waterway Freight Movement, 2023

Freight Movement	Tons (000's)	Value ($M)
Inbound	6,837	5,970
Outbound	34,120	8,085
Throughput	11,684	8,280
Intrastate	5,915	256
Total	**58,558**	**22,591**

Source: GFT Analysis of Transearch Data, 2023.

Table 36 – Projected Missouri 2043 Top Five Commodities Transported by Water, 2023

Ranking	Commodity	Tons (000's)
1	Farm Products	20,143
2	Nonmetallic Minerals	16,140
3	Chemicals or Allied Products	6,845
4	Clay, Concrete, Glass, or Stone	6,523
5	Petroleum or Coal Products	2,702

Source: GFT Analysis of Transearch Data, 2023.

Air

Air cargo volumes, while comparatively small in tonnage, are expected to grow in value as high-value, time-sensitive goods continue to expand. **Table 37** and **Table 38** present Missouri's projected 2043 air freight activity and leading commodities.

Table 37 – Projected Missouri 2043 Air Cargo Movement, 2023

Freight Movement	Tons (000's)	Value ($M)
Inbound	153	5,302
Outbound	125	4,076
Throughput	0	2
Intrastate	2	74
Total	**280**	**9,454**

Source: GFT Analysis of Transearch Data, 2023.

Table 38 – Projected Missouri 2043 Top Five Commodities Transported by Air, 2023

Ranking	Commodity	Tons (000's)
1	Small Packaged Freight Shipments	84
2	Transportation Equipment	27
3	Electrical Equipment	27
4	Instruments, Photo Equipment, Optical Equipment	25
5	Chemicals or Allied Products	21

Source: GFT Analysis of Transearch Data, 2023.

Emerging Trends

Missouri's freight system will be shaped not only by projected growth in tonnage and value but also by several structural shifts in how goods are produced, distributed and consumed. These emerging trends will influence freight flows across all modes and require adaptive planning to enable the system to remain resilient and competitive.

E-Commerce and Last-Mile Delivery

The rapid growth of e-commerce is driving an increase in parcel shipments and fundamentally altering urban freight dynamics. Last-mile delivery has become a critical component of supply chains, placing new demands on local road networks and distribution facilities, particularly in metropolitan areas like St. Louis and Kansas City. Managing congestion, curb access and delivery efficiency will be key challenges.



Source: MoDOT

Near Shoring and Regional Supply Chains

Global supply chain disruptions and rising transportation costs are accelerating the trend toward near-shoring and regional production. For Missouri, this shift could reshape inbound and outbound flows, with more intermediate goods and components moving within North America rather than overseas. Trade corridor patterns may adjust accordingly, reinforcing the importance of Missouri's highway and rail connectivity to Mexico and Canada.



Source: MoDOT

Connected and Autonomous Vehicles (CAVs)

Autonomous trucking is rapidly transitioning from pilot testing to active commercial deployment across the U.S. Several long-haul AV developers — including Aurora, Kodiak, Waymo and Plus — are now operating automated Class-8 tractors on major interstate corridors in Texas, Arizona, New Mexico, Colorado, Wyoming, Oklahoma and other Sun Belt states. These trucks are already traveling coast-to-coast routes that pass through Missouri, but due to current Missouri statute requiring a human driver behind the wheel, fully driverless operation cannot occur within state boundaries. As a result, AV-equipped trucks currently perform "state-line handoffs", stopping at Missouri's borders to switch to human drivers before continuing their route. This mirrors long-standing oversize/overweight permitting practices where operators must comply with differing state-by-state regulations.

Despite common assumptions, AV tractors have performed reliably in harsh operating conditions, including snow, wind and reduced visibility — and avoid human overcorrection or fatigue-related deceleration. However, current technology and regulations limit autonomous operation to interstate corridors, meaning human drivers remain essential for first-mile and last-mile movements to ports, rail terminals, airports and distribution centers. Industry experts underscore that widespread AV adoption will actually increase the need for short-haul and regional drivers, particularly for the "last-leg" movements that AVs cannot complete autonomously. Additionally, remote-operations centers, where trained staff can intervene digitally during unusual events, are becoming a critical workforce component, suggesting new job types that may emerge in Missouri.

Stakeholder outreach reinforced these trends and revealed additional AV-related

considerations across modes. Rail operators described growing use of autonomous and semi-autonomous inspection systems, including drone-assisted inspections and automated geometry cars that reduce worker exposure and improve safety.

Port stakeholders noted early movement toward autonomous yard tractors and automated gate operations, reflecting a broader industry trend toward partial terminal automation.

Aviation representatives identified the potential for autonomous ground-service equipment in the future, particularly in cargo-handling environments. Trucking industry stakeholders emphasized that inconsistent work-zone layouts, irregular signage and constrained lane widths pose difficulties not only for human drivers but also for AV perception systems, highlighting the need for more uniform work-zone standards as automation expands. They also stressed that AV long-haul operations will likely shift freight patterns, requiring designated staging locations near urban freight hubs where AVs transition to human drivers. This aligns with national practice in AV-active states, where Department of Transportation (DOT)s are beginning to plan for driver-change facilities near key interchanges. Collectively, stakeholder input suggests that autonomous technologies will shape workforce needs, last-mile logistics, infrastructure consistency and intermodal coordination across Missouri's freight network.

As AV deployment expands nationally, the most significant needs for Missouri are policy readiness, interagency coordination and the future establishment of driver transfer or staging locations near major freight markets. Other states advancing AV trucking have created governor-appointed task forces that include DOTs, highway patrol, emergency responders, insurers and AV operators to develop safety protocols, emergency response procedures and communications plans. Missouri will need similar coordination to prepare for AV integration while maintaining law enforcement familiarity, incident response procedures and public awareness. Because AV firms increasingly rely on remote operations personnel who can intervene digitally during unexpected events, Missouri may also see emerging workforce opportunities in remote driving assistance, safety monitoring and operations centers. As these technologies mature, freight operations along key routes like I-70 and I-44 will increasingly benefit from enhanced connectivity and automation.

Artificial Intelligence

Artificial Intelligence (AI) is rapidly transforming freight operations and transportation system management and Missouri stakeholders are beginning to adopt or explore these technologies across multiple modes. During modal outreach, Class I railroads highlighted their growing use of AI-enabled safety systems, including acoustic wayside detectors, automated track inspection, wheel-profile analytics and predictive maintenance tools, technologies that reduce derailment risk and support FRA's broader shift toward risk-based safety oversight. Aviation

stakeholders expressed interest in AI for cargo-handling optimization, aircraft and equipment predictive maintenance and improved operational forecasting, particularly as mid-size airports expand their air cargo role. Ports and waterway operators noted opportunities to use AI for terminal yard management, crane scheduling, drone-based inspections and navigation forecasting during high-water events.

For highway freight operations, AI is increasingly used for incident detection, predictive analytics, work-zone monitoring and advanced routing, as documented by FHWA and USDOT. Trucking industry stakeholders emphasized that travel-time unpredictability and inconsistent work-zone layouts create challenges for both human drivers and perception-based automated systems. They expressed interest in AI applications that improve construction-zone communication, freight visibility and corridor reliability. Integrating these capabilities into MoDOT's Transportation Management Center (TMC) could support faster incident response, enhance freight safety and strengthen travel-time reliability on critical corridors. Over time, AI-enabled analytics will also improve MoDOT's ability to monitor freight performance, identify emerging bottlenecks and prioritize investments more effectively across the statewide network.

Commodity Shifts

Evolving commodity markets will also shape future freight volumes. Agricultural exports are expected to remain a cornerstone of Missouri's economy, while growth in advanced manufacturing, energy transitions and food processing will drive changes in mode choice and logistics patterns. Declines in coal and petroleum movements contrast with increases in higher-value goods such as chemicals, transportation equipment and refrigerated products.

Overall Freight Growth

By 2043, Transearch projects nearly 1.30 billion tons of freight moving through Missouri's multimodal system. Growth will not be uniform; truck freight is anticipated to capture the largest share of increases, while rail and water remain essential for bulk commodities. Sector-specific dynamics, particularly in manufacturing, distribution and agriculture, will define how this growth is distributed across modes and regions.

Together, these trends underscore the need for a flexible and future-ready freight system that can adapt to technological change, evolving supply chains and shifting commodity flows. Missouri's ability to respond proactively will be central to maintaining its role as a national freight crossroads.

Comparing Current System Performance to Future System

Performance measures provide Missouri with a critical lens for evaluating how today's multimodal freight system is functioning and where future demand will place additional pressure on capacity, safety and reliability. By benchmarking current volumes against projected 2043 freight flows, decision-makers can better understand how Missouri's system is positioned to meet the challenges of a growing and evolving freight economy.The following subsections compare current system performance with expected future performance for highways, rail, waterways and air cargo. For each mode, Transearch tonnage and value projections are paired with the SFRP goals and objectives to identify where performance gaps may emerge and what areas will require targeted investment. This comparison highlights both existing strengths and future vulnerabilities in Missouri's multimodal freight network.



Source: MoDOT

Highway Freight: Current to Future Performance

Missouri maintains the seventh-largest state highway system in the nation, with more than 33,800 miles of roadway and over 10,000 bridges. Highways carry most of the freight in Missouri, approximately 55% of statewide tonnage in 2023. Pavement conditions remain relatively strong, with about 89% of major highways rated in good condition. However, recurring congestion, truck parking shortages and first-/last-mile bottlenecks continue to constrain efficiency. Metro areas remain primary freight congestion hotspots, with estimated statewide congestion costs reaching approximately $630 million in 2023.

Highways are the backbone of Missouri's freight network, carrying over 624 million tons in 2023 and projected to grow to more than 765 million tons by 2043. Growth is expected across both bulk and manufactured goods, with significant increases in food products, farm products and secondary traffic. In response to growing freight and passenger demand, Missouri is making a historic investment in its highway system, including the addition of a third lane along I-70, which is expected to significantly improve capacity, reliability and safety on one of the state's most critical freight corridors.

Implications for Performance:

- **Reliable:** While the addition of a third lane along I-70 represents a historic investment that is expected to significantly improve corridor capacity and reliability, projected growth in truck volumes will continue to place pressure on key freight corridors. Even with the historic addition of a third lane along I-70. Bottlenecks are likely to persist at interchanges, urban approaches and other major routes such as I-44, requiring continued focus on system wide reliability.
- **Stewardship:** Higher freight tonnage will place additional strain on pavement and bridge conditions, increasing life-cycle maintenance costs.
- **Safe:** More truck activity, combined with last-mile delivery growth in urban areas, heightens safety risks for vulnerable road users.
- **Connected:** First- and last-mile connectivity to freight generators will be critical as demand grows.

Waterway Freight: Current to Future Performance

Missouri hosts the 11th-largest rail network in the U.S., with about 3,800 miles of track served by five Class I railroads and 15 short lines. Rail moves roughly 30% of Missouri's freight by weight, anchored by the Kansas City and St. Louis hubs, two of the nation's most significant

rail centers. Network conditions are generally strong, but chokepoints persist in urban areas where intermodal terminals, low-clearance bridges and at-grade crossings constrain efficiency. Missouri has more than 3,300 public crossings, posing ongoing safety risks despite declining blocked crossing incidents since 2021.

Rail carried nearly 345 million tons in 2023 and is projected to rise slightly to 356 million tons by 2043. The commodity mix, however, is expected to shift dramatically: coal tonnage will decline, while chemicals, food products and transportation equipment increase.

Implications for Performance:

- **Prosperous:** Rail's role in supporting Missouri's agricultural and manufacturing competitiveness continues as commodity flows shift.
- **Reliable:** Growth in higher-value freight requires ongoing investment in intermodal terminals and short-line resilience.
- **Innovative:** Rail carriers' deployment of advanced safety and scheduling technologies will maximize efficiency
- **Waterway Freight:** Current to Future Performance Missouri's 1,050 miles of navigable rivers and 19 public port authorities play a vital role in supporting agriculture and bulk commodity movement. In 2023, 51.10 million tons of freight moved by water. However, reliability is increasingly constrained by aging infrastructure, with locks and dams on the Mississippi River average more than 75 years old, with average delays at key locks ranging from one to five hours.

By 2043, tonnage on Missouri's waterways is projected to increase to nearly 59 million tons. Farm products and nonmetallic minerals will continue to dominate waterborne freight, underscoring the importance of maintaining channel depth and lock reliability to enable dependable barge operations.

Implications for Performance:

- **Stewardship:** Maintaining channel depth and lock reliability will be essential to supporting continued barge traffic.
- **Reliable:** Adapting infrastructure strategies to reduce weather-related disruptions to waterway reliability.
- **Connected:** Strengthening intermodal links at ports will help waterways complement rail and truck freight, particularly in serving export markets.

Air Cargo: Current to Future Performance

Air cargo serves a specialized but high-value segment of Missouri's freight economy. Major operations are concentrated at St. Louis Lambert International (STL), Kansas City International (MCI) and Springfield-Branson National (SGF), with several regional airports supporting cargo movement. In 2023, air freight totaled approximately 207,000 tons valued at $7.20 billion. The system is not significantly constrained by infrastructure conditions but remains sensitive to demand fluctuations and broader supply chain dynamics.By 2043, air cargo is projected to increase to 280,000 tons valued at $9.50 billion — a 35% increase in tonnage and nearly one-third increase in value.



Source: MoDOT

Implications for Performance:

- **Prosperous:** Growth in e-commerce and high-value goods strengthens Missouri's role in global supply chains, particularly near STL and KCI airports.
- **Connected:** Stronger ground access to airports will be necessary to enable seamless multimodal freight movement.
- **Innovative:** Integration of automation, advanced logistics hubs and improved airside facilities will be key to meeting future demand.

Summary

Comparing current and future freight volumes across all modes underscores Missouri's role as a multimodal freight hub and highlights the pressures that will mount as nearly 1.30 billion tons of goods move through the state by 2043. Highways will continue to bear the brunt of growth, rail will evolve with changing commodity markets, waterways will remain vital for bulk exports and air cargo will expand as a high-value niche.Tying these changes back to the SFRP goals and objectives emphasizes the need for Missouri to:

- Invest in reliability by addressing highway bottlenecks and strengthening multimodal resilience.
- Advance stewardship through proactive maintenance and sustainable infrastructure strategies.
- Promote safety for both heavy truck corridors and vulnerable users in urban freight environments.
- Support a prosperous economy by adapting to commodity shifts and capitalizing on high-value logistics sectors.
- Strengthen connectivity across first-/last-mile freight links, ports and airports.
- Pursue innovation through technology adoption and funding strategies that support long-term competitiveness.

Comparison of System Capacity to Forecasted Volumes

Missouri's multimodal freight system is projected to handle nearly 1.30 billion tons of freight by 2043, a 14% increase over 2023 levels. While this growth underscores the state's importance as a national freight hub, it also highlights areas where system capacity may not keep pace with future demand. The following subsections identify gaps between current performance and forecasted volumes, focusing on modal capacity constraints, regional infrastructure needs and risk areas where bottlenecks or underperformance are most likely.

Gaps Between Current Performance and Future Demand

Highways:

- Truck volumes are projected to increase by more than 140 million tons between 2023 and 2043, amplifying pressure on Missouri's interstate corridors, especially I-70, I-44, I-435, I-29, I-55, I-35 I-49 and I-270.
- Existing bottlenecks in Kansas City, St. Louis and Springfield will worsen, threatening reliability and safety.

- First-/last-mile connections around distribution hubs will become more strained by growth in e-commerce and parcel shipments, risking gaps in connected objectives.

Rail:

- Shifting commodity patterns—from coal to chemicals, food products and transportation equipment—will place new demands on intermodal capacity.

Aging short line infrastructure may prevent railroads from handling heavier axle loads or growing agricultural exports without investment, creating a stewardship gap.

Waterways:

- Channel maintenance and lock/dam reliability will determine system performance, even though projected tonnage growth is modest.
- Weather variability introduces risk to navigation reliability, potentially undercutting Missouri's competitive advantage in barge transport.

Air:

- Capacity at major airports may be adequate for projected tonnage, but ground access, warehouse space and cargo handling facilities could be limiting factors.
- Growth in small-package freight will stress connected objectives unless roadway and distribution access improvements are made.

Modal Capacity Constraints

- **Highways:** Without capacity expansion or demand management, congestion on I-70 and I-44 corridors is likely to reduce reliability and increase costs for shippers.
- **Rail:** Intermodal terminal capacity (e.g., Kansas City) may not be sufficient for projected growth in manufactured goods.
- **Waterways:** Infrastructure reliability (locks, levees, dredging) remains a constraint, particularly during extreme weather events.
- **Air:** Cargo handling and logistics integration, rather than runway capacity, represent the main constraint for Missouri's air freight system.

Infrastructure Needs by Region

- **St. Louis Region:** Key interstate bottlenecks, Mississippi River navigation reliability and urban last-mile delivery pressures should be primary focus.
- **Kansas City Region:** Intermodal rail hubs and interstate congestion points are critical to future freight reliability.
- **Southwest Missouri (Springfield/Joplin):** Growth along I-44 freight corridor requires targeted capacity and safety enhancements.
- **Rural Corridors:** Short line rail and rural highway connections will need investment to maintain access to agricultural markets.

Risk Areas and Bottlenecks

- **Urban vs. Rural Stress:** Urban areas will face congestion and safety pressures from truck and parcel growth, while rural areas risk underinvestment in short line railroads, bridges and two-lane freight routes.
- **Key Corridors at Risk:**
  - **I-70:** Projected truck volume growth will continue to place pressure on one of the state's most heavily traveled freight corridors. While the addition of a third lane is expected to significantly improve capacity and reliability along I-70, long-term growth in freight demand and interchange activity may continue to influence performance, particularly near urban areas.
  - **I-44:** Growth in farm products and manufactured goods will test capacity and safety performance.
  - **Mississippi River navigation:** Lock and dam reliability remains a single point of failure for barge traffic.
  - **Kansas City and St. Louis intermodal facilities:** Terminal capacity may fall behind demand for trail-truck transfers.

Summary

Missouri's freight network is well-positioned to handle projected growth overall, but without strategic investments, several gaps will emerge between system capacity and forecasted demand. Highways face the greatest challenges, with rail, waterways and air cargo also requiring targeted upgrades to maintain reliability, safety and competitiveness. Identifying and addressing these gaps will be essential to achieving the SFRP goals of a prosperous, reliable and connected multimodal freight system.

Summary of Findings

Missouri's multimodal freight system is a cornerstone of the state's economy, moving over 1.10 billion tons of freight in 2023 and projected to handle nearly 1.30 billion tons by 2043. Growth will be driven by both bulk commodities, such as farm products and nonmetallic minerals and higher-value manufactured goods, including chemicals, transportation equipment and small packaged freight.

Each mode will face distinct challenges:

- Highways will continue to carry the majority of freight. Major investments, including the addition of a third lane along I-70, are expected to improve capacity and reliability; however, rising truck volumes and growth on other key corridors such as I-44 will continue to challenge systemwide performance.
- Rail will experience a commodity shift from coal to higher-value products, with potential strain on short lines and intermodal hubs.
- Waterways will remain vital for agricultural exports but are dependent on resilient lock, dam and channel infrastructure.
- Air Cargo, though small in tonnage, will grow in value, stressing distribution facilities and first-/last-mile access.

Emerging trends such as e-commerce, regional supply chain shifts, connected and automated vehicle adoption and changing commodity markets will further reshape Missouri's freight landscape.



Source: MoDOT

Implications for Freight and Rail Investment Strategies

These findings have direct implications for how Missouri should prioritize freight and rail investments over the next two decades:

- Highways: Invest in capacity, safety and reliability improvements on critical freight corridors (I-70, I-44, I-55 and I-35), while addressing urban congestion and first-/last-mile delivery challenges.
- Rail: Modernize short line rail infrastructure, expand intermodal capacity in Kansas City and St. Louis and support projects that align with commodity shifts toward chemicals, food products and advanced manufacturing.
- Waterways: Support investments in navigation reliability, including dredging, lock and dam maintenance and climate resilience, to protect Missouri's position in agricultural exports.
- Air cargo: Enhance ground access, cargo handling capacity and logistics integration at key airports to accommodate growing demand for time-sensitive, high-value shipments.
- Multimodal connections: Strengthen intermodal hubs and first-/last-mile freight connections to promote efficiency and resiliency across the network.

In line with the SFRP goals of being prosperous, reliable, connected and innovative, Missouri's investment strategies should focus not only on maintaining a state of good repair but also on preparing the freight system to adapt to changing technologies, supply chains and commodity flows. Strategic, data-driven investments will keep freight a powerful economic driver for Missouri while preserving the state's role as a vital national freight crossroads.

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Source: MoDOT

Chapter 7. Freight and Rail Impacts

The Missouri freight transportation network encompasses railroads, highways, bridges, ports, waterways and airports, which can face significant threats from extreme weather. Certain weather events can substantially damage and disrupt the freight network, impacting the infrastructure needed to move goods or stalling the State's economy by preventing goods and services from reaching intended markets. Tornadoes, extreme flooding and winter storms are a few examples of weather hazards that may cause safety issues and operational disruptions. Road closures, railroad shutdowns, port congestion and flight delays are examples of disruptions that impact the economy by increasing delays and imposing safety risks.

Freight transportation is essential to the movement of goods across the country, but its impact extends far beyond logistics and economics. As volume of trucks, trains, barges and planes increases, impacts to people and wildlife also increase. Expansion of infrastructure reduces wildlife habitats and the buffers between it and residents. Freight impacts to the environment can include increased particulate matter in the air, increased noise levels and increased intensity for stormwater runoff carrying debris and chemicals into the water system. Recognizing the cost of the extreme weather's impacts to freight movement and the potential impacts of freight movement on the surrounding environment, Congress incorporated provisions in 49 USC 70202 requiring analysis of these elements in state freight plans. On Jan. 12, 2023, the USDOT published the USDOT State Freight Plan and State Freight Advisory Committee F (the Guidance) identifying the minimum requirements for state freight plans to meet the new statutory requirements from the Infrastructure Investment and Jobs Act (IIJA).[39] The Guidance was effective March 8, 2023.

The Guidance requires each plan to include quantifiable goals and strategies to decrease:

- The severity of impacts of extreme weather and natural disasters on freight mobility
- The impacts of freight movement on flooding and stormwater runoff
- The impacts of freight movement on local air pollution.
- The impacts of freight movement on wildlife habitat loss

[39]USDOT, "State Freight Plan and State Freight Advisory Committee Guidance," issued January 12, 2023, https://www.transportation.gov/mission/office-secretary/office-policy/guidance-state-freight-plans-and-state-freight-advisory.

This chapter discusses the impacts of severe weather on the freight system by looking at the resilience of the MoDOT freight network. Freight resilience emphasizes an adaptable freight system that maintains operations and recovers rapidly from disruptions caused by extreme weather events. For infrastructure to withstand weather events, engineering designs/materials or the location of new infrastructure placement is important. Recovery from disruptions can include an initial emergency response as well as managing subsequent recovery actions, such as the emergency procurement of a downed bridge to expedite the delivery of materials for reconstruction. Mitigating impacts from weather hazards on the freight network is vital to improve safety and reduce impacts on the overall freight economy. **Figure 38** demonstrates damage that can occur to critical infrastructure from extreme weather events like flooding.

Then the chapter examines more closely the impacts Missouri's freight transportation system has on the human and wildlife environments. Use of zero emissions equipment, implementation of quiet zones, grade separations and stormwater management techniques can reduce these freight impacts.

Figure 38 – 2019 Flooding Washes Out a Section of U.S. Route 136



Background

Reliability is key in freight movement. States strive to operate resilient transportation networks that can endure and adapt to disruptions such as extreme weather, aging infrastructure, economic shifts and changing freight demands to maintain reliability for users. Missouri's 2022 State Freight Rail Plan reflected this focus through a multimodal strategy that integrated freight and passenger systems while prioritizing infrastructure durability, network redundancy and long-term adaptability. As part of its planning and project delivery processes, MoDOT routinely evaluates each location for safety, functionality, corridor consistency and potential impacts from extreme weather and resilience concerns. In 2018, MoDOT conducted a statewide assessment of National Highway System (NHS) facilities affected by natural disasters that required permanent repairs. This effort was expanded in 2020 with updates to the Transportation Management System (TMS), which now tracks all disaster-impacted locations across NHS and other routes.[40] These evaluations help MoDOT identify vulnerabilities and guide investments that strengthen the freight network's resilience.



[40]MoDOT, "National Highway System Transportation Asset Management Plan", published June 2022, https://www.modot.org/sites/default/files/documents/Federal%20Transporation%20Asset%20Management%20Plan_508Compliant.pdf.

2022 Missouri State Freight and Rail Plan

The 2022 SFRP Plan (SFRP or the Plan) was the State's first integrated, multimodal blueprint designed to optimize multimodal freight and passenger rail.[41] Resilience was a central pillar throughout the 2022 SFRP, with specific attention to Missouri's ability to withstand and adapt to dynamic challenges such as supply chain disruptions, natural disasters, economic shifts and evolving transportation demands. The 2022 SFRP identified resilience as critical in both freight and passenger systems, emphasizing infrastructure durability, redundancy in networks and adaptability for future trends such as renewable energy and near-shoring. It's resilience strategy also focused on supporting the continuity of essential goods movement and passenger service, particularly in response to vulnerabilities exposed by the COVID-19 pandemic and anticipated energy transitions.

The 2022 SFRP proposed infrastructure improvements like universal crossovers and additional main lines to prevent bottlenecks and improve network redundancy. By embedding environmental, operational and economic resilience into all aspects of freight and rail planning, the 2022 SFRP positioned Missouri to thrive in an uncertain future. The key pieces of resilience from the 2022 SFRP are:

Equity and Environmental Resiliency: Support Equity and Environmental Resiliency of the multimodal freight and passenger rail.

- Support opportunities for alternative fueling infrastructure.
- Support expanded multimodal 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
- Support expanded multimodal freight and passenger rail service as a means of reducing carbon emissions and fuel consumed per ton and per passenger mile and increasing the system's resiliency and redundancy against extreme weather events.
- Increase passenger rail accessibility to low-income, elderly and special needs groups who have limited access to auto and other modes.

Economy: Support economic growth and competitiveness in Missouri through strategic improvements to the multimodal freight network and passenger rail system.

- Enhance resiliency and develop redundancy for the multimodal freight and passenger rail system to increase reliability in moving passengers and freight.

[41]MoDOT, "2022 Missouri State Freight and Rail Plan", published May 2022, https://www.modot.org/2022-state-freight-and-rail-plandocuments.

By embedding resilience into its planning framework, Missouri joins other states in developing tailored strategies to address regional challenges. For example, California emphasizes smart technology and disaster preparedness, while Illinois focuses on connectivity and weather-resilient infrastructure. These diverse approaches offer valuable insights into how resilience can be integrated across different freight systems. MoDOT's commitment to reviewing and updating its infrastructure data confirms that resilience remains a central consideration in future investments. Through these efforts, Missouri continues to enhance its freight network's ability to withstand disruptions and support long-term economic growth.

MoDOT 2023 Carbon Reduction Strategy

In Nov. 2023, MoDOT published its Carbon Reduction Strategy (CRS) that was developed in coordination with the metropolitan planning organizations and the regional planning councils.[42] This strategy is focused on the goals of the IIJA Carbon Reduction Program (CRP) which provides funding for a wide variety of eligible projects geared toward reducing transportation carbon dioxide emissions from on-road highway sources. It focuses on three areas:

- **Energy Management:** reduce Missouri's energy footprint by implementing new technologies such as smart lighting and electrification infrastructure.
- **Non-motorized Transportation:** provide people the opportunity to walk or bike to nearby destinations by constructing new and improved non-motorized facilities.
- **Traffic Flow Improvement:** promote better fuel economy through signal and intersection optimization projects that reduce delays and improve traffic flows.

Strategies aligned with freight movement include:

- Expanding the use of roundabouts to reduce idling vehicles,
- Linking additional traffic cameras to traffic management centers that monitor congestion and incidents for more rapid response to traffic disruptions
- Projects that separate motor vehicles from pedestrians and bicycles.

[42]MoDOT, Carbon Reduction Strategy, published November 2023, https://www.modot.org/sites/default/files/documents/MoDOT%20CRS_web.pdf.

MoDOT Freight Network and Weather Hazards


Source: MoDOT

The State's extensive infrastructure investment faces disruption threats from extreme weather events such as flooding, winter extremes, heat waves and severe storms. These events can disrupt operations across all freight modes by compromising rail integrity, damaging bridges, disrupting river navigation and hindering logistics center operations. MoDOT actively monitors these risks, implements strategies to reduce their impact and prepares itself to respond effectively when disruptions occur.

Evaluating how extreme weather affects state freight systems is essential for maintaining performance and building long-term resilience. Though not discussed in detail here, the possible disruption of freight movement due to seismic risks from the New Madrid and other fault lines should also be considered.

MoDOT incorporates weather-related changes into its life cycle planning to enable its infrastructure remains reliable over time. With most locations seeing major projects every eight to nine years, the risk of needing premature replacements due to non-performance issues is reduced. This approach allows MoDOT to focus on strategic investments that consider both current and future severe weather challenges. Through planning, MoDOT strengthens the freight network's ability to withstand and adapt to evolving environmental conditions.

Weather Hazards

Weather hazards are natural events that create risks to human life, the environment and property. Common weather hazards in Missouri include tornadoes, flooding, severe thunderstorms, winter storms, cold waves, heat waves, droughts and wildfires. These events can be extremely dangerous and develop quickly with little warning. Not only can these hazards affect human life and the environment, but they can also impact freight infrastructure such as the rail and highway network, bridges, alternative transportation, stormwater management, inland waterways, airports, pipelines and intermodal facilities. This section lays out the most common weather hazards that affect the Missouri Freight Network at the time of writing. As weather patterns shift and change, future weather hazards may be added or removed from this list. In **Appendix J, Figures 1-7** demonstrate the location of weather events in the state and how those events relate to the location of critical infrastructure.

Tornadoes

- Tornadoes disrupt transportation systems by impacting operations, damaging infrastructure and lowering overall efficiency.
- Missouri is highly tornado prone, with more than 2,500 tornadoes since 1950. Peak months of tornado occurrence are April through June.[43]
- The 2011 Joplin Tornado, rated an EF5 on the Enhanced Fujita scale, was Missouri's deadliest tornado. It caused catastrophic destruction, requiring an immediate highway clean-up effort, a massive disaster relief freight response and utility reconstruction, impacting freight routes for weeks.

Flooding

- Flooding severely disrupts infrastructure, shutting down highways, railways, bridges and ports, triggering widespread logistical and economic disruptions.
- Repeated widespread flooding events, including the historic 1993 and 1995 Midwest floods and more recent events, resulted in closure of airports, water ports and long distances of highways and rail lines which all require subsequent rebuilding.[44&45]
- Even minor floods can interrupt operation of multiple freight modes, resulting in supply chain delays.

[43]U.S. National Weather Service, NOAA, "Months of Peak Tornado Occurrence," accessed October 15, 2025, https://www.weather.gov/cae/tornadobymonth.html.
[44]D.J. Hagerty, A.C. Parola and T.E. Fenske, "Impacts of 1993 Upper Mississippi River Basin Floods on Highway Systems," Transportation Research Record 1483 (1995): 32-37, https://onlinepubs.trb.org/Onlinepubs/trr/1995/1483/1483-004.pdf.
[45]Joanna Marsh, FreightWaves, "Midwest Floods Stymie Rail Operations," March 21, 2019, https://www.freightwaves.com/news/railroad-midwest-floods-stymie-rail-operations.

Severe Thunderstorms

- The high winds, tornadoes, hail, lightning and intense rainfall associated with thunderstorms delay shipments, stranded vehicles and cause costly infrastructure damage.
- Thunderstorms, a frequent and disruptive force statewide, are becoming more common and extreme. In 2024, a severe storm in St. Louis set a record for the most rain in a 24-hour period. It caused flash flooding that shut down transportation systems and stranded vehicles. At least a dozen St. Louis metro bus routes were out of service for the morning commute, with only limited restoration by 9 a.m. The same storm caused flooding in multiple counties southwest of St. Louis.[411] In all, five Missourians were swept to their deaths by the storm's fast-rising floodwaters.[412]

Winter Storms

- Winter weather events can significantly disrupt ground and air transportation systems by impairing visibility, reducing traction, damaging infrastructure and straining maintenance and operational capacity.
- In Missouri, winter weather has repeatedly halted freight and passenger movement, such as the 2011 snowstorm that prompted the first statewide closure of I-70 and an hours-long closure of the Kansas City International Airport.[413] **Figure 39** shows the impacts of cold weather on river barge traffic.

Figure 39 – A Mississippi River Towboat and Coal Barge in Icy Waters During a St. Louis Winter



[46]Kate Grumke, Lacretia Wimbley and Sarah Fentem, St. Louis Public Radio, "At least two dead after flash flooding throughout St. Louis area on Election Day," published November 5, 2024, https://www.stlpr.org/news-briefs/2024-11-05/record-breaking-rainfall-flash-flooding-st-louis-election-day.
[47]Associated Press, "Missouri Flash Floods Blamed for Five Deaths, Including Two Poll Workers," published November 6, 2024, https://weather.com/news/weather/news/2024-11-06-deadly-flash-floods-in-missouri-on-election-day.
[48]NOAA, "February 1-2, 2011 Blizzard and Record Snowfall Event," accessed October, 15, 2025, https://www.weather.gov/eax/feb012011.

Cold Waves

- Cold waves are extended periods of extreme cold, often caused by Artic air masses, leading to sudden temperature drops and freeze-related damage.
- These events can severely impact infrastructure, causing bridge joint failures, rail fractures and river ice jams.

Heat Waves

- Heat waves in Missouri are becoming more frequent and intense, with periods of extreme heat and high humidity.[49]
- Extreme heat conditions can cause heat-related illnesses, droughts, wildfires and significant stress on infrastructure, including power grids and pavement buckling

Drought

- Droughts are prolonged periods of below-average rainfall, often exacerbated by high temperatures. Extreme drought can lead to water shortages and harm to agriculture and ecosystems in the form of reduced crop yields and increased risk of wildfires.
- Extended dry periods can also limit barge transportation on major rivers, threaten municipal water supplies and reduce hydropower generation.[50]
- In 2023, Missouri experienced its seventh driest growing season since 1895, with widespread drought conditions caused by low rainfall and high temperatures across an eight-month span.[51]

Wildfires

- Although less frequent than in western states, wildfires in Missouri pose a serious threat, especially during dry months with high temperatures and strong winds.
- Most wildfires are the result of human activity and can damage property, harm wildlife and endanger public health.
- In March 2024, Missouri experienced its first-ever fire disaster, with more than 200 wildfires burning more than 15,000 acres, including a major outbreak in mid-March that heavily impacted the Ozarks.[52]

[49]Frankson, Rebekah, Kenneth E. Kunkel, Sarah M. Champion and Brooke C. Stewart., NOAA National Centers for Environmental Information, "Missouri State Climate Summary," 2024, https://statesummaries.ncics.org/downloads/Missouri- StateClimateSummary2022.pdf.
[50]NOAA National Integrated Drought Information System, "National Conditions Missouri", accessed October 15, 2025, https://www. drought.gov/states/missouri.
[51]University of Missouri. College of Agriculture, Food and Natural Resources, Missouri Climate Center, "2023 was likely Earths warmest year on record, Missouri's third drought during growing season also defined 2023," January 11, 2024, http://climate.missouri. edu/news/arc/jan2024a.php.
[52]Bassler, H. (2025, June 17). "Worst-case scenario": St. Louis meteorologists warn of Missouri's worsening wildfire disasters, KSDK, https://www.ksdk.com/article/news/local/missouri-wildfire-disasters-are-coming-meteorologists-warn-to-prepare/63-5eb0f06f-be95- 4ce6-9cac-3888238f8bec.

Freight Transportation Network

Weather hazards pose significant risks to Missouri's freight and transportation systems, leading to widespread delays, cancellations, infrastructure damage and increased operational costs. Given Missouri's central location and its vital role as a national freight hub, the impacts to the economy from freight disruptions reach far beyond the State.

The freight transportation network is complex and highly interconnected, supporting the movement of goods across broad distances. It relies on a combination of transportation modes such as railroads, highways, inland waterways, airports, pipelines and intermodal facilities. These modes contribute to the efficiency and reliability of freight logistics while interacting to meet the diverse needs of industries, businesses and consumers. Rather than operating independently, these modes are interconnected in ways that allow freight to move efficiently. This multimodal approach enables flexibility in routing, cost-effectiveness in shipping and reliability in delivery. Intermodal facilities enhance this system by allowing goods to transfer seamlessly between modes, strengthening the overall performance of the network.

Each transportation mode, rail, highways, bridges, inland waterways and ports, airports, pipelines and intermodal facilities, faces distinct risks that can affect the overall functionality and resilience of the freight network. Understanding the specific function and vulnerabilities of each mode is essential for improving system preparedness and response to enable continued flow of freight.

Rail

- Missouri is a central hub for freight rail, hosting more than 3,700 miles of track.
- Class I railroads, including Burlington Northern Santa Fe Railway (BNSF), Canadian Pacific Kansas City (CPKC), CSX, Norfolk Southern (NS) and Union Pacific Railroad (UP) connect the state to national economic hubs and international ports of entry.
- Class III railroads, also known as short lines, are important first and last mile connections between industrial areas and the Class I railroads, reducing congestion on Missouri's highways.
- Critical rail hubs like Kansas City and St. Louis are the second and sixth largest freight rail hubs in the country, playing a vital role in national and international freight movement.

Rail yards, intermodal facilities and bridges are particularly vulnerable to flooding, heat-related rail deformation and severe storms.

Highway Network and Trucking Corridors

- Missouri is intersected by major highways, including I-70, 44, 49, 55, 29 and 35, which serve as key state and national freight corridors.
- St. Louis, Kansas City and Springfield are major nodes for trucking and logistics.
- Highways serve as critical access to all modal freight hubs.
- Truck parking facilities, highways and bridges need protection from extreme weather events and stormwater flooding.

Inland Waterways and Ports

- The Missouri River (M70 and M29) and Mississippi River (M35 and M55) are major arteries for waterborne freight movement moving between the agricultural Midwest and the Gulf for international shipments.
- The St. Louis regional port accounts for 21% of the Upper and Mid-Mississippi River freight flow.
- Vulnerabilities include fluctuating river levels, sediment buildup in channels and harbors and infrastructure damage from storms both at the ports and to the rivers' navigation control structures.

Airports

- St. Louis Lambert International Airport (STL), Springfield-Branson International Airport (SGF) and Kansas City International Airport (KCI) are critical components for high-value and time-sensitive freight cargo.
- Extreme weather risks that contribute to delays include heat damage to runways, disruptions from severe wind and rainstorms and icing on plane wings.

Pipelines

- Missouri has an extensive network of pipelines transporting oil, natural gas and other products.
- Access to pipeline terminals is a critical component of the network.
- Pipelines are susceptible to erosion, flooding and damage from shifting soil due to extreme weather events.

Intermodal Facilities

- Key intermodal terminals in Kansas City, St. Louis and other locations facilitate the transfer of goods between rail, truck and waterways.
- These facilities face risks from extreme heat, flooding and storm damage

Table 39 outlines the potential impacts of various eather hazards on Missouri's freight and transportation infrastructure.

Table 39 – Weather Hazard Impacts on Missouri's Freight System

	Rail	Highways and Trucking Corridors	Bridges	Inland Waterways and Ports	Airports	Pipelines	Intermodal Facilities
Tornado	Tracks blocked by debris; wind damage to rail infrastructure. Possible damage to cargo, railcars and locomotives	Debris blocks roads; structural damage to signage and barriers. Vehicle and cargo damage possible	Structural damage from wind; erosion from flash floods	Debris and outages disrupt cargo flow; fallen trees block access	Aircraft and terminals are vulnerable to wind damage	Debris impact and wind pressure may rupture pipelines	Structural damage to cranes, buildings; system shutdowns. Possible vehicle, container and cargo damage
Flooding	Track washouts; foundation erosion	Road erosion and collapse; vehicle sweep risk in deep water	Scouring weakens piers and footings; water pressure damages joints	Eroded banks, damaged docks and disrupted navigation channels. Risk of facility closure	Water intrusion impacts runway surfaces and access roads. Risk of facility closure	Eroded soil exposes or shifts buried pipelines	Rail washouts and road closures break multimodal links
Severe Thunder-storms	Track bed erosion; electrical and signal system failure	Washed-out roads; power outages disable signals and crossings. Possible cargo damage	Wind and water stress structural elements	Container loss; unsafe operating conditions for workers	Lightning and wind cause infrastructure damage	Voltage surges and flying debris can damage components	Flooding and outages disrupt operations
Winter Storms	Cold cracks rails and stiffens components; snow/ice reduce traction	Icy roads reduce driver control; increased maintenance needs	Brittle failures and freeze-thaw cracking	Ice buildup halts barge traffic	Ground handling disruptions due to snow and ice	Cracking and leakage from pipe freezing and contraction	Worker safety protocols trigger shutdowns
Cold Waves	Rail fractures; frozen cables disrupt signals	Freeze-thaw cycles degrade pavement, subgrade. Possible cargo damage	Stress from material contraction causes cracking and joint damage	Possible cargo damage from extreme cold	Equipment performance impacted by extreme cold	Freezing can block or rupture pipes	Truck engines or systems may fail to start
Heat Waves	Rail deformation and buckling ("sun kinks"); overheated signals	Pavement buckling and rutting of pavement	Thermal expansion stresses bridge joints and decks	Cargo spoilage risk increases; cooling requirements intensify	Runway surface softening	Pipe expansion stresses joints; soil shrinkage shifts support	Thermal stress impacts infrastructure reliability
Drought	Rail deformation and buckling. Risk of embankment fires started by sparks	Soil shrinkage can destabilize embankments, cuttings and pavement substructure	Shrinking soils shift bridge foundations	Low water restricts barge drafts and narrows navigation channels	Runway degradation from heat	Soil desiccation shifts pipes, increasing risk of leaks	Soil shrinkage and settlement may stress infrastructure
Wildfires	Track damage from heat; reduced visibility from smoke. Possible structure and equipment loss	Road closures from smoke; heat damages pavement; signpost loss risk. Possible structure and equipment loss	Buckled steel and cracked concrete from high heat	Erosion increases from vegetation loss; clogged drainage. Possible structure and equipment loss	Smoke disrupts air traffic visibility and routing. Possible structure and equipment loss	Heat may deform pipes; ash contaminates water systems	Air quality and visibility impair operations. Possible structure and equipment loss

Freight Impacts on the Environment and Society

Efficient, reliable freight transportation is essential to the nationwide movement of goods and supports jobs, availability of consumer products and quality of life amenities. However, its impact extends far beyond logistics and economics as increasing freight activity can contribute to concerns from communities near the freight facilities. The movement of diesel-powered trucks, trains and cargo equipment contributes to airborne particulate matter, affecting air quality, while the design of freight infrastructure can disrupt drainage patterns and lead to water issues. Over time, these conditions can affect public health and reduce property values. As a result, strategies to reduce these impacts while supporting the continued movement of goods must be considered.

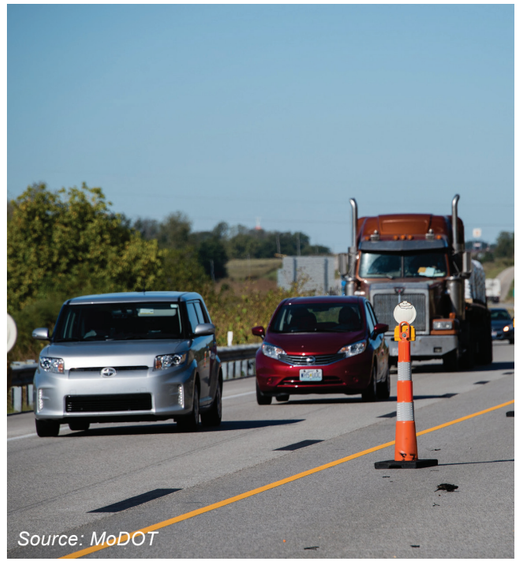
A range of solutions is available to address these challenges to increase the environmental sustainability of the freight systems. The use of zero-emissions equipment at freight facilities can help reduce diesel emissions, improving air quality and public health. In rail corridors, the establishment of quiet zones and the use of wayside horns and rail-highway grade separations can significantly reduce noise pollution without compromising safety. Meanwhile, the growing demand for truck parking has prompted the exploration of potential solutions such as real-time parking information systems, new facility development and the repurposing of existing infrastructure to reduce trucks parking on highway ramps and shoulders, as well as neighborhood streets. These practices aim to address the safety, regulatory and operational challenges truck drivers face when designated parking is unavailable. These solutions improve safety and efficiency and also help protect the quality of life for nearby communities, representing a shift toward more sustainable, efficient and community-conscious freight infrastructure.

Community Impacts

Missouri's freight transportation network, while vital to citizens' well-being and the commercial health of the State, can impact communities and wildlife habitats through its contributions to air and noise pollution, safety concerns and soil and water contamination.

Air

Diesel-powered vehicles and equipment are a source of emissions at the local level, affecting areas that are near highways, river ports, rail yards, transload facilities and distribution centers. When motors idle, they release emissions, increasing local exposure to tiny particles and droplets such as soot and smoke. Trucks most often idle in traffic and at loading docks. Locomotives idle mostly at loading docks and while awaiting maneuvers in siding tracks and rail yards. Among the effects of vehicle emissions is the formation of ozone, which affects air quality. **Figure 40** shows a sign warning drivers about poor air quality.


Source: MoDOT

Air freight impacts local air quality in communities that are near cargo airports. Aircraft emissions are released during landing, takeoff and idling. Although the volume of air freight emissions is less overall than that of rail or trucks, the emissions per ton of freight are comparable and also impact regional air quality.

Marine freight can affect local air quality, specifically in port communities. At inland waterways emissions originate from ships, diesel-powered equipment, trucks and trains that support cargo movement.

Figure 40 – Ozone Forecast Messaging



Source: MoDOT

Noise and Vibration

The noise from freight traffic can disrupt sleep and affect individuals' stress levels. Vibration caused by the movement of vehicles and locomotives can impact nearby buildings and infrastructure, leading to structural issues.[53]

[53]Ardian, Alan Riski Rio, Dewi Handayani and Ahmad Marzuki. 2025, "A Review: Vibration Caused by Transportation," Engineering Proceedings 84, no. 1: 42, https://doi.org/10.3390/engproc2025084042.

Traffic Congestion and Safety

Growing demand for goods and services—including doorstep delivery of consumer products—increases the average traffic rate on Missouri's roads. Increasing numbers of passenger and commercial vehicles can slow the flow of traffic and increase the number of potential conflicts.

Stormwater Runoff and Flooding

Freight facility surfaces such as concrete, asphalt and rooftops are mostly impermeable. These prevent water infiltration and, during significant rain events, can increase surface runoff volume and speed. Stormwater can quickly overflow drainage systems, especially in urban areas. Deluges and the resulting runoff can lead to flash flooding in and around freight hubs, can cause erosion and lessen water quality.

Freight infrastructure can disrupt natural drainage patterns where roads, terminals and buildings were not designed with high water volumes in mind. Soil compaction, caused by the use of heavy equipment and large trucks, can also reduce soil permeability, resulting in flooding. Excess water might flood adjoining or low-lying areas due to the lack of flood protection and resilient infrastructure. Runoff from freight areas can wash contaminants such as deicing chemicals, hydrocarbons from lubricating fluids and heavy metals from tires, brakes and engine wear into watersheds.[54]

Strategies to Enhance Freight Transportation Resilience



Source: MoDOT

[54]U.S. Environmental Protection Agency (EPA), National Pollutant Discharge Elimination System, "Stormwater Discharges From Transportation Sources," last modified January 10, 2025, https://www.epa.gov/npdes/stormwater-discharges-transportation-sources.

Increased resilience can enhance the efficiency and reliability within Missouri's freight transportation network in the face of major weather disruptions and aging infrastructure. **Table 40** describes targeted goals and strategies that can result in a more adaptable freight system that maintains uninterrupted movement of goods, strengthens reliability of corridors and supports economic competitiveness. By focusing on future planning strategies, MoDOT can mitigate risks and minimize the disruptions on the freight network statewide. Enhancing freight resiliency can protect Missouri's role as a key national freight hub and support long term economic growth.

Table 40 – Goals and Strategies to Enhance Freight Transportation System Resilience

SFRP Goal	Strategy
Stewardship Maintain current assets and services we have today	Prioritize long-term maintenance for critical freight assets. Incorporate risk planning and resilience needs into transportation planning processes Design freight infrastructure to resist damage under physical stress. Strengthen secondary highways and bridges to operate as detour routes for all traffic, including standard commercial motor vehicles.
Safe Work to enhance safety of the transportation system for all users	Identify safe, publicly owned locations for truck parking use when major freight corridors are unexpectedly closed due to weather or other incidents.
Prosperous Boost the economy through transportation investments	Coordinate across state and local agencies and modes to unify resilience efforts statewide.
Connected Improve mobility and connect communities through expanded multimodal choices	Identify alternative routes for freight assets which are more vulnerable to extreme weather disruptions. Install signage and real-time traffic alert systems to guide freight vehicles through congested areas and provide alternate routes for standard size and weight vehicles when delays occur.
Reliable Ensure efficiency and reliability in the transportation network	Prioritize critical freight needs, transportation assets and modal connections for rapid emergency response. Harden vulnerable freight assets to extreme weather and seismic events. Stage alternative commercial vehicle route signage - for trucks of legal dimension and weight – at locations for quick installation during detour events.
Innovative Integrate emerging technologies to make our transportation system prepared and future-ready	Integrate technologies to track infrastructure conditions, detect disruptions and support timely freight operation decisions. Implement technology to simulate and monitor infrastructure performance, enabling proactive maintenance and informing design decisions. Include outlier vehicles such as oversized and/or overweight vehicles in assessment and design decisions.

Table 41 describes goals and strategies in the SFRP that will mitigate freights impacts on the environment and society.

Table 41 – Goals and Strategies to Mitigate Freight Impacts

SFRP Goal	Strategy
Stewardship Maintain current assets and services we have today	Support implementation of Quiet Zones on freight rail lines adjacent to residential areas to reduce noise and improve quality of life while maintaining freight service.
Safe Work to enhance safety of the transportation system for all users	Support implementation of zero emission freight equipment. Encourage truck parking facilities to be included in industrial economic development projects to reduce unauthorized parking on shoulders, ramps and near residential areas.
Prosperous Boost the economy through transportation investments	Identify potential road-rail grade separation locations on freight routes to reduce idling and noise. Support rail access to industrial development areas to encourage freight traffic efficiency.
Reliable Ensure efficiency and reliability in the transportation network	Support installation of automation and idle reduction standards at modal hubs to reduce idling and increase capacity. Consider roundabout installation near freight hubs to reduce truck idling. Expand CCTV locations connected to traffic management systems to increase rapid response for traffic disruptions and backups
Connected Improve mobility and connect communities through expanded multimodal choices	Support existing intermodal hub locations and identify potential additional sites to encourage efficient movement of freight and reduce idling from backup queue.
Innovative Integrate emerging technologies to make our transportation system prepared and future-ready	Support installation of intelligent highway-rail at-grade crossing technology that adjusts traffic signals and notifies commercial vehicles when an alternative crossing should be used. This reduces idling from backup queues. Continue to monitor other states' experiences with truck parking information systems that provide virtual information to drivers regarding available authorized parking locations.

Chapter 8. Recommendations

This chapter presents a set of strategic, actionable recommendations that advance Missouri's freight system in alignment with federal freight planning guidance and the goals of the NMFN. These recommendations identify infrastructure improvements, policies and operational innovations that strengthen Missouri's contribution to national economic competitiveness; reduce congestion and eliminate bottlenecks; improve safety, security, efficiency and resiliency; and enhance the productivity and reliability of freight movement for industries that support high-value jobs.

The recommendations reflect analyses of system conditions, freight bottlenecks, modal integration, future demand and performance gaps, as well as opportunities to improve modal shift for both short and long distance movements across rural and urban corridors. They emphasize strategies to achieve and maintain a state of good repair, reduce heavy-vehicle impacts on critical roadways, improve first/last-mile connectivity between ports, airports, gateways and the National Multimodal Freight Network (NMFN) reduce the environmental impacts of freight movement. Stakeholder and regional input helped refine these priorities and support their relevance to Missouri's freight shippers, carriers and communities.

Recommendations are organized into four categories — Policy, Operations, Project Development and Capital Improvements and Communications — the recommendations support multi-state corridor coordination, enhance multimodal connectivity and position Missouri to leverage innovation and advanced technologies to improve safety, efficiency and reliability. They also reflect the need for implementable, high-value strategies that are not burdensome to state or local governments and that align with federal discretionary grant programs in an environment of variable funding availability.


Source: MoDOT

Policy

Recommendation 1:
Continue monitoring Truck Parking Information Management System (TPIMS) and Truck Parking Availability System (TPAS) efforts nationwide to evaluate whether these technologies are appropriate and cost-effective for implementation in Missouri.

Discussion: Missouri continues to have a large deficit of truck parking spaces across the system. States across the country are piloting technology-based solutions to more effectively use the available safe and reliable truck parking. Some states have identified issues related to reliability and long-term maintenance of existing technology-based information systems. Missouri trucking industry stakeholders consistently noted a preference for increasing inventory of spaces significantly before implementing an electronic system. Until a significant number of truck parking spaces are added to Missouri's inventory, monitoring efforts in other states can help The MoDOT identify best practices and continued advancements in artificial intelligence (AI)before committing to a system. MoDOT may explore public-private partnerships or cooperative data-sharing agreements, consistent with its statutory authority and procurement policies, to enhance system efficiency and reduce implementation costs. Existing third-party platforms such as Trucker Path and Dock411 offer crowd-sourced parking data that could inform or supplement future state-led systems. Insights from these efforts, along with findings from the **Truck Parking Analysis Technical Memorandum** should guide any future technology investments.

Action Items

- ☾ Track TPIMS/TPAS pilot outcomes and funding mechanisms in peer states and freight corridors.
- ☾ Engage third-party platform providers to assess integration opportunities and data-sharing protocols.
- ☾ Evaluate long-term maintenance, funding and interoperability requirements before pursuing a pilot program or funding.
- ☾ Revisit feasibility as part of future MoDOT freight plan and statewide truck parking plan updates.

Missouri SFRP Goals

	**Prosperous** – Increase partnership coordination with local communities, regional and metropolitan organizations, businesses, transportation service providers and other sectors to identify what transportation projects can better support local economies.
	**Reliable** – Take a practical/life cycle approach to highway system capacity expansion.
	**Innovative** – Explore technology and develop business practices that result in lower life-cycle costs.

Recommendation 2:
Increase reliable investment in first- and last-mile non-highway freight infrastructure to reduce highway congestion and improve statewide system efficiency.

Discussion: Modal stakeholders consistently emphasized that lack of capital funds to support non-highway freight movement was limiting the efficiency of Missouri's freight system. Missouri's Freight Enhancement Program (FRE) was highlighted as an example of a critical tool for supporting multimodal freight investments that improve reliability and reduce highway congestion. The program's quick turnaround and ease of application were highlighted as positives with calls for substantial expansion of the available funds. FRE has enabled ports, railroads and airports to complete small but high-impact projects that enhance freight connectivity, safety and economic competitiveness. Stakeholders noted that many freight projects—such as cargo aprons, rail spurs and port access improvements—are not competitive for federal programs, which typically prioritize passenger or highway-centric infrastructure. Increasing flexible, state-level funding for multimodal needs would strengthen the supply chain resilience and statewide freight mobility. This recommendation also aligns with regional priorities outlined in the St. Louis Freightway Freight Development Plan and the Mid-America Regional Council (MARC) Connected Freight Kansas City (KC) 2050 Plan, both of which emphasize increased investment in first- and last-mile connectivity, intermodal access and industrial site readiness. Increasing available funds can help advance regional priority freight projects identified in these plans, supporting coordinated multimodal development across Missouri's economic centers. Additional details are provided in **Freight Condition and Performance Chapter.**

Action Items

- ☾ Evaluate opportunities to increase annual FRE appropriations or development of a new larger non-highway grant program for first- and last-mile freight investments through complementary fundings sources (e.g., legislative allocation, public-private cost-share).
- ☾ Prioritize projects that improve multimodal connectivity and enhance economic competitiveness.
- ☾ Support short line and and industrial developmenttax credit state legislation that encourages investment in Class III rail lines.
- ☾ Track FRE project outcomes using consistent performance metrics to demonstrate program effectiveness.
- ☾ Flex a portion of the National Highway Freight Program (NHFP) funds to non-highway freight projects as permitted by Title 23 U.S. Code Section 167.

Missouri SFRP Goals

	**Stewardship** - Explore and secure stable funding to support the current system and services for each mode of transportation.
	**Reliable** - Provide reliable and accessible multimodal transportation options for all users.
	**Innovative** - Identify and plan for alternative funding sources to recoup gas tax revenue lost from alternatively fueled vehicles and to supplement gaps in federal funding programs.

Recommendation 3:
Modify at-grade railroad crossing prioritization framework to incorporate approach grades and other physical factors that hinder sightlines and increase safety risks.

Discussion: MoDOT uses an exposure index and the FRA accident prediction formula as the primary factors to prioritize crossing projects. Approach grades that hinder sightlines increase safety risks. Modifying the Section 130 program's methodology would allow Missouri to target investments more effectively, reduce crash risk, mitigate bottlenecks and adopt next-generation technologies that improve safety and mobility at crossings. This action aligns with the Show-Me Zero Plan and the Highway-Rail Grade Crossing State Action Plan (2022-2026), both of which emphasize proactive risk reduction through engineering upgrades, education and public outreach. This recommendation also complements MARC's data-driven approach to freight corridor safety.

Action Items

- Review the existing Section 130 prioritization criteria to identify gaps related to approach grade and visibility conditions.
- Coordinate with the FRA and peer Departments of Transportation (DOTs) to identify best practices for incorporating geometric risk factors into crossing safety programs.
- Pilot new data collection or assessment tools (e.g.,Light Detection and Ranging (LiDAR), Geographic Information System (GIS) based slope analysis) to quantify sightline limitations.
- Update internal procedures and prioritization models to verify that future safety investments address both historical crash data and proactive risk indicators.

Missouri SFRP Goals

	Safe - Invest in system-wide safety improvements to reduce fatalities and serious injuries for all modes.
	Reliable - Increase reliability of the transportation system in bottleneck areas.
	Innovative - Understand and deploy innovative work zone warning and protection devices.



Source: MoDOT

Recommendation 4:
Establish a coordinated statewide freight data and governance framework to support continuous collaboration among MoDOT, Metropolitan Planning Organizations (MPOs), Regional Planning Commissions (RPCs), ports, railroads and private-sector partners.

Discussion: Regional freight plans highlight the importance of institutional coordination to sustain effective multimodal planning and data-sharing. Missouri can lead freight planning by providing structure for a statewide practitioner freight team to integrate state, regional and private-sector freight datasets; coordinate project prioritization; and monitor performance outcomes. This would align with MARC's Connected Freight KC 2050 call for an expanded Goods Movement Committee and strengthen MoDOT's statewide leadership role in freight planning.

Action Items

- Convene a standing freight practitioner's working group to support regional freight planning.
- Develop standardized data protocols for sharing commodity flows, truck GPS and port/rail volumes.
- Integrate data from regional freight plans into MoDOT Tracker and freight dashboards.

Missouri SFRP Goals

	Stewardship - Preserve the assets and services currently in place by fostering data transparency, sharing and coordination among all stakeholders.



Source: MoDOT

Operations

Recommendation 5:
Incorporate trucking industry perspectives into work-zone standard protocols for construction and maintenance operations to improve freight safety and reliability.

Discussion: MoDOT has standardized protocols used to plan work zones. The trucking industry emphasized that inconsistent work zones, limited real-time communication and substantially reduced lane width can create safety risks and operational inefficiencies for commercial drivers. Stakeholders cited examples along major freight corridors—particularly the I-70 projects—where temporary concrete barriers were struck or displaced, narrowing travel lanes and creating hazards for trucks. Establishing statewide work zone practices that consistently incorporate trucking industry perspective and improving real-time communication about active construction can help improve safety, reduce uncertainty and maintain freight mobility during construction activities. MARC's Connected Freight KC 2050 Plan highlights corridor reliability and consistent operations as key freight mobility goals. Implementing standardized work-zone practices will help achieve those objectives and reduce delays for freight carriers across the Kansas City region and statewide.

Action Items

- Engage freight carriers and driver associations in work zone safety standards, protocols and best practices to identify recurring issues and recommended improvements.
- Expand smart work zones Intelligent Transportation Systems (ITS) technology and its integration into drivers' GPS notification systems.
- Evaluate whether planned freight detour routes should be incorporated into work zone standards to increase freight reliability on freight corridors.

Missouri SFRP Goals

	Reliable – Maintain a transportation network that is efficient and dependable.



Source: MoDOT

Recommendation 6:
Identify and implement strategies for improving freight resiliency through innovative operation enhancements and improving infrastructure on key corridors and freight facilities.

Discussion: To promote infrastructure resilience and operational continuity, MoDOT can incorporate a more proactive, data-driven and technology-enabled strategy. Investing in real-time monitoring systems, adaptive infrastructure and innovative approaches such as the use of AI, can lead to faster response times and reduce the duration and cost of disruptions. Planning for Freight resiliency was also identified as a strategic priority in MARC's Connected Freight KC 2050 Plan and peer-state freight plans reviewed in **Missouri's Context Chapter.** These emphasize proactive planning for weather events, infrastructure redundancy and coordinated response capabilities — frameworks Missouri can build upon through this recommendation.



Source: MoDOT

Action Items

- Conduct a freight system resiliency assessment to identify vulnerable corridors, facilities and intermodal connectors.
- Pilot technology-based solutions (e.g., predictive analytics, remote sensing, automated inspections) to support real-time monitoring and response.
- Coordinate with ports, railroads and airports to share data and develop joint contingency plans for critical disruptions.
- Integrate freight resiliency goals and metrics into MoDOT's long-range planning and performance reporting processes.

Missouri SFRP Goals

	Reliable - Enhance emergency and alternative routes; Enhance transportation infrastructure resilience to maintain the movement of people and goods during traffic disruptions.
	Innovative - Explore technology and develop business practices that result in lower life-cycle costs. Integrate traffic management systems and vehicle detection systems to monitor and improve traffic congestion.

Recommendation 7:
Work with regional planning organizations to identify locations needed for truck staging to reduce congestion, unauthorized parking and improve effectiveness of state-provided long-term parking.

Discussion: Freight generators often limit truck pickup and delivery to specified appointment times. In urban areas where authorized parking is limited, drivers often choose to wait at MoDOT-owned truck parking facilities far from the freight generator, reducing the available parking spaces for drivers stopping due to Hours of Service regulations. Then when traveling to the freight generator the truck is operating during peak congestion times on the roadway, decreasing the driver's available time to carry cargo and unnecessarily contributing to peak congestion. If truck staging areas are located at or near the freight generators, the drivers can better plan trips to effectively use available Hours of Service (HOS) and travel to these staging areas outside of peak congestion. This effort complements MARC's corridor analysis and freight data initiatives, which use similar metrics to identify staging areas and parking needs along key urban freight corridors. More detailed information is contained in the **Truck Parking Analysis Technical Memorandum.**


Source: MoDOT

Action Items

- Analyze statewide GPS and American Transportation Research Institute (ATRI) truck movement data to identify high-frequency stopping locations with one- to seven-hour duration trends which can indicate stage parking.
- Coordinate with local public officials, MPOs and RPCs to identify potential locations and strategies to implement stage parking for freight generators.
- Incorporate results into future truck parking plans and multimodal freight planning activities to guide funding and policy priorities.

Missouri SFRP Goals

	Prosperous - Increase partnership coordination with local communities, regional and metropolitan organizations, businesses, transportation service providers and other sectors to identify what transportation projects can better support local economies.
	Innovative - Explore technology and develop business practices that result in lower life-cycle costs.

Project Development and Capital Improvements

Recommendation 8:
Expand truck parking spaces along Missouri freight corridors to increase safety and reduce operational costs.

Discussion: Missouri has a substantial shortage in truck parking as described in the **Truck Parking Analysis Technical Memorandum.** MoDOT pioneered conversion of weigh stations and rest areas to truck parking. The gap of supply compared to demand is projected to grow from 875 (2024) to 1,450 (2050) spaces for public parking and from 2,542 (2024) to 5,010 (2050) for private parking. The recent discretionary grant to increase parking availability on I-70 will reduce this gap slightly.



Source: MoDOT

Action Items

- Identify opportunities to expand existing truck parking facilities on all freight corridors.
- Publish the Truck Parking Analysis Technical Memorandum to provide information to private facilities to potentially expand availability.
- Collaborate with MPOs, RPCs and local public agencies to identify areas where staging parking could be implemented to reduce demand at MoDOT's long-term sites.
- Consider the addition of truck parking facilities during project scoping.
- Apply for corridor-wide truck parking discretionary grants using the I-70 application as a model.

Missouri SFRP Goals

	Safe - Invest in system-wide safety improvements to reduce fatalities and serious injuries for all modes.

Recommendation 9:
Consider development of intermodal and transload facilities as eligible projects to strengthen modal shift opportunities, reduce roadway deterioration from heavy vehicle movementstt enhance connections between Missouri's highway, rail, waterway and air freight networks.

Discussion: Interviews with Missouri freight-dependent industries show that improving modal transfer efficiency remains a major opportunity to strengthen competitiveness and reduce pressure on the highway system. Heavy agricultural, mining, energy and timber truck movements contribute disproportionately to pavement deterioration and the FHWA requires states to identify where these impacts are occurring and where modal alternatives may help reduce long-term maintenance costs.

Expanding intermodal and transload capacity—particularly rail-served or port-based facilities—would provide shippers with viable modal-shift options and relieve corridors experiencing high heavy-truck volumes. These strategies align with the St. Louis Freightway's Freight Development Plan and MARC's Connected Freight KC 2050 Plan, both of which emphasize investments that improve multimodal connectivity and reduce reliance on long-haul trucking.

Action Items

- Identify and prioritize strategic locations for new or expanded intermodal facilities based on freight flows, commodity types and access to key corridors.
- Collaborate with railroads, port authorities, MPOs and private developers to advance site planning, design and funding.
- Evaluate opportunities for state support or cost-sharing through programs such as the Freight Enhancement Program or federal discretionary grants.

Missouri SFRP Goals

	Prosperous - Increase partnership coordination with local communities, regional and metropolitan organizations, businesses, transportation service providers and other sectors to identify what transportation projects can better support local economies.
	Connected - Provide an accessible and connected transportation system for all users.

Recommendation 10:
Partner with Class III railroads for funding to upgrade trackage to accommodate industry standard railcars and increase safety at grade crossings.

Discussion: While the majority of the Missouri Freight rail network is capable of handling industry standard railcars (286,000 lb) gaps remain, predominately on Class III rail lines, where infrastructure limitations prevent full network efficiency. Class III rail lines have limited resources for capital investment. As first- and last- mile connectors, these rail lines provide much needed access to Class I's which is critical for attraction of freight generators to the state while also providing an alternative to truck thereby reducing congestion and goods movement cost. Some track upgrades have been accomplished through the FRE program, however, that program funding is severely limited. Class III stakeholders noted that recent changes at MoDOT reduced eligibility for maintaining active warning systems at crossings. With limited capital funds for on-going maintenance of these systems, the railroad is less likely to pursue these improvements thus reducing safety for both rail and truck freight at these locations. These proposed partnering initiatives also align with the Freightway's call for targeted rail-infrastructure upgrades and bridge improvements that remove freight chokepoints in the St. Louis region. See the **Freight Conditions and Performance Chapter** for more details on the impact of weight limit tracks on the network.

Action Items

- Support short line tax credit state legislation that encourages investment in Class III rail lines.
- Evaluate whether retiring and replacing dated Class III at-grade crossings should be included in eligible activities for rail crossing program.

Missouri SFRP Goals

	Stewardship - Explore and secure stable funding to support the current system and services for each mode of transportation.
	Reliable - Increase reliability of the transportation system in bottleneck areas.



Source: MoDOT

Recommendation 11:
Prioritize targeted improvements in partnership with Amtrak and railroads to maintain and improve on-time performance for the Missouri River Runner and other shared use corridors.

Discussion: Competing interest between freight and passenger rail can pose operational challenges along shared use corridors; targeted investments can help alleviate chokepoints along these critical corridors. This recommendation complements the Freightway Priority Projects List, which includes bridge and rail-corridor enhancements improving both passenger and freight reliability within shared-use corridors. See **Freight Conditions and Performance Chapter** for additional information.



Source: MoDOT

Action Items

- Work with Amtrak and freight railroads to identify and prioritize shared-use corridor bottlenecks impacting on-time performance.
- Evaluate infrastructure improvements such as siding extensions, universal crossovers, double-tracking and signal modernization to enhance reliability.
- Monitor and report on-time performance metrics to evaluate the effectiveness of targeted improvements and inform future planning.

Missouri SFRP Goals

	Prosperous - Increase partnership coordination with local communities, regional and metropolitan organizations, businesses, transportation service providers and other sectors to identify what transportation projects can better support local economies.
	Reliable - Increase reliability of the transportation system in bottleneck areas.

Recommendation 12:
Support development and marketing of “freight-ready” industrial sites adjacent to multimodal corridors.

Discussion: Missouri Partnership, the Missouri’s Department of Economic Development (DED), SmartPort and Freightway all have programs to identify properties ready for freight generator development with utility connections and modal access. MoDOT can coordinate with local and regional partners to advance site readiness for logistics-focused industries. Site readiness complements MoDOT’s infrastructure role by aligning land development with transportation investments.

Action Items

- Incorporate site-readiness metrics into FRE Program project selection.
- Coordinate with DED, Missouri Partnership, SmartPort and Freightway to identify sites being actively marketed to assess any modal access needs anticipated for inclusion in project prioritization.
- Promote freight-ready sites through MoDOT and regional economic development communications.

Missouri SFRP Goals

	Prosperous - Increase partnership coordination with local communities, regional and metropolitan organizations, businesses, transportation service providers and other sectors to identify what transportation projects can better support local economies



Source: MoDOT

Communications

Recommendation 13:
Enhance freight truck parking and safety information availability.

Discussion: Truck drivers and other motorists would benefit from improved visibility of truck parking information on MoDOT's web resources, particularly during emergencies. Improving traveler information supports corridor-management goals identified in MARC's Connected Freight KC 2050 Plan, which encourages consistent freight communication tools across regions. Additional details are provided in **Truck Parking Analysis Technical Memorandum.**

Action Items

- Add welcome center, rest area and public truck parking sites to the MoDOT Traveler Inforfation Map.
- Evaluate GPS tracking providers, geofencing, and other ITS tools to enhance real-time notifications to drivers.

Missouri SFRP Goals

	Reliable – Enhance transportation infrastructure resilience to maintain the movement of people and goods during traffic disruptions.



Source: MoDOT

Recommendation 14:
Incorporate freight infrastructure resilience into the project prioritization and scoping.

Discussion: Reliability is a key factor for goods movement. Extreme weather events reduce reliability. Impacts of weather hazards on modal components of the freight system can be found in the Freight and Rail Impacts Chapter. This analysis provides general guidance for scoping and project prioritization. Some states have performed a proactive, data-driven vulnerability and impact assessment on individual infrastructure elements to incorporate into project prioritization and scoping. Leveraging resources through interagency coordination can provide a more holistic understanding of system risk, guide investment prioritization and enhance emergency preparedness. This effort parallels MARC's and the Freightway's shared focus on freight system resilience and interagency coordination for emergency preparedness.

Action Items

- Engage with partner MPOs and relevant state agencies.
- Consider freight route weather hazard risk as higher priority in project prioritization process.
- Include major freight routes consideration in development of emergency response tiers.

Missouri SFRP Goals

	Prosperous - Increase partnership coordination with local communities, regional and metropolitan organizations, businesses, transportation service providers and other sectors to identify what transportation projects can better support local economies
	Reliable - Enhance transportation infrastructure resilience to maintain the movement of people and goods during traffic disruptions.



Source: MoDOT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THIRD LIEN STATE ROAD BONDS, SERIES A 2026 PRICING SUMMARY
-- Presented by Brenda Morris, Chief Financial Officer, 573-751-2803.

ISSUE: The competitive sale of the Third Lien State Road Bonds, Series A 2026 (hereinafter, "Series A 2026 Bonds") took place on May 19, 2026. The bond proceeds will finance projects in the Statewide Transportation Improvement Program ("STIP"). This summary provides an overview of the pricing results.

RECOMMEND that the Commission:

- This item is for information only; no action is required.

DEPARTMENT VIEW:

- Bond financing allows the department to provide much needed infrastructure improvements to the traveling public sooner than pay-as-you-go funding allows. Building projects sooner results in cost savings by reducing project inflation costs, while at the same time advancing economic development, improving safety, and easing congestion.
- The department supports targeted bond issues for projects with long-term benefits that comply with the MHTC's conservative Debt Management Policy.
- Attachment 1 provides a pricing summary for the bonds.

OTHER VIEWS:

- The bond market views the Commission and the Commission's Debt Management Policy favorably, as evidenced by investment banks submitting very competitive bids for the Series A 2026 Bonds.

MHTC POLICY:

- Financial – Debt Management – Bond Financing Summary.
- Financial – Debt Management Policy.

OTHER PERTINENT INFORMATION:

- Issuance of the Series A 2026 Bonds will generated $650.0 million in proceeds for projects in the STIP.
- The Series A 2026 Bonds received credit ratings of 'AA+', 'Aa1', and 'AAA' from Standard & Poor's, Moody's, and Fitch, respectively.
- The financing attracted attention with five bids received. While some banks placed individual bids, some formed syndicates and bid as a group. Altogether, 18 banks participated in bids, including six members of the Commission's pre-qualified investment banking pool.
- Competition was tight with the winning bid coming from BofA Securities, with a True Interest Cost (TIC) of 2.970 percent. The sale was very competitive with the spread between all bids being less than three basis points.
- The newly-issued debt is in compliance with the parameters established in the Commission's Debt Management Policy.
- The expected closing and delivery of funds is scheduled for June 16, 2026.

SOURCE OF FUNDING: All costs associated with the Series A 2026 Bond issue will be paid from Series A 2026 Bond proceeds. Principal and interest on the Series A 2026 bonds will be paid as provided in the Master Bond Indenture dated July 1, 2005, from the State Road Fund Revenues and State Road Bond Fund Revenues.

Third Lien State Road Bonds, Series A 2026

Pricing Summary

Item	Series A 2026 Bonds
Par Amount	$608,520,000
Premium	$42,429,787
Bond Proceeds	$650,949,787
Interest Rate on New Bonds (True Interest Cost)	2.970%
Average Life on New Bonds	3.683 years
Maturities on New Bonds	2027 - 2033
Uses	
Project Fund	$650,000,000
Cost of Issuance (COI)	$660,000
Underwriter's Discount	$287,034
Additional Proceeds	$2,753
Total Uses	$650,949,787

Winning Bidder:
BofA Securities


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1

REPORT AND RECOMMENDATION REGARDING FINAL ORDERS OF RULEMAKING – CONTRACTOR PERFORMANCE RATING

-- Presented by Mark Croarkin, Assistant Chief Engineer, 573-751-4586; and Terri Parker, Chief Counsel, 573-751-7451.

ISSUE:

- Section 227.105, RSMo requires the department to promulgate rules, which determine a contractor's minimum qualifications for the contractor's bid to be acceptable for a highway project in excess of two million dollars.
- Proposed amended and rescinded rulemaking for Title 7 Code of State Regulations (**CSR**) 10-10, Contractor Performance Rating to Determine Responsibility, is required to address the following issues:
  - Eliminate the annual rating of contractors' performance and replace with a simplified contractor award process.
  - Maintain the right to recommend or declare persons or contractors nonresponsible on other grounds that is already in the CSR.
- On February 4, 2026, the Commission approved and authorized staff to file the proposed amended and rescinded rules with the Joint Committee on Administrative Rules (**JCAR**) and the Secretary of State (**SOS**), who published the proposed amendments and proposed rescissions in the *Missouri Register* for public comment. No comments were received during the thirty (30) day comment period.

RECOMMEND that the Commission:

- Approve the final orders of rulemaking to complete the rulemaking process.
- Authorize the Secretary to the Commission to file the final orders of rulemaking (**Attachments 1-9**) with JCAR and SOS for publication in the *Missouri Register*.
- Authorize the Director, Deputy Director/Chief Engineer, Chief Financial Officer, Assistant Chief Engineer, Chief Safety and Operations Officer, or Chief Administrative Officer to execute any documents necessary to complete rulemaking process.

DEPARTMENT VIEW:

- Department staff believes the Commission's Contractor Performance Rating rules should reflect current statutory requirements and processes, be as clear and concise as possible without redundancy, and continue to be necessary and up to date.

OTHER VIEWS:

- **General Assembly:** By enacting section 536.175, RSMo in 2012, state legislators want state agencies to regularly review their administrative rules and repeal those rules that are obsolete or unnecessary and amend those rules to reduce regulatory burdens on individuals, businesses, or political subdivisions or eliminate unnecessary paperwork.
- **Governor Approval:** On May 5, 2026, MoDOT staff sent a copy of the proposed final orders of rulemaking to the Governor's Office for its review and approval. MoDOT staff received the Governor's Office approval on May 7, 2026.

- **Public Comment Period:** There were no comments received regarding the proposed amended and rescinded rulemaking during the *Missouri Register* public comment period from March 16, 2026 to April 15, 2026.

MHTC POLICY:

- Commission – Policies and Administrative Rules – Administrative Rules (Code of State Regulations).
- Commission – Highways – Construction – Contractor Prequalification.

OTHER PERTINENT INFORMATION:

- Under section 226.130.1(2), RSMo, the Commission shall prescribe rules and regulations not inconsistent with law fixing the duties of all persons employed by the Commission. There is a very thorough and lengthy process involved in preparing and reviewing administrative rules:
  - Prior to preparing administrative rules for the Commission's consideration, department staff will draft a rule and review it with affected stakeholders and industry to receive their input and address any concerns.
  - The administrative rules are then submitted to the Commission for consideration and approval.
  - Once approved by the Commission, the department submits the proposed rulemaking to SOS and JCAR.
  - Thirty (30) to forty-five (45) days later, the rules are published in the *Missouri Register*.
  - Following publication, there is a public comment period for a minimum of thirty (30) days.
  - Once the public comment period is closed, the department addresses the comments, if any are made, and submits the final order of rulemaking to the Commission for consideration again. Sometimes changes will be made from the initial proposal to the final proposal; occasionally no changes are made.
  - Following Commission approval, the department submits the final order of rulemaking to JCAR.
  - JCAR has thirty (30) days to review the final order of rulemaking.
  - After JCAR review, the department submits the final orders of rulemaking to SOS.
  - The rules are incorporated and published in the *Code of State Regulations* and become effective thirty days after publication.
  - Once a rule becomes effective, it has the force and effect of law.

SOURCE OF FUNDING: No additional MoDOT funds will be required.

Title 7—DEPARTMENT OF TRANSPORTATION
Division 10—Missouri Highways and Transportation Commission
Chapter 10—Contractor Performance Rating to Determine Responsibility

ORDER OF RULEMAKING

By the authority vested in the Missouri Highways and Transportation Commission under sections 226.020, 226.130, 227.030, and 227.105, RSMo, the commission amends a rule as follows:

7 CSR 10-10.010 Definitions **is amended**.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on March 16, 2026 (51 MoReg 397-398). No changes have been made to the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 7—DEPARTMENT OF TRANSPORTATION
Division 10—Missouri Highways and Transportation Commission
Chapter 10—Contractor Performance Rating to Determine Responsibility

ORDER OF RULEMAKING

By the authority vested in the Missouri Highways and Transportation Commission under sections 226.020, 226.130, 227.030, and 227.100, RSMo, the commission amends a rule as follows:

7 CSR 10-10.020 Explanation of Contractor Performance Rating System **is amended**.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on March 16, 2026 (51 MoReg 399). No changes have been made to the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 7—DEPARTMENT OF TRANSPORTATION
Division 10—Missouri Highways and Transportation Commission
Chapter 10—Contractor Performance Rating to Determine Responsibility

ORDER OF RULEMAKING

By the authority vested in the Missouri Highways and Transportation Commission under sections 226.020, 226.130, 227.030, and 227.100, RSMo, the commission rescinds a rule as follows:

7 CSR 10-10.030 Rating Categories for Evaluating the Performance of a Contractor **is rescinded**.

A notice of proposed rulemaking containing the text of the proposed rescission was published in the *Missouri Register* on March 16, 2026 (51 MoReg 399). No changes have been made to the text of the proposed rescission, so it is not reprinted here. This proposed rescission becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 7—DEPARTMENT OF TRANSPORTATION
Division 10—Missouri Highways and Transportation Commission
Chapter 10—Contractor Performance Rating to Determine Responsibility

ORDER OF RULEMAKING

By the authority vested in the Missouri Highways and Transportation Commission under sections 226.020, 226.130, 227.030, and 227.105, RSMo, the commission rescinds a rule as follows:

7 CSR 10-10.040 Contractor Performance Project Evaluation Used For Determining Contractor Performance **is rescinded**.

A notice of proposed rulemaking containing the text of the proposed rescission was published in the *Missouri Register* on March 16, 2026 (51 MoReg 399-400). No changes have been made to the text of the proposed rescission, so it is not reprinted here. This proposed rescission becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 7—DEPARTMENT OF TRANSPORTATION
Division 10—Missouri Highways and Transportation Commission
Chapter 10—Contractor Performance Rating to Determine Responsibility

ORDER OF RULEMAKING

By the authority vested in the Missouri Highways and Transportation Commission under sections 226.020, 226.130, 227.030, and 227.105, RSMo, the commission rescinds a rule as follows:

7 CSR 10-10.050 Procedure and Schedule for Completing the Contractor Performance Project Evaluation **is rescinded**.

A notice of proposed rulemaking containing the text of the proposed rescission was published in the *Missouri Register* on March 16, 2026 (51 MoReg 400). No changes have been made to the text of the proposed rescission, so it is not reprinted here. This proposed rescission becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 7—DEPARTMENT OF TRANSPORTATION
Division 10—Missouri Highways and Transportation Commission
Chapter 10—Contractor Performance Rating to Determine Responsibility

ORDER OF RULEMAKING

By the authority vested in the Missouri Highways and Transportation Commission under sections 226.020, 226.130, 227.030, and 227.105, RSMo, the commission rescinds a rule as follows:

7 CSR 10-10.060 Explanation of Standard Deviation Rating System for All Contractors **is rescinded**.

A notice of proposed rulemaking containing the text of the proposed rescission was published in the *Missouri Register* on March 16, 2026 (51 MoReg 400). No changes have been made to the text of the proposed rescission, so it is not reprinted here. This proposed rescission becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 7—DEPARTMENT OF TRANSPORTATION
Division 10—Missouri Highways and Transportation Commission
Chapter 10—Contractor Performance Rating to Determine Responsibility

ORDER OF RULEMAKING

By the authority vested in the Missouri Highways and Transportation Commission under sections 226.020, 226.130, 227.030, and 227.105, RSMo, the commission rescinds a rule as follows:

7 CSR 10-10.070 Procedure for Annual Rating of Contractors **is rescinded**.

A notice of proposed rulemaking containing the text of the proposed rescission was published in the *Missouri Register* on March 16, 2026 (51 MoReg 400-401). No changes have been made to the text of the proposed rescission, so it is not reprinted here. This proposed rescission becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 7—DEPARTMENT OF TRANSPORTATION
Division 10—Missouri Highways and Transportation Commission
Chapter 10—Contractor Performance Rating to Determine Responsibility

ORDER OF RULEMAKING

By the authority vested in the Missouri Highways and Transportation Commission under sections 226.020, 226.130, 227.030, and 227.105, RSMo, the commission rescinds a rule as follows:

7 CSR 10-10.080 Determination of Nonresponsibility **is rescinded**.

A notice of proposed rulemaking containing the text of the proposed rescission was published in the *Missouri Register* on March 16, 2026 (51 MoReg 401). No changes have been made to the text of the proposed rescission, so it is not reprinted here. This proposed rescission becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.

Title 7—DEPARTMENT OF TRANSPORTATION
Division 10—Missouri Highways and Transportation Commission
Chapter 10—Contractor Performance Rating to Determine Responsibility

ORDER OF RULEMAKING

By the authority vested in the Missouri Highways and Transportation Commission under sections 226.020, 226.130, 227.030, and 227.105, RSMo, the commission amends a rule as follows:

7 CSR 10-10.090 Reservation of Rights to Recommend or Declare Persons or Contractors Nonresponsible on Other Grounds **is amended**.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on March 16, 2026 (51 MoReg 401). No changes have been made to the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: No comments were received.


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2

MISSOURI TRANSPORTATION FINANCE CORPORATION (MTFC) ELECTION OF AT-LARGE BOARD MEMBER

-- Presented by Brenda Morris, Chief Financial Officer (MTFC Executive Director), 573-751-2803.

ISSUE: The two-year term for at-large board member, Michael T. Waters, expires on June 30, 2026. In accordance with Commission Policy and the MTFC Bylaws, the two at-large members of the MTFC Board of Directors shall be elected by the Commission.

RECOMMEND that the Commission:

- Elect Michael T. Waters, Jr. to the MTFC Board of Directors for a two-year term beginning July 1, 2026, and expiring June 30, 2028.

DEPARTMENT VIEW:

- As a successful businessman with knowledge of both finance and transportation, Mr. Waters is a great asset to the MTFC Board of Directors.

OTHER VIEWS:

- Mr. Waters has expressed a desire to serve on the MTFC Board of Directors.

MHTC POLICY:

- Financial – Project Funding and Financing Alternatives – Missouri Transportation Finance Corporation (MTFC) Loan.

OTHER PERTINENT INFORMATION:

- Mr. Waters has served as an at-large board member since October 2, 2024.
- Mr. Waters is a former commissioner of the Missouri Highways and Transportation Commission.
- Mr. Waters is also a former member of the MTFC Board of Directors, serving as Vice President from fiscal years 2019 to 2023.

SOURCE OF FUNDING: Not applicable.


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3

APPROVAL OF PLANS FOR CONDEMNATION
-- Presented by Sarah Kleinschmit, State Design Engineer, 573-751-2876.

ISSUE: Commission policy authorizes the Chief Engineer or his designee to approve and file plans as needed for the condemnation of right of way subject to approval by the Commission in order to expedite the delivery of projects. In addition, Commission approval of detailed project plans is required under Section 227.050, RSMo as a precedent to condemnation action to acquire right of way to construct needed improvements.

RECOMMEND that the Commission:

- Approve the noted detailed project plans approved by the Chief Engineer.

DEPARTMENT VIEW:

- The department continues to negotiate with property owners, however, approval of plans for condemnation is needed to maintain the project schedule.

OTHER VIEWS:

- Not applicable.

MHTC POLICY:

- Highways – Right of Way – Acquisition.

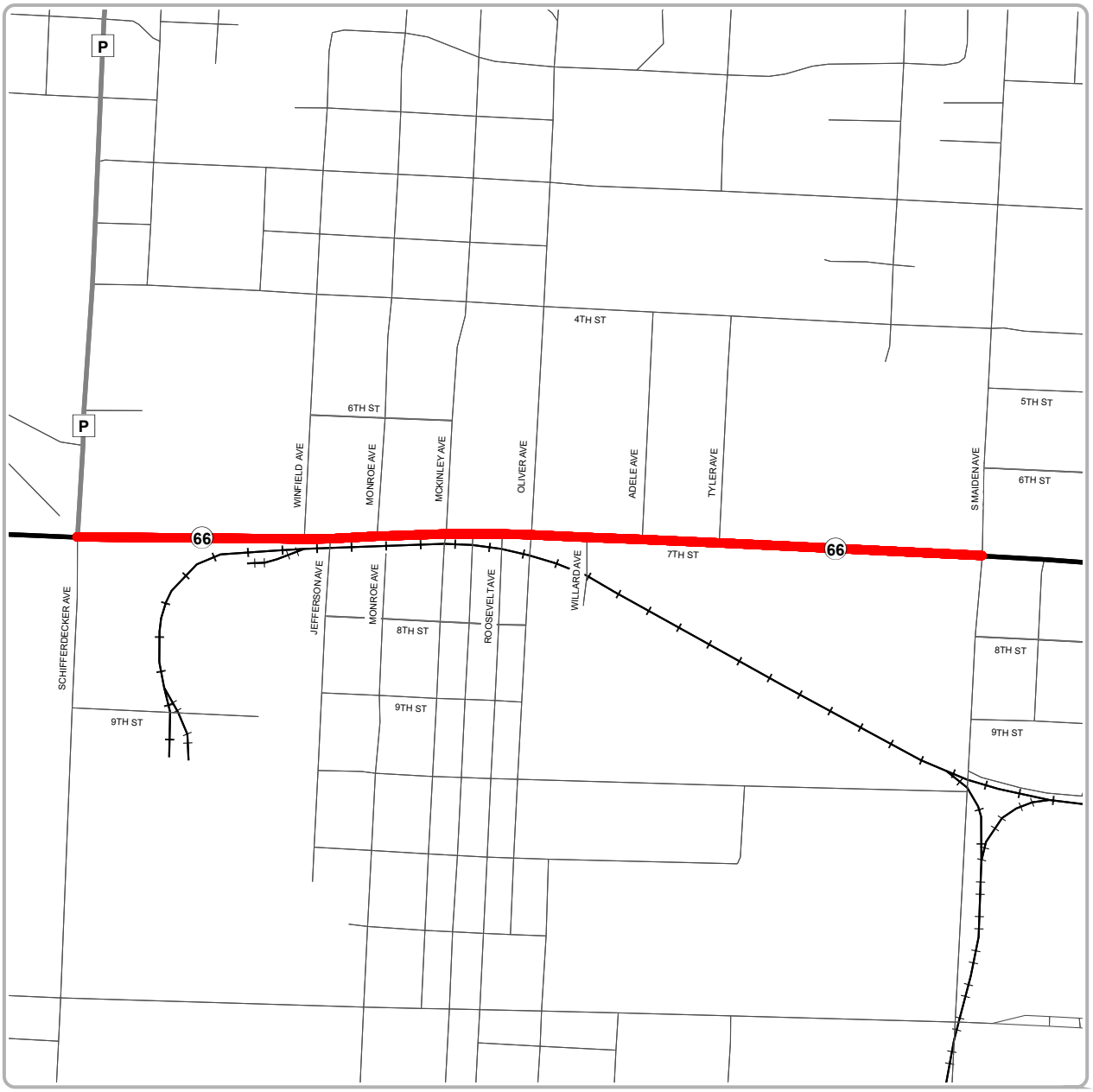
OTHER PERTINENT INFORMATION:

County	Route	Job Number
Jasper	66	J7S2185B, J7S2185F
Jasper	66	J7S2185C
Jasper	66	J7S2185D
Jasper	66	J7S2185E, J7S2185G

PROJECT DESCRIPTION:

- Route 66, Jasper County – A highway improvement project including pavement and operational improvements (J7S2185B), and sidewalk improvements (J7S2185F), together with any incidental work on the above state road from Route P (Schifferdecker Avenue) to Maiden Lane in the city of Joplin.
- Route 66, Jasper County – A highway improvement project including pavement, operational and sidewalk improvements, together with any incidental work on the above state road from Maiden Lane to Route 43 (Main Street) in the city of Joplin.
- Route 66, Jasper County – A highway improvement project including pavement, operational and sidewalk improvements, together with any incidental work on the above state road from Route 43 (Main Street) to St. Louis Avenue in the city of Joplin.
- Route 66, Jasper County – A highway improvement project including pavement and operational improvements (J7S2185E), and sidewalk improvements (J7S2185G), together with any incidental work on the above state road from St. Louis Avenue to Loop 49 (Range Line Road) in the city of Joplin.

SOURCE OF FUNDING: Funding for these improvements has already been committed in the Commission approved FY2026-FY2030 Statewide Transportation Improvement Program.





Project Location

CERTIFICATION OF RIGHT OF WAY PLANS J7S2185B & J7S2185F ROUTE 66 JASPER COUNTY

0 0.4 Miles

N





Project Location

CERTIFICATION OF RIGHT OF WAY PLANS J7S2185C ROUTE 66 JASPER COUNTY

0 0.4 Miles

N



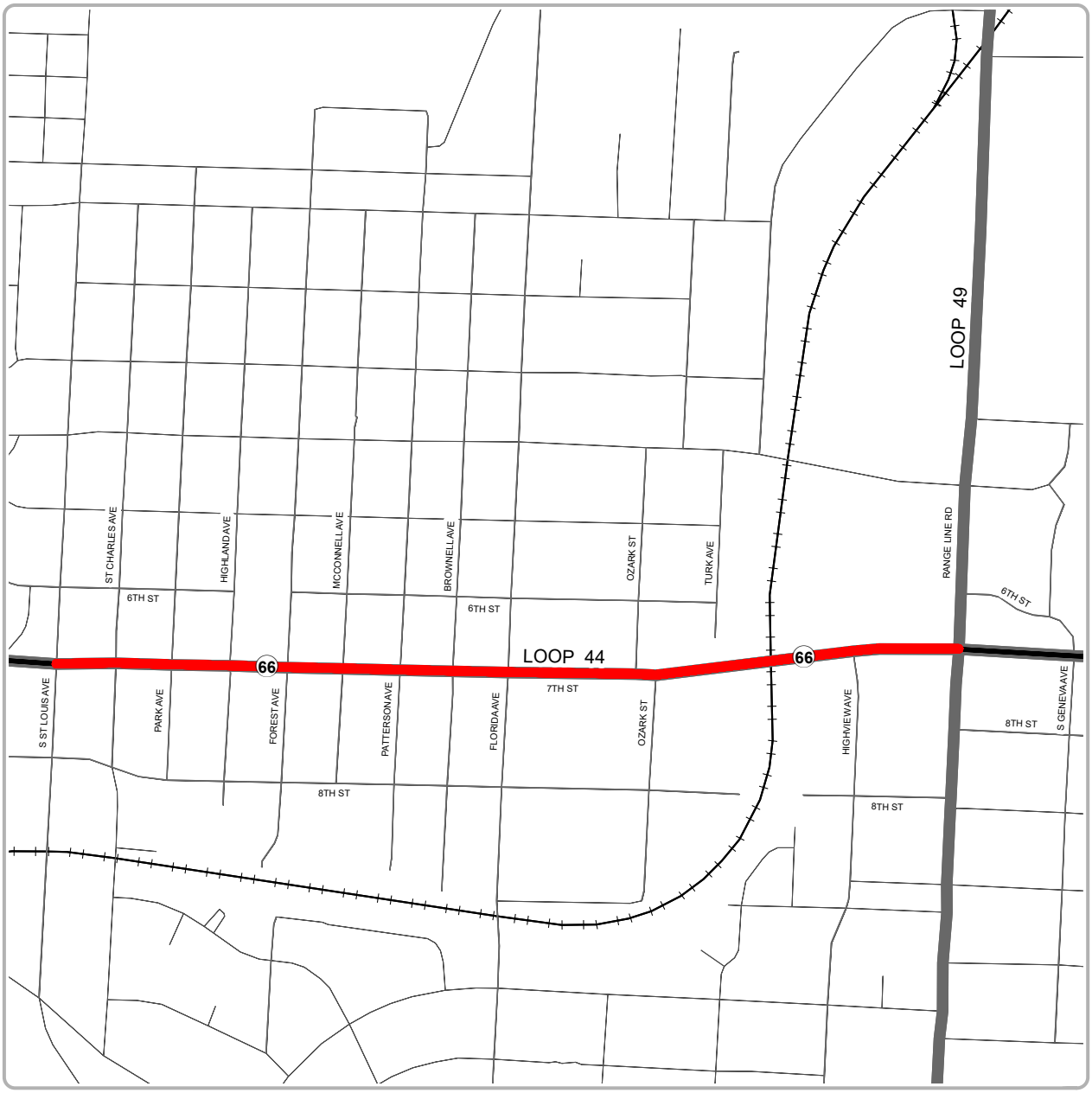


Project Location

CERTIFICATION OF RIGHT OF WAY PLANS J7S2185D ROUTE 66 JASPER COUNTY

0 0.4 Miles

N





Project Location

CERTIFICATION OF RIGHT OF WAY PLANS J7S2185E & J7S2185G ROUTE 66 JASPER COUNTY

0 0.4 Miles

N


MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
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1

MoDOT BRIEFING REPORT
-- Presented by Ed Hassinger, Director, 573-751-4622.

ISSUE: Governor Mike Kehoe requested all state agencies provide his office with information through standard formats for communication. One of the standards of interactions is an Issue Brief that will educate and inform the Governor regarding significant matters that the departments are addressing.

Each month, this report to the Commission will include the Issue Briefs and Meeting Requests that were sent from MoDOT to the Governor since the previous MoDOT Briefing report. There were no briefing reports provided for the past month.

RECOMMEND that the Commission:
- This item is for information only; no action is required.

DEPARTMENT VIEW:
- Good communication with the administration is important, likewise, keeping the Commission informed is important as well.
- Communication at all levels within the department is essential to providing services to the traveling public.

OTHER VIEWS:
- The public supports government that operates in an open and transparent manner.

MHTC POLICY:
- COMMISSION – Guiding Principles – Transparency – Open Meetings and Records.

OTHER PERTINENT INFORMATION:
- Not applicable.

SOURCE OF FUNDING: Not applicable.


MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
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2

MISSOURI DEPARTMENT OF TRANSPORTATION FINANCIAL REPORT – FISCAL YEAR 2026

-- Presented by Doug Hood, Financial Services Director, 573-526-3955.

ISSUE: Attached is a copy of the Financial Report for fiscal year to date April 30, 2026, with budget and prior year comparisons.

RECOMMEND that the Commission:

- This report is for information only; no action is required.

DEPARTMENT VIEW:

- This report is presented based on cash disbursements.
- Significant differences between the current and prior year Financial Report, Attachment 1, are described below:
    - Total MoDOT disbursements are $451.3 million more than the same period last fiscal year. The increase is due to the net effect of increased spending in Personal Services, Expense and Equipment, Low Volume Roads, Program Delivery Program, Improve I-70 and Forward 44 Programs, and Multimodal General Assembly Designated and Funded Projects and decreased spending in Fringe Benefits, Program Delivery General Assembly Designated and Funded Projects, and Multimodal Program.
    - Personal Services disbursements are $8.0 million more than the same period last fiscal year, and Fringe Benefits disbursements are $22.7 million less than the same period last fiscal year. The increase in personal services is due to the continued implementation of the Commission approved compensation plan that included some market adjustments and tenure based pay increases effective July 1, 2025. The decrease in Fringe Benefits can be attributed to the department's retirement contribution rate decreasing from 52.0 percent in fiscal year 2025 to 37.0 percent in fiscal year 2026.
    - Expense and Equipment disbursements are $72.7 million more than the same period last fiscal year due to several factors. Disbursements were lower in fiscal year 2025 due to delays in planned work, such as striping, chip sealing, and pavement repair due to wet weather conditions in July 2024. In the current fiscal year, snow and ice related costs increased due to early pre-fill of winter aggregates, such as salt, to ensure adequate supply ahead of the next winter season. The timing of payments for facility capital improvement projects also contributed to the increase, along with higher general liability premiums.
    - Disbursements for Low Volume Roads first appropriated in 2025 are $52.9 million more than the same period last fiscal year. This appropriation will be spent over multiple years, and we are in the second year of spending. Additionally, disbursements will vary based on the construction season.
    - The Program disbursements for Program Delivery increased $157.2 million compared to the same period last fiscal year due to an increase in contractor payments related to a larger construction program.

  - The Improve I-70 Program disbursements for Program Delivery are $227.2 million more than the same period last fiscal year due to the project just beginning in late fiscal year 2024. As of April 30, 2026, MoDOT has awarded five of the nine projects that make up this program.
  - The Forward 44 Program disbursements for Program Delivery are $3.5 million more than the same period last fiscal year due to the project beginning in late fiscal year 2025.
  - The General Assembly Designated and Funded Projects disbursements for Program Delivery are $43.4 million less than the same period last fiscal year due to completing most of the Low Volume Road improvements first appropriated in fiscal year 2024. Low Volume Road improvements appropriated in fiscal year 2025 were included as part of Safety and Operations.
  - The Program disbursements for Multimodal decreased by $9.2 million compared to the same period last fiscal year. This is primarily due to approximately $18.0 million in land acquisition expenditures for the Jefferson County Port that occurred in fiscal year 2025. This decrease was partially offset by increased disbursements from aviation and rail projects, of which the timing of reimbursements vary.
  - The General Assembly Designated and Funded Projects disbursements for Multimodal are $7.5 million more than the same period last fiscal year. These appropriations will be disbursed over multiple fiscal years on new projects from fiscal year 2025.
- Attachment 2 provides a breakdown of the ARPA (American Rescue Plan Act) and the General Assembly Designated and Funded projects MoDOT is overseeing. The Office of Administration is responsible for making the disbursements on these projects.
- Attachment 3 provides details for the funding of the Improve I-70 Program.
- Attachment 4 provides details for the funding of the Forward 44 Program.

OTHER VIEWS:

- Not applicable.

MHTC POLICY:

- Financial – Budget – Operating Budget.

OTHER PERTINENT INFORMATION:

- The Financial Report is prepared on a cash basis and does not reflect outstanding construction awards or funds encumbered for expenses and equipment.

SOURCE OF FUNDING: Disbursements are funded from the department's various funds.

Fiscal Year 2026 Financial Summary
Ten Months Ended April 30, 2026 and 2025
Cash Basis (Dollars in Thousands)

	Fiscal Year 2026 Budget	Amended Fiscal Year 2026 Budget[1]	Fiscal Year 2026 Actual	Percentage of Budget-to-Date	Fiscal Year 2025 Actual
Administration					
Personal Services	$ 19,277	$ 24,865	$ 19,588	78.8 %	$ 18,818
Expense and Equipment	5,162	6,647	2,546	38.3	2,697
Total Administration	24,439	31,512	22,134	70.2	21,515
Safety and Operations					
Personal Services	151,046	194,435	149,085	76.7	146,078
Expense and Equipment	254,298	328,348	252,998	77.1	194,211
Program	31,401	31,401	22,134	70.5	23,611
Low Volume Roads	120,000	86,367	61,028	70.7	8,177
Total Safety and Operations	556,745	640,551	485,245	75.8	372,077
Program Delivery					
Personal Services	78,965	99,688	75,399	75.6	71,560
Expense and Equipment	30,755	41,117	21,453	52.2	17,611
Program	2,284,406	2,771,408	1,997,588	72.1	1,840,378
Improve I-70 Program	2,800,000	2,622,397	343,924	13.1	116,774
Forward 44 Program	577,500	577,500	3,569	0.6	49
Gen. Assembly Designated/Funded Projects	392,363	291,040	25,916	8.9	69,337
Total Program Delivery	6,163,989	6,403,150	2,467,849	38.5	2,115,709
Fleet, Facilities, and Information Systems					
Personal Services	15,356	15,356	11,731	76.4	11,318
Expense and Equipment	117,457	117,457	83,743	71.3	73,561
Total Fleet, Facilities, and Information	132,813	132,813	95,474	71.9	84,879
Multimodal					
Personal Services	3,358	3,358	2,164	64.4	2,191
Expense and Equipment	1,119	1,119	435	38.9	351
Program	281,853	275,123	123,860	45.0	133,091
Railroad Grade Crossing Safety Program	25,000	25,000	2,658	10.6	1,765
Gen. Assembly Designated/Funded Projects	96,466	67,844	12,698	18.7	5,213
Total Multimodal	407,796	372,444	141,815	38.1	142,611
Fringe Benefits					
Retirement and Long-Term Disability[2]	193,706	193,706	93,439	48.2	125,971
Medical, Life Insurance, and EAP	59,769	59,769	49,473	82.8	44,372
Retiree Medical Insurance	21,865	21,865	17,607	80.5	16,244
Workers' Compensation[2]	9,447	9,447	10,197	107.9	7,500
Other Fringe Benefits[3]	29,922	29,922	22,169	74.1	21,522
Total Fringe Benefits	314,709	314,709	192,885	61.3	215,609
Subtotal MoDOT Disbursements	**7,600,491**	**7,895,179**	**3,405,402**	**43.1**	**2,952,400**
Motor Carrier Refunds	41,000	41,000	14,449	35.2	16,192
Total MoDOT Disbursements	**$ 7,641,491**	**$ 7,936,179**	**$ 3,419,851**	**43.1 %**	**$ 2,968,592**

[1]Fiscal year 2026 amended budget is Truly Agreed to and Finally Passed appropriation amounts adjusted for vetoes, restrictions, reverted, and supplemental amounts.

[2]Flexibility of appropriation authority was utilized to transfer budget dollars from the Retirement appropriation to the Workers' Compensation appropriation, as allowed under the 50 percent flexibility provision in House Bill 4 between fringe benefit appropriations.

[3]Includes fringe benefits appropriated in House Bill 5 for social security and unemployment tax and the department's share for MoDOT employees who are enrolled in the Missouri Consolidated Health Care Plan (MCHCP), Missouri State Employees' Retirement System (MOSERS), and MO Deferred Compensation Plan.

Fiscal Year 2026 Financial Summary
ARPA[1] of 2021 and General Assembly Designated and Funded Projects[2]
Ten Months Ended April 30, 2026 and 2025
Cash Basis (Dollars in Thousands)

	Fiscal Year 2026 Budget[4]	Fiscal Year 2026 Actual	Percentage of Budget-to-Date	Fiscal Year 2025 Actual
Projects[3]				
Waste Water Improvements[1]	$ 6,690	$ 4,822	72.1 %	$ 1,705
Kirkwood Historic Train Station[1]	2,291	---	---	2,350
Carrolton Amtrak Station[1]	965	7	0.7	37
Washington County Airport[1]	1,000	754	75.4	2
Buffalo Municipal Airport[1]	687	222	32.3	62
Port Capital Improvement Projects[1]	11,090	829	7.5	3,712
New Madrid County Port Authority[1]	2,899	1,161	---	891
Elderly and Disabled Transit Assistant[1]	6,000	2,256	37.6	---
Highway 76 Road Improvements in Branson[2]	6,200	2,032	32.8	---
I-35, I-29, and US 169 Road Improvements[2]	30,000	1,230	4.1	---
Total Disbursements	**$ 67,822**	**$ 13,313**	**19.6 %**	**$ 8,759**

[1]American Rescue Plan Act (ARPA) is federal funding to support public transportation systems as they respond to the pandemic.

[2]Budget Stabilization funding consists of funds received from the federal government and is a General Revenue look alike.

[3]These projects are being administered by Office of Administration (OA): however, MoDOT is overseeing the projects.

[4]Fiscal year 2026 budget is Truly Agreed to and Finally Passed appropriation amounts.

Fiscal Year 2026 Financial Summary
Improve I-70 Program
Ten Months Ended April 30, 2026
Cash Basis (Dollars in Thousands)

	Budget	Bond Proceeds To Date	Prior Fiscal Year Disbursements	Fiscal Year 2026 Disbursements	Remaining
Bonding					
I-70 Bonds	$ 1,400,000	$ 907,498	N/A	N/A	$ 492,502
I-70 Construction from Bonds		$ 907,498	$ 190,960	$ 330,541	$ 385,997

	Budget	Transfers To Date	Prior Fiscal Year Disbursements	Fiscal Year 2026 Disbursements	Remaining
Cash					
OA I-70 Project	$ 1,400,000	$ (414,231)	N/A	N/A	$ 985,769
I-70 Construction from General Revenue Transfer		$ 414,231	$ 37,313	$ 13,383	$ 363,535

Fiscal Year 2026 Financial Summary
Forward 44 Program
Ten Months Ended April 30, 2026
Cash Basis (Dollars in Thousands)

Bonding	Budget	Bond Proceeds to Date	Prior Fiscal Year Disbursements	Fiscal Year 2026 Disbursements	Remaining
I-44 Bonds	$ 363,750	$ ---	N/A	N/A	$ 363,750
I-44 Construction from Bonds		$ ---	$ ---	$ ---	$ ---

Cash	Budget	Transfers To Date	Prior Fiscal Year Disbursements	Fiscal Year 2026 Disbursements	Remaining
OA I-44 Project	$ 213,750	$ (12,707)	N/A	N/A	$ 201,043
I-44 Construction from General Revenue Transfer		$ 12,707	$ 49	$ 3,569	$ 9,089


MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
MDCCCXX

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CONSULTANT SERVICES CONTRACT REPORT
-- Presented by Sarah Kleinschmit, State Design Engineer, 573-751-2876.

ISSUE: This report represents consultant contracts executed in the month of April for both engineering and non-engineering related projects separated out by two budgets: Design Bridge Consultants (DBC) and MoDOT Operating Budget.

RECOMMEND that the Commission:

- This report is informational and requires no action.

DEPARTMENT VIEW:

- Fiscal Year 2026 DBC Budget Status as of May 1, 2026:
  Budgeted: $130 million
  Expenditures: $110.2 million
- Attachment 1 (DBC Budget Contracts Only) This attachment shows the active contracts held by individual engineering consultant firms prior to April 1, 2026. The table indicates the number of contracts held by each consultant, the total value of the contracts and the unexpended contract costs for each consultant. The firms certified as Disadvantaged Business Enterprises (DBE) are noted and include both minorities owned and women owned consultant business enterprises.
- Attachment 2 Indicates new contracts executed between April 1-30, 2026.

OTHER VIEWS:

- Engineering percentage of payout per fiscal year
  Year 1 51%, Year 2 27%, Year 3 19%, Year 4 3%

MHTC POLICY:

- Highways – Consultant Engineering Services – Consultant Engineer Services – STIP – Negotiated Contract.
- Highways – Consultant Engineering Services – Consultant Engineering Services – STIP – Hourly Rate.
- Equipment and Procurement – Procurement of Professional Services Consultants (Other than STIP Related) – Professional Services (other than engineering).

OTHER PERTINENT INFORMATION:

- Not applicable

SOURCE OF FUNDING: Expenditures from the Statewide Transportation Improvement Program budget are used to fund DBC contracts shown in Attachment 1 and 2.

Engineering Consultant Services Contracts Utilizing the DBC Budget Active Contracts Prior to April 1, 2026			
Consultant	**Number of Contracts**	**Total Contract Cost**	**Unexpended Contract Cost**
Crawford, Murphy & Tilly (CMT)	52	$55,642,995.00	$41,604,423.00
HDR	35	$54,184,928.00	$28,063,320.00
Wilson & Company	24	$35,835,683.00	$25,274,723.00
George Butler Associates, Inc. (GBA)	26	$34,843,513.00	$19,391,177.00
Garver LLC	32	$30,511,453.00	$19,030,912.00
Burns & McDonnell	13	$26,020,929.00	$16,506,952.00
Bartlett & West	42	$25,820,608.00	$14,144,869.00
Olsson Assoc.	40	$25,164,802.00	$12,274,533.00
GFT Infrastructure, Inc.	2	$21,701,923.00	$18,289,645.00
TREKK Design Group, LLC	23	$20,685,962.00	$5,762,522.00
HNTB	21	$17,656,010.00	$10,858,932.00
Hanson Professional Services, Inc.	9	$14,117,446.00	$5,410,989.00
Jacobs Engineering Group	7	$14,099,461.00	$12,508,171.00
AECOM Technical Services, Inc.	7	$14,050,310.00	$14,128,933.00
WSP USA Inc.	14	$13,576,065.00	$12,271,847.00
HG Consult, Inc.	9	$12,481,183.00	$11,000,233.00
Oates Associates, Inc.	13	$10,587,328.00	$4,722,235.00
HR Green, Inc.	26	$10,226,513.00	$6,558,267.00
Kapsch TrafficCom USA, Inc.	1	$9,763,797.00	$9,763,797.00
Horner & Shifrin, Inc.	16	$9,449,058.00	$7,120,551.00
Bacon Farmer Workman Engineering & Testing	21	$8,267,714.00	$3,915,269.00
Gonzalez Companies, LLC	12	$7,540,250.00	$6,633,985.00
Lochmueller Group	18	$7,411,591.00	$2,625,279.00
TranSystems	13	$7,046,300.00	$4,694,412.00
EFK Moen	28	$6,886,600.00	$1,497,129.00
Thouvenot, Wade & Moerchen, Inc.	8	$6,869,657.00	$663,766.00
Engineering Design Source Inc. (EDSI)	3	$4,984,971.00	$4,744,988.00
Alfred Benesch and Company	9	$4,948,934.00	$1,378,585.00
CDM Smith	2	$4,486,789.00	$4,486,789.00
Kimley-Horn and Associates	6	$4,204,406.00	$1,927,637.00
Transcore ITS, LLC	4	$3,948,254.00	$3,948,254.00
Civil Design	7	$3,869,944.00	$659,180.00
Veenstra & Kim	13	$3,592,665.00	$1,513,443.00

Consultant	Number of Contracts	Total Contract Cost	Unexpended Contract Cost
OWN, Inc.	7	$3,389,141.00	$1,144,864.00
Affinis	4	$3,266,979.00	$1,276,390.00
Klingner & Associates, P.C.	7	$3,050,643.00	$852,063.00
Surveying and Mapping, LLC	10	$2,487,301.00	$2,271,366.00
Modjeski and Masters, Inc.	2	$2,010,223.00	$14,608.00
CDG Engineers	3	$1,862,192.00	$1,277,778.00
EXP U.S. Services, Inc.	1	$1,421,555.00	$9,248.00
George L. Crawford & Associates dba CBB	6	$1,335,732.00	$1,134,519.00
Parsons Transportation Group	1	$1,215,898.00	$1,215,898.00
Prairie Engineers P.C.	10	$1,093,219.00	$547,876.00
Powell & Assoc.	2	$1,022,258.00	$655,076.00
Anderson Engineering	4	$1,011,550.00	$342,999.00
Terracon Consultants, Inc.	7	$989,996.00	$839,657.00
CASCO Diversified Corporation	8	$888,780.00	$888,780.00
Access Engineering, LLC	2	$745,758.00	$745,758.00
CB Engineering, Inc. dba Cochran	4	$720,105.00	$468,955.00
Wood Environment & Infrastructure Solutions		$641,533.00	$118,625.00
Pickering Firm, Inc.	5	$482,301.00	$250,612.00
Quigg Engineering, Inc.	5	$469,633.00	$168,029.00
R. Hitt Consulting, LLC	1	$453,886.00	$453,886.00
Engineering Surveys & Services, LLC	4	$376,697.00	$119,907.00
Renaissance Infrastructure Consulting, Inc.	2	$270,562.00	$70,027.00
Cook, Flatt & Strobel Engineers, P.A.	4	$255,616.00	$255,616.00
Powell CWM, Inc.	1	$243,358.00	$37,458.00
GeoEngineers	3	$230,594.00	$45,688.00
Kaskaskia Engineering	2	$213,845.00	$213,845.00
HW Lochner	1	$184,618.00	$3,116.00
UES Professional Solutions 25, LLC f/k/a Geote	1	$178,909.00	$27,773.00
Hutchison Engineering, Inc.	1	$177,658.00	$177,658.00
Infrasense, Inc.	1	$169,968.00	$193,879.00
SCI Engineering, Inc.	4	$157,247.00	$81,479.00
Geotechnology, Inc.	4	$142,737.00	$70,577.00
ABNA Engineering, Inc.	1	$136,535.00	$18,098.00
Toth & Associates, Inc.	1	$114,182.00	$114,182.00
Farnsworth Group Inc.	3	$106,059.00	$48,459.00
S.H. Smith & Co. Inc. (dba Smith & Co.)	1	$99,705.00	$10,042.00
Bowlby & Assoc.	4	$97,409.00	$52,079.00

Consultant	Number of Contracts	Total Contract Cost	Unexpended Contract Cost
All Civil Engineering, LLC	1	$87,558.00	$87,558.00
Golder Associates Inc.	1	$82,523.00	$118.00
St. Charles Engineering & Surveying, Inc.	1	$71,651.00	$71,651.00
Merge Midwest Engineering	2	$61,346.00	$206.00
HS Smith and Company	1	$56,479.00	$2,723.00
Volkert, Inc.	1	$52,646.00	$12,266.00
Poepping, Stone, Bach & Associates, Inc.	1	$45,975.00	$45,975.00
Midland Surveying	2	$33,223.00	$33,223.00
BioSurvey Group, LLC	1	$23,027.00	$23,027.00
Custom Engineering Inc.	1	$21,415.00	$507.00
Allstate Consulting LLC	1	$11,400.00	$4,054.00
Totals	674	$562,739,667.00	$349,873,925.00

Engineering Consultant Services
Contracts Utilizing the DBC Budget
Contracts Executed

Consultant	DBE Firm Y/N?	Number of Contracts	Current Budget Amount	Available Budget Amount
Crawford, Murphy & Tilly (CMT)	N	1	$636,651	$636,651
EFK Moen	Y	1	$898,222	$898,222
HDR	N	3	$1,534,942	$1,534,942
HR Green, Inc.	N	1	$999,181	$999,181
Infrasense, Inc.	N	1	$57,886	$33,975
OWN, Inc.	N	1	$230,211	$230,211
Surveying and Mapping, LLC	N	1	$93,299	$93,299
Terracon Consultants, Inc.	N	4	$81,216	$81,216
TREKK Design Group, LLC	Y	1	$153,133	$153,133
		14	$4,684,742	$4,660,832