

Forward 44 Update

February 27, 2025



I-44 Purpose & Need Study



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Today's Topics

- Why Study I-44?
- 2008 & Forward 44 Purpose and Need Study Details
- Public Engagement
- Draft Future Study Sections (FSS)
- Next Steps
- Recommendations from the Core Team








I-44 Purpose & Need Study



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Why Study Interstate 44?

-  I-44 is a freight route of national significance.
-  I-44 touches 11 counties; helping facilitate 1.2 million jobs.
-  Existing pavement structure built in the 1960s.
-  Design standards have changed.
-  Traffic volumes are increasing.



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2008 & Forward 44 Purpose & Need Study Details



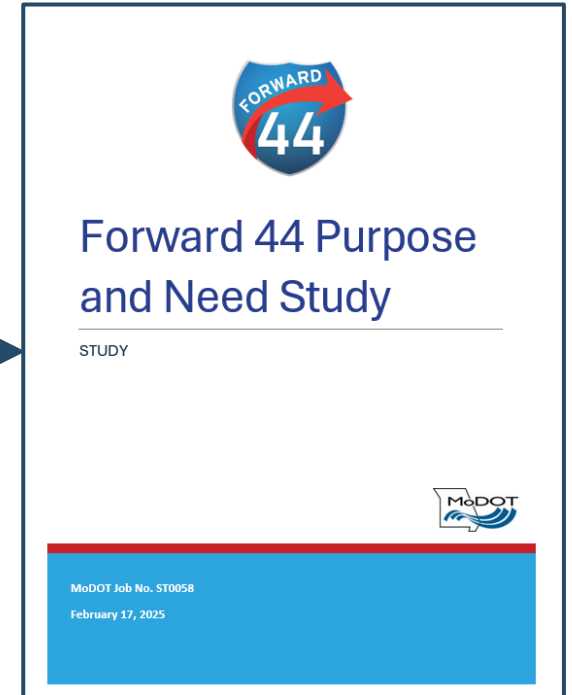
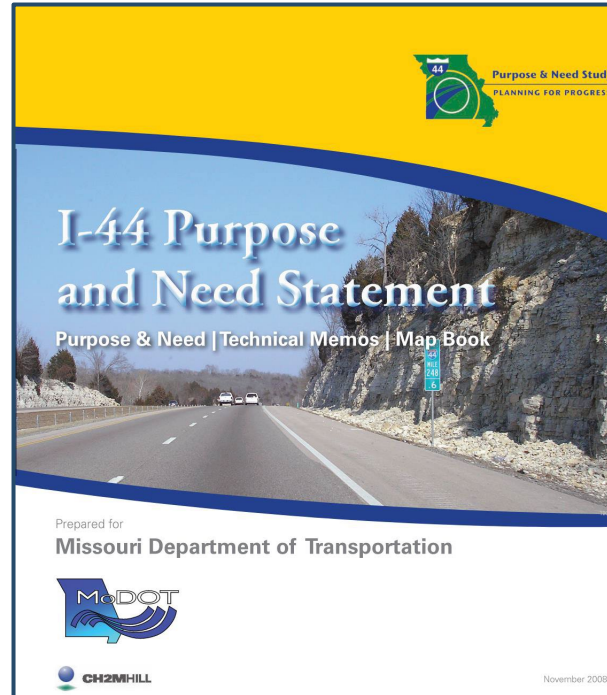
I-44 Purpose & Need Study



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Study Overview

- **2008:** Original Purpose and Need Study
 - Analyzed over 250 miles of I-44
- **2024:** Forward 44 Purpose and Need Study
 - Funded through \$20 million of General Revenue
 - February 2024 – Spring 2025



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Forward 44 Study Goals



**Validate the outcomes of
the 2008 I-44 Purpose and
Need Study**



**Provide opportunities for
public input**



**Prioritize future study
segments (FSS) for more in-
depth environmental review.**



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Forward 44 Study Analysis Areas

- Roadway geometry.
 - Lane, shoulder, median widths.
 - Vertical and horizontal clearances.
 - Vertical grades & horizontal curves.
- Interchange geometrics & operations (81).
- Bridge conditions (241).
- Traffic operations.
 - Travel time, delay, LOS, v/c, VMT.
- Safety.
- Agency Coordination.



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Forward 44 Study Analysis Areas (cont.)

- Environmental
 - Natural resources.
 - Wetlands, T&E, floodplains.
 - Cultural resources.
 - Archaeological (33), architectural (1), cemeteries, churches, schools, Historic Route 66, National Historic Trails.
 - Hazardous materials sites (>1,700).
- Air quality.
- Environmental Justice.
- Economic development.



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Other Analyses Performed for Forward 44 Study

- Cost estimates for adding one additional lane.
 - Typical sections, pavement (mainline, shoulders, ramps, auxiliary lanes), structures, ramp acceleration/deceleration extensions, retaining walls, earthwork, barriers, ROW, drainage, MOT, signing & marking, lighting, utilities.
- Resiliency
 - Identified 6 locations vulnerable to natural hazards.
- Establish Future Study Sections (FSS).
 - Based on traffic volumes, LOS, and safety.
- Prioritize FSS – Tier I, II, and III.
- Potential NEPA Classification for FSS.



2008 Purpose and Need Study – Needs

- Roadway capacity is becoming inadequate for expected demand.
- There is a degrading safety environment on I-44.
- Interchanges along I-44 have safety and operation issues and are inconsistent with current design standards.
- Freight traffic represents an essential element of the traffic stream on I-44.
- Evolving engineering standards result in inconsistent roadway designs.
- Balancing access, economic development, and human/natural resources.



Forward 44 Purpose and Need Study – Needs

✓ Validated

- Roadway capacity is becoming inadequate for expected demand.
- Freight traffic represents an essential element of the traffic stream on I-44.
- Evolving engineering standards result in inconsistent roadway designs.
- Balancing access, economic development and human/natural resources.

□ Modified

- There is a degrading safety environment on I-44.
- Interchanges **and portions of the mainline** along I-44 have safety and operation issues and are inconsistent with current design standards.

➤ Added

- Preserve the existing I-44 facility as needed to carry existing and future loads.



Public Engagement



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Public Engagement Opportunities

- Website – modot.mo.org/forward44.
- Email Database.
 - Advocacy groups, community centers, media, individual stakeholders.
- Public officials' meetings.
- Quarterly Stakeholder Meeting #1 – May 2024.
 - Agencies and MPOs/RPCs.
 - Study goals, schedule and an opinion survey.
- Quarterly Stakeholder Meeting #2 – January 2025.
 - Study update, Purpose & Need validation, stakeholder comments, Future Study Sections, prioritization.



Public Engagement Opportunities (cont.)

- In-person Public Information Meetings (5)
 - July and August 2024.
 - St. Clair, Rolla, Joplin, Springfield, Lebanon.
 - 149 combined attendees (~29 per meeting).
 - Study overview, environmental resources, engineering & traffic data findings.
 - Digital online map to discuss site specific issues.
- Online Survey
 - July 10, 2024 – Aug. 21, 2024.
 - 1,644 respondents and 3,858 individual comments.
 - Improvements, benefits, issue locations, environmental resources.



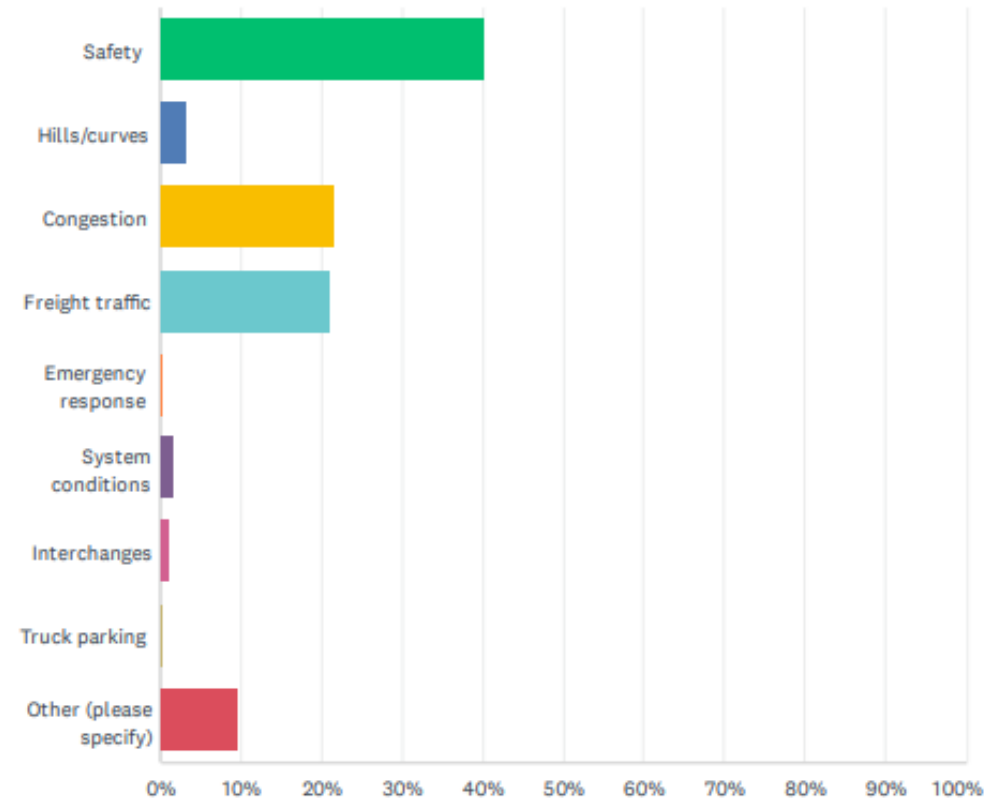
Q1 If you could improve ONE thing about I-44 in the study area, what would it be?

Answered: 1,636 Skipped: 8

Survey Results

Citizens identified their **top concerns** along the I-44 corridor study area.

- Safety.
- Congestion.
- Freight traffic.



Question 2

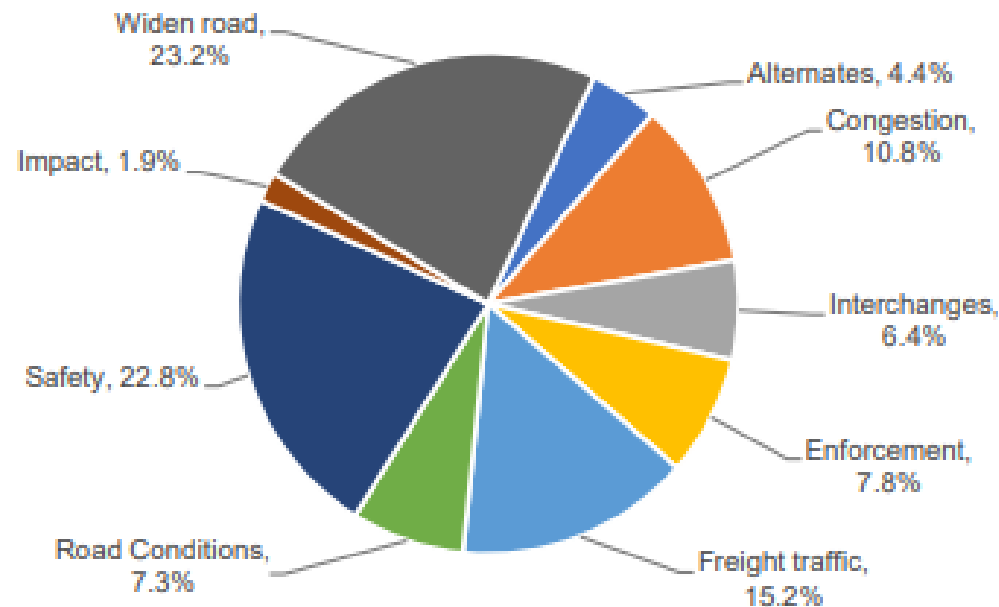
What local or statewide benefits would you like I-44 improvements to provide?

Survey Results

Citizens identified their **top improvements** along the I-44 corridor study area.

- Widen roadway/Capacity.
- Safety.
- Freight traffic.

RESPONSES TO QUESTION 2



Question 3

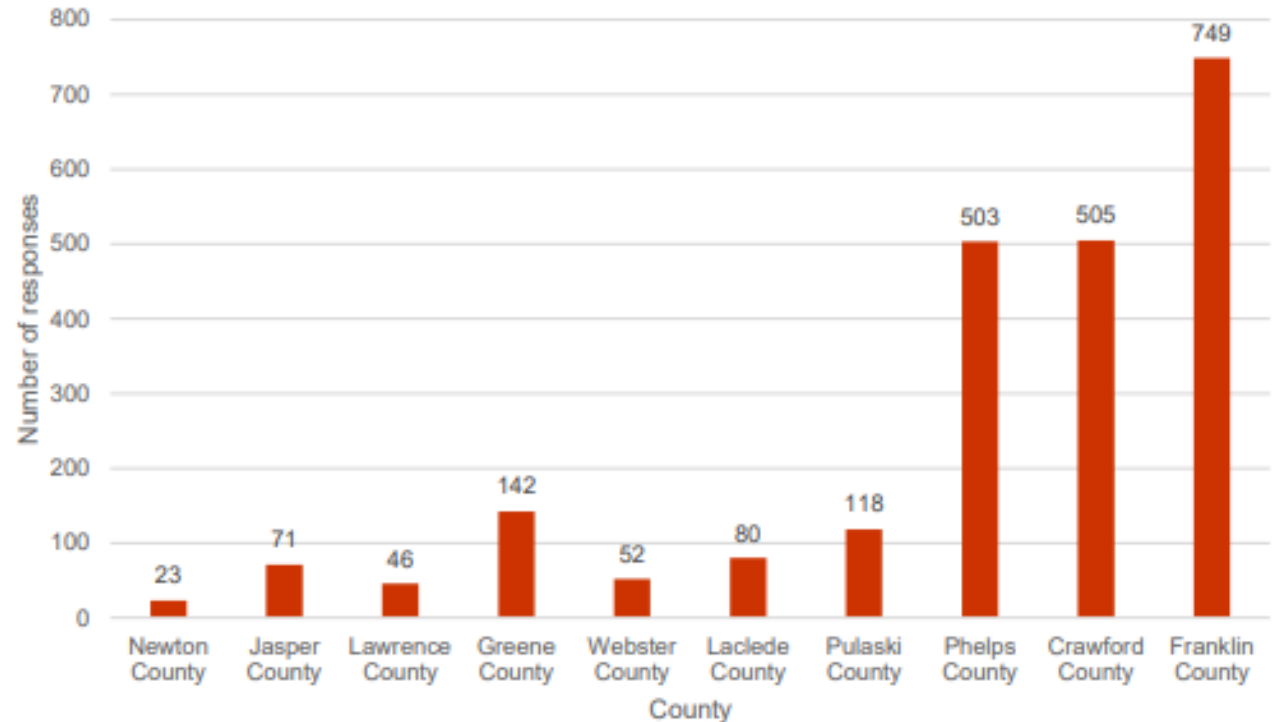
When traveling along I-44, where do you see the most issues?

Survey Results

Citizens identified where the top perceived issues are along the I-44 corridor study area.

- Franklin.
- Crawford.
- Phelps.

PROBLEM AREAS BY COUNTY



Public Engagement: 3,858 Comments

Substantive Comment Category	Related to NEPA or Purpose & Need?	Response
Add one lane in each direction, reduce congestion, and improve safety	NEPA	Alternative design/impacts and multimodal considerations will be included as part of future NEPA studies.
Improve interchanges/lengthen ramps	NEPA	Alternative design/impacts and multimodal considerations will be included as part of future NEPA studies.
Widen shoulders	NEPA	Alternative design/impacts and multimodal considerations will be included as part of future NEPA studies.
Speed enforcement for cars/trucks	Neither	Speeding is an enforcement issue and should be addressed by enforcement officials.
Separate lanes for trucks only	NEPA	Alternative design/impacts and multimodal considerations will be included as part of future NEPA studies.
Add more truck climbing lanes	NEPA	Alternative design/impacts and multimodal considerations will be included as part of future NEPA studies.



Public Engagement: 3,858 Comments

Substantive Comment Category	Related to NEPA or Purpose & Need?	Response
More truck parking/rest areas	NEPA	Alternative design/impacts and multimodal considerations will be included as part of future NEPA studies.
Multimodal considerations	NEPA	Alternative design/impacts and multimodal considerations will be included as part of future NEPA studies.
Underpasses for wildlife	NEPA	Alternative design/impacts and multimodal considerations will be included as part of future NEPA studies.
Share results of the Study with the public	Purpose & Need	The Purpose & Need study findings will be available for public review and comment.
Environmental impacts	Purpose & Need	Subsequent NEPA studies will consider alternatives, along with a detailed environmental analysis of impacts.



Draft Future Study Sections (FSS) & Prioritization



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Review of Factors Used to Establish FSS Logical Termini

Factor	Description	Review
Jurisdictional	<p>Roadways under common administrative or jurisdictional control are generally subject to common planning strategies and are, therefore, logical to group together.</p> <p>Among the jurisdictions considered were metropolitan planning organizations (MPOs), various municipal jurisdictions such as counties, cities, townships, and MoDOT Districts.</p>	Review did not warrant changes.
Landscape	<p>On a statewide scale, there can often be important terrain differences to consider.</p> <p>Addressing these challenges in a comprehensive way can have benefits in the design, construction, and maintenance cycle as well as maximizing driver expectations regarding roadway design.</p>	Review did not warrant changes.



Review of Factors Used to Establish FSS Logical Termini (cont.)

Factor	Description	Review
Traffic Volume	Roadways that handle similar volumes of vehicular traffic often have common problems whose solutions need to be considered collectively. Consequently, major breaks in traffic volumes were considered in the establishment of the FSS.	FSS adjusted to keep localized traffic and safety issues concentrated by reviewing crash densities overlaid with future (2050) projected volumes and LOS. Review warranted changes.
Traffic Composition	Similarly, the types of vehicles that make up the traffic stream can influence problems and solutions. Common issues of this type include commuter traffic and truck traffic.	
Traffic Destination	Incorporating the entire trip into a transportation solution is often key to adequately addressing associated needs.	
Crash Densities	Generally, there are three elements to safe roadway design: traffic, geometrics and crashes. Areas of crash densities were utilized in determining the FSS, as a means for determining the origin of vehicular safety issues.	
Roadway Condition	Roadways are under continual maintenance. Grouping roadway sections in ways that acknowledge the existing condition of the roadway and the future maintenance projects can maximize the effectiveness of public expenditures. Operational similarities such as common speed limit and design features are also important.	



Review of Factors Used to Establish FSS Logical Termini (cont.)

FSS	Jurisdictional	Landscape	Traffic and Crash Ratio/ Weighted Crash Ratio	Safety			2050				Roadway Con		ditions
				High Crash Density Location	2023 Volume (AADT)	LOS	Composition (% Trucks)	Volume (AADT)	LOS	Composition (% Trucks)	Vertical Curves	Horizontal Curves	
1	Joplin; JATSO - Joplin MPO; MoDOT-SW; Harry S. Truman Coord Council RPC	Flat	0.70/6.84	Exits 6 & 8, Exit 18	35,200	B	30%	52,700	C	30%	Generally meets current standards	Generally does not meet current standards (Superelevation and radius deficiencies)	
2	Incorporates rural areas between Joplin and Mt. Vernon; MoDOT-SW; Harry S. Truman Coord Council RPC & SW Missouri COG RPC	Flat; Minimal Development	0.41/2.69	N/A	32,400	B	29%	48,500	C	29%	Generally does not meet current standards	Generally meets current standards	
3	Mt. Vernon; MoDOT-SW; SW Missouri COG RPC	Flat; Minimal Development; Rolling terrain (Ozark Uplands)	0.53/7.22	Exit 58 and Exit 67	34,300	B	26%	51,300	C	26%	Generally meets current standards	Generally does not meet current standards (Superelevation deficiencies)	



FSS Logical Termini Revisions – 2008 Study vs Forward 44 Study

2008 FSS

FSS	Length (miles)	# of Interchanges
1	19	7
2	49	12
3	22	9
4	63	12
5	37	12
6	34	6
7	28	10

Forward 44 FSS

FSS	Length (miles)	# of Interchanges
1	19.5	8
2	20	5
3	28.6	7
4	21.8	9
5	21.8	4
6	22.9	6
7	20.7	5
8	9.2	4
9	16	4
10	24.4	6
11	24.6	6
12	13.6	4
13	10.6	3

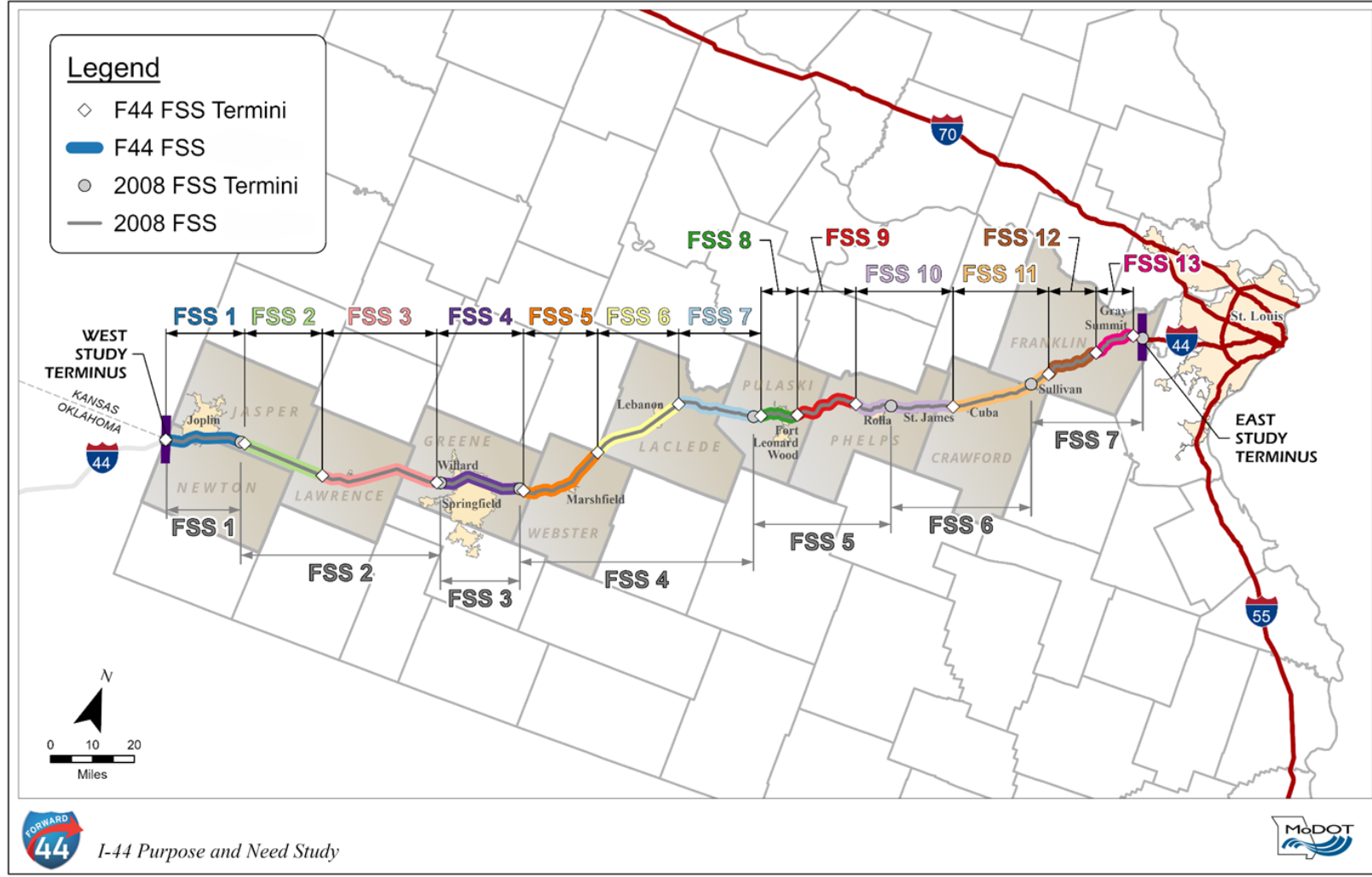


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FSS Logical Termini Revisions – 2008 Study vs 2024 Forward 44 Study



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Prioritization of Future Study Sections

- Safety.
- Congestion.
- Freight traffic.
- Consistent with current design standards.
- Resiliency.
- Driven by public input.

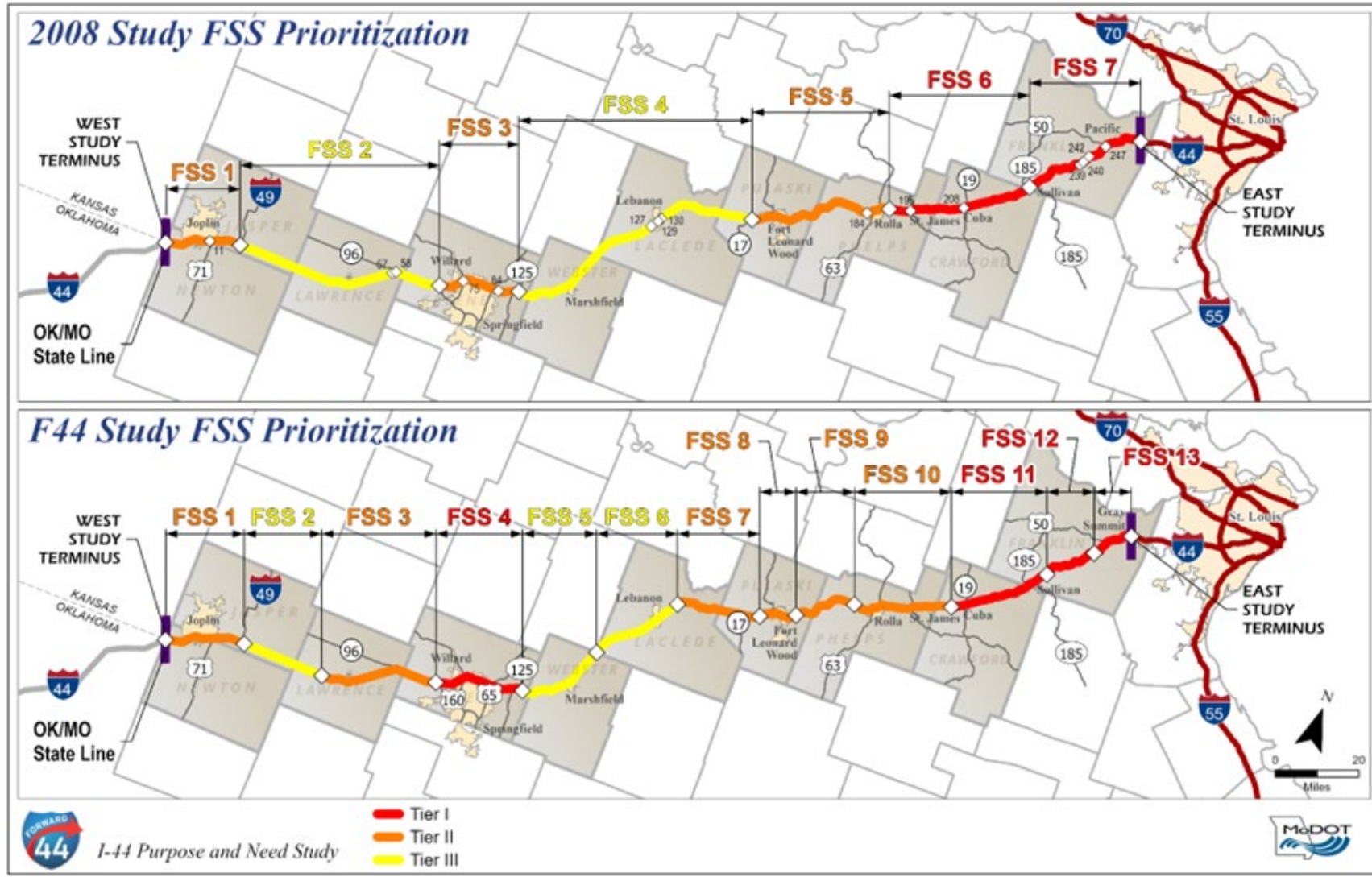


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FSS Logical Termini Prioritization



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Next Steps...

- 1st submittal package to FHWA – Jan. 14, 2025.
 - Expect comments soon.
- Publish Study on Forward 44 website and ensure district awareness.
- **Expect Study Completion by Spring 2025.**



Thank you

Contact us:



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www.modot.org/forward44



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