MARCH 2025

I-70 SIU 1 Environmental Assessment Re-evaluation

Prepared by

MISSOURI DEPARTMENT OF TRANSPORTATION

For

FEDERAL HIGHWAY ADMINISTRATION

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List of Abbreviations and Acronyms

ADT	Average Daily Traffic
AASHTO	American Association of State Highway and Transportation Officials
APE	Area of Potential Effect
BGEPA	Bald and Golden Eagle Protection Act
CFR	Code of Federal Regulations
CRP	Conservation Reserve Program
EA	Environmental Assessment
EIS	Environmental Impact Statement
EO	Executive Order
EPA	Environmental Protection Agency
EPG	Engineering Policy Guide
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FONSI	Finding of No Significant Impact
INFRA	Infrastructure for Rebuilding America
JSP	Job Special Provision
LWCF	Land and Water Conservation Fund
LUST	Leaking Underground Storage Tank
MBTA	Migratory Bird Treaty Act
MDC	Missouri Department of Conservation
MDNR	Missouri Department of Natural Resources
MoDOT	Missouri Department of Transportation
NAC	Noise Abatement Criteria
NHD	National Heritage Database
NEPA	National Environmental Policy Act
NHPP	National Highway Performance Program
NRHP	National Register of Historic Places
NRCS	National Resource Conservation Service
NSA	Noise Sensitive Area
PDO	Property Damage Only
RCRIS	Resource Conservation and Recovery Information System
ROD	Record of Decision
SHPO	State Historic Preservation Officer
SIU	Section of Independent Utility
SEMA	State Emergency Management Agency
SEIS	Supplemental Environmental Impact Statement
SIP	State Implementation Plan
SPUI	Single Point Urban Interchange
STIP	Statewide Transportation Improvement Program
USACE	U.S. Army Corps of Engineers

USFWS	U.S. Fish and Wildlife Service
USDOT	U.S. Department of Transportation
VAU	Visual Assessment Unit
WOUS	Waters of the U.S.
WRP	Wetlands Reserve Program

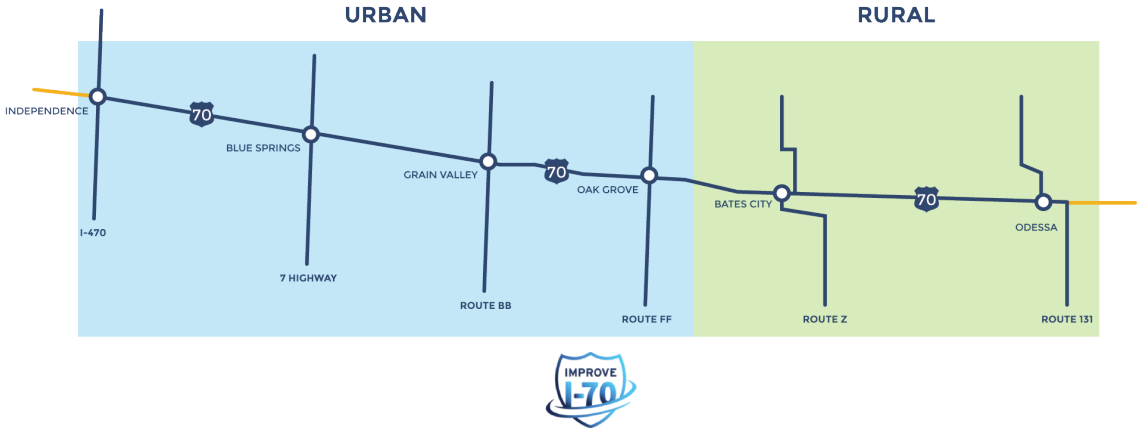
1.0 Introduction

The study area for this re-evaluation is defined as the entirety of Segment of Independent Utility (SIU) 1 of the I-70 corridor, from just east of the I-470 interchange (Jackson County) to Mile Marker 39 (east of Odessa), in Lafayette County (**Figure 1**).

Previous environmental studies related to proposed improvements along I-70 include the 2001 Interstate 70 Corridor First Tier Environmental Impact Statement (EIS) and Record of Decision (ROD) signed December 18, 2001; the Final Second Tier Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) for the I-70 SIU 1 signed September 7, 2006, under job number 4I1341D; and the 2009 Supplemental Environmental Impact Statement (SEIS) and ROD for Truck-Only Lanes signed August 14, 2009, which supplement the previous first and second tier studies. The 2009 Truck-Only Lanes ROD was amended on December 5, 2023, and can be found in **Appendix A**.

The Federal Highway Administration (FHWA) and Missouri Department of Transportation's (MoDOT) Engineering Policy Guide (EPG) require a re-evaluation when there has been more than three years since a FONSI was signed or when changes related to the original study have occurred. A re-evaluation also requires validating the original purpose and need. Due to the extent of time between the current project and the previous environmental studies, a re-evaluation of the 2006 SIU 1 Second Tier EA is required in accordance with the National Environmental Policy Act (NEPA) (23 Code of Federal Regulations [CFR] 771.129) and associated laws.

Figure 1: SIU 1 Project Location

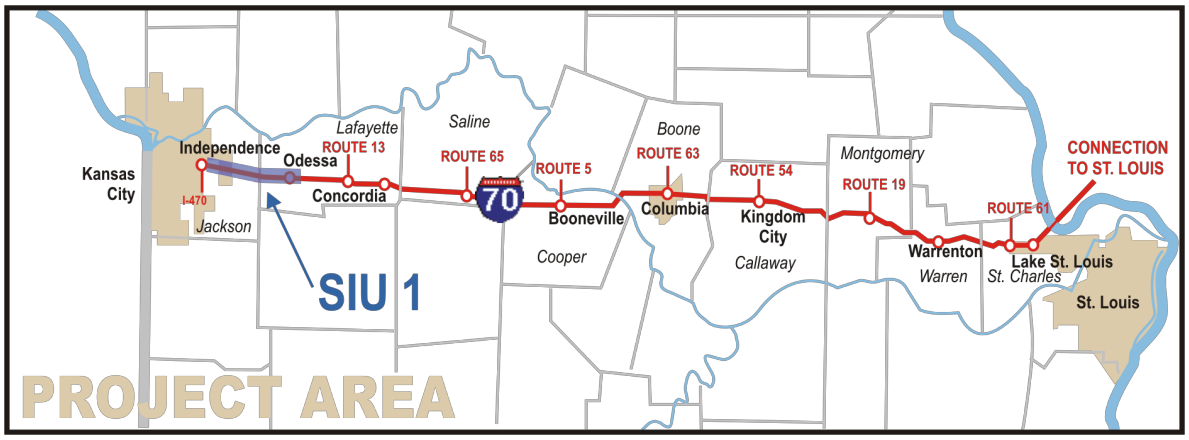


A portion of the proposed improvements to SIU 1 are currently funded through the National Highway Performance Program (NHPP) and are included in MoDOT's Statewide Transportation Improvement Program (STIP) for construction in the fiscal years 2023-2027.

2.0 Background

In the fall of 1999, MoDOT initiated a tiered environmental decision-making process, referred to as Improve I-70 First Tier Study, to evaluate strategies for improving the I-70 corridor in Missouri between the metropolitan areas of Kansas City and St. Louis. The tiering process allowed for a focus on corridor-wide issues and reduced repetition in environmental documentation. First tier decisions frame and narrow the scope of second tier studies and related decisions. The Second Tier Studies, known collectively as Improve I-70, looked more specifically at the recommended strategies and their local impacts. To ensure an appropriate level of detail, the Improve I-70 Second Tier program divided the interstate into seven different geographic sections, each with its own environmental study and recommendations (**Figure 2**).

Figure 2: Improve I-70 First Tier Study Area and SIU 1



The Interstate 70 Corridor First Tier EIS was prepared to aid in determining the most appropriate type of improvement concept for I-70. The ROD, approved by FHWA in 2001, selected the "Widen Existing I-70 Strategy" as the preferred alternative. This strategy would improve existing I-70 by adding one lane in each direction, resulting in three in each direction, in rural areas and a minimum of eight lanes, four in each direction, through Columbia and in the metropolitan areas of Kansas City and St. Louis. The preferred alternative also included improved access management, reconstruction of the existing roadway to enhance safety and performance, and provisions for future transportation improvements within the median.

In 2006, the Second Tier EA was completed with a FONSI, assessing impacts specific to SIU 1, from just east of the I-470 interchange (Jackson County) to Mile Marker 39 (east of Odessa), in Lafayette County. In general, the selected alternative included an additional lane in each direction, the replacement of all existing interchanges and overpasses, access management where appropriate, and the provision for continuous frontage roads on both sides of I-70 as deemed necessary.

Building on the work of the first and second tier studies, MoDOT initiated a SEIS to evaluate the impacts of a new strategy for I-70 consisting of dedicated truck-only lanes. Approved in a 2009 ROD, the Truck-Only Lanes Strategy would construct two truck-only lanes and two or more general purpose lanes in each direction along existing I-70. Depending on the location along the corridor, concrete barriers, buffer separations or grassed areas would separate the truck-only lanes and general-purpose lanes from each other. This strategy was determined to be consistent with the decisions made in the 2001 ROD, as it would fit within the limits of the previously evaluated footprint, to the extent possible, utilizing the preserved future transportation corridor identified in the Widen Existing I-70 Strategy. Interchange features of the Widen Existing I-70 Strategy at the majority of the interchanges along the corridor would also be retained.

On December 5, 2023, an Amended ROD to the 2009 SEIS, was signed by FHWA. In accordance with 23 CFR 771.127(b), the Amended ROD selects the 2001 First Tier EIS and ROD's Preferred Alternative, widening of the I-70 corridor to six general-purpose travel lanes, which was fully evaluated in the study. The Amended ROD can be found in **Appendix A**.

3.0 Purpose and Need

As noted in the 2001 First Tier EIS, the goal of I-70 improvements along the entire Missouri corridor is to provide a safe, efficient, environmentally sound, and cost-effective transportation facility that responds to the needs of the study corridor and to the expectations of a nationally important interstate. Additionally, the 2006 Second Tier EA documented the development of the purpose and need for the SIU 1 improvements. The specific purpose and need addressed by the proposed action in SIU 1 is summarized as follows:

- Roadway Capacity;
- Traffic Safety;
- Roadway Design Features;
- System Preservation;
- Goods Movement;
- Access to Recreational Facilities; and
- National Security.

The 2009 SEIS did not alter the project's purpose and need. Therefore, the 2006 Second Tier EA purpose and need was reviewed to ensure validity as part of this current re-evaluation. Each purpose and need element is discussed below.

3.1 Roadway Capacity

One element of the purpose and need is to develop alternatives that accommodate both existing and projected traffic volumes. After a re-evaluation of SIU 1, the volumes across this portion of I-70 are estimated to grow by 15 to 25 percent between 2023 and 2050[1]. With the No-Build Alternative, these increases would result in poor operational conditions for travelers on I-70.

Table 1 summarizes traffic volume projections for existing, opening (when construction is complete), and design year conditions by roadway section under the No-Build Alternative. The projections are given in Average Daily Traffic (ADT). In 2023, existing traffic volumes ranged from 23,550 to 104,170 vehicles per day. In 2026, I-70 traffic volumes are expected to range from 24,360 to 107,030 and eventually range from 30,820 to 129,940 by year 2050. Nearly every portion of the system would experience a significant increase in volume. The largest increase – an estimated 25 percent increase in traffic – occurs between Johnson Dr. and Highway M. Both the overall magnitude of the volumes and the projected increases vary by location within the corridor. **Table 1** shows that the total volume of traffic within the Kansas City urban area is higher than at the eastern ends of the corridor. The 2050 ADT volumes within

[1] The project's ultimate traffic condition.

the urban area reach almost 130,000. Conversely, the traffic increases (on a percentage basis) are higher to the east of the urban area.

Table 1: Existing & No-Build I-70 Traffic Volumes

SIU 1 Subsection	2023 Average Daily Traffic	2026 Average Daily Traffic	2050 Average Daily Traffic
1. I-470 to Little Blue Pkwy	104,170	107,030	129,940
2. Little Blue Pkwy to Woods Chapel Rd	103,930	106,080	123,310
3. Woods Chapel Rd to MO 7	89,470	91,510	107,830
4. MO 7 to Adams Dairy Pkwy	67,560	69,270	82,950
5. Adams Dairy Pkwy to Route AA	51,710	52,970	63,040
6. Route AA to Route F	44,730	45,920	55,430
7. Route F to Route D	35,370	36,440	45,050
8. Route D to Route 131	32,540	33,620	42,330
9. Route 131 to Johnson Dr	23,550	24,360	30,820
10. Johnson Dr to Hwy M	25,780	26,690	34,150

Note: The Average Daily Traffic volumes were projected from future projections by use of a 10 percent K-Factor applied to the highest projected peak hour volume in both directions of travel on I-70. Both the eastbound and westbound direction of I-70 experience the heaviest volumes in the evening peak hour.

As part of the SIU 1 Re-evaluation, the I-70 corridor from I-470 to Mile Marker 29 (**Figure 1**) are considered to fall under the urban category (for design purposes). The portion of the corridor from Mile Marker 29 to Mile Marker 39 in Odessa, is considered a rural section (for design purposes). The distinction between urban and rural pertains primarily to existing conditions and anticipated future development.

The significant increase in projected ADT over the next 20 years will further contribute to the existing and observed traffic congestion along the I-70 corridor. The project is aimed at alleviating existing and projected congestion as well as equipping the I-70 facility with the proper capacity and interchange configurations for the expected growth on the outskirts of the urban area.

3.2 Traffic Safety

Missouri's Blueprint for Safer Roads (State Strategic Highway Safety Plan) calls for vision of zero traffic fatalities on Missouri roadways. This project utilizes data-driven safety analysis to identify crash types and trends and prioritize safety. As traffic volumes are expected to increase on the corridor in future years, the number of crashes will also increase.

The Re-evaluation analyzed crash records for the five-year period between 2018 and 2022. A total of 1,940 crashes occurred along I-70, in SIU 1, during the study period. A breakdown of the total crashes and crash severities is shown in **Table 2** below.

Table 2: I-70 SIU 1 Crashes by Severity Rating

Year	Total Crashes	Total Property Damage Only (PDO) Crashes	Total Injury Crashes	Total Fatal Crashes
2018	346	277	68	1
2019	435	351	79	5
2020	285	235	49	1
2021	457	390	65	2
2022	417	350	64	3
Totals	**1,940**	**1,603**	**325**	**12**

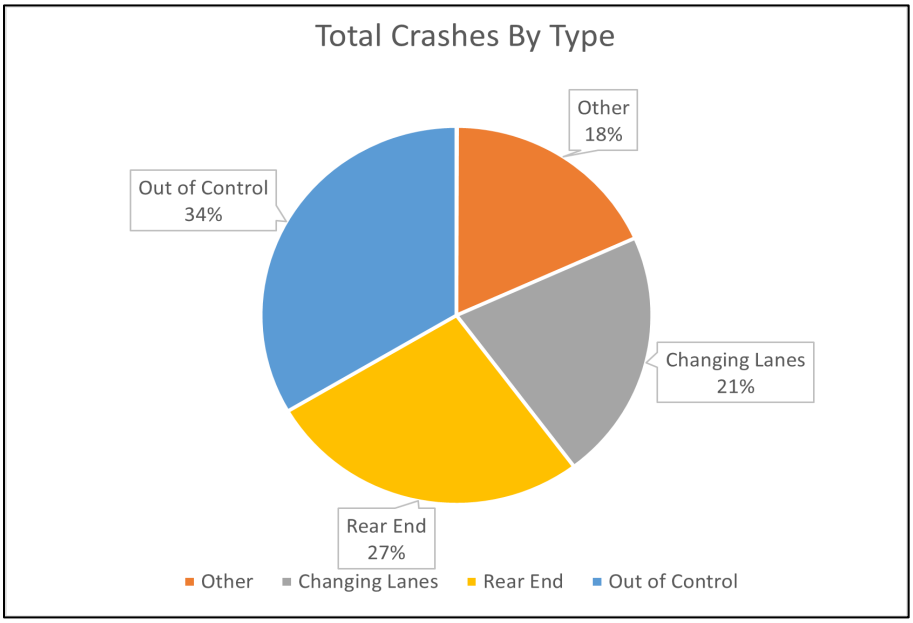
Overall, a total of 12 fatal crashes (less than one percent) and 325 injury crashes (17 percent) occurred within the last five years along SIU 1. A total of 1,603 crashes resulted in PDO (83 percent). The crashes broken out by segments are shown in **Table 3**.

Table 3: I-70 SIU 1 Crash Rates by Location (2018-2022)

Description	From Exit	To Exit	Length (miles)	Total Crash Rate	Total PDO Crash Rate	Total Injury Crash Rate	Total Fatal Crash Rate
I-470 to Woods Chapel Rd	15	18	3.3	78	59	19	0
Woods Chapel Rd to MO 7	18	20	1.9	72	58	13	0
MO 7 to Adams Dairy Pkwy	20	21	1.3	104	87	17	1
Adams Dairy Pkwy to Route AA	21	24	2.7	84	73	12	0
Route AA to Route F	24	28	3.8	76	67	9	0
Route F to Route D	28	31	3.2	86	72	13	2
Route D to Route 131	31	37	5.5	61	53	8	1
Route 131 to Johnson Dr	37	38	1.3	106	91	14	1

Analyzing the crash types a corridor is experiencing can point to what safety issues the corridor is experiencing and help in identifying potential opportunities for mitigation or countermeasures. The breakdown of crashes by type along I-70 is shown in **Figure 3** below. The top crash type is out of control.

Figure 3: I-70 Crash Types



The proposed improvements to the interstate, ramp terminals, and interchanges along I-70 are expected to improve safety. With an additional lane and increase in traffic volumes, the overall number of crashes would be expected to increase. With the improvements to I-70 the severity of crashes is expected to decrease, with most crashes expected to be PDO. Minimal growth is anticipated in the fatal and injury categories of crashes. Overall, the elements in the Preferred Alternative would be expected to reduce the severity of crashes in SIU 1 and contribute to the improvement of safety across the I-70 corridor. To the greatest extent possible, safety improvements will be implemented along SIU 1 and throughout the I-70 corridor to ensure a safe roadway for all users.

3.3 Roadway Design Features

For the original Improve I-70 Study, MoDOT adopted stringent minimum design criteria. For the purposes of this re-evaluation, the design criteria for I-70 will follow MoDOT's EPG and provisions of the American Association of State Highway and Transportation Officials (AASHTO) Policy on Geometric Design of Highway and Streets, 2001, Fourth Edition, and a Policy on Design Standards – Interstate System, 2018, where possible. The Conceptual Study Report (**Appendix B**) identifies the I-70 design criteria and the typical section for both the urban and rural sections.

3.4 System Preservation

The original pavement for I-70 was constructed between 1956 and 1965, with portions of incorporated U.S. 40 being constructed in the 1940s. Since that time there have been numerous projects to rehabilitate, resurface and reconstruct portions of the roadway to maintain its structural integrity and provide a smooth riding surface. The average pavement condition in SIU 1 is rated to be in good condition. The combined Lafayette and Jackson County bridge condition ratings fall within the fair to

good categories. More information on pavement and bridge conditions can be found in the Conceptual Study Report.

3.5 Goods Movement

Interstate 70 is the primary east-west link across the state of Missouri. This corridor plays an important role in moving freight and general inter/intra-state travel. Because this portion of I-70 runs through the Kansas City metropolitan area, it is also an important piece of that local network. This creates conflicts between existing traffic streams with different purposes. Trucks present an additional challenge because of their size and limited maneuverability.

There are several distinct traffic streams on I-70 in SIU 1. There is a substantial truck component, traditional long-distance (through) traffic and the local traffic stream associated with the Kansas City metropolitan area.

The implementation of a preferred alternative that effectively incorporates local connectivity is key to accommodating all users of I-70.

3.6 Access to Recreational Facilities

Interstate 70 is the largest gateway to the vast amount of tourist and recreational destinations in the state. Convenient access to recreational areas in Missouri is important to the quality of life of many Missourians and Midwesterners. The Branson/Table Rock Lake area and the Lake of the Ozarks are two of the largest tourist/recreational destinations in Missouri. Travelers use the I-70 connections to major north/south highways, such as U.S. 54, 63, 61, and 65 to arrive at tourist and recreational facilities throughout the state.

3.7 National Security

Interstate 70 is a major east-west transportation corridor on a national, regional, and local level. As such, I-70 is a vital part of the nation's national security system. The need to have efficient, convenient, and expeditious movement of large quantities of people and equipment requires that the transportation system be able to provide access to protect critical assets, enhance traffic management capabilities, and improve emergency response capabilities.

3.8 Conclusion

The 2006 Second Tier EA purpose and need was determined to still be valid and the elements were utilized in examining the reasonable alternatives.

4.0 Alternatives Development

4.1 Selected Alternative

In consideration of the Purpose and Need as well as screening of the potential impacts, a Selected Alternative has been identified for the re-evaluation of SIU 1. The Selected Alternative is:

- Consistent with the SIU 1 EA recommendation.
- Improves Level of Service to acceptable performance.
- Provides flexibility in developing implementation solutions.

A comparison between the Selected Alternative configuration from the 2006 SIU 1 EA and the Selected Alternative configuration from this SIU 1 EA Re-evaluation is presented in **Table 5**. Modifications from the 2006 SIU 1 ROD's Selected Alternative are highlighted in bold, italics, and underlined. Comments on the consistency between the SIU 1 EA Re-valuation's Selected Alternative and the ROD's Selected Alternative are provided in the far-right column.

As shown in **Table 5**, the modifications to this Re-evaluation's Selected Alternative from the ROD's Selected Alternative are minor in nature and remain consistent with the overall goals, operations, performance, and related impacts within the SIU 1 corridor. The section of I-70 between Route F and Odessa, the Route 131 interchange and the Route D interchange have been improved by MoDOT since the 2006 ROD. These modifications were retained in the SIU 1 EA Re-evaluation's Selected Alternative.

The needs addressed by the ROD's Selected Alternative were to accommodate existing and future traffic volumes on I-70, improve outdated I-70 design elements where possible, accommodate all users of I-70, and improve user safety. The refined SIU 1 EA Re-evaluation's Selected Alternative addresses these needs through minor improvements and implementing interchange configurations that were not applicable when the ROD's Selected Alternative was identified. As described in the table, the minor modifications at the locations noted are consistent with the ROD's Selected Alternative and do not require a Supplemental EIS and new ROD.

Revisions to the configuration of the Selected Alternative identified in this Re-evaluation document may occur during project delivery. Any modifications to the Selected Alternative, and their related impacts, would need to be assessed for consistency with the findings of this Re-evaluation document. Assuming that any modifications are consistent with the findings of this Re-evaluation document, this Re-evaluation document will remain valid.

The cost estimate for the I-70 SIU 1 Selected Alternative is $474,520,000 (in 2024 dollars).

Table 5: Selected Alternative Comparison Between 2006 SIU 1 EA and SIU 1 EA Re-Evaluation

Location	Component	2006 SIU 1 ROD	SIU 1 EA Re-evaluation	Re-evaluation Selected Alternative Comments
Subsection 1: I-470 to Mile Marker 19	Mainline I-70	8-Lane Urban Mainline Widening	8-Lane Urban Mainline Widening	Consistent with ROD's Selected Alternative
	Woods Chapel Road Interchange	SPUI (Single Point Urban Interchange) With relocated south and northwest outer roads.	SPUI With relocated south and northwest outer roads.	Consistent with ROD's Selected Alternative
Subsection 2: Mile Marker 19 to Mile Marker 22	Mainline I-70	8-Lane Urban Mainline Widening	8-Lane Urban Mainline Widening	Consistent with ROD's Selected Alternative
	Route 7 Interchange	Tight Diamond Interchange to the south and a modified standard diamond interchange to the north with a loop in the northeast quadrant.	Tight Diamond Interchange to the south and a modified standard diamond interchange to the north with a loop in the northeast quadrant.	Consistent with ROD's Selected Alternative
Subsection 3: Mile Marker 22 to Mile Marker 25	Mainline I-70	6-Lane Urban Mainline Widening	6-Lane Urban Mainline Widening	Consistent with ROD's Selected Alternative
	Route AA/BB Interchange	SPUI with new north frontage road and improved south frontage road.	SPUI with new north frontage road and improved south frontage road.	Consistent with ROD's Selected Alternative
Subsection 4: Mile Marker 25 to Mile Marker 29	Mainline I-70	6-Lane Urban Mainline Widening	6-Lane Urban Mainline Widening	Consistent with ROD's Selected Alternative
	Route F Interchange	SPUI with new north frontage road and south frontage road at existing 4th Street.	SPUI with new north frontage road and south frontage road at existing 4th Street.	Consistent with ROD's Selected Alternative
Subsection 5: Mile Marker 29 to Eastern Terminus outside of Odessa	Mainline I-70	6-Lane Rural Mainline Widening	6-Lane Rural Mainline Widening	Consistent with ROD's Selected Alternative
	Route D Interchange	Diamond Interchange with frontage roads spaced 1,100 ft north	Roundabout east of Route D with Old US40 connection to eastbound on/off ramp	Consistent with ROD's Selected Alternative as the new interchange provides similar

Location	Component	2006 SIU 1 ROD	SIU 1 EA Re-evaluation	Re-evaluation Selected Alternative Comments
		and south of the ramp termini.	(Alternative 2)	operational improvements as the ROD's Selected Alternative.
	Route WW Interchange	Grade Separation	Grade Separation	Consistent with ROD's Selected Alternative
	Hughes Road Interchange	Diamond Interchange with frontage roads spaced 1,320 ft north and south of the ramp termini.	Diamond Interchange	Consistent with ROD's Selected Alternative
	Route 131 Interchange	Grade Separation	Roundabout east of Route 131 with US-40 connection and eastbound exit/entrance (Alternative 6)	Consistent with ROD's Selected Alternative as the improvements address the capacity and flow issues in this area.
	County Road 96/Johnson Dr. Interchange	Diamond Interchange with frontage roads spaced 1,000 feet north and 1,250 feet south of the ramp termini.	Diamond Interchange with frontage roads spaced 1,000 feet north and 1,250 feet south of the ramp termini.	Consistent with ROD's Selected Alternative

5.0 Public and Agency Coordination

In March 2022, during the planning stages of the project, MoDOT issued a public notice of the proposed I-70 projects and the re-evaluation of the SIU 1 Second Tier Environmental Assessment completed in 2006. A variety of public coordination tools were utilized to solicit feedback on proposed improvements.

From August 28 and September 7, 2023, MoDOT hosted a total of seven kick-off public information meetings for the Improve I-70 Program. The meeting held on Tuesday, September 5, in Blue Springs, Missouri, was related to SIU 1. This meeting was held from 4 p.m. to 6 p.m. at the Central Jackson County Fire Protection District located at 4715 W. U.S. 40. A total of 64 people attended the meeting, and 10 in-person comments were received. The substantive comments and responses are included in **Table 6**.

During the same period of August 28 and September 7, 2023, approximately 2,400 visitors viewed the Improve I-70 Public Involvement webpage. A total of 41 comments were received specific to the two counties SIU 1 comprises. Of those 41 comments, 40 were specific to Jackson County and 1 was specific to Lafayette County. The substantive comments and responses are included in **Table 6**.

On October 30, 2023, one-on-one discussions were held with the City of Odessa to go over the overall Improve I-70 project and specifically SIU 1. The city was supportive of the project and appreciative to be included and provided with updates on the project.

Once reasonable alternatives were identified near Route D in Bates City and Route 131 in Odessa MoDOT held additional individual meetings with Bates City and the City of Odessa. Notes from MoDOT's meeting with each respective city are included in **Appendix C**.

Table 6: SIU 1 Substantive Comments

Comment	Response
So what public transit options are being considered either as an alternative to this or as a part of this? My family has been aching for a better way to get to St. Louis from Kansas City for almost 20 years now. We have had to drive every time we want to visit family because the travel time for the trains is longer than it takes to drive (for context, takes about 4-4.5 hours to drive, and almost 6 hours via train). My parents are getting old, and the journey is only getting harder on them using a car, so I would love if the train line was improved so that they could use it and not worry about making the trip. And I get that this is a highway improvement project, I really do, but have other alternatives been SERIOUSLY considered and given due thought instead of going straight to highway expansion? Has induced demand and its potential impact been calculated for this project?	Thank you for your interest in MoDOT's Statewide Improve I-70 Program! We received your comment from the recent public information meetings and wanted to follow up with you regarding your question/concern. The $2.8B in funding provided by the Missouri Legislature is dedicated towards the expansion of I-70 to 3 lanes in each direction. While other transit options can and are considered alongside that construction, we have been mandated to provide that lane expansion. Additional funding would be required to make the kind of large scale passenger rail improvements that you are seeking. Previous studies done (early 2000s) indicated that train usage would not be high enough to provide

	relief to I-70 traffic leading to the lane expansion not remaining a need. The likelihood of induced demand from the lane expansion is a consideration of the ongoing engineering study for the full project limits that is accounted for. The Improve I-70 Program is still in its planning stage. We appreciate your feedback ahead of the design stage of the program. You can stay up to date on all the projects within the program by visiting our program website at https://www.modot.org/improvei70/home. Should you have additional questions or concerns, please reach out to us at improvei70@modot.mo.gov.
I'm all for the expansion of I-70 from Blue Springs to the east as long as it will eliminate the overweight semi traffic that is destroying Route F south of Oak Grove to 50 Highway. There are numerous areas of the shoulder that have been repaired only to have semis damage repeatedly as well as areas in the lanes of the highway that have deep ruts and ridges making it dangerous, especially in the S curve areas. There are so many driveways going onto F Hwy now, I'd like to see it changed to what Buckner Tarsney is. Little to no semi traffic and slower, safer speeds. Will the expansion/widening of the Interstate 70 help with this issue of truck traffic? I'm in favor, if so. Thank you for the opportunity to voice my opinion. Thanks for the work all year long keeping up with our State roadways. Stay safe out there.	Thank you for your interest in MoDOT's Statewide Improve I-70 Program! We received your comment from the recent public information meetings and wanted to follow up with you regarding your question/concern. I believe that Route F is used mostly as a connector between US 50 and Interstate 70 when traffic is congested due to a crash or commuter traffic. The Improve I-70 program will reduce all traffic congestion on I-70 with a focus on improving the ability for freight to navigate the corridor. These improvements in freight access will pull a lot of the traffic off of Route F and allow them to reliably travel on I-70. Thank you so much for your support! The Improve I-70 Program is still in its planning stage. We appreciate your feedback ahead of the design stage of the program. You can stay up to date on all the projects within the program by visiting our program website at https://www.modot.org/improvei70/home. Should you have additional questions or concerns, please reach out to us at improvei70@modot.mo.gov.

On May 22, 2023, notices were sent to local, state, and federal agencies describing the proposed actions and seeking comments relative to the interests of each agency. These notices were sent to Tribal Nations as well. Comments were requested by July 1, 2023. U.S. Fish and Wildlife Service (USFWS) responded on May 24, 2022, and noted that their only concerns are related to the standard provisions associated with the protection of federally listed bat species. The Missouri Department of Natural Resources (MDNR) responded on May 24, 2023, acknowledging receipt of the agency coordination letter. The U.S. Army Corps of Engineers (USACE) reached out on May 24, 2023, acknowledging receipt of the agency coordination letter and again on May 26, 2023, to note that several Waters of the United States may be impacted by the proposed project and permits may be required in later stages of the project. The Missouri State Historic Preservation Office (SHPO) responded on June 27, 2023, acknowledging receipt of the agency coordination letter.

Agency Coordination materials can be found in **Appendix D**. The Section 106 Programmatic Agreement was fully executed on August 29, 2023, and is included in **Appendix K**.

6.0 Resource Impact Evaluation

The following matrix presents an analysis of resources evaluated in the 2006 Second Tier EA and describes changes to resources and findings regarding the potential impact on each resource. The matrix identifies resource impacts within SIU 1 in association with project J4I2293 and includes a determination of whether the impact has changed or remained the same from the 2006 EA. A summary table of the impact evaluation findings is provided in **Table 13** following this matrix and a map index identifying environmental resources along the SIU 1 corridor is included in **Appendix E**.

6.1 Environmental Re-evaluation Matrix for Interstate 70, SIU 1, Environmental Assessment for Project J4I2293/ST0019

23 CFR 771.129

Missouri Department of Transportation/Federal Highway Administration

REGION Missouri Division	STATE PROJECT NO. 4I2293/ST0019	I-70 SIU 1, EA
DATE APPROVED	FEDERAL AID NO. 70-1 (218)	

REASON FOR CONSULTATION:

FHWA and MoDOT's Engineering Policy Guide require a re-evaluation to comply with NEPA (23 Code of Federal Regulations [CFR] 771.129) and associated laws due the amount of time since the 2006 EA was approved and re-evaluated in 2024.

WILL THE TIME LAPSE OR MODIFIED ALIGNMENT CHANGE THE IMPACTS TO THE FOLLOWING:

1) LAND USE — Is there a resource impact? YES [ ] NO [X]

Changes since the 2006 EA: More Impacts [ ] Same [X] Fewer Impacts [ ]

SIU 1 Corridor – 2006 EA

The SIU 1 study area consisted of both urban and rural development patterns. At the time, Subsections 1, 2, and 3 consisted primarily of suburban residential land uses and commercial and office development. Subsections 4 and 5 were largely rural with some concentrated development. Most developed areas within SIU 1 were located within the incorporated areas.

The Jackson County portion of SIU 1 was located in incorporated areas and was covered by formal land use plans. Each plan addressed the importance of I-70 within their community. The plans encouraged the continual development of mixed commercial and industrial uses at interchanges, which served as connections to the residential base of the communities. The improvements proposed for I-70 in SIU 1 supported these planning efforts and would continue to provide compatibility with local land uses and the local transportation network in each community.

The Selected Alternative impacted 469 acres (189.8 hectares) of land in SIU 1. The land use impacts varied throughout the SIU 1 Project Area due to the type of improvements made and the varied density of existing development along the corridor.

SIU 1 Corridor – Re-evaluation

Mainline Widening

Similar to the 2006 EA, the SIU 1 Re-evaluation study area consists of both urban and rural development patterns. The Jackson County portion of SIU 1 consists primarily of residential, commercial, business/office, and mixed-use land uses. Other land uses include industrial and agriculture/open space uses. The Lafayette County portion of SIU 1 is still predominantly rural and consists primarily of residential and agriculture land uses, with some commercial and industrial uses near incorporated areas.

The Jackson County segment of SIU 1 is located within incorporated areas and is covered by formal land use plans. The majority of these plans indicate a preference for commercial, mixed use, or business/office land uses along I-70. The Lafayette County segment of SIU 1 is located within both rural and incorporated areas and is primarily covered by the county land use plan. This plan indicates a preference for urban mix uses (residential, commercial, and industrial uses) near incorporated areas along I-70.

Route D Interchange

The Route D interchange in Bates City is located within Lafayette County and is primarily surrounded by rural residential and commercial land uses with some agricultural land use. The Lafayette County land use plan indicates a preference for urban mix uses (residential, commercial, and industrial uses) near the intersection.

The Selected Alternative for the Route D interchange in Bates City would impact a few individual parcels, but these impacts are not expected to change the surrounding land uses.

Route 131 Interchange

The Route 131 interchange in Odessa is located within Lafayette County and is primarily surrounded by rural residential and commercial land uses with some agricultural land use. The Lafayette County land use plan indicates a preference for urban mix uses (residential, commercial, and industrial uses) near the intersection.

The Selected Alternative for the Route 131 interchange in Odessa would impact a few individual parcels, but these impacts are not expected to change the surrounding land uses.

2) PRIME AND UNIQUE FARMLAND Is there a resource impact? YES [X] NO [ ]

Changes since the 2006 EA: More Impacts [ ] Same [ ] Fewer Impacts [X]

SIU 1 Corridor – 2006 EA

In 1997 Missouri had a total of 14,310,200 acres of prime farmland, 141,000 acres in Jackson County and 157,015 acres in Lafayette County. Prime farmland was determined by soil. Those that had the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed, and other agricultural crops with minimum inputs of fuel, fertilizer, pesticides, and labor and without intolerable soil erosion.

The Conservation Reserve Program (CRP) was a voluntary program for agriculture landowners. Through this program landowners could receive annual rental payments and cost-share assistance to establish long-term, resource-conserving covers on eligible farmland. At the time, one parcel of land, in the SIU 1 area, was enrolled in the CRP program and was located north of 1-70 in Subsection 4.

Potentially impacted areas of prime farmland, farmland of statewide importance and CRP lands were calculated for the Build Alternatives. The Natural Resources Conservation Service (NRCS) then reviewed the various Build Alternatives and completed the Farmland Conversion Impact Rating Form for Corridor Type Projects (Form NRCS-CPA-106), which include both consideration of acreage impacted, as well as the relative value of the farmland impacted. Conversion Impact Ratings were developed independently of each of the five subsections of SIU 1.

The Selected Alternative would convert approximately 186.7 acres of Prime Farmland, 263.3 acres of Farmland of Statewide Importance, and 3.6 acres of CRP lands to highway right of way. None of the subsections of the Selected Alternative for this project had Farmland Conversion Impact ratings exceeding NRCS' threshold value of 160. Therefore, no significant amounts of farmland conversion would be anticipated.

SIU 1 Corridor – Re-evaluation

Mainline Widening

Based on the project footprint, the project could potentially convert 3.1 acres of prime farmland and 18.5 acres of farmland of statewide importance.

In addition to the opportunity to minimize impacts during the next phase of the project, portions of the potentially impacted acreage are surrounding existing interchanges or are within the urban area. The conversion impacts to prime farmland or farmland of statewide importance is expected to be minimal.

NRCS has confirmed that there are no CRP or Wetland Reserve Program (WRP) lands within the SIU 1 project area.

The Farmland Conversion Impact Rating continues to remain below the NRCS threshold of 160 points. Therefore, the impacted farmland does not require further consideration for protection and no additional sites need to be evaluated. The Farmland Conversion Impact Rating form is located in **Appendix F**.

Route D Interchange

Based on the project footprint, it is possible the Selected Alternative at the Route D interchange could -convert 0.0 acres of prime farmland and 1.28 acres of farmland of statewide importance. However, the amount of conversion is expected to be minimal.

Route 131 Interchange

Based on the project footprint, it is possible the Selected Alternative at the Route 131 interchange could convert 3.9 acres of prime farmland and 0.20 acres of farmland of statewide importance. However, the amount of conversion is expected to be minimal.

3) RIGHT-OF-WAY ACQUISITION AND DISPLACEMENTS Is there a resource impact? YES [X] NO [ ]

Changes since the 2006 EA: More Impacts [ ] Same [ ] Fewer Impacts [X]

SIU 1 Corridor – 2006 EA

The Build Alternatives for SIU 1 required widening of the existing highway and reconstructing and/or relocating existing interchanges. The additional right of way needed for these improvements necessitated the relocation of some existing households, businesses, and other facilities. The Selected Alternative resulted in the displacement of 40 residential units and 20 businesses and would require 71 total parcel acquisitions and 310 partial parcel acquisitions. The total area impacted would include 469 acres. The potential displacements are dispersed along the 24-mile study area.

SIU 1 Corridor – Re-evaluation

Mainline Widening

The Re-evaluation has identified 64 total acres of right-of-way impacts along the entire SIU 1 corridor. The breakdown of these impacts are as follows:

- Residential impacts include 18 parcels, which affects 15 acres.
- Business/commercial impacts include 32 parcels, which affects 17 acres.

• Agricultural (wooded/vacant) and other (e.g., utilities, institutional, fraternal organizations) impacts include 37 parcels, which affects 33 acres.

A total of 87 partial parcel acquisitions and zero total parcel acquisitions would be required for the Selected Alternative.

Route D Interchange

A total of 4 acres of right-of-way impacts have been identified for the Route D intersection Selected Alternative. The partial displacements include two businesses/commercial properties and two agricultural, vacant, undeveloped, or unknown land parcels. Required parcel acquisitions for the Selected Alternative consist of four partial acquisitions.

Route 131 Interchange

A total of 5 acres of right-of-way impacts have been identified for the Route 131 intersection Selected Alternative. There is only one partial displacement of a residential unit while the remaining three partial displacements consist of agricultural, vacant, undeveloped, or unknown land parcels. Required parcel acquisitions for the Selected Alternative consist of four partial acquisitions.

Applicable Commitment(s):

8. During right of way acquisition and relocations, MoDOT will assure that this will be accomplished in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. MoDOT is committed to examining ways to further minimize property impacts throughout the corridor, without compromising the safety of the proposed facility, during subsequent design phases.

24. During the final design process, MoDOT will consider options to minimize new right of way acquisition.

4a) COMMUNITY IMPACTS—COMMUNITY COHESION Is there a resource impact? YES [X] NO [ ]

Changes since the 2006 EA: More Impacts [ ] Same [X] Fewer Impacts [ ]

<u>SIU 1 Corridor – 2006 EA</u>

The Selected Alternative partially impacted the Grain Valley Christian Church, the Grain Valley Police Station, the Grain Valley City Hall, five MoDOT Park and Ride lots, a water treatment plant pumping station, a truck rest area, and a MoDOT Maintenance Yard. In each of these instances a portion of land was acquired but no buildings were impacted and there was no impact to the functionality of the facilities.

There were no impacts to schools, cemeteries, fire protection facilities, or hospitals located within the SIU 1 Project Area as a result of the Build Alternatives.

<u>SIU 1 Corridor – Re-evaluation</u>

Mainline Widening

Community resources in the original study area include one fire station, one police station, one public school, four childcare centers, nine health care facilities, four assisted living/senior citizen facilities, and eight churches. There were no neighborhood associations, private schools, hospitals, or ambulance services located within the study area. The community resources within the study area that are located in the widening footprint for SIU 1 are listed below.

The Central Jackson County Fire Protection District Station 3 is just northwest of the I-70/NE Adams Dairy Pkwy interchange and is partially located in the widening footprint.

Matthews Elementary School is located northeast of the I-70/Route AA and BB interchange. Its access is located in the widening footprint.

Two childcare centers are partially located in the widening footprint: Spectrum Station Early Learning and Childcare Center Blue Springs, and BLS Education Center – Grain Valley.

One healthcare facility (Rusici Wellness Center in Blue Springs) is located on the border of the widening footprint.

Two assisted living/senior citizen facilities are located on the border of the widening footprint: Cedarhurst of Blue Springs and Ignite Medical Resort St. Mary's. The accessibility of one other assisted living/senior citizen facility, Benton House of Blue Springs, is located within the widening footprint.

The access to seven churches within the study area is located within the widening footprint. They include Church of the Resurrection – Blue Springs, Crossroads Church, First Samoan Assembly of God Church, New Life Church, Jehovah's Witnesses Kingdom Hall Oak Grove, The Crown, and Calvary Baptist Church.

Neighborhoods and community cohesion are not anticipated to be adversely impacted by the project.

Route D Interchange

No community resources are located near the Route D interchange Selected Alternative; therefore, community cohesion will not be affected.

Route 131 Interchange

Community resources located near the Selected Alternative for the Route 131 interchange include one healthcare facility (Odessa Medical Group), and one church (Calvary Baptist Church). Neither of these resources are anticipated to be adversely impacted by the Selected Alternative, therefore, community cohesion will remain unaffected.

4b) COMMUNITY IMPACTS—SOCIOECONOMICS

Is there a resource impact? YES [ ] NO [X]

Changes since the 2006 EA: More Impacts [ ] Same [X] Fewer Impacts [ ]

<u>SIU 1 Corridor – 2006 EA</u>

The counties that fell within the jurisdiction of SIU 1, Jackson and Lafayette County, experienced an increase of 4.6 percent and 10.1 percent in population growth, respectively, from 1980 to 2000. Their cities followed a similar pattern. In Jackson County, Independence grew 1.3 percent, Blue Springs grew 85.4 percent, Oak Grove grew 24.2 percent, and Grain Valley grew an astonishing 288.8 percent. Lafayette County, while it did not have cities growing as much as Jackson County, experienced a 23.1 percent growth in Bates City and 56 percent growth in Odessa. The study focused on data as small as US Census block groups in order to best understand the levels of growth and decline. The two largest growth points for Jackson County were census tract 140.02 block group 1, at 262.9 percent, and Census Tract 148.01 block group 9, at 150.5 percent. In Lafayette County the highest rate of change was experienced in census tract 903 block group 5. The 2000 census identified Jackson County as having 654,880 residents and Lafayette County as having 32,960 residents.

The percentage of persons older than 65 within the study area decreased from 13.0 percent to 12.5 percent in Jackson County and from 16.5 to 15.4 percent in Lafayette County.

In Jackson County, minority groups represented 32.3 percent of the population in 2000.Minority populations in the block groups within the Jackson County portion of SIU 1 was lower, at only 5 percent.

The minority population in Lafayette County was 5.1 percent in 2000. Minority populations in the block groups within the Lafayette County portion of SIU 1 were also 5.1 percent. Two block groups located within SIU 1 exceeded this average.

Occupancy rates were over 90 percent in all the communities located in the SIU 1 study area, and the percentage of owner-occupied housing units was consistent with, or exceeded, the state average of 63%. Median home values were generally high in the area.

Concentrations of employment generating businesses were located throughout SIU 1, particularly in Independence and Blue Springs. However, the largest employers within the Kansas City region were located outside of the SIU 1 Project Area.

In Jackson County block groups, the percentage of persons below the poverty level was lower than both state and county levels. In Lafayette County, the percentage of persons below the poverty level was generally greater than in the Jackson County portion of SIU 1.

The percentage of low-income and minority populations within the block groups located in SIU 1 was generally lower compared to that of each city as well as Jackson and Lafayette Counties. It was predicted that concentrated areas of residential displacements could occur in Independence, Blue Springs, and Grain Valley. Eight duplexes and one single-family home impacted in Subsection 2 were located in a block group with a slightly higher percentage of minority residents than the statewide average. Four single-family homes and seven mobile homes impacted in Subsection 5 were located in a block group with a greater proportion of persons living below the poverty level.

SIU 1 Corridor – Re-evaluation

Mainline Widening

Population growth differentiated between counties in the SIU1 study area. Jackson County experienced an increase of 9.3 percent in population growth, while Lafayette County experienced a decrease of 0.3 percent in population growth from 2000 to 2022. All cities within the Jackson County portion of SIU1 experienced growth with Independence having grown by 10 percent, Blue springs by 22.4 percent, Oak Grove by 47.7 percent, and Grain Valley by 197.8 percent. In Lafayette County, Odessa grew by 15.8 percent, while Bates City declined by 38.9 percent.

The percentage of persons older than 65 within the widening footprint and study area has increased slightly since the 2006 evaluation. In Jackson County 15.4 percent of the population is older than 65, while in Lafayette County, 19 percent of the population is older than 65. The Jackson County block groups within the study area consist of 18 percent of the population being older than 65, and the block groups within Lafayette County consist of 16 percent of the population being older than 65.

The minority groups in Jackson County represent 35.6 percent of the population according to the most recent census. Block groups within the Jackson County portion of the SIU1 widening footprint and study area consist of 13 percent minority groups. In Lafayette County, minority groups represent 8 percent of the population. Block groups within the Lafayette County portion of the SIU1 widening footprint and study area consist of 4.9 percent minority groups.

In Jackson County block groups, the percentage of persons below the poverty level is 6.8 percent. In Lafayette County block groups, the percentage of persons below the poverty level is 8.3 percent. Both are lower than the state and county level percentages.

The percentage of minority populations within the block groups located in SIU1 is still generally lower compared to that of each city and Jackson and Lafayette Counties. The percentage of persons below the poverty level within the block groups is different between counties. Jackson County block groups have a percentage of persons below the poverty level that is generally lower than that of Jackson County and each of its cities. Lafayette County block groups have a percentage of persons below the poverty level that is lower than Lafayette County, but greater than each of its cities.

It is predicted that concentrated areas of partial displacements will occur in Odessa, Bates City, and Oak Grove. In the Lafayette County portion of SIU1, three mobile home parks and two single family homes that will be partially impacted are located in a block group with a higher percentage of persons below the poverty level. In another Lafayette County block group with a percentage of persons below the poverty level that is slightly higher, one mobile home park will be partially impacted. Lastly, one other mobile home park along with two

single family homes that will be partially impacted are located in a Lafayette County block group with slightly higher percentages of minority populations and persons living below the poverty level.

Route D Interchange

The Route D interchange is located in Lafayette County, in Bates City. The percentage of persons older than 65 within Lafayette County has increased slightly since the 2006 evaluation. In Bates City, 18.8 percent of the population is older than 65 and in the Selected Alternative's three intersecting block groups, 12.5 percent of the population is older than 65.

In Bates City, the minority groups represent 13 percent of the population. Minority groups within the Selected Alternative's three intersecting block groups represent 4.7 percent.

In Bates City, the percentage of persons below the poverty level is 3.9 percent. The percentage of persons below the poverty level in the Selected Alternative's three intersecting block groups is 12.8 percent. Bates City is lower than both the state and county levels, while the intersecting block groups are the same as the state level and greater than the county level.

The percentage of minority populations within the Selected Alternative's intersecting block groups is still relatively low compared to Bates City and Lafayette County. The intersecting block groups have a percentage of persons below the poverty level that is considered high when compared to both Bates City and Lafayette County.

Some partial displacements may occur in the Bates City area. Near the Route D interchange improvements and in a block group with a higher percentage of persons below the poverty level, there are two mobile home parks that will be partially impacted.

Route 131 Interchange

The Route 131 interchange is located in Lafayette County and in the city of Odessa. The percentage of persons older than 65 within Lafayette County has increased slightly since the 2006 evaluation. In the city of Odessa, 20.4 percent of the population is older than 65 and in the Selected Alternative's two intersecting block groups, 25.3 percent of the population is older than 65.

The minority groups in Odessa represent 4.3 percent of the population according to the most recent census. In the Selected Alternative's two intersecting block groups, minority groups represent 7.3 percent of the population.

The percentage of persons below the poverty level in Odessa is 4.2 percent. In the Selected Alternative's two intersecting block groups, there are 10.2 percent of persons below the poverty level. Both are lower than the state level percentage while the city of Odessa is also lower than the county level percentage.

The percentage of minority populations within the Selected Alternative's intersecting block groups is still relatively low compared to Odessa and Lafayette County. The intersecting block groups have a percentage of persons below the poverty level that is generally lower when compared to the state level but higher than the city of Odessa and Lafayette County.

Some partial displacements may occur in the Odessa area. Near the Route 131 interchange improvements and in a block group with a percentage of persons below the poverty level that is slightly higher, there is one mobile home park that will be partially impacted.

5) WETLANDS AND WATERS OF THE U.S. Is there a resource impact? YES [X] NO [ ]

Changes since the 2006 EA: More Impacts [ ] Same [ ] Fewer Impacts [X]

SIU 1 Corridor – 2006 EA

Impacts to streams from the Build Alternatives would occur as a result of bridging, piping (extending culverts or concrete box culverts) or relocations. Most streams currently are piped or flow in box culverts under existing I-70. With the widening of I-70, these pipes/culverts would be extended to a new discharge headwall location. A total of 40 jurisdictional stream crossings would be impacted with the Selected Alternative for a total distance of approximately 18,000 feet. Among these, 14 streams would require channel relocation and restoration.

Wetlands within the SIU 1 Project Area were delineated in accordance with the USACE 1987 Wetland Delineation Manual and were described in Chapter III of the 2006 EA. Direct impacts would result from the acquisition of land for the proposed I-70 improvements. The total area of wetland impacts would be 14.7 acres (5.966 ha) for the Selected Alternative.

It was determined that MoDOT would mitigate wetland losses by creating or restoring wetlands in sufficient quantity and quality such that there would be no net loss of area or function in accordance with state and federal wetland executive orders. Wetlands lost due to construction of I-70 improvements would be replaced in-kind based on the standard wetland classes through mitigation activities in the project area or offsite. Potential wetland mitigation sites could include suitable construction borrow sites within the vicinity of the project.

SIU 1 Corridor – Re-evaluation

Mainline Widening

Wetland and stream delineation field work occurred in August 2023. The potential impacts that could occur within the alternative footprint is estimated to be 39 stream crossings (which equates to about 14,205 linear feet), 1.9 acres of vegetated wetlands, 0.1 acres of jurisdictional ponds, and no WRP lands. Of the 39 stream crossings and 14,205 linear feet within the alternative footprint, there is the potential to impact 7,345 linear feet of permanent waters tributaries and 6,860 linear feet of non-relatively permanent water tributaries.

The jurisdictional pond within the alternative footprint is Lake Remembrance located at Gregory O. Grounds Park, north of I-70. Impacts to this pond can be mitigated during the final design of the NE Adams Dairy Parkway and I-70 interchange.

Many wetland features occur within or adjacent to the I-70 right of way. As a result, there are no prudent and feasible alternatives that would completely avoid all wetland impacts.

Table 7: Impacts to Wetlands and WOUS within Preferred Alternative Footprint

Water Feature Classification	Preferred Alternative
Wetlands (Acres)	
Jurisdictional Ponds	0.1
Forested Wetland	1.5
Emergent Wetland	0.2
Shrub Wetland	0.2
Total Wetlands and Jurisdictional Ponds (Acres)	2
Stream Crossings (Linear Feet)	14,205
Non-Relatively Permanent	6,860
Relatively Permanent (Including perennial)	7,345
Total Stream Crossings	39

The Waters of the U.S. Delineation (WOUS) report can be found in **Appendix G**.

Route D Interchange

There are a few wetlands and a stream located near the Route D interchange, but they will not be impacted by the Selected Alternative. Therefore, the Selected Alternative at Route D will have no adverse impact on any wetlands or ponds.

Route 131 Interchange

There are a few streams and wetlands located near the Route 131 interchange, but they will not be impacted by the Selected Alternative. Therefore, the Selected Alternative at Route 131 will have no adverse impact on any wetlands or ponds.

Applicable Commitment(s):

16. MoDOT will apply best management practices to minimize impacts to wetlands and soil erosion as a result of this project. The implementation of the Selected Alternative will result in wetland losses that cannot be reasonably avoided. Mitigation for these wetlands will ensure that wetland acreage and functional value will not be decreased. Any compensatory mitigation site will be held in public ownership or in an ownership arrangement suitable to both the USACE and the MDNR (if MOU between MoDOT and MDNR, Management of Wetland Mitigation Lands Agreement, or a similar agreement is in force at time of 404 permit authorization), and in a manner consistent with Section 4 of Executive Order 11990.

If Waters of the US are impacted, MoDOT will mitigate stream and/or wetland impacts in accordance with the most current regulations and guidance's.

6) FLOODPLAINS Is there a resource impact? YES [X] NO [ ]

Changes since the 2006 EA: More Impacts [ ] Same [ ] Fewer Impacts [X]

SIU 1 Corridor – 2006 EA

EO 11988, Floodplain Management, requires all federal agencies providing financed or assisted construction and conducting federal programs (e.g., federal highway system) affecting land use, to take actions to reduce the negative impacts of floods on the human and natural environments. Executive Order 11988 also requires agencies to:

- Evaluate the potential impacts of its actions on floodplains;
- Ensure that programs consider floodplain hazards and management; and
- Assess whether a proposed action will occur in a floodplain prior to taking any action.

In the event that an action will occur in a floodplain, the agency shall consider practicable alternatives to the proposed action to "avoid adverse effects and incompatible development."

There are no Federal Emergency Management Agency (FEMA) or State Emergency Management Agency (SEMA) buyout properties located within the SIU 1 Project Area. Therefore, there would be no impacts to these properties.

The Build Alternatives would require construction in areas where floodplains have not been identified, in areas within approximate floodplain, or in areas within detailed floodplains and regulatory floodways. Encroachments on the 100-year floodplains would not increase the flood levels by more than one foot (0.3 meters), which is the threshold set by FEMA. Additionally, proposed roadway profile elevations and proposed structure low chord elevations would be designed to satisfy the FEMA requirement of less than a one foot (0.3 meters) rise. Encroachments on the regulatory floodway would not be expected to increase the flood levels by any amount. Any regulatory floodway encroachment will require a "no-rise" certification. The risk to human safety and property loss from the Build Alternatives would be kept to a minimum by using standard stream crossing design criteria.

Existing culverts at locations of approximate floodplains would be extended if necessary. Culvert extensions generally increase headwater elevations depending on the nature of the extension. Because the amount of impacted floodplain areas is relatively small and the existing floodplain is predominantly undeveloped, no significant new flooding risks would result. All of the floodplain encroachments associated with the Selected Alternative are transverse in nature.

Based upon impacts to regulatory floodways, none of the alternatives would be preferred over another. The regulatory floodway encroachments from the Resource Protection Areas would not be expected to increase the flood levels by any amount and would likely receive a "no-rise" certification.

The Selected Alternative would impact 102.5 acres (41.5 hectares) of floodplain. The Selected Alternative would also impact and cross 8.2 acres (3.3 hectares) and 1,805 feet (550 meters) of regulatory floodway.

In order to provide new travel lanes on the SIU 1 portion of I-70, it is necessary to locate additional travel lanes within and through the following floodplains: Little Blue River, East Fork Little Blue River, Blue Branch Creek Tributary No. 2, Sni-A-Bar Creek, Swiney Branch, Sni-A-Bar Creek Tributary No. 3, Horseshoe Creek, Little Horseshoe Creek, Unnamed Tributary to Little Horseshoe Creek, East Fork Sni-A-Bar Creek, Owl Creek, and Tributaries to Davis Creek.

The Selected Alternative was determined to provide the best solution for existing roadway deficiencies and future traffic volumes and other study corridor needs. The crossings of all base floodplains will be designed and constructed in compliance with applicable floodplain regulations, including EO 11988 and 23 CFR 650. There will be no increases in base flood elevations attributable to implementation of these roadway improvements.

SIU 1 Corridor – Re-evaluation

Mainline Widening

The potential project related impacts to the 100-year floodplain are 35.2 acres. The potential project related impacts to regulatory floodway is 3.6 acres. It is possible that these impacts will be reduced during more detailed design.

Crossings would be designed to be consistent with SEMA floodplain management goals and objectives. Additional fill and structures would be designed so as not to increase flood elevations and to avoid interruption to public transportation due to flood damage to the roadway or structures. A no rise certification will need to be received indicating that the proposed work would not increase the water evaluations in the regulatory floodway. All floodplain permits (and a no practicable alternative finding) need to be obtained in accordance with applicable floodplain regulations.

Based on the alternative identified and the measures to minimize harm the proposed improvements are not expected to have significant, long-term impacts on natural and beneficial floodplain values.

The location and hydraulic impacts are identified in the 23 CFR Section 650 Subpart A Technical Memorandum in **Appendix H**. The Preliminary Drainage Report is also located in **Appendix H.**

Route D Interchange

There are no floodplains located within the Route D interchange vicinity. Therefore, the Selected Alternative at Route D will have no impacts to floodplains.

Route 131 Interchange

There are no floodplains located within the Route 131 interchange vicinity. Therefore, the Selected Alternative at Route 131 will have no impact to floodplains.

Applicable Commitment(s):

19. Where feasible, MoDOT's design process will minimize impacts to floodplains.

20. During final design MoDOT shall complete hydraulic studies to assess floodplain and regulatory floodway impacts. All impacts shall be documented and meet the requirements of all federal and state regulations. MoDOT shall obtain a Flood Plain Development Permit from the SEMA for construction within areas of identified flood hazard prior to proceeding with construction. MoDOT shall obtain a "No-Rise" certificate for construction within a regulatory floodway. ***(Not Applicable to SIU 1)***

- *MoDOT will ensure the Design-Build Contractor minimizes the size and duration of temporary obstructions within the floodplains and regulatory floodway during construction by effective construction sequencing and construction methodology.* **(EA Re-evaluation)**
- *MoDOT will ensure local and regional access to existing rural and urban areas and facilities are maintained during construction. The highway improvement project would not support incompatible floodplain development.* **(EA Re-evaluation)**
- *MoDOT will ensure the Design-Build Contractor avoids modification to the functions of the natural floodplain environment or will maintain it as closely as practicable in its natural state.* **(EA Re-evaluation)**
- *MoDOT will ensure the floodplain analysis and certifications comply with floodplain regulations and demonstrate minimal impacts to the floodplains within the project limits.* **(EA Re-evaluation)**
- *MoDOT will ensure the Design-Build Contractor prepares a "No-Rise" certificate for construction within a regulatory floodway.* **(EA Re-evaluation)**
- *MoDOT on behalf of the Design-Build Contractor will obtain the floodplain development permits from SEMA prior to FHWA authorization for construction.* **(EA Re-evaluation)**
- *MoDOT will ensure sediment and erosion control best management practices are implemented during construction and disturbed areas are seeded following construction for restoring and preserving natural and beneficial floodplain values.* **(EA Re-evaluation)**

- *If the Contractor is unable to obtain No-Rise Certification(s), or if floodway(s) are expanded, MoDOT or the Design-Build Contractor will prepare a CLOMR for approval by SEMA prior to construction in affected areas. MoDOT or the Design-Build Contractor will also obtain an approved LOMR from SEMA after construction is complete.* **(EA Re-evaluation)**

7) GROUNDWATER Is there a resource impact? YES [ ] NO [X]

Changes since the 2006 EA: More Impacts [ ] Same [X] Fewer Impacts [ ]

SIU 1 Corridor – 2006 EA

The SIU 1 Project Area lies within the Osage – Salt Plains of the Central Lowland physiographic region of northwest Missouri. The bedrock underlying the area consists of cyclic deposits of limestone and shale. Water from the consolidated rock formations is highly mineralized and generally unsuitable for human use, such that other sources of water are used for water supplies. Wells in the alluvium along the smaller streams produce small amounts of water. The principal source of present and future groundwater supplies is from the Missouri River. The Missouri River alluvium provides a productive source of groundwater to Kansas City and Independence as well as other non-municipal water users in the SIU 1 Project Area. Generally, water from the Missouri River alluvium is a calcium-bicarbonate type with variable concentrations of total dissolved solids, sulfate and chloride and other inorganic compounds.

The areas covered by the Selected Alternative do not include any MDNR designated wellhead protection areas for groundwater drinking supplies. Communities and rural residents do not utilize groundwater resources within the SIU 1 area for drinking water supplies and, therefore, would not be impacted. Improper handling or accidental spills of hazardous materials, such as fuels and lubricants for construction equipment, could occur resulting in discharges to surface waters. These events could adversely impact water quality and aquatic life. The extent of groundwater contamination would be dependent upon local spill prevention and response plans.

SIU 1 Corridor – Re-evaluation

Mainline Widening

The Missouri River is still the principal source of present and future groundwater supplies in the SIU 1 Project Area. The Missouri River alluvium provides a productive source of groundwater to Kansas City and Independence as well as other non-municipal water users in the SIU 1 Project Area.

The Preferred Alternative does not include any MDNR designated wellhead protection areas for groundwater drinking supplies. Communities and rural residents do not utilize groundwater resources within the SIU 1 area for drinking water supplies and, therefore, would not be impacted. The EA would remain applicable for this resource.

The extent of groundwater contamination would be dependent upon local spill prevention and response plans.

Route D Interchange

The Selected Alternative at Route D is not expected to encroach directly on the wells in the project area. The addition of impervious surface for the construction of this interchange would not affect the recharge of wells. There are no anticipated impacts to groundwater in the project area.

Route 131 Interchange

The Selected Alternative at Route 131 is not expected to encroach directly on the wells in the project area. The addition of impervious surface for the construction of this interchange would not affect the recharge of wells. There are no anticipated impacts to groundwater in the project area.

8) SURFACE WATER RESOURCES Is there a resource impact? YES [X] NO [ ]

Changes since the 2006 EA: More Impacts [ ] Same [ ] Fewer Impacts [X]

SIU 1 Corridor – 2006 EA

Water quality in lakes, streams and their tributaries within the I-70 Study Area could be impacted during the construction phase of the proposed project. Negative water quality impacts are possible, especially during storm events, as storm water runoff may carry pollutants to the streams. In particular, total suspended solids and total dissolved solids could increase from erosion of stream banks and exposed surfaces during construction. Over the long-term and during the operational phase, the increased amounts of impermeable surface could contribute to storm water runoff resulting in increased flooding, potential for erosion and runoff pollutant loading. However, changes to the stream designations would not be anticipated in association with the Build Alternatives. Along the urban mainline of the I-70 corridor, development would continue to occur at a slightly quicker rate than the No-Build Alternative, potentially increasing the secondary impacts to the water resources. Along the rural mainline of the I-70 corridor, proposed frontage roads and interchanges would allow industrial, commercial, and residential development to occur at a quicker rate than the No-Build Alternative. The potential for increased discharges of nutrients, sediments and hazardous materials could change the stream and lake designations. No impacts are expected to occur to any of the classified lakes.

Water quality impacts could occur during the construction and operational phases of the project, whether the roadway construction was in an entirely new location or only included improvements to an existing roadway. Construction phase impacts could include soil erosion induced by disturbance of vegetation and soils, and accidental spills of hazardous materials within and adjacent to streams and drainages. Operational phase impacts focus on stormwater runoff, but could include long-term erosion of areas inadequately revegetated or accidental release of hazardous materials during transport.

Soil erosion during construction would be the greatest potential impact to surface water quality, especially along stream banks and steep slopes. Soil erosion could occur during and after clearing of vegetation, grading of right of way and construction of support structures for stream crossings (bridges and culverts). Erosion of surface soils degrades water quality by increased sediment loads, turbidity levels and concentrations of total and dissolved solids. Other pollutants in the construction area could be transported to water bodies via stormwater runoff of exposed land.

The potential impact to receiving streams of these pollutants could result in a change to, reduction in or elimination of aquatic life. Degradation of water quality could result in impacts to stream use designations and future use of surface water resources, such as livestock and wildlife watering and aquatic life. Improper handling or accidental spills of hazardous materials, such as fuels and lubricants for construction equipment, could occur resulting in discharges to surface waters. These events could adversely impact water quality and aquatic life.

Impacts associated with the Selected Alternative could include both short term and longer-term water quality impacts. These impacts may include sediment loading due to construction activities, pollutant loading from stormwater runoff, as well as continued commercial and residential development along the corridor that could contribute sediment, nutrient, and chemical loading. The Selected Alternative would impact 40 stream crossings which equates to 18,000 linear feet.

SIU 1 Corridor – Re-evaluation

Mainline Widening

The chosen alternative would require an expanded right of way, stream fills and additional crossings of streams. The potential impact in the composite alternative footprint would affect about 14,205 linear feet of perennial, intermittent, and ephemeral streams. This includes culverted and open channel streams. Of the streams 6,860 linear feet of non-relatively permanent waters would be potentially impacted along with 7,345linear feet of relatively permanent waters.

There are 14 bridges crossing over streams within the project footprint. Bridges across these streams would have relatively little direct impact. Except for possible temporary impacts during construction, these stream habitats would remain relatively intact.

The extension and installation of culverts would reduce the aquatic habitats somewhat, but the impacts of the stream habitats would generally be minor and short-lived. Impacts to aquatic species include temporary reduction of some populations, particularly of less mobile and more sensitive species, such as some invertebrate populations. The impacts would not result in a permanent change in diversity of the stream system.

The total potential impact within the alternative footprint would be to 39 stream crossings.

Route D Interchange

The Selected Alternative at the Route D interchange does not cross any streams and therefore does not require any stream fills. No surface waters will be impacted by the Selected Alternative at Route D.

Route 131 Interchange

The Selected Alternative at the Route 131 interchange does not cross any streams and therefore does not require any stream fills. No surface waters will be impacted by the Selected Alternative at Route 131.

9) VISUAL QUALITY Is there a resource impact? YES [X] NO [ ]

Changes since the 2006 EA: More Impacts [ ] Same [X] Fewer Impacts [ ]

<u>SIU 1 Corridor – 2006 EA</u>

The SIU 1 Project Area was located in the Western Glaciated Plains and consisted of gentle to moderate slopes with rolling hills. In general, the western portion of SIU 1 was urban in nature including the large cities of Independence, Blue Springs, and Grain Valley while the remainder of SIU 1 was a mixture of agricultural land and the smaller cities of Oak Grove, Bates City and Odessa.

Natural visual resources within SIU 1 included several water resources which included intermittent and perennial streams, the Little Blue River and Little Blue Trace, numerous small stock ponds, lakes, and wetlands. The visual characterization within SIU 1 could have been described as a mosaic of forest and grassland habitat types modified by historic land clearing, agricultural purposes that included row-crop fields, pasture, and hayfields.

There were numerous man-made visual resources within SIU 1 including commercial and industrial buildings, existing roadways and interchanges, billboards, utility structures, transmission lines, and communication towers. The majority of the man-made resources were located within the cities located along I-70 in SIU 1.

The First Tier EIS for the I-70 corridor developed a visual quality rating procedure that could be used at a more detailed level during the Second Tier Study. They are divided into separate visual boundaries: topographic and landscape components. The quality of the visual environment could be collectively assessed using the attributes of vividness, intactness, and unity.

The identified visual assessment units (VAU) for SIU 1 and the relative existing visual quality rating of each are presented in **Table 8** below.

Table 8: Visual Quality Ratings for Visual Assessment Units

VAUs	Visual Quality Rating
Agricultural Land	Moderate
River and Stream Valleys	High
Forested Areas	High
Large Towns and Cities	Moderate to Low
Small Towns	Moderate to High

The Selected Alternative would have a minimal impact on the viewsheds and local vantage points within the SIU 1 Project Area.

SIU 1 Corridor – Re-evaluation

Mainline Widening

There are multiple areas along I-70 where new developments have occurred since the 2006 EA was completed with most of them being located around Blue Springs and Grain Valley. Most of these new developments may have changed the view from I-70 but stay consistent with existing development, especially those located in incorporated areas and near interchanges.

The proposed improvements are not anticipated to change visual impacts from what was expected in the 2006 EA. Therefore, the project will have minimal impact on visual quality within the SIU1 study area.

Route D Interchange

Some new developments have occurred near the Route D interchange in Bates City since the 2006 EA was completed. Only one of these new developments (Love's Travel Stop) is in close proximity to the selected alternative's location.

Similar to the overall mainline visual impacts, these new developments may have altered the view from I-70, but they stay consistent with existing development. Therefore, the proposed alternative for the Route D interchange will have minimal impact on visual quality.

Route 131 Interchange

No new development has occurred near the Route 131 interchange in Odessa since the 2006 EA was completed. Therefore, the proposed alternative for the interchange will have little to no impact on visual quality.

10) AIR QUALITY Is there a resource impact? YES [ ] NO [X]

Changes since the 2006 EA: More Impacts [ ] Same [X] Fewer Impacts [ ]

SIU 1 Corridor – 2006 EA

The Lafayette County portion of SIU 1 fell within the Southwestern Intrastate Air Quality Control Region (AQCR #139), and the Jackson County portion of SIU 1 fell within the Metropolitan Kansas City Interstate AQCR (AQCR #94). The Southwestern Intrastate Air Quality Control Region had a designation of better than national standards for total suspended particulates and sulfur dioxide, unclassifiable/attainment for carbon monoxide, cannot be classified or better than national standards for nitrogen dioxide, and no designation for lead. The Metropolitan Kansas City Interstate Air Quality Control Region had a designation of better than national standards for total suspended particulates and sulfur dioxide, unclassifiable/ attainment for carbon monoxide, cannot be classified or better than national standards for nitrogen dioxide, and no designation for lead. The Missouri State Implementation Plan (SIP) did not contain any transportation control measures for these AQCRs.

The Environmental Protection Agency approved the Kansas City Ozone Maintenance Plan in 1992. This plan projected no increase in emissions from 1999 to 2012. The Missouri Air Conservation Commission adopted this plan of action in July 2002. Under this plan the state monitored ambient air quality and updated the emissions inventory to ensure consistency and implement contingency measures if the standard were violated.

In 2004, having followed the new designations under the eight-hour ozone NAAQS, some counties in the Kansas City area were deemed "unclassifiable". This meant both Kansas and Missouri were required to develop a plan to maintain the eight-hour ozone standard in the Kansas City area for their respective counties.

In the May 3, 2005 Federal Register, Environmental Protection Agency (EPA) issued the final rule for the Air Quality Redesignation for the 8-Hour Ozone National Ambient Air Quality Standard for some Counties in the States of Kansas and Missouri. This rule redesignated the Kansas City Maintenance Area as being in attainment for the 8-hour standard, effective June 2, 2005. The 2005 Kansas City Maintenance Plan for Control of Ozone, adopted on July 21, 2005, lists various transportation control measures as part of the contingency measures to be implemented in case of a violation of the 8-hour or 1-hour ozone standard.

It was anticipated that over the next 20 to 30 years emissions would decrease and this would offset the increase in free-flow traffic volumes along the I-70 Study Corridor as well as the SIU 1 Project Area. Development trends were expected to continue. With improved mobility and access management implemented as part of the reconstructed I-70 corridor, the project was not anticipated to cause a violation of the NAAQS.

SIU 1 Corridor – Re-evaluation

Mainline Widening

The EPA's Missouri Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants, dated December 31, 2023, does not list Lafayette County. Part of Jackson County is listed as a nonattainment area for sulfur dioxide (SO2) from 2013-2021 but was redesignated on March 2, 2022.

MDNR submitted a redesignation request and a maintenance plan for the Jackson County nonattainment area along with a maintenance plan supplement which was approved on January 31, 2022.

As a result, the Missouri State Implementation Plan (SIP) does not include any transportation conformity requirements for these areas. However, Missouri has implemented statewide SIP-approved rules that control ozone precursors to prevent violations of the 8-hour or 1-hour ozone standard.

Temporary localized air quality impacts are possible due to emissions from construction equipment, fugitive dust from the construction sites and haul roads, aggregate crushing and washing operations, concrete batch plants, or the burning of woody debris.

Route D Interchange

According to the Missouri SIP, there are no conformity requirements for the area where the Route D interchange is located in Bates City.

Route 131 Interchange

According to the Missouri SIP, there are no conformity requirements for the area where the Route 131 interchange is located in Odessa.

11) NOISE Is there a resource impact? YES [X] NO [ ]

Changes since the 2006 EA: More Impacts [X] Same [ ] Fewer Impacts [ ]

SIU 1 Corridor – 2006 EA

The Selected Alternative impacted noise sensitive receptors in SIU 1. The Missouri Department of Transportation complied with the FHWA Noise Abatement Criteria (NAC). Construction noise would be monitored and abated in cases where the criterion is exceeded.

A TNM analysis was performed for a total of 28 noise sensitive receptors, and five noise walls were found feasible. MoDOT was committed to complying with FHWA's NAC. Construction noise would be monitored and abated in cases where the criterion is exceeded. Noise mitigation measures for sensitive receptors have been incorporated into the Selected Alternative based on an analysis of reasonableness and feasibility. MoDOT was not committed to any noise mitigation measures at the time of the FONSI, but noise mitigation analysis would be re-evaluated after the final design phase to reflect those design details and MoDOT's Noise Policy will be followed.

SIU 1 Corridor – Re-evaluation

Mainline Widening

MoDOT was coordinated with to determine groupings or communities of receivers where noise abatement measures should be considered. All other impacted receivers not evaluated in a noise barrier analysis did not meet the feasibility or reasonability requirement because the receivers were separated by long distances and not grouped in a community setting. In these cases, noise abatement measures would exceed the 1,300 ft^2 per benefitted receptor, meaning that they would not be considered reasonable. A total of 14 barriers were analyzed. Six of those barriers were deemed reasonable and feasible. **Table 9** summarizes the results of the barrier analysis. More details are available in the Noise Technical Memorandum included in **Appendix I**.

Conditions can change during the project design process. These changes may affect the preliminary noise abatement determinations in the environmental document. Such changes could include modifications to the proposed cross-sections, shifting the alignment, and changing roadway or ramp grades.

Final decisions regarding the construction of noise barriers are made during the final design process. If design changes have occurred and a new noise policy has been approved since the original noise analysis, with FHWA approval the new policy is to be used for the new analysis and final decision.

Preliminary noise barrier designs will be developed once right-of-way plans have been completed. The preliminary barrier designs will be incorporated into the preliminary roadway design plans. The final noise barrier design will be revisited when the preliminary roadway design plans are completed.

First-row benefitted owners and residents will be notified of potential noise abatement measures and their viewpoints will be sought via ballot.

Table 9: Noise Barrier Analysis Summary

Barrier Name	Noise Sensitive area (NSA) Location	Feasible	Reasonable Criteria 1 and 2*	Benefitted Receivers
Barrier NSA1-1	1	Yes	No, not of all impacted first-row receivers received a 7 dBA reduction	0
Barrier NSA1-2	1	No	N/A, but reasonability was checked since NSA is a recreational area. Reasonability was not met, > 1,300 ft^2 per benefitted receiver	1
Barrier NSA2	2	Yes	Yes	86
Barrier NSA6	6	Yes	Yes	44^
Barrier NSA7	7	Yes	No, not of all impacted first-row receivers received a 7 dBA reduction	5
Barrier NSA8	8	Yes	Yes	102
Barrier NSA9	9	Yes	Yes	37
Barrier NSA11	11	Yes	Yes	9
Barrier NSA12	12	Yes	No, > 1,300 ft^2 per benefitted receiver	9
Barrier NSA14	14	Yes	No, not of all impacted first-row receivers received a 7 dBA reduction	2
Barrier NSA15	15	Yes	No, not of all impacted first-row receivers received a 7 dBA reduction	5
Barrier NSA17	17	No	N/A	0
Barrier NSA18	18	Yes	No, > 1,300 ft^2 per benefitted receiver	6
Barrier NSA19	19	Yes	Yes	24^

** See Section 7 of Noise Study (Appendix I)*

^Benefitted receivers after parallel barrier analysis

Note: Shaded rows indicate noise wall locations that were determined to be Feasible and Reasonable

The noise analysis performed during this Re-evaluation followed MoDOT's current, FHWA approved, noise policy. Final noise barrier decisions will be made during final design. If at that time, a new MoDOT noise policy approved by FHWA is in place, the new noise policy will be used for a new noise analysis and final noise barrier decisions.

General construction noise impacts are expected from activities like demolition, earth moving and paving operations. However, noise impacts due to construction are expected to be minor and to occur infrequently because of the distance of the construction areas to the NSAs and the limited hours of equipment use.

Route D Interchange

NSA13 is the only NSA located near the Route D interchange in Bates City. A barrier analysis was not needed for NSA13 because there was only one first-row receiver. A barrier would not meet feasibility criteria.

Temporary general construction noise impacts are expected but should be minor and infrequent.

Route 131 Interchange

NSA16 is the only NSA located near the Route 131 Interchange in Odessa. A barrier analysis was not done for NSA16 because it contained only one impacted receiver. MoDOT requires at least a five dBA insertion loss for a minimum of two first-row, impacted receptors. Therefore, a barrier would not meet feasibility criteria.

Temporary general construction noise impacts are expected but should be minor and infrequent.

Applicable Commitment(s):

11. MoDOT has special provisions for construction, which require that all contractors comply with all applicable local, state, and federal laws and regulations relating to noise levels permissible within and adjacent to the project construction site. Construction equipment is required to have mufflers installed in accordance with the equipment manufacturers' specifications.

23. The MoDOT Noise Policy will be used to address noise impacts. For locations where noise walls are feasible and reasonable, MoDOT will discuss noise wall locations and provide benefited residents an opportunity to vote on whether they would like a noise wall.

37. The noise analysis was performed during this Re-evaluation followed MoDOT's current, FHWA approved, noise policy. Final noise barrier decisions will be made during final design. If at that time, a new MoDOT noise policy approved by FHWA is in place, the new noise policy will be used for a new noise analysis and final noise barrier decisions.

12) HABITATS AND WILDLIFE Is there a resource impact? YES [X] NO [ ]

Changes since the 2006 EA: More Impacts [ ] Same [ ] Fewer Impacts [X]

<u>SIU 1 Corridor – 2006 EA</u>

Most terrestrial vegetation disruption associated with the Build Alternatives would impact agricultural plant communities (i.e., cropland, pasture, etc.), which have limited value as habitat due to the intensive and continued disturbance associated with agricultural activities. The loss of vegetation in these areas would not affect the viability of regional plant populations of any species and would not impact wildlife habitat beyond the immediate area of disturbance.

Many of the native plant communities throughout the project area have been lost or severely fragmented through agricultural activities and development. The most extensive native community or sensitive habitats within the project area are wetlands and narrow strips of riparian forest found along streams throughout the project area.

Wildlife impacts associated with the Build Alternatives can be both short and long-term. These impacts consist of individual disruption, habitat avoidance, habitat disruption and mortality (direct and indirect). Wildlife species that would be impacted by the Build Alternatives are common to rural environments of Missouri, so although some individual wildlife would be impacted or in some cases lost, it would not affect the viability of regional populations.

Potential impacts to the water quality and aquatic communities resulting from roadway construction may be short or long term. Short-term impacts are primarily related to the construction phase, whereas long-term impacts could be associated with both the construction, operational and maintenance phases. Impacts to water quality and aquatic communities during construction typically result from elevated turbidity levels and the deposition of sediment into neighboring surface waters. Long-term water quality would likely not be adversely affected by the proposed improvements.

The SIU 1 Project Area is located within the Glaciated Plains Natural Division of Missouri. The original vegetation of this area was predominantly prairie. Extensive forests existed historically and in most cases, still do exist along drainages. In rural areas of SIU 1, row crop agriculture and grazing operations dominate the area. Remnant prairies, glades and wetlands are also found in Jackson and Lafayette counties (Currier and Smith, 1988) (Gremaud, 1987).

Upland forests in SIU 1 occur on ridgetops and side slopes. Bottomland hardwood wetlands occur primarily along the floodplains of the major rivers and streams within SIU 1. In the alluvial valley of the Blue River, American elm and pin oak (Quercus palustris) dominate the forested wetlands. Bottomland forests occur along incised streams and tributaries. Bottomland forests along the terraces of these waterways flood for a brief duration during and after heavy rainfall events. Despite occasional short-term flooding, these forests are typically not jurisdictional wetlands except for scattered depressions in the floodplain.

Terrestrial and aquatic wildlife species and their habitats are found in the SIU 1 Project Area on agricultural land, pastures, bottomland, upland forests, rivers, streams and wetlands.

The SIU 1 Project Area consists of various habitat and land uses. Upland forests, wetlands, old fields, agricultural land and pastures are habitats and travel corridors for common wildlife species.

The Missouri Fish and Wildlife Information System lists nearly 250 bird species for Jackson and Lafayette counties. Waterfowl and shore birds use rivers, ponds and shallow emergent wetlands in the SIU 1 Project Area.

The Blue River, Little Blue River, Sni-A-Bar Creek, perennial streams, intermittent tributaries and ponds are the major sources of aquatic fauna in the SIU 1 Project Area. There are no commercial harvests in these rivers and tributaries.

A total of 40 jurisdictional stream crossings would be impacted by the Selected Alternative. Among these, a total of 14 streams would require channel relocation and restoration for a total distance of approximately 15,900 to 18,300 feet (4,846 to 5,577 meters). Potential impacts associated with these relocations include direct mortality of aquatic biota, localized impacts to water quality and loss of riparian habitat. In many cases, existing culverts would be extended to construct the additional highway lanes.

MoDOT would implement the stream mitigation and enhancement plan for major creek crossings and would also implement its Sedimentation and Erosion Control Program to reduce the severity of impact to aquatic habitats.

In most situations, crossings would be designed at right angles to minimize impacts. Culverts would be installed at grade and the discharge channel equipped with energy dissipation features to protect against bed degradation.

<u>SIU 1 Corridor – Re-evaluation</u>

Mainline Widening

Field investigations were conducted during several dates in August 2023. The land uses in the area consist of the same categories as were present in 2004. Woodlands continue to comprise the most natural habitats in the project area.

As an expansion of an existing roadway, the impact to upland habitats would largely be encroachment on the edges rather than fragmentation of large, contiguous habitats. Total impact to wooded areas, including areas within the existing right of way, under the project footprint would be 57.3 acres. Impacts to riparian corridors is expected to be about 27 acres.

Potential impacts to water quality and aquatic communities from roadway construction remain both short or long term. Short-term impacts are related to the construction phase, while long-term impacts could be associated with both construction, operational, and maintenance phases. Long-term water quality would likely not be adversely affected by the proposed improvements.

Route D Interchange

The Preferred Alternative at Route D will have no impact on any riparian corridors, upland habitats, or woodlands. Impacts to wildlife would be minimal as no fragmentation of large, contiguous habitats would result from this alternative.

Route 131 Interchange

The Preferred Alternative at Route 131 will impact 0.4 acres of riparian corridor. This riparian corridor is potential, suitable bat habitat. Further impacts resulting from impacting potential, suitable bat habitat are discussed in the Threatened and Endangered Species section.

Applicable Commitment(s):

26. MoDOT will consider potential roadway and median design applications to improve wildlife crossing safety during the design phase of the project. Mitigation plans developed in relation to stream crossing impacts will consider enhancements, such as vegetative plantings, designed to encourage animal species to utilize these vegetative corridors as passageways. Any wildlife enhancements considered during the design phase would be located within the right of way for the Selected Alternative.

MoDOT included more information on the INFRA Grant, locations, KMZ, example plan sheets and resources in the Design Build Request for Proposal. Preliminary GIS analysis conducted April-July 2022 and updated in April 2024 show significant wildlife vehicle collision (WVC) hotspots along the I-70 corridor. MoDOT will ensure the Contractor implements mitigation measures to address wildlife crossings at the Lake Remembrance and Oak Grove WVC hotspot segments, with improvements funded by $1.4 million in INFRA grant funds. The Contractor is encouraged to consider mitigation measures, with examples and hotspot preliminary plan KMZs provided in the RFP document.

13) THREATENED AND ENDANGERED SPECIES Is there a resource impact? YES [X] NO [ ]

Changes since the 2006 EA: More Impacts [ ] Same [ ] Fewer Impacts [X]

<u>SIU 1 Corridor – 2006 EA</u>

The Endangered Species Act of 1973 (16 USC 1531-1543) provides for the protection of threatened and endangered species, and the conservation of designated critical habitat. The potential occurrence of federal and state listed species in the vicinity of the SIU 1 Project Area was determined through literature review and agency consultation with MoDOT.

The Missouri Natural Heritage Database (NHD) was consulted to determine if state and/or federal threatened and endangered species were known to occur in the SIU 1 Project Area and throughout Jackson and Lafayette Counties.

MoDOT queried the Missouri NHD and determined that no federal or state listed species are known to occur in or within the vicinity of (i.e., within one mile of the proposed right of way) the SIU 1 Project Area (Wren [MoDOT], personal communication). The peregrine falcon (*Falco peregrinus*) and barn owl (*Tyto alba*) are the only state-endangered species known to occur in Jackson County. Habitat preferences for the peregrine falcon and barn owl include residential areas, cropland, pasture and rangeland, all of which are abundant in areas surrounding the SIU 1 Project Area. The American bittern (*Botaurus lentiginosus*) is the only known state-endangered species known to occur in Lafayette County. Habitat preferences for the American bittern include marshes, wet meadows and sloughs with emergent vegetation and permanent water 8-13 inches deep. Development of land for residential and commercial purposes in the area surrounding the SIU 1 Project Area has likely decreased this preferred habitat; however, ponds with emergent vegetation are abundant throughout rural Jackson and Lafayette Counties. These three state-endangered species are not imperiled globally. Therefore, no impacts to threatened and endangered species are anticipated with any of the Build Alternatives.

Indiana Bats (*Myotis sodalis*) may be found throughout the state. The wintering range is generally south of the Missouri River and the summer range generally north. According to the Missouri Department of Conservation (MDC), there are fewer than 30 caves or mines that are known to have sizable Indiana Bat colonies. The bats have very specific habitat requirements for their winter hibernation sites.

The females and their young spend the summer months in maternity colonies in both riparian and upland woodlands where suitable roost trees are present. The preferred roost trees have exfoliating, loose or platy bark or scars from fire or lightning strikes or other damage that allow the bats entry in a hollow or cavity in the tree. The tree could also be dead or declining vigor and the bark is in the process of sloughing off. Female maternity colonies prefer to roost under the sloughing bark.

There are likely additional areas within the I-70 corridor that provide seasonal habitat to the Indiana Bat. The Missouri Department of Transportation recognizes the importance of minimizing the effects of habitat loss, especially with respect to habitats that could be used by threatened and endangered species. The Indiana Bat does prefer woodlands with a variety of species and age classes.

The United States Fish and Wildlife Service previously used a guidance that focused on not cutting suitable roost trees during the breeding season (April 1 through September 30) to avoid negative impacts on the species. The United States Fish and Wildlife Service now advocates reviewing projects on a case by case basis focusing on the following criteria: the projects proximity to known hibernacula; maternity, male roosts and/or important foraging areas; the composition of the woodland; the land use of the area after the project is complete; and consideration of the magnitude, scope, frequency and duration of the proposed action with regard to the importance of the area to the Indiana Bat.

No threatened or endangered species would be impacted by the Selected Alternative.

SIU 1 Corridor – Re-evaluation

Mainline Widening

Field investigations for threatened and endangered species and migratory bird species were conducted on August 6-10, 2023. The purpose of this investigation was to identify the location of woodlands and potential suitable bat habitat, as well as bridge and culverts that had migratory bird species concerned with the Study Area. A total 57.3 acres of wooded areas are present in the Preferred Alternative footprint. Wooded areas were mapped as either woodlands or potential suitable bat habitat. The Threatened and Endangered Species Review can be found in **Appendix J**.

Potential suitable bat habitat consists of areas that have suitable tree species large enough to support Indiana or northern long-earned bat roosting that are connected to larger woodlands in the landscape with a nearby water source. Individual roost trees were not identified at this time. Potential impacts include 32.3 acres of potential suitable bat habitat withing the Preferred Alternative footprint.

Woodlands consist of areas that are wooded but do not have trees large enough for Indiana or norther long-eared bas to roost in, area dominated by species that are not suitable for roosting, such as eastern red cedar (*Juniperus virginiana*), or are isolated areas not connected to a larger wooded area with a water source. Approximately 24.9 acres of woodlands may be impacted by the project footprint.

The 32.3 acres of potential suitable bat habitat identified includes riparian habitat that would be considered suitable for foraging and travel for the gray bat. With removal of this suitable habitat, it is expected that a determination of “may affect, but not likely to adversely affect” will be appropriate for the gray bat.

The Sni-a-Bar Creek, Horseshoe Creek, and Little Blue River areas are where Indiana and northern long-eared bats are most likely to be present. There are multiple bridges that cross over these perennial creeks that could be used for roosting. Some of the tree removal may occur greater than 300 feet from existing roadway. With removal of this suitable habitat, it is expected that a determination of “may affect, not likely to adversely affect” will be appropriate for the Indiana and northern long-eared bat.

Tricolored bats were proposed for listing as endangered in September 2022. They mainly roost in foliage of live and dead trees in spring, summer, and fall, and hibernate in caves and other subterranean habitats during the winter. These bats can occasionally be found roosting on bridges and in culverts. Although there is not currently guidance available for tricolored bats, it seems that all areas identified with trees could provide suitable habitat for tricolored bats. Impacts resulting from the project are not expected to jeopardize the continued existence of the tricolored bat. MoDOT plans to confer with USFWS on the tricolored bat.

Monarch butterfly was proposed for listing as threatened in December 2024. Two Monarch butterfly populations exist in North America, east and west of the Rocky Mountains. They migrate to overwintering sites in California and the country of Mexico. Milkweed is an obligate host plant for eggs and larvae, and adult butterflies require a variety of blooming nectar sources during breeding and migration. Conversion of native and naturalized milkweed and nectar plant habitats could negatively impact Monarchs at an individual and population level. Project location has previously disturbed and maintained vegetation, wooded areas that will be removed, and a local intermittent stream. There will be minimal if any removal of naturalized native plant areas and this project will not jeopardize the existence of Monarch butterfly. If the project has not progressed to construction by the time Monarch butterfly is listed as threatened, MoDOT will revisit USFWS consultation requirements when the listing becomes final. MoDOT does not anticipate additional conservation or mitigation measures.

Western regal fritillary butterflies were proposed for listing as threatened in August 2024. Regal fritillaries are restricted to tallgrass prairies and stay in Missouri as caterpillars until spring. As adult butterflies, however, they may feed on a variety of nectar plants such as milkweed, coneflower, blazing stars, bergamots, clovers, goldenrods, and ironweeds. This project does not overlap with habitat per USFWS correspondence on 8/7/2024.Remnant or restored tallgrass prairies are not located within the study area, thus impacts resulting from the project are not expected to jeopardize the continued existence of the species.

The Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c) of 1940 (BGEPA), prohibits anyone, without a permit issued by the Secretary of the Interior, from "taking" bald eagles, including their parts, nests, or eggs. BGEPA provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof."

No bald or golden eagles, or other raptor nests were located during the site visit.

The Migratory Bird Treaty Act (16 U.S.C. 701 et seq.) of 1918 (MBTA) implements various treaties and conventions between the U.S., Canada, Japan, Mexico, and the former Soviet Union for the protection of migratory birds. Under MBTA, unless permitted by regulations, it is unlawful to pursue, hunt, take, capture or kill; attempt to take, capture or kill; possess, offer to or sell, barter, purchase, deliver or cause to be shipped, exported, imported, transported, carried, or received any migratory bird, part, nest, egg or product, manufactured or not.

Evidence of two migratory bird species, the barn swallow (*Hirundo rustica*) and the cliff swallow (*Petrochelidon pyrrhonota*), was present at several of the bridges and culverts in the study area. These species are often found together. It is possible that any of the bridges over streams (Perche and Hinkson Creek in particular) could have cliff or barn swallow nests during any nesting season.

Table 10: Federal & State Listed Threatened & Endangered Species

Common Name	Scientific Name	Federal Status[1]	State Status[2]
Mammals			
Gray Bat	*Myotis grisescens*	Endangered	Endangered
Indiana Bat	*Myotis sodalis*	Endangered	Endangered
Northern Long-eared Bat	*Myotis septentrionalis*	Endangered	Endangered -
Tricolored Bat	*Perimyotis subflavus*	Proposed Endangered	-
Invertebrates			
Monarch Butterfly	*Danaus plexippus*	Proposed Threatened	-
Western Regal Fritillary	*Argynnis idalia occidentalis*	Proposed Threatened	

1 - *USFWS, IPaC Official Species List, Project Code: 2023-0129722*

2 - *Missouri Department of Conservation, Missouri Natural Heritage Review*

Route D Interchange

The Selected Alternative at Route D will have no impact on any threatened or endangered species. Impacts to wildlife would be minimal as no fragmentation of large, contiguous habitats would result from the Selected Alternative.

Route 131 Interchange

The Selected Alternative at Route 131 will impact 0.4 acres of riparian corridor. This riparian corridor is potential, suitable bat habitat. With the removal of this suitable habitat it is expected that a determination of "may affect, but not likely to adversely affect" will be appropriate for the gray bat. Impacts resulting from the project are not expected to jeopardize the continued existence of the tricolored bat. MoDOT plans to confer with USFWS on the tricolored bat.

No bald or golden eagles, or other raptor nests were located during the site visit.

Applicable Commitment(s):

14. MoDOT will review the Natural Heritage Database and coordinate with the USFWS periodically during the project development process to identify any new locations of threatened and endangered bat activity.

- *MoDOT will coordinate the project with USFWS, including proposed timelines, action items, and commitments. Any changes to the project or mitigation requirements as a result of ongoing consultation shall be incorporated in to the project prioer to construction authorization.* **(EA Re-evaluation)**

33. MoDOT will include a Job Special Provision (JSP) in project contract(s) to help ensure that bridges are kept free of active nests before and during construction.

34.Tree Clearing will not occur prior to the completion of consultation with USFWS and MDC. It is recommended that tree clearing occur in the inactive months, which is October 16 to March 31 in Missouri. Also, if applicable FHWA will not authorize a project to go to construction without the mitigation payment being made.

35. If the project has not progressed to construction by the time Monarch Butterfly is listed as threatened, MoDOT will revisit USFWS consultation requirements when the listing becomes final. MoDOT does not anticipate additional conservation or mitigation measures.

14) CULTURAL AND HISTORIC RESOURCES Is there a resource impact? YES [ ] NO [X]

Changes since the 2006 EA: More Impacts [ ] Same [X] Fewer Impacts [ ]

<u>SIU 1 Corridor – 2006 EA</u>

Cultural resources consist of archaeological sites, architectural buildings and structures, bridges, and cultural landscapes.

An archaeological survey was completed for properties currently listed or eligible for listing on the NRHP in the SIU 1 area. The Area of Potential Effects (APE) used for the survey was approximately 150 feet to one side or the other, and a buffer of 100 feet beyond the construction limits. At rural locations where the construction corridor included both sides of the interstate, the APE consisted of 75 feet and an additional 100-foot buffer on both sides of the existing interstate. If only a new frontage road was required, the APE consisted of a 50-foot construction corridor plus an additional 100-feet buffer. Urban areas had an APE approximately 100 feet wide for the construction corridor and an additional buffer of 50 feet, and those locations requiring widening on both sides of the interstate had a corridor of 50 feet, and a buffer of 50 feet, on both sides. Any new alternates assumed an APE of 500 feet for the construction corridor plus a buffer of 100 feet to either side. Interchanges typically covered an area of one-half square mile, plus a surrounding 100-foot buffer. For interchanges covering greater distances, only the construction corridor and a buffer of 100 feet was surveyed. If the APE did not

extend beyond the existing I-70 right of way, no cultural resource investigations would be performed in that area.

A geomorphological study was performed where the proposed construction corridor extended across the bottoms of major waterways. This was done to identify locations likely to have buried cultural remains.

185 architectural resources and 27 bridge resources were documented in the architectural survey in the SIU 1 area. Of the architectural resources, 47 date prior to 1945 and were formally inventoried. 21 of the bridge resources dated to 1961 or later. None of the bridges were recommended eligible for the NRHP. No NRHP properties occurred within the APE for SIU 1, two were recommended eligible. One had since been demolished by its owner, which left the Rice House (1JA107) as the only known resource in the SIU 1 potentially eligible for the NRHP.

Two archaeological sites, both historic, were defined during the archaeological survey. Site AS1JA1 was the previously recorded site 23JA368, which originally contained a light scatter of historic artifacts. However, the site area was then covered by a parking lot. Site AS1LF2 consisted of a concrete foundation, possibly for a barn. No prehistoric remains were found during the survey. Only two artifacts were found during the survey, a cut nail and a bolt located at site AS1LF2. None of the sites were recommended eligible for the NRHP.

No known National Register of Historic Places (NRHP)-eligible cultural resource sites would be impacted by the Selected Alternative.

SIU 1 Corridor – Re-evaluation

Mainline Widening

Architecture:

The architectural survey evaluated 135 built environment resources that were 40 years of age or older, having been constructed before 1984. Similar to the 2006 EA, no NRHP built environment resources occur within the APE for SIU 1, but two are recommended eligible for the NRHP.

Resource AR-236 is located at 5538 Old Highway 40 and is comprised of a former Southwestern Bell Repeater Station. Careful excavation is suggested around the north end of this property and should buried resources become exposed, MoDOT archaeologists and historical archaeologists should be contacted to inspect the site. Resource AR-236 has the potential to be adversely impacted by the project and are recommended for avoidance.

Resource AR-043 is located at 751 Outer Road and is comprised of a single-family residence, and multiple outbuildings. Resource AR-043 has the potential to be adversely impacted by the project and are recommended for avoidance.

The remainder of the architectural resources in the I-70 APE are recommended not eligible for the NRHP.

The Rice House (IJA107) which was identified in the 2006 EA as potentially eligible, is outside of the APE for this Re-evaluation.

The architectural survey also evaluated 31 bridges within the APE. All 31 bridges are either exempt from Section 106 review or Section 106 is complete for those bridges. Therefore, none are recommended eligible for the NRHP.

On December 30, 2024, SHPO concurred that the two properties (AR-043 and AR-236) are eligible for the NRHP, and that the remaining resources would not be considered eligible for listing in the NRHP. SHPO concurs that there would be no adverse effect on the two historic properties and has no objection to the initiation of project activities with the condition that the properties be marked for avoidance during construction. The SHPO letter can be found in **Appendix K**.

Archaeology:

There were seven previously recorded archaeological sites located within the project study area. All were able to be revisited, however, some had portions that could not be accessed due to the lack of landowner permission to access private property. The northern and southern portions of site 23JA54, and the northern portion of site 23JA1674 could not be surveyed due to the lack of landowner permission. Sites 23JA1676 and 23LF1147 could

only be evaluated from the right-of-way due to the lack of landowner permission, however both sites were also covered by paved commercial parking lots. Site 23JA1869 could only be evaluated from the right-of-way as well due to the lack of landowner permission.

Although this portion of I-70 has been intensively surveyed since at least the 1970s, the present survey identified three sites not previously recorded, 23LF1186, 23LF1187 and 23JA1869.

It is recommended that seven sites are not eligible for the NRHP within the proposed project footprint. All seven of these sites, 23JA423, 23JA424, 23JA426, 23JA1676, 23LF1147, 23JA1869, and 23LF1187, were determined to have few subsurface remains, so additional investigations would not produce any new information.

One other site, 23JA54, was unevaluated for NRHP since most of the site could not be tested. The site was partially destroyed by highway construction and was determined to have few subsurface remains within the study area. However, this site extends outside of the project study area, and this portion of the site will need to be evaluated by future investigations. If the project changes to include additional portions of this site within the APE, additional testing will be required to evaluate eligibility.

The remaining two sites within the project study area may have intact subsurface features that could provide new insights into Precontact or Historical activities and people's lives. These sites should be avoided by the proposed construction improvements, or the sites tested to assess their eligibility for the NRHP better. These sites are: 23JA1674 and 23JA1869.

If the proposed project footprint is changed and new areas are added, MoDOT and SHPO will need to be contacted to determine the need for a cultural resource survey of any new areas. In this way, the community's cultural heritage will be protected, and it could prevent the inadvertent disturbance of human remains or sacred places. SHPO concurred with the findings of the Archaeological Survey in a letter dated July 5, 2024 (**Appendix K**).

A reasonable effort has been made to identify Section 4(f) resources. There is little or no potential for the presence of archeological resources that have value for preservation in place, and any subsequent Section 4(f) compliance requirements would be identified through the processes established in executed Section 106 Programmatic Agreement in **Appendix K**.

Archival, Architecture, and Archaeology Reports Available Upon Request

Route D Interchange

Architecture: No existing NRHP properties or built environment resources recommended eligible for the NRHP are located near the Route D interchange in Bates City. Therefore, no architectural resources will be adversely impacted by the Route D Selected Alternative.

Archaeology: Site 23LF1147 is the only archaeological site located near the Route D intersection in Bates City. The site was determined to have few subsurface remains and is recommended not eligible for the NRHP. Site 23LF1147 is located north of the proposed improvements and will not be impacted. Therefore, no archaeological sites will be adversely impacted by the Route D Selected Alternative.

Route 131 Interchange

Architecture: No existing NRHP properties or built environment resources recommended eligible for the NRHP are located near the Route 131 interchange in Odessa. Therefore, no architectural resources will be adversely impacted by the Route 131 Selected Alternative.

Archaeology: Site 23LF1187 is the only archaeological site located near the Route 131 intersection in Odessa. The site was determined to have few subsurface remains and is recommended not eligible for the NRHP. Site 23LF1187 is located east of the proposed improvements and will not be impacted. Therefore, no archaeological sites will be adversely impacted by the Route 131 Selected Alternative.

Applicable Commitment(s):

17. MoDOT will comply with the newly executed Programmatic Agreement (dated 01/23/2024). Should design modifications and/or construction activities result in impacts to historic properties, MoDOT will coordinate with SHPO related to the Section 106 process.

The National Register of Historic Places eligible Rice House (1JA107) will not be adversely impacted.

15) PARKLANDS, OTHER PUBLIC LANDS AND SECTION 4(f) AND 6(f)

Is there a resource impact? YES [X] NO [ ]

Changes since the 2006 EA: More Impacts [X] Same [ ] Fewer Impacts [ ]

SIU 1 Corridor – 2006 EA

Located in the SIU 1 was a total of 10 parks, 6 of which were publicly owned. No state parks were located within the SIU 1 area.

Little Blue Trace Nature Preserve was a total of 1,856 acres and consisted of 4 shelters, 30 picnic tables, 3 soccer fields and a softball field; all of which were located north of existing I-70. The preserve also had a bicycle trail, with no plans for additional facilities adjacent to I-70 except for the future extension of Little Blue Trace Trail to the south under I-70. Lastly the Natural Preserve crosses I-70 at two locations within SIU 1. The entire facility was a Section 4(f) and 6(f) resource.

Baumgardner Park was located south of I-70, taking up 12 acres and was owned and operated by the City of Blue Springs. The park consisted of indoor/outdoor pools, picnic shelters, tennis courts, a ball field, sand-volleyball courts, horseshoe pits, and a playground. The entire facility was a 4(f) and 6(f) resource.

Gregory O. Grounds Park was owned by the City of Blue Springs and consisted of a nearly constructed 54-acre lake and 79 acres of passive parkland. The dam for the lake was being monitored by the MDNR for a safety issue that involved an inadequate spillway capacity. Construction of the park amenities was scheduled for completion in July 2005. The entire facility was a 4(f) resource. Since Land and Water Conservation Funds (LWCF) were not used at that time section 6(f) was not applicable to this facility.

Armstrong Park consisted of 10 acres southeast of the I-70/Route AA/BB interchange in Grain Valley. Owned and operated by the City of Grain Valley, Armstrong Park included three shelter houses with grills and picnic tables, a gazebo, restrooms, two playground areas, sand volleyball courts, two lighted baseball fields, and an asphalt walking trail. The entire facility was a 4(f) and 6(f) resource.

Bates City Park, located 1/3 mile south of I-70, consisted of .75 acres. The park was owned and maintained by Bates City and included playground equipment. The entire facility was a 4(f) resource. Since LWCFs were not used at this facility, section 6(f) is not applicable.

Dyer Park was located southeast of the I-70/Route 131 interchange in Odessa. It consisted of 31 acres and included a fishing lake, picnic shelters, a walking trail, baseball fields, tennis courts, sand volleyball courts, a playground, and a rodeo arena. The entire facility was a 4(f) resource. Since LWCFs were not used at this facility, section 6(f) is not applicable.

There would be no permanent incorporation, temporary occupancy, or any constructive use of existing 4(f) resources due to the SIU 1 Selected Alternative.

SIU 1 Corridor – Re-evaluation

Mainline Widening

A total of five publicly owned parks are located within the SIU 1 study area, 2 of which are located within the widening footprint. A total of six publicly owned trails are also located within the SIU 1 study area, all of which are located within the widening footprint. There are still no state parks located within the SIU 1 study area.

- **Little Blue Trace Nature Preserve** is a county park that follows the Little Blue River from Longview Lake north to Blue Mills Road and sits on 1,856 acres. The park includes a 15.5-mile hiking and bicycling trail along with four shelters, 30 picnic tables, and a softball field located along the north portion of the trail system. The Little Blue Trace Nature Preserve still crosses I-70 at two locations within SIU 1 so that it is on both sides of I-70. The entire facility is considered a 4(f) and 6(f) resource. There will be temporary closure(s) of the Nature Preserve property within MoDOT right of way during construction. Further Section 4f documentation is not anticipated but a temporary occupancy permit will be required.
- **Little Blue Trace Trail** is a 15.5-mile long hiking and bicycling trail located in Little Blue Trace County Park just outside of Kansas City, MO. The hiking and bicycling trail currently begins at Blue Mills Road and extends south to Phelps Road, crossing under I-70 near Little Blue River. The entire facility is considered a Section 4(f) and 6(f) resource.

  The Preferred Alternative would require temporary closure of the Little Blue Trace Trail during the widening of mainline I-70. As the bridges at this location are widened over the trail, the trail would need to be closed for safety reasons. The trail itself would not be impacted by the Preferred Alternative. It is estimated that 346 feet could be closed during the project. Further Section 4f documentation is not anticipated but a temporary occupancy permit will be required.

  Coordination has been conducted with MDNR related to its Section 6f status, and a "No Conversion" letter was signed on August 9, 2024. Jackson County has been copied on the MDNR correspondence. A copy of the letter is included in **Appendix L.**
- The **Woods Chapel Road Bike Trail** is a paved path located along the east side of Woods Chapel Road/R D Mize Road in Blue Springs, MO. The bike trail starts at NW Harbor Place and runs south to US Highway 40. This facility is considered a 4(f) resource. Section 6(f) is not applicable as LWCF's have not been used at this facility. There will be temporary closure(s) of the Woods Chapel Road Bike Trail, within MoDOT right of way, during construction. It is estimated that 1,254 feet of this trail may be impacted by the project.

  The Woods Chapel Road bridge will need to be replaced as part of the widening of mainline I-70. This may require an extended closure or change the trail route in some way that isn't known at this time. If that is the case, the appropriate level of Section 4(f) documentation would be completed. If temporary closure is the only impact a temporary occupancy permit will be required.
- The **Route 7 Bike Trail** is a marked bike lane that runs along State Highway 7 in Blue Springs, MO. The entire length of State Highway 7 in Blue Springs is designated a "share the road" bike route. This facility is considered a 4(f) resource. Section 6(f) is not applicable as LWCF's have not been used at this facility. There will be temporary closure(s) of the Route 7 Bike Trail, within MoDOT right of way, during construction. It is estimated that 946 feet of this trail may be temporarily impacted by the project during construction. Further Section 4f documentation is not anticipated but a temporary occupancy permit will be required.
- **Adams Dairy Parkway Trail** is a 5.7-mile shared use path that runs along a major roadway (Adams Dairy Pkwy) in Blue Springs, MO. Amenities along the trail include bike parking, benches, dog waste bags and trash receptacles, water fountains for both humans and dogs, public art and trail lighting. This facility is considered a 4(f) resource. Section 6(f) is not applicable as LWCFs have not been used at this facility. There will be temporary closure(s) of the Adams Dairy Parkway Trail, within MoDOT right of way, during construction. It is estimated that 1,852 feet of this trail may be impacted by the project. Further Section 4f documentation is not anticipated but a temporary occupancy permit will be required.
- **Gregory O. Grounds Park** is located just north of I-70 and east of Adams Dairy Parkway. The park is owned by the City of Blue Springs and is home to the 54-acre Lake Remembrance. The park also includes a 2.7-acre dog park, and almost 3 miles of scenic walking/jogging trails. The entire facility is a 4(f) resource. There will be temporary closure(s) of a portion of Gregory O. Grounds Park, within MoDOT right of way, during construction. Section 6(f) is not applicable as LWCF's have not been used at this facility. Further Section 4f documentation is not anticipated but a temporary occupancy permit will be required.

- **Greogry O Grounds Park Trail** is a 2.6-mile recreational trail that travels through Gregory O Grounds Park in Blue Springs, MO and follows the perimeter of Remembrance Lake. The entire facility is a 4(f) resource. Section 6(f) is not applicable as LWCFs have not been used at this facility. There will be temporary closure(s) of the Gregory O Grounds Park Trail, within MoDOT right of way, during construction. It is estimated that 2,957 feet of this trail may be impacted by the project. Further Section 4f documentation is not anticipated but a temporary occupancy permit will be required.
- The **Buckner Tarsney Multi-Use Path** is a paved 10-foot-wide multi-use path that runs along the east side of Buckner Tarsney Rd./Route AA in Grain Valley, MO. This facility is considered a 4(f) resource. Section 6(f) is not applicable as LWCF's have not been used at this facility. There will be temporary closure(s) of the Buckner Tarsney Multi-Use Path, within MoDOT right of way, during construction. It is estimated that 536 feet of this trail may be impacted by the project. Further Section 4f documentation is not anticipated but a temporary occupancy permit will be required.

Exhibits showing each of the Section 4(f) and Section 6(f) resources are included in **Appendix L**.

The Preferred Alternative is anticipated to have temporary construction impacts to the resources listed above. The Section 4(f) Applicability Checklist has been completed for each resource and it is not anticipated that a Section 4(f) evaluation would need to be completed. A Temporary Occupancy Permit will be required once more detailed design and construction plans have been completed. The completed checklists are included in **Appendix L**.

The next three resources included in this analysis are not located within the widening footprint for SIU 1 and will not be affected by the project.

Baumgardner Park is located south of I-70 near Blue Springs High School. The park covers 12 acres and is still owned and operated by the City of Blue Springs. Its amenities include a shelter house with picnic tables, playground facilities, sand volleyball courts, horseshoe pits, a practice ball field and tennis courts. The entire facility is considered a 4(f) resource. While the Blue Springs Centennial Pool-Plex is located near Baumgardner Park, it is no longer considered a part of the park and is operated by the Blue Springs School District.

Armstrong Park is owned by the City of Grain Valley and is located southeast of the I-70/Route AA/BB interchange. The 10-acre park includes four shelters with BBQ grills and picnic tables, two lighted baseball fields with bleachers, a gazebo, a skatepark, an asphalt walking trail, two large playground areas, multi-purpose field area, and a pavilion for larger events. The entire facility is a 4(f) and 6(f) resource.

Dyer Park is owned by the City of Odessa and is located southeast of the I-70/Route 131 interchange. Dyer Park is home to Lake Venita. The park's facilities include a community building, the community swimming pool, a large pavilion, a small picnic shelter, outdoor basketball court, two tennis courts, rodeo arena, sand volleyball courts, two playground areas, a ½ mile walking trail, and baseball and softball fields. The entire facility is a 4(f) and 6(f) resource.

Route D Interchange

No parklands are located near the Route D interchange in Bates City. The Selected Alternative does not require any publicly owned park land, including those subject to Section 4(f) or 6(f). Therefore, no 4(f) or 6(f) properties will be affected by the project.

Route 131 Interchange

Dyer Park is the only park located near the Route 131 interchange in Odessa. The park is located just south of the proposed improvements. However, the Selected Alternative does not require any land from Dyer Park or any other publicly owned parkland including those subject to Section 4(f) or 6(f). Therefore no 4(f) or 6(f) properties will be adversely impacted by the project.

Applicable Commitment(s):

28. MoDOT will continue coordination with the City of Blue Springs Parks and Recreation Department regarding the temporary closure of the Adams Dairy Parkway Bicycle Trail.

MoDOT will coordinate with the City of Blue Springs Parks and Recreation Department regarding the temporary closure of the Route 7 Bicycle Trail, Woods Chapel Road Bicycle Trail, and Gregory O Grounds Trail.

38. MoDOT will coordinate with Jackson County prior to and during all construction phases regarding the temporary closure of the Little Blue Trace Trail. Closure of the Little Blue Trace Trail will not exceed 12 months.

39. MoDOT will ensure that temporary occupancy permits are completed for temporary closures of all Section 4f resources. Any impacts that are greater than temporary closure will require the completion of the appropriate Section 4f documentation.

16) HAZARDOUS MATERIALS AND WASTE MANAGEMENT Is there a resource impact? YES [ ] NO [X]

Changes since the 2006 EA: More Impacts [X] Same [ ] Fewer Impacts [ ]

SIU 1 Corridor – 2006 EA

Hazardous waste sites located within the SIU 1 Project Area were inventoried and reviewed based on the results of a search of federal and state environmental databases. The inventory in Chapter III includes a ranking of the sites to determine those with a "None-to-Low", a "Low-to-Moderate", or a "Moderate-to-High" potential for impact. This discussion provides an assessment of the "Moderate-to-High" ranked sites for each SIU 1 subsection. The "Moderate-to-High" ranked sites and their potential for impacts are listed in **Table 11**.

Among the Build Alternatives, there are five sites ranked "Moderate-to-High" whose past or present use indicates a potential for hazardous waste contamination of soils and possibly groundwater. Minor variation of alignments during final design could avoid some of these sites, however, many of them could require the removal of underground fuel storage tanks or further investigation to evaluate potential contamination of soils or groundwater. In addition, the possibility exists that additional sites with contamination may be encountered during actual construction, particularly given the number of service stations near each of the existing interchange locations within SIU 1. In the event contamination is encountered, MoDOT would develop an appropriate course of action and coordinate with the MDNR.

Table 11: "Moderate-to-High" Rank Potential Hazardous Waste Sites

Site ID	Site Location	Federal/State Program List	Comments	Potential for Impact
Subsection 1 – *I-470 to Mile Marker 19*				
BP Amoco Service Station	1922 Woods Chapel Road Blue Springs, MO	Leaking Underground Storage Tank (LUST) UST Spills	Former LUST site. LUST cleanup completed in 1999. Gasoline spill of unknown quantity reported in February 2002.	May be impacted by Alternative 1-1 or 1-2
Subsection 2 – *Mile Marker 19 to Mile Marker 22*				
BP Amoco Service Station	I-70 and Route 7 (southeast corner of interchange) Blue Springs, MO	LUST UST FINDS RCRIS	Contamination related to diesel spill. Former service station, which may have been the source of contamination, Reportedly encompassed area to north and south of site. The site is currently being addressed through risk-	May be impacted by Alternative 2-1 or 2-2

			based corrective action (RBCA) through the MDNR.	
Phillips Petroleum Company Service Station	1202 North Route 7 (northeast corner of interchange) Blue Springs, MO	LUST UST	Groundwater contamination related to gasoline spill. Tanks were removed with 2,200 yd3 of soil. Groundwater contamination appears to be on-site. The site is currently being addressed through RBCA through the MDNR.	May be impacted by Alternative 2-1 or 2-2
Subsection 3 – *Mile Marker 22 to Mile Marker 25*				
New Trail Travel Center	Interchange at Route AA/BB - 1103 N. Buckner Grain Valley, MO	LUST	Orphan site – no information available	May be impacted by widening of Route BB in association with Alternative 3-1 or 3-2
Subsection 4 – *Mile Marker 25 to Mile Marker 29*				
None	-	-	-	-
Subsection 5 – *Mile Marker 29 to Mile Marker 39*				
Former City Dump	Northwest quadrant of current CR 96 / Johnson Road Interchange, Odessa, MO	Not reported	Reported by local officials.	May be impacted by Proposed mainline with Alternative 5-1, 5-2, 5-3 or 5-4.

With regard to "Moderate-to-High" potential hazardous waste sites, none of the alternatives would be preferred over another.

The preferred mitigation measures for these sites would be avoidance. However, in the event that these sites could not be avoided and contamination was proven to be present, MoDOT would negotiate cleanup responsibility with the current owner. Negotiations with the current owner and any investigative or remedial activities would be coordinated with the MDNR's Hazardous Waste Management Program and would comply with all EPA requirements. If any hazardous waste sites are encountered during the construction process, they would be dealt with in accordance with appropriate state and federal regulations.

The Selected Alternative will impact five sites ranked "Moderate-to-High" whose past or present use indicates a potential for hazardous waste contamination of soils and possibly groundwater. Minor variations of alignments during final design could avoid some of these sites, however, many of them could require the removal of underground fuel storage tanks or further investigation to evaluate potential contamination of soils or groundwater. In addition, the possibility exists that additional sites with contamination may be encountered during actual construction, particularly given the number of service stations near each of the existing interchange locations within the SIU 1 Project Area. In the event contamination is encountered, MoDOT would develop an appropriate course of action and coordinate with MDNR's Hazardous Waste Management Program.

<u>SIU 1 Corridor – Re-evaluation</u>

Mainline Widening

To identify and evaluate sites that may potentially contain hazardous materials, petroleum products, or other sources of contamination, a federal and state government database search was conducted by Environmental

Data Resources, Inc. (EDR), dated December 5, 2023.The database search included over 100 unique environmental databases including sites identified or evaluated as federal or state Superfund sites; facilities that generate, store, treat or dispose of hazardous wastes; solid waste landfills; facilities that have active, closed, or leaking aboveground storage tanks (ASTs) or underground storage tanks (USTs); sites actively undergoing cleanup; spills involving potentially hazardous materials; and a number of other activities that might be an indicator of a hazardous condition. The Missouri Department of Natural Resources (MDNR) E-Start database was searched for the Study Area and contains information on hazardous waste site investigations and cleanups, as well as regulated storage tank sites. There were 915 hazardous materials sites identified within a 1.5-mile radius of the Study Area and used as one of the screening criteria for the initial alternatives and later the alternative identified. There are total of 162 sites identified as being potentially impacted by the alternative identified. Two of the 162 sites were identified in the MDNR E-Start database as having received a completed remediation certificate under the MDNR's Brownfields/Voluntary Cleanup Program. Further details on the 162 sites, including potential site mapping, are included in **Appendix M.**

Minor variations in alignment during final design could avoid some of these sites, however, many of them could require further investigation to evaluate potential contamination of soils or groundwater. There is a possibility that additional sites with contamination may be encountered during actual construction. In the event contamination is encountered, MoDOT would develop an appropriate course of action and coordination with MDNR.

Hazardous materials sites within or adjacent to the Preferred Alternative footprint were classified based on a likelihood of contamination as "Moderate-to-High," "Low-to-Moderate," and "None-to-Low." Adjacent sites were those located on an abutting parcel to the Preferred Alternative footprint. that Furthermore, as shown in **Appendix I**, "Moderate-to-High" risk sites were given a priority ranking of 1, "Low-to-Moderate" risk sites were given a priority ranking of 2, and "None-to-Low" risk sites were given a priority ranking of 3. Overall, there are 11 "Moderate-to-High" likelihood of contamination sites within or adjacent to the Preferred Alternative footprint. 10 of the 11 sites given a "Moderate-to-High" likelihood of contamination for the Re-evaluation are new from the 2006 EA. The one site that remained at a "Moderate-to-High" likelihood of contamination was the BP Amoco Service Station located at I-70 and Route 7 in the 2006 EA, which corresponds with the site Texaco Service Station 29-126-0030 located at 1007 N Highway 7 in the Re-evaluation. There are 25 sites with a likelihood of contamination being "Low-to-Moderate" within or adjacent to the Preferred Alternative footprint.

Table 12: Moderate-to-High Likelihood of Contamination Sites within/adjacent to the Preferred Alternative

County	Site Name	Address	Likelihood of Contamination	Regulatory Status/Database(s)	Assessment Report ID
Jackson	MEYER LABORATORY, INC	2401 NW JEFFERSON ST	Moderate-to-High	ECHO, FINDS, FTTS, HIST FTTS, ICIS, NPDES (PERMIT EFFECTIVE & TERMINATED), PFAS, RCRA-SQG, SSTS, TRIS	E 11
Jackson	FAURECIA BLUE SPRINGS	N/A	Moderate-to-High	PFAS ECHO	E 15
Jackson	FORMER DENNYS RESTAURANT	1105 NW HWY 7	Moderate-to-High	ASBESTOS	E 24
Jackson	R.D. MIZE ROAD DEMOLITION PROJECT	1205-1573 R.D. MIZE ROAD	Moderate-to-High	ASBESTOS	E 28

Jackson	FORMER RESTAURANT	1130 NW SOUTH OUTER RD	Moderate-to-High	ASBESTOS	E 33
Jackson	TEXACO SERVICE STATION 29-126-0030	1007 N HIGHWAY 7	Moderate-to-High	ECHO, EDR Hist Auto, FINDS, LUST, SPILLS, RCRA NonGen / NLR, RGA LUST, UST (No NFA issued)	E 39
Jackson	GRAIN VALLEY REGULATOR BLDG	174 E MCQUERRY	Moderate-to-High	ASBESTOS	E 70
Jackson	MAG TRUCKS	3320 S. OUTER BELT RD	Moderate-to-High	ASBESTOS, ERNS, SPILLS	E 82
Jackson	COMMERCIAL STRUCTURE - CONVENIENCE STOP FOR TRUCKS	403 SW 1ST STREET	Moderate-to-High	ASBESTOS	E 103
Jackson	IOOF LODGE #115 HALL	118-1120 SOUTH BROADWAY	Moderate-to-High	ASBESTOS	E 106
Lafayette	BARN	800 W. OLD 40	Moderate-to-High	ASBESTOS	E 141

The Selected Alternative has the potential to impact 11 sites ranked "Moderate-to-High" whose past or present use indicates a potential for hazardous waste contamination of soils and possibly groundwater. Minor variations of alignments during final design could avoid some of these sites, however, many of them could require the removal of underground fuel storage tanks or further investigation to evaluate potential contamination of soils or groundwater. In addition, the possibility exists that additional sites with contamination may be encountered during actual construction, particularly given the number of service stations near each of the existing interchange locations within SIU 1.

Route D Interchange

The Selected Alternative at Route D has the potential to impact one hazardous material site. The potential for contamination at this site is Low-to-None.

Site Name	Address	Likelihood of Contamination	Regulatory Status/Database(s)
Diesel Express	206 E Old 40 Hwy	Low-to-None	UST

Route 131 Interchange

The Selected Alternative at Route 131 has the potential to impact one hazardous material site. The potential for contamination at this site is "Moderate-to-High." The site is listed as an old barn that contained asbestos. The exact location of the barn is unverified, so any contact with unidentified structures during construction should result in the appropriate hazardous waste actions being taken.

Site Name	Address	Likelihood of Contamination	Regulatory Status/Database(s)
Barn	800 W Old 40 Hwy	Moderate-to-High	Asbestos

Applicable Commitment(s):

25. Additional study and proper remediation of hazardous waste sites that will be encountered by construction will be performed as needed to minimize exposure of construction workers and the public to hazardous wastes and to ensure proper disposal of contaminated earth and other substances. This includes proper disposal of demolition debris in accordance with state law.

17) SOILS AND GEOLOGY Is there a resource impact? YES [ ] NO [X]

Changes since the 2006 EA: More Impacts [ ] Same [X] Fewer Impacts [ ]

SIU 1 Corridor – 2006 EA

The geology within SIU 1 consists of unconsolidated sediments composed of loess, glacial till, and/or residuum overlying Pennsylvanian Age limestone and shales in the upland areas with alluvium in the floodplains of the Little Blue River and Sni-A-Bar Creek. In the Missouri River Valley, loess, consisting of windblown silt and clay size particles composed primarily of quartz, feldspar and kaolin may be present up to a thickness of 100 feet (30.5 meters). However, the thickness of the loess decreases substantially to a thickness of a few feet or less in SIU 1. In some areas the loess may be underlain by Kansan glacial till where the predominantly clay till has not been eroded. The loess is normally described as low plastic silty clay to clayey silt. Residual soils may be present below the till or loess where it has not been removed by the Kansan glaciation. These residual clay and silty clay soils transition into the layers of bedrock that underlie the entire uplands area. The residual soils are normally described as highly plastic or medium to highly plastic clays. The alluvium in the Little Blue River and Sni-A-Bar Creek valleys consists primarily of silty clay and clay overlying a thin layer of sand and gravel.

There are no large-scale faults within SIU 1. However, a limited potential exists for bridge and overpass structures within SIU 1 to be affected by seismic activity related to the New Madrid seismic zone. With the potential exception of seismic activity related to the New Madrid seismic zone, the bedrock units within SIU 1 appear to be relatively stable.

There are no limestone quarries nor coal mines are located within the SIU 1 Project Area.

Caves and other karst features such as springs and losing streams are common in southern Missouri where there are thicker sequences of soluble limestone and dolomite. However, these geologic conditions suitable for formation of karst features are not found in Jackson and Lafayette counties. There are no known caves, springs or other karst features within SIU 1.

All reasonable alternatives would have required the excavation of earth. Much of the soil in the project area is Urban Land. To the extent possible earth excavated in one area would be relocated as fill material to another part of the project. This effort would minimize the cost of hauling and disposal of excess material or borrowing fill material from another site. There may have been some permanent removal of soil resources from the project corridor. If additional materials were needed, these materials would have been obtained from local quarries or from new or existing borrow sites nearby.

During and following construction, proper sediment and erosion control measures would have been implemented to control the loss of soil to erosion, in accordance with MoDOT *Standard Specification Book for Highway Construction*.

SIU 1 Corridor – Re-evaluation

Mainline Widening

As most changes in soil composition occur gradually over long periods of time, and there have been no major natural disasters or change in the type of development in the study area, geologic and soil conditions are not

expected to have experienced notable changes since the 2006 EA. The EA would remain applicable for this resource.

Route D Interchange

As the majority of changes in soil composition occur gradually over long periods of time, and there have been no major natural disasters or change in the type of development in the study area, geologic and soil conditions are not expected to have experienced notable changes within the footprint of the Selected Alternative at Route D.

Route 131 Interchange

As the majority of changes in soil composition occur gradually over long periods of time, and there have been no major natural disasters or change in the type of development in the study area, geologic and soil conditions are not expected to have experienced notable changes within the footprint of the Selected Alternative at Route 131.

Applicable Commitment(s):

9. During construction, MoDOT's standard specifications, MDNR Solid Waste Management Program, and MoDOT's Sediment and Erosion Control Program will all be followed.

10. Through MoDOT's approved Pollution Prevention Plan for the National Pollutant Discharge Elimination System, the control of water pollution will be accomplished. The plan specifies berms, slope drains, ditch checks, sediment basins, silt fences, rapid seeding and mulching and other erosion control devices or methods as needed. In addition, all construction and project activities will comply with all conditions of appropriate USACE and MDNR permits and certifications.

MoDOT commits to obtaining the required permits and certifications from USACE and MDNR prior to FHWA authorization for construction and the onset of project activities.

18) Mitigation and Commitments

The following provides a review of decisions made through the course of the First and Second Tier Studies.

12-18-2001 Interstate 70 Corridor, Kansas City to St. Louis, Missouri Final First Tier EIS and ROD – Within the first Tier of the EIS, FHWA approved the selection of the Widen Existing I-70 Strategy for the I-70 Corridor. The strategy would improve existing I-70 by adding lanes and reconstructing the existing roadway to enhance safety and performance, including improved access management. This strategy included provisions for future transportation improvements within the median in rural areas, and the ability to add capacity in the future. ***(Applicable to SIU1)***

9-7-2006 Interstate 70 SIU 1 Corridor FONSI - *The* second tier EA evaluated impacts to SIU 1, defined as the portion of I-70 from just east of the I-470 interchange (Jackson County) to just east of Mile Marker 39 (Exit 133) east of Odessa, in Lafayette County. The Selected Alternative included an additional lane in each direction, the replacement of all existing interchanges and overpasses, access management where appropriate, and the provision for continuous frontage roads on both sides of I-70 as deemed necessary. ***(Applicable to SIU 1)***

8-14-2009 Interstate 70 Corridor, Kansas City to St. Louis, Missouri Supplemental EIS and ROD *– The 2009 Supplemental EIS and ROD for Truck-Only Lanes signed August 14, 2009, supplemented the previous first and second tier studies. The 2009 Truck-Only Lanes ROD was amended on December 5, 2023.* Within the First Tier of the I-70 SEIS, the Truck-Only Lanes Strategy was determined to be the selected improvement strategy. The Truck-Only Lanes Strategy would construct two truck-only lanes and two or more general purpose lanes in each direction along existing I-70. Concrete barriers, buffer separations or grassed areas would separate the truck-only lanes and general-purpose lanes from each other, depending on the location along the corridor. The Truck-only Lanes Strategy was determined to be consistent with the decisions made in the 12-18-2001 ROD, as it would fit within the limits of the previously evaluated footprint, to the extent possible, utilizing the future transportation corridor identified in the Widen Existing 1-70 Strategy. Interchange features of the Widen Existing I-70 Strategy at the majority of the interchanges along the corridor would be retained. ***(Not Applicable to SIU 1)***

List of Commitments

As identified in the 12-18-01 ROD for the Tier 1 EIS, the 9-7-06 FONSI for SIU 1, the 12-5-23 Amended ROD to the 2009 SEIS, and the 2009 ROD, MoDOT agreed to the commitments and future actions during the design and construction phases of future improvements in the SIU 1 corridor. The agreed upon commitments and future actions are summarized below. In addition, applicability of the commitments as related to SIU 1 are identified.

Changes or updates to these commitments are shown below each commitment where applicable.

Existing Commitments from the 2006 FONSI and 2009 ROD Common to all SIUs:

*1. MoDOT will comply with the appropriate currently adopted design criteria and design standards. (**Applicable to SIU1**)*

- *MoDOT will comply with the appropriate currently adopted design criteria and design standards. However, design exceptions are possible* **(EA Re-evaluation).**

*2. MoDOT will incorporate suitable and reasonable Intelligent Transportation Systems elements into the Improve I-70 program. **(Applicable to SIU 1)***

*3. MoDOT will consult with emergency responder agencies involved in traffic incident management on I-70 in future design and maintenance of traffic plan development as the Improve I-70 program progresses. **(Applicable to SIU 1)***

*4. MoDOT will construct frontage roads for the purposes of maintaining existing local service connections and maintaining existing access to adjacent properties, where warranted. The frontage roads as proposed in the Frontage Road Master Plan may be constructed in the future as needs arise and as funding becomes available. Where reasonably possible, the eight-foot (2.4 meters) paved shoulder along new frontage road construction could serve as a one-way bicycle facility. **(Not Applicable to SIU 1)***

- *MoDOT will maintain existing local service connections and access to adjacent properties. Shoulder width will be determined in accordance with standards balancing safety and available resources.* **(EA Re-evaluation)**
- *MoDOT will ensure local and regional access to existing rural and urban areas and facilities are maintained during construction. **(EA Re-evaluation)***

Rationale: MoDOT acknowledges that some new outer roads will not be constructed with 8-foot paved shoulders. Also, the Frontage Road Master Plan no longer applies to this project.

5. MoDOT will develop a maintenance of traffic plan for the construction phases. Through traffic will be maintained along I-70 and at access points to the interstate from crossroads. It is likely that some interchange ramps and crossroads will be closed, and temporary detours required. Construction schedules, road closures and

detours will be coordinated with police forces and emergency services to reduce impact to response times of these agencies. ***(Not Applicable to SIU 1)***

- *MoDOT will develop a maintenance of traffic plan for construction phases. It is likely that some mainline, interchange ramps, and crossroads will be closed, and temporary detours required. Construction schedules, road closures and detours will be coordinated with police forces and emergency services to reduce impact to response times of these agencies.* **(*EA Re-evaluation*)**

Rationale: MoDOT acknowledges that short-term full closures of I-70 and some interchanges may occur during construction.

6. MoDOT will coordinate with project area businesses regarding access issues, via direct communication throughout the construction period. ***(Applicable to SIU 1)***

- *Communication may include a variety of tools (email updates, website, etc.).* ***(Applicable to SIU 1)***

7. MoDOT will coordinate with local public service and utility service providers during the final design phase of the project and during the construction period to minimize infrastructure relocation, modifications and connectivity requirements. ***(Not Applicable to SIU 1)***

- *MoDOT will coordinate with local public service and utility service providers during the design and construction phases of the project.* **(*EA Re-evaluation*)**

Rationale: MoDOT acknowledges that minimization of infrastructure relocation, modifications, and connectivity requirements to utilities may not be achievable in some locations.

8. During right of way acquisition and relocations, MoDOT will assure that this will be accomplished in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. MoDOT is committed to examining ways to further minimize property impacts throughout the corridor, without compromising the safety of the proposed facility, during subsequent design phases. ***(Applicable to SIU 1)***

9. During construction, MoDOT's standard specifications, MDNR Solid Waste Management Program, and MoDOT's Sediment and Erosion Control Program will all be followed. ***(Applicable to SIU 1)***

10. Through MoDOT's approved Pollution Prevention Plan for the National Pollutant Discharge Elimination System, the control of water pollution will be accomplished. The plan specifies berms, slope drains, ditch checks, sediment basins, silt fences, rapid seeding and mulching and other erosion control devices or methods as needed. In addition, all construction and project activities will comply with all conditions of appropriate USACE and MDNR permits and certifications. ***(Applicable to SIU 1)***

- *MoDOT commits to obtaining the required permits and certifications from USACE and MDNR prior to FHWA authorization for construction and the onset of project activities.* ***(EA Re-evaluation)***

11. MoDOT has special provisions for construction, which require that all contractors comply with all applicable local, state, and federal laws and regulations relating to noise levels permissible within and adjacent to the project construction site. Construction equipment is required to have mufflers installed in accordance with the equipment manufacturers' specifications. ***(Applicable to SIU 1)***

12. MoDOT is committed to minimizing lighting impacts. Efficient lighting and equipment will be installed, where appropriate, to optimize the use of light on the road surface while minimizing stray light intruding on adjacent properties. ***(Applicable to SIU 1)***

13. To minimize impacts associated with construction, pollution control measures outlined in the MoDOT Standard Specifications for Highway Construction will be used. These measures pertain to air, noise and water pollution as well as traffic control and safety measures. ***(Applicable to SIU 1)***

14. MoDOT will review the Natural Heritage Database and coordinate with the USFWS periodically during the project development process to identify any new locations of threatened and endangered bat activity and for new locations of running buffalo clover. ***(Applicable to SIU 1)***

- *MoDOT will coordinate the project with USFWS, including proposed timelines, action items, and commitments. Any changes to the project or mitigation requirements as a result of ongoing consultation shall be incorporated in to the project prioer to construction authorization.* **(EA Re-evaluation)**

15. Landscaping in the right of way will include native plant species and other enhancements in accordance with the statewide I-70 Corridor Enhancement Plan to the maximum extent possible. In accordance with MoDOT standards, new seed mixes, mulch and plant materials will be free of invasive weedy species to the extent possible. Where appropriate, MoDOT will partner with the MDC Grow Native program and implement the establishment of native vegetation along highway rights of way. ***(Not Applicable to SIU 1)***

- *MoDOT commits to following the EPG's roadside design guidelines.* **(EA Re-evaluation)**

Rationale: MoDOT's landscaping policy has been revised since the EIS/ROD. The Statewide I-70 Corridor Enhancement Plan no longer applies to this project. MoDOT EPG's roadside design guidelines supersedes past policies on planting details.

16. MoDOT will apply best management practices to minimize impacts to wetlands and soil erosion as a result of this project. The implementation of the Selected Alternative will result in wetland losses that cannot be reasonably avoided. Mitigation for these wetlands will ensure that wetland acreage and functional value will not be decreased. Any compensatory mitigation site will be held in public ownership or in an ownership arrangement suitable to both the USACE and the MDNR (if MOU between MoDOT and MDNR, Management of Wetland Mitigation Lands Agreement, or a similar agreement is in force at time of 404 permit authorization), and in a manner consistent with Section 4 of Executive Order 11990. ***(Applicable to SIU 1)***

- *If Waters of the US are impacted, MoDOT will mitigate stream and/or wetland impacts in accordance with the most current regulations and guidance's.* **(EA Re-evaluation)**

17. MoDOT will continue to coordinate with the SHPO and comply with the existing executed Programmatic Agreement that complies with the National Historic Preservation Act. ***(Not Applicable to SIU 1)***

- *MoDOT will comply with the newly executed Programmatic Agreement (dated 01/23/2024). Should design modifications and/or construction activities result in impacts to historic properties, MoDOT will coordinate with SHPO related to the Section 106 process.* **(EA Re-evaluation)**

Rationale: MoDOT will comply with the newly executed Programmatic Agreement (dated 01/23/2024) as it supersedes the previous Programmatic Agreement. ***(Not Applicable to SIU 1)***

18. MoDOT is working with the MDC on a program to plant new trees to replace those removed by transportation construction projects. ***(Not Applicable to SIU 1)***

- *MoDOT no longer has a tree replacement policy in place. As a result, MoDOT will not implement replacement of removed trees.* **(EA Re-evaluation)**

19. Where feasible, MoDOT's design process will minimize impacts to floodplains. ***(Applicable to SIU 1)***

20.During final design MoDOT shall complete hydraulic studies to assess floodplain and regulatory floodway impacts. All impacts shall be documented and meet the requirements of all federal and state regulations. MoDOT shall obtain a Flood Plain Development Permit from the SEMA for construction within areas of identified flood hazard prior to proceeding with construction. MoDOT shall obtain a "No-Rise" certificate for construction within a regulatory floodway. . ***(Not Applicable to SIU 1)***

- *MoDOT will ensure the Design-Build Contractor minimizes the size and duration of temporary obstructions within the floodplains and regulatory floodway during construction by effective construction sequencing and construction methodology.* **(EA Re-evaluation)**
- *MoDOT will ensure local and regional access to existing rural and urban areas and facilities are maintained during construction. The highway improvement project would not support incompatible floodplain development.* **(EA Re-evaluation)**

- *MoDOT will ensure the Design-Build Contractor avoids modification to the functions of the natural floodplain environment or will maintain it as closely as practicable in its natural state.* **(EA Re-evaluation)**
- *MoDOT will ensure the floodplain analysis and certifications comply with floodplain regulations and demonstrate minimal impacts to the floodplains within the project limits.* **(EA Re-evaluation)**
- *MoDOT will ensure the Design-Build Contractor prepares a "No-Rise" certificate for construction within a regulatory floodway.* **(EA Re-evaluation)**
- *MoDOT on behalf of the Design-Build Contractor will obtain the floodplain development permits from SEMA prior to FHWA authorization for construction.* **(EA Re-evaluation)**
- *MoDOT will ensure sediment and erosion control best management practices are implemented during construction and disturbed areas are seeded following construction for restoring and preserving natural and beneficial floodplain values.* **(EA Re-evaluation)**
- *If the Contractor is unable to obtain No-Rise Certification(s), or if floodway(s) are expanded, MoDOT or the Design-Build Contractor will prepare a CLOMR for approval by SEMA prior to construction in affected areas. MoDOT or the Design-Build Contractor will also obtain an approved LOMR from SEMA after construction is complete.* **(EA Re-evaluation)**

21. MoDOT will continue to coordinate with the NRCS to determine appropriate mitigation measures for the loss of Conservation Reserve Program and Wetlands Reserve Program lands. ***(Not Applicable to SIU 1)***

- *MoDOT has confirmed with NRCS that no WRP or CRP lands exist within SIU 1.* **(EA Re-evaluation)**

22. Plans for suitable pedestrian, bicycle and wheelchair access across I-70 will be developed during the design of the interchanges. ***(Not Applicable to SIU 1)***

- *Pedestrian, bicycle, and Americans with Disabilities Act (ADA) access will be developed across I-70 where there is connectivity to facilities on either side of I-70.* **(EA Re-evaluation)**

23. The MoDOT Noise Policy will be used to address noise impacts. Where appropriate, possible noise abatement types and locations will be presented and discussed with the benefited residents during the preliminary design phase. Noise abatement measures will be considered that are deemed reasonable, feasible and cost effective. ***(Not Applicable to SIU 1)***

- *The MoDOT Noise Policy will be used to address noise impacts. For locations where noise walls are feasible and reasonable, MoDOT will discuss noise wall locations and provide benefited residents an opportunity to vote on whether they would like a noise wall.* **(EA Re-evaluation)**

Rationale: MoDOT's noise policy has changed since the EA/FONSI. The current MoDOT noise policy is being implemented. New Commitment #37 also addresses possible future MoDOT noise policy changes during final design.

24. During the final design process, MoDOT will consider options to minimize new right of way acquisition. ***(Applicable to SIU 1)***

25. Additional study and proper remediation of hazardous waste sites that will be encountered by construction will be performed as needed to minimize exposure of construction workers and the public to hazardous wastes and to ensure proper disposal of contaminated earth and other substances. This includes proper disposal of demolition debris in accordance with state law. ***(Applicable to SIU 1)***

Existing Commitments from the 2009 ROD Common to all SIUs:

26. MoDOT will consider potential roadway and median design applications to improve wildlife crossing safety during the design phase of the project. Mitigation plans developed in relation to stream crossing impacts will consider enhancements, such as vegetative plantings, designed to encourage animal species to utilize these vegetative corridors as passageways. Any wildlife enhancements considered during the design phase would be located within the right of way for the Selected Alternative. ***(Applicable to SIU 1)***

Existing Commitments from the 2006 FONSI Commitments Specific to SIU 1:

27. The National Register of Historic Places eligible Rice House (1JA107) will not be adversely impacted. ***(Applicable to SIU 1)***

28. MoDOT will continue coordination with the City of Blue Springs Parks and Recreation Department regarding the temporary closure of the Adams Dairy Parkway Bicycle Trail. ***(Applicable to SIU 1)***

- *MoDOT will coordinate with the City of Blue Springs Parks and Recreation Department regarding the temporary closure of the Route 7 Bicycle Trail, Woods Chapel Road Bicycle Trail, and Gregory O Grounds Trail.* **(EA Re-evaluation)**

29. MoDOT will continue to coordinate with MDNR Dam Safety Unit to determine whether the MDNR will require a construction permit for dam modifications associated with the lake at Gregory O. Grounds Park. ***(Not Applicable to SIU 1)***

Rationale: The widening footprint would not require any dam modifications at the lake at Gregory O. Grounds Park.

30. MoDOT will continue to coordinate with the NRCS to determine appropriate mitigation measures for the loss of the 3.6 acres (1.5 hectares) of CRP lands in SIU 1. ***(Not Applicable to SIU 1)***

- *See commitment #21*

31. While transit service within the SIU 1 Project Area will likely not be impacted. Prior to construction MoDOT will coordinate with transit agencies regarding construction phasing. ***(Applicable to SIU 1)***

New Commitments Specific to SIU 1 at the time of the Re-evaluation:

32. If there are changes in the project scope, project limits, existing conditions, pertinent regulations, or environmental commitments, MoDOT will re-evaluate potential impacts prior to implementation. Environmental commitments are not subject to change without prior written approval from FHWA.

33. MoDOT will include a Job Special Provision (JSP) in project contract(s) to help ensure that bridges are kept free of active nests before and during construction.

34.Tree Clearing will not occur prior to the completion of consultation with USFWS and MDC. It is recommended that tree clearing occur in the inactive months, which is October 16 to March 31 in Missouri. Also, if applicable FHWA will not authorize a project to go to construction without the mitigation payment being made.

35. If the project has not progressed to construction by the time Monarch Butterfly is listed as threatened, MoDOT will revisit USFWS consultation requirements when the listing becomes final. MoDOT does not anticipate additional conservation or mitigation measures.

36. For projects that encompass more than one SIU, MoDOT will combine the commitments in the affected SIUs into one document that will be converted into either JSP or contract documents.

37. The noise analysis was performed during this Re-evaluation followed MoDOT's current, FHWA approved, noise policy. Final noise barrier decisions will be made during final design. If at that time, a new MoDOT noise policy approved by FHWA is in place, the new noise policy will be used for a new noise analysis and final noise barrier decisions.

38. MoDOT will coordinate with Jackson County prior to and during all construction phases regarding the temporary closure of the Little Blue Trace Trail. Closure of the Little Blue Trace Trail will not exceed 12 months.

39. MoDOT will ensure that temporary occupancy permits are completed for temporary closures of all Section 4f resources. Any impacts that are greater than temporary closure will require the completion of the appropriate Section 4f documentation.

Table 13: SIU 1 EA Re-evaluation Summary Impact Table

Resource Evaluated		Impact Findings	
	Measurement	2006 EA	Re-evaluation
Social and Economic			
Land Use Compatibility with Current Trends	Rating	Benefits > Adverse Impacts	Benefits > Adverse Impacts
Displacements:			
Total Area	Acres	469	64
Residential Units	Number	40	18
Businesses	Number	20	32
Agricultural and Other	Number	--	37
No. of Parcel Acquisitions (Total/Partial)	Number	71 / 310	0 / 87
Environmental Impacts			
Noise[1]	Number[2]	119[3]	579[4]
Parklands:			
Refuges/Parks	Number	0	2
Other Public Lands	Number	1	6
Farmland Conversion Impact Rating	Rating	All Subsections < 160 Point Threshold	SIU1 < 160 Point Threshold
Prime Farmland	Acres	186.7	20
Farmland of Statewide Importance	Acres	263.3	7
CRP Land	Acres	3.6	0
100 Year Floodplain	Acres	102.5	35.2
Floodway	Acres	8.2	3.6
Stream Crossings	Number / Linear Feet	40 / 18,000 ft	39 / 14,205ft
Vegetated Wetlands	Acres	14.7	1.9
Jurisdictional Ponds	Acres	1.2	0.1
Potential Bat Habitat	Acres	Not Reported	32.3
Riparian Corridors	Acres	33.7	27
Known Cultural Resources:			
Cemeteries	Number	0	0
Architectural Resources	Number	0	0
Historical Bridges	Number	0	0
Archaeological Sites	Number	0	0
Hazardous Waste Sites[5]	Number	5	11
Visual Quality	Rating	Benefits > Adverse Impacts	Benefits > Adverse Impacts
Secondary Impacts	Rating7	Benefits > Adverse Impacts	Benefits > Adverse Impacts

1 – Impacts with potential mitigation measures

2 – Number meeting or exceeding the FHWA NAC of 66 dBA or causing a 15 dBA increase over existing noise levels.

3 – The 2006 EA identified impacted receivers which may have multiple dwelling units.

4 – The re-evaluation calculated impacted dwelling units which will be a greater number than receivers.

5 – Sites ranked “Moderate-to-High” whose past or present use indicates a potential for hazardous waste contamination.

7.0 Conclusion

Most of the impacts to socioeconomic and environmental resources resulting from the proposed project would remain the same as, or less than, the impacts identified in the 2006 Second Tier EA. The proposed project would result in impacts that are consistent with impact findings in this section of SIU 1 which were evaluated in the 2006 EA.

This re-evaluation document demonstrates that the 2006 Final I-70 Second Tier EA and FONSI for SIU 1 remain valid. The proposed project continues to meet the Purpose and Need identified in the 2006 EA. Therefore, a supplemental study of the 2006 EA is not necessary for the current project.

FEDERAL AID NO. 70-1 (218)
I-70 SIU 1, JACKSON & LAFAYETTE COUNTIES
JUST EAST OF THE I-470 INTERCHANGE (JACKSON COUNTY) TO MILE MARKER 39 (EAST OF ODESSA), IN LAFAYETTE COUNTY
MODOT JOB NUMBER: J4I2293/ST0019

Submitted Pursuant to
42 U.S.C. 4332(2)(c), 49 U.S.C. 303
by the
U.S. Department of Transportation
Federal Highway Administration and the
Missouri Department of Transportation

REBECCA JO ROST

Digitally signed by REBECCA JO ROST
Date: 2025.03.19 11:19:28 -05'00'

Date of Approval	For FHWA	Title

Appendix A: Amended Record of Decision

Appendix B: Conceptual Study Report

Appendix C: Public Involvement Summary

Appendix D: Agency Coordination

Appendix E: Environmental Resources

Appendix F: Farmland Conversion Impact Rating

Appendix G: Waters of the U.S. Delineation

Appendix H: Floodplain and Drainage Technical Memoranda

Appendix I: Noise Technical Memorandum

Appendix J: Threatened and Endangered Species Review

Appendix K: Cultural Resources

Appendix L: Section 4(f) and 6(f) Resources

Appendix M: Hazardous Materials Technical Memorandum