NEPA Re-evaluation of the

U.S. Route 67 Environmental Impact Statement

(Job No. J9P3661)

From U.S. Route 160/MO Route 158 to Two Miles North of the Arkansas State Line



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List of Abbreviations and Acronyms

AADT	Average Annual Daily Traffic
ADT	Average Daily Traffic
ACS	American Community Survey
AASHTO	American Association of State Highway and Transportation Officials
BMP	Best Management Practices
CE	Construction Inspection
CFR	Code of Federal Regulations
CR	County Road
EA	Environmental Assessment
EIS	Environmental Impact Statement
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
HMVMT	Hundred Million Vehicle Miles Traveled
IPaC	Information for Planning and Consultation
ISTEA	Intermodal Surface Transportation Efficiency Act
LWCF	Land and Water Conservation Fund
LOS	Level of Service
MDC	Missouri Department of Conservation
MDNR	Missouri Department of Natural Resources
MoDOT	Missouri Department of Transportation
NHD	National Heritage Database
NEPA	National Environmental Policy Act
NHS	National Highway System
NRHP	National Register of Historic Places
NRCS	National Resource Conservation Service
PE	Preliminary Engineering
PBRTs	Potential Bat Roost Trees
ROD	Record of Decision
SHPO	State Historic Preservation Officer
SEMA	State Emergency Management Agency

T&E Threatened and Endangered TMP Traffic Management Plan USACE U.S. Army Corps of Engineers USCB U.S. Census Bureau U.S. Fish and Wildlife Service USFWS USDOT U.S. Department of Transportation vpd Vehicles per day WOUS Waters of the U.S.

1.0 Introduction

In August 2019, the voters of the city of Poplar Bluff, Missouri overwhelmingly approved a ballot measure to fund the expansion of U.S. Route 67 (Route 67) south of Poplar Bluff to the Arkansas state line, which supports the planned expansion of future Interstate 57 (I-57). This project includes upgrading approximately ten miles of Route 67 in Butler County from two lanes to a four-lane, fully-divided controlled access highway on a new alignment, from the Route 160/158 interchange to two miles north of the Arkansas state line near County Road (CR) 274 (Figure 1). As a result, the Missouri Department of Transportation (MoDOT) is preparing to design and construct these improvements to this portion of Route 67. In 2005, this segment of Route 67 was included as part of an Environmental Impact Statement (EIS) required by the National Environmental Policy Act (NEPA) for proposed improvements to 71 miles of the highway. As required by MoDOT's Engineering Policy Guide and the Federal Highway Administration (FHWA), NEPA approvals that are more than three years old are required to be re-evaluated. Therefore, the future expansion of Route 67 in Butler County requires a re-evaluation of the 2005 "Final Environmental Impact Statement, Route 67, Madison, Wayne and Butler Counties, Missouri" (2005 EIS). This re-evaluation will focus only on the ten miles of Route 67 in Butler County, from the Route 160/158 interchange to two miles north of the Arkansas state line near CR 274, as this is the last segment of Route 67 in the 2005 EIS that is still only two lanes wide.

2.0 Background

In the fall of 1997, MoDOT initiated the Route 67 EIS in

Madison, Wayne, and Butler Counties. The EIS and its accompanying Record of Decision (ROD) were approved by FHWA in June and August of 2005, respectively. The purpose of the EIS was to evaluate strategies for improving Route 67 from just south of Fredericktown in Madison County to just south of Neelyville in Butler County. The EIS looked specifically at developing a four-lane, divided highway to accommodate projected traffic demands, to improve safety, and to correct roadway deficiencies.

The EIS assessed impacts of several alternatives along the 71-mile project corridor. Due to the nature and length of the project corridor, multiple build alternatives were identified in six separate locations, or subsections, of the overall corridor. These subsections varied in length from 1.9 miles to 3.7 miles and each considered two to three build alternatives. For the remaining sections of the project corridor that

Figure 1. Route 67 EIS Re-evaluation Project Location



connected to and between the six locations where multiple alternatives were considered (approximately 78 percent of the total length), only one build alternative was developed based on a line of best fit adjacent to existing Route 67. This build alternative was identified as "common alignment" in the EIS. By breaking up the 71-mile corridor into subsections, the EIS planning team was able to direct their evaluations more specifically toward the issues at each location. For example, farmland impacts in the flat bottomland of southern Butler County were more closely analyzed compared to how they were analyzed in the rolling upland forest areas of Wayne County. Upon an extensive evaluation of these alternatives, a preferred alternative was selected for the overall EIS project corridor.

Since the 2005 ROD, most of the improvements studied in the EIS have been completed along the 71- mile corridor, in Madison, Wayne, and parts of Butler County (as presented in Figure 2, blue). The northernmost sections of the selected alternative consisted of an upgrade from a two-lane highway to a four-lane divided access-controlled highway from just north of Cherokee Pass in Madison County (north terminus) to a point approximately 2.8 miles north of Route 60-North in Butler County (about 50.2 miles). This section was upgraded from a two-lane to a four-lane divided highway between 2007 and 2011; however, it was not constructed as a fully access-controlled highway. At-grade intersections and median breaks are permitted in various locations. The construction was funded in part by MoDOT and the Highway 67 Corporation, which raised funds for the project through the passage of a special sales tax by the voters of Poplar Bluff in 2005.

The selected alternative (Figure 2, gold) to the south consists of an upgrade from a four-lane divided limited-access highway to a four-lane divided access-controlled highway from a point approximately 2.8 miles north of Route 60-North to Route 60-South at Poplar Bluff (about 7.2 miles). These improvements consist primarily of converting some at-grade intersections to interchanges and development of some outer roads, but they have not been constructed.

The third section (Figure 2, green and red) is south of Poplar Bluff and consists of a 13.1-mile upgrade from a two-lane highway to a four-lane divided access-controlled highway from approximately 0.6 miles north of Cane Creek south of Poplar Bluff to two miles north of the Arkansas line in Butler County (south terminus).

Between 2012 and 2014, a four-mile portion of the third section – from 3.5 miles north of Route 160/158 to 0.5 mile south of Route 160/158 (Figure 2, green) – was upgraded from a two-lane highway to a four-lane divided access-controlled highway and included an interchange at Route 160/158 (MoDOT Project Number J0P0959). An EIS re-evaluation was conducted and approved by FHWA for this portion in 2010. However, the remaining 10-mile portion from 0.5 mile south of Route 160/158 to the south terminus remains a two-lane highway.



Figure 2. Route 67 EIS Completed Projects

The EIS did not include the portion of Route 67 that bypasses Poplar Bluff to the west (Figure 2, purple), which was studied as part of a separate project (MoDOT Project J0P0339). Environmental studies and design of the bypass occurred in the early 1990s. Construction of the bypass was completed in 2002.

The upgrades documented in the 2005 EIS included: several new interchanges; some realignment of Route 67; the incorporation of existing Route 67 as a frontage road in places; the incorporation of existing Route 67 as part of the four-lane divided access-controlled highway in places; and new bridges over the St. Francis River, Black River, and numerous creeks. Bypasses were considered and ultimately selected at Cherokee Pass in Madison County, Greenville in Wayne County, and at Neelyville in Butler County.

The improvements proposed for the segment of Route 67 from south of Poplar Bluff to two miles north of the Arkansas state line are part of a larger initiative to extend I-57 through southeast Missouri and into Arkansas to make a connection between Chicago, Illinois and Little Rock, Arkansas. In early 2019, Missouri legislators put forth an initiative to upgrade and rename Route 60 between Sikeston and Poplar Bluff, and to upgrade and rename Route 67 from Poplar Bluff to the Arkansas line. The new designation for these sections would be I-57. The legislation was put in place to improve safety on these two southeast Missouri highways and to spur economic development.

In August 2019, voters of Poplar Bluff overwhelmingly approved a measure to extend the sales tax that was established in 2005 to continue funding the Highway 67 Corporation. This enabled the city of Poplar Bluff and MoDOT to begin the process of completing the upgrade of Route 67 from Route 160/158 to two miles north of the Arkansas state line for future conversion to I-57. The first step in that process is to conduct a re-evaluation of the 2005 EIS for this stretch of Route 67.

3.0 Purpose and Need Validation

The 2005 EIS noted that the primary purposes for the proposed action for Route 67 are to accommodate projected traffic demands, to improve safety, to correct existing roadway deficiencies, and to provide system continuity between I-55 in Jefferson County and the Arkansas state line. The specific purpose and need addressed by the proposed action includes the following:

- **Congestion** associated with projected traffic growth, which was expected to double along the entire corridor over 21 years (up to 2025);
- Areas of high accident rates (above the statewide average) and, particularly, areas of high fatal accident rates (also above the statewide average);
- **Roadway deficiencies** on existing Route 67 including substandard geometrics and inadequate cross sections; and
- **System continuity** along Route 67 between I-55 in Jefferson County and the Arkansas state line.

The purpose and need from the 2005 EIS was reviewed to ensure its validity for the portion of Route 67 being studied in this current re-evaluation. Each purpose and need element is discussed below.

3.1 Congestion

The 2005 EIS noted that traffic was forecasted to increase at a rate of 2 percent per year. In the 2005 EIS, the average daily traffic (ADT) volume in 2002 on Route 67 between Route 160/158 and Route 142 was 4,450 vehicles per day (vpd). It was projected to increase to 7,790 vpd by 2025. The traffic volume south of Route 142 in 2002 was 3,510 vpd with a projected increase to 6,140 vpd by 2025. The projected

increase in traffic would result in roadway levels of service (LOS) of between a LOS D and LOS E, which would be below MoDOT standards for LOS on a two-lane highway. These values are presented in Table 1.

In 2019, the ADT on Route 67 between Route 160/158 and Route 142 was 5,863 vpd. While this indicates a slower annual increase (1.64 percent) than what was projected in the EIS, the Route 67 corridor is still experiencing notable increases in traffic levels, which will continue to decrease LOS. Traffic volume is projected to continue to grow to 7,687 vpd by the design year 2041 (an increase of 1.24 percent per year). While this level is less than the projected level in the 2005 EIS, the traffic growth on Route 67 could still see greater increases with the ultimate completion of I-57 in Missouri and Arkansas. The completion of this corridor as an interstate has the potential to attract traffic off of the I-55 corridor in Missouri and Arkansas.

Location	2002 ADT	2025 ADT	2019 ADT	2041 ADT
	(from 2005 EIS)	(from 2005 EIS)	(recorded)	(projected)
Between Routes 160/158 and 142	4,450	7,790	5,863	7,687
South of Route 142	3,510	6,140	4,630	6,072

Table 1. Average Daily Traffic (ADT) on Route 67 (vehicles per day)

The upgrade of Route 67 from a two-lane to a four-lane divided highway would increase the roadway capacity along this segment and improve LOS. Therefore, the congestion element of the purpose and need remains valid for this re-evaluation.

3.2 Accidents and Safety

Accident totals in the 2005 EIS were over a five-year period from January 1998 to December 2002. The terrain along the project length is generally flat with the exception being the vicinity of the Route 160/158 interchange, where rolling uplands transition to bottomland floodplain.

The 2005 EIS indicated two locations with an above-average accident rate. One location was at the intersection with Route 160/158 where the accident rate was 953.8 accidents per hundred million vehicle miles traveled (HMVMT) or 4.2 times the statewide average at that time. The 2005 EIS reported three fatal accidents had occurred over the five-year period, which resulted in a fatal accident rate of 55.0 per HMVMT, or 18.5 times the statewide average of 2.97 per HMVMT at that time. These accident problems were attributed to poor roadway geometry coupled with a high number of turning movements, the lack of a center turn lane, and development adjacent to the intersection. These values are presented in Table 2.

The accident rate at Route 160/158 has dramatically declined since the construction of the Route 160/158 interchange in 2014. Over the 0.7-mile length of Route 67 between Route 160/158 and Route V, the accident rate over the five-year period from January 2015 to December 2019 was 127.8 accidents per HMVMT. This represents a decline of over 600% compared to the 1998-2002 timeframe. There were no fatal accidents through this 0.7-mile length between 2015 and 2019. Therefore, the traffic safety need at the former Route 160/158 intersection appears to no longer be valid for this re-evaluation.

The other location was the Route 142 intersection where the accident rate was 717.9 accidents per HMVMT or 3.2 times the statewide average. At Route 142, there were a total of 23 accidents between

1998 and 2002 with ten of them resulting in personal injury. The causes of accidents at this location were attributed to a high number of turning movements, the lack of a center turn lane, and driver inattentiveness. This location was characterized by excessive turning movement conflicts with existing through traffic.

The accident rate at Route 142 has been updated for the five-year period from January 2015 to December 2019. At Route 142, there were a total of 42 accidents over the more recent five-year period indicating a rise in the number of accidents compared to the 2005 EIS timeframe. Therefore, the traffic safety need at Route 142 still remains a valid component of the purpose and need for this re-evaluation.

Location	From 2005 EIS	2019
Rte. 160/158 Intersection	953.8	127.8
Rte. 142 Intersection	717.9	981.3

Table 2. Accident Rates on Route 6

Note: Accident rates computed in accidents per hundred million vehicle miles traveled

3.3 Roadway Deficiencies

In the 2005 EIS, the design criteria used for the proposed action was for an interstate in rolling terrain as governed by the MoDOT Policy, Procedure and Design Manual. An interstate is defined as highway that is four lanes wide with the opposing lanes divided by a median and with fully-controlled access. These criteria required a design speed of 70 miles per hour (mph), a minimum radius of horizontal curvature of 1,641 feet, and a maximum grade of 4 percent. The design required fully paved shoulders, and each direction of traffic to be separated by a depressed grass median. In addition to meeting the design criteria, the proposed action was to maximize the use of the existing highway right of way, and to minimize impacts to environmental resources in the study area.

The 2005 EIS indicated there are no vertical curve deficiencies and one horizontal curve deficiency along Route 67 south of Poplar Bluff. The horizontal curve deficiency was immediately north of what was the intersection of Route 67 and Route 160/158. MoDOT Project J0P0959 provided an improvement to this deficiency with the construction of the Route 160/158 interchange. Therefore, the roadway design features at Route 160/158 listed in the EIS are no longer valid for this re-evaluation.

However, the interchange constructed under Project J0P0959 still has horizontal deficiencies. The EIS proposed a direct northbound on-ramp from Route 160/158 to Route 67. This was modified in Project J0P0959 and a loop ramp on the south side of Route 160/158 was constructed instead. The southbound on-ramp in the 2005 EIS was proposed as a loop ramp on the north side of Route 160/158. This was constructed under Project J0P0959; however, it is in a slightly different configuration from the proposed 2005 EIS layout. The bridge that carries Route 67 over Route 160/158 is four lanes wide; however, the outer lanes in both directions serve as acceleration lanes for the northbound and southbound on-ramp traffic, which makes the interchange deficient in meeting interstate standards. In order to meet interstate standards, this interchange needs to be modified to provide four through lanes through the interchange.

3.4 System Continuity

The 2005 EIS referenced Section 1006 of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, which directed development of a proposed National Highway System (NHS) in cooperation with

the states and local officials. ISTEA began a series of federal surface transportation programs that provided funding for highways, highway safety, and transit. ISTEA authorized surface transportation funding for fiscal years 1992 through 1997. The current federal surface transportation funding program is the Fixing America's Surface Transportation Act, which was signed into law in 2015 by President Obama. It provides funding for surface transportation infrastructure planning and investment and is authorized from fiscal years 2016 through 2020.

The purpose of the NHS is to "provide an interconnected system of principal arterial routes, which will serve major population centers, international border crossings, ports, airports, public transportation facilities, and other major travel destinations, meet national defense requirements and serve interstate and regional travel." A primary objective of the NHS is to provide an interconnected system of arterial routes and linkage of multi-state corridors.

MoDOT has identified Route 67 as an NHS route. The selected alternative in the 2005 EIS provides an enhanced connection between the Route 67 corridor in Jefferson and St. Francois counties in Missouri and the Route 67 corridor in Arkansas. The Route 67 corridor in Jefferson and St. Francois counties in Missouri is currently a four-lane expressway. In Arkansas, much of Route 67 is already a freeway with the Arkansas Department of Transportation having a goal to upgrade those unimproved sections of Route 67 to a freeway as part of their long rang statewide highway planning strategy and to meet the goals of developing a future I-57. Therefore, the system continuity component of the purpose and need is still valid for this re-evaluation.

4.0 Preferred Alternative

As described in the Background (Section 2.0) of this re-evaluation, multiple build alternatives were developed at six separate subsections within the overall 71-mile 2005 EIS project corridor. The portion of the preferred alternative in this re-evaluation project area is comprised of Alternates R, T, U', and W from the 2005 EIS (see Figure 3). Other 2005 EIS alternates that were considered and ultimately eliminated from consideration are not discussed herein.

<u>Alternate R</u>

In the 2005 EIS, Alternate R began approximately 2,740 feet north of Route 160/158 and was adjacent to the east side of Route 67. The EIS considered two alternatives at Route 160/158: Alternate R and Alternate S. In the 2005 EIS, Alternate R was selected as the preferred alternative at this location.

Since that time, MoDOT (through Project J0P0959) redesigned a portion of Route 67 that affects the northern 2,740 feet of Alternate R, which is no longer adjacent to Route 67, but is approximately 780 feet south and east of it. As noted in Section 2.0, an EIS re-evaluation was conducted and approved by FHWA for this portion of Alternate R in 2010. From Route 160/158 to the south, Alternate R is essentially the same as it was presented in the EIS. Alternate R also included a proposed interchange at Route 160/158 (which has since been constructed under MoDOT project J0P0959). However, the interchange requires some modifications as discussed in the Purpose and Need (Section 3.3).

For this re-evaluation, the northern terminus is considered to be a point approximately 2,740 feet north and east of Route 160/158 along the alignment that was constructed under MoDOT Project J0P0959. From the northern terminus, Alternate R is 2.76 miles long and begins 2,740 feet northeast of Route

160/158. It then proceeds southwesterly through slightly rolling terrain to a point along Route 160/158 approximately 1,350 feet east of what was Route 67 (now Route C, or South Westwood Boulevard).

Alternate R lies just east of the Butler County Water District #1 water tower, which is on the south side of Route 160/158. Alternate R crosses to the west side of Route C approximately 2,150 feet south of Route 160/158. From there, it lies adjacent to the west side of existing Route 67 for approximately 3,280 feet to CR 360. Existing Route 67 is proposed as a service road between the point where Alternate R crosses existing Route 67 and CR 360.

At CR 360, Alternate R enters bottomland floodplain and veers southwesterly away from existing Route 67 for approximately 2,790 feet to avoid the Fellowship Southern Baptist Church of Neelyville. The church property abuts the west side of Route 67. Alternate R crosses the right of way of an old railroad grade approximately 825 feet west of existing Route 67. From there, it proceeds southeasterly to CR 338, where it becomes adjacent to and west of existing Route 67. This represents the southern limit of Alternate R and the northern limit of Alternate T.

<u>Alternate T</u>

Alternate T is a common alignment alternative in the 2005 EIS, meaning there were no other alternatives developed in this area for comparison. It is 3.9 miles long and begins at the southern end of Alternate R just south of CR 338 and just west of and adjacent to existing Route 67. It remains adjacent to the west side of Route 67 for its entire length. This alternative crosses Epps Ditch, Harviell Ditch, and Hart Ditch and lies entirely in bottomland floodplain. Under this alternative, existing Route 67 is converted to a service road and provides access to adjacent properties to the east. This alternative also includes a grade-separated crossing at Route MM to provide east-to-west access across the proposed highway. The southern limit of this alternative is approximately one mile south of Route MM, which represents the northern limit of Alternate U'.

<u>Alternate U'</u>

From the southern end of Alternate T to the south, the 2005 EIS considered three alternatives at Neelyville: Alternate U; Alternate U'; and Alternate V. In the 2005 EIS, Alternate U' was selected as the preferred alternative at this location.

Alternate U' is 2.53 miles long and begins at the southern end of Alternate T and proceeds southwesterly to a point approximately 765 feet west of existing Route 67 and 2,050 feet north of Route 142. From there, the alternative proceeds southerly and intersects Route 142 at a proposed diamond interchange. The placement of this interchange was strategic in the 2005 EIS because it avoids the Wilbourn Site, a known prehistoric archaeological site further west of Route 67.

Alternate U' then continues southerly between the Corkwood Conservation Area and existing Route 67. A grade-separated crossing is proposed at CR 270. South of CR 270, Alternate U' crosses Route 67 and becomes adjacent to the east side of existing Route 67. North of the point where Alternate U' crosses existing Route 67, existing Route 67 is planned to be a local road to the east of Alternate U'. South of this crossing, existing Route 67 is planned as a service road west of Alternate U'. The southern limit of Alternate U' is the northern limit of Alternate W.



Figure 3. Alternates Comprising Preferred Alternative

<u>Alternate W</u>

Alternate W is also a common alignment alternative in the 2005 EIS. It is the southern-most section of Route 67 in the 2005 EIS and begins at the southern end of Alternate U' south of CR 270. It is immediately adjacent to the east side of existing Route 67 for its entire length, which is approximately one mile. The southern limit of Alternate W also represents the southern terminus of this re-evaluation.

4.1 Preferred Alternative Modifications

A separate "Route 67 Preferred Alternative Technical Memorandum" was prepared as part of this reevaluation to consider changes in the study area, policies, and public opinion that have occurred since the 2005 EIS was completed that could affect the location of the preferred alternative. This technical memorandum is included in Appendix A. As a result of this further study, changes were recommended to the preferred alternative at three locations in the project area that include:

- The Route 160/158 interchange (Alternate R);
- The area around the Fellowship Southern Baptist Church of Neelyville (Alternate R); and
- The Route 142 interchange (Alternate U').

The reasons for the modifications are described below.

Route 160/158 Interchange

On the north side of the Route 160/158 interchange, the alignment of Route 67 was modified from the preferred alternative in that it was constructed further south of existing Route 67 instead of immediately adjacent to it. The 2005 EIS proposed a direct northbound on-ramp from Route 160/158 to Route 67. This was modified in MoDOT project J0P0959 and a loop ramp on the south side of Route 160/158 was constructed instead. The southbound on-ramp in the 2005 EIS was proposed as a loop ramp on the north side of Route 160/158. This was constructed; however, it is in a slightly different configuration from the layout in the 2005 EIS. The bridge that carries Route 67 over Route 160/158 is four lanes wide; however, the outer lanes in both directions serve as acceleration lanes for the northbound and southbound on-ramp traffic. This makes the interchange deficient in meeting interstate standards. This interchange needs to be modified to provide four through lanes through the interchange. The 2005 EIS environmental footprint for Alternate R at the Route 160/158 interchange is being expanded to allow for flexibility in the design of interchange modifications to address these deficiencies. Therefore, this re-evaluation includes a slightly expanded environmental footprint for Alternate R at the Route 160/158 interchange (see Appendix A).

Fellowship Southern Baptist Church of Neelyville

In the 2005 EIS, the alignment of Alternate R was proposed to the west of the Fellowship Southern Baptist Church of Neelyville to avoid the church. This church was newly constructed at the time of the 2005 EIS. This area has been reviewed and a modified Alternate R has been developed, which removes the western shift and straightens out the alignment. The modified Alternate R lies adjacent to the west right of way of existing Route 67. Impacts associated with the straightened alignment differ from what was presented in the 2005 EIS, particularly that the church is now counted as a displacement. A comparison of impacts between the original Alternate R from the 2005 EIS and the modified Alternate R is provided in Appendix A of this re-evaluation.

Route 142 Interchange

The Route 142 interchange falls within Alternate U'. The placement of the Route 142 interchange is situated between a known archaeological site (Wilbourn Site) and the Corkwood Conservation Area on the west, and existing Route 67 on the east. Neelyville Ditch flows through the proposed interchange footprint, which would require several bridge structures. For this re-evaluation, the environmental footprint at the proposed Route 142 interchange has been expanded to allow for flexibility in the design of potential interchange modifications (see Appendix A). The expanded footprint offers an opportunity to further minimize or avoid impacts to Neelyville Ditch and to provide greater separation between the proposed interchange and the Wilbourn Site and Corkwood Conservation Area.

Other Modifications

Based on further review of the preferred alternative, two additional areas were identified that require some degree of additional environmental footprint. These areas were not included in the 2005 EIS and include:

- Alternate R an overpass is proposed at CR 338 to provide connectivity between frontage roads on either side of proposed Route 67. Construction of the overpass is considered an optional design feature for future consideration by MoDOT.
- Alternate U' a frontage road is proposed along the west side of proposed Route 67 from Route 142 to a point approximately 1.3 miles north.

4.2 Construction Phasing

Construction of the Preferred Alternative will be conducted in phases, as outlined below, to allow for the use of federal and state grant funds in combination with local matching funds provided by the City of Poplar Bluff to finance design and construction.

I-57/US 67 South Phase 1

Phase I extends from Route 160 south two miles to CR 338. MoDOT will provide Preliminary Engineering (PE) and Construction Inspection (CE) for this phase. Funding is currently committed through a combination of Governor's Cost Share Grant funds leveraged with local matching funds provided by the City of Poplar Bluff. Because not all committed state funds are currently available due to the COVID-19 pandemic, Phase I has been broken out into two one-mile sections – Phase 1A and Phase 1B. MoDOT will conduct PE for both Phases 1A and 1B, however Phase 1B, which extends from approximately one mile south of Route 160 (near CR 360) to CR 338, will be constructed in combination with Phase 2. Estimated construction completion for Phase 1A is 2023.

I-57/US67 South Phase 2

Phase 2 is also two miles in length, extending from CR 338 south to CR 352. MoDOT will provide PE and CE for this phase. Funding has been approved through a MoDOT Cost Share and the City of Poplar Bluff has committed matching funds. Estimated construction completion for Phase 2 is 2024.

I-57/US 67 South Phase 3

Phase 3 is 4.5 miles in length and extends from CR 352 south to approximately CR 270. This phase is not yet funded, however, MoDOT and the City of Poplar Bluff are pursing federal grants and estimate construction completion in 2025.

I-57/ US 67 Phases 4 and 5

Phase 4 includes the two remaining miles between CR 270 and the Arkansas state line which is not part of this Route 67 EIS Re-evaluation. Phase 4 will be studied in a separate NEPA analysis and completed as funding becomes available. After completion of the 12 miles of four-lane freeway improvements to Route 67, the local communities and counties will work to upgrade the existing four-lane highway between Poplar Bluff and Sikeston as Phase 5 in order to complete I-57 in Missouri.

5.0 Public and Agency Coordination

On April 8, 2020, notices were sent to local, state, and federal agencies describing the proposed actions and seeking comments relative to the interests of each agency. Notices were also sent to federally recognized tribes on April 14, 2020. Comment and coordination letters from the U.S. Environmental Protection Agency, Missouri Department of Natural Resources (MDNR), Missouri State Emergency Management Agency (SEMA), Missouri Federal Assistance Clearinghouse, and U.S. Army Corps of Engineers (USACE) are provided in Appendix B. As of the date of this submittal, no other comments from agencies or tribes have been received.

On April 17, 2020, during the planning stages of the project, MoDOT issued a notice informing the public of the proposed upgrades to the approximately 10-mile segment of Route 67 and the re-evaluation of the 2005 EIS. The notice was published in the local newspaper, the Daily American Republic, as well as on MoDOT's website and social media page. MoDOT accepted public comments through May 18, 2020. Nineteen public comments were received via the online comment form, while the social media post generated another 43 comments (see Appendix B). Many commenters were supportive of the project, indicating that the additional lanes and reconfigured ramps would have safety and economic benefits. Other comments included those worried about increased traffic and noise, and that the interstate would take away from the small-town atmosphere. Some commenters, particularly affected property owners, had questions or requested additional information on the project, which MoDOT then provided.

6.0 Resource Impact Evaluation

As discussed in the Introduction (Section 1.0), the 2005 EIS evaluated impacts associated with a 71-mile corridor through three counties – Madison, Wayne, and Butler. In the 2005 EIS, the quantification of impacts was presented in cumulative totals for the entire 71-mile Route 67 corridor and, for some resources, was broken down by county. This 2020 re-evaluation only focuses on 10 miles of the original corridor studied. To allow for the direct comparison between the 2005 impacts and the 2020 impacts, the 2005 EIS was used where impacts could be readily determined. Where the 2005 impacts associated with the 10-mile section were not readily determined, historical records and aerial photography from the early 2000s were used to provide both a quantitative and qualitative assessment of resources that would have been impacted by the preferred alternative in 2005.

The following form presents impact analysis findings for each resource evaluated. The matrix identifies if there is an impact to the resource with a yes/no check box and whether the impact has changed or remained the same from the 2005 EIS. The preferred alternative alignment, key resources, and resource impacts are also shown on the Route 67 EIS Re-evaluation map index in Appendix C. A summary of the impact evaluation findings is shown in Table 7 following the form.

Environmental Re-evaluation/Consultation Form for U.S. Route 67 Environmental Impact Statement

Missouri Department of Transportation/Federal Highway Administration

REGION	STATE PROJECT NO.	PROJECT TITLE, DOCUMENT TYPE
Missouri Division	J9P3661	Environmental Impact Statement, Route 67,
Date Approved	Federal Aid No.	Madison, Wayne, and Butler Counties, Missouri
	NHPP 67-1(25)	

REASON FOR CONSULTATION:

The Route 67 Madison, Wayne, and Butler Counties Final EIS was approved and signed in June 2005 followed by approval of the ROD in August 2005. A number of improvement projects evaluated in the 2005 EIS have been constructed within the 71-mile corridor originally studied. MoDOT and the City of Poplar Bluff are ready to move forward on design and construction of the remaining approximately 10 miles of the original corridor studied in the 2005 EIS. Therefore, a re-evaluation of the 2005 EIS is necessary to determine if impacts within this corridor have changed.

IS THERE AN IMPACT AND WILL THE TIME LAPSE CHANGE THE IMPACTS TO THE FOLLOWING:

1) Socioeconomics

Is there an impact to this resource? Change since 2005 EIS

More Impacts \Box No Change \boxtimes Fewer Impacts \Box

Yes 🛛 No 🗆

The social setting in Butler County has remained relatively consistent since the 2005 EIS. Based on decennial census data and the most recent American Community Survey (ACS) 5-year estimates provided by the U.S. Census Bureau (USCB), Butler County experienced minor population growth (4.7 percent) between the 2000 and 2010 censuses, but remained essentially unchanged (decreasing 0.1 percent) between 2010 and 2018. Within Butler County, the proposed project corridor spans Beaver Dam Township and Neely Township, which have experienced differing population trends. Between 2000 and 2018, Beaver Dam Township grew from 3,963 to 4,338 residents (increase of 9.5 percent) while Neely Township went from 1,259 to 727 residents (decrease of 42.3 percent). However, similar to the county, when considered together, the population of the two-township project corridor has remained relatively steady, decreasing 3.0 percent. Correspondingly, residential and commercial development along the project corridor remains similar to what was documented in the 2005 EIS. A number of buildings have since been vacated or demolished, but minor amounts of new construction have also taken place.

As noted in the 2005 EIS, socioeconomic impacts include the acquisition of land for new right of way which would result in the direct loss of property that is subject to property taxes. Based on the total 2019 assessed valuation for Butler County of \$631,645,296, the assessed value of the land that would be acquired for the current preferred alternative is estimated to be approximately \$247,034. This makes up just 0.04 percent of the total assessed value of real estate in Butler County in 2019. Consistent with the findings of the 2005 EIS, tax impacts from the preferred alternative would be minimal. Other socioeconomic impacts would include changes in employment, both from job losses associated with business displacements and the generation of jobs from highway construction, as well as benefits to the local economy associated with the cost of labor and materials. Due to the smaller scope of the current project compared to the full 71-mile project analyzed in the 2005 EIS, as well as inflation of the dollar since 2005, a direct comparison of economic costs and benefits has not been determined. However, along this portion of the project corridor, impacts related to employment and

construction costs would be of the same general magnitude as those determined in the 2005 EIS. Based on the lack of significant changes in the affected environment, impacts to socioeconomics are expected to remain consistent with those determined in the 2005 EIS.

2) Land Use

Is there an impact to this resource? Change since 2005 EIS

More Impacts \Box No Change \boxtimes Fewer Impacts \Box

Yes 🛛 No 🗆

The 2005 EIS describes the land use along the study corridor south of Poplar Bluff as primarily large farms, with scattered residential and highway commercial uses. Current land use remains consistent with this characterization. Based on a review of current and historic aerial imagery, the only large-scale changes to land use along the corridor since the 2005 EIS have been the conversion of agricultural and residential land to transportation right of way at the recently constructed Route 160/158 interchange, and the closure of the Lakeview Golf Course north of Neelyville, which has been graded and converted to agricultural use. Otherwise, new development along the corridor has been minimal, and much of the surrounding area remains agricultural.

Project construction, under the current preferred alignment, would impact approximately 441 acres of land. Of this, approximately 71 acres are existing roadway right of way. Therefore, impacts to land use would consist of the acquisition and conversion of up to 370 acres of land, primarily agricultural or undeveloped but including some residential and commercial uses, to roadway right of way. Current land cover within the proposed project footprint is shown in Table 3. After developed open space, which includes the existing roadway as well as lawns and parking lots, the most abundant land cover is cultivated crops and hay fields/pasture. Consistent with the 2005 EIS, the most significant land use impact, in terms of total area acquired, would be agricultural land.

	Area within Project
Land Cover Type	Footprint (ac)
Cultivated Crops	122.0
Deciduous Forest	11.7
Developed, Low Intensity	19.9
Developed, Medium Intensity	2.3
Developed, Open Space	198.7
Emergent Herbaceous Wetlands ²	1.0
Evergreen Forest	5.8
Hay/Pasture	45.5
Mixed Forest	9.8
Open Water	1.2
Woody Wetlands ¹	23.0
Total	440.9

Table 3. Land Cover within the Proposed Project Footprint¹

¹Project footprint includes existing right of way.

²Wetland delineations were completed for affected wetlands and more accurate

impacts are included in the Surface Water Resources section below.

Source: National Land Cover Dataset (Homer et al. 2015)

No formal land use controls exist within the project corridor, as neither Butler County nor the City of Neelyville have adopted zoning regulations or have comprehensive land use plans in place. Therefore, the proposed project would have no negative impact on community land use plans and policies. Consistent with the findings of the 2005 EIS, increased traffic volumes and intersection improvements have the potential to create opportunities for development of highway businesses (e.g., gas stations and convenience stores). However, given the current level of development in the study area, the extent of new development is still expected to be minimal. For farming operations, designation of Route 67 as an interstate may affect the movement of farm equipment for farms that are currently located on both sides of the highway by removing direct access across the highway. However, outer roads and county road overpasses will be constructed to maintain access for all properties and farming

operations. As no substantial land use changes have occurred, impacts to land use within the project corridor would remain consistent with the determinations of the 2005 EIS.

3) Displacements

Is there an impact to this resource? Change since 2005 EIS

More Impacts \Box No Change \Box Fewer Impacts \boxtimes

Yes 🛛 No 🗆

The 2005 EIS determined that the preferred alternative for the entire 71-mile corridor improvement would displace 148 single-family residences and 45 commercial buildings. To make an approximation of the number of these displacements within the 10-mile segment currently under re-evaluation, historic aerial photographs were reviewed to identify structures within the original preferred alignment. Using this strategy, it was determined that, in 2005, the original preferred alignment along this 10-mile segment would have resulted in approximately 38 total displacements.

Since the publication of the 2005 EIS, there have been structures that were identified as displacements that no longer exist, as well as new construction in potentially impacted areas. Using current aerial imagery in combination with site reconnaissance, it was determined that there would be approximately 32 total displacements within the current preferred alignment. These displacements include 24 single-family residences, 7 commercial properties, and 1 church, and are identified on the map index in Appendix C. Many of the displacements are common to both the original and current alignments, with the most numerous differences occurring near Route 160/158, where a number of structures identified for displacement in 2005 have since been removed to allow for the recent modification of the interchange.

One notable difference from the 2005 EIS, resulting from the straightening of the alignment between CR 360 and CR 338, is the displacement of the Fellowship Southern Baptist Church of Neelyville. The original preferred alternative at this location shifted from the existing Route 67 right of way to the west to avoid the church. As part of this re-evaluation, MoDOT reviewed and modified this alternative. The modification allowed for the new alignment to parallel existing Route 67, thereby eliminating the horizontal curves required to avoid the church which also resulted in fewer residential displacements and fewer impacts to agricultural land, wetlands, and forest habitat (Appendix A). The church has been at this location since the 1970's (having replaced the original building in the late 1990's or early 2000's) and currently has a congregation of around 40 people. MoDOT has been in communication with Tim Freeman, the pastor of the church, regarding the possibility of acquiring the property. Additionally, there has been no indication that this church serves a notable concentration of minority or other disadvantaged populations.

During the design phase, additional analysis would be completed to determine the exact number of properties that would be impacted, and the current use and occupancy of each structure to be removed. MoDOT will conduct the acquisition and relocation of all affected properties in accordance with the procedures established in the Uniform Act of 1970, as amended. MoDOT will carry out the Uniform Act without discrimination and in compliance with Title VI (the Civil Rights Act of 1964), the President's Executive Order on Environmental Justice, and the Americans with Disabilities Act. As the necessary displacements are relatively similar in nature and number to those identified in the 2005 EIS, the original findings remain valid.

4) Environmental Justice

Is there an impact to this resource? Change since 2005 EIS

More Impacts \Box No Change \boxtimes Fewer Impacts \Box

Yes 🗌 No 🖂

EO 12898 mandates some federal-executive agencies to consider environmental justice as part of the NEPA analysis by identifying and addressing disproportionately high and adverse human health or environmental effects on low-income and minority populations. For the purposes of this evaluation, low-income residents are defined as those whose household income falls below the nationwide poverty level determined annually by the USCB, and minority residents are defined as Black or African American; American Indian or Alaska Native; Asian;

Native Hawaiian and Other Pacific Islander; some other race (not mentioned above); two or more races; or a race whose ethnicity is Hispanic or Latino.

The 2005 EIS noted that, in general, the socioeconomic study area and the region overall had small minority populations and were overall less affluent than the state of Missouri (based on census data from 2000). However, the townships that encompass the corridor had low-income percentages that were consistent with the three counties along the corridor, and thus the EIS found that no disproportionate and adverse impacts would occur to minority or low-income populations as a result of the project.

As shown in Table 4, the state of Missouri and Butler County have seen an increase in the percentage of minority residents since 2000, while the two townships that encompass the currently proposed project corridor, Beaver Dam and Neely Township, have seen a decrease in minority populations and are below the minority percentage of both the state and county. The percentage of the population below the poverty level has risen in all geographies, but most notably in Neely Township, where 46 percent of residents are now considered low-income, more than doubling since 2000. While Beaver Dam Township, which encompasses the northern portion of the project corridor, has a low-income percentage consistent with the county and state, Neely Township, which encompasses the southern portion of the project corridor, has a low-income percentage considerably higher than these reference geographies. Thus, the project corridor spans an area with typical low-income percentages.

While the percentage of low-income residents in Neely Township has increased since the 2005 EIS, impacts of the proposed project, including property acquisition, noise, and construction impacts, would be consistent throughout the project corridor and would not be appreciably more severe or greater in magnitude for minority or low-income populations than the impacts experienced by non-environmental justice populations along the corridor. Based on a review of the project corridor and interactions with residents during the field survey and public comment periods, no readily identifiable groups of minority, low-income, or otherwise disadvantaged persons were observed. Property acquisition would affect parcels with a wide range of property values and no concentrations of low-income housing were identified that would be displaced or directly impacted by project construction. Therefore, proposed project activities would not result in disproportionately high and adverse effects to environmental justice populations and the determinations from the 2005 EIS would remain applicable for this resource.

	Percent	Percent Minority		t Below y Level
Area	2000	2018	2000	2018
State of Missouri	16.2	20.4	11.7	14.2
Butler County	7.8	11.2	18.6	21.8
Beaver Dam Township	2.8	2.2	13.5	17.4
Neely Township	15.8	8.7	19.2	46.0
Source: USCB 2000, USCB ACS 20	018			

Table 4. Environmental Justice Populations within Project Vicinity

5) Soils and Geology

Is there an impact to this resource? Change since 2005 EIS Yes 🛛 No 🗌

More Impacts \Box No Change \boxtimes Fewer Impacts \Box

The entirety of the proposed project corridor is located within the Mississippi Embayment subdivision of the Interior Lowlands physiographic province. In this subdivision, the bedrock is covered by a thick mantle of unconsolidated sands, silts, and clays. These deposits consist of mostly silt or sand alluvium, deposited by the Mississippi River, and are dated Early to Late Wisconsin. Dune sands, dated Holocene and Late Wisconsin, are also noted in the broad terraces in the vicinity of Route 67. These unconsolidated dune sand deposits comprise

the Mackintosh, Harris, and Sharecropper Ridges, located west and northwest of Neelyville. Typical elevations in proximity to U.S. 67 are approximately 300 to 310 feet above mean sea level.

The Mississippi Embayment is underlain by a thick sequence of sand, gravel, silt, and clay and, therefore, is not considered to be a karst area. For this reason, as well as the lack of observed karst features near the project area, the sinkhole collapse potential is low. Additionally, due to the surficial nature of road construction, impacts to bedrock and regional geology resulting from the project would be minimal.

According to the Butler County Soil Survey, surficial soils within the project corridor are made up of the following associations:

- Loring-Captina-Clarksville association: gently sloping to steep, moderately well drained to excessively drained, silty and very cherty soils on uplands;
- Tuckerman-Bosket association: nearly level to moderately sloping, poorly drained to well drained, loamy soils on low terraces, ridges, and mounds of natural levees; and
- Calhoun-Amagon association: nearly level, poorly drained, silty soils on low terraces and floodplains.

Construction of the proposed alignment would require the permanent clearing of vegetation along areas where additional roadway would be constructed and clearing of vegetation within temporary workspaces. Thus, the soils present within the project area may become more erodible during the construction phase. However, areas temporarily cleared of vegetation would be seeded with site-appropriate seed upon completion of construction, lessening the erosion hazard and minimizing impacts. In addition, to minimize potential soil erosion during construction activities, MoDOT's Sediment and Erosion Control Program would be followed and measures described in the approved Pollution Prevention Plan, such as the utilization of berms, slope drains, ditch checks, sediment basins, silt fences, rapid seeding and mulching, and other erosion control devices or methods would be implemented as needed. Therefore, impacts to soils and geology would be minor.

As the majority of geologic change and changes in soil composition occur gradually over long periods of time, and no major natural disasters or human developments have occurred in the region that would have notable impacts to geology or soils, geologic conditions along the project corridor are not expected to have experienced notable changes since the 2005 EIS. Therefore, impacts to soils and geology within the project corridor would be consistent with the 2005 determinations and the 2005 EIS would remain applicable for this resource.

6) Surface Water Resources

Is there an impact to this resource? Change since 2005 EIS

More Impacts \boxtimes No Change \square Fewer Impacts \square

Yes 🛛 No 🗆

The 2005 EIS determined that the proposed project would directly impact approximately 80 acres of jurisdictional wetlands, 34.63 acres of which are located within the portion of the project corridor currently being reevaluated. Additionally, this segment included 1,620 linear feet of jurisdictional stream crossings or relocations, out of the 20,109 linear feet potentially impacted by the entire project.

Delineations performed in the project area from late May to early June 2020 identified increased stream and wetland impacts compared to the 2005 findings, in part due to the additional right of way added near the Route 160/158 and Route 142 intersections. Potential impacts to unnamed tributaries were also quantified, whereas the 2005 EIS impacts were limited to named streams.

Surface water features identified in the project area in 2020, including wetlands and streams, are shown on the map index in Appendix C. Within the 10-mile re-evaluation corridor, 54 wetlands, totaling approximately 46.81 acres, were delineated including 33 forested wetlands, 4 scrub-shrub wetlands, and 17 emergent wetlands. Thirteen open water resources, totaling approximately 2.77 acres, were documented within the project area. These features are all man-made or man-altered and include catfish, stock, and recreational ponds. Additionally, 19 streams totaling approximately 11,316 linear feet were documented within the project area. While the majority of the identified water features exhibited Waters of the U.S./jurisdictional characteristics, some of the features are isolated and did not exhibit a surficial hydrological connection to traditional navigable waters.

Therefore, not all of the identified features would likely fall under USACE jurisdiction; however, the USACE must provide the final jurisdictional determination. Field data and characteristics of each of the identified water features are included in the *"Waters of the U.S. Delineation Report, U.S. Route 67 (Butler County), Environmental Impact Statement Re-Evaluation"*, dated August 2020.

In the design process, wetland systems will be avoided to the extent practicable. Roadway design will include measures to minimize potential effects to wetland recharge areas. In areas of wetland crossings, culverts will be sized to allow the free flow of water to maintain hydrologic connection. The design phase will consider methods to reduce indirect hydrologic impacts to wetlands such as directing stormwater flow through vegetated drainageways, energy dissipaters, and/or sedimentation or detention basins. MoDOT will coordinate with the USACE and obtain the required Section 404 permits for dredge and fill activities within waters of the U.S. Compensatory mitigation may be required by the USACE in association with Section 404 approval. If mitigation is required, MoDOT will mitigate stream and wetland impacts through an in-lieu fee provider. To the extent feasible, MoDOT will pursue wetland mitigation through the MoDOT Bootheel Regional Mitigation Bank. If capacity is not available within this mitigation bank, wetland impacts will be mitigated at a MoDOT mitigation bank outside the service area at a higher ratio, or through the purchase of credits from an outside mitigation bank in the service area.

7) Groundwater

Is there an impact to this resource? Change since 2005 EIS Yes □ No ⊠ More Impacts □ No Change ⊠ Fewer Impacts □

A recent search of the MDNR's Wellhead Information Management System database identified 17 water wells located within a 500-foot radius of the currently proposed project corridor, three of which were mapped within the proposed right of way (see map index in Appendix C). The majority of the wells in the vicinity are for irrigation or domestic use, while one is a public well belonging to the Butler County Water Supply District #1. Older, private wells not included in the database may also be located within the project corridor. The 2005 EIS did not identify specific well locations but given the rural nature of the project corridor and the lack of public infrastructure, it was assumed that there was one well per residential displacement.

MoDOT will appropriately close and seal any wells that cannot be avoided by the project to prevent any contamination of groundwater. In addition, as noted in the 2005 EIS, if private wells are affected by dewatering procedures during construction, landowners will be compensated for the temporary interruption in well usage. Since some of the private wells may be used primarily for irrigation purposes, the construction procedures that will affect well usage would be scheduled during off-season periods when water usage is significantly reduced.

Given the generally thick soil/residuum covers and lack of karst features in the project corridor, construction activities and highway runoff are not expected to impact groundwater quality in the area. As no substantial land use changes have occurred that would affect groundwater or result in a significant increase in new water wells since the 2005 EIS, impacts to groundwater within the project corridor would remain consistent with the determinations of the 2005 EIS.

8) Floodplains

Is there an impact to this resource? Change since 2005 EIS

According to the current Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), effective November 26, 2010 (panel numbers 29023C0295E, 29023C0384E, 29023C0385E, 29023C0392E, and 29023C0395E), portions of the proposed project footprint are located within the 100-year floodplain (see map index in Appendix C). The 100-year floodplain is identified by FEMA and FHWA guidelines (23 CFR 650) as the area with a one percent annual chance of flooding. Consistent with the documentation in the 2005 EIS, the areas of 100-year floodplain within the current project footprint are associated with the Harviell Ditch, Hart Ditch,

Neelyville Ditch, and several unnamed tributaries or drainageways. There is no regulatory floodway within the project footprint.

The 2005 EIS identified 191.6 acres of 100-year floodplain that would be impacted by the preferred alignment along the portion of the project corridor south of the Route 160/158 intersection. Due to minor modifications to the preferred alignment and an update to the FEMA FIRM in 2010, impacts to the 100-year floodplain from the currently proposed alignment have increased to 243.5 acres.

Impacts to floodplains within the project footprint would be limited to fill associated with construction of an expanded transportation corridor. During the design process, a detailed hydraulic analysis will be completed in accordance with the requirements of FEMA and the USACE, to prevent a rise in flood elevation and avoid adverse impacts. Additionally, MoDOT will obtain a floodplain development permit from SEMA prior to FHWA authorization for construction within the 100-year floodplain.

In accordance with 23 CFR 650.111, the project is not expected to increase the potential for loss of life or property and would therefore not be considered a significant risk. The project does not result in a substantial adverse impact on natural and beneficial floodplain values. Since there will be temporary soil disturbance during construction activities, sediment and erosion control best management practices (BMPs) will be utilized during construction and disturbed areas will be seeded following construction. The proposed project would not create new access to undeveloped lands and would therefore not support incompatible floodplain development. While the acreage of 100-year floodplain impact within the proposed project footprint has increased compared to impacts noted in the 2005 EIS, the proposed construction would continue to be designed and permitted so as to minimize loss of floodplain storage and avoid any adverse impacts. Thus, the determination of impacts from the 2005 EIS would remain applicable to this resource.

9) Public Lands

Is there an impact to this resource?

Yes 🗌 No 🖂

Yes 🛛 No 🗆

Change since 2005 EIS

More Impacts \Box No Change \boxtimes Fewer Impacts \Box

Section 4(f) states that land from a publicly owned park, recreation area, wildlife or waterfowl refuge, or historic site can be used for a transportation project only if there is no feasible and prudent alternative and all possible measures have been taken to minimize harm. As noted in the 2005 EIS, the only public land in the vicinity of the proposed project corridor is the Missouri Department of Conservation (MDC) Corkwood Conservation Area. The Corkwood Conservation Area is accessible from Route 142 and is located approximately 150 feet west of the proposed Route 67 right of way at its closest point. As shown on the map index in Appendix C (Sheet 7), the preferred alternative would avoid the Corkwood Conservation Area and would not require land acquisition or access changes to the facility. An overpass is proposed at the intersection of Routes 142 and 67, which would maintain access to the Conservation Area from the east. Therefore, the proposed project would not result in a use under Section 4(f).

Section 6(f) of the Land and Water Conservation Act places restrictions on the conversion of public recreation facilities, funded with Land and Water Conservation Fund grants, to non-recreation uses. There are no facilities subject to Section 6(f) within the proposed project corridor.

Based on a review of state and federal databases from MDC, Missouri State Parks, and the Protected Areas database of the U.S., there are no public lands in the vicinity of the proposed project that were not previously identified in the 2005 EIS. Therefore, impacts to public lands along the proposed project corridor would remain consistent with the determinations of the 2005 EIS.

10) Prime Farmland

Is there an impact to this resource? Change since 2005 EIS

More Impacts oxtimes No Change \Box Fewer Impacts \Box

Impacts to soils with prime farmland characteristics were quantified, by county, in the 2005 EIS. Based on consultation with the National Resource Conservation Service (NRCS), 538.4 acres of prime and unique farmland

in Butler County would be impacted by the original preferred alternative, resulting in a conversion impact rating total of 118 points, as reported on the Farmland Conversion Impact Rating Form NRCS-CPA-106. This rating was below the 160 points needed to require additional avoidance and/or mitigation measures.

Within the current preferred alignment for the approximately 10-mile project corridor, up to 58.1 acres of soils with prime farmland characteristics, 236.4 acres of soils considered prime farmland if drained, and 38.1 acres considered farmland of statewide importance would be converted to right of way. While direct comparisons to the 2005 EIS are not possible as quantifications were only provided by county, it is anticipated that impacts to prime farmland within the current project corridor would be slightly greater than the originally proposed alignment due to the additional right of way added near the Route 160/158 and Route 142 intersections with Route 67. However, prime farmland soils are abundant in the region, with the proposed alignment impacting less than 0.1 percent of prime and unique farmland in Butler County. Additionally, as the minor change in impacted prime farmland acreage associated with the current preferred alignment would not alter the original impact rating such that it would be above the 160-point threshold that would require consideration of other alternatives, the NRCS concurred that submittal of a new Form NRCS-CPA-106 would not be required (Appendix B). Therefore, impacts to prime farmland along the project corridor would remain similar to the 2005 determinations and the EIS would remain applicable for this resource.

11) Visual Quality

Is there an impact to this resource? Change since 2005 EIS

More Impacts \Box No Change \boxtimes Fewer Impacts \Box

Yes 🛛 No 🗆

Yes 🗌 No 🖂

The 2005 EIS stated that, in general, the preferred alternative would potentially impact visual resources through the widening of the roadway, the presence of service roads, and the need for cut and fill slopes, overpasses, and interchanges that increase the visual scale of the roadway. However, the landscape throughout the corridor is considered representative, or typical, of what occurs across the region, and is therefore not considered to be aesthetically or visually unique. Additionally, the proposed improvements associated with the preferred alternative would largely occur within or adjacent to an existing transportation corridor. Consequently, impacts to the landscape were not expected to adversely alter the visual and aesthetic character of the project corridor. As the proposed modifications to the original alignment within the project corridor would not result in significant changes to the viewshed, and there has been no notable development resulting in new visually sensitive receptors, the impacts to visual quality would remain consistent with the original determinations and the findings from the 2005 EIS would remain applicable for this resource.

12) Air Quality

Is there an impact to this resource? Change since 2005 EIS

More Impacts \Box No Change \boxtimes Fewer Impacts \Box

The project corridor is contained within Butler County, part of the Southeast Missouri Intrastate Air Quality Control Region. Butler County is currently in attainment with all National Ambient Air Quality Standards and with the state's ambient air quality standards regulated by MDNR's Air Conservation Commission. As the project corridor is not within an area that is currently designated nonattainment or maintenance and is outside the jurisdiction of a Metropolitan Planning Organization, all transportation conformity requirements under the Clean Air Act have been satisfied.

As noted in the 2005 EIS, the Preferred Alternative would allow for greater free-flow operating conditions, relative to the No Action Alternative. Without the proposed improvements, poor levels of service could lead to congested conditions on the roadway which could potentially result in poorer air quality. The current proposed alignment would enable more efficient traffic flow and would not result in a notable increase in miles traveled when compared to either the current alignment of Route 67 or the preferred alignment from the 2005 EIS. Therefore, there would be no adverse impact to air quality and the findings of the 2005 EIS would remain applicable for this resource.

13) Noise

Is there an impact to this resource? Change since 2005 EIS

More Impacts \boxtimes No Change \square Fewer Impacts \square

Yes 🛛 No 🗆

The proposed improvements to Route 67 involve the substantial alteration of an existing highway and the addition of through-traffic lanes, making it a Type I project under 23 CFR 772. Noise studies are required for highway projects that are determined to be Type I. Based on the results of the noise study conducted for the 2005 EIS, 73 receptors along the entire 71-mile corridor would be impacted under the Build scenario in design year 2025. The specific location of impacted receptors was not provided, so the number within the current 10-mile project corridor is undetermined. The 2005 EIS also noted that the final decision on the installation of abatement measures would be made upon completion of detailed design and the public involvement process.

As part of the current re-evaluation, a new noise study was completed for the current 10-mile project corridor to account for the proposed changes in alignment and updated traffic estimates (Appendix D). The FHWA highway traffic noise prediction program, TNM 2.5, was used to determine noise levels at various receptors along the corridor under existing and predicted Build and No Build conditions for design year 2041. The model was run as a "flat terrain", or straight-line model, describing a worst-case scenario with higher sound levels than would be expected in detailed modeling that incorporates topography.

Based on the results of the modeling, the existing noise levels for the receptors in the study area range from 44.2 dBA to 66.7 dBA. The projected No Build 2041 traffic noise levels range from 45.3 dBA to 67.9 dBA. Generally, receptor noise levels increase approximately 1 dBA from the existing scenario to the No Build scenario. Only one receptor (a single-family residence) would experience noise impacts under the No Build scenario, exceeding the FHWA Noise Abatement Criteria (NAC) of 67 dBA. Overall, there would be a minimal expected change in noise levels from the existing scenario to the No Build scenario to the No Build scenario.

The 2041 traffic noise levels for the Build alternative, as predicted by TNM, range from 47.0 dBA to 67.9 dBA. Three receptors, all single-family residences, would experience noise impacts under the Build scenario. One receptor is considered impacted due to noise levels approaching, meeting, or exceeding the NAC; one is considered impacted as it would experience a substantial increase (15 dBA or greater) in noise levels from the existing condition; and one is considered impacted for meeting both of these criteria. The locations of the receptors that would be impacted under the 2041 Build scenario are identified on the map index in Appendix C.

When traffic noise impacts are identified, noise abatement must be considered and evaluated based on FHWA and MoDOT's criteria for feasibility and reasonableness. Due to the relatively small number of impacted receptors along the Route 67 corridor and the distance between these receptors, the feasibility criteria for noise abatement are not met. Specifically, current MoDOT policy requires at least a 5 dBA insertion loss for a minimum of two first-row, impacted receptors for noise abatement to be considered feasible. Of the three impacted receptors, one is isolated and the other two are located on opposite sides of the proposed roadway from each other, such that only a single receptor would be benefited by noise abatement in a specific area. Because the impacted receptors do not meet the feasibility criteria, further analysis of abatement measures will not be considered. If design changes dictate the need for a new noise analysis, the contractor shall inform MoDOT to seek approval from FHWA for use of the current noise policy (per MoDOT Engineering Policy Guide, Section 127.13.12.5, Final Noise Abatement Decisions), prior to the contractor performing a new noise analysis.

Although a direct comparison in the number of impacted receptors within the project corridor was not able to be determined, it is estimated that current projected traffic noise levels would be slightly higher than those predicted in the 2005 EIS due to an increase in the projected design year traffic volume. However, due to the rural nature of the corridor, impacted receptors would remain minimal and noise abatement measures would not be reasonable or feasible.

14) Threatened and Endangered Species

Is there an impact to this resource? Change since 2005 EIS

More Impacts \Box No Change \boxtimes Fewer Impacts \Box

Yes 🗌 No 🖂

Federal- and state-listed threatened and endangered (T&E) species protected by the Endangered Species Act (ESA) that may be present in the project area were identified using the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) website (Consultation Code: 03E14000-2020-SLI-2145, dated May 12, 2020) as well as the MDC Natural Heritage Review (dated May 6, 2020). Within the project area, five species, including three mammals and two clams (mussels), were identified as threatened, endangered, or candidate species listed for protection under the ESA and are listed below in Table 5.

Common Name	Scientific Name	Status		
Mammals				
Gray bat	Myotis grisescens	Endangered		
Indiana bat	Myotis sodalis	Endangered		
Northern long-eared bat	Myotis septentrionalis	Threatened		
	Clams			
Curtis' pearlymussel	Epioblasma florentina curtisii	Endangered		
Pink mucket (pearlymussel)	Lampsilis abrupta	Endangered		

Table 5. Listed Threatened and Endangered Species in the Project Area

After obtaining official species lists, a desktop review of resource maps was conducted to determine the extent of suitable habitat that may occur in the project area for each listed species and which species may be present in the project area based on agency records, or have the greatest potential for suitable habitat to be present. Streams in the project area are primarily man-altered ditches with little riparian corridor and thick sediment accumulation; therefore, it was determined that suitable habitat for the listed clam (mussel) species (Curtis' pearlymussel and pink mucket) was not present and a "no effect" determination was made by MoDOT for these species. Conversely, the project area includes several forested tracts, edge habitat, and water resources, indicative of a high bat roosting and foraging potential. In addition, the project will require clearing of approximately 50 acres of trees, including 23 acres of woody wetland, as shown in Table 3. Therefore, a field survey conducted by MoDOT's consultant in May and June of 2020 focused on identifying potential bat habitat for the listed bat species within the project area.

The habitat suitability survey for potential T&E bat habitat and potential bat roost trees (PBRTs) was carried out in accordance with the USFWS' 2020 Range-Wide Indiana Bat Survey Guidelines. During field surveys, identified PBRTs were flagged, photographed, and mapped, while recording pertinent information such as tree species, size, and notes regarding its condition and roost potential. In total, 301 PBRTs were identified within the project area.

Field surveys also identified seven flowering plant species, listed in Table 6, that are included in MDC's "Missouri Species and Communities of Conservation Concern Checklist". According to MDC, the "Checklist is used mainly for planning and communication purposes. All native animal species in the State of Missouri are protected as biological diversity elements unless a method of legal harvest, harm or take is described in the [Wildlife Code of Missouri] Code. All native plant species in the State of Missouri are protected as biological diversity elements only on land owned by the Missouri Department of Conservation" (MDC 2020). MDC does not own land in the project area; however, Corkwood Conservation Area, which is owned by MDC, is adjacent to the project area near the Route 67 and Route 142 intersection. These species are not protected under the ESA.

Common Name	Scientific Name	State Rank
Water oak	Quercus nigra	Imperiled
Corkwood	Leitneria pilosa ssp. Ozarkana	Imperiled
Broadwing sedge	Carex alata	Imperiled/Vulnerable
Finger dogshade	Cynosciadium digitatum	Imperiled
Eastern mannagrass	Glyceria septentrionalis var.	Unrankable
Sedge	Carex flaccosperma	Vulnerable
Gaping panic grass	Steinchisma hians	Imperiled

Table 6. MDC Species of Conservation Concern Identified in the Project Area

MoDOT consulted with MDC to determine if specific conservation measures would be required for Missouri Species of Conservation of Concern that are encountered within the project area. MDC considered the presence of these species in the project area and determined that impacts from the project would be minimal due to the common occurrence of these species south and east of the project and because the project is not impacting sensitive natural areas (Appendix B). No mitigation measures or BMPs were identified by MDC for these species.

Due to the number of PBRTs and amount of potentially suitable habitat for the Indiana and northern long-eared bats that were observed, MoDOT and USFWS requested that an acoustic survey for the presence/absence of the T&E bat species be conducted. The acoustic survey was conducted by Environmental Solutions and Innovations, Inc. from June 25 through June 28 for presence/probable absence of these two species. The acoustic analysis did not provide evidence of Indiana or northern long-eared bats; however, the analysis did identify two confirmed gray bat calls within the project area. Based on this analysis, MODOT made a "no effect" determination for the Indiana and northern long-eared bat and a "not likely to adversely affect" determination for the gray bat.

MoDOT consulted with USFWS regarding potential impacts to threatened and endangered bat species on September 11, 2020. MoDOT received concurrence on September 15, 2020 with the determination that the project is "not likely to adversely affect" gray bat (Appendix B). Because the presence/absence survey for T&E bat species is valid for 5 years from the date of the survey, if the proposed project is not completed prior to June 2025, or if new species are provided protection under the ESA for the project area, MoDOT may conduct additional surveys for T&E species in the project area. The proposed realignment is not near any known caves. Route 67 crosses four irrigation ditches, but there is no suitable riparian habitat adjacent to these ditches within the realignment areas. In coordination with USFWS, it was determined that no conservation measures are needed for the gray bat as the project does not cross streams, and there are no known caves nearby.

15) Hazardous Materials and Waste Management

Is there an impact to this resource? Change since 2005 EIS

More Impacts \Box $\;$ No Change \Box $\;$ Fewer Impacts \boxtimes

Yes 🖂 No 🗆

The 2005 EIS identified seven hazardous waste sites located within or adjacent to the study corridor, south of the Route 160 interchange. Upon review, it was determined that two of the seven sites are located within the footprint of the current preferred alignment. These sites include the Francis Satellite/Salvage Yard, the former site of approximately 300 salvage vehicles, and Pennington's Self-Storage, which formerly operated as a service station where gasoline was sold. Based on a review by a MoDOT Hazardous Waste Specialist, including a field visit to the former salvage yard, it was determined that neither of these sites pose any significant contamination risk. The other five hazardous waste sites identified in the 2005 EIS are located on parcels that would not be disturbed by construction of the preferred alignment.

MDNR's E-START interactive map, coupled with a review of aerial imagery and field reconnaissance, was used to determine if there are potential hazardous materials sites within the proposed project footprint that were not previously identified in the 2005 EIS. All of the records of hazardous substance investigation or cleanup sites and regulated storage tank facilities identified on the E-START map in the project vicinity were reviewed, and one new site adjacent to the project footprint was identified. JB's Store (also known as The Junction), an operating

gas station located at the southwest corner of the Route 67 and Route 142 intersection, was identified as a known petroleum facility with no known releases. Additionally, while E-START had no records on the property, a vacant gas station was observed near the southern terminus of the proposed alignment via aerial photos and site reconnaissance. In August 2020, soil sampling was conducted at both gas station sites to determine if contamination was present at either site. No evidence of contamination was detected at the vacant gas station site. However, samples taken at The Junction site did identify contaminants above Missouri Risk Based Corrective Action default target levels. This contamination is likely associated with a 2017 Petroleum Storage Tank Insurance Fund claim for a less than reportable release (below 50 gallons) at the fuel pumps. During the design phase of the project, MoDOT will undertake further investigation and potential remediation in association with The Junction site as necessary based upon the ultimate roadway design and property acquisition requirements.

In addition, during field reconnaissance of the project corridor conducted in May of 2020, a trash dump/salvage yard site was identified within the proposed project footprint. The site is located west of Route 67 and approximately 0.65 miles north of Route 142, on a parcel that also operates a golf cart shop. In July 2020, a MoDOT representative inspected the site and found that the majority of the waste and scrap material consists of golf cart frames; the vehicles appeared to be battery-operated only, with no fuel tanks. The landowners noted that they remove any batteries before stockpiling the carts in this area and are actively processing the frames for scrap material. Based on this information, it was determined that this site does not pose a concern for hazardous waste. It is expected that the landowners would complete cleanup of the site prior to MoDOT's acquisition of the property.

While several additional hazardous waste sites have been identified since the 2005 EIS, some originally identified sites no longer fall within the impacted area, and the relative clean-up effort for the corridor is anticipated to remain low based on estimated length of time and cost of effort. Consistent with the 2005 EIS, demolition of acquired structures would be completed in compliance with national standards for demolition and renovation (40 CFR 61.145), as well as Occupational Safety and Health Administration worker protection standards pertaining to asbestos removal and lead exposure. Any previously unknown hazardous waste sites that are found during project construction will be handled in accordance with Federal and State Laws and Regulations. Therefore, the 2005 EIS findings remain applicable for this resource.

16) Cultural and Historic Resources

Is there an impact to this resource? Change since 2005 EIS

More Impacts \Box No Change \boxtimes Fewer Impacts \Box

Yes 🛛 No 🗆

The Missouri State Historic Preservation Office (SHPO) Archaeology Viewer interactive map was reviewed to determine if any new cultural resource surveys and archaeological sites have been recorded since publication of the 2005 EIS. One new archaeological site (23BU1557) and associated survey was found. Site 23BU1557 was recorded by MoDOT as the Oakdale School in 2012 during a survey of two bridges. A small portion of the site was located within the MoDOT project area and the report authors suggested additional features could be located behind the structure, outside of their project area. No other new surveys were identified within the remaining Route 67 corridor, and all other sites and surveys corresponded with previously identified sites and surveys included in the 2005 EIS.

A cultural resources survey was conducted in the project area in June 2020 for the re-evaluation project. From this survey, one new archaeological site was recorded (23BU1593), one isolated find was recorded (IF1), and two previously recorded sites were revisited (23BU399, 23BU1557). Additionally, an architectural assessment of buildings over 50 years in age, not previously assessed, was completed. 23BU1593 and all of the architectural resources have been determined to be not eligible for listing on the National Register of Historic Places (NRHP) and the project will have no adverse effect on these resources. 23BU399 and 23BU1557 are potentially NRHP eligible and will require Phase II eligibility testing if they cannot be avoided.

At this time, MoDOT is pursuing design of the northernmost approximately two miles of the proposed Route 67 project in Butler County and anticipates design and construction on the remaining eight miles to be conducted in future project phases as funding becomes available. Sites 23BU399 and 23BU1557 are not located within the

current phase of the project. MoDOT communicated any possible ramifications to potentially NRHP eligible sites to SHPO in their Section 106 consultation letter which stated the following:

- archaeological sites 23BU399 and 23BU1557 are potentially NRHP eligible and will require Phase II eligibility testing if they cannot be avoided
- as the project design develops, MoDOT will notify SHPO
 - If the sites will be avoided and ask SHPO to concur that this undertaking will result in "no historic properties affected."
 - If the sites cannot be avoided, MoDOT will submit a Phase II eligibility testing report and ask SHPO to concur that this undertaking will result in "no adverse effect" or "adverse effect" to historic properties based upon the results of the Phase II testing.

In addition, MoDOT will designate each potentially eligible site as "Do Not Disturb" on the roadway construction plans to further protect the resource.

On September 8, 2020, the Missouri SHPO concurred with this finding that archaeological sites 23BU399 and 23BU1557 may be eligible for inclusion in the NRHP and should thus be treated as eligible until further assessed. Additionally, SHPO found that there has not been enough information provided regarding architectural resource AR-2 to determine its eligibility. This resource is located within the current design and construction phase of the project, however, it has been avoided and will not be impacted by construction. (Appendix B).

Mitigation and Environmental Commitments

As identified in the 2005 ROD for the 2005 Route 67 Final EIS – Madison, Wayne, and Butler Counties (MoDOT Job No. JOP0746), MoDOT agreed to the commitments and future actions during the design and construction phases of future improvements to Route 67. The agreed upon commitments, mitigation measures, and future actions from the 2005 ROD and 2005 Final EIS and this 2020 EIS Re-evaluation segment are summarized below. The applicability of the commitments and mitigation measures from the previous decisions as related to this re-evaluation of the 10-mile section in Butler County between U.S. Route 160/MO Route 158 to 2 miles north of the Arkansas state line are identified in parenthesis after each listing. Changes or updates to these commitments are shown below each commitment where applicable.

Decisions

1. The proposed roadway typical section consists of four 12-foot (3.6-meter) lanes with 10-foot (3-meter) shoulders and a depressed grass median of 52 feet (15.8 m). (2005 Final EIS and 2005 ROD) (Still applicable)

Relocations

- 1. If acquisition of only a portion of property leaves the owner with a remnant, MoDOT will determine whether the remnant maintains utility or value to the present owner. If MoDOT determines that the portion of property is an uneconomic remnant, they will offer to acquire the uneconomic remnant along with the portion of property needed for the project. The owner may decline MoDOT's offer to purchase the uneconomic remnant. (2005 Final EIS) (Still applicable)
- 2. Acquisition and relocation for the project will be accomplished in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and amendments (Act). (2005 Final EIS) (Still applicable)

Wetlands

- The total jurisdictional wetlands impacted by the construction of the Preferred Alternative is approximately 80.1 acres. Efforts will be made during the design phase to minimize hydrologic impacts to remaining wetlands. Regional impacts to groundwater recharge or groundwater quality are not expected, but localized impacts are possible. (2005 Final EIS and 2005 ROD) (Still applicable)
 - 46.81 acres of delineated wetlands are located in the current re-evaluation segment. (2020 EIS Re-evaluation)

- 2. The Preferred Alternative will be located in close proximity to several ecologically sensitive/or potentially unique areas: Cherokee Pass Springs, Twelve mile Springs, Self Fen, Geronimo Spring, Alexander Fen, Bounds Fen, Box Spring, Cane Creek Slough, and forested dune/swale wetlands. The Preferred Alternative directly impacts most of these resources. The design phase will evaluate avoidance and minimization measures at these areas as well as engineering controls to reduce indirect impacts to these sensitive resources. (2005 Final EIS and 2005 ROD) (Not applicable to the 2020 re-evaluation because these areas are outside of the current project area)
- 3. Monitoring of the wetland mitigation areas will be implemented upon completion of the wetland creation and restoration areas as part of the wetland permitting process. Monitoring activities will be identified in the final mitigation plan. (2005 Final EIS and 2005 ROD) (Not applicable)
 - Completed for Route 67 improvements north of the current re-evaluation project area.
- 4. If mitigation is required, MoDOT will mitigate stream and wetland impacts through an in-lieu fee provider. To the extent feasible, MoDOT will pursue wetland mitigation through the MoDOT Bootheel Regional Mitigation Bank. If capacity is not available within this mitigation bank, wetland impacts will be mitigated at a MoDOT mitigation bank outside the service area at a higher ratio, or through the purchase of credits from an outside mitigation bank in the service area. (2020 EIS Re-evaluation)

Floodplains

- 1. The Preferred Alternative will involve a total of 50 floodplain crossings. The total potential area impact to floodplains is approximately 390.9 acres. There are two FEMA regulatory floodways that are associated with the Black River and Cane Creek in Butler County. Hydraulic studies will be completed during the design phase for the proposed sizing of all bridges and culverts. Within the 100-year floodplain, bridges and culverts will be designed such that the cross sectional area available for flood flow through structure openings is sufficiently large to result in upstream flood level increase of not more than 1 foot within the floodways of the Black River and Cane Creek. These bridges will be designed so that there will be no increase in flood levels within the floodway during the occurrence of the base (100 year) flood discharge. (2005 Final EIS) (Not applicable to the 2020 re-evaluation because the Black River and Cane Creek are outside of the current project area)
- 2. The crossings of all regulated floodplains will be designed and constructed in compliance with applicable floodplain regulations, including Executive Order 11988. There will be no increases in base flood elevations attributable to the implementation of the proposed roadway improvements. During the design process, a detailed hydraulic analysis of the flows and water surface elevations will be made in accordance with the requirements of FEMA and USACE to ensure the absence of any encroachments upon regulatory floodways as well as to avoid any adverse impacts. (2005 Final EIS and 2005 ROD) (Still applicable)
 - Applicable to crossings of the Harviell Ditch, Hart Ditch, Neelyville Ditch, and several unnamed tributaries or drainageways within the 2020 re-evaluation project area. (2020 EIS Re-evaluation)
- During the design process, a detailed hydraulic analysis will be completed in accordance with the requirements of FEMA and the USACE, to prevent a rise in flood elevation and avoid adverse impacts. MoDOT will obtain a floodplain development permit from SEMA prior to FHWA authorization for construction within the 100-year floodplain. (2020 EIS Re-evaluation)

Streams

 Proposed jurisdictional stream mitigation for relocated streams will be performed in accordance with the Missouri Aquatic Resource Mitigation Guidelines (MDNR, 1999) and in coordination with the USACE and MDNR. Replacing relocated streams with, to the extent practicable, similar stream systems to reduce the noted impacts will be considered during the design phase. (2005 Final EIS) (Still applicable through the use of the Missouri Stream Mitigation Method)

- All construction activities will comply with the existing rules and regulations of governmental agencies having jurisdiction over streams and water supplies in the area. To prevent or minimize adverse impacts to streams, water courses, lakes, ponds, or other water impoundments within and adjacent to the project area, MoDOT's Pollution Prevention Plan will be implemented. (2005 Final EIS and 2005 ROD) (Still applicable)
 - Sediment and erosion control BMPs will be utilized during construction and disturbed areas will be seeded following construction. (2020 EIS Re-evaluation)
- 3. The proposed action will result in both short and long term water quality impacts. Construction impacts include increases in sedimentation and turbidity levels of surface water resources. Long-term impacts include direct loss of aquatic habitat and changes to hydrology. The proposed right of way for the preferred alternate will cross 32 perennial and 19 intermittent jurisdictional stream channels that will require relocation due to the Preferred Alternative. (2005 Final EIS and 2005 ROD) (Still applicable)
 - 19 streams, for which USACE jurisdiction has not yet been determined, are located in the current re-evaluation segment. (2020 EIS Re-evaluation)

Groundwater

1. MoDOT will appropriately close and seal any wells that cannot be avoided by the project to prevent any contamination of groundwater. In addition, as noted in the 2005 EIS, if private wells are affected by dewatering procedures during construction, landowners will be compensated for the temporary interruption in well usage. Since some of the private wells may be used primarily for irrigation purposes, the construction procedures that will affect well usage would be scheduled during off-season periods when water usage is significantly reduced. (2020 EIS Re-evaluation)

Air Quality

- 1. Based on a cooperative agreement between FHWA, MoDOT, and MDNR (FHWA, 1988), an air quality analysis should be performed if the ADT exceeds 54,000 in the year of construction and 72,700 vehicles in the twentieth year following project construction (i.e., design year). (2005 Final EIS and 2005 ROD) (Not applicable)
 - As the project corridor is not within an area that is currently designated nonattainment or maintenance and is outside the jurisdiction of a Metropolitan Planning Organization, all transportation conformity requirements under the Clean Air Act have been satisfied. (2020 EIS Re-evaluation)

Geology

- 1. A geotechnical study to determine soil and bedrock physical properties will be conducted during the design phase. This information, along with design standards to reduce earthquake impact potential, will be used in the final design of the highway. (2005 Final EIS) (Still applicable)
- To minimize potential soil erosion during construction activities, MoDOT's Sediment and Erosion Control Program would be followed and measures described in the approved Pollution Prevention Plan, such as the utilization of berms, slope drains, ditch checks, sediment basins, silt fences, rapid seeding and mulching, and other erosion control devices or methods would be implemented as needed. (2020 EIS Re-evaluation)

Threatened and Endangered Species

 Three federally listed species may have some potential to be affected by the Preferred Alternative. The Indiana bat and Gray bat were identified within 1 mile of the Preferred Alternative on USACE property. (2005 Final EIS) (Partially applicable)

- The project area for the 2020 re-evaluation was surveyed for the presence/absence of protected bat species, including the Indiana bat and northern long eared bat. The survey indicated presence of only the gray bat. USFWS has concurred with the determination of "not likely to adversely affect the gray bat." (2020 EIS Re-evaluation)
- Because the presence/absence survey for T&E bat species is valid for 5 years from the date of the survey, if the proposed project is not completed prior to June 2025, or if new species are provided protection under the ESA for the project area, MoDOT may conduct additional surveys for T&E species in the project area. (2020 EIS Re-evaluation)
- 2. The federally endangered Hine's emerald dragonfly was not identified within the study corridor, several fens with suitable habitat are located adjacent to the Preferred Alternative. (2005 Final EIS) (Not applicable because no fens are located in the 2020 re-evaluation project area)
- 3. Two state listed plant species (corkwood and water oak) will be directly impacted in Butler County. (2005 Final EIS) (No action required)
 - Seven state-listed species of concern, including corkwood and water oak, were observed within the current re-evaluation segment. However, these species are protected as biological diversity elements only on land owned by the MDC. As no MDC land will be impacted by the proposed project, MDC does not recommend any additional conservation measures. (2020 EIS Reevaluation)
- 4. Two state listed mussels (western fanshell and Ouachita kidneyshell) were found immediately downstream of the Black River crossing and, therefore, have the potential to be directly affected by the Preferred Alternate. (2005 Final EIS) (Not applicable because the Black River crossing is outside the current re-evaluation project area)
- 5. A number of state listed fish and the state listed Big Creek crayfish have also been indirectly impacted by the Preferred Alternative. (2005 Final EIS) (Not applicable because these species have not been identified in the current re-evaluation project area)
- 6. After completing the design phase of the project and prior to construction, MoDOT will reinitiate informal consultation with the USFWS to discuss potential construction impacts to any federally threatened or endangered species. Additionally, MoDOT will coordinate with the USFWS and MDC to resurvey and re-locate listed mussel species as needed and appropriate prior to construction. (2005 Final EIS and 2005 ROD) (Not applicable)
 - MoDOT has completed consultation with the USFWS for the current re-evaluation project area.
 See #1 above. Additionally, no listed mussel species have been identified in the project area.
- 7. Twenty-one R9 animal species and 49 R9 plant species potentially occur within the study corridor. No R9 species were located within the Preferred Alternative on MTNF property. One R9 plant species, orange coneflower was observed at one location within the study corridor on private land. This location will not be impacted by the Preferred Alternative. (2005 Final EIS and 2005 ROD) (Not applicable because these plant species have not been identified in the current re-evaluation project area)

Habitats

- 1. Direct impacts to forested land as a result of the construction of the Preferred Alternative would result in the conversion of 1,449.9 acres. The right of way for the Preferred Alternative has the potential to convert a total of 395.6 acres of agricultural land. (2005 Final EIS and 2005 ROD) (No action required)
 - Total forested land that would be impacted within the current re-evaluation project area is approximately 50 acres. (2020 EIS Re-evaluation)

Section 4(f)

 Section 4(f) resources that will be affected by the Preferred Alternative include Old Greenville Site, Greenville Recreation Area, the St. Francis River Bridge, North Greenville Recreational Area/Greenville ballpark, and the Ozark Trail. (2005 Final EIS and 2005 ROD) (Not applicable because these 4(f) resources are outside of the current re-evaluation project area)

Cultural Resources

- No architectural resources within the Area of Potential Effect (APE) [100 feet beyond the right of way for the Preferred Alternative] are currently listed on the NRHP. Four architectural resources within the APE for the Preferred Alternative are recommended to be eligible for listing on the NRHP. The SHPO has concurred that there will be no adverse effect to three of these structures (buildings 78a, 317a, and 317b). The fourth architectural resource, the St. Francis River Bridge, will be removed from the Preferred Alternative. Physical destruction of this bridge is considered an adverse effect when applying the requirements of Section 106 of the National Historic Preservation Act. (2005 ROD and 2005 Final EIS) (Not applicable because these architectural resources are outside of the current re-evaluation project area)
- 2. The right of way for the Preferred Alternative will affect 44 archaeological resources (the entire site or portion of the site). One of these sites, site 23WE637 Old Greenville National Historic Site (Old Greenville) is listed on the NRHP. Approximately 2.0 acres of new right of way will be required from Old Greenville and was included in the Final Section 4(f) Evaluation. (2005 ROD and Final EIS) (Not applicable because Old Greenville is located outside of the current re-evaluation project area)
- 3. Twelve other archaeological sites may be significant within the context of history or prehistory and may meet the eligibility requirements for listing on the NRHP. A Phase II investigation is recommended for these sites to assess their eligibility status. The remaining 31 sites have been evaluated as ineligible for the NRHP and no further work is recommended for these sites. Some areas have not been surveyed (right of way entry denied). The SHPO has reserved their final comment on archaeological resources until those areas have been surveyed and additional investigations have been completed. (2005 ROD and 2005 Final EIS) (Not applicable as a Phase I cultural resources survey was conducted to determine potential eligibility of sites within the current re-evaluation project areas; see #5 below)
- 4. A project-specific MOA between FHWA and the Missouri SHPO has been developed. The MOA provides for the development of a mitigation plan for the adverse effect to the St. Francis River Bridge, the development of a mitigation plan for impacts to Old Greenville National Historic Site, additional phase II testing, a Phase I survey for those properties where right of entry was denied, evaluation of any sites that may be present, and provides a framework for mitigation of impacts to any NRHP eligible resources that cannot be avoided. (2005 Final and 2005 ROD EIS) (Not applicable as these resources are outside of the current re-evaluation project area and the stipulations of this MOA have been complied with.)
- 5. MoDOT will designate each potentially eligible site as "Do Not Disturb" on the roadway construction plans to further protect the resource. (2020 EIS Re-evaluation)
- During the preliminary design phase, if it is determined that archaeological sites 23BU399 and 23BU1557 and architectural resource AR-2 would be impacted by the proposed improvements to Route 67, MoDOT will conduct further cultural resources investigations to determine if these sites are eligible for inclusion in the NRHP. (2020 EIS Re-evaluation)

Hazardous Materials and Waste Management

1. During the design phase of this project, MoDOT will undertake further investigation and potential remediation in association with The Junction site as necessary based upon the ultimate roadway design and property acquisition requirements. (2020 EIS Re-evaluation)

 Any previously unknown hazardous waste sites that are found by MoDOT or the Contractor during project construction will be handled in accordance with Federal and State Laws and Regulations. (2020 EIS Re-evaluation)

Regulatory Compliance

- 1. A Department of the Army, Section 404 permit will be required for the discharge of dredge and fill material in waters of the United States. (2005 Final EIS and 2005 ROD) (Still applicable)
- 2. A Section 402 (CWA), NPDES permit for storm water discharges from construction sites will be required from MDNR. (2005 EIS and 2005 ROD) (Still applicable)
- 3. A floodplain development permit will be required from SEMA prior to construction and development activities. (2005 Final EIS and 2005 ROD) (Still applicable)
- 4. For the regulatory floodway associated with Black River and Cane Creek in Butler County, a no-rise certificate will be required prior to the request for a floodplain development permit. (2005 Final EIS and 2005 ROD) (Not applicable because the Black River and Cane Creek are outside the current re-evaluation project area)
- 5. An MOA is required between FHWA and SHPO to meet the responsibilities under Section 106 of the National Historic Preservation Act. (2005 Final EIS and 2005 ROD) (Not applicable as this applies to resources that are outside of the current re-evaluation project area and the stipulations of this MOA have been complied with)

Construction

- 1. Following the construction phase, right of ways will be planted using a mix of native grass and forb species that will enhance soil stabilization and provide benefit to local wildlife. The revegetation of slopes and cut areas will be accomplished in such a manner as to be sensitive to the time of construction activities, the time of implementing erosion control measures, and the methods by which native vegetation species are reestablished. (2005 Final EIS and 2005 ROD) (Still applicable)
- 2. Land disturbance sites will be inspected on a regular schedule and within a reasonable time period (not to exceed 72 hours) following heavy rains. Regularly scheduled inspections shall be a minimum of once a week. (2005 Final EIS and 2005 ROD) (Still applicable, but overridden by current policy stated below)
 - Land Disturbance sites will be inspected by MoDOT on a regular schedule, either once every seven or fourteen days. (2020 EIS Re-evaluation)
 - MoDOT will conduct Inspections within 48 hours of a rain event that produces runoff that meets or exceeds the local 2-year 24-hour storm runoff frequency when 7-day inspections are conducted. If 14-day inspections are conducted, post runoff inspections by MoDOT will occur within 24 hours of a rain event producing a quarter of an inch of rain or more per 24-hour period. (2020 EIS Re-evaluation)
- 3. A traffic management plan (TMP) will be developed and implemented during the project's engineering phase to ensure reasonable traffic flow during construction. To minimize delays to emergency vehicles, MoDOT will coordinate construction activities, sequencing, and traffic management plans with the local fire, police, and emergency rescue services. (2005 Final EIS and 2005 ROD)
 - MoDOT will ensure a TMP is included in the construction contract to respond to temporary disruptions in travel patterns and travel time. Once developed, MoDOT will assess the impacts of the TMP within the framework of NEPA. If the TMP could result in impacts that were not previously reviewed under NEPA—such as new or additional road closures, access changes, or other circumstances that could cause new or modified impacts to resources, MoDOT's environmental section will review these impacts prior to implementing the TMP. (2020 EIS Reevaluation)
- 4. Erosion control measures will be implemented after clearing and construction activities have been completed. (2005 Final EIS) (still applicable but overridden by current policy stated below)
 - MoDOT's Sediment and Erosion Control Program would be followed and measures described in the approved Pollution Prevention Plan, such as the utilization of berms, slope drains, ditch checks, sediment basins, silt fences, rapid seeding and mulching, and other erosion control devices or methods would be implemented as needed. (2020 EIS Re-evaluation)

Future Actions

 If there are changes in the project scope, project limits, existing conditions, pertinent regulations, or environmental commitments, MoDOT must re-evaluate potential impacts prior to implementation. Environmental commitments are not subject to change without prior written approval from FHWA. (2020 EIS Re-evaluation)

Table 7. U.S. Route 67 EIS Re-evaluation Summary Impact TableComparison of Impacts from the 2005 EIS to the Current Project

	Impact Findings			
		Current EIS 2020	Change Since	
Resource Evaluated	2005 EIS	Re-evaluation	2005 EIS	Re-evaluation Comments
Socioeconomics	Minor impacts	Minor impacts	No change	Findings remain consistent with 2005 EIS, with minor
				impacts related to loss of property subject to property
				taxes, changes in employment, and construction costs.
				Social setting and development have remained largely
				unchanged.
Land Use	Minor impacts	Minor impacts	No change	No substantial land use changes have occurred; impacts to
				land use within the project corridor would remain
				consistent with the determinations of the 2005 EIS.
Displacements	38 total	32 total	Fewer impacts	The current proposed alignment would result in fewer
	displacements	displacements		displacements compared to those identified in the 2005
				EIS. One notable difference is the additional displacement
				of the Fellowship Southern Baptist Church of Neelyville due
				to a proposed alignment change.
Environmental Justice	No impact	No impact	No change	Project activities would not result in disproportionately high
				and adverse effects to environmental justice populations.
Soils and Geology	Minor impacts	Minor impacts	No change	Impacts to soils during construction would be minor and
				minimized through implementation of sediment and
				erosion control BMPs, consistent with the findings of the
				2005 EIS.
Surface Waters	34.63 acres	46.81 acres	More impacts	Potential surface water impacts increased compared to the
	wetland	wetland impacts /		2005 EIS, in part due to the additional right of way added to
	impacts / 1,620	11,316 linear feet		the preferred alignment, as well as quantification of
	linear feet	stream impacts		impacts to unnamed tributaries. USACE will provide final
	stream impacts			jurisdictional determinations and all permitting
				requirements will be fulfilled.
Groundwater	No impact	No impact	No change	No change from 2005 EIS; any impacted water wells would
				be appropriately closed and sealed and no impacts to
				groundwater quality are anticipated.

	Impact Findings			
		Current EIS 2020	Change Since	
Resource Evaluated	2005 EIS	Re-evaluation	2005 EIS	Re-evaluation Comments
Floodplains	191.6 acres	243.5 acres	More impacts	Impacts to the 100-year floodplain increased due to updates to the FEMA FIRM and the additional right of way added to the preferred alignment. However, the proposed construction would continue to be designed and permitted so as to minimize loss of floodplain storage and avoid any adverse impacts.
Public Lands	No impact	No impact	No change	No change from 2005 EIS; the project would not result in a use under Section 4(f) and there are no facilities subject to Section 6(f) within the proposed project corridor.
Prime Farmland	Form NRCS- CPA-106 conversion impact rating of 118; no avoidance and/or mitigation measures required	New Form NRCS- CPA-106 not necessary; no avoidance and/or mitigation measures required	More impacts	Acreage impacted within the current project corridor likely slightly greater than the originally proposed alignment due to the additional right of way. However, prime farmland soils are abundant in the region and the NRCS did not require submittal of a new Form NRCS-CPA-106. Determinations from 2005 EIS remain applicable.
Visual Quality	Minor impacts	Minor impacts	No change	No change from 2005 EIS; Proposed modifications to the original alignment would not result in significant changes to the viewshed, and there has been no notable development resulting in new visually sensitive receptors.
Air Quality	No impact	No impact	No change	No change from 2005 EIS; all transportation conformity requirements under the Clean Air Act have been satisfied.
Noise	Minimal impacts due to rural nature; need for abatement undetermined	3 impacted receptors; abatement measures not feasible	More impacts	Projected traffic noise levels would be slightly higher than those predicted in the 2005 EIS due to increased design year traffic volumes. However, impacted receptors would remain minimal and noise abatement measures would not be necessary.

	Impact Findings			
		Current EIS 2020	Change Since	
Resource Evaluated	2005 EIS	Re-evaluation	2005 EIS	Re-evaluation Comments
Threatened and	Impacts	May affect, not	No change	Suitable habitat for federally listed mussel species (Curtis'
Endangered Species	undetermined;	likely to adversely		pearlymussel and pink mucket) was not present and
	MoDOT to	affect gray bats;		acoustic surveys did not provide evidence of Indiana or
	initiate	no effect on other		northern long-eared bats in the project area. Acoustic
	consultation	T&E species		analysis did identify two confirmed gray bat calls. USFWS
	prior to			concurred with the finding of "Not likely to adversely
	construction			affect" the gray bat.
Hazardous Materials	7 potential	4 potential	Fewer impacts	Four potentially hazardous sites were identified that could
and Waste	hazardous	hazardous waste		be impacted by the proposed alignment, and
Management	waste sites	sites; testing		contamination concerns were ruled out at all but one of
	within or	determined		these sites. MoDOT will undertake further investigation and
	adjacent to	presence of		potential remediation in association with The Junction site
	corridor	contamination at		as necessary based upon the ultimate roadway design and
		only one site		property acquisition requirements.
Cultural and Historic	1 resource	3 resources	No change	In addition to archaeological site 23BU399, which was
Resources	potentially	potentially NRHP		identified in the 2005 EIS, one new archaeological site,
	NRHP eligible	eligible (23BU399,		23BU1557, was recorded within the project area. As these
	(23BU399);	23BU1557, and		sites were determined potentially eligible for the NRHP,
	would require	AR-2); will require		they will require Phase II eligibility testing if they cannot be
	Phase II	further		avoided. Additionally, SHPO found that there has not been
	eligibility	investigation if not		enough information provided regarding architectural
	testing if not	avoided		resource AR-2 to determine its eligibility. If impacted,
	avoided			further investigation of AR-2 would be required.

7.0 Re-evaluation Conclusion

Most of the impacts to socioeconomic and environmental resources resulting from the proposed project would remain similar to the impacts identified in the 2005 EIS. The social and environmental setting along the current re-evaluation segment has remained relatively unchanged and the minor modifications to the preferred alternative would not result in significantly greater impacts than those identified in the 2005 EIS. While the proposed project may result in wetland, stream, floodplain, and archaeological impacts, these impacts would be permitted and/or mitigated as required and would be generally consistent with impact findings for this segment of Route 67 evaluated in the 2005 EIS.

This re-evaluation document demonstrates that the 2005 EIS and ROD for Route 67 remain valid. The proposed project continues to meet the purpose and need identified in the 2005 EIS. Therefore, a supplemental study of the 2005 EIS is not necessary for the current project.

U.S. Route 67 Environmental Impact Statement Re-evaluation Butler County, Missouri MoDOT Project J9P3661

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.

Date of Approval

For FHWA

Title

Appendix A

Route 67 Preferred Alternative Technical Memorandum





Prepared for:	Wood Env City of Pop	d Environment and Infrastructure and of Poplar Bluff			
	LOCATION:	US Route 160/MO Route 158 to 2 miles north of Arkansas state line			
	PREPARED BY:	Quigg Engineering Inc.			
	DATE:	May 27, 2020			

QUIGG ENGINEERING INC

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1.0 Introduction

In August 2019, the voters of the city of Poplar Bluff, Missouri overwhelmingly approved a ballot measure to fund the expansion of US Route 67 (Route 67) south of Poplar Bluff to the Arkansas state line, which supports the planned expansion of future Interstate 57 (I-57). This project includes upgrading approximately ten miles of Route 67 from two lanes to a four-lane, fully-divided controlled access highway on a new alignment from the Route 160/158 interchange to two miles north of the Arkansas state line near County Road 274 in Butler County.

The future expansion of Route 67 in Butler County requires a re-evaluation of the "*Environmental Impact Statement, Route 67, Madison, Wayne and Butler Counties, Missouri*", (Final EIS) which was approved in 2005. The Final EIS evaluated the environmental impacts associated with upgrading 85 miles of Route 67 to a four-lane, access controlled, highway from just south of Fredericktown in Madison County to two miles north of the Arkansas line in Butler County. Since the Final EIS was completed, the Missouri Department of Transportation has constructed the planned upgrades of Route 67 in Madison, Wayne, and partially in Butler County. The remaining southernmost 10 miles of the Route 67 corridor studied in the Final EIS have not been upgraded and still remain as a two-lane highway. Therefore, this re-evaluation will focus only on these last ten miles of Route 67 in Butler County, from the Route 160/158 interchange to two miles north of the Arkansas state line near County Road (CR) 274 as this is the last portion of Route 67 in the Final EIS that is still only two lanes wide.

This location study technical memorandum has been prepared in support of the environmental reevaluation, which is required because major steps to advance the project (for example, authority to acquire a significant portion of right-of-way or to undertake final design) have not occurred within three years after the approval of the Final EIS (23 CFR 771.129(b)).

This technical memorandum reviews the original footprint of the preferred alternative in the Final EIS for the 10-mile segment described above and re-examines that footprint for adequacy given current design criteria and policies, changes in environmental conditions, and potential changes in the proposed action. In the Final EIS, multiple alternates were considered at six separate locations along the Route 67 corridor, with the remaining areas in between these six locations consisting of just one build alternate which was generally adjacent to the existing right of way. This breakdown of locations was done to better manage the complexities of the evaluation of all of the alternates over the entire length of the 85-mile corridor. These alternates were designated by letter from Alternate A at the northern terminus in Madison County to Alternate W at the southern terminus in Butler County. Within the last and southernmost 10 miles of the Route 67 corridor in the Final EIS, two alternates were studied at the Route 160/158 interchange (Alternate R and Alternate S) and three were studied at the Route 142 interchange (Alternate U, Alternate U' and Alternate V). The northern terminus for this re-evaluation is the intersection of the southern terminus is the same as that in the Final EIS.

2.0 Original Preferred Alternative

The alternates making up the original preferred alternative in the Final EIS are described in the subsections below and shown in Figure 1 (consisting of three panels). Only the alternates that were included in the original preferred alternative are described in detail herein. Alternates that were eliminated in the Final EIS, Alternates S, U, and V, were not considered in this technical memorandum.

2.1 Alternate R

The northern terminus in this re-evaluation is roughly represented in the Final EIS as Alternate R. In the Final EIS, Alternate R was compared to Alternate S with Alternate R being selected as the preferred alternative at this location. Alternate R is 2.76 miles long and begins just north of Route 158 and east of what was Route 67 (now Route C) and then proceeds 2,740 feet southwesterly through upland hills to a point along Route 158 approximately 1,350 feet east of Route 67. Alternate R also includes a proposed interchange at Route 160/158 (which has since been partially constructed). As described in the Final EIS, the interchange at Route 160/158 indicated the southbound on-ramp as a loop ramp and the northbound on-ramp as a direct ramp to Route 67.

Under Alternate R, Route 67 lies just east of the Butler County Water District #1 water tower, which is on the south side of Route 158. Alternate R crosses to the west side of Route 67 approximately 2,150 feet south of Route 160 and it then lies adjacent to the west side of existing Route 67 for approximately 3,280 feet to CR 360. In this section, existing Route 67 is proposed as a service road between the point where Alternate R crosses existing Route 67 and CR 360.

At CR 360, Alternate R enters bottomland floodplain and turns southwesterly away from existing Route 67 for approximately 2,790 feet to avoid the Fellowship Southern Baptist Church of Neelyville, which lies just to the west of existing Route 67. Alternate R crosses the right of way of an old railroad grade approximately 825 feet west of existing Route 67. From there, Alternate R proceeds southeasterly to CR 338, where it then becomes adjacent to and west of existing Route 67.

2.2 Alternate T

Alternate T was a stand-alone alternative in the Final EIS, meaning there were no other alternatives developed in this area for comparison. It begins at the southern end of Alternate R just south of CR 338 and just west of and adjacent to existing Route 67. It remains adjacent to the west side of Route 67 for its entire length, which is approximately 3.9 miles. This alternative crosses Epps Ditch, Harviell Ditch, and Hart Ditch and lies entirely in bottomland floodplain. Under this alternative, existing Route 67 is converted to a service road and provides access to adjacent properties to the east. This alternative also includes a grade-separated crossing at Route MM to provide east-to-west access across the proposed highway and ends approximately one mile south of Route MM.

2.3 Alternate U'

From the southern end of Alternate T to the south, the Final EIS considered three alternatives at Neelyville: Alternate U; Alternate U'; and Alternate V. In the Final EIS, Alternate U' was selected as the preferred alternative at this location. Alternate U' begins at the southern end of Alternate T and proceeds southwesterly to a point approximately 765 feet west of existing Route 67 and 2,050 feet north of Route 142. From there, the alternative proceeds southerly and intersects Route 142 at a proposed diamond interchange. The placement of this interchange was strategic in the Final EIS because it avoids the Wilbourn Site, a known prehistoric site further west of Route 67.

Alternate U' then continues southerly between the Corkwood Conservation Area and existing Route 67. A grade-separated crossing is proposed at CR 270. South of CR 270, Alternate U' crosses and severs existing Route 67 and becomes adjacent to the east side of the existing roadway. North of the point where Alternate U' severs existing Route 67, existing Route 67 would become a local road to the east of Alternate U'. South of the this point, existing Route 67 would become a service road west of Alternate U'.

2.4 Alternate W

Alternate W is also a stand-alone alternative in the Final EIS. It is the southern-most section of Route 67 and begins at the southern end of Alternate U' south of CR 270. It is immediately adjacent to the east side of existing Route 67 its entire length, which is approximately one mile.







3.0 Alignment Focus Areas

This technical memo focuses on three locations in the Route 67 study area that merit additional consideration for alignment or corridor modifications. These are:

- 1. The Route 160/158 interchange;
- 2. The area around the Fellowship Southern Baptist Church of Neelyville; and
- 3. The Route 142 interchange.

The reasons for the modifications are described below.

3.1 Route 160/158 Interchange

The Route 160/158 interchange at Route 67, constructed between 2012 and 2014, is located within Alternate R of the Final EIS (see Figure 2). On the north side of the interchange, the alignment of Route 67 was modified from the Final EIS Alternate R location in that it was constructed further south of existing Route 67 instead of immediately adjacent to it. This shift to the south leaves a portion of Alternate R from the Final EIS that is no longer applicable to this re-evaluation and this is shown as a dashed red line in Figure 2.

The Final EIS proposed a direct northbound on-ramp from Route 158 to Route 67. This was modified in construction and a loop ramp on the south side of Route 158 was constructed instead. The southbound on-ramp in the Final EIS was proposed as a loop ramp on the north side of Route 158. This was constructed; however, it is in a slightly different configuration from the proposed Final EIS layout. The bridge that carries Route 67 over Route 158 is four lanes wide; however, the outer lanes in both directions serve as acceleration lanes for the northbound and southbound on-ramp traffic, which makes the interchange deficient in meeting interstate standards, which is a four-lane divided highway with fully-controlled access. Construction on Route 67 south of the Route 160/158 interchange stopped approximately 2,260 feet south of Route V.

In order to meet interstate standards, this interchange needs to be modified to provide four through lanes through the interchange. Upon review of the Final EIS footprint for Alternate R at the Route 160/158 interchange, the study team has expanded the environmental footprint to allow for flexibility in the design of interchange modifications to address the deficiencies. Therefore, this re-evaluation includes a slightly expanded environmental footprint for Alternate R at the Route 2).

3.2 Fellowship Southern Baptist Church of Neelyville

As described in Section 2.1, Alternate R included a shift of the proposed Route 67 alignment to the west to avoid the Fellowship Southern Baptist Church of Neelyville (see Figure 3), which was newly constructed at the time of the Final EIS.

The re-evaluation study team reviewed this area and developed a second alternative for Route 67 which removes the western shift and straightens out the alignment. The new modified Alternate R lies adjacent to the west right of way of existing Route 67 and is consistent with the alignment to the north and south of this section. Impacts associated with the straightened alignment would differ from what was presented in the Final EIS; therefore, the re-evaluation study team conducted an evaluation of the two alternatives - Alternate R and Modified Alternate R - which is presented in Section 4.0.





3.3 Route 142 Interchange

The Route 142 interchange falls within Alternate U' (see Figure 4). As presented in Section 2.3, the placement of the Route 142 interchange is situated between a known archeological site (Wilbourn Site) and the Corkwood Conservation Area on the west, and existing Route 67 on the east. Neelyville Ditch flows through the proposed interchange footprint, which would require several structures to span the creek.

For this re-evaluation, the study team recommends expanding the environmental footprint at the proposed Route 142 interchange to allow for flexibility in the design of interchange modifications. By having additional flexibility at this location, the final design team would have options to modify the layout of the interchange. The expanded footprint offers an opportunity to minimize or avoid impacts to Neelyville Ditch and to provide greater separation between the proposed interchange and the Wilbourn Site and Corkwood Conservation Area.

3.4 Other Areas Evaluated

The re-evaluation study team reviewed other areas throughout the preferred alternative to determine access needs for properties impacted by the new highway. This review resulted in three additional areas along the preferred alternative where an expanded environmental footprint is needed to account for frontage roads that are required for access to adjacent properties. These were not included in the Final EIS. These areas are:

- Alternate R a frontage road is proposed from CR 338 to a point approximately 0.5 miles north on the west side of the alternative;
- Alternate R an overpass is proposed at CR 338 to provide connectivity between frontage roads on either side of proposed Route 67
- Alternate U' a frontage road is proposed from Route 142 to a point approximately 1.3 miles north on the west side of the alternative.

4.0 Evaluation of Alternatives at Fellowship Southern Baptist Church of Neelyville

An alternative evaluation methodology was developed and used to compare the two alternatives at the Fellowship Southern Baptist Church of Neelyville (Alternate R and Modified Alternate R). The criteria used for this evaluation is based off of the alternative analysis evaluation criteria used in the Final EIS and were used to facilitate a quantitative evaluation of these two alternatives. Specifically, the criteria include:

- Traffic/Transportation including length of alignment and number of bridges.
- Natural resources including effects on habitats, prime farmland, floodplains, surface water, threatened and endangered (T&E) species, and wetlands.
- Agricultural resources including effects on agricultural land and agricultural operations.
- Socioeconomic resources including impacts to land uses and residential and agricultural displacements.
- Cultural resources including effects on archeological sites.
- Other elements including impacts during construction and cost.

Each of these criteria were broken into sub-criteria (indicators) to be used in quantifying the effects of each alternative on the resource. The data gathered for each indicator was assembled from desktop sources only and is presented in Figure 3. Field work will be conducted later in the re-evaluation project to confirm resource impacts. A summary of the impacts of the two corridors is presented in Table 1 below.



	Ν	Legend			
	Λ	Stream / Ditch		Addl. Env. Fo	otprint
\sim		Final EIS Alternative		Corkwood CA	Ą
	V	Alternate U'			
0	500	1,000	1,5	500	2,000
					Feet



Figure 4 Route 142 Interchange Additional Environmental Footprint

Indicator	Original Alternate R (From Final EIS)	Modified Alternate R (Straight Along Exist. Rte. 67)
Traffic / Transportation	•	
Length (miles)	1.15	1.11
Number of bridges	0	0
Number of horizontal curves	3	0
Natural Resources		
Number of stream crossings	0	0
Area through NWI mapped wetlands (acres) ¹	3.59	0.47
Area through NWI mapped ponds/open water (acres)	2.39	2.18
Area through floodplain (acres)	40.41	39.68
T&E species habitat affected (acres of tree clearing)	11.31	6.14
Area through prime farmland (acres)	14.96	12.21
Agricultural Resources		
Area through agricultural land (acres) ²	22.68	11.62
Number of farm building acquisitions	1	1
Agricultural properties affected	4	4
Agricultural properties bisected	3	0
Socioeconomic Resources		
Area through residential land (acres)	5.92	8.69
Number of residential displacements	5	4
Number of churches displaced	0	1
Total new right of way (acres)	45.59	45.0
Cultural Resources		
Potential for impact to historic sites	Low	Low
Other Elements		
Impacts during construction	Relatively low	Relatively low
Cost (\$ millions)	4.306	4.156

	Table 1: Summary of Im	pacts – Alternate R at Fellow	ship Southern Baptis	st Church of Neelyville
--	------------------------	-------------------------------	----------------------	-------------------------

¹National Wetlands Inventory

²National Land Cover Database designated cultivated crops or hay/pasture

Based on the information presented in Table 1, a qualitative evaluation was performed between these two alternatives. The No-Build alternative was not revisited here as it had already been eliminated from consideration in the Final EIS because it does not meet the Purpose and Need of the project.

The qualitative evaluation of the two alternative corridors is presented in Table. 2.

Alternative Corridor	Advantages	Disadvantages
	Previously approved in Final EIS	Three horizontal curves
	No church displacements	One additional residential
		displacement
		Bisects three agricultural
Alternate P (Final FIS)		properties
		Greater impacts to agricultural
		land
		Greater impacts to wetlands
		Greater areas of habitat
		impacted (more tree clearing)
	No horizontal curves	Displaces the Fellowship
	One less residential	Southern Baptist Church of
	displacement	Neelyville
Madified Alternate P	• Does not bisect agricultural land	Greater impacts to residential
Moulleu Alternate K	Fewer impacts to wetlands	land use
	Less habitat impacted (less tree	
	clearing)	
	Lower cost to construct	

Table 2: Advantages / Disadvantages of Alternative Corridors

Based on the information presented in Table 1 and Table 2, there are modest differences in the two alternatives. Modified Alternate R is more consistent with the existing transportation system in that it is parallel to existing Route 67 and has no horizontal curves. The original Alternate R has three horizontal curves and departs from existing Route 67 alignment. Modified Alternate R does not bisect any agricultural properties; whereas, the original Alternate R bisects three agricultural properties. The original Alternate R impacts more wetlands and potential T&E habitat than modified Alternate R. Modified Alternate R displaces the Fellowship Southern Baptist Church of Neelyville.

Modified Alternate R meets the stated objectives of the Purpose and Need in the Final EIS. Given that it is more consistent with the alignment of existing Route 67 and fewer agriculture, wetland, and potential T&E habitat impacts, it is recommended that modified Alternate R be carried forward as the preferred alternative in the vicinity of the Fellowship Southern Baptist Church of Neelyville (see Figure 5).



N	Legend			
	Modi	fied Edge of Paven	nent	Alt. R
	Edge	of Pavement from	Final EIS	Modified Alt. R
V				Alt. T
0	500	1,000	1,500	2,000
				l⊢eet



Preferred Alternative

5.0 Summary

In order to proceed with the re-evaluation of the Final EIS, the study team makes the following recommendations for modifications to the Route 67 preferred alternative south of Poplar Bluff.

- Expand the environmental footprint for Alternate R at the Route 160/158 interchange to provide design flexibility to modify the interchange in order to meet interstate standards.
- Modify Alternate R at the Fellowship Southern Baptist Church of Neelyville by:
 - \circ $\;$ removing the curves that place the alternative west of the church,
 - straightening the alignment so that it is parallel and adjacent to existing Route 67, and
 - providing an overpass at CR 338 for connectivity between frontage roads on either side of proposed Route 67.
- Modify Alternate U' north of Route 142 by providing additional environmental footprint to account for a frontage road on the west side of the alternative.
- Expand the environmental footprint of Alternate U' at the Route 142 interchange to provide design flexibility to modify the interchange to further minimize environmental impacts.

This modified preferred alternative meets the objectives of the Final EIS Purpose and Need of reducing congestion, reducing the potential for crashes, addressing roadway deficiencies, and providing system continuity between I-55 in Jefferson County and the Arkansas state line.

Appendix B

Public and Agency Coordination

AND A

MoDOT Southeast District

Published by Marissa Van Robey Johnson [?] - April 17 - 🔇

SHARE YOUR THOUGHTS! As part of the planning stages for the conversion of U.S. Route 67 to Interstate 57, MoDOT and City of Poplar Bluff are currently reevaluating the Route 67 Environmental Impact Statement completed in 2005.

The Future I-57 project would include upgrading 10 miles of Route 67 to four lanes on a new alignment from the Route 160 interchange to two miles north of the Arkansas state line near County Road 274 in Butler County.

Interested persons may review the EIS and share their thoughts at https://www.modot.org/us-67-future-i-57-butler-county. Comments will be accepted through Monday, May 18 as part of the reevaluation of the EIS.



AD DETAILS: \$10 AD FOR TARGET AREA April 17-April 27, 2020

2.3K People Reached

86 Shares

...

43 Comments

78 Reactions

- o 60 likes
- **12 wows**
- o 3 loves
- 2 angry
- 1 laughing

COMMENTS:

Janet Luter Derinda Sheppard

Donna Harmsen Need to bypass Corning and Pocahontas when we travel to daughters that is the worst stretch of road and very dangerous too many big trucks and to many people passing

Jeff Anglin thats in Arkansas.....sooo...... not really in Missouri.... not really relevant

Chuck Wyatt Donna was supposed to bypass Corning and go to pokey I thought originally?

Dale Bowers Don't have to worry about Corning. County and city officials won't let it come through

Larry Wertenberger If we don't get anything better than the recent so called improvements from Cane Creek southward on 67 or the ridiculous work on 160 through Fairdealing! Then just save the money and fix the 2 messes we have now !

Steven Shane Hogard It will never happen. Arkansas will never complete I-57

Chuck Wyatt Steven I beg to differ, 412 coming out of Paragould is 4 lane till u hit mo state line then it's 2 lane to Kennett there so far ahead of us on highway structure it's not funny

Jason Hill Chuck Wyatt Arkansas doesn't know where they want to join with the 4 lane I drive it everyday right now both states need to invest in fixing 67 on both sides of the line

Mark Pirtle That's where they ended it years ago. To the southeast of walnut ridge. If they would extend to the state line, it would bypass Corning and Pocahontas completely.



Walnut Ridge

Wade Robertson Chuck Wyatt it has took AR 30 years to get from the possum grape exit to walnut ridge ar is the one that is so far behind

Chuck Wyatt Same way up here maybe the interstate 57 crap will fix it

Frank Louie Gauthier Center divider was tested yesterday and it held up. Thank goodness or there would have been even more of a wreck

Vernice Stevens With out four lanes hwy where would you be today look hwy rout 66.

Phyllis Miller It needs to go more to the west and bypass corning. Not straight South into corning.

Rocky Robertson We need to get it all done instead of talking about it we need some good highways to drive on

Becky Carroll Smith Don't let the same group of clowns do the future work. Terrible workmanship.

Jeff Robinson Hen no why change a highway name that's been established 4 years just gonna cause confusion that's messed up if u ask me *(comment hidden due to language)*

Leona Ober Hope they do that road is terrible on South.

David Murphy Think that truck is going the wrong way lol

Lawton Wells David Murphy I think you're right

Frank Louie Gauthier just over the 158 overpass southbound he is in the right line

David Murphy Julie Nelson no I drive a big truck and I live at that turn he's on the wrong side of the road

Julie Nelson David Murphy no it's going the right way that turns back into a two lane highway right there.

T Martin Ward Interstate means federal money..Get it done.

Wade Robertson It's about time this road needs to be finished

Mike Miller Put it somewhere else. I don't want it in my front yard.

Wesley Nelson It's all about federal money

Charles Gates Joseph Gates you might want to check into this

Linda Johnson Yes they will

Linda Rogers

(i) (i)

Gail Labryer Velvet Jones-Krueger

Keith Cassidy I think it's bs that folks are in such a big hurry! You can get anywhere you want to in this country! Leave earlier, make a trip out of it, enjoy you expensive car/truck/suv, why not drive through the small towns, show them patriotism, put you phones down and enjoy the scenery, and for goodness sake slow down and be safe!! This is just my personal opinion, no need for hatred. Sondra Cassidy your thoughts?

Sondra Cassidy Keith Cassidy I totally agree!! Last few times we have been that way there was not enough traffic, In my opinion, to warrant a 4 lane!! And besides taking all those homes along the highway down there!! There some nice homes that way!! And yes people need to go through these small towns and visit!! Sometimes these small towns have some awesome history!! People, by now, should learn to slow down and take in the sights cause they could be gone tomorrow!! God Bless and have a great day!!

Keith Cassidy Sondra Cassidy well said!

Noland Clark What about truck drivers

Keith Cassidy Noland Clark there's lots of room for arguments to my statement, it is just an opinion. Truckers are vital, but this world is still running the same as when truckers were almost on all secondary roads none were too high speed and smooth back then, plus......a lot of them use secondary and back roads to miss them pesky toll roads and weigh stations, lol

Noland Clark Keith Cassidy not just trucks but people in general need to get places and that corridor should have been a 4 lane years ago. Not being an intestate is killing people all across highway 60 from Sikeston to Poplar Bluff

Keith Cassidy Noland Clark I can get anywhere in the United States...anywhere! We don't NEED s IIII Heck of a lot more people dying on the highways to St. Louis aaaaaaaaad 4 lanes!!! Point made!!! (comment hidden due to language)

Noland Clark Keith Cassidy no point not made but what ever you better look between Sikeston and poplar bluff the regular intersections people have been dieing for alot of year even before it was 4 lane. It needs ramps and made into interstate

Keith Cassidy Noland Clark ok.

Aaron Headley It doesn't matter what our thoughts are the government will do what they want anyway

Public Comments Received via MoDOT Website

Your Name	Your Email	Please share your thoughts!	MoDOT Response
Jackson Hurst	ghostlightmater@yahoo.com	I approve the Route 67 Environmental Impact Statement (EIS) that was completed in 2005.	
TRACY ERVE	monar0723@email.com	Was wondering if you have a man of this new highway layout	Mrs. Frye, Thank you for your interest in the US 67 (Future I-57) project. I have a small graphic of the general location that I have attached. The area being reevaluated for the new 4 lane would lie mostly to the west of existing 67 and follow the existing alignment pretty close. Old 67 would become the outer road and some new outer road connections would be built on the west side. Right now we are in the process of evaluating the environmental work that was previously done back in 2005. After the reevaluation there will be a comment period like the one you are participating in now. After the comment period we will then move into the design period and that is when you will see notices of public meetings where design alternatives would be shared. The website you visited will be a good source for information as it is developed along with local media. Thank you for your interest, Picket
INACITATE	moparo/25@gmail.com	The interchange porth of Penular Bluff pends to be reworked	
		The north bound ramp, 67 to north 67 is unacceptable, it's too tight and it's easy to miss. The south bound ramp, 67 to Hwy 60 east is also unacceptable, it's too tight also. Both of those ramps are going to have many accidents. For cars & truck roll overs! With extending I-57 to Arkansas, that is going to be a very busy interchange. North bound traffic will be splitting off there to go to St. Louis. If something isn't done to change those ramps, there will be major traffic jams! Thank you. Steve Urban. O (0. Uther Tarching	
Steve Urban	kartmn43@aol.com	O/O, Urban Trucking.	
Jonathan Lloyd	jonathanlloyd7262@yahoo.com	Are you going to have any meetings that we can attend? If so how will we know when and where ? I'm really concerned about how it's going to affect me. I live on Cr. 338 on the west side of 67 Hwy. any information would be greatly appreciated. This is a terrible idea! Finishing what we started of making US 67 a four lane highway is a great idea. Converting US 67 and US 60 to an Interstate Highway to spend \$180+/-M plus perpetual	Thank you for your interest in the US 67 (future I-57) project. Currently the we are reevaluating the environmental work that was done in 2005. After the reevaluation there will be a comment period like the one you are participating in now. After this comment period we will move into the design phase and it is here that you will see notices of public meetings where different design alternatives would be discussed. The website you visited will be a good source of information as it is developed along with local media. I have attached a graphic to show you the area that is being reevaluated. Thank you for your interest, T. Pickett
		maintenance only to send Missouri money to Arkansas.	
Steve		I'll work tirelessly to fight this waste of precious funds.	
Bubanovich	steveb@hrquadr.com	sab-	
Jerry McDowell	mcdowell841@windstream.net	fix highway 160 its like a roller coaster ride driving on it then fix your future interstate	
		It is time to move forward on this projectit will be safer for the traveler and will greatly help the	
Gary Melton	dogwood.hills@yahoo.com	economy by moving consumer products in a more timely and efficient manner	
Jerry Edmundson	edexc62@gmail.com	This interstate will be the worst thing that has ever happened to our community. This will bring in more crime to an already strained law enforcement. Drug flow is already a problem , this will make it 10 times worse. Interstate towns are also bombarded with illegals aliens and just the wrong kind of people. Keep Poplar Bluff a small country town! We do not need the interstate.	
Charles Language	1	The on, off ramps need looked at. Very sharp curves when taking them. If any new ones to be	
Gioria Laguna Phyllis Miller	pmjeanmiller@outlook.com	CONSTRUCTED MODOL ENGINEERS Should address these issue. PLEASE NO! WE LIVE RIGHT ON THE HWY AT 142 JCT. I HEAR TRUCKS ALL NIGHT AND DAY ! WE COUNTED 127 BIG TRUCKS IN 1 HOUR. ITS NEEDS TO GO ANOTHER ROUTE. I HATE THIS TRAFFIC !!	
Jerry Wawak	jerry.wawak@gmail.com	I think this would be an excellent idea. It would be very beneficial to Southeast Missouri and Northeast Arkansas communities. I have talked to people who live in Texas and travel to St. Louis who still go through Memphis because they don't know any better. They assume 67 is a "rural" highway and don't go that way even though it would save them a lot of time and distance.	

Your Name	Your Email	Please share your thoughts!	MoDOT Response
Madhav Kothapalli	mvkothapalli@gmail.com	Is there a plan to start construction on this segment (after the EIS is completed) in the near future? Also, is there any planned construction for the rest of the future I-57 corridor (U67 from US160 to Poplar Bluff and US60 from Poplar Bluff to Sikeston)? It looks like it might already be four lanes but it might need changes to upgrade to interstate standards.	Mr. Kothapalli, Thank you for your interest in US67 (Future I-57). To answer your questions below: -There are proposed projects for construction as money becomes available. -There are currently no projects in the STIP to address upgrades to this section of the US 67 (Future I- 57) corridor. Thanks again for your interest, T. Pickett
Josh Magill	josh_magill05@yahoo.com	I have more questions than thoughts. Is there a current projected route for the phase 1 below the 160/67 junction? I assume the highway will run parallel to the current 67 hwy thru the straight area between Harviel exit and Neelyville. In this case, which side of the current hwy, will the additional 2 lanes be constructed? Will the South bound lanes be built on the west side of the current highway? Thank you for any and all information Josh Magill	Mr. Magill, Thank you for your interest in the US 67 (Future I-57) project. At this time the only work being done is the reevaluation of the environmental document that was completed in 2005. In that document the plan was for a new 4 lane facility with old 67 becoming the outer road. I have attached a small graphic that shows the area being reevaluated. After the reevaluation a comment period like the one you are participating in now will take place. Then we will move into the design phase of things where you will see advertising of public meetings and design alternatives presented. Thank you for your interest, T. Pickett
Bill Cabb	hilly, cabb@batmail.com	I think this will be a great project for the area. It is needed for safety and for economic benefits to	
Gary Holden	garyholden1975@gmail.com	This looks good overall, though it was a bit confusing to read. A couple of thoughts/questions. 1. The new highway should follow as close to the existing two lane road as much as possible so the existing highway can be used as a frontage road. How much impact on the Corkwood conservation area will this actually have? 2. The situation at Route 160/158 needs to be fixed, the bridge and ramps seem very narrow and tight in all directions, and they don't even have full shoulders. This area needs to be widened and converted to a standard diamond interchange if it is to become I-57. 3. The two at grade intersections north of the project area at County C and the existing frontage road system should be closed off as part of this. 4. Is this new 10 miles of construction going to be built to be full access control (Interstate) standards right off the bat, or will you be building the initial four lane highway and putting in the grade separations later? 5. What about the remaining two miles to the Arkansas border? Are you waiting for Arkansas to determine where it will go south of there before continuing?	 Mr. Holden, Thank you for your interest in the US 67 (Future I-57) project. 1. At this point in the process we don't know the extent of impact. As we proceed with getting a design consultant on board the thought will be to avoid or minimize any impacts to the Corkwood Conservation Area. 2. This has been taken into consideration with plans to make improvements at the interchange. 3. This will be taken into consideration and has been discussed previously 4. The plan is to build to Interstate standards. 5. We have reached out to Arkansas and remain in contact concerning where their improvements might end. They are currently in the environmental review stage and should be sending out for public comment in the near future. Thanks again for your interest, T. Pickett
Richard Garrison	richar.garriso2278@gmail.com	Would love to see it 4 lane but I live on the west side of 67 on CR-352 and being a interstate it will require me to drive about 5 miles on gravel roads that get flooded out a lot to Either Harviell or Neelyville ramp. This would also slow down emergency services by a lot. Would affect a lot of people not just me. So could a frontage road be put on each side?	Mr. Garrison, Thank you for your interest in the US 67 (Future I-57) project. As part of the design to Interstate standards, outer roads will be incorporated into any new design. There will be more information forthcoming for public comment once the reevaluation of the EIS is complete. Please check our website in the coming months for new information. Thanks Again, T. Pickett
Benjamin Stratemeyer	beancounterben@gmail.com	Absolutely, Missouri and Arkansas cannot build or upgrade this road fast enough. Economically speaking getting it upgraded to interstate status will help our communities to promote locations.	

Your Name	Your Email	Please share your thoughts!	MoDOT Response
		We own Creachs Golf carts and from the chart it looked like you were going behind our business?? Is that correct. Also where the red and black lines are together , does that mean you'll be adding	Mrs. Creach, I'm writing in response to your comment concerning Rte. 67 expansion. At this time the reevaluation of environmental work done in 2005 is being completed. After the reevaluation there will be a public comment period similar to the comment period you participated in now. There will also be opportunity for public meetings as the projects move into a design phase. At this time the projected plan is to build to the west of existing 67 all new 4 lanes with a median strip between. The existing Rte. 67 would become on outer road and access to the new 67 (Future I-57) would be built. At this time we are still pretty early in the process and have no design that we can share with you. As the process gets further along, you'll see notifications for public involvement and it is at that time design alternatives would be presented. Please follow the website and media for updates or call me if you have any further questions. Thanks,
Sharon Creach	sharoncreach49@gmail.com	two lanes beside the present lanes??	T. Pickett
Edward John			
Clark	Ejc0711@outlook.com	Interstate 57/Unided States 67 It Going To Be In The Future In Arkansas & Missouri Thank You!	



Michael L. Parson Governor State of Missouri OFFICE OF ADMINISTRATION Post Office Box 809 Jefferson City, Missouri, 65102

Jefferson City, Missouri 65102 Phone: (573) 751-1851 Fax: (573) 751-1212 Sarah H. Steelman Commissioner

March 24, 2020

Timothy Pickett 105 West Capitol Avenue PO Box 270 Jefferson City, MO

Subject:

2010009 Legal Name: MoDOT Project Description: Re-Evaluation of US Route 67 Environmental Impact Statement

The Missouri Federal Assistance Clearinghouse, in cooperation with state and local agencies interested or possibly affected, has completed the review on the above project application.

None of the agencies involved in the review had comments or recommendations to offer at this time. This concludes the Clearinghouse's review.

A copy of this letter is to be attached to the application as evidence of compliance with the State Clearinghouse requirements.

Sincerely,

Sora Vandorf

Sara VanderFeltz Administrative Assistant

cc:

Michael L. Parson Governor

Sandra K. Karsten Director of Public Safety



James Remillard Acting Director

STATE EMERGENCY MANAGEMENT AGENCY

DEPARTMENT OF PUBLIC SAFETY PO Box 116, Jefferson City, Missouri 65102 Phone: (573) 526-9100 Fax: (573) 634-7966 E-mail: mosema@sema.dps.mo.gov

April 21, 2020

Mr. Timothy C. Pickett, P.E., Transportation Project Manager 2675 North Main Street P.O. Box 160 Sikeston, Missouri 63801

Re: Request for Comments on Re-evaluation to US Route 67 Environmental Impact Statement

Dear Mr. Pickett, P.E.,

We very much appreciate the opportunity to make comments on the National Environmental Policy Act (NEPA) environmental assessment regarding the re-evaluation of US Route 67 in Madison, Wayne, and Butler Counties. Please accept this commentary in response to your notice to our office, received on April 13, 2020.

The State of Missouri is a participant in the National Flood Insurance Program (NFIP). Any development associated with this project that is located along US Route 67 within a Special Flood Hazard Area (SFHA), as identified by the Federal Emergency Management (FEMA), must meet the requirements of the state's floodplain management ordinance. This may require obtaining a Floodplain Development Permit for the proposed project. This permit must be obtained prior to the commencement of any construction and development activities in the SFHA. Since the project is state-owned, this permit needs to be obtained from this office (SEMA).

If the proposed development is also located within a Regulatory Floodway, an Engineering "No-Rise" Certificate and statement of the effect of the proposed project regarding possible flooding is required before the development can be permitted. This analysis must be performed by a licensed Missouri Professional Engineer, according to current FEMA guidelines and standards.

If you have any questions concerning this letter or the requirements of the minimum standards of the NFIP, please feel free to contact me at (573) 526-9129.

Sincerely,

Karen Mittel

Karen L. McHugh, CFM Floodplain Management Section Manager State NFIP Coordinator

cc: Matt Winters, Floodplain Administrator, Poplar Bluff Community File – Poplar Bluff



A Nationally Accredited Agency



DEPARTMENT OF THE ARMY LITTLE ROCK DISTRICT, CORPS OF ENGINEERS POST OFFICE BOX 867 LITTLE ROCK, ARKANSAS 72203-0867 www.swl.usace.army.mil/

May 4, 2020

Regulatory Division

FILE No. SWL-2020-00124

Missouri Department of Transportation Attn: Timothy C. Pickett, PE 2675 North Main St. P.O. Box 160 Sikeston, MO 63801

Dear Mr. Pickett:

Please refer to your letter dated April 9, 2020, concerning a waters of the United States (WoUS) determination of the proposed roadway project, located at Lat 36.800311 Long - 90.485327, Poplar Bluff, Butler County, Missouri. In response to your informed, voluntary request, this letter provides a preliminary jurisdictional determination (PJD) that identifies aquatic resources that may be WoUS on the property and the Department of the Army (DA) permit requirements pursuant to Section 404 of the Clean Water Act (33 U.S. Code 1344).

My review revealed that the project site does appear to contain areas that may be WoUS. It is recommended that if there our WoUS that are proposed to be impacted, a delineation will need to be conducted to determine the extent of the WoUS.

This PJD is advisory in nature. If you wish to receive an approved jurisdictional determination (AJD) for the property, you must request one. In order to expedite the review, we suggest you provide our office with a delineation of all WoUS within the property using Corps approved methodology. An AJD is generally valid for a 5-year period, incorporates administrative appeal rights, and specifically identifies the presence or absence, the location, and the extent of WoUS on the property. Delineations done by consultants are not official until approved by the Corps of Engineers.

Please be advised that the discharge of dredged or fill material in WoUS, requires a DA permit prior to beginning work in most situations. A permit is required pursuant to Section 404 of the Clean Water Act. The clearing of wetlands with mechanized equipment; landleveling; construction of ditches, dikes, and dams; placement of fill to raise the elevation of a site; and stabilization of banks are examples of activities that may require a permit. All of these activities typically involve the discharge of dredged or fill material in WoUS.

Your cooperation in the Regulatory Program is appreciated. If you have any questions, please contact me at (870) 886-3610 and refer to No. SWL-2020-00124.

Sincerely,

Chris Wrbas

Chris Wrbas Project Manager

Enclosures

cc: Ch, Regulatory Enf
Heitz, Connie

From:	Timothy C. Pickett <timothy.pickett@modot.mo.gov></timothy.pickett@modot.mo.gov>
Sent:	Monday, May 11, 2020 6:44 AM
То:	Matthew Burcham; Heitz, Connie
Cc:	Melissa Scheperle
Subject:	FW: US 67 EIS Reevaluation

FYI

From: Summerlin, Joe <summerlin.joe@epa.gov>
Sent: Friday, May 8, 2020 11:26 AM
To: Timothy C. Pickett <Timothy.Pickett@modot.mo.gov>
Cc: Tapp, Joshua <Tapp.Joshua@epa.gov>
Subject: US 67 EIS Reevaluation

Mr. Pickett:

Thank you for contacting the U.S. Environmental Protection Agency in regards to the US 67 EIS Reevaluation. From the information gathered, MODOT will be looking to construct a ten mile stretch of the highway and one intersection that went through the NEPA process in 2005. EPA recommends evaluating that section again using the original EIS coupled with any new studies or changes that deviate from the original document. This can be done by tiering and using either a categorical exclusion or environmental assessment. If there are no new changes to add, please reference the original EIS as you plan public participation.

If you have any questions, please contact me at <u>summerlin.joe@epa.gov</u> or via phone at (913) 551-7029.

Sincerely,

Joe Summerlin NEPA Project Manager Office of Intergovernmental Affairs EPA Region 7

Heitz, Connie

From:	Timothy C. Pickett <timothy.pickett@modot.mo.gov></timothy.pickett@modot.mo.gov>
Sent:	Tuesday, May 12, 2020 7:19 AM
То:	Matthew Burcham; Heitz, Connie
Cc:	Melissa Scheperle
Subject:	FW: Request for Comments on Re-evaluation of U.S. Route 67

From: Hunt, Rob <Rob.Hunt@dnr.mo.gov>
Sent: Monday, May 11, 2020 5:25 PM
To: Timothy C. Pickett <Timothy.Pickett@modot.mo.gov>
Subject: Request for Comments on Re-evaluation of U.S. Route 67

Hello,

Sorry for the late response. We will not need a special meeting at this time. Our individual programs that have interest in this project will be in touch with MODOT as needed. Thank you for the invitation to participate.

Rob Hunt Planning Coordinator Missouri Department of Natural Resources 573-522-2656 **CAUTION:** External email. Please do not click on links/attachments unless you know the content is genuine and safe.

Natalie

I concur with your statement on the reasons for not completing a new NRCS-CPA-106. If the statement is not sufficient for the FHWA, NRCS can complete a new NRCS-CPA-106 for the reevaluation project area if needed.

Contact me if you have any questions.

Thank you.

Rod Taylor USDA/NRCS 480 West Jackson Trail Jackson, Missouri 63755 (573) 755-6075 (573) 243-1467 ext 5 www.nrcs.usda.gov rod.taylor@usda.gov

From: Reiss, Natalie <natalie.reiss@woodplc.com>
Sent: Thursday, December 3, 2020 11:49 AM
To: Taylor, Rodney - NRCS, Jackson, MO <rod.taylor@usda.gov>
Subject: RE: Route 67 Re-Evaluation - Form NRCS-CPA-106

Good morning Rod,

I'm following up on our correspondence earlier this year (below and attached) regarding a reevaluation of the 2005 Route 67 EIS. Upon review of our re-evaluation, FHWA requested clarification on why it is not necessary to complete a new NRCS-CPA-106. Can you please review our statement below and let me know if you concur, or if you have other/additional reasoning?

As indicated on the original Farmland Conversion Impact Rating Form NRCS-CPA-106, completed in 2000, 538.4 acres of prime and unique farmland in Butler County would be impacted by the original preferred alternative, resulting in a conversion impact rating total

of 118 points. Since changes in soil composition occur gradually over long periods of time, and no major human developments have occurred in the region that would have notable impacts on soils, conditions along the project corridor are not expected to have experienced notable changes since that time. Minor modifications to the original preferred alternative involve the acquisition of relatively small areas of additional right-of-way along the 10-mile segment under current re-evaluation. However, this minor change in impacted acreage would not alter the impact rating such that it would be above the 160-point threshold that would require consideration of other alternatives. Therefore, it is not necessary to complete a new Form NRCS-CPA-106.

If you need any additional info, just let me know. Much appreciated!

Natalie (Kleikamp) Reiss Environmental Technical Professional Mobile: (512) 748-6787 www.woodplc.com



From: Taylor, Rodney - NRCS, Jackson, MO <<u>rod.taylor@usda.gov</u>>
Sent: Thursday, June 25, 2020 2:40 PM
To: Reiss, Natalie <<u>natalie.reiss@woodplc.com</u>>
Subject: FW: Route 67 Re-Evaluation - Form NRCS-CPA-106

CAUTION: External email. Please do not click on links/attachments unless you know the content is genuine and safe.

Natalie

Mr. Lugo-Camacho asked me to reply to your email.

It should not be necessary to complete a new NRCS-CPA-106 for the project.

Contact me if you have any questions.

Thanks

Rod Taylor USDA/NRCS 480 West Jackson Trail Jackson, Missouri 63755 (573) 755-6075 (573) 243-1467 ext 5 www.nrcs.usda.gov rod.taylor@usda.gov

From: Reiss, Natalie <<u>natalie.reiss@woodplc.com</u>>
Sent: Thursday, June 25, 2020 11:25 AM
To: Lugo-Camacho, Jorge - NRCS, Columbia, MO <<u>jorge.lugo-camacho@usda.gov</u>>
Subject: Route 67 Re-Evaluation - Form NRCS-CPA-106

Good morning Mr. Lugo-Camacho,

Wood is completing a re-evaluation of a 2005 Environmental Impact Statement (EIS) for US Route 67 on behalf of FHWA, MoDOT, and the City of Poplar Bluff. The original EIS evaluated a corridor spanning Madison, Wayne, and Butler counties. A Farmland Conversion Impact Rating form for corridor projects was completed, and is attached for your reference.

The current re-evaluation is being conducted for an approximately 10-mile segment of the original corridor, in Butler County between Route 160/158 and a point two miles north of the Arkansas state line near County Road 274. Some minor modifications have been made to the proposed alignment along this segment since the 2005 EIS and previous consultation.

I am reaching out to see if it will be necessary to submit a new Form NRCS-CPA-106 for the section of the corridor we are re-evaluating. If so, please let me know what information you will need in addition to the form with parts I and III completed.

Thanks so much for your help,

Natalie (Kleikamp) Reiss Environmental Technical Professional Mobile: (512) 748-6787 www.woodplc.com



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MEMORANDUM



Missouri Department of Transportation Environmental Section P.O. Box 270, Jefferson City, MO 65101

TO:	Memorandum to File
CC:	Scott Meyer-10
	Lois M. DuMey-Environmental Science & Engineering, Inc. w/attachment
	1/M
FROM:	Kevin McHugh
	Agricultural/Land Use Specialist-de
DATE.	Database 11 2000
DATE:	CH 0CT 18 2000
SUBJECT:	Design-Environmental Studies
	Route 67. Madison, Wayne, Butler Counties
	Joh No. JOP0746
	Farmland Conversion Impact Rating
	161100

The project referenced above has been rated for farmland conversion impact. The proposed project has 627.3 acres in Butler County, 1032.2 acres in Wayne County, and 691 in Madison County. There are 538.4 acres of prime and unique farmland associated with the project in Butler County, and 20.1 and 9.3 in Wayne and Madison Counties respectively. The recorded Part V Relative Value of Farmland to be converted totaled 58 points in Butler County, 32 points in Wayne, and 58 points in Madison. The Part VI Site Assessment Criteria rating scored 60 points out of a possible 160 for all three counties. The total conversion impact ratings were 118, 92, and 118 points. This is below the 160-point threshold established for consideration of farmland protection. The completed form is on file for review.

The following relates to the Part VI Site Assessment Criteria. The proposed project area is generally rural in all three counties. The site is not known to be protected from conversion by any State, local government, or private non-profit policy or program. No on-farm investments will be impacted. After project completion, none of the remaining land of the affected farms will become nonfarmable because of interference with land patterns. All farm support services are available to the area and will not be negatively impacted by the project. The project will be fully compatible with existing agriculture.

km/sw

Attachment

U.S. DEPARTMENT OF AGRI Soil Conservation Service	CULTURE	RMLAND C			1G		SCS-CPA-106 01-91
PART (To be completed by Feo	leral Agency)	FORCO	3 Date of Land Eval	PROJECTS	9/15/00 - 4	Sheet 1 - (1	
1. Name of Project	(and rigency)		5. Federal Agency In	volved	9/15/00 4	Sneet 1 of 1	
U.S. Route 67 2. Type of Project			Federal H	lighway Administrat	ion		
Improvements of exis	ting transportation fac	ility.	Madison,	Wayne and Butler	Counties, Missouri		
Tract I (To be completed by GC	•/		1. Date Request Rec 8/03/00	ceived by SUS	<u></u> 2	Person Comple	ting Form
3. Does the site contain prime, i (If no, the FPPA does not app	unique, statewide or lo ily - Do not complete a	cal important fa dditional parts c	rmland? of this form) Ye	s⊠ No □	4. Acres friga	led Av	erage Farm Size 180
5. Major Crop(s) Corn		6. Farmeble I Ac: 457,653-B	and in Government Ju iutler; 487,070-Wayne;	irisdiction 318,519-Madison	7. Amount of F 382,940-Butler	armland as Defir 201,970-Wayne	ted in FPPA Ac: 143,991-Madison
 Name of Land Evaluation Syst LESA 	lem Used.	 Name of Lo No 	ocal Assessment System one	ρ μ	10. Date Land	Evaluation Retur	ned by SCS
PART III (To be completed by Fe	ederal Agency)				Alternative Corri	dor For Segment	
				Corridor 1	Butler	Wayne	Madison
A. Total Acres to Be Converted	Directly			2162.14			-1
B. Total Acres to Be Converted	I Indirectly, Or To Rec	eive Services		188.36			
C. Total Acres in Corridor				2350.5	627.3	1032.2	691.0
PART IV (To be completed by SC	S) Land Evaluation In	formation				. San Ka	
A. Total Actes Prime And Uniq	ue Farmland	19623-60		de de la composición de la composicinde la composición de la composición de la composición de la compo	538.4	20.1	9.3
B. Total Acres Statewide And L	ocal Important Farmla	and		The solution is	1994 (1994) 1995 -	363.5	170.5
C. Percentage Of Farmland in	County Or Local Govi.	Unit to Be Com	verted		0.2	0.3	0.1
D. Percentage Of Farmland in	Govt. Jurisdiction With	same Or High	er Reletive Value		43	19	50
PART V (To be completed by SCS of Farmland to Be Converted (Sca	5) Land Evaluation Gr lie of 0 - 100 Points)	iterian Relative	Value		58	32	58
PART VI (To be completed by Fec Assessment Criteria (These criter	leral Agency) Corridor ria are explained in 7 (CFR 658.5(c))	Maximum Points	in the local desires in the	<u>, and an </u>		<u></u>
1. Area in Nonurban Use			15		15	15	15
2. Perimeter in Nonurban Use	9		10	1	10	70	10
3. Percent of Corridor Being F	Farmed		20		20	5	20
4. Protection Provided by Stat	te and Local Governm	ent	20		D	C	0
5. Size Of Present Farm Unit	Compared To Averag	e	10		0	20	10
6. Creation of Nonfarmable F	armland		25		U	0	Ŏ
7. Availability Of Farm Suppo	rt Services		5		5	5	5
8. On-Farm investments			20		0	0	0
9. Effects Of Conversion On F	Farm Support Services	3	25		0	0	0
10. Compatibility With Existing	Agricultural Use		10		0	0	0
TOTAL SITE ASSESSMENT	POINTS		160	1	6 17	60	60
PART VII (To be completed by Fed	deral Agency)						
Relative Value of Farmland	(From Part V)		100		58	27	27 y
Total Corridor Assessment assessment	(From Part VI or a loca	al site	160		ζc	60	1 60
TOTAL POINTS (Total of al	bove 2 lines)		260		719	95	11 ×
1. Corridor Selected: 2	 Total Acres of Farm Converted by Project 	llands to be st:	3. Date of Selection:	-	4. Was a Local Yes	Site Assessment	Used?
5 Person For Selection			1				

Reason For Selection:

Signature of Person Completing This Part:	DATE	
NOTE: Complete a form for each segment with more than one Alternative C	Corridor.	

P:\5197085G\DP\FMLAND_0.WPD



September 8, 2020

Kathryn Drennan Warner Senior Archaeologist Wood Environment & Infrastructure, Inc. 212 East McCarty Street Jefferson City, MO 65101

Re: **SHPO Project No. 015-BU-20** – Phase I Cultural Resources Survey for the US 67 EIS Re-Evaluation Project, MoDOT Job No. J0P0746, Butler County, Missouri (FHWA)

Dear Kathryn Drennan Warner:

Thank you for submitting information on the above referenced project for our review pursuant to Section 106 of the National Historic Preservation Act (P.L. 89-665, as amended) and the Advisory Council on Historic Preservation's regulation 36 CFR Part 800, which requires identification and evaluation of cultural resources.

We have reviewed the report submitted for the above referenced project. Based on this review it is evident that an adequate cultural resources survey has been conducted of the project area. We concur that archaeological site 23BU1593, and architectural resources AR-1, and AR-3 – AR-12 are not eligible for listing on the National Register of Historic Places (NRHP). There has not been enough information provided regarding architectural resource AR-2 to determine its eligibility. We also concur that archaeological sites 23BU399 and 23BU1557 may be eligible for inclusion in the NRHP and should thus be treated as **eligible** until further assessed. If archaeological sites 23BU399 and 23BU1557, and architectural resource AR-2 are to be impacted by the proposed undertaking then further investigation of these resources will be needed. We concur, however, that if these resources are avoided by the proposed undertaking that this will result in **no historic properties affected**, and have no objection to the initiation of project activities.

Please be advised that, should project plans change, information documenting the revisions should be submitted to this office for further review. In the event that cultural materials are encountered during project activities, all construction should be halted, and this office notified as soon as possible in order to determine the appropriate course of action.



Kathryn Drennan Warner Page 2

If you have any questions, please write the State Historic Preservation Office, P.O. Box 176, Jefferson City, Missouri 65102 attention Review and Compliance, or call Jeffrey Alvey at (573) 751-7862. Please be sure to include the **SHPO Project Number** (015-BU-20) on all future correspondence or inquiries relating to this project.

Sincerely,

STATE HISTORIC PRESERVATION OFFICE

Toni M. Prawl, Ph.D. Director and Deputy State Historic Preservation Officer

c.: Raegan Ball, FHWA Michael Meinkoth, MoDOT Taylor Peters, FHWA

Reiss, Natalie

Subject:

3478

FW: Biological Assessment for Butler County Rt 67 (J9P3661) Consultation Code 03E14000-2020-SLI-3478

From: Roberts, Andy <<u>andy_roberts@fws.gov</u>>
Sent: Tuesday, September 15, 2020 8:56 AM
To: Christopher D. Shulse <<u>Christopher.Shulse@modot.mo.gov</u>>
Cc: Georganne E. Bowman <<u>Georganne.Bowman@modot.mo.gov</u>>; Matthew Burcham
<<u>Matthew.Burcham@modot.mo.gov</u>>; Peters, Taylor (FHWA) <<u>taylor.peters@dot.gov</u>>; Timothy C. Pickett
<<u>Timothy.Pickett@modot.mo.gov</u>>; Weber, John S <<u>John S Weber@fws.gov</u>>; Herrington, Karen
<<u>karen_herrington@fws.gov</u>>
Subject: Re: [EXTERNAL] Biological Assessment for Butler County Rt 67 (J9P3661) Consultation Code 03E14000-2020-SLI-

Dear Ms. Bowman,

The U.S. Fish and Wildlife Service has reviewed your September 11, 2020, email and enclosures requesting consultation on the proposed Route 67 expansion in Butler County, Missouri and submits these comments pursuant to the Endangered Species Act of 1973, as amended (16 U.S.C. 1531-1544).

Based on the information the Service concurs with your determination that the proposed work is not likely to adversely affect the Gray Bat. Should the scope, timing, or manner of activity change, please contact this office.

Thank you for your efforts to conserve federally listed species.

Sincerely,

Andy Roberts

From: Christopher D. Shulse <<u>Christopher.Shulse@modot.mo.gov</u>>

Sent: Friday, September 11, 2020 9:23 AM

To: Roberts, Andy <<u>andy_roberts@fws.gov</u>>

Cc: Georganne E. Bowman <<u>Georganne.Bowman@modot.mo.gov</u>>; Matthew Burcham

<<u>Matthew.Burcham@modot.mo.gov</u>>; Peters, Taylor (FHWA) <<u>taylor.peters@dot.gov</u>>; Timothy C. Pickett <<u>Timothy.Pickett@modot.mo.gov></u>

Subject: [EXTERNAL] Biological Assessment for Butler County Rt 67 (J9P3661) Consultation Code 03E14000-2020-SLI-3478

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Andy – please see Georganne's email below and the attached documents. She's having email problems this morning so I'm sending this on her behalf.

I'm going to send the acoustic report separately since the file size is so large.

We are asking for expedited review on this one under our reimbursable agreement in order to finalize the re-eval and get NEPA clearance.

Please let us know if you have any questions.

Thanks, Chris

Chris Shulse

Environmental Compliance Manager Endangered Species and Wetlands Environmental and Historic Preservation Section Missouri Department of Transportation P.O. Box 270, Jefferson City, MO 65101 office 573-526-6678 •cell 573-406-2207 christopher.shulse@modot.mo.gov• www.modot.org/environmental-studies <u>M i s s i o n</u> "Our mission is to provide a world-class transportation system that is safe, innovative, reliable and dedicated to a prosperous Missouri."

From: Georganne E. Bowman
Sent: Friday, September 11, 2020 9:15 AM
To: Christopher D. Shulse
Subject: Expedited review requested for Butler County Rt 67 Good afternoon Andy,

MoDot is proposing to expand ten miles of Route 67 in Butler County, south of Poplar Bluff to south of Neelyville. We have determined that this project may affect, but is not likely to adversely affect Gray bat based upon the results of acoustic surveys (see attached report). These surveys failed to detect Indiana and Northern long-eared bats, therefore MoDOT and FHWA are making "no effect" determinations for these species. No effect determinations are also being made for Curtis pearlymussel and Pink Mucket because no suitable habitat for these species occurs within the action area. We are asking for concurrence with these determinations.

Attached to this email is the BA requesting an expedited review. Also attached is the Route 67 Protected Species Report, Prepared by Wood, Inc, and the Route 67 Acoustic Survey, prepared by ESI, Inc.

Let me know if you have any questions or need additional information. Thank you in advance for your time.

Sincerely,

Georganne Bowman

Sr. Environmental Specialist Environmental and Historic Preservation Section MoDOT - Design P.O. Box 270, Jefferson City, MO 65101

Heitz, Connie

From:	Christopher D. Shulse <christopher.shulse@modot.mo.gov></christopher.shulse@modot.mo.gov>
Sent:	Monday, October 19, 2020 10:36 AM
То:	Heitz, Connie
Subject:	FW: MoDOT Rt 67 in Butler County

CAUTION: External email. Please do not click on links/attachments unless you know the content is genuine and safe.

Hi Connie – see below.

From: Malissa Briggler <<u>Malissa.Briggler@mdc.mo.gov</u>>
Sent: Wednesday, September 23, 2020 12:57 PM
To: Georganne E. Bowman <<u>Georganne.Bowman@modot.mo.gov</u>>
Subject: RE: MoDOT Rt 67 in Butler County

Hello Georganne,

Thank you for reaching out to us and for sending such a detailed report. It makes the review go by much faster when all the information I'd need is right there in front of me. It looks like the rare plants you are expecting to encounter are mostly considered rare only in Missouri. We track them primarily because of the habitat is so limited in Missouri, but they are fairly common further to the south and east. For that reason and that your project area is not impacting sensitive natural areas, I believe the impact of this project will be minimal.

If I were worried about impacting the only few populations we have of these species in MO, I would explore possibilities of transplanting. But I don't see that as the case either.

If you have further questions, please feel free to contact me.

Thank you, Malissa

Malissa Briggler State Botanist Missouri Dept of Conservation 2901 W. Truman Blvd. Jefferson City, MO 65102 573-522-4115 ext. 3200

From: Georganne E. Bowman [mailto:Georganne.Bowman@modot.mo.gov]
Sent: Wednesday, September 23, 2020 12:29 PM
To: Malissa Briggler <<u>Malissa.Briggler@mdc.mo.gov</u>>
Subject: MoDOT Rt 67 in Butler County

Hi Malissa,

I just left you a voice mail message, and I'm following that with this email.

MoDOT is working to realign and widen Rt 67 south of Poplar Bluff to 2 miles of the Arkansas border. Working with our contractors we have completed a wetland delineation and protected species report (attached). During our assessment, we found several MDC plans of conservation concern.

Before we start construction, I wanted to touch base with you to see if there are any plants that need to be relocated? Or if you had any BMPs for working around these species? We have not consulted with COE yet on the wetland mitigation.

Give me a call and we can discuss our plans and opportunities for protection as we start moving forward.

Sincerely,

Georganne Bowman

Sr. Environmental Specialist

Environmental and Historic Preservation Section MoDOT - Design P.O. Box 270, Jefferson City, MO 65101 office 573-526-5649 •cell 573-508-3136 georganne.bowman@modot.mo.gov • www.modot.org/environmental-studies Appendix C

Map Index











































Appendix D

Noise Analysis Technical Memorandum

Project Technical Memorandum

Project Name:	NEPA Re-evaluation of the U	J.S. Route 67 EIS	
Project Number:	325220170		
Date:	September 14, 2020		
Prepared For:	Missouri Department of Tran	sportation	
-	Federal Highway Administra	tion	
Prepared By:	Wood Environment and Infra	astructure Solutions	
Subject:	Noise Analysis		
		Prepared by:	NMR
		Checked by:	CJH. KEB

1.0 Introduction

This memorandum provides the results of the traffic noise modeling analysis performed by Wood in July 2020 in support of the proposed US Route 67 (Route 67) Environmental Impact Statement (EIS) Re-Evaluation (Project) in Butler County, Missouri. The EIS re-evaluation is being conducted for the expansion of Route 67 south of Poplar Bluff to near the Arkansas state line, which supports the planned expansion of future Interstate 57 (I-57). The Project includes upgrading approximately ten miles of Route 67 from two lanes to a four-lane, fully-divided controlled access highway on a new alignment from the Route 160/158 interchange to two miles north of the Arkansas state line near County Road (CR) 274. The future expansion of Route 67 in Butler County requires a reevaluation of the "Environmental Impact Statement, Route 67, Madison, Wayne and Butler Counties, Missouri" (Final EIS) which was approved in 2005. The Final EIS evaluated the environmental impacts associated with upgrading 71 miles of Route 67 to a four-lane, access controlled, highway from just south of Fredericktown in Madison County to two miles north of the Arkansas line in Butler County. Since the Final EIS was completed, the Missouri Department of Transportation (MoDOT) has constructed the planned upgrades of Route 67 in Madison, Wayne, and partially in Butler County. The remaining southernmost ten miles of the Route 67 corridor studied in the Final EIS have not been upgraded and remain as a two-lane highway.

The purpose of the noise analysis was to address the potential for traffic noise impacts along the proposed improved Route 67 and to evaluate the need for noise abatement measures. The findings will assist with the impact assessment presented in the EIS re-evaluation and confirm compliance with Federal Highway Administration (FHWA) and MoDOT regulations.

2.0 Noise Background and Regulations

2.1 Noise Background

Sound is caused by the vibration of air molecules, and loudness is measured on a logarithmic scale using units of decibels (dB). Sound is composed of a wide range of frequencies; however, the human ear is not uniformly sensitive to all frequencies. Therefore, the "A" weighted scale was devised to correspond with the sensitivity of the human ear. The A-weighting generally weighs more heavily on noise levels in the humanly audible range and screens out noise levels that cannot

be heard but are still generated, such as a high frequency dog whistle. The A-weighted unit is used because:

- 1. it is easily measured,
- 2. it approximates the sensitivity of the human ear to sounds of different frequencies,
- 3. it matches attitudinal surveys of noise annoyance better than other noise measurements, and
- 4. it has been adopted as the basic unit of environmental noise by many agencies around the world in dealing with community noise issues.

The equivalent sound level is the steady-state, A-weighted sound level, which contains the same amount of acoustic energy as the actual time-varying, A-weighted sound level over a specified period of time. If the time period is one hour, the descriptor is the hourly equivalent sound level or Leq(h), which is widely used by state highway agencies as a descriptor of traffic noise. It is generally the equivalent level of sound [in decibels or dB(A)], which represents the level of sound, held constant over a specified period of time, and which reflects the same amount of energy as the actual fluctuating noise over that time period. Leq is based on the energy average, not a noise level average.

2.2 Federal Regulations

Traffic noise analyses are required for all projects considered a Type I project. The Federal regulations define Type I projects as any of the following:

- The construction of a highway on new location;
- The physical alteration of an existing highway where there is either:
 - Substantial Horizontal Alteration. A project that halves the distance between the traffic noise source and the closest receptor between the existing condition to the future build condition, or
 - Substantial Vertical Alteration. A project that removes shielding therefore exposing the line-of-sight between the receptor and the traffic noise source; (this is done by either altering the vertical alignment of the highway or by altering the topography between the highway traffic noise source and the receptor);
- The addition of a through-traffic lane(s); (this includes the addition of a through traffic lane that functions as a High-Occupancy Vehicle (HOV) lane, High-Occupancy Toll (HOT) lane, bus lane, or truck climbing lane);
- The addition of an auxiliary lane, except for when the auxiliary lane is a turn lane;
- The addition or relocation of interchange lanes or ramps added to a quadrant to complete an existing partial interchange;
- Restriping existing pavement for the purpose of adding a through-traffic lane or an auxiliary lane; or
- The addition of a new or substantial alteration of a weigh station, rest stop, ride-share lot or toll plaza.

This proposed Route 67 improvement would be characterized as a Type I noise project as it involves substantial alteration of an existing highway and the addition of through-traffic lanes.

The Federal regulations establish noise abatement criteria to consider noise levels where noise abatement should be evaluated. Five separate noise abatement criteria (NAC) based upon land use are used by FHWA to assess potential noise impacts. Per FHWA, a traffic noise impact occurs when noise levels approach or exceed the NAC listed in Table 2-1. In determining the applicable noise activity category for the study area, existing and proposed land use was reviewed. The applicable NAC for all residential noise receptors evaluated is 67 dB(A).

Activity	Activity	Criteria ¹	Evaluation	
Category	Leq(h)	L10(h)	Location	Activity Description
A	57	60	Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B ²	67	70	Exterior	Residential.
С	67	70	Exterior	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52	55	Interior	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E ²	72	75	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D or F.
F				Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.
G				Undeveloped lands that are not permitted.

Table 2-1. FHWA Noise Abatement Criteria

¹ The Leq(h) and L10(h) Activity Criteria values are for impact determination only, and not design standards for noise abatement measures.

² Includes undeveloped lands for development for this activity category.

Source: Table 1 to Part 772 - Noise Abatement Criteria, FR Doc. 2010-15848 Filed 7-12-10; 8:45 am

2.3 MoDOT Policy

Based on the FHWA regulations, state highway authorities are allowed to establish the noise level determined to approach the NAC and to define a substantial increase in traffic noise levels. MoDOT defines noise impacts as follows:

- Design-year traffic noise levels are predicted to approach, meet, or exceed the NAC, with approach defined as 1 dB(A) less than the NAC [for example, the approach value for the residential NAC of 67 dB(A) would be 66 dB(A)].
- Design-year traffic noise levels are predicted to substantially increase over the existing traffic generated noise levels. A substantial increase is defined as an increase of 15 dBA or more above the existing noise level.

3.0 Traffic Noise Analysis

3.1 Receptors

MoDOT defines a noise receptor as a discrete or representative location of a noise sensitive area(s), for any of the land uses listed in the Noise Abatement Criteria Table (Table 2-1).

For this analysis, noise receptors included any noise sensitive land uses located within 500 feet of the edge of the proposed roadway. Fifty-four receptors were identified along the 10-mile section of Route 67 between the Route 160/Route 67 interchange and County Road 274, shown in Figure 1. The majority of the receptors are residential (Category B), with one place of worship (Category C) and one commercial property, a flea market, with outdoor gathering space (Category E).

3.2 Methodology

Traffic Noise Model 2.5 (TNM 2.5) was used to determine existing and predicted noise levels for the proposed expanded Route 67 as described in the Route 67 EIS Re-evaluation currently underway. The model was run as a "flat terrain", or straight-line model as described in MoDOT EPG 127.13.12.2 Noise Screening Analysis Procedure. The straight line model was prepared as follows for this screening analysis:

- Model inputs consisted of existing and proposed roadway alignments, traffic data, volume, speed, and composition (trucks and cars) provided by MoDOT. Other inputs included posted speed limits, and receptor distances from the roadway.
- Elevation data was not incorporated into the model.
- Field measurements to validate the accuracy of the noise model were not required and thus, not conducted.

3.3 Traffic

Traffic volumes in the Route 67 study area were obtained from MoDOT's Transportation Management System Administrator. The current average daily traffic (ADT) on Route 67 in the study area is 5,863 vehicles per day (vpd). The construction year (2021) ADT is projected to be 6,014 vpd and the design year (2041) ADT is projected to be 7,687 vpd. The percentage of trucks in the traffic flow ranges from 31.4 percent to 35.2 percent. The posted speed along Route 67 is 60 miles per hour (mph).

4.0 <u>Results</u>

Existing and 2041 No Build and 2041 Build noise levels for all receptors are shown in Table 4-1.

	Table 4-1.	Noise Impact Summary
--	------------	----------------------

	Land Use		No Build	Build 2041	Build 2041 Increase	
	Category		2041 L _{Aeq1h}	LAeq1h	Over	
	/ NAC	Existing	Calculated	Calculated	Existing	Impact Under Build
Receptor	(dBA)	L _{Aeq1h} (dBA)	(dBA)	(dBA)	(dB)	2041 Conditions
1	B / 67	54.4	55.5	59.0	4.6	-
2	B / 67	50.6	51.7	54.5	3.9	-
3	B / 67	44.6	45.7	47.4	2.8	-
3A*	B / 67	53.6	54.7	56.4	2.8	-
4	B / 67	46.0	47.1	48.2	2.2	-
5	B / 67	45.1	46.2	47.0	1.9	-
6	B / 67	46.2	47.3	48.7	2.5	-
7	B / 67	46.6	47.7	49.3	-7.3	-
8	B / 67	48.8	49.9	52.0	3.2	-
9	B / 67	47.0	48.1	50.3	3.3	-
10	B / 67	47.0	48.1	48.9	1.9	-
11	B / 67	49.1	50.2	51.0	1.9	-
12	B / 67	59.7	60.9	59.3	-0.4	-
13	B / 67	51.6	52.7	51.7	0.1	-
14	B / 67	63.8	65.0	57.7	-6.1	-
15	B / 67	58.7	59.8	54.1	-4.6	-
16	B / 67	52.4	53.5	50.7	-1.7	-
17	B / 67	53.2	54.4	59.7	6.5	-
18	B / 67	51.9	53.0	57.1	5.2	-
19	B / 67	62.8	63.9	57.6	-5.2	-
20	B / 67	62.3	63.4	57.2	-5.1	-
21	B / 67	63.8	64.9	58.0	-5.8	-
22*	B / 67	56.9	58.0	<mark>67.5</mark>	10.6	Exceeds NAC
23	B / 67	63.7	64.8	57.8	-5.9	-
24	B / 67	48.3	49.4	51.4	3.1	-
25	B / 67	65.9	<mark>67.1</mark>	59.6	-6.3	Exceeds NAC (No- Build only)
26	B / 67	61.5	62.6	56.9	-4.6	-

27	B / 67	61.7	62.8	56.4	-5.3	-
28	B / 67	60.7	61.8	55.3	-5.4	-
29	B / 67	63.3	64.4	57.3	-6.0	-
30	B / 67	62.7	63.9	55.5	-7.2	-
31	B / 67	55.2	56.4	62.6	7.4	-
32	B / 67	53.4	54.5	59.0	5.6	-
33	B / 67	45.2	46.3	58.9	13.7	
34	B / 67	44.2	45.3	54.6	10.4	
35	B / 67	61.8	63.0	51.3	-10.5	-
36	B / 67	63.7	64.9	47.7	-16.0	-
37	E / 72	66.7	67.9	48.2	-18.5	-
38	B / 67	61.7	62.9	50.7	-11.0	-
39	B / 67	59.6	60.8	50.9	-8.7	-
40	B / 67	46.3	47.4	<mark>62.2</mark>	15.9	Substantial increase
	- • •					
41*	B / 67	50.0	51.1	<mark>67.9</mark>	17.9	Substantial increase; exceeds NAC
41*	B / 67 B / 67	50.0 56.3	51.1 57.4	<mark>67.9</mark> 53.7	17.9 -2.6	Substantial increase; exceeds NAC -
41* 42 43	B / 67 B / 67 B / 67	50.0 56.3 53.9	51.1 57.4 55.0	67.9 53.7 56.3	17.9 -2.6 2.4	Substantial increase; exceeds NAC - -
41* 42 43 44	B / 67 B / 67 B / 67 B / 67	50.0 56.3 53.9 52.2	51.1 57.4 55.0 53.4	67.9 53.7 56.3 59.5	17.9 -2.6 2.4 7.3	Substantial increase; exceeds NAC - - -
41* 42 43 44 45	B / 67 B / 67 B / 67 B / 67 B / 67	50.0 56.3 53.9 52.2 52.6	51.1 57.4 55.0 53.4 53.7	67.9 53.7 56.3 59.5 60.3	17.9 -2.6 2.4 7.3 7.7	Substantial increase; exceeds NAC - - - - -
41* 42 43 44 45 46	B / 67 B / 67 B / 67 B / 67 B / 67 B / 67	50.0 56.3 53.9 52.2 52.6 60.0	51.1 57.4 55.0 53.4 53.7 61.0	67.9 53.7 56.3 59.5 60.3 50.6	17.9 -2.6 2.4 7.3 7.7 -9.4	Substantial increase; exceeds NAC - - - - - - - -
41* 42 43 44 45 46 47	B / 67 B / 67 B / 67 B / 67 B / 67 B / 67 B / 67	50.0 56.3 53.9 52.2 52.6 60.0 63.3	51.1 57.4 55.0 53.4 53.7 61.0 64.4	67.9 53.7 56.3 59.5 60.3 50.6 51.9	17.9 -2.6 2.4 7.3 7.7 -9.4 -11.4	Substantial increase; exceeds NAC - - - - - - - - - -
41* 42 43 44 45 46 47 48	B / 67 B / 67	50.0 56.3 53.9 52.2 52.6 60.0 63.3 62.7	51.1 57.4 55.0 53.4 53.7 61.0 64.4 63.8	67.9 53.7 56.3 59.5 60.3 50.6 51.9 53.3	17.9 -2.6 2.4 7.3 7.7 -9.4 -11.4 -9.4	Substantial increase; exceeds NAC - - - - - - - - - - - -
41* 42 43 44 45 46 47 48 49	B / 67 B / 67	50.0 56.3 53.9 52.2 52.6 60.0 63.3 62.7 60.1	51.1 57.4 55.0 53.4 53.7 61.0 64.4 63.8 61.2	67.9 53.7 56.3 59.5 60.3 50.6 51.9 53.3 53.1	17.9 -2.6 2.4 7.3 7.7 -9.4 -11.4 -9.4 -7.0	Substantial increase; exceeds NAC - - - - - - - - - - - - - - - -
41* 42 43 44 45 46 47 48 49 50	B / 67 B / 67	50.0 56.3 53.9 52.2 52.6 60.0 63.3 62.7 60.1 64.2	51.1 57.4 55.0 53.4 53.7 61.0 64.4 63.8 61.2 65.4	67.9 53.7 56.3 59.5 60.3 50.6 51.9 53.3 53.1 56.0	17.9 -2.6 2.4 7.3 7.7 -9.4 -11.4 -9.4 -7.0 -8.2	Substantial increase; exceeds NAC - - - - - - - - - - - - - - - - - - -
41* 42 43 44 45 46 47 48 49 50 51	B / 67 B / 67 C / 67	50.0 56.3 53.9 52.2 52.6 60.0 63.3 62.7 60.1 64.2 53.0	51.1 57.4 55.0 53.4 53.7 61.0 64.4 63.8 61.2 65.4 54.2	67.9 53.7 56.3 59.5 60.3 50.6 51.9 53.3 53.1 56.0 50.7	17.9 -2.6 2.4 7.3 7.7 -9.4 -11.4 -9.4 -7.0 -8.2 -2.3	Substantial increase; exceeds NAC - - - - - - - - - - - - - - - - - - -
41* 42 43 44 45 46 47 48 49 50 51 52	B / 67 B / 67 C / 67 B / 67	50.0 56.3 53.9 52.2 52.6 60.0 63.3 62.7 60.1 64.2 53.0 57.7	51.1 57.4 55.0 53.4 53.7 61.0 64.4 63.8 61.2 65.4 54.2 58.8	67.9 53.7 56.3 59.5 60.3 50.6 51.9 53.3 53.1 56.0 50.7 59.5	17.9 -2.6 2.4 7.3 7.7 -9.4 -11.4 -9.4 -7.0 -8.2 -2.3 1.8	Substantial increase; exceeds NAC - - - - - - - - - - - - - - - - - - -

*Indicates receptor has potential for displacement.

Boldface and highlighted indicates the noise levels approach (within 1 dB), meet or exceed the NAC, or noise levels that are a substantial increase (15 dBA

or greater) from existing levels.

The existing noise levels for the receptors in the study area range from 44.2 dBA at Receptor 34 to 66.7 dBA at Receptor 37. The projected No Build 2041 traffic noise levels range from 45.3 dBA at Receptor 34 to 67.9 dBA at Receptor 37. Generally, receptor noise levels increase approximately 1 dBA from the existing scenario to the No Build scenario. Receptor 25 (single family residence along the east side of existing Route 67 south of CR 352) would experience noise impacts under the No Build scenario, exceeding the NAC of 67 dBA. However, there would be minimal expected change in noise levels from the existing scenario to the No Build scenario for the other receptors analyzed in the study area due to the projected increase in traffic volumes.

The 2041 traffic noise levels for the Build alternative as predicted by TNM range from 47.0 dBA at Receptor 5 to 67.9 dBA at Receptor 41. Three receptors would experience noise impacts under the Build scenario. Two receptors are considered impacted due to noise levels approaching, meeting, or exceeding the NAC. These occur at Receptor 22 (single family residence along the west side of Route 67 between CR 338 and CR 340) and Receptor 41 (single family residence north of CR 270 and east of the proposed Route 67 alignment). Receptor 41 also would experience a substantial increase in noise levels from the existing condition, as would Receptor 40 (single family residence north of CR 270 and west of the proposed Route 67 alignment).

5.0 Noise Abatement Evaluation

When traffic noise impacts are identified, noise abatement shall be considered and evaluated for feasibility and reasonableness.

Feasibility

Feasibility is the ability to provide abatement in a given location considering the acoustic and engineering limitations of the site. Acoustic feasibility refers to noise abatement measure(s) ability to achieve the minimum noise reduction at impacted receptors. MoDOT requires at least a 5 dBA insertion loss for a minimum of 2 first-row, impacted receptors for noise abatement to be considered feasible. Engineering feasibility refers primarily to physical constraints and other constructability constraints, such as topography, access, drainage, safety, maintenance, and presence of other noise sources. In general, if these factors are too extreme or cannot be accommodated in providing the minimum noise reduction, noise abatement will be deemed infeasible. For reasons of safety (primarily wind load and clear space concerns), a noise wall's height is limited to 20 feet. The wall height criterion alone cannot be used to consider noise abatement infeasible.

Reasonableness

Each of the three required reasonableness factors listed below must be met.

Mandatory Reasonableness Factors:

1. Viewpoints of owners and residents of the benefitted receptors will be obtained. These will usually be obtained by ballot through mailings or at a public forum;

- 2. Noise abatement measures shall not exceed 1,300 square feet per benefitted receptor, in the case of noise walls. Where noise walls are not options, other noise abatement techniques may be considered, but cannot exceed \$46,000 per benefitted receptor. In order to ensure that the noise abatement parameters remain current, the wall area limit and cost per benefited receptor shall be recalculated at an interval not to exceed every five years. The updated values may not be used to analyze noise abatement calculations from previous years. MoDOT does not allow cost averaging; and
- 3. Noise abatement measures must provide a minimum reduction of 7 dBA for 100 percent of benefitted, first-row receptors.

Based on the location of the three impacted receptors, the proposed project does not meet the feasibility criteria, as they are separated such that there is no area where two first-row, impacted receptors could be benefitted by abatement measures. Receptor 22 is isolated, while receptors 40 and 41 are located on opposite sides of the proposed roadway. Because the impacted receptors do not meet the feasibility criteria, further analysis of abatement measures will not be considered.

6.0 References

- MoDOT, Engineering Policy Guide (EPG), Section 127.13, Noise, website <u>https://epg.modot.org/index.php/127.13_Noise</u>, accessed August 2020.
- FHWA, Highway Traffic Noise: Analysis and Abatement Guidance, FHWA-HEP-10-025, December 2011.

Figures


























<u>Legend</u>

New ROWExisting ROW

Noise Abatement Category (NAC)

• Category B













