

IMPROVE



Record of Decision

FHWA-MO-EIS-04-01-F
Interstate 70 Corridor
Second Tier EIS
Section of Independent Utility 4
Route BB to Eastern Columbia
Boone County

(MoDOT Project Number: J4I1341G)

Approving Official:  Date: 4/27/06

Division Administrator
Federal Highway Administration

Record of Decision

FHWA-MO-EIS-04-01-F
INTERSTATE 70 CORRIDOR
SECOND TIER EIS, SIU 4
Columbia, Missouri

A. Decision

The Federal Highway Administration approves the selection of the Preferred Alternative for SIU 4 of the I-70 Corridor. The Missouri Department of Transportation (MoDOT) and the Federal Highway Administration (FHWA) are investigating improvements to I-70 across Missouri, from Kansas City to St. Louis. This effort is known as Improve I-70. As stated in the First Tier Environmental Impact Statement (EIS), the overall goal of the Improve I-70 project is “to provide a safe, efficient, environmentally sound and cost-effective transportation facility that responds to corridor needs as well as expectations of a national interstate.” Within SIU 4 (the 18-mile portion of I-70 that includes the city of Columbia and nearly all of I-70 in Boone County), the Preferred Alternative specifies the improvement of I-70 along its existing alignment. Improvements include increasing the number of through lanes on I-70 from four to six lanes, west of the U.S. 40 interchange and east of the MO-Z interchange, and from four to six, and ultimately eight lanes in the vicinity of Columbia, Missouri (from U.S. 40 interchange to the MO-Z interchange). The Preferred Alternative also includes the reconstruction/reconfiguration of the existing interchanges.

B. Alternatives Considered

In its regulations for implementing the National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) recognizes that many alternatives can potentially address an area’s transportation problems. The Selected Alternative for SIU 4 is selected, in part, on the basis of how well it satisfies the project’s purpose and need. The purpose and need elements associated with the Second Tier of the I-70 (SIU 4) EIS are to accommodate existing and future (2030) traffic volumes on I-70; to improve existing I-70 design; to accommodate all users of I-70; and to improve user safety on I-70. Reasonable alternatives must also be practical and feasible from engineering, environmental and economic standpoints.

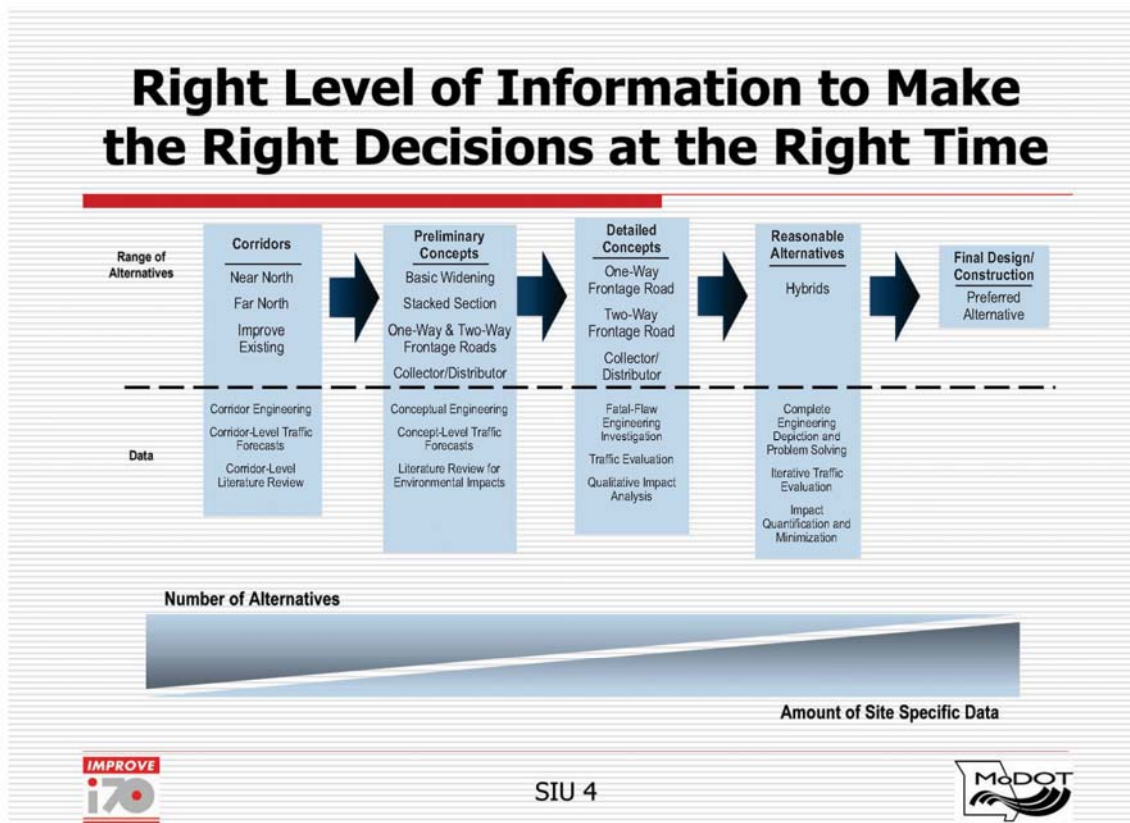
Identification of the Selected Alternative for SIU 4 was based on a screening process that began with the development of a wide range of initial alternatives to address the transportation needs of I-70. The wide range of alternatives was then screened based on engineering evaluations; agency coordination; consideration of social, economic and environmental impacts; and public input. The basic steps were as follows:

- Reevaluation of the **corridors** that emerged from the First Tier EIS. The corridor alternatives included improving the existing I-70 corridor, developing a Near North Corridor and developing a Far North Corridor. The Near North and Far North

Corridors were one-mile-wide (1.3-km-wide) bands without a specific freeway alignment.

- Screening of the corridors. One important question was whether improvements to only the existing I-70 corridor would address future transportation needs or whether improvements in multiple corridors would be required to safely accommodate future traffic volumes.
- Development of a range of preliminary alternatives or **concepts** within the corridor(s) that have been screened. For this project, preliminary concepts and detailed concepts were developed. This flexible approach allowed for the application of better data within the decision-making process.
- Determination of whether each concept is reasonable and responsive to the project purpose and need and retention of alternatives that address the existing deficiencies of I-70 (**reasonable alternatives**). In this case, the reasonable alternatives could be best described as hybrids of the original concepts.
- Identify a **Selected Alternative** and explain the justification for its selection.

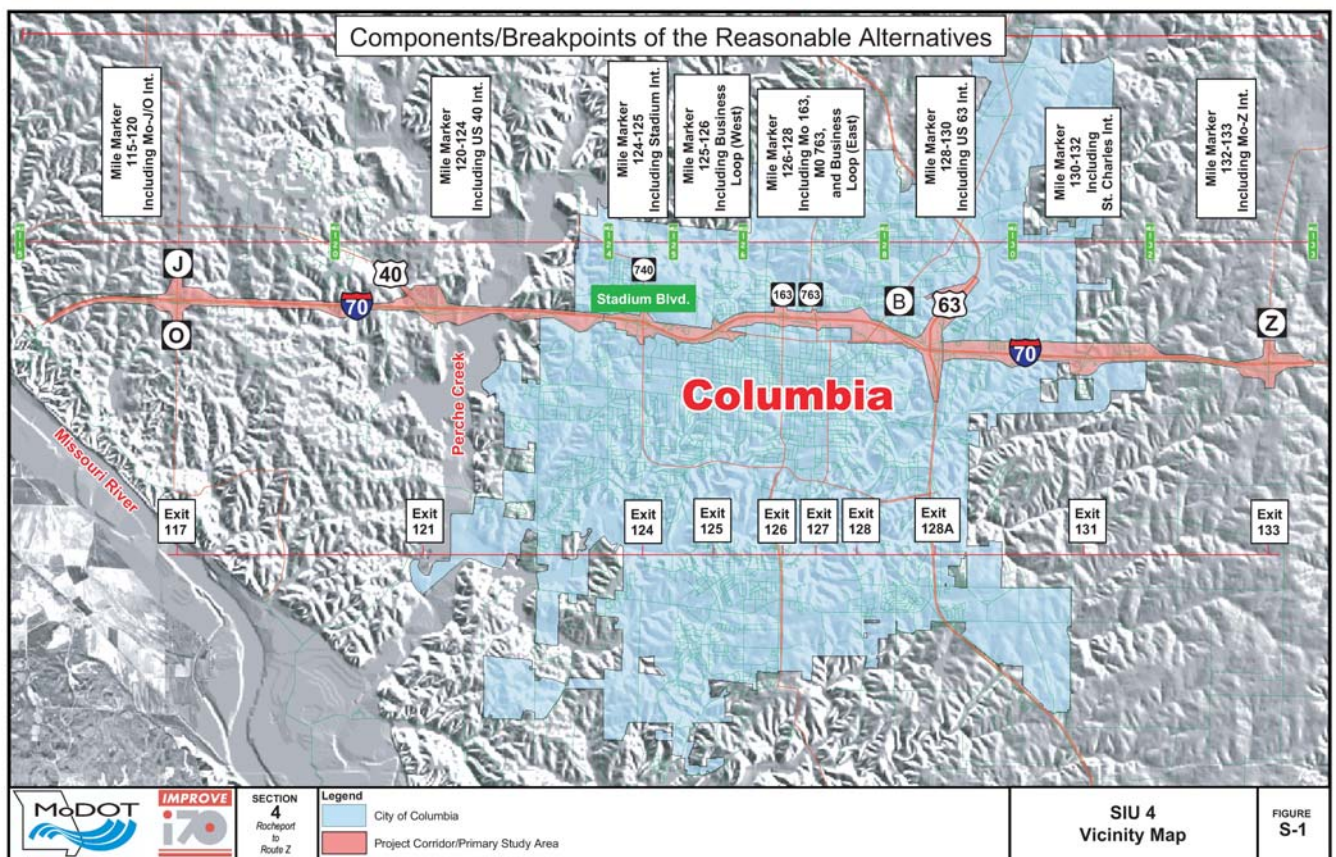
The following figure visually depicts the overall process of alternative development and evaluation.



The Selected Alternative for SIU 4 consists of the following elements:

Western Part of Project Area: Western Terminus to Stadium Interchange

This portion of I-70 extends between mile 116.2 and 124.6, including the MO-J/O interchange and the U.S. 40 interchange. The mainline widening would occur to the south and the widened rural median would be maintained. The widening to the south minimizes impacts and allows for a seamless transition to the Missouri River crossing that occurs in SIU 3 (approximately 1.3 miles [2.1 km] west of the SIU 4 termini). The MO-J/O interchange would be constructed as a diamond interchange, and the U.S. 40 interchange would be reconstructed as an enhanced diamond interchange. The existing frontage roads would be maintained and, in some cases, improved.



Central Part of Project Area: Columbia between Stadium and U.S. 63

This portion of the project extends from mile markers 124.6 to 130.0, including the Stadium Boulevard, Business Loop West, MO-763, MO-163, Business Loop East, U.S. 63 and Business 63 interchanges. Overall, the mainline widening occurs symmetrically on each side for the existing highway. Room for a maximum of eight lanes would be available; however, only six lanes would be constructed initially. Narrower medians in this largely urban portion of the project area would be used to minimize impacts. The existing frontage roads would be maintained and, in some cases, improved. The Stadium interchange would be reconstructed as a tight diamond, and the Business Loop West interchange would be reconstructed as a two-point interchange. The 163/763/Business Loop East

interchanges would be part of a one-way frontage road system, and the U.S. 63 interchange would be a four-movement system interchange combined with Business 63 as a tight diamond.

Eastern Part of Project Area: U.S. 63 to MO-Z

This portion of the project extends from mile marker 130.0 to the eastern terminus (mile marker 134.0), including the St. Charles Road and MO-Z interchanges. The mainline widening would occur symmetrically on each side for the existing highway and the urban median would be used. The existing frontage roads would be maintained and, in some cases, improved. West of the MO-Z interchange, there would be six lanes initially and ultimately there would be eight through lanes, and east of the interchange there would be six through lanes. The St. Charles interchange would be reconstructed as a tight diamond interchange, and the MO-Z would be a standard diamond interchange.

C. Section 4(f)

Section 4(f) of the DOT Act of 1966 limits FHWA participation in projects that adversely impact publicly owned park and recreation lands, wildlife and waterfowl refuges and historic sites. The Secretary of Transportation may only approve projects requiring the use of these lands if there is no feasible and prudent alternative to the use and the project includes all necessary planning to minimize harm. The reasonable alternatives were configured in order to avoid impacts to all Section 4(f) resources, except for the Bowling-Napier Estate (Architectural Resource 4BO147). The Bowling-Napier Estate is located between I-70 and Business Loop 70 in the vicinity of mile marker 127.5. The Bowling-Napier Estate was found to be eligible for the NRHP. The larger of the two dwellings was found to be individually eligible. The NRHP boundary was determined to be the entire 30-acre parcel.

The Selected Alternative (and all reasonable alternatives) include the relocation of the on and off movements between I-70 and Business Loop I-70 through the use of a new interchange. Approximately 6.3 acres (approximately 20 percent) from the property's northwestern corner would be acquired to construct the approach roads to the interchange. None of the buildings would be displaced. The proposed ramps along I-70 would also result in a narrow encroachment along the property's entire northern border. Based on coordination with the SHPO, these impacts led to an Adverse Effect determination. It was determined that Section 4(f) also applied. Pursuant to analysis, coordination and consultation, it has been determined that there are no feasible and prudent alternatives to the use of the Bowling property. Additionally, it has been determined that the project has incorporated all necessary planning to minimize harm.

Table 1 summarizes the minimization and mitigation discussed in the EIS.

Table 1 Summary of Section 4(f) Impact Minimization and Mitigation

This table summarizes the minimization and mitigation techniques evaluated for the Bowling Property.
Design Modifications: The design of the Selected Alternative sought to minimize the impacts associated with the new interchange. Below are some of the constraints that influenced the design.
The connector needed to terminate at existing intersections. New intersections would negatively impact the overall roadway network and conflict with existing intersections. Consolidating and relocating the terminal intersections increases the project's relocation impacts substantially.
Possible design modifications were constrained by the presence of the two fixed resources vital to the community – the power plant and the COLT Railroad.
The design also needed to be incorporated into the design of I-70 itself. Unless it could function as a component of the overall system, it could not be considered feasible. The Selected Alternative works within these constraints and avoids the acquisition of all of the buildings on the Bowling property.
Footprint Minimization: To the extent practical, the encroachment on the Bowling property was minimized by reducing the project footprint.
This included minimizing the total size of the project's footprint as well as shifting of design elements away from the Bowling property. As the design process proceeds, additional footprint reductions would be evaluated.
Payment of Fair Market Value: The Missouri Department of Transportation acquisition and relocation process is conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.
The Uniform Act, as well as Missouri state law, requires that just compensation be paid to the owner of private property taken for public use. The appraisal of fair market value is the basis of determining just compensation to be offered to the owner of property to be acquired.
Best Management Practices, Restoration and Landscaping: In order to rehabilitate the areas of the Bowling property disturbed by the project, a landscaping plan would be a component of the project. Important elements of this plan would include the following:
To the extent feasible, a phased construction schedule would be used to minimize exposed areas. The use of temporary covers to stabilize areas not under construction will also be investigated.
A re-vegetation plan would be a component of this project. This plan would compensate for the loss of trees caused by construction.
If possible, construction would be limited to a single growing season. In any case, vegetative covers would be well established prior to end of the growing season.
In addition to the implementation of standard Best Management Practices (BMPs), such as soil erosion control plans, specific BMPs would be established to minimize impacts, as applicable.
Coordination: The Improve I-70 project included an extensive public involvement/outreach program. Of particular interest to the Section 4(f) process are the following:
Property Owner Coordination and SHPO/Section 106 Coordination
Coordination amongst all of the affected local, regional and county transportation agencies
Coordination amongst local stakeholders and those interested in cultural resources.

D. Impacts

The process that led to the identification of the Selected Alternative included evaluations of impacts. The impact analysis included right of way impacts, environmental impacts, community impacts, displacement impacts, engineering impacts and issues along with an examination of the compatibility with local transportation priorities. An extensive public involvement plan was also used in the decision-making process. Even though the Selected Alternative involves the improvement of the existing roadway, it is expected that approximately 400 acres of new right-of-way will be required. Most of this right-of-way is agricultural land, but it also includes commercial, residential and industrial land uses. A total of 142 structures are expected to be acquired to build the Selected Alternative. This includes 39 single-family residential units, four multiple-family residential units, 66 structures associated with business operations, 23 outbuildings and 10 public or fraternal buildings. The residential units represent a total of 299 dwelling units. The vast majority of these come from two senior citizen residences located on the north side of I-70, between the Stadium (MO-740) and Business Loop West interchanges. The Selected Alternative has been configured to avoid the area's public parks. Likewise, it was the project team's intent to avoid impacts to sites on or eligible for the National Register of Historic Places. However, the Bowling-Napier Estate is affected by the Selected Alternative (see Section C). In addition to the impacts to the human environment, the Selected Alternative impacts the natural environment. Among the impacts are nearly 19,000 linear feet of stream impacts. Much of this is associated with the expansion of existing bridges or the improvement of existing culverts. Additionally, 8.3 acres of freshwater wetlands, 2.2 acres of non-wetland ponds and 143 acres of woodland habitat will be lost. The improvement of I-70 within SIU 4 will also require large expenditures of money. The total cost (in 2005 dollars) is expected to be \$627,997,000.

E. Measures to Minimize Harm

During the design and implementation of the Selected Alternative, MoDOT committed itself to obtaining necessary permits and performing other actions that will minimize and mitigate the impacts of the project. Those commitments are summarized below:

1. Missouri Department of Transportation will comply with the appropriate currently adopted design criteria and design standards.
2. Missouri Department of Transportation will incorporate suitable and reasonable Intelligent Transportation Systems (ITS) elements into the Improve I-70 program.
3. Missouri Department of Transportation will consult with emergency responder agencies involved in traffic incident management on I-70 in future design and maintenance of traffic plan development as the Improve I-70 program progresses.
4. Missouri Department of Transportation will construct frontage roads for the purposes of maintaining existing local service connections and maintaining existing access to adjacent properties, where warranted. The frontage roads as proposed in the Frontage Road Master Plan may be constructed in the future as needs arise and as funding becomes available. Where reasonably possible, any eight-foot (2.4 meters) paved shoulder along new frontage road construction could serve as a one-way bicycle facility.

5. Missouri Department of Transportation will develop a maintenance of traffic plan for the construction phases. Through traffic will be maintained along I-70 and at access points to the interstate from cross roads. It is likely that some interchange ramps and cross roads will be closed and temporary detours required. Construction schedules, road closures and detours will be coordinated with police forces and emergency services to reduce impact to response times of these agencies.
6. Missouri Department of Transportation will coordinate with project area businesses regarding access issues, via direct communication throughout the construction period.
7. Missouri Department of Transportation will coordinate with local public service and utility service providers during the final design phase of the project and during the construction period to minimize infrastructure relocation, modifications and connectivity requirements.
8. During right of way acquisition and relocations, MoDOT will assure that this will be accomplished in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. Missouri Department of Transportation is committed to examining ways to further minimize property impacts throughout the corridor, without compromising the safety of the proposed facility, during subsequent design phases.
9. During construction, MoDOT's standard specifications, MDNR Solid Waste Management Program, and MoDOT's Sediment and Erosion Control Program will all be followed.
10. To minimize impacts associated with construction, pollution control measures outlined in MoDOT's Standard Specifications for Highway Construction will be used. These measures pertain to air, noise and water pollution as well as traffic control and safety measures. Through MoDOT's approved Pollution Prevention Plan for the National Pollutant Discharge Elimination System (NPDES), the control of water pollution will be accomplished. In addition, all construction and project activities will comply with all conditions of appropriate U.S. Army Corps of Engineers and Missouri Department of Natural Resources permits and certifications. Finally, the Missouri Department of Transportation has special provisions for construction which require that all contractors comply with all applicable local, state, and federal laws and regulations relating to noise levels permissible within and adjacent to the project construction site.
11. Missouri Department of Transportation is committed to minimize lighting impacts. Efficient lighting and equipment will be installed, where appropriate, to optimize the use of light on the road surface while minimizing stray light intruding on adjacent properties.
12. Missouri Department of Transportation will review the Natural Heritage Database and coordinate with the U.S. Fish and Wildlife Service periodically during the project development process to identify any new locations of threatened and endangered species.
13. Landscaping in the right of way will include native plant species and other enhancements in accordance with the statewide I-70 Corridor Enhancement Plan

to the maximum extent possible. In accordance with MoDOT standards, new seed mixes, mulch and plant materials will be free of invasive weedy species to the extent possible. Where appropriate, MoDOT will partner with the MDC Grow Native program and implement the establishment of native vegetation along highway rights of way.

14. All crossings of jurisdictional streams and discharges of fill into freshwater wetlands are regulated under Sections 401 and 404 of the Clean Water Act (CWA). All permits required by the CWA will be obtained prior to construction. As part of the merged National Environmental Policy Act (NEPA)/Section 404 process, the U.S. Army Corps of Engineers (COE) has been working jointly with FHWA and MoDOT in developing this action. The agencies have concurred in the project's Purpose and Need and in the alternatives examined. The agencies conducted a joint public interest review after the Draft EIS was released for comment and after MoDOT applied for a Section 404 permit. The public interest review included a joint public hearing. Further coordination among the FHWA, the COE and MoDOT in April 2006 resulted in a decision to complete the FHWA Record of Decision (ROD) to be followed soon after with an "umbrella" Section 404 permit confirming the merged NEPA/Section 404 permit process and agreement on Purpose and Need, alternatives examined and the joint public interest review. That umbrella permit will be conditioned to require MoDOT to coordinate further with the COE during the detailed design of the project to ensure that suitable avoidance, minimization and mitigation are conducted to address potential impacts to wetlands and waters of the U.S. Wetland replacement, if necessary, will be provided through this permit process. The Missouri Department of Transportation has developed a Conceptual Wetland Mitigation Plan to compensate for wetland impacts. This plan addresses the wetland impacts associated with all of the I-70 SIUs. Wetland mitigation for SIU 4 will emerge from the finalized version of the mitigation plan.
15. Missouri Department of Transportation will continue to coordinate with the SHPO and comply with the existing executed Programmatic Agreement that complies with the National Historic Preservation Act.
16. When trees are removed, MoDOT will implement the tree replacement policy and plant two trees for every tree removed that has a diameter greater than six inches at breast height.
17. Where feasible, MoDOT's design process will minimize impacts to floodplains.
18. Mitigation efforts to prevent the rise in flood elevation of each of the water bodies affected will be employed to obtain a No-Rise Certification for the State Emergency Management Agency (SEMA) as well as any necessary floodplain development permits from SEMA.
19. Missouri Department of Transportation will continue to coordinate with the NRCS to determine appropriate mitigation measures for the loss of Conservation Reserve Program (CRP) and Wetlands Reserve Program (WRP) lands.
20. Plans for suitable pedestrian, bicycle and wheelchair access across I-70 will be developed during the design of the interchanges (where appropriate and feasible).

21. Missouri Department of Transportation's Noise Policy will be used to address noise impacts. Where appropriate, possible noise abatement types and locations will be presented and discussed with the benefited residents during the preliminary design phase. Noise abatement measures will be considered that are deemed reasonable, feasible and cost effective.
22. During the final design process, the MoDOT will consider options to minimize new right of way acquisition.
23. To avoid potential negative impacts on the Indiana bat, coordination with the USFWS will be conducted. The USFWS advocates reviewing projects on a case-by-case basis focusing on the project's proximity to known hibernacula; maternity, male roosts and/or important foraging areas; the composition of the woodland and the land use of the area after the project is complete. Missouri Department of Transportation will review the Natural Heritage Data Base periodically during the project development process to identify any new locations of endangered species activity. Missouri Department of Transportation will continue consultation with the USFWS to avoid or minimize potential impacts to this species.
24. Missouri Department of Transportation will continue cooperating with MDNR, MDC and USFWS to relocate the population of bristled cyperus known to occur within the right of way to other publicly owned lands prior to construction.
25. Additional study and proper remediation of hazardous waste sites that will be encountered by construction will be performed as needed to minimize exposure of construction workers and the public to hazardous wastes and to ensure proper disposal of contaminated earth and other substances. This includes proper disposal of demolition debris in accordance with state law.
26. The I-70 Study Team will continue to coordinate with local planning agencies, including CATSO and the Columbia Planning and Building Department.
27. The design of roadway crossings over I-70 and bridges over streams in the Columbia area will be coordinated with the City Planning and Building Department and the Parks and Recreation Department to make the crossings as compatible as possible with plans to extend bicycle and pedestrian trails and pathways along the roadways and stream corridors.
28. Detailed design of the project will include early coordination with City and County public works departments and the Missouri One-Call System to identify utilities in the project area. The design process will include periodic consultation of utility owners to ensure compatibility of the roadway design with continued service, proper design of any utilities requiring relocation, construction techniques and timing and technical assistance during construction.

F. Monitoring and Enforcement

The FHWA Missouri Division Office will monitor further project development for the Improve I 70 project through its day-to-day administration of the Federal aid program. The Missouri Department of Transportation has committed itself to numerous environmental commitments in association with the Improve I-70 project (see Section E). Among these measure to minimize

harm are identifying and committing to obtain all necessary permits for the construction of the Selected Alternative. These include:

- During right of way acquisition and relocations, MoDOT will ensure that this will be accomplished in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.
- During construction, MoDOT's standard specifications, MDNR Solid Waste Management Program, and MoDOT's Sediment and Erosion Control Program will be followed.
- To minimize impacts associated with construction, pollution control measures outlined in MoDOT's Standard Specifications for Highway Construction will be used.
- Through MoDOT's approved Pollution Prevention Plan for the National Pollutant Discharge Elimination System (NPDES), the control of water pollution will be accomplished.
- Stream and wetland impacts associated with the range of reasonable alternatives are subject to permitting and associated water quality certification under Sections 404 and 401 of the CWA. This project is being processed in accordance with the process of merging the NEPA review and compliance with the CWA. Key to merging the review is the coordination between the MoDOT and FHWA with the COE and MDNR at several concurrence points. In this way, the full rationale of the decisions by the MoDOT and FHWA can be shared with the regulators as the decisions are made, reducing the potential for having to revisit critical planning decisions at a later time. As indicated in Section E, the merged process has been implemented through this action. The COE, FHWA and MoDOT have agreed to complete the "umbrella" Section 404 permit after the FHWA ROD has been approved. The COE then will complete the process of evaluating the application for the "umbrella" Section 404 permit to be written with anticipated conditions for further coordination as detailed design is conducted for the action. All construction and project activities will comply with all conditions of appropriate U.S. Army Corps of Engineers and Missouri Department of Natural Resources permits and certifications. All permits required by the Clean Water Act will be obtained prior to construction.
- The Missouri Department of Transportation will enforce its special provisions requiring contractors to comply with all applicable local, state and federal laws and regulations relating to noise levels permissible within and adjacent to the project construction site.
- In accordance with the spirit of the Endangered Species Act, Missouri Department of Transportation will review the Natural Heritage Database and coordinate with the U.S. Fish and Wildlife Service periodically during the project development process to identify any new locations of threatened and endangered species. Missouri Department of Transportation will also continue cooperating with MDNR, MDC and USFWS to relocate the population of bristled cyperus known to occur within the right of way to other publicly owned lands prior to construction.
- Missouri Department of Transportation will continue to coordinate with the SHPO and comply with the existing executed Programmatic Agreement that complies with the National Historic Preservation Act.

- MoDOT will work with SEMA and assure that any floodplain and/or regulatory floodway issues are addressed appropriately.
- The Missouri Department of Transportation will require proper remediation and disposal of any hazardous waste encountered during construction, in accordance with state law.

G. Comments on Final FEIS

On November 18, 2005 a Notice of Availability for the SIU 4 FEIS was published in the National Register (Vol. 70, No. 222, page 69967). The comment period for this document ended on December 18, 2005. No comments on the FEIS were received.

H. Conclusions

The selection of the Selected Alternative for SIU 4 was made following a collaborative decision-making process that included a thorough consideration of all social, economic, and environmental factors with an extensive outreach program of resource agency coordination and public involvement. The Selected Alternative and its respective environmental consequences are accurately presented in the EIS for SIU 4.

The I-70 SIU 4 project was prepared using the condensed FEIS format. The project's DEIS presents all relevant project data up to, and including, the identification of the recommended Selected Alternative. The condensed FEIS parallels the format of the DEIS. Each major chapter of this FEIS briefly summarizes the important information contained in the corresponding section of the DEIS and discusses any noteworthy changes that have occurred since the DEIS was circulated. This condensed format approach avoids repetition of material from the DEIS by incorporating it by reference.