# **Record Of Decision**

U.S. Route 64 Bridge over the Missouri River St. Charles and St. Louis Counties, Missouri Final Environmental Impact Statement

Project No. J6P1436

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Date of Approval

Ku W. Ward División Administration For FHWA Title

# RECORD OF DECISION For

# U.S. Route 64 Bridge over the Missouri River St. Charles and St. Louis Counties, Missouri MoDOT Job No. J6P1436

#### Decision

The proposed project is a bridge relocation study for an improved Missouri River crossing of the U.S. Route 64 corridor in St. Charles and St. Louis counties, Missouri. The project is approximately 2.1 miles in length and involves a new crossing of the Missouri River and the demolition of the existing 1930's westbound bridge.

The original preferred alternative (A2' in the 2004 FEIS) proposed a new bridge be constructed upstream of the two existing bridges to provide four lanes of eastbound traffic. The 1980's bridge which currently provides four lanes of eastbound traffic would be converted to provide three lanes of westbound traffic. The 1930's bridge which currently provides three lanes of westbound traffic would be converted to provide one lane of westbound outer road traffic with a shared pedestrian bike path. After the public meeting held in May of 2010, it was voiced by the public that a connection to the Katy trail from the proposed shared pedestrian bike path was highly desired. Because of the strong opinion from the public, MoDOT has committed to providing a connection to the Katy trail from the new facility on the new bridge.

Recent inspections of the 1930's bridge have determined that the bridge should not be included in future improvement plans. The removal of the 1930's bridge from the improvement plan has resulted in the development of a new preferred alternative. This alternative is a slightly modified version of Alternative A Option 1. Also included in this project are improvements to the Chesterfield Airport Road interchange in St. Louis County, and connections to the proposed one-way collector/distributor road system along Route 64 in Chesterfield Valley.

The purposes of the proposed project are to improve the transportation system meeting increased travel demands by providing more capacity across the Missouri River, which also improves safety; to provide a new bridge across the river to address concerns with the aging and deteriorating westbound bridge; provide system continuity between roadway improvements in both St. Charles and St. Louis counties, and provide a facility that accommodates current economic development trends. The proposed project addressees all of these needs with little impact to the natural and social environment.

**Alternatives and Transportation Strategies Considered** 

Several transportation strategies were considered in order to meet the future transportation needs of the I-64 bridges across the Missouri River. Specifically, the following strategies were considered:

- No Action
- Transportation System Management (TSM)
- Mass Transit
- Upgrading the current bridge structures and approaches
- New bridge construction and new approach roadways

## **No Action**

Under the No Action strategy, there would be no new major construction. Improvements would be limited to normal pavement maintenance. The No Action strategy fails to address the projects purpose and need in that the No Action strategy would not:

- Address structural deficiencies of the existing, aging westbound bridge.
- Improve traffic flow by providing enough lanes across the river to accommodate the projected travel demands of the region over the next 30 years.
- Improve safety for motorists using the Route 64 bridges.
- Provide system continuity across the river.

Although the No Action strategy was eliminated because it did not address the projects purpose and need, it was carried forward as a baseline for comparing the other build alternatives.

## **Transportation System Management (TSM)**

TSM actions were determined not to be a viable option because the through traffic nature of the existing road and bridge configurations. There are no intersections, signalization or other typical TSM elements located in the study area. As a result, this strategy was not considered in detail as a reasonable solution and was eliminated from further consideration.

## **Mass Transit**

The only component of Mass Transit in the study area is commuter bus transit. A Major Transportation Investment Analysis (MTIA) for the Daniel Boone Study Area, completed in July 2000 by Parsons Brinckerhoff Quade & Douglas, Inc., indicates that there are no plans for the extension of mass transit facilities along the Route 64 corridor through the study area. Light rail transit is planned to stop at Westport (I-270 and Page Avenue) and is not planned to run west of Interstate 270. Due to the lack of long range plans to introducing mass transit into the study area, this strategy was eliminated from further consideration.

## **Upgrading Existing Facility**

Upgrading the existing facility was also evaluated. Both existing bridges were initially designed to carry two lanes of traffic. The westbound bridge was re-striped in December 2001 to provide three lanes of westbound traffic and the eastbound bridge was re-striped to carry four lanes of eastbound traffic. These new striping configurations have maximized the lane capacity of each bridge. This current, maximized condition along with the degrading structural integrity of the 1930's bridge fails to meet the objectives and identified needs presented in the project purpose and need. Therefore, improved bridge capacity can only result from a build alternative in order to add additional traffic lanes to the system. Upgrading the current structures was not given further consideration as a stand-alone solution since it will not be feasible to utilize the existing 1930's bridge and additional traffic cannot be added to the existing eastbound structure.

For this project, new bridge construction was considered viable for further study with the strategy of developing alternatives that meet the stated purpose and need with consideration of long-term cost effectiveness and potential environmental impacts and displacements.

### **New Construction Alternatives Considered**

#### Alternative A Option 1:

Alternative A Option 1 includes the construction of a new six-lane bridge on the upstream side of the existing eastbound bridge and the demolition of the existing westbound bridge. The new six-lane bridge carries four lanes of eastbound traffic and two lanes of westbound traffic separated by a concrete median barrier. The existing eastbound bridge converts to two westbound lanes.

#### Alternative A Option 1 Modified: (Selected Alternative)

Alternative A Option 1 Modified includes the construction of a new four-lane bridge that will provide four lanes of eastbound traffic. A shared pedestrian/bike path will be constructed on the upstream side of the new eastbound bridge with connections to the Katy trail and St. Louis County's trail system. Additionally, the1980s bridge which currently provides four lanes of eastbound traffic will be changed to provide four lanes of westbound traffic. A design exception has been approved to continue the use of four lanes on this structure. The 1930s bridge is to be removed.

## Alternative B Option 3:

Alternative B Option 3 includes the construction of a new six-lane bridge on the downstream side of the existing westbound bridge and demolition of the existing westbound bridge. The new six-lane bridge carries four lanes of westbound traffic and two lanes of eastbound traffic separated by a concrete median barrier. The existing eastbound bridge is then striped to only two eastbound lanes.

## Section 4(f)

The Selected Alternative (Alternative A Option 1 Modified) directly impacts the 1930s bridge which is a Section 4(f) property. A Programmatic Section 4(f) evaluation for historic bridges was completed for this impact and was signed by the Federal Highway Administration on July 13, 2011. In conjunction with the completion of the 4(f) evaluation, a Memorandum of Agreement (MOA) was prepared and approved July 17, 2011.

## **Measures to Minimize Harm**

All practical measures to minimize harm have been incorporated into the identification of the selected alternative. All such minimization measures that were considered in identification of the selected alternative will be incorporated into all appropriate construction specifications and contracts. There are no controversial or unresolved issues regarding mitigation aspects.

#### Traffic

A traffic management plan will be developed and implemented during the project's engineering phase to ensure reasonable traffic flow crossing the river 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.

#### Water Quality

MoDOT will implement best management practices for stormwater control and comply with the Missouri Department of Natural Resources (DNR) stormwater regulation 10 CSR 20-6.010 and the provisions of the National Pollutant Discharge Elimination System (NPDES) Permit No. MO-R100104, a general permit issued for road construction projects statewide. Job construction specifications will require erosion control measures to prevent sedimentation. MoDOT's Sediment and Erosion Control Program, as approved by the DNR, will be implemented to prevent pollution caused by construction activities. As described in the EIS, compliance with the provisions of DNR's stormwater regulations and the provisions of the NPDES permit will also minimize adverse water quality impacts.

#### **Relocations and Displacements**

Alternative A Option 1 Modified does not displace any residents or businesses. No impacts to public services and facilities are anticipated, and impacts to the tax base are anticipated to be minor.

#### Noise

Noise impacts associated with the selected alternative will be limited to construction related noise during the completion of the proposed replacement of the 1930's bridge and subsequent adjoining roadway.

#### Wetlands and Waters of the U.S.

MoDOT in coordination with the U.S. Army Corps of Engineers (USACE) and other resource agencies will compensate for any unanticipated permanent wetland losses by restoring, creating, and enhancing wetlands in a manner that will ensure no net loss of function or acreage as a result of this project. The compensatory mitigation site will be held in public ownership, or in an ownership arrangement suitable for both the USACE and the Missouri Department of Natural Resources (MDNR) (if Memorandum of Understanding between MoDOT and MDNR, Management of Wetland Mitigation Lands Agreement, or a similar agreement is in force at the time of the Section 404 permit authorization), and in a manner consistent with Section 4 or Executive Order 11990.

#### Floodplain

Current plans for the replacement bridge incorporate pier placement and span lengths that match the existing bridge; therefore, there will be no rise in either the regulatory floodway or the 1% (100-year) floodplain. During the design process, a detailed hydraulic analysis for the flows and water surface elevations will be made in accordance with the requirements of the Federal Emergency Management Agency (FEMA) and the USACE to ensure the absence of any encroachments upon regulatory floodway as well as to avoid any adverse impacts.

# Wildlife and Threatened and Endangered Species

Since there is no timeline for project construction at this time and designs for the project have not yet been completed, it cannot be determined at this time how the project may impact migratory birds, the bald eagle, Indiana bat, and the pallid sturgeon. Therefore, after completing the design phase of this project and prior to construction, MoDOT will reinitiate informal consultation with the U.S. Fish and Wildlife Service (USFWS) to discuss potential construction impacts to any threatened or endangered species and the best ways to minimize those impacts. Ideally, this consultation will occur 2-3 years prior to construction, allowing ample time to complete the consultation and implement any modifications needed to avoid or minimize impacts. If impacts to federally listed species cannot be avoided, FHWA and MoDOT will initiate formal consultation with the USFWS.

MoDOT will conduct a habitat assessment for the Selected Alternative. What is proposed likely has the maximum forested impacts and any reasonable alternative would likely have no more and probably less forested acres of impact. MoDOT will assessment habitat impacts for the federally endangered Indiana bat (*Myotis sodalis*) and complete consultation with the U.S. Fish and Wildlife Service before awarding the project. Any conditions resulting from consultation will be advanced through the Design-Build Process.

## **Cultural Resources**

One potentially eligible archaeological site is located within the project area. Since the project is going to be let as design build, it is not known to what extent the site will be impacted. Once the design is final and impacts to the site are known, appropriate actions will be taken to ensure that clearance is obtained from the State Historic Preservation Office (SHPO).

In addition to the one site that is located in the project area, a geomorphic and geoarchaeological study has recently been completed within the project corridor on the south or St Louis County side of the Missouri River, to assess the potential for deeply buried archaeological sites within the floodplain portions of the Daniel Boone Bridge project corridor. Buried soils and surfaces that could have been occupied during the historic and prehistoric past were identified in test trenches excavated within the corridor, however no artifacts, or other evidence for buried archaeological sites were present. That geomorphic study found no evidence for any archaeological sites within the project corridor on the St Louis County side of the Missouri River.

# Summary

The Preferred Alternative (Alternative A Option 1 Modified) minimizes the impacts, to the extent possible, on all of the sensitive resources listed above. Because of this, it is MoDOT's decision that this alternative best serves the need to address roadway concerns as well as minimizing impacts to resources and will be carried forward as the Selected Alternative to be constructed.