The Osage River Bridge and Rail Project
Cole and Osage Counties, Missouri

Federal Railroad Administration
FINDING OF NO SIGNFICANT IMPACT

June 2010

The Osage River Bridge and Rail project is located on the Union Pacific Railroad (UPRR) Jefferson City Subdivision in Osage City, Missouri, along the Amtrak *Missouri River Runner* route. The Osage River Bridge and Rail project consists of constructing a second railroad river bridge over the Osage River, at river mile 5.3, and providing double tracks on both sides of the bridge for a distance of approximately 0.5 miles. The new bridge will be 1,235 feet long and consist of 10 spans of seven deck plate girders, one through plate girder and two steel beam spans. The new bridge will be downstream and immediately adjacent to the existing UPRR Bridge at milepost 116.89 over the Osage River. The existing bridge is currently the only one-track section of railroad between St. Louis and Jefferson City, a distance of approximately 130 miles. When the new bridge and track work is completed, the UPRR line will be completely double track from Jefferson City to St. Louis. The Federal Railroad Administration (FRA) selected the application for the Osage River Bridge and Rail project, submitted by the Missouri Department of Transportation (MoDOT), for funding under the High-Speed Intercity Passenger Rail (HSIPR) Program.

Purpose and Need

The current one-track segment across the Osage River Bridge acts as a pinch point for rail traffic, which is a serious challenge to the UPRR dispatching system, and the unavoidable result is frequent delay to passenger rail and freight rail traffic. A total of 42 trains, including four Amtrak Missouri River Runner trains, run daily on the UPRR Jefferson City Subdivision through this single track segment on the Bridge. Total train idling time, as trains wait to cross the Bridge, ranges from 8 to 15 hours per day.

The purpose of this project is to eliminate the last bottleneck on the entire eastern half of the Amtrak route and thus increase the on-time delivery of both passenger and freight trains along the entire UPRR corridor in Missouri between St. Louis and Kansas City. No additional service is proposed as part of this project.

The new bridge will also eliminate train idling that occurs when trains wait to cross the single track across the bridge. Many trains currently wait in one of the two communities for an extended period of time. In addition, the bridge project will enhance comfort for passengers traveling to Jefferson City by minimizing any delay in their arrival at Jefferson City, which is only 8 miles away.

Alternatives

The alternatives considered for the proposed action include: the No-build alternative, the construction of a second-track bridge upstream of the existing bridge, and the construction of a second-track bridge downstream of the existing bridge (the Preferred Alternative). These alternatives were evaluated based upon their ability to meet the project purpose and need, to satisfy engineering design criteria, and to avoid or minimize adverse environmental impacts.

The No-build alternative would consist of continuing operations of freight and passenger rail traffic on the existing single track crossing of the Osage River. The no-build alternative was determined not to be feasible because it would not meet the project purpose and need and because it would not improve train service operations at the single track pinch point.

Construction of a second-track bridge upstream of the existing UPRR bridge was considered. However, due to the surrounding land use of the proposed location, the alternative has a greater potential for adverse environmental impacts than the Preferred Alternative. This alternative would adversely impact a residential neighborhood and require the taking of residential property. As a result, the upstream build alternative was dismissed from detailed analysis.

The Preferred Alternative proposes to construct the bridge downstream and immediately adjacent to the existing bridge. This alternative would be similar to the existing bridge, and the majority of the project area is within existing UPRR right-of-way. The Preferred Alternative will require an additional 0.4 acres on the north side of the railroad tracks in Osage City and 5.3 acres on the east side of the Osage River. The east side acquisition will require reconstruction of County Road 145, which parallels the existing track, to accommodate the addition of the second track.

Benefits of Preferred Alternative

The Preferred Alternative minimizes the construction time of the proposed bridge, while still meeting the need of eliminating the single track pinch point on the UPRR Jefferson Subdivision and improving the reliability of passenger and freight train service along the UPRR line from St. Louis and Kansas City, Missouri. The Preferred Alternative would result in minimal, short-term construction impacts and no long-term significant adverse environmental impacts. The Preferred Alternative will improve environmental conditions by reducing train idling and improving passenger and freight operations over the Osage River.

Procedural History

The U.S. Coast Guard (USCG) prepared an Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) for the Osage River Crossing for UPRR in December 2007 and conducted a Reevaluation of the EA in March 2010. The EA, FONSI, and Reevaluation were prepared to support issuance of a USCG bridge permit.

The USCG EA and Reevaluation cover the same scope of work proposed in the MoDOT Osage River Bridge and Rail Project selected for HSIPR funding by FRA.

The FRA Office of Railroad Policy and Development has reviewed the USCG EA and Reevaluation for the Osage River Bridge, which are attached for reference. The potential for environmental impact from the project is summarized as follows:

Community and Environmental Justice:
The Preferred Alternative will not result in any residential or business displacements or direct impacts to community institutions. The Preferred Alternative will also not result in any disproportionate adverse impacts on any minority or low income populations.

Floodplains:
The Preferred Alternative is located within the 100-year floodplain of the Osage River, but no materials would be placed below the 100-year flood contours for the temporary access roads, workpads, causeways, or bridges. The Preferred Alternative will not create any increase to the 100-year flood elevations.

Floodplain Development Permits from Cole and Osage Counties will be required. The Preferred Alternative will not result in a significant impact on floodplains or flood heights, nor stimulate additional development within the floodplain.

Wetlands:
The Preferred Alternative would impact three wetland areas totaling 0.15 acres, which includes 0.09 acres of palustrine emergent wetlands, 0.02 acres of palustrine scrub-shrub wetlands, and

0.04 acres of palustrine forested wetlands. Impacted wetlands will be mitigated through the purchase of one credit, consisting of one acre, from the Lower Missouri River Mitigation Bank, which will allow for a mitigation ratio of 3:1 for emergent and scrub-shrub wetland impacts and a 4:1 ratio for forested wetland impacts. A Section 404 Permit for wetland fill will be required from the U.S. Army Corps of Engineers (USACE).

The Preferred Alternative will not result in significant adverse impacts to wetlands, and there is no practicable alternative to the proposed location. The Preferred Alternative includes all practicable measures to minimize harm to wetlands, and mitigation shall be provided to compensate for the resulting minimal, unavoidable impacts.

Threatened or Endangered Species:
The project area contains suitable habitat for bald eagles, pallid sturgeon, and mussels. The U.S. Fish and Wildlife Service (USFWS) was consulted regarding the project, potential impacts, and conservation measures. USFWS concurred with a determination that the project is not likely to affect any federally listed species. The Preferred Alternative is not likely to adversely affect any threatened or endangered species.

To minimize the effect of the project on bald eagles, tree-clearing activities will be conducted only as required for construction and activities and should be conducted between March 1 and November 15. If any tree clearing activities are required between November 15 and March 1, surveys would be required to determine if bald eagles are present within the project area. To minimize construction impacts on the pallid sturgeon, pier construction should not be conducted and sediment disturbance should be minimized during April through July. In addition, measures should be taken to control erosion from construction activities, avoid water quality impacts on the Osage River, and maintain suitable water flow and fish passage.

Wildlife:
The Preferred Alternative is not expected to alter wildlife movement since a rail line already exists through the area and no additional train service frequencies would occur as a result of the project. The loss of habitat associated with the Preferred Alternative is negligible. The Preferred Alternative would have no significant impact on wildlife.

Prime and Unique Farmlands:
The Preferred Alternative will require moving County Road 145, which parallels the existing track, north to accommodate the second track. Six acres of farmland will be required for reconstruction of the road. The necessary 6 acres is less than 0.003 percent of Osage County's total available farmland of 194,645 acres. The U.S. Department of Agriculture Natural Resource Conservation Service (NRCS) relative value of the farmland is 80 on a scale of 0 to 100, and the total NRCS farmland conversion points, including the corridor assessment, is 118. A rating of 160 points or higher is considered a substantial impact. The Preferred Alternative will have no significant adverse impact to prime and unique farmlands.

Air Quality:
The project area is in attainment. The Preferred Alternative will eliminate 8 to 15 hours of trains idling per day and does not result in an increase in passenger or freight service frequencies. The project would have no significant adverse impact on current or future air quality or lead to the establishment of a non-attainment area. The Preferred Alternative is expected to have a beneficial impact to air quality.

Noise/Vibration:
The Preferred Alternative would not permanently increase noise and vibration in the project area. Temporary increases may result during construction, but train traffic volumes would not increase as a result of the Preferred Alternative. The Preferred Alternative would also eliminate the noise and vibration associated with trains idling from 8 to 15 hours per day. The Preferred Alternative will have no significant adverse impact to noise and vibration.

Water Quality:
The Preferred Alternative would not permanently impact water quality. Construction and operations activities related to the Preferred Alternative are consistent with Missouri State water quality standards, and a Section 401 Water Quality Certification will be required from the State of Missouri Department of Natural Resources, Water Pollution Control Program. Best Management Practices will be incorporated into the design and construction of the Preferred Alternative to minimize the potential for sediment and other pollutants to enter the Osage or Missouri River Systems. The Preferred Alternative will have no significant adverse impact to water quality.

Water Bodies and Navigable Waterways:
The Preferred Alternative would not permanently impact waterborne traffic, as the navigation channel will be maintained throughout the life of the project. A Section 404 Permit from the USACE would be required for the discharge of dredged and fill material into waters of the United States. The Preferred Alternative will have no significant adverse impact to water bodies or navigable waterways.

Historic and Cultural Resources:
The Missouri State Historic Preservation Office concurred with a determination of no effect on historic properties and no adverse effect on archeological resources eligible for the National Register of Historic Places.

Section 4(f)/6(f):
No Section 4(f) or 6(f) resources are located within the project area. The Preferred Alternative would have no impact on Section 4(f) or 6(f) resources.

Therefore, the FRA finds that the project as presented and assessed in the USCG EA and Reevaluation, including the mitigation measures outlined within, will have no foreseeable significant adverse impact on the quality of the human and natural environment.

Joseph C. Szabo
Administrator

6/21/10
Date

This document has been prepared in accordance with FRA's Procedures for Considering Environmental Impacts by the Office of Railroad Policy and Development, with assistance from the Office of Chief Counsel. For further information regarding this document, contact:

Wendy Messenger
Environmental Protection Specialist
1200 New Jersey Avenue SE
Washington, DC 20590
Phone: (202) 493-6396