Federal Highway Administration

[Docket No. FHWA–2021–0007]

Emergency Temporary Closure of the Interstate 40 Hernando DeSoto Bridge Over the
Mississippi River Between Arkansas and Tennessee

AGENCY: Federal Highway Administration (FHWA), U.S. Department of Transportation (DOT).

ACTION: Notice; request for comments.

SUMMARY: The Arkansas Department of Transportation (ARDOT) and the Tennessee Department of Transportation (TDOT) closed the I-40 Hernando DeSoto Bridge (I-40 Bridge) over the Mississippi River between Arkansas and Tennessee on May 11, 2021, for safety considerations when a mechanical fracture was discovered within the elements of a steel box beam. FHWA is providing notice that ARDOT and TDOT are continuing the temporary closure of the I-40 Bridge for an indefinite period of time. FHWA has approved a request by the Arkansas and the Tennessee Divisions of the FHWA for an emergency deletion of a segment of I-40 between the I-55 Split (Exit 279B) in West Memphis, Arkansas, and the I-240 Interchange (Exit 1E) in Memphis, Tennessee, from the National Network in accordance with applicable regulations due to the safety considerations discussed in this notice. FHWA is requesting comments from the public on the alternate routes selected by TDOT and ARDOT due to the closure.

DATES: Comments must be received on or before [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: To ensure that you do not duplicate your docket submissions, please submit them by only one of the following means:

- Federal eRulemaking Portal: Go to http://www.regulations.gov and follow the online instructions for submitting comments.
The ARDOT and TDOT closed the I-40 Bridge over the Mississippi River between Arkansas and Tennessee on May 11, 2021, for safety considerations. During a routine inspection
of the I-40 Bridge by ARDOT, a mechanical fracture was discovered within the elements of a steel box beam. Local law enforcement agencies were immediately notified to shut down the bridge to all traffic. FHWA is providing notice that ARDOT and TDOT are continuing the temporary closure of the I-40 Bridge for an indefinite period of time.

FHWA is responsible for enforcing the Federal regulations applicable to the National Network of highways that can safely and efficiently accommodate the large vehicles authorized by provisions of the Surface Transportation Assistance Act of 1982, Public Law 97-424 as amended, designated in accordance with 23 CFR Part 658 (Truck Size and Weight, Route Designations—Length, Width and Weight Limitations) and listed in Appendix A to Part 658. Under 23 CFR 658.11 (Additions, deletions, exceptions, and restrictions), FHWA may approve deletions of, or use restrictions on, the Interstate system or other National Network route based upon specified justification criteria in 23 CFR 658.11(d)(2). FHWA is authorized to delete any route from the National Network on an emergency basis based on safety considerations pursuant to section 658.11(e), which also requires publishing this notice in the Federal Register for comment.

The closure of the I-40 Bridge has affected traffic throughout western Tennessee, the Memphis metropolitan area, and eastern Arkansas. The I-40 Bridge and the I-55 Memphis-Arkansas Bridge (I-55 Bridge) are the only two Mississippi River crossings in the Memphis area. The additional traffic on I-55 due to the I-40 Bridge closure has increased delays in crossing the river. Based on traffic volume data provided by ARDOT and TDOT, the closed I-40 Bridge carried an Average Annual Daily Traffic (AADT) count of over 40,000 vehicles, and trucks comprised 30 percent of that volume. The I-55 Bridge had an AADT count of over 40,000 vehicles, with 35 percent of the volume comprised of trucks. The TDOT’s 2018 Statewide Multimodal Freight Plan¹ identified the I-55 river crossing as one of the top freight bottlenecks,

¹ Tennessee Statewide Multimodal Freight Plan is available at www.tn.gov/content/dam/tn/tdot/freight-and-logistics/TDOT_FreightPlan_AMENDED_04022019.pdf
based on the route meeting the condition that the segment had a level of service of F with a truck volume of greater than 5,000 trucks per day, and truck travel speeds averaging less than 45 mph.

Arkansas and Tennessee State transportation officials have implemented official detours via the Interstate network. Traffic on I-40 eastbound from West Memphis, Arkansas, into Memphis, Tennessee, is being rerouted to I-55 south to cross the I-55 Bridge. Motorists may then use I-240 to connect to I-40 eastbound in Tennessee. Traffic on I-40 westbound from Memphis, Tennessee, into West Memphis, Arkansas, is detoured to I-240, where traffic may connect to I-55 northbound to cross the Memphis-Arkansas Bridge and merge back into I-40 westbound.

Some ramps in the area are also closed. The TDOT closed the ramps accessing I-40 westbound from State Route 3 (SR 3)/Danny Thomas Boulevard southbound and northbound, Riverside Drive, Front Street, Madison Avenue, and I-240 northbound. In addition, I-40 westbound is closed to traffic at the split with I-240 southbound and the ramps to SR 3/Danny Thomas Boulevard southbound, Mound City Road and Martin Luther King Jr. Drive. The ARDOT closed the ramps accessing I-40 eastbound from Mound City Road and Martin Luther King Jr. Drive. In addition, I-40 eastbound is closed at the split with I-55 southbound and there is a lane closure in the area. The City of Memphis retimed the traffic signals to accommodate new traffic patterns and distributed maps through media on how to travel in and around downtown Memphis. In addition, TDOT is addressing the capacity of the I-55 and Crump Interchange by performing signing and striping changes to improve operations for both northbound and southbound traffic near the I-55 bridge. These improvements include ramp closures, enhanced striping to address friction points, and signage restricting movements that impact operations.

The TDOT and ARDOT have coordinated plans with local governments on both sides of the Mississippi River. The TDOT and ARDOT met with local transportation officials and police agencies immediately after the closure to prepare for the anticipated overflow of traffic from the official detour route on the Interstates to the local network. Such coordination is continuing with the City of Memphis counterparts in traffic, operations, and emergency management to address
any issues on diverted traffic, incidents, detours, and delay notices as changes are being made to improve travel in the area. Police agencies in the region are also assisting.

The TDOT SmartWay Traffic Management System provides access to closed circuit television and dynamic message signs (DMS) on both sides of the Mississippi River to allow real-time monitoring of traffic and incidents. Daily updates are being posted on TDOT’s Website for the I-40 closure. Traffic conditions on the I-55 Memphis-Arkansas Bridge can also be heard on TDOT’s 511 system. The TDOT placed portable message signs on I-40 west of the Tennessee River and east of Jackson, Tennessee, advising of the bridge closure. Estimated travel time to E. H. Crump Boulevard is displayed on the I-40 DMS west of the I-40/I-55 Interchange in West Memphis, Arkansas. Navigation service providers were advised of the bridge closure so that digital maps correctly reflect the current situation.

The ARDOT is also providing closed circuit television, portable changeable message signs (CMS), and static DMS on the Arkansas side of the river. Portable CMS were placed along I-55, as far as the Missouri State line and along I-40. DMS were posted as far away as Fort Smith, Texarkana, and Little Rock to advise intrastate traffic of the bridge closure. The ARDOT public facing Website, iDriveArkansas, has incident and advisory information concerning the closure. Live streaming video is available to the public and the ARDOT Traffic Management Center, which it actively monitors and provides assistance to first responders. Portable camera trailers and temporary cameras were deployed nearby and, on the structure, to assist with bridge monitoring. Traffic signal timing was reviewed for Marion and West Memphis.

To assist in facilitating Interstate commerce, ARDOT and TDOT are coordinating with local trucking associations to minimize freight traffic disruptions. The TDOT is working with State departments of transportation in Mississippi and Missouri along with the trucking industry to identify possible detour routes for long haul commercial motor vehicle (CMV) drivers to allow them to divert to other Mississippi River crossings and avoid the I-55 Bridge. By
Partnering with a smart mobility CMV fleet service, TDOT has arranged for detour information to be shared directly with CMV drivers through in-cab devices.

Overweight permitted loads in excess of 180,000 lbs. are being routed around the I-55 Bridge on alternate routes. Eastbound loads in excess of 12’ 6” in width are being rerouted as well. CMVs of the dimensions and configurations described in 23 CFR 658.13 and 658.15 which serve the affected area must use the following alternate routes:

For vehicles with a height of 13’ 7” to 15’ 9”: Eastbound I-55 travel must follow E. H. Crump Boulevard to Florida Street to South Parkway to I-240. Vehicles headed westbound must take I-240 Exit 28 to South Parkway to Florida Street to E. H. Crump Boulevard to I-55.

For vehicles with a height of 15’ 10” and up: Eastbound I-55 travel must follow E. H. Crump Boulevard to Florida Street to Kansas Street/New Horn Lake Road to US-61. Vehicles headed westbound must take SR-175 to US-61 to New Horn Lake Road/Kansas Street to Florida Street to E. H. Crump Boulevard to I-55.

Note: Any load over 15’ 6” will have a survey that must be reviewed for accuracy. Vehicles servicing the businesses bordering the impacted area are still able to do so by also using the alternate routes described above and local signage to circulate around the restricted area.


Issued in Washington, DC on July 12, 2021.

Stephanie Pollack,  
Acting Administrator,  
Federal Highway Administration.

[FR Doc. 2021-15151 Filed: 7/15/2021 8:45 am; Publication Date: 7/16/2021]