



Mr. Jason DuPont  
Project Manager  
Mid-States Project  
Vincennes University Jasper Campus  
Administration Building, Room 216  
850 College Ave.  
Jasper, IN 47546

June 14, 2022

RE: Mid-States Corridor Draft Environmental Impact Statement Comments

Dear Mr. Dupont,

The Executive Board of the Indiana Karst Conservancy (IKC) has spent considerable time reviewing the Draft Environmental Impact Statement (DEIS) related to the Mid-State Corridor. While we understand that the study selected Route P as the preferred route, we still wish to contribute comments on the analysis of Route M and Route O just in case the preferred route selection were to change prior to the release of the final EIS. As an organization, the IKC's primary mission is to protect caves and karst within Indiana. As acknowledged in various sections of the DEIS, and particularly Chapter 3, Section 22 (Karst Impacts) and Appendix Y (Karst Analysis), Route M and Route O would have had significant impact to the karst region of the Crawford Uplands in Dubois, Lawrence, Martin, and Orange counties.

While we will not get into too many specifics, it is concerning that there is likely an undercount of the number of caves that would be impacted by the proposed Routes M and O. Table Y-1 reported 28 caves for Route M and 21 caves for Route O. It is understood that these numbers were primarily based upon an April 2020 data request of *known* caves documented by the Indiana Cave Survey (ICS). We do know that several additional caves and significant karst features were subsequently identified with some of those reported to the ICS as a result of landowners becoming aware of the proposed routes who then contacted both the IKC and ICS to report karst features on their (and neighbors') properties. One of these was the multi-acre Ragsdale Gulf to the north of Orangeville, originally documented by Clyde Malott in 1932, but not in the ICS database until April 2022. It is not clear how much, if any, additional field investigation was completed specifically for this Mid-States Corridor analysis, but it is assumed there would be many more caves "discovered" if the corridor alignments were systematically walked, better reflecting the impact. And of course there would be a large number of caves without surface openings discovered during construction of Route M or O.

The IKC also questions the number of sinkholes reported (52-54 in Route M and 22-36 in Route O). These numbers seem grossly underestimated, knowing the karst topography of the areas where the alignments are located. Appendix Y did not go into detail of the methodology used to count the sinkholes or the respective cumulative areas of the sinkholes, but knowing some areas near the corridor alignment of Route O have been documented to have as many as 1.5 sinkholes per acre and that the alignments are in the range of 3,000 to 5,000 acres (granted only part of the alignments would be in karst areas), the reported number of sinkholes that would be impacted appears to be materially misstated.

It is also very troubling to read the statement in Appendix Y that "...karst impacts associated with either Alternatives M or O would require substantial additional agency coordination and field studies during Tier 2 to determine the details for karst impacts." For the EIS to have any validation in quantifying the real impact when comparing it to the other routes, this information should be included in the Tier 1 study. Planning to conduct this investigative work during the Tier 2 study, after the preferred route is already selected, is illogical and irresponsible. It is also disappointing that more effort was not expended in this Tier 1 study in quantifying the caves, karst features, and sinkholes that might discourage future proposals that seem to gain momentum every 10-20 years to place a new-terrain highway across this sensitive karst area.

At least it is reassuring that for both Route M and Route O that it was concluded in the DEIS that "...high cost and high impacts to many resources resulted in [them] being removed from further consideration. Several resource agencies expressed their opposition to Alternatives M and O because of their overall high impacts. The U.S. Army Corps of Engineers stated in its April 15, 2020 comment letter on the Screening of Alternatives package that it did not believe either Alternative M or O could satisfy the requirements to select the LEDPA, as required under the Section 404(b)(1) guidelines."

Organizationally, the IKC refrains from commenting on the appropriateness of the preferred Route P since it is to the west of the exposed karst region (although we have a number of members who are very much opposed). With that said, we do have a member in the Odon area who has recently reported a number of sandstone shelters and an abandoned coal mine in the First (Furse) Creek area where Route P crosses. These shelters and mine, now in the ICS database, could be winter bat hibernacula and also used seasonally for swarming or roosting activities. The use of sandstone shelters, crevices, and other natural non-traditional winter hibernacula is just now being fully appreciated (research is on-going at Ohio State University by Joe Johnson and others) and may be even more important post-White-nose Syndrome (WNS) for the survival of hibernating bat populations (some of which are federally endangered and others likely candidates for being listed as endangered).

The IKC appreciates this opportunity to comment, and we are glad that neither Route M or Route O was selected as the preferred route of this study.

Sincerely,

A handwritten signature in black ink that reads "Matthew Selig". The signature is written in a cursive, flowing style.

Matthew Selig  
President  
Indiana Karst Conservancy