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RE: Preliminary comments on Mid-States Corridor Project Tier 1 Environmental Impact Study –Draft Purpose and Need Statement, Screening of Alternatives, and Impact Assessment; and Request for Suspension of Project Planning Activities in Light of COVID-19 Virus Outbreak

Dear Commissioner McGuinness and Mr. DuPont,

The undersigned organizations and businesses are submitting our preliminary comments on the draft Purpose and Need Statement, the Screening of Alternatives Report, and the Impact Assessment Report. We reserve the right to submit additional comments and information for the project record should planning and analysis of the project go forward.

The United States and the world at large are enduring a global pandemic that has created great uncertainty and fear – for human health, for the well-being of our families and communities, and about the economic hardships that individuals and businesses are facing now and into the future. Because of the pandemic and its consequences, we seriously question the merits of proceeding with planning for a major highway project that risks multiplying the hardships already facing the residents and businesses of the twelve-county project area. These hardships include the possible loss of one's home or farm, and the displacement of locally owned businesses that are already struggling as a result of the necessary restrictions on commerce and social interaction resulting from efforts to reduce the spread of the virus. What's more, these restrictions on movement and public gatherings – along with Hoosiers' focus on the well-being of their families and communities – will discourage or completely undermine a meaningful public review and input process for the project.

This is an unprecedented time in modern history, and it behooves state government to focus its attention and resources on charting a sensible course to recovery, rather than exacerbating the

social and economic effects of the pandemic – at least for the residents of southern Indiana potentially affected by the Mid-States project. Accordingly, we urge the Indiana Department of Transportation to suspend any further planning or analysis of this project, and fully reevaluate the merits of this project, given the weaknesses of the purpose and need statement as described elsewhere in these comments.

Along with our recommendation to suspend project planning, the undersigned organizations are submitting the following preliminary comments on the Mid-States Corridor project. We urge you to (1) reconsider the Purpose and Need Statement for the project, (2) fully and fairly consider non-highway alternatives, and (3) reject the "northeast" corridor options, which would have considerable negative environmental impacts on important natural resources, rare habitat, and threatened and endangered species.

## Reconsideration of the Purpose and Need Statement

The Purpose and Need Statement is a key step in the NEPA process—it frames the problem that needs to be solved and defines the range of possible alternatives to be evaluated. The Statement for the proposed Mid-States Corridor Project is as follows:

> The Purpose of the Mid-States Corridor project is to provide an improved transportation link between the US 231/SR 66 and I-69 (either directly or via SR 37) which) [sic]
> 1. Improves business and personal regional connectivity in Dubois County and Southern Indiana;
> 2. Improves regional traffic safety in Southern Indiana;
> 3. Supports economic development in Southern Indiana; and
> 4. Improves highway connections to existing major multi-modal locations from Southern Indiana

The Purpose and Need Statement for the Mid-States Corridor Project is both flawed and inadequately supported.

### Population Trends and Economic Development

A primary concern is that the Statement essentially claims that low rates of population growth in the rural parts of the project area indicate lack of a strong economy and justify a new highway. This assertion, and its underlying assumptions, is deeply problematic. In justifying other highway projects, INDOT has argued that significant population *growth* is what justifies highway construction in undeveloped areas—on the basis that more people means greater demand for highway infrastructure.[1] Here, INDOT tries to claim the opposite—that *low* population growth should be addressed by building a new highway. INDOT cannot have it both ways. It is nonsensical to claim that when an area is growing, the state should build a highway to accommodate this growth, and also that when an area is declining, the state should build a

[1] *See, e.g., Illiana Corridor Tier Two Final Environmental Impact Statement*, 1-4 (Sept. 2014), *available at* http://nepa.illianacorridor.org/tier_2/tier2_feis.aspx.

highway to create growth. By this logic, Indiana should be building highways literally everywhere, a position which is certainly not consistent with smart transportation planning.

Furthermore, slow growth or even declining populations in rural areas is not unusual. Indeed, it is a recognized trend across the country. In recent years, there has been a demographic shift across the country toward more growth in urban areas and a corresponding decline in population in less developed areas. Two-thirds of rural counties in the United States decreased in population in 2012, compared to less than one-third of urban counties.[2] This is due not only to "Americans flocking to urban centers," but also due to natural decreases: rural counties have more older residents and lower birth rates. "And now that natural decreases started, they'll likely continue in these areas for years." *Id.*

Indiana-specific predictions are consistent with these national trends. "While the state will have a number of fast-growing communities over the next few decades, most Indiana counties will likely see a decline in population during this projection period. Losses will be especially common among Indiana's mid-sized and rural communities."[3] Net out-migration is expected to continue, while an aging population will lead to more deaths and fewer births. This trend is part of a broader cultural shift due to a number of factors and is unlikely to be reversed by the construction of a highway.

In light of these national and local trends, Indiana should focus on spending its limited tax dollars on infrastructure projects that will provide access for the most people at the least cost, thoughtfully leverage private investments toward areas with the infrastructure to support them, and encourage and support population growth in already developed areas. Importantly, encouraging sprawl development has economic and social costs far beyond the initial highway, as it increases stress on local roads and other infrastructure and social services. Indiana should consider the opposite approach being taken by other states with similar demographic challenges. Iowa, for example, has recognized that "[o]ur role is not to continually rebuild the system as it was built decades ago, but rather to implement a system that will meet the needs of the 21st century. This will require significant investment in stewardship, some focused capacity expansion as resources allow, and perhaps even some contraction of the system."[4] Similarly, the Congressional Research Service has noted "[t]he geographic breadth of population decline raises the question of whether some areas undergoing long-term population loss now have too many roads and bridges. This, in turn, leads to a policy question: should states and counties redirect highway funding away from underused roads and bridges in population loss areas and toward growth areas?"[5]

It is also critical to examine the assumption that increased highway access will lead to economic growth. Although the first interstate highways had significant economic benefits, as more and

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[2] Mike Maciag, *America's Rural-Urban Divide Is Growing*, Governing (Apr. 28, 2013), *available at* http://www.governing.com/blogs/by-the-numbers/gov-americas-rural-urban-divide-is-growing.html.
[3] Matt Kinghorn, *Indiana Population Projections to 2050*, Indiana Business Research Center, Indiana University Kelley School of Business (2018), available at http://www.incontext.indiana.edu/2018/mar-apr/article1.asp
[4] *Iowa In Motion 2045: Iowa State Transportation Plan*, at 141, Iowa Department of Transportation (2017), *available at* https://iowadot.gov/iowainmotion/files/IIM-2045-Full-Plan.pdf. Page 141
[5] *Rural Highways*, 3, Congressional Research Service (July 5, 2018), *available at* https://crsreports.congress.gov/product/pdf/R/R45250.

more highways were built, the additional benefit brought by each decreased significantly. According to a study conducted for the Federal Highway Administration, the "net social rate of return on total highway capital was high . . . in the 1950s and 1960s, then declined considerably . . . In [the] 1980s the rates of return on total highway capital and private sector capital seem to have converged."[6] In other words, spending tax money on highways has no greater net economic benefit than not collecting that tax in the first place would.

A recent report by the RAND Corporation reviewing literature on economic impacts of highways stated that "in a developed economy with a comprehensive highway system, such as that of the United States, it is inappropriate to expect that each highway investment will have large positive economic effects."[7] Instead, "highway infrastructure varies greatly in its economic effects, and these effects can be highly context-specific."[8] The Congressional Budget Office's February 2016 report on federal highway spending also acknowledged decreased economic returns on spending on highways, and noted that "[j]ust because highway infrastructure can have . . . positive economic effects does not necessarily mean that it will. Roads, bridges, or other forms of transportation to sparsely populated places or little used infrastructure may provide few of the benefits, let alone enough to offset the costs."[9]

Moreover, the Purpose and Need Statement explains that the project area has a combination of higher than average poverty, but relatively low unemployment. While the Statement seems to argue that there are unfilled jobs that could be filled by increased transportation, the high poverty rate suggests that the jobs that exist in the area are low-paying, and that may be the real reason that workers are not commuting into the area. Indeed, bringing in more workers could have the unintended consequence of driving down wages in light of increased labor supply.

Transportation Need

The Purpose and Need Statement also includes unsupported assumptions about the need for increased accessibility and connectivity. The Statement provides an apparently arbitrary determination that the "ideal" travel time between any two destinations is the time that it would take to travel the distance *in a perfectly straight line* between the two points *at 50-60 miles per hour for the entire trip*. It then looks at three origin points within the project area, and how long it is predicted to take *in the year 2045* to get to between four and eight destinations *with traffic*, including destinations as far away as Chicago, Illinois. For each of these origin/destination combinations, the actual travel time was only between 1.1 and 1.8 times the "ideal" travel time. Actual travel time for no trip was more than a 50% increase on a direct, perfectly straight route at 50 miles per hour. Based on these numbers, the Statement concluded that there is an accessibility problem. This is an astonishing conclusion. Under this approach, there is an accessibility

[6] M. Ishaq Nadiri & Theofanis P. Mamuneas, *Contribution of Highway Capital to Industry and National Productivity Growth* 115 (Sept. 1996), *available at* http://www.fhwa.dot.gov/reports/growth.pdf.
[7] Howard Shatz, et al., RAND Corporation, *Highway Infrastructure and the Economy*, 58 (2011), *available at* http://www.rand.org/content/dam/rand/pubs/monographs/2011/RAND_MG1049.pdf.
[8] *Id.* at iii.
[9] Congressional Budget Office, *Approaches to Making Federal Highway Spending More Productive*, 16-17 (Feb. 2016), *available at* https://www.cbo.gov/sites/default/files/114th-congress-2015-2016/reports/50150-Federal_Highway_Spending.pdf.

problem any time there is not a perfectly straight and direct 50-60 mile per hour (for the entire duration of the trip) transportation option between any two points. It would essentially require a highway entrance and exit ramp at everyone's front door. This cannot be the basis for determining a need for a new highway project.

The Purpose and Need Statement provides a further surprise when it reveals that *even in the year 2045*, outside of the urban centers, there will only be very limited congestion in a few discrete areas in the study area. This is entirely inconsistent with the claimed need for a new project. While there is overwhelming evidence that new highway capacity does not solve congestion, it defies common sense to suggest highway construction to solve *nonexistent* congestion.

It is also important that the agencies do not assume that building a new rural highway will improve regional safety. As an initial matter, rural highways generally have much greater fatality rates than urban roadways: "Although 19 percent of people in the U.S. live in rural areas and 30 percent of the vehicle miles traveled occur in rural areas, almost half of crash deaths occur there."[10] It is likely that many factors contribute to the higher fatalities on rural highways, including a false sense of safety (leading to more risky behavior),[11] higher chance of encountering wildlife and slow-moving farm equipment, and poorer lighting and pavement condition. Traffic safety concerns are important, and alternatives must be critically examined to determine whether they will actually improve safety. It has been widely shown that building more highways generally leads to more vehicle miles traveled due to induced demand, which would presumably lead to more collisions and fatalities. We urge the agencies to consider other methods of addressing safety concerns, including proven safety countermeasures[12] that could be implemented on existing area roadways. Depending on the specific local conditions, these countermeasures include things like improving roadside design at curves, dedicated left and right turn lanes at intersections, median barriers, and rumble strips.

Impermissibly Narrow Purpose and Need Statement

Furthermore, the Purpose and Need Statement is impermissibly narrow and predetermines the outcome. Under NEPA, an EIS must include a solution-neutral purpose and need statement, so that alternatives are not eliminated simply because they are different from the proposed project. *Simmons v. United States Army Corps of Engineers*, 120 F.3d 664, 666 (7th Cir. 1997). The NEPA analysis cannot adopt a limited purpose and need that acts as a "self-fulfilling prophecy" for this particular proposed highway project and that effectively precludes full and fair consideration of all reasonable alternatives, including non-highway alternatives. *Id.*

One of the stated purposes for the Mid-States Corridor Project is to "*[i]mprove[] highway connections* to existing major multi-modal locations from Southern Indiana." By definition, only building a new or expanded highway can improve highway connections. This purpose therefore

[10] *Fatality Facts 2018: Urban/Rural Comparison*, Insurance Institute for Highway Safety, Highway Loss Data Institute (Dec. 2019), https://www.iihs.org/topics/fatality-statistics/detail/urban-rural-comparison.
[11] University of Minnesota, *Americans take more risks when they drive the nation's rural highways, new study says*, ScienceDaily (Aug. 4, 2010), www.sciencedaily.com/releases/2010/08/100804110212.htm.
[12] *Proven Safety Countermeasures*, U.S. Department of Transportation, Federal Highway Administration (Page last modified on January 24, 2020), https://safety.fhwa.dot.gov/provencountermeasures/.

inappropriately forecloses non-highway alternatives. The Purpose and Need Statement must be re-written to be solution-neutral.

**Full and Fair Consideration of Non-Highway Alternatives**

The alternatives analysis forms "the heart of the environmental impact statement." 40 C.F.R. § 1502.14. *Simmons v. U.S. Army Corps of Engineers*, 120 F.3d 664, 670 (7th Cir. 1997). Under NEPA, an agency must "[r]igorously explore and objectively evaluate all reasonable alternatives," including the alternative of no action. 40 C.F.R. § 1502.14.

The proponents' summary dismissal of non-highway transportation alternatives is unreasonable. The relevant Appendix acknowledges that transit and passenger rail can "connect employees to places of work," but states that they would not "support regional industry logistics operations and goods movement," and that transit "does not have the scale or scope of impact necessary."[13] This limited analysis does not even begin to consider how transit could be expanded so that it *would* have an adequate scale, nor does it consider how expansion of passenger and freight rail together might meet all of the purported purposes of the project.

The Appendix acknowledges that freight rail is "well-used in Indiana" and that it is "a consistent and efficient means of moving goods," but argues that it can only serve limited industries. Even more surprisingly, the Appendix indicates on a comparison chart – with no discussion or support whatsoever – that freight rail cannot improve highway safety, economic development, or intermodal connectivity. To the contrary, increased use of freight rail could replace truck traffic, with corresponding highway safety benefits, not to mention decreased wear on roadways. As acknowledged, freight rail can be an efficient means of moving goods. In fact, rail accounts for 40% of freight transport based on ton-miles, but only causes 8% of the carbon emissions from freight transportation.[14] "Rail transportation is so efficient that even if cargo must travel a longer distance by rail than it would by point-to-point trucking, shipping by rail still uses far less energy."[15] Freight rail can certainly also benefit economic development and intermodal connectivity.

The Appendix not only fails to consider how passenger and freight rail might be developed together, but also fails to consider <u>any</u> combinations or packages of non-highway alternatives. The agencies should definitely consider local road upgrades – including safety improvements, as discussed above, and should consider local roadway improvements in combination with other options, like transit and non-transportation alternatives as described in Section 1.4 of the Screening of Alternatives report[16].

[13] Purpose and Need Statement at p.25.
[14] Michael E. Webber, *Freight Trains Are Our Future* (Excerpt: Power Trip), Popular Science (May 9, 2019), *available at* https://www.popsci.com/power-trip-excerpt/.
[15] *Id.*
[16] Screening of Alternatives Report, Mid-States Corridor, Tier 1 Environmental Impact Study, February 2020

**Rejection of Environmentally Damaging Northeast Corridors**

We especially urge INDOT to reject the "northeast" corridors that cross the heavily forested and sensitive karst terrain in Orange, Martin and Lawrence Counties. As reflected in the Combined Meeting Summary document, there is strong public concern about the environmental impacts of this proposed project.

The proposed Mid-States Corridor highway will have significant environmental impact along all the potential routes, and proposed routes M and O are especially problematic. For the alternative routes selected to move forward, the Impact Calculation Appendix[17] lists these impacts:

- Floodplain impacts range: 217 acres (Route C) to 801 acres (Route M); Route M and Route O have greatest impacts
- Wetlands impacts range: 30 acres (Route P) to 62 acres (Route M)
- Stream impacts range: 48,833 linear feet (Route C) to 114,844 linear feet (Route O); Route M and Route O have the greatest impacts[18]
- Forestland impacts range: 221 acres (Route B) to 1,998 acres (Route M); Route M and O have the greatest impact
- Farmland impacts range: 1,155 acres (Route M) to 1,583 acres (Route P)
- Karst areas impact range: 0 acres (all routes except M & O) to 568 acres (Route O)

Proposed routes M and O will disturb or destroy sensitive and high value environmental resources.

*Lost River Karst plain and other karst areas and features*

The Lost River Karst Area is a globally recognized geologic area due to its high concentration and diversity of karst features: caves, springs, sinking streams, swallow holes, sinkholes and other features.[19] The Lost River flows through the Mitchell Karst Plain, a natural region underlain by karst geology that extends from Putnam County to the Ohio River.[20] The Lost River runs underground for 22 miles in Orange County, returning to the surface near Orangeville. In some parts of the Lost River drainage there are 1,000 or more sinkholes per square mile.[21] Two of Indiana's three largest springs – the Orangeville Rise and the True Rise of the Lost River – are found here. The Lost River Cave System in Orange County is the second longest cave in

[17] Screening of Alternatives Report Impact Calculation Appendix, Mid-States Corridor, Tier 1 Environmental Impact Study, February 2020

[18] Note: these listed impacts do not include impacts to the significant sub-surface "stream" drainage prevalent in these karst-intense areas.

[19] The Lost River Karst of Indiana, A National Monument Proposal, NSS Lost River Conservation Task Force, Robert Armstrong, March 1974

[20] Homoya, Michael A., Abrell, Brian, Aldrich, James R., Post, Thomas W., The Natural Regions of Indiana, Indiana Natural Heritage Program, Indiana Department of Natural Resources, *Indiana Academy of Science*, Vol. 94, 1985

[21] Malott, Clyde A., Presidential Address, Significant Features of the Indiana Karst, Indiana University, *Indiana Academy of Science*, undated

Indiana at 22.2 miles surveyed to date.[22] This cave is located between Wesley Chapel Gulf and the True Rise of the Lost River. Orangeville Rise, Wesley Chapel Gulf (managed by the U.S. Forest Service), and Tolliver Swallow Hole are designated National Natural Landmarks.[23] The Lost River area is worthy of national monument designation, and such a proposal was recommended by the Lost River Conservation Association as far back as the early 1970s.[24]

To the west of the Lost River area into the Crawford Upland are many karst valleys separated by sandstone ridges.[25]

The Blue Spring Cave System in Lawrence County is the third largest cave in Indiana at 20.9 miles surveyed to date.[26] This cave is located southwest of Bedford with drainage all along SR 37 (part of Route O).

Karst systems are highly vulnerable to contamination by nonpoint source runoff, including the polluted runoff from highways. Surface runoff may enter karst features with little or no soil buffering or natural attenuation of flow.[27] Unlike in non-karst systems, groundwater moves very rapidly in karst regions, meaning pollutants can be spread long distances in a short period of time.[28] These underground habitats are extremely sensitive to even slight changes in water chemistry, including change in pH.

Karst systems support an incredible diversity of life, including many of the rarest types of spiders, insects, and crustaceans.[29] The state-endangered Hoosier Cavefish – a candidate for federal listing – lives in the underground waters of the Lost River karst area.[30]

Highway construction through this area will disturb or destroy karst features, change well-established underground flow and drainage patterns, increase the risk of polluted runoff entering the karst system, and harm the rare and sensitive species that live in the underground waters and caves of this area. During construction, sediment and petroleum-based substances from construction machinery can pollute surface and ground water.[31] Runoff from a highway in use

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[22] Indiana Karst Conservancy, IKC Update No. 109, December 2012
[23] National Park Service, U.S. Department of Interior, National Natural Landmarks by State: Indiana, https://www.nps.gov/subjects/nnlandmarks/state.htm?State=IN, accessed March 21, 2020
[24] The Lost River Karst of Indiana, A National Monument Proposal
[25] Malott, Clyde A., Significant Features of the Indiana Karst
[26] Frushour, Sam, Map published Oct 1999
[27] Living with Karst, A Fragile Foundation, American Geological Institute, in cooperation with National Speleological Society and American Cave Conservation Association, Illinois Basin Consortium, National Park Service, U.S. Bureau of Land Management, USDA Forest Service, U.S. Fish and Wildlife Service, U.S. Geological Survey, 2001
[28] *Id.*
[29] Lewis, Julian J., A Few Words about the Subterranean Fauna of the Lost River (Orange County, Indiana), IKC Update No. 99, December 2010
[30] Chakrabarty P, Prejean JA, Niemiller ML (2014) The Hoosier cavefish, a new and endangered species (Amblyopsidae, Amblyopsis) from the caves of southern Indiana. ZooKeys 412: 41–57. doi:0.3897/zookeys.412.7245
[31] Water Quality And Quantity Impacts Of Highway Construction And Operation: Summary And Conclusions, Michael E. Barrett, Joseph F. Malina, Jr., Randall J. Charbeneau, Research Report Number 1943-7F, Texas Department of Transportation by the Center For Transportation Research Bureau Of Engineering Research, The University Of Texas At Austin, March 1996

contains metals, solids and sediment, and petroleum hydrocarbons.[32] Spills from tanker truck accidents, involving chemicals, gasoline or other toxic substances may occur. Post-construction, there are also the added risks and costs of future collapses and repairs for the life of the highway.[33]

There is no on-the-ground alignment of Route O that can avoid substantial impacts to the sensitive and unique karst features and fish and wildlife resources in the Lost River basin.

*Hoosier National Forest*

The Hoosier National Forest (HNF) is Indiana's largest public forest at 203,000 acres, stretching from south of Bloomington to the Ohio River. The HNF contains high-quality upland and bottomland hardwood forest, dominated by stands of oak-hickory and mixed hardwood forest. It contains some of the largest tracts of contiguous forest in Indiana, a variety of high-quality natural communities, and provides critically important habitat for numerous wildlife species.[34]

The HNF is also a highly valued recreation destination, sought by hikers, birdwatchers, anglers, hunters, backpackers, cave explorers, horse riders and mountain bikers. The forest contains over 260 miles of hiking, horseback and mountain bike trails, five horse camps, and several regular campgrounds.[35] It is one of the few areas in Indiana where visitors can find and enjoy a primitive backcountry recreation experience.

Routes M and O will travel through or adjacent to the HNF purchase boundary and depending on exact location of the final right of way, may directly affect HNF land (including Wesley Chapel Gulf).[36] The Luke's Knob Area, a designated backcountry area (MA 6.4)[37], and the Shirley Creek Horse Camp and Trail System would be HNF areas closest to Route O and possibly directly impacted by this route. Karst features are found throughout the Lost River unit of the HNF.

In addition, Routes M and O will adversely impact the solitude and serenity provided in the Sam's Creek and Tincher Hollow areas of the Hoosier National Forest popular for wilderness recreation experiences that are very limited in Indiana.

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[32] National Academies of Sciences, Engineering, and Medicine 2006. Evaluation of Best Management Practices for Highway Runoff Control. Washington, DC: The National Academies Press. https://doi.org/10.17226/23211.
[33] Weary, David J., The Cost of Karst Subsidence and Sinkhole Collapse in the United States Compared with Other Natural Hazards, U.S. Geological Survey, The 14th Sinkhole Conference, U.S. National Cave and Karst Research Institute, October 2015
[34] Hoosier National Forest, USDA Forest Service, https://www.fs.usda.gov/main/hoosier/about-forest, accessed March 21, 2020
[35] Forest Facts, Hoosier N.F., USDA Forest Service, March 2008
[36] Screening of Alternatives Report, Mid-States Corridor, Tier 1 Environmental Impact Study, February 2020
[37] Land and Resource Management Plan, 2006, Hoosier National Forest, USDA Forest Service , https://www.fs.usda.gov/main/hoosier/landmanagement/planning, accessed March 21, 2020

Any public parks, recreation areas or wildlife refuges that may be affected by the project are subject to protection from conversion under Section 4(f) of the 1966 U.S. Department of Transportation Act[38], and Section 6(f)(3) of the Land and Water Conservation Fund Act.[39]

*Martin State Forest*

Martin State Forest encompasses 7,863 acres in Martin County and includes several parcels nearby or along Route M and which may be directly affected by this route.[40] Karst features are also common along this corridor. As with the HNF, Martin State Forest contains high quality hardwood forests that provide important wildlife habitat, stunning scenic views, outdoor recreation opportunities, watershed protection, forest products and carbon sequestration services.[41]

Among the state and federal natural areas or recreation sites that could be affected by Routes M & O are[42]:

- Hindostan Falls
- Williams Dam
- Spice Valley
- Jug Rock Nature Preserve
- Bluffs of Beaver Bend Nature Preserve
- Plaster Creek Seeps Nature Preserve
- Orangeville Rise Nature Preserve
- Wesley Chapel Gulf, Tolliver Swallow Hole, National Natural Landmarks

*East Fork White River*

Route M would generally parallel and likely cross the East Fork White River and its tributaries in several locations.[43]

According to a 2006 Indiana Department of Natural Resources report, *White River Basin Survey: East Fork White River, 2003*, "the EFWR fish community represents a highly diverse fish community that was comprised of at least 86 species, including one state endangered species (Lake sturgeon) and one state species of special concern (Spotted darter)."[44] The East Fork White River, below Williams Dam, is particularly significant as the habitat for what is

[38] An overview of the Federal law dealing with protection of parks, recreation areas, wildlife and waterfowl refuges, and historic sites, Companion Guide to Video, Federal Highway Administration, U.S. Department of Transportation, August 2012, www.fhwa.dot.gov/federal-aidessentials, accessed March 21, 2020
[39] National Park Service, U.S. Department of Interior, Land and Water Conservation Fund, Compliance Responsibilities and Legal Protection, https://www.nps.gov/subjects/lwcf/protection.htm, accessed March 21, 2020
[40] Screening of Alternatives Report, Mid-States Corridor, Tier 1 Environmental Impact Study, February 2020
[41] Martin State Forest, Indiana Department of Natural Resources, https://www.in.gov/dnr/forestry/4822.htm, accessed March 21, 2020
[42] Screening of Alternatives Report, Mid-States Corridor, Tier 1 Environmental Impact Study, February 2020
[43] *Id.*
[44] White River Basin Survey: East Fork White River, 2003, Kevin Hoffman, Assistant Research Biologist, Division of Fish and Wildlife, Indiana Department of Natural Resources, 2006

considered the only Ohio River strain of the Lake sturgeon (*Acipenser fulvescens*) remaining in the entire Ohio River drainage.[45] The Lake sturgeon, a long-lived fish that can reach 8 feet in length and weigh up to 300 pounds[46], is currently being considered for federal listing. In 2019, in response to a listing petition filed by several non-profit organizations, the U.S. Fish and Wildlife Service found that listing "may be warranted."[47]

*Rare, threatened and endangered species at risk in the project area*

In addition to the species described earlier, there are many other state and federally listed fish, wildlife and invertebrate species known or believed to occupy the forest, wetland, meadow, cave and stream habitats in the project area. Some of these are described in the Screening of Alternatives Report, Mid-States Corridor Tier 1 Environmental Impact Study.[48]

The East Fork White River, in Martin and Dubois Counties, has contained or still contains populations of five federally listed freshwater mussels:

- Sheepnose mussel (*Plethobasus cyphyus*)
- Fat pocketbook mussel (*Potalmilus capax*)
- Rough pigtoe mussel (*Peurobema plenum*)
- Fanshell mussel (*Cyprogenia stegaria*)
- Rabbitsfoot mussel (*Quadrula quadrula*)

These state-listed mussel species are also recorded as occurring in the project area: Round hickory nut mussel (*Obovaria subrotunda*) and Little spectaclecase mussel (*Villosa lienosa*).

Three federally-listed bat species – Indiana bat (*Myotis sodalis*), Northern long-eared bat (*Myotis septentrionalis*), and gray bat (*Myotis grisescens*), and three state-endangered bats – Little brown bat (*Myotis lucifugus*), Evening bat (*Nycticeius humeralis*), and Tri-colored bat (*Perimyotis subflavus*) – along with the species of special concern Eastern red bat (*Lasiurus borealis*) are known or likely to inhabit the project area.[49,50,51,52,53]

Additional state listed species include state endangered birds – Cerulean warbler (*Setophaga cerulea*), Loggerhead shrike (*Lanius ludovicianus*), Barn owl (*Tyto alba*), Henslow's sparrow (*Ammodramus henslowii*) – and the Common mudpuppy (*Necturus maculosus*), Northern

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[45] Lake Sturgeon Monitoring in the East Fork White River, 2014 Wildlife Science Report, Division of Fish and Wildlife, Indiana Department of Natural Resources, pages 13-15

[46] Lake Sturgeon, Michigan Sea Grant, https://www.michiganseagrant.org/topics/ecosystems-and-habitats/native-species-and-biodiversity/lake-sturgeon/, accessed March 21, 2020

[47] U.S. Fish and Wildlife Service, U.S. Department of Interior, Endangered and Threatened Wildlife and Plants; 90-Day Findings for Three Species; Notice of petition findings and initiation of status reviews, Federal Register, August 15, 2019

[48] Screening of Alternatives Report, Mid-States Corridor Tier 1 Environmental Impact Study, February 2020

[49] *Id.*

[50] Indiana County Endangered, Threatened and Rare Species List, County: Orange, Indiana Natural Heritage Data Center, Division of Nature Preserves, Indiana Department of Natural Resources, accessed March 2020

[51] Indiana County Endangered, Threatened and Rare Species List, County: Martin

[52] Indiana County Endangered, Threatened and Rare Species List, County: Dubois

[53] Indiana County Endangered, Threatened and Rare Species List, County: Lawrence

crawfish frog (*Lithobates areolatus circulosus)*, eleven cave invertebrate species, along with numerous rare or endangered plants.[54, 55,56,57,58]

The state and federally listed Copperbelly water snake (*Nerodia erythrogaster neglecta*) is also recorded as present in the project area.[59]

Impacts of Highways on Fish and Wildlife

The construction and presence of highways have many harmful effects on native wildlife.[60,61,62] These effects include: mortality from road construction, mortality from collision with vehicles, modification of animal behavior, alteration of the physical environment, alteration of the chemical environment, and the spread of exotics. Specifically, highways can act as a barrier to wildlife movement and migration, fragment, alter or destroy habitats, increase risk of predation, and reduce genetic diversity among affected wildlife populations. The construction of any Mid-States highway on new terrain alignment will increase these impacts to wildlife in the project area.

Climate Impacts

The loss of up to 2,000 acres of forestland, and the loss of as much as another 1,100 acres in farmland from this project will eliminate the carbon sequestration benefits of these lands. Coupled with the loss of roughly 1,800 acres of forestland and 4,000 acres of farmland due to the I-69 extension from Indianapolis to Evansville,[63] and the 9,073 acres of forestland lost from 2001 to 2016 in the eight project-area counties[64] through which the Mid-States right of way might pass, this would be a substantial cumulative impact on forest cover – and carbon sequestration capacity -- in southern Indiana. The loss of carbon storage in forests and farms would result from any new-terrain road construction.

The tables comparing performance measures outcomes and natural resource/community impacts in the Screening of Alternatives Report do not reveal whether daily traffic counts in the entire project region would increase, or whether the estimated future traffic counts simply represent a redirection or concentration of existing traffic levels. Without this information, the project

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[54] Screening of Alternatives Report, Mid-States Corridor Tier 1 Environmental Impact Study, February 2020
[55] Indiana County Endangered, Threatened and Rare Species List, County: Orange, Indiana Natural Heritage Data Center, Division of Nature Preserves, Indiana Department of Natural Resources, accessed March 2020
[56] Indiana County Endangered, Threatened and Rare Species List, County: Martin
[57] Indiana County Endangered, Threatened and Rare Species List, County: Dubois
[58] Indiana County Endangered, Threatened and Rare Species List, County: Lawrence
[59] Screening of Alternatives Report, Mid-States Corridor Tier 1 Environmental Impact Study, February 2020
[60] Forman, Richard T.T., Alexander, Lauren E., Roads and their Major Ecological Effects, Harvard University Graduate School of Design, *Annual Review of Ecology and Systematics*, Volume 29, 1998
[61] Hill, Jacob, The Environmental Impact of Roads, https://www.environmentalscience.org/roads, accessed March 21, 2020
[62] Trombulak, Stephen C., Frissell, Christopher A., Review of Ecological Effects of Roads on Terrestrial and Aquatic Communities, Conservation Biology, Pages 18–30, Volume 14, No. 1, February 2000
[63] Appendix HH, Comparison of Tier 1 And Tier 2 Impacts For Key Resources, Tier 2 Environmental Impact Statement, I-69 Section 6 Martinsville to Indianapolis, September 26, 2017
[64] National Land Cover Database, Forest Acres Change for Indiana counties, Draft Indiana Forest Action Plan 2020 Update, January 2020, https://www.in.gov/dnr/forestry/5436.htm

analysis fails to consider whether the project would result in increased vehicle miles traveled with a corresponding increase in vehicle-related greenhouse gases.

Indirect Impacts

None of the Mid-States Corridor Tier 1 study reports quantify the likely indirect impacts of the route alternatives. In addition to the direct impacts we have described above, new highways can induce indirect impacts and this is often one of the outcomes – in the form of new land development near highway interchanges -- of these projects. For example, for the I-69 Evansville to Indianapolis highway, these additional impacts – in loss of acreage -- for forests, farmlands and wetlands ranged from 22% to 44% of the direct acreage impacts.[65]

**Construction of Routes M or O would conflict with the interagency Memorandum of Understanding concerning construction of transportation projects in karst regions of the state.**

In October 1993, the Indiana Department of Transportation, the Indiana Department of Natural Resources, the Indiana Department of Environmental Management, and the U.S. Fish and Wildlife Service executed a Memorandum of Understanding (MOU) "..for the purpose of delineating guidelines for construction of transportation projects in karst regions of the state."[66] In the MOU, the parties agreed to "accept responsibility to ensure that the transportation needs of Indiana are met in an environmentally sensitive manner that protects the habitat of all species." Further, the MOU states that "The intent of INDOT is to avoid karst areas and use alternative drainage where possible."

Construction of routes M and O would traverse the Mitchell Karst Plain and would be unable to avoid impacting large concentrations of karst features, particularly Route O which would dissect the Lost River Karst Area, described more fully above.

The Karst MOU and its guidelines led to the abandonment of an earlier highway proposal that would have followed the same general alignment from Mitchell to West Baden as that of Route O. This past proposed highway alignment, part of a SR 145/SR 37 project, was not built because of its expected extreme impacts to the Lost River Karst Area.

It is important to understand that the desktop screening for environmental impacts that has been done so far has been very limited and likely fails to account for significant impacts to important natural resources. While desktop screening is an acceptable first step, comprehensive on-the-ground surveys will be required to inform the Environmental Impact Statement.

[65] Tier 1 Record of Decision, I-69 Evansville to Indianapolis, Indiana, Federal Highway Administration, U.S. Department of Transportation, March 21, 2004, and Appendix HH, Comparison of Tier 1 And Tier 2 Impacts For Key Resources, Tier 2 Environmental Impact Statement, I-69 Section 6 Martinsville to Indianapolis

[66] Memorandum of Understanding, Indiana Department of Transportation, Indiana Department of Environmental Management, Indiana Department of Natural Resources, U.S. Fish and Wildlife Service, October 13, 1993

The northeast routes would require the greatest amount of new right-of-way and least use of existing infrastructure. Even if a highway alternative is ultimately chosen, the best way to move people and goods from the Ohio River to the urban areas around Indianapolis is to direct traffic onto existing I-69 as soon as reasonably possible. Indiana just spent a considerable sum of money completing I-69, which was itself a controversial highway project, so to fail to maximize its utility would be even more wasteful. There is no reason to detour to the east harming sensitive forest and karst ecosystems, or to the west fracturing rich farms, forests and wetlands or to degrade such lands to the north to meet the stated purpose and need for this project, when targeted roadway and bridge safety improvements to existing US 231 and other existing highways in the region, along with select non-highway alternatives including freight rail, that may provide equivalent improvements in personal mobility, freight movement and access have not been fully analyzed. Improvements to transportation infrastructure should be focused on improving the movement of people and goods rather than solely the movement of motor vehicles.

* * *

We reiterate our request that planning and analysis for this project be suspended given the health, social and economic challenges now facing residents of southern Indiana. And before any work on this project resumes, we urge the agencies and project proponents to first objectively consider whether there is actually a need for this project, and whether a project could even meet the alleged need. If there is an actual need, the Purpose and Need Statement must be broad enough to encompass non-highway alternatives. Relatedly, the NEPA process requires full and fair consideration of non-highway alternatives, including alternatives combining different approaches. Finally, we urge you to reject the northeast corridors based on their significant and unjustified environmental impacts.

Sincerely,

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Deputy Director

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Staff Attorney
Environmental Law and Policy Center

Bowden Quinn, Director
Sierra Club Hoosier Chapter

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***Local organizations***

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Protect Our Woods

Kay Luttrell
Friends of Shirley Creek
Bedford

Rock Emmert
Kris Lasher
Norma Kreilein, MD
Healthy Dubois County

Gretchen Anderson
Orangeville Rise

Rock Emmert
Kris Lasher
Project Acorn
Dubois County

John Blair
ValleyWatch
Evansville

David Coyte
Coalition for the Advancement of Regional Transportation

Falling Springs Bird Sanctuary
Orange County

***Churches***

Bobby Busick, Trustee
Bethel Church
Orleans

Joseph Chisham
Trustee
Mt. Horeb Baptist Church
Orleans

***Businesses***

Nick Swayer, Owner
1815 Barber Co.
Orleans

David McBride,
Co-owner
A.M. Properties
Mitchell

Rex Babcock, Owner
Babcock Motors
Orleans

Patton Busick
Busick Contracting, LLC
Orleans

Brett Busick, Owner
Busick Insurance Agency, LLC, Orleans

Tony Edwards, Owner
CarSmart Auto Group
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Callie Coulter
Consistent 7, LLC
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Devin Schmidt, Member
Construction Transfer, LLC.
Orleans

Timothy Scott, Owner
Dillman-Scott Funeral Home
Paoli

Bill Fletcher, Owner
Fletcher Heating and Cooling
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Steve & Donna Phillips, Owners
Flower Cottage
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Norman Gallion, Owner
Gallions Super-Value
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Rodney Hager, Owner
Hager Farms
Orleans

Randy Hall, Owner
Hall's Home Services
Orleans

Chad Hall & Todd Hall, Co-owners
HB Service Center
Orleans

Chad Hall, Owner
HB Trucking
Orleans

Brandon & Nikki Deckard, Owners
HD Graphix
Orleans

Marion Eubank, Co-owner
Highway 37 Treasures/Flea Market, Paoli

Brett Busick, Owner
Hoosier Express Auto Wash, LLC
Orleans

Derek Breitwiser
Hot Spot Bar and Grill
Dubois

Greg Noble, President
Infrastructure Systems, Inc.
Orleans

Jon Stalker, Member
ISI Property
Orleans

Emily Brown, Owner
J & S Sportswear
Orleans

Jonathan Swayer, Owner
Jonathan Swayer Drafting
Orleans

Brian Jones, Owner
Jones Auto
Orleans

Greg Kendall, Owner
Kendall Trucks and Parts, Inc.
Orleans

Brian & Betsi Sanders, Owners
Kirby Hardware
Orleans

Steve Lantis, Owner
Lantis Insurance
Orleans

Linda Lee, Owner
Lazy Black Bear
Paoli

Monte Rager, Owner
Lost River Liquors
Orleans

Vance & Myra Elliott
Maple Leaf Farms
Orleans

Kimberly R. Arnold, Owner
Orange County Community Development Inc.
Orleans

Jeff Riley & Troy Riley, Owners
Orleans Marathon
Orleans

Grant Noble, Member
Orleans Plaza, LLC
Orleans

Jerry Rigsby
Rigsby Farms
Worthington Horse Auction
Worthington

Bill & Billy Rominger, Owners
Rominger Farms, Paoli

Rachel Minton, Owner
Shakeburger Drive-IN
Paoli

Mark Springer, Owner
Springer Insurance
Orleans

Scott Daugherty, Owner
Super Clean Carwash
Orleans

Duane & Jaima Voegerl
Voegerl Hill Farms, Dubois

Mark Wheat, Owner
Wheat's Off-Road
Orleans

Michael Powell, Owner
Porky's BBQ
Paoli

David & Jo Riley,
Owners
Riley Oil Company
Paoli

Scott Daugherty, Owner
Scott Daugherty Trucking
Orleans

Simon & Wendy Sprigler, Owners
Sprigler's Gathering Room
Orleans

Jay Strauss, Owner
Strauss Investments and
Financial Services
Orleans

Cyndi Qualkenbush
Owner
The Hair Dugout
Orleans

Jason Strauss
Washworld of Indiana
Orleans

Amy Amstutz, Owner
White River Bait & Tackle
Williams

Rachel Minton, Owner
Rachel's Family Hair Care
Paoli

Stephen Robinson,
Owner
Robinson Auction Service
Orleans

Andy Mahler, Director
Shagbark, Inc.
Paoli

Daniel & Brian Springer, Owners
Springer Brothers Farms
Paoli

Corey Scott
Super Burger
Paoli

Joe Taylor
USC, LLC
Orleans

William Parks, Owner
Wendy's of Paoli
Paoli

cc: Honorable Eric Holcomb
Governor, State of Indiana

Senator Mike Braun
U.S. Senate

Senator Todd Young
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