To: INDOT Link 101 Project Team

From: Stephen J. Otte

Re: Public Comment to SR 101 Extension Alternatives Development

Date: 8/26/23

I. Preamble

This comment is being respectfully submitted in response to an invitation for public comment running through September 8, 2023 concerning the alternatives development phase of the Link 101 Project. As the son of Pike township landowners, I write this letter not only to express my individual concerns, but to express those concerns of my family, my community, and in many respects, the public at large. It is with firm resolve that I request INDOT to abandon this project, or at the very least, to fundamentally alter its scope and purpose.

The gravity of this project on the community and surrounding landscape cannot be overstated, as its effects will be profound, irreparable, and will adversely impact every fabric of this region. Mutli-generational family farms will be lost, the character of this community will be desecrated, fragile ecosystems will be destroyed, and the touted benefits of the highway will likely be unrealized, if not missed entirely. Moreover, in a much broader sense, this 200-million-dollar project belies fiscal, environmental, and social responsibility on a local and national scale.

II. The Link 101 Extension Will Degrade the Local Community

> *"Growth is inevitable and desirable, but destruction of community character is not. The question is not whether your part of the world is going to change. The question is how."* ~ Edward T. McMahon

The character of Switzerland, Ohio, Ripley, and Dearborn counties is defined by its quiet, rural way of life. Free from the urban sprawl and noise of the city, the region provides an alternative to the congested, urban life of nearby Cincinnati for its citizens and offers a much-needed respite for many others.

By way of background, the region has a rich and varied history which is interwoven into its very character and culture. Within these counties lie native American archaeological sites, the remnants of Indiana's first frontier settlements, Mcguire's Stockade (a War of 1812 outpost located on Clay Miller Road—mere yards from the proposed Alternative D), and the historic town of Farmer's Retreat, named for the farmers and residents who fled there ahead of an advancing Confederate calvary lead by Brigadier General John Hunt Morgan in 1863 (Also threatened by Alternate D). Additionally, the entire project area contains hundreds of family farms, many of which have been owned by the same family for generations. The land is also an outdoorsman's paradise, offering some of the best hunting, fishing, and recreational opportunities in the state. Still relatively undeveloped by the expanding urbanization of greater Cincinnati, it is widely regarded as one of the last pristine landscapes in this region. It is peaceful, quiet, and beautiful. For most of its residents, the area would not become more valuable because of increased development, but in spite of it.

The State Route 101 extension would gut the very essence of what makes this region special. It would literally dissect and destroy multi-generational farms and homesteads, ecologically diverse landscapes, and places of historical significance. It would spoil the quiet air with the sound of increased traffic and the echoing of semis navigating the steep valleys and ravines of the area. It would invite unwanted urbanization and unsightly development—little of which would likely be to our community's economic benefit, but instead the benefit of outside special interests. And most importantly, the highway would take away the very land that we call home—not out of necessity, but out of convenience and greed. Simply put,

this project is not necessary. It is time that we redefine progress and our very understanding of what it means. We need to critically question the point at which a marginal increase in speed or efficiency supplants the priceless qualities that make this region so valued.

III The Economic And Social Costs of a New Highway Exceed the Benefits

i. The Marginal Benefits of a New Highway Do Not Justify the Cost

The economics of this project simply cannot justify the exorbitant cost. With $200,000,000.00 set aside, this project requires a huge outlay of resources and yet, delivers so little in terms of net benefits. One of the primary, stated purposes of this highway—to improve travel time and connectivity—is only marginally accomplished. Per the Draft Purpose and Need Statement, a direct connection will shave 5.5 miles off of the existing shortest route from Markland Dam to US Route 50, resulting in a 17.5-mile route versus the 22.5-mile route currently in existence. Furthermore, it will result in a 15 minute shorter travel time: 19 minutes compared to the current, fastest travel time of 34 minutes.

Notably, the supposed improved travel distances and travel times are based on the assumption that the new route will run in a near perfect straight line from Markland Dam to US 50, which is unlikely to be realized given the very difficult terrain. Yet, even if the road is constructed in a straight line, the math on this project is still absurd. At its current budget of 200 million, the state will be spending approximately 36.36 million per every mile reduced from the current, most direct route, or 13.33 million per each minute in travel-time reduced from the existing route. The cost-benefit of this project skews heavily towards high cost and little reward.

ii. The Real Cost of the New Highway & Unintended Consequences Negate Its Benefits

Highway expansion projects, like the 101 extension, have huge price tags and few benefits. They contribute to a dangerous and destructive transportation system that requires significant outlays of cash on an annual basis just to maintain, all of which is ultimately passed on to the public. Worse yet, highways like the new 101 harm the health of people, dissects communities by displacing people, properties, businesses, and green space.

Notwithstanding the staggering $200,000,000.00 initial price tag of the new 101 extension, the ongoing maintenance costs of this highway alone are shocking and economically debilitating. According to one study, a new lane-mile in America costs around $24,000 annually to maintain on average.[1] It is reasonable to assume that the project area will likely cost above that average given the difficult terrain of the land and southern Indiana's climate. Yet, despite the high cost of maintaining highways like the proposed 101, Indiana is building more of them than the state can maintain. With every new lane built, the worse the road repair deficit becomes. Transportation for America estimates that as of 2017, just keeping our nation's existing roads in acceptable repair and fixing those in poor condition will require $231 billion annually over a six-year period – double all 2015 highway capital expenditures.[2] The problem is so pervasive that the U.S. Department of Transportation estimates a backlog of $105 billion for transit infrastructure in need of replacement.[3] It makes no sense building new roads, especially the new 101 extension when so many roads, especially throughout Indiana, are in poor condition. Given the cost of this new highway, compounded with the ever-mounting costs of repairs needed for our existing crumbling infrastructure, it is evident that we are on a fiscal crash course that will overwhelm our state and local communities' budgets—all at our expense in the form of higher taxes.

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[1] $24,000 per new lane-mile: Transportation for America, Repair Priorities 2019, p.11.

[2] $169 billion per year to keep our good roads "good," plus $62 billion per year to address the backlog of poor roads. 2015 expenditures: $105.4 billion. Transportation for America, *Repair Priorities 2019*, pp.9-10.

[3] "Fact Sheet: The American Jobs Plan," The White House, March 31 2021

Aside from these obvious costs, there are some less-known costs that can be even worse. Studies consistently show that living close to major roads or in areas of high traffic density—which this route will bring—is associated with adverse health effects, including higher rates of asthma, cardiovascular and respiratory disease, loss of fertility and death.[4] When the health of a community suffers, not only do individuals pay the price, but entire communities bear the cost of lower productivity and loss of economic vitality. Thus, the true cost of this project far exceeds the already absurdly high cost of construction. Worse yet, we will continue to bear these costs for years to come as maintenance and public health issues plague the community.

IV. The Purported Safety Benefits of a New Highway Will be Offset By an Increase in Total Accidents

One assumption made by the authors of the Draft Purpose and Need Statement is that that the new 101 highway will improve safety by reducing vehicle miles travelled (VMT). While highway expansion is often justified as necessary to reduce traffic congestion or "vehicle miles travelled", upon closer examination, this argument rings hollow. According to "the fundamental law of road congestion," expanding a highway shapes society to become more reliant on cars and actually creates more traffic due to increased use.[5] According to this research, when people's ability to travel is expanded, they will do it more. The research specifically noted that VMT "increases proportionately to roadway lane kilometers for interstate highways."[6]

Yet, even if VMT was actually reduced by the new 101, that does not, in and of itself, result in a safer highway. The Draft Purpose and Need Statement provides misleading data in suggesting that since the "index of

[4] Residential Proximity to Major Highways — United States, 2010

[5] Duranton, Gilles, and Matthew A. Turner. 2011. "The Fundamental Law of Road Congestion: Evidence from US Cities." *American Economic Review*, 101 (6): 2616-52

[6] Id. at 2616.

crash frequency" is elevated along the current shortest and fastest existing routes, the new 101 highway will be safer since its index of crash frequency will be lower. While the index might be lower, this metric merely measures the difference between the expected and reported number of crashes on a road. However, with substantially increased traffic volume from the new highway, especially from large commercial vehicles, the total frequency of crashes along the new 101 will certainly increase, even if the index of crash frequency is lower. According to one study, "results showed an approximately linear relationship between traffic volume and accident frequency…"[7] The data revealed that at higher volumes—similar to what the new 101 will cause—"accident frequency increases at a higher rate." Stated another way: with more vehicles comes more accidents. Thus, adding more vehicles by building the new 101 extension will not enhance safety, but will only make the project area more dangerous, not to mention will lead to significant increases in property damage as a result of more total accidents occurring.

Next, despite INDOT suggesting otherwise, the current fastest route to US 50 is not inherently unsafe. According to the Draft Purpose and Need Statement, from January 1, 2017 through March 2022, "the project area had 19 fatal crashes, representing 0.5 percent of the total crashes within the project area." Notably, there were no fatal crashes along the existing fastest and shortest route (Table 2.3-1). For crashes involving injuries, the project area had approximately 13 percent of crashes involving injuries while the existing fastest and shortest route had 18 percent." According to table 2.3-1, this 18% equated to a mere 28 accidents with injuries and no fatalities. Thus, over the course of five years and three months, there were on average just 5.33 accidents involving injuries per year on the fastest and shortest route and zero deaths. With so few accidents, it is difficult to conceive how INDOT

[7] Relationship Between Traffic Volume and Accident Frequency at Intersections Int. J Environ Res Public Health. 2020 Feb 21.

can continue to argue in good faith that safety is a primary goal of this project.

Finally, another tenuous assumption made by INDOT is that the new 101 will decrease emergency care response times. While true in theory, what INDOT fails to consider here is that the increased traffic volume will likely overwhelm the region's small core of first responders, thus potentially diminishing the benefit of increased response times. As a matter of fact, this region relies extensively on a small force of volunteer firefighters and other EMS responders. This modest force simply lacks the ability to meet the demand of a major highway and will therefore likely find itself stretched far too thin due to overwhelming demand for services caused by this highway. This is a recipe for disaster.

V. The Environmental Consequences of this Project Are Destructive & Unacceptable

i. The Construction of a New Highway Destroys Fragile Ecosystems and Defies Federal Guidelines, Objectives, & Policy

There is no question that building highways takes a significant toll on the environment. Construction destroys natural ecosystems and pollutes local water sources. Road expansion also worsens the climate crisis. As a matter of fact, production of cement alone contributed 8% of the world's CO2 emissions in 2016.[8] Moreover, expanding roads entrenches a transportation system responsible for massive pollution and additional CO2 emissions. As previously discussed, transportation researchers have long since discovered that "the fundamental law of road congestion" actually results in more vehicles and thus more pollution and emissions.

It is for these and other reasons that the U.S Government has directed its policy away from building new roads, and instead, is focusing on

[8] Global C02 Emissions from Cement Production, CICERO Center for International Climate Research, Oslo 0349, Norway January 2018. See: essd.copernicus.org/articles/10/195/2018/essd-10-195-2018.pdf

maintaining and enhancing existing routes. In a memorandum published in December of 2021, Federal Highway Administration deputy administrator Stephanie Pollack directed her staff to encourage state and local governments to consider fixing existing roads before building new ones, citing environmental concerns as significant factors for this policy.[9] By moving forward with the Route 101 extension, INDOT will betray these important recommendations and policy objectives which are necessary for the wellbeing of our entire country.

ii. The 101 Extension Jeopardizes Both Threatened and Endangered Species of Plants and Animals

Many studies have documented how roads detrimentally affect wildlife populations and their ability to persist locally or even at a larger landscape scale. The primary mechanisms for these impacts include habitat loss, habitat fragmentation, disrupted animal movement, and road-related mortality. Without question, the extension of Route 101 would lead to most, if not all of these consequences.

The worst environmental destruction will result from the options resulting in new roads being constructed, which include all alternatives to varying degrees except Alternative G. Alternative D is sure to pose the greatest environmental destruction. This route will require 21 miles of new alignment, the most of any route. It will transverse some of the most rugged terrain in the region, if not the state, severing miles of forests as it cuts through multiple steep valleys, wetlands, and nearly clips the Lubbe nature preserve in western Dearborn County. This route will invariably require the greatest acquisition of private land and will result in the greatest loss of habitat and habitat fragmentation, not to mention lead to higher construction and maintenance costs considering the difficulty in paving and

[9]Memorandum by Stephanie Pollack: Policy on Using Bipartisan Infrastructure Law Resources to Build a Better America, December 16, 2021.

maintaining the longest proposed route through such challenging landscapes. The other alternatives aren't much better.

The environmental consequences of this highway, regardless of the route chosen, are not merely hypothetical, but will directly impact the delicate ecosystem of this region. INDOT's "project area" contains an ecologically diverse, albeit fragile ecosystem established within a varied landscape. As described by the South Laughery Creek Watershed Management Plan in June 2006: "The [Laughery Creek Watershed] has been deeply dissected by streams where the bottoms of the valleys may be 450 feet below the uplands. Some of the highest elevations in the state are found here."[10] Within these troughs and crests lie some of the richest and most diverse forests in the state. "The most notable natural community of this section is the mesophyte forests associated with ravines. These communities differ from many of the forests of Indiana in that about a dozen species of trees may dominate any one given stand.[11] These rich forests covered approximately 52.60% of the Laughery watershed at the time of 2006 Watershed study.[12] In addition to the forests, there are 2,240 acres of wetlands within the watershed.[13] Both the forests and wetlands are highly endangered by the development of this new highway. All measures should be taken to eliminate any impact to these delicate ecosystems.

Disruption to habitats such as forests and wetlands can have deleterious effects on threatened or endangered wildlife populations, many of which live in the project area. Endangered species living here include the Bobcat (Lynx Rufus), the Henslow's Sparrow (Ammodramus henslowii), the Northern Harrier (Circus cyaneus), the Barn Owl (Tyto alb), and River Otters (Lutra Canadensis).[14] Furthermore, it is believed that the Indiana bat, a Federally Endangered Species, may be present in the project area as well.

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[10] South Laughery Creek Watershed Management Plan, June 2006, pg. 11.
[11] Id. at pg. 13.
[12] Id. at. Pg. 12.
[13] Id. at pg. 21.
[14] Id. at pg. 14.

Additionally, two species of "Special Concern" are documented as occurring in the area as well: the Broad-winged Hawk (Buteo platypterus) and the Worm-eating Warbler (Helmitheros vermivorus). And finally, the iconic bald eagle is also present here. While its numbers are on the rise nationally, it still has a fragile population in Indiana. Notably, this list does not include the multiple plant species which are also listed as threatened or endangered—as there are too many to count for purposes of this comment. Nevertheless, both plants and animals alike are severely threatened by this project, as the building of a new highway would exasperate the decline of these already endangered and threatened species due to habitat loss, fragmentation, disrupted migration patterns, and road mortality. Even if the highway is built on existing roads—thus avoiding additional habitat loss—there would still be disrupted migration and increased road-related mortality due to the substantial increase in traffic flow. Thus, from an environmental perspective, there is no viable alternative other than not building the highway at all. If it is ultimately built nonetheless, it is critical that INDOT use existing roads as much as possible. Unfortunately, few of the proposed alternatives take full advantage of the existing nearby roads.

V. The Alternative Solution: Dollars Should be Spent Repairing Existing Infrastructure

i. Not Enough is being invested in maintaining roads both locally and nationally

America's transportation infrastructure—and Indiana's for that matter—desperately needs repair. As a matter of fact, there are 173,000 miles of road and more than 45,000 bridges in the U.S. classified as being in "poor" condition as of 2021.[15] From 2009-2017, thirty-seven states saw an increase in the percentage of roads in poor condition, including Indiana, which saw an increase from 10% to 13% from 2009 to 2017.[16] While America faces a road

[15] UPDATED FACT SHEET: Bipartisan Infrastructure Investment and Jobs Act. WhiteHouse.Gov August 2, 2021.
[16] Transportation for America, *Repair Priorities 2019*, p.19. Total percentage increase:., p.21.

and bridge repair backlog of more than half a trillion dollars, including $435 billion for road repair and $125 billion for bridge repair, states like Indiana continue to prioritize new and expanded roads and other wasteful infrastructure projects that aren't needed instead of fixing its broken infrastructure.[17] As a matter of fact, an analysis of capital spending on state managed roads in Indiana found that between 2009 and 2014, the state spent an obscene 49% of all highway capital spending on roadway expansion, yet only 20% on roadway repair.[18] With it's proportion of road deemed to be in "poor condition" steadily rising, the state of Indiana has clearly misplaced its priorities. By investing in the new 101 extension, the state is only reaffirming these misplaced priorities.

This misguided approach has the potential to derail the purported benefits of the new 101 highway. New research published by the National Bureau of Economic Research, measuring the social cost of damaged roads, buttresses the case for prioritization of highway repair instead of new highway development. The study found that repair can lead to safer and more efficient travel overall as opposed to building new highways. The authors of this research argue that the wear and tear on our highway system has much greater costs than were previously understood, from reduced travel speeds, increased travel costs, and increased safety risks. The results of this study demonstrate a "need for more transportation infrastructure investment, especially for road maintenance" instead of new highways. By investing in the new Route 101 highway in lieu of improving and maintaining existing roads, Indiana will be sorely neglecting the backlog of maintenance that is critical for the continued flow of traffic through not just the southeast region, but the entire state. Practically, what this means is that we will have slower and more dangerous roads in the aggregate

[17] $560.4 billion. U.S. Department of Transportation, Federal Highway Administration, Status of the Nation's Highways, Bridges, and Transit Conditions and Performance Report, 23rd Edition, "Chapter 7 – Capital Investment Scenarios" Exhibit 7-9.

[18] Transportation for America, *Repair Priorities 2019*, p.17.

notwithstanding the new 101 extension. Thus, it begs the question whether the new highway will actually accomplish its stated goals of safer and more timely transportation across the region.

ii. <u>There is no "need" for this Highway; Upgrading existing routes can accomplish similar objectives as the new Route 101 extension</u>

We don't need a new highway. What we need is to invest the $200 million that is available for the 101 project towards fixing and maintaining the roads we already have, or better yet, reallocate these funds entirely to a more worthy cause. At the local level, there are several routes in need of repair. Routes 156, 56, 129, and 262 could all stand to be improved upon. If these and other roads are improved, existing routes can deliver benefits that meet many of the goals that the new Route 101 will purportedly accomplish. This could involve straightening sharp corners, adding shoulder width where appropriate, and elevating roads and bridges above the 100-year floodplain. With these improvements, the existing roads in the region would have faster travel times, enhanced safety, and will adhere to modern standards—all at a fraction of the cost of building a new highway. Best of all, land would be spared, and the environmental impact diminished by maintaining versus building a new highway. While this is not to suggest existing roads should be used as mass-transit corridors for large trucks, they can be upgraded to meet the project goals and more than meet the needs of the local population. Thus, INDOTs insistence that a new highway is "needed" is categorially untrue. Not only are the existing routes adequate, but there are viable options for enhancing them that don't require a new highway. Let's start a new conversation where we focus on improving our roads instead of building a new one.

Choosing to invest in improvements/maintenance verses building a new highway would be much better received by the public. Nationally, Americans strongly prefer existing roads be fixed before new roads are built. As a matter of fact, a 2020 YouGov polling found that 79% of U.S. voters

want government to fix existing roads before building new ones, and 61% support a 10-year moratorium on new roads.[19] The local population holds similar, if not even more polarized views. Presently, thousands in the community are rallying in opposition to this issue. As of August 30, 2023, the private Facebook Page "STOP Link 101" has grown to over a thousand members and is increasing by the day. This page only captures a small fraction of the growing coalition of individuals, businesses, and other organizations who oppose this project. Resistance to this project will only grow in the coming months unless INDOT demonstrates that it will truly listen to and work with the community, not against it.

VI CONCLUSION

The benefits of the State Route 101 extension are few and the costs are many. Moreover, the purported "need" of the project is based on a fallacy that only a new highway can address the perceived shortcomings of the existing routes. Whether we look at this project from an economic, environmental, or community-based lens, the harm greatly outweighs the benefit. It is therefore imperative that INDOT abandon this project entirely and conclude that no build is the best option.

The stakes of this project could not be any higher. If built, this highway will impact the community in profound, immeasurable ways. While discussions regarding speed and efficiency of travel are relevant, some of the most important considerations are the intangible ones, those that can never be measured. We simply cannot put a price tag on the character of this community or the sanctity and beauty of its undeveloped lands. Moreover, we cannot quantify the value of this land which represents the hopes and dreams of its people and of the generations who came before them who lived, worked, and died here. This land is our lineage and it is our home, a home that we are proud of and don't want disturbed. And in a much larger sense, this land embodies much more; it represents the very essence of the

[19] Transportation for America, "Voters want and need more transportation options," 17 March 2020

American Dream that we all collectively share—a dream that is rooted in individual liberty and personal autonomy, free from government intrusion. This is a dream that should never be taken from us. We will stand firm and united in opposing any attempt to do so.