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# The Michigan Tolling Study Relies on Questionable Assumptions

## In a Nutshell

- The Michigan Tolling Study concludes that it is economically feasible to implement a statewide tolling program that could produce about a billion dollars in net revenue annually.
- An analysis of the Study and relevant federal regulations suggests that the approach described may be prohibited by the Federal Highway Administration, calling the study's findings into question.
- The Study is a missed opportunity to evaluate potentially beneficial and realistic implementations of tolling in Michigan.

Michigan's road agencies are in broad agreement that more money is needed to 'fix the damn roads.' Despite an over 50 percent increase in state transportation funding since 2015, the Michigan Long-range Transportation Plan estimates a "needs gap" of over \$4 billion per year between 2020 and 2045. In 2019, Governor Whitmer proposed nearly tripling Michigan's gasoline tax, which would have made it the highest in the nation. The legislature rejected this proposal.

The Whitmer Administration has since indicated that it will not pursue additional fuel tax increases. In addition to being politically unpopular, the revenue-generating potential of fuel taxes are declining as vehicles become increasingly efficient and electrified. More viable methods to generate transportation revenue will likely include direct user fees, such as road usage charges (RUC), or traditional toll roads.

The Michigan Tolling Study, made public in January 2023, evaluated the feasibility of establishing and implementing a network of tolled highways in Michigan.

Top-line conclusions from the Study emphasized the finding that "Michigan could generate \$1 billion a year to fix deteriorating roads by charging motorists tolls to use nearly 1,200 miles of state highways." However, these findings are potentially misleading. The Study itself warns that "selecting portions of any individual result without consideration of the intent of the whole may create a misleading or incomplete view of the results." In other words, one must understand details of how the Study was conducted in order to interpret the findings.

A thorough review of the Study's assumptions and methodology suggest that the findings should not be considered conclusive. In fact, the proposed approach appears disallowed under federal law.

With Public Act (PA) 140 of 2020, Michigan's legislature required the Michigan Department of Transportation (MDOT) to deliver "a feasibility study...on tolling highways of this state." The legislature assumed that the results of the feasibility study would be positive, as MDOT was also required to deliver a "strategic implementation plan" that should include several specific elements regarding the economics of a statewide tolling program. \$3.3 million was allocated for this two-year effort.

It is unclear why the legislature assumed that a statewide tolling program would be determined so feasible as to also require an implementation plan. This appears to be 'putting the cart before the horse.' Federal law limits the options available for states to institute tolling on federal-aid highways. Most notably, there is a general prohibition on tolling *Interstate* highways.

The Michigan Tolling Study was produced in response to legislative direction that was confused and confusing. Public Act 140 stated that "it is the intent of the legislature that this state become qualified [for] the Interstate System Rehabilitation and Reconstruction Pilot Program." This pilot program can apply only to one Interstate route (not a statewide system). Tolls collected under this pilot could only be used on the tolled facility and so could not produce additional revenue. The Michigan Tolling Study rejected the idea of applying for this program. According to the Study:

"The revenue requirements associated with this program would require separate financing [from any other toll facilities]. ... This would increase financing and administrative costs and limit flexibility compared to a systemwide tolling program. Based on these reasons, it is not recommended to apply for this program."

Yet, the approach recommended by the Tolling Study has its own set of complications.

Most toll facilities in the United States are federally authorized under U.S. Code Chapter 23 Section 129, and established prior to initial construction. For example, Michigan's Mackinac Bridge and international Blue Water Bridge are tolled under Section 129 authority. (Other tolled bridges, such as the Ambassador Bridge in Detroit, the Liberty Bridge in Bay City, and the Grosse Isle Bridge are private and not subject to Section 129.)

Conversion of a toll-free highway to a tollway is possible but only when the facility is completely reconstructed – a costly endeavor typically performed every 40–50 years or more. Even with reconstruction, it is not permitted to convert a designated Interstate highway to a tollway under Section 129. The most that can be done is to construct new tolled lanes; states cannot reduce the number of toll-free lanes on an Interstate.

Regardless of underlying regulatory barriers, the Tolling Study team was legally required to deliver a detailed "strategic implementation plan on tolling highways of this state." MDOT interpreted this to include Interstate routes. To meet this requirement, the team proposed creating a statewide tolling network by applying the Section 129 Bridge Program. Unlike lengthy highway segments, bridges in the Interstate system can be tolled under current law. Per the Study:

"The strategy was to identify eligible bridges on the...toll corridors and/or segments assumed for the Bridge Program. Assumed eligibility was based on the condition of the bridge and whether it warranted reconstruction by the time tolling was assumed to start. Then it was assumed that some or all the eligible bridges on a specific corridor or segment would be tolled."

In other words, the Study assumes it is possible to toll Michigan's existing federal-aid highways, including Interstates, by rebuilding a series of bridges within a segment under the Section 129 Bridge Program and then designating the entire segment as a tolled facility. The Tolling Study does not suggest that the Federal Highway Administration (FHWA) has expressed support for this creative interpretation of federal law. The Study only states that "it is recommended that close coordination between the new Michigan Toll Authority and the Federal Highway Administration related to this program be a top priority."

An inquiry to the [FHWA Tolling Program Manager](#) regarding the feasibility of the Michigan Tolling Study's approach was responded to by reference to [standard regulatory documents](#). These documents strongly imply that the Section 129 Bridge Program cannot be used to toll entire highway segments. For example, a [FAQ document](#) (updated January 10, 2023) addresses the location of toll gantries for bridges. FHWA advises that:

"In general, toll gantries should be located on the toll facility or approaches to the toll facility. Locating toll gantries further removed from the bridge could create the risk of *effectively tolling a Federal-aid highway that is not eligible to be tolled in violation of 23 U.S.C. 301 and 129.*" (Emphasis added.)

The Tolling Study also includes the use of deferred tolling (i.e., delayed collection of tolls until several bridges along a route are reconstructed). On this, [FHWA advises](#):

"Deferred tolling for any extended period after the facility is open to traffic is problematic and subject to challenge as violating 23 U.S.C. 301, as 23 U.S.C. 129 was designed to link the financing of the capital investment with the limited exception to the requirement that Federal-aid highways and bridges be free from tolls of all kinds."

Michigan's legislature was prudent to request an evaluation of tolling as a potential remedy for Michigan's road funding difficulties. Tolling is a successful approach in many states and may be beneficial in Michigan. However, the resulting Tolling Study proposes a strategy with questionable legal feasibility. Using the Section 129 Bridge Program and deferred tolling may be interpreted by FHWA as an attempt to *effectively toll a federal aid highway that is not eligible to be tolled in violation of 23 U.S.C. 301 and 129.*

There are [other aspects](#) of the Michigan Tolling Study that call into [question the economic feasibility](#). But further discussion of economic details is not worthwhile until an approach can be identified that would likely be permitted.

Elements of the Michigan Tolling Study hint at a viable path forward. Crucially, tolling should be considered not only as a revenue source, but also as a tool to improve the operational efficiency of surface transportation, such as through variable pricing for congestion management.

The Tolling Study recognized this by including the [Value Pricing Pilot Program](#) as part of the proposed approach. This federal program is more about increasing the efficiency of transportation systems, rather than capturing revenue. A key objective of the program is "to demonstrate whether and to what extent roadway congestion may be reduced through application of congestion pricing strategies."

Unfortunately, the Tolling Study did not emphasize the use of congestion pricing strategies to improve investment or operational efficiencies. The Value Pilot Pricing Program was considered only on I-696 and part of I-275, and only "because they both have significant reconstruction planned using funding from the [Rebuilding Michigan Bonding Program](#)." In other words, those routes are already being reconstructed with state bond proceeds, and so could not be rebuilt again under the federal Section 129 Tolling Program.

The Tolling Study included several non-Interstate facilities (e.g., US-131, US-127, M-14, and M-10). It is permissible to implement tolls on such existing non-Interstate federal-aid routes under Section 129. However, the entire highway must be reconstructed, not just the bridges. This could drastically change the economic feasibility.

For existing Interstate routes, new toll lanes can be added so long as the number of toll-free lanes are not reduced. The Tolling Study assumes that MDOT will be adding additional lanes to I-94. The Study did not evaluate constructing these new lanes as toll lanes, but assumed that these would be constructed as general purpose lanes and subsequently tolled with all other lanes under the Section 129 Bridge Program. If new lanes on I-94 are truly justified, these can be constructed as toll lanes and this option should be evaluated.

Federal policy is moving towards loosening restrictions on tolling existing Interstate highways. For example, the 2021 Infrastructure Investment and Jobs Act introduced the Congestion Relief Pilot Program. The details of this program have not yet been determined by FHWA, but are likely to provide for tolling on the Interstate system without requiring complete reconstruction. An official notice of funding opportunity from FHWA is expected soon.

If the federal Congestion Relief Pilot is successful, it might be mainstreamed in the next federal transportation bill (expected in 2027) and become standing federal policy. Michigan should track the progress of this program and seek opportunities to utilize it. This could be a great learning opportunity for the State of Michigan, as well as the United States, as policymakers seek to improve operational efficiency of surface transportation and identify reliable revenue sources.

The Michigan Tolling Study is a missed opportunity to evaluate realistic approaches to address Michigan's road funding problems. However, the study provides value by highlighting current barriers and providing an example of how tolling economics and trade-offs can be evaluated. Michigan should continue to explore policies to create future sustainable transportation revenue models, while also improving operational efficiency of the transportation system.

## ABOUT THE AUTHOR

### Eric Paul Dennis, PE - Research Associate - Infrastructure



Eric joined the Citizens Research Council in 2022 as an expert in civil infrastructure policy. Previous to his position with the Research Council, Eric spent nearly ten years as a transportation systems analyst, focusing on the policy implications of emerging technologies such as autonomous vehicles, connected vehicles, and intelligent transportation systems. Eric has been a Michigan-licensed professional engineer (PE) since 2012. As a practicing engineer, Eric has design and project experience across multiple domains, including highways, airfields, telecommunications, and watershed management. Eric received his Bachelor's degree in civil engineering from Michigan State University in 2006. Eric also holds Masters degrees in environmental engineering and urban/regional planning, both from the University of Michigan.

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**Southeast Michigan**  
38777 Six Mile Rd. Suite 208, Livonia, MI 48152  
(734) 542-8001  
**Lansing**  
115 W Allegan St. Suite 480, Lansing, MI 48933  
(517) 485-9444