



House Appropriations Subcommittee on Transportation
February 28, 2024



2023 MDOT RUC Study/Literature Review

- From the FY 2023 MDOT Budget

“... the Department shall study the potential impact of electric vehicle (EV) integration on Michigan transportation fund revenue. The study shall include an analysis of the feasibility of alternate user -based systems as funding sources for the Michigan transportation fund...”

- Conclusions

Ideally, roads would be paid for by the people who use them, in proportion to how much they travel and how much they ship. No one would pay for roads they don't use, and no one would get a free ride at someone else's expense.

Additional Conclusions from the 2023 Study

- Michigan registration surtax on light vehicles currently offsets revenue not raised by the gasoline tax.
- The surtax on weight-based heavy-truck registration fails to replace the motor-carrier tax revenue as the number of electric trucks increase.
- At least 37 states have some research under way regarding mileage-based fees or road usage charges. (single state and multi-state coalitions)
- 4 states (Hawaii, Oregon, Utah, and Virginia) have permanent RUC programs as of August 2023. These programs are limited to electric vehicles.
- The cost of collecting mileage-based fees from all vehicles is unknown. None of the pilot projects have estimated the cost of RUC on all vehicles.



MDOT STSFA/RUC Project Summary

Project Title: Perceptions and Implications of Road Use Charges

- Fall of 2021, MDOT applied to the Federal Highway Administration's (FHWA's) 6th round of Surface Transportation System Funding Alternatives (STSFA) grants.
- Early 2023, we were notified that our project proposal was successful.
- Purpose:
 - Increase public awareness about the need for alternatives to the gas tax
 - Explore the potential of Road use charges (RUC) as an alternative revenue source based on actual road usage
 - Analyze the use of RUC as a tool to manage performance of the transportation network

Project Phases

Statewide survey

Conduct a large-scale survey to understand respondents' perceptions of and thoughts about gas taxes and road usage charges

Demonstration #1a

Test a simple, intuitive, user-friendly way to calculate and communicate road usage charges

Demonstration #1b

Determine whether credits / debits can be used to affect behavior change where relevant and appropriate

Project Timeline

The public perception survey is currently live and open until March 1, 2024

Task	2023			2024												2025				
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Project Planning	█	█	█																	
Public Perception Survey				█	█	█														
Survey Analysis							█													
Demonstration Recruitment								█	█	█	█	█								
RUC Pilot													█	█	█	█	█			
Final Report																		█	█	█

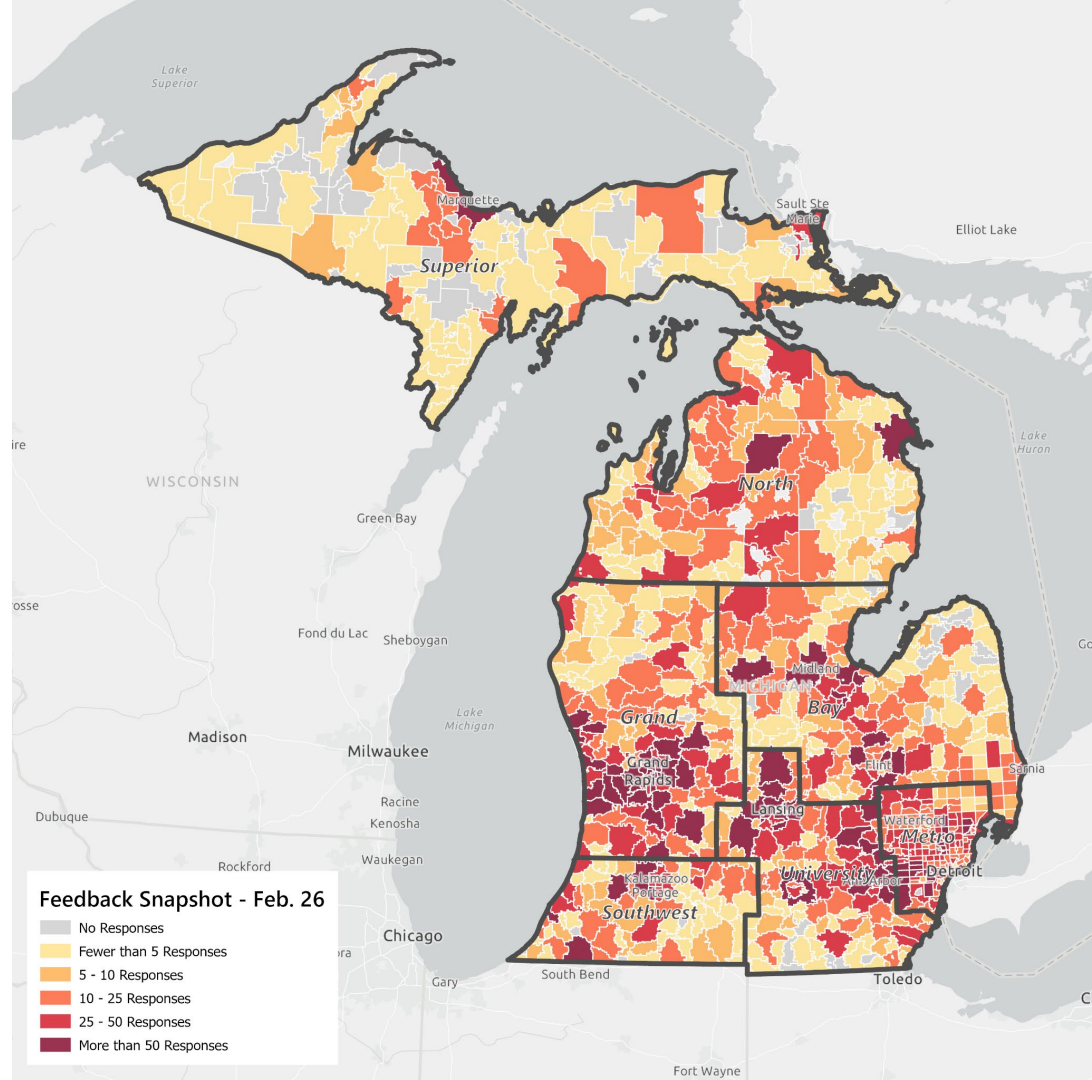
Response Snapshot

February 26

- Total responses received: 43.6k
- **Total validated responses: 18.9k**
 - ~200 new validated responses since last week (Feb. 19)
 - “Validated” responses have passed multiple fraud checks:
 - Duplicate response / IP address screens
 - Bot detection / response time screens
 - Completion screen
 - Manual email address screen
- Interest in demonstration phase:
 - **10.4k addresses**
 - **6.3k license plates (subject to additional verification)**

Road Use Charging Study

At least one validated response has been received from 95+% of Michigan ZIP codes.







www.Michigan.gov/MIRoadCharge

SIRC Program Review

- Funding available in upcoming NOFO: Up to \$45M to be awarded (three fiscal years' worth of funding)
- Eligible entities: State DOTs, *MPOs*, *local governments*
- Purpose: Test the feasibility of a RUC and other user -based alternative revenue mechanisms to help maintain the long - term solvency of the Highway Trust Fund through pilots at state, local, regional levels
- Letters of Intent encouraged
- Local match: 20% for entities that have not received a grant under Section ← 130001 applies to SIRC, *not* STSFA

SIRC Program Review

Timing Considerations

- NOFO anticipated Q2 (ex. April 24), 60-day response window
- Award announcement made 8-16 months post grant submission (ex. June 25)
- FHWA-Awardee agreement process: 3-5 months (ex. Sept 25)
- MDOT procurement, selection of team to support/ start work: 3-4 months (ex. early 2026)

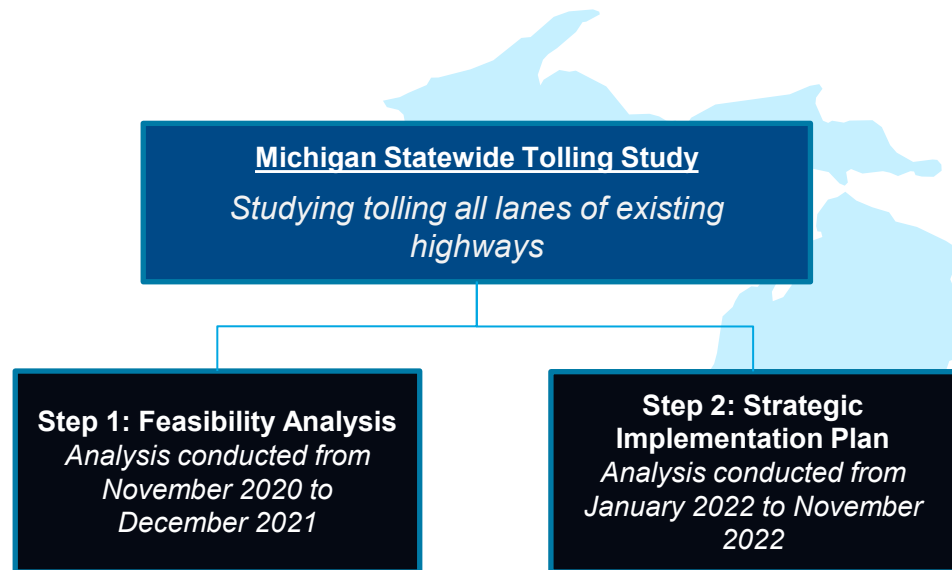
Average Pilot Project Timelines

- Discovery: 6-12 months
- Pilot set up: 6-12 months
- Pilot and Evaluation: 3-12 months

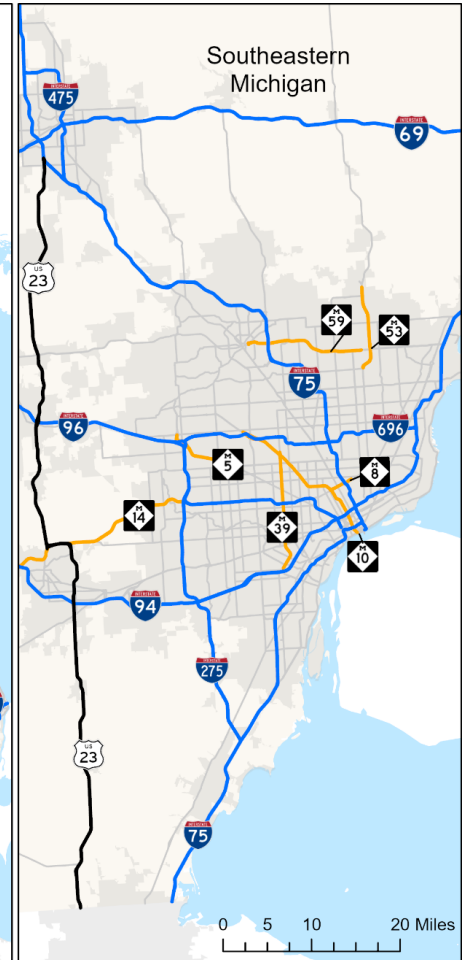
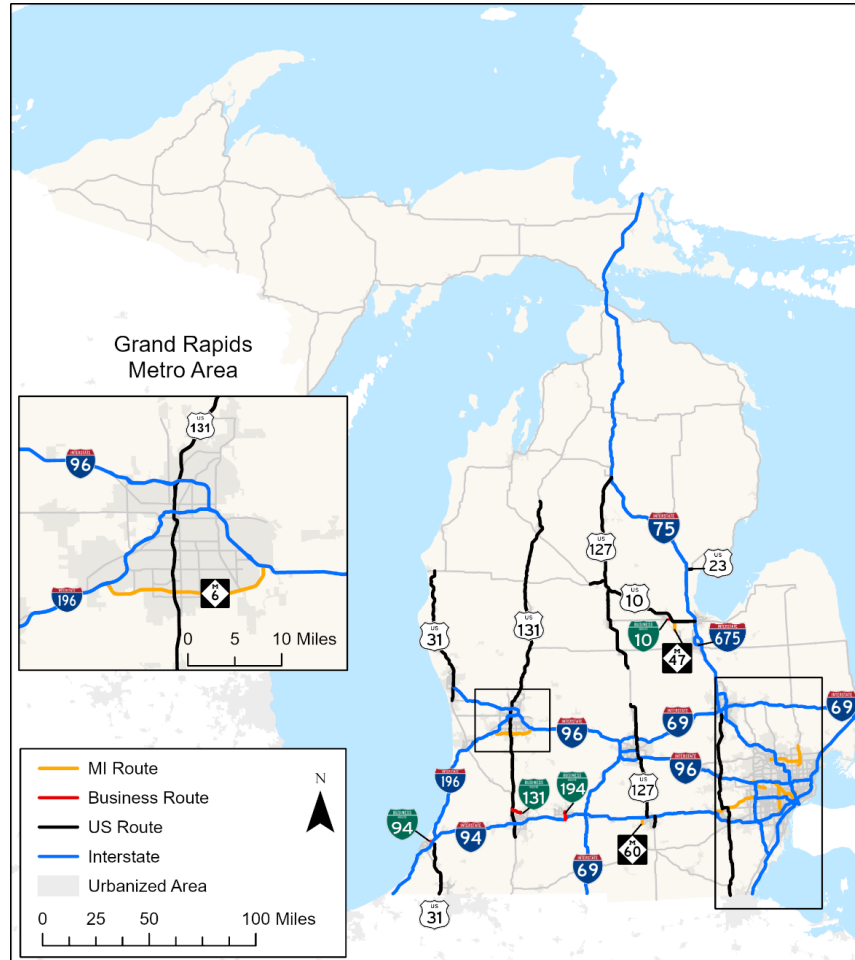
Tolling Study Overview

P.A. 140 of 2020 (July 8, 2020) and P.A. 73 of 2022 (May 10, 2022) required:

- MDOT to engage an outside consulting firm to conduct a feasibility study and strategic implementation plan
- Study must consider:
 - Economic impact and feasibility of tolling
 - Consideration of a discount program
 - Impact on out-of-state operators
 - Applicability for Federal tolling programs
 - Optimal toll rates
 - Identification of required tolling rules
 - Long-term financing opportunities
 - Identification of candidate corridors
 - Identify ways to maximize use of Michigan workers and products
- Feasibility study and implementation plan to be delivered by January 31, 2023. (*Only change in P.A. 73 of 2022 was deadline*)

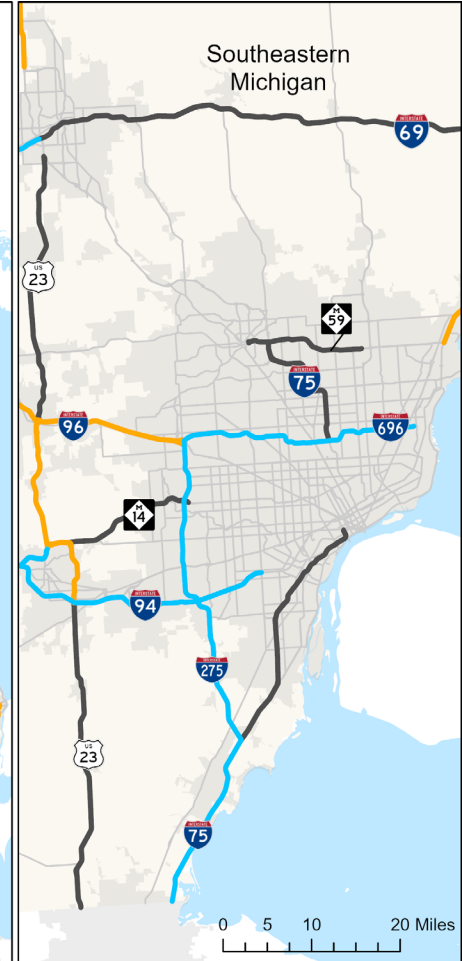
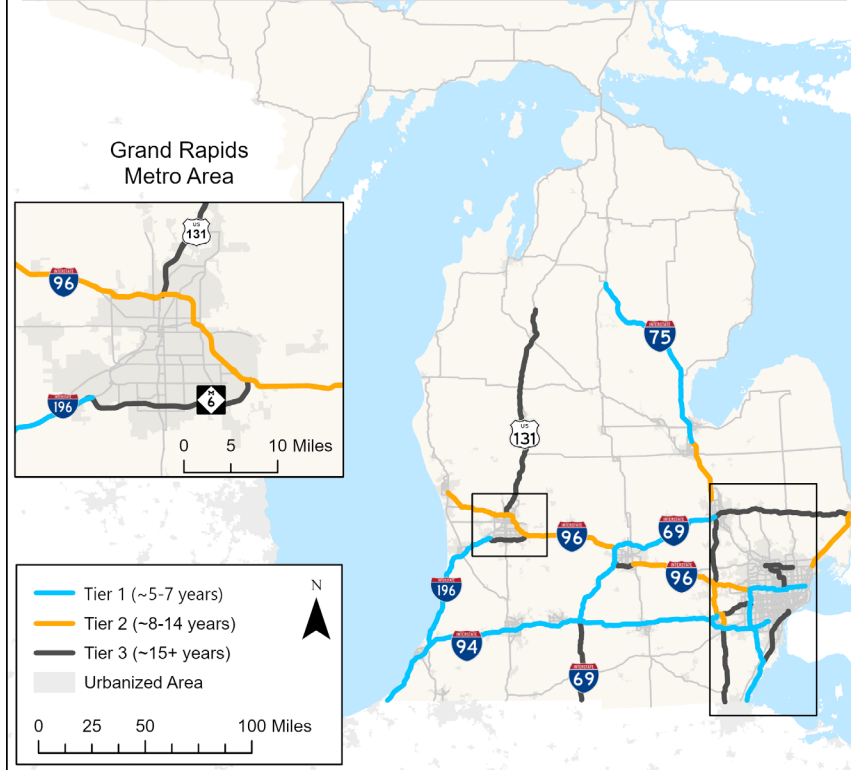


All Limited Access Highways



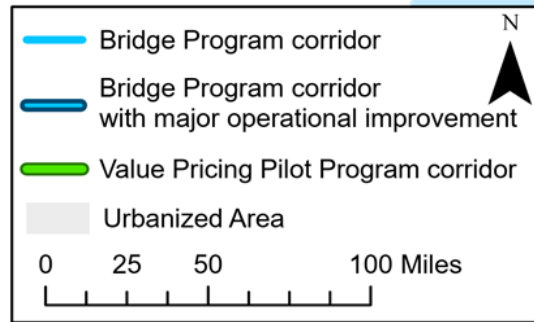
Toll System Resulting from Feasibility Analysis

- Where possible, avoid toll corridors adjacent to environmental justice communities
- Tiering was based on readiness for tolling deployment and considerations of financial performance, road condition, bridge condition, and geographic equity



Tier 1 Corridors

- The gross revenue potential of the entire Tier 1 system represented on this slide is \$1.3 billion (in year of collection dollars).



Statewide Toll Study Key Findings

- 1,156-mile Toll System (3 Tiers)
- A toll of 6 -to-6.5 cents per mile ¹ will cover all life cycle costs for Tier 1 (545 miles of highway) at or above standard performance measures.
 - Supports \$8.5 billion capital investment for these tolled roads (2032)
- Tolling could:
 - Diversify revenue sources for transportation
 - Free up existing sources of federal and state transportation revenue for other road and bridge projects
- Require a careful approach to implementation

¹Indexed for inflation and large trucks at 4x higher rate



Federal Tolling Programs

PROGRAMS	DESCRIPTION/REQUIREMENTS	USE OF REVENUE?
Section 129 Bridge and Tunnel MAINSTREAM PROGRAM	<ul style="list-style-type: none"> ▪ Comply with the FHWA reconstruction guidance ▪ Bridge defined as a span > 20 feet ▪ Multiple bridges/tunnels for a “corridor” 	Corridor, then any federal eligible project
ISRRPP (Reconstruction) PILOT PROGRAM	<ul style="list-style-type: none"> ▪ Enables tolling of all reconstructed lanes ▪ 3 provisional slots; 3 available 	Corridor only
VPPP (Value Pricing) PILOT PROGRAM	<ul style="list-style-type: none"> ▪ Congestion and time-of-day toll rates ▪ MPO consultation ▪ Performance reporting ▪ 15 slots; slots are open 	Corridor, then any federal eligible project
Congestion Relief Program PILOT PROGRAM	<ul style="list-style-type: none"> ▪ New competitive grant program part of IJA for urban areas with at least 1M population ▪ Optimizing existing capacity and multimodal solutions ▪ Gives tolling authority for up to 10 urban areas 	Detailed guidance not yet available

All Electronic Tolling (AET) at Highway Speeds



All-electronic toll gantry on the East End Crossing toll bridge over the Ohio River between Indiana and Kentucky



Conceptual all-electronic toll gantry in Michigan