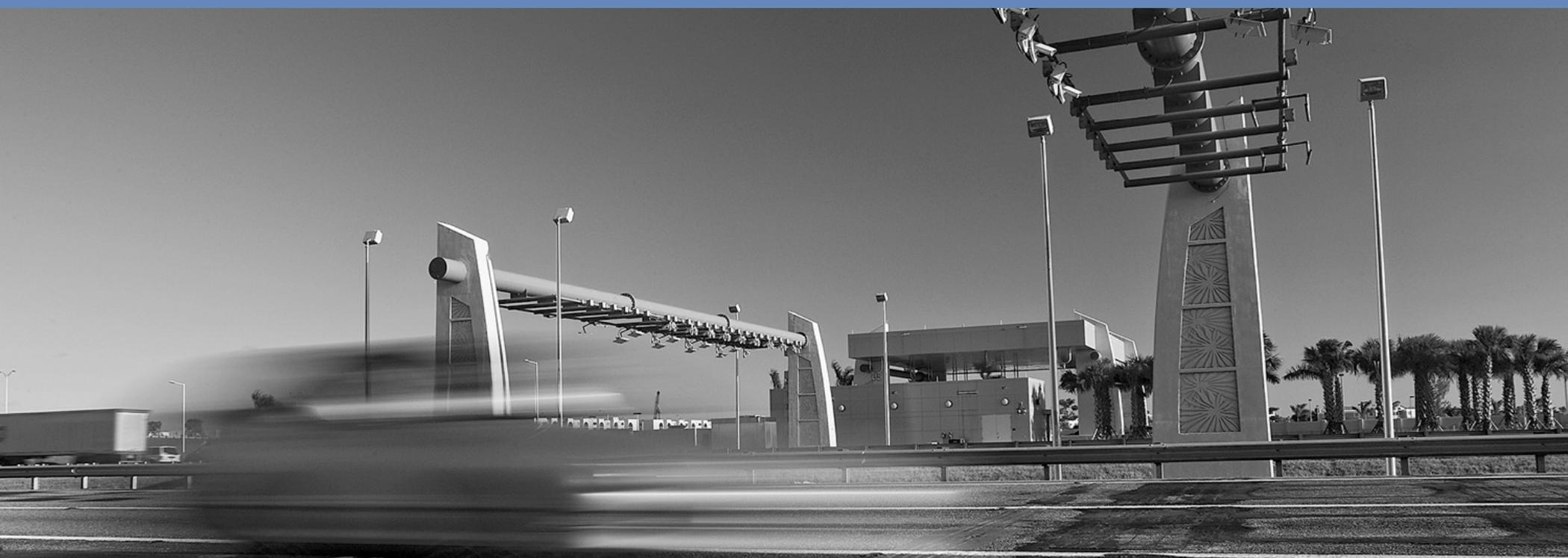


STATE OF MICHIGAN TOLLING STUDY (PA 140 of 2020)



House Appropriations Subcommittee on Transportation
April 28, 2021



About HNTB

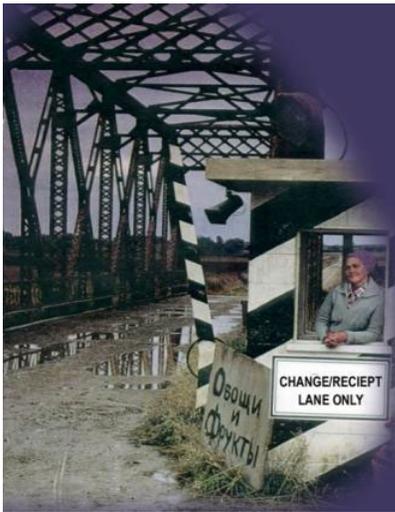
- Employee-owned infrastructure solutions firm
- Founded in 1914
- Nearly 5,000 teammates in 70 offices around the U.S.
- Opened Michigan office in 1992; currently employ 140+ Michigan residents
- Engineer News-Record's Midwest Design firm of the Year, 2019



State of the Practice – Interstate Tolling



Evolution of Tolling



Cash Only



Mixed Use
Cash/ETC



Dedicated ETC



ORT



AET

ETC = Electronic Toll Collection

ORT = Open Road Tolling

AET= All Electronic Tolling

Tolling in Michigan?

P.A. 140 of 2020 (July 8, 2020) requires:

- 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 will be delivered prior to July 8, 2022



Federal Programs to Advance Interstate Tolling

PILOT PROGRAMS

- **No** additional federal approval processes required
- Requires reconstruction of existing bridges/tunnel lanes or construction of new lanes
- Potentially faster to implementation
 - Section 129 New Capacity
 - Section 129 Bridge/Tunnel Reconstruction
 - Section 166 HOV to HOT Conversion

PILOT PROGRAMS

- **Must secure** a slot in a competitive Pilot Program
- Greater flexibility (corridor tolling and variable pricing without reconstruction)
- More nuanced requirements, plan and environmental (NEPA)
 - ISRRPP (Interstate System Reconstruction and Rehabilitation)
 - VPPP (Value Pricing)

Comparison of Tolling Programs

	Description/Requirements	Construction Required?	Toll Existing?	NEPA Required?	Use of Revenue:	Timing of Tolls:
Section 129 New Capacity	<ul style="list-style-type: none"> New capacity (express lanes and expansions) 	Yes	No	No*	Corridor, then any fed eligible	Construction Completion
Section 129 Bridge & Tunnel	<ul style="list-style-type: none"> Comply with the FHWA reconstruction guidance Bridge defined as a span greater than 20 feet Multiple bridges/tunnels for a “corridor” 	Yes	Yes	No*	Corridor, then any fed eligible project	Construction Contract Execution
Section 166 HOV to HOT	<ul style="list-style-type: none"> Conversion of existing HOV to HOT MPO consultation Performance reporting 	No	No	No*	Corridor, then any fed eligible project	Construction Completion
ISRRPP (Reconstruction)	<ul style="list-style-type: none"> Enables tolling of all reconstructed lanes 3 provisional slots; 3 available 	Yes	Yes	Yes	Corridor only	Construction Completion
VPPP (Value Pricing)	<ul style="list-style-type: none"> Congestion and time-of-day toll rates MPO consultation and Performance reporting 15 slots; 7 permanent and 8 reserved 	No	Yes	Yes	Corridor, then any fed eligible project	Construction Completion

***Note:** Implications from forgoing NEPA or diverting revenues off a corridor should be carefully examined

Tolling Myths

“Tolling means you will put toll booths in the middle of the road.”



Tolling Myths

“You have to add toll booth plazas at every freeway exit to implement tolling.”



No! Just need space for a gantry to be constructed on the mainline.

Tolling Myths

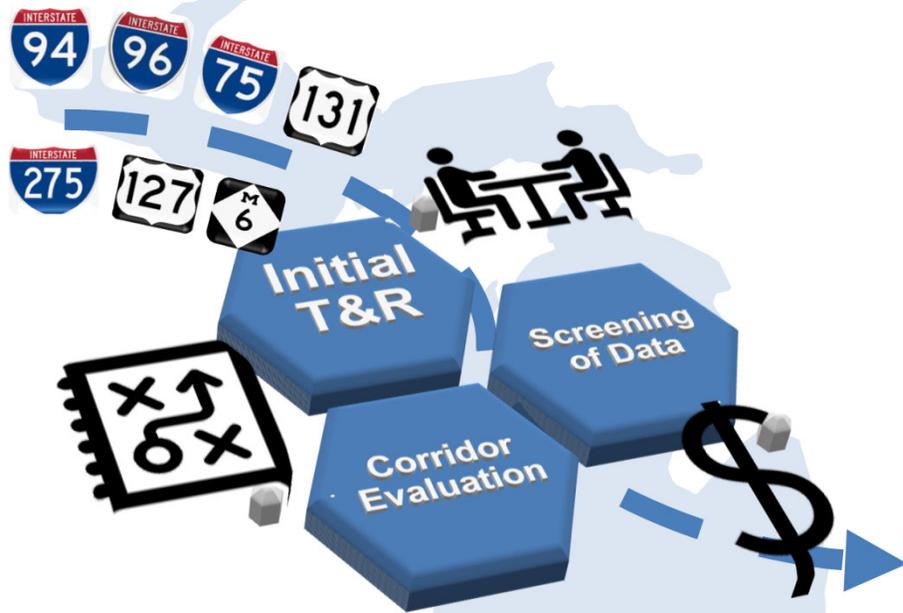
“It costs 50% of the toll revenue to collect the tolls.”

**NO! Collection costs average between
12% and 18% of the tolls.**

Michigan's Toll Feasibility Study

Step 1 = Feasibility Study

Start with 31 Limited Access Corridors



Feasibility Study Identifies "If Tolling Makes Sense & Identifies Most Promising Corridors"

Step 2 = Implementation Plan

Start with most promising candidate corridors and complete the following tasks:

Assess Feasibility Of Federal Programs

Traffic & Revenue/Optimal Toll Rates

Economic/Environmental Analysis

Equity & Discount Programs

Financing Opportunities

Policy & Rules

Final Recommendations
July 2022

Michigan – A Potential Path Forward



Legislative action

Feasibility Study

Strategic Implementation Plan

FHWA Concurrence

Communications and Outreach

Pre-construction Activities

Environmental Approvals

MOU or Tolling Agreement with FHWA

Feasibility Study Scope

- Tolling Seminar/Education
- Data Gathering
- Initial Traffic & Revenue Estimates
- Data Analysis
- Corridor Screenings
- Stakeholder Outreach
- High Level Economic Analysis
- Federal Program Review
- Develop of Initial Net Revenue
- Identification of Candidate Corridors

Michigan – A Potential Path Forward



Legislative action

Feasibility Study

Strategic Implementation Plan

FHWA Concurrence

Communications and Outreach

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Environmental Approvals

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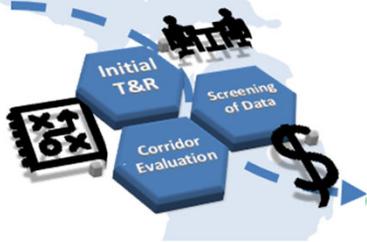
Implementation Plan Components

- Concept of Operations Plan
- Candidate Corridor Capital needs assessment
- Toll plan and gantry locations
- Final Traffic & Revenue
- Net revenue, phasing and financing strategy
- Federal approach (tolling programs and NEPA)
- Summary of Stakeholder Viewpoints
- Final Strategic Implementation plan

Tolling Study Schedule

Step 1 = Feasibility Study

Start with 31 Limited Access Corridors



Fall 2020	Winter 2021	Spring 2021	Summer 2021
HNTB Selected	Legislative Briefings	Stakeholder Outreach	Candidate Corridors
Kick-off	Data Analysis	Economic Analysis	Legislative Check-ins
Tolling Workshops	Initial T&R	Refined T&R	Stakeholder Outreach
Data Collection	Corridor Screening	Corridor Screening	Imp. Plan Scoping

Step 2 = Implementation Plan

Start with most promising corridors (+/- 10) and complete the following tasks:



Fall 2021	Winter 2022	Spring 2022	Summer 2022
Develop ConOps	Legislative Briefings	Stakeholder Outreach	Final Feasibility Study
Stakeholder Outreach	Refined Economic Analysis	Final T&R	Final Imp. Plan (by July 2022)
Gantry Analysis	Cost Estimating	Sequencing Plan	Legislative Presentations
Environmental Review	Initial Net Revenue	Final Net Revenue	Stakeholder Presentations

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