



Wisconsin Transportation Fund Solvency

*Summary report —
includes feasibility
of tolling Wisconsin
Interstate highways*



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Purpose of the study

2015 Wisconsin Act 55 requires the Wisconsin Department of Transportation (WisDOT) to study the methods of improving the solvency of the Wisconsin Transportation Fund. This report discusses current funding sources and trends, as well as options to fund future transportation needs.

Tolling may be one of the options. This summary document provides an overview of a detailed feasibility analysis of instituting tolls on Wisconsin Interstate highways.

The overall study and this report do not make any recommendations about transportation revenue and expenditure options, including tolling. The report provides scenarios and options for consideration.

Please review this summary and other materials that WisDOT has provided on the study. See the end of this document if you would like more information.



Solvency study overview

- The 2015–17 biennial budget requires a Transportation Fund solvency study to be provided to the Joint Committee on Finance of the Wisconsin Legislature
- WisDOT examined revenues going into the Transportation Fund and expenditures coming out over a 10-year period from state fiscal year 2018 to 2027
- The study has five main components:
 - Results of efficiencies achieved by WisDOT
 - Description of current revenue sources
 - Description of current expenditures
 - Future scenarios for expenditures compared to current revenues
 - Potential options for new revenue, including tolling



Existing revenue trends

- Two primary sources of revenue
 - Motor fuel taxes expected to decrease due to greater vehicle fuel efficiency
 - Vehicle registration fees expecting small growth through 2027

Total Transportation Fund Revenues for FY 2018 to FY 2027

Type of Revenue	Amount
Gross Segregated Revenues	\$19,526,519,400
Transportation Revenue Bond Debt Service	-\$2,278,636,800
Transportation Revenue Bonds	\$725,890,000
GO Bonds	\$0
Federal Revenues	\$9,032,916,500
Local Revenues	\$1,078,861,000
Total Available Revenue	\$28,085,550,100



Possible future expenditure scenarios for 2018 to 2027

The study examined expenditure options over 10 years and compared the totals to forecasted revenue available only from existing sources and rates

- **Scenario One:** spend *less* than 2015–17 budget trend
 - System conditions worsen severely by 2027
 - No new planning for highway expansions until 2055
- **Scenario Two:** spend *same* as 2015–17 budget trend
 - System conditions worsen significantly by 2027
 - No new planning for highway expansions until 2040
- **Scenario Three:** spend *above* 2015–17 budget trend
 - System conditions worsen moderately by 2027
 - No new planning for highway expansions until 2034



Comparing revenue trends to spending scenarios

Totals from FY 2018 to FY 2027

	Scenario One	Scenario Two	Scenario Three
Available revenue	\$28.09 billion	\$28.09 billion	\$28.09 billion
Total expenditure	\$28.94 billion	\$31.11 billion	\$36.03 billion
Shortfall	\$0.85 billion	\$3.03 billion	\$7.94 billion
Increase in 'poor' State highway miles	109%	93%	72%



Revenue options for consideration

● Motor fuel tax options

- Increase the motor fuel tax
- Institute a sales tax on motor fuel
- Index the motor fuel tax rate
- Institute a variable motor fuel tax

● Driver license and motor vehicle fee options

- Increase the vehicle registration fee
- Increase the driver license fee
- Institute hybrid and electric vehicle fee surcharge
- Institute value-based motor vehicle registration
- Transfer of sales tax on vehicles and parts from the General Fund

● New tax and fee mechanisms

- Mileage-based motor vehicle registration fee
- Highway use fee on new vehicles
- Tolling



Study on feasibility of tolling

- WisDOT conducted an in-depth analysis of tolling to provide substantive data to decision-makers. The study did not make any recommendations regarding tolling.
- WisDOT commissioned a consultant project to study the feasibility of tolling Wisconsin Interstate highways.
- Interstate highways in Wisconsin:
 - About 875 roadway miles (less than 1% of total system)
 - **Carries about 17% of all roadway traffic in Wisconsin**
 - I-535 between Superior and Duluth (Blatnik Bridge) is not included in the study



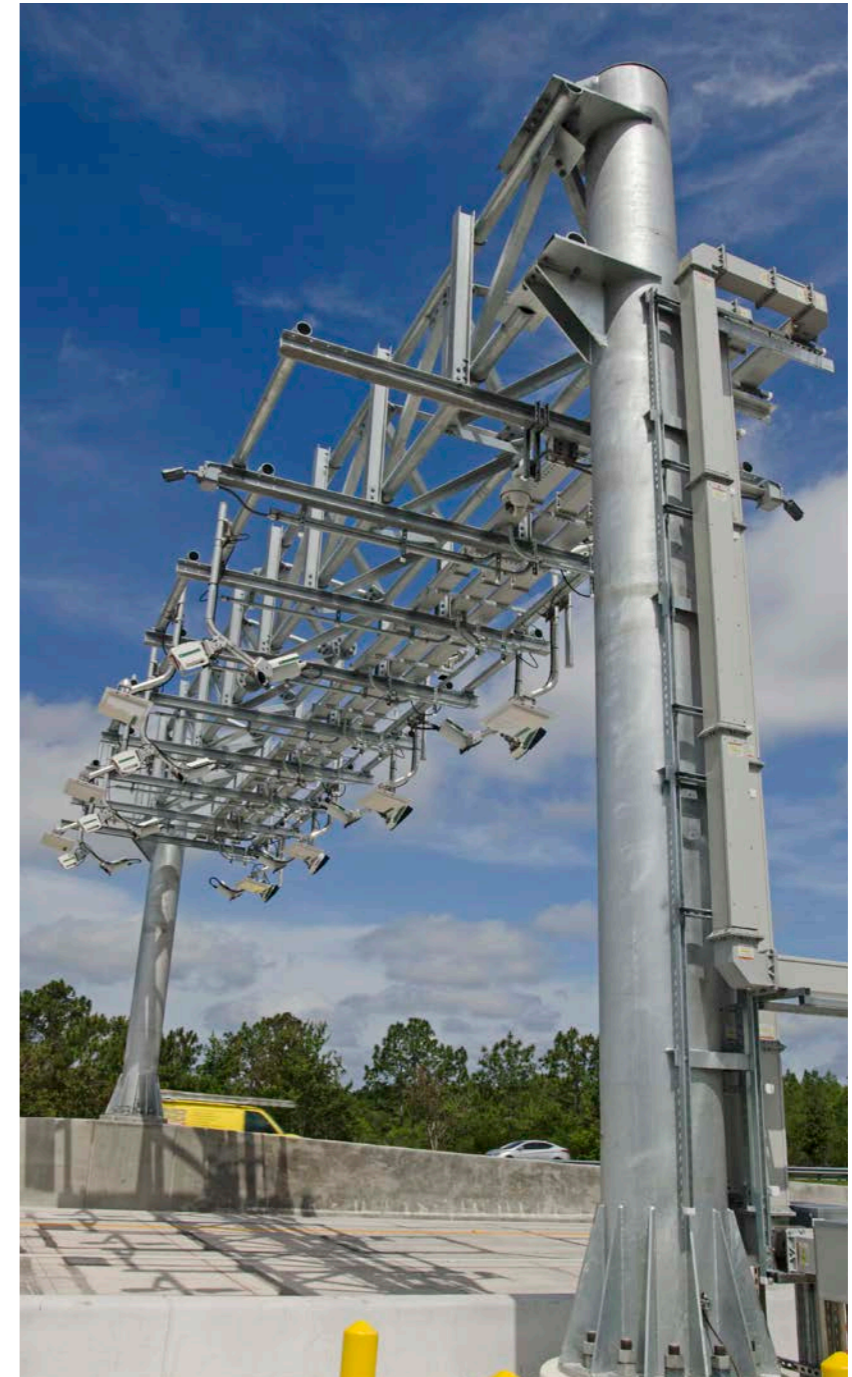
Why study tolling?

Opportunities of tolling

- Fits the user fee concept better than fuel taxes or registration fees
- Ensures payment by out-of-state motorists
- Not impacted by vehicle fuel efficiency or alternative fuels
- 940,000 Wisconsin vehicles are registered to use the Illinois Tollway

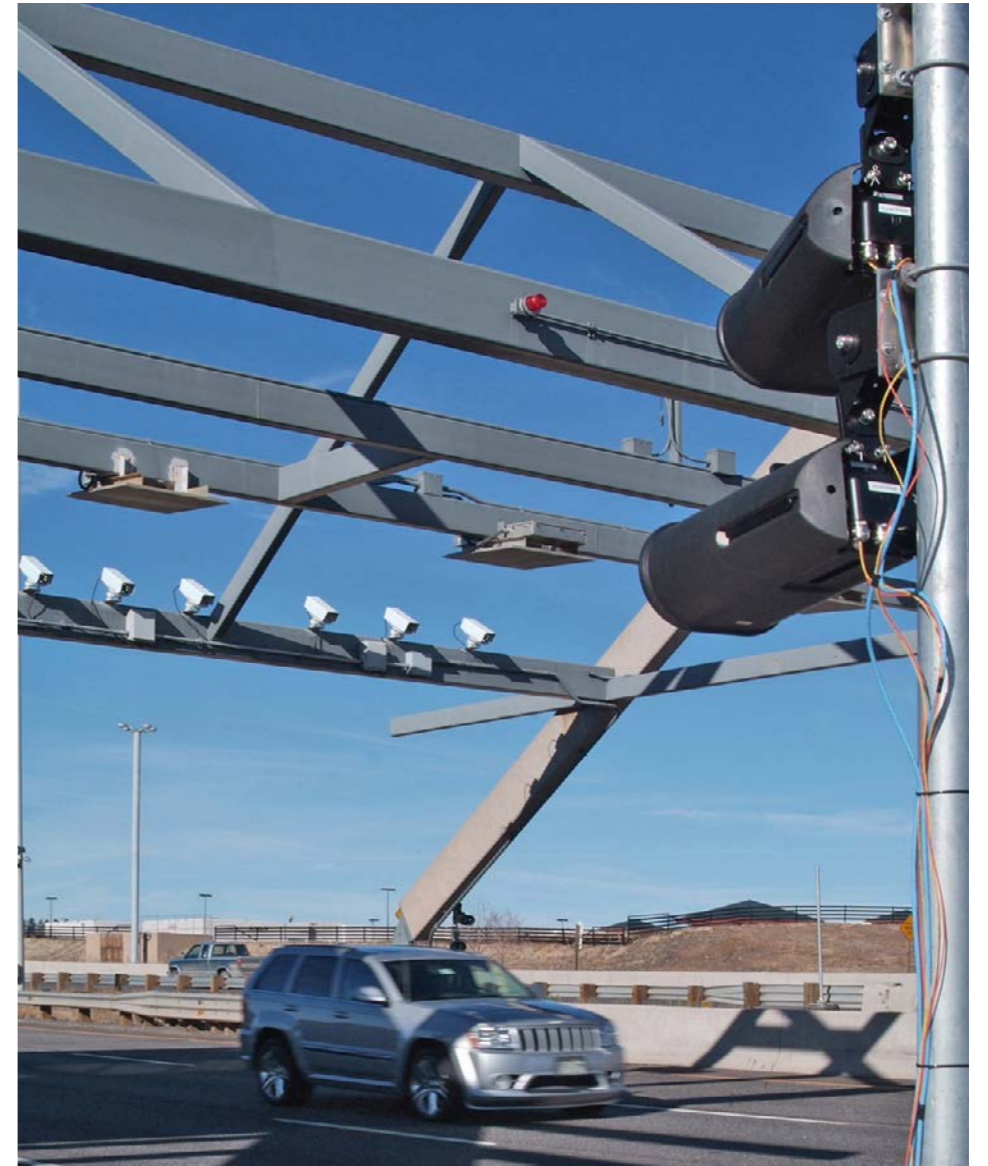
Challenges of tolling

- Complicated business structure that is new to Wisconsin
- Could divert traffic that doesn't want to pay tolls
- Would require some up front investment



What is in the Wisconsin study?

- **Task 1:** Current industry standards and best practices from 30+ other states involved in tolling
- **Task 2:** Policy considerations and legal/statutory issues for Wisconsin
- **Task 3:** Traffic and revenue forecasting
 - All Interstate corridors at a **basic** level
 - Selected sample corridors at a **detailed** level
- Study is analytical only; no recommendations
 - HNTB was prime consultant
 - Study cost just under \$900,000



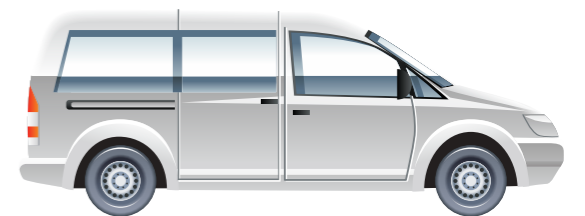
What about federal laws?

Federal

- Federal law prohibits tolls on most Interstates
- Some specific purposes allowed (e.g. bridges, new capacity)
- Federal pilot program could allow tolls on existing Interstates
- Federal authorization would likely limit the use of tolling revenue to the corridor from which it was collected



For more information on federal tolling policies and programs, visit http://www.fhwa.dot.gov/ipd/revenue/road_pricing/tolling_pricing/



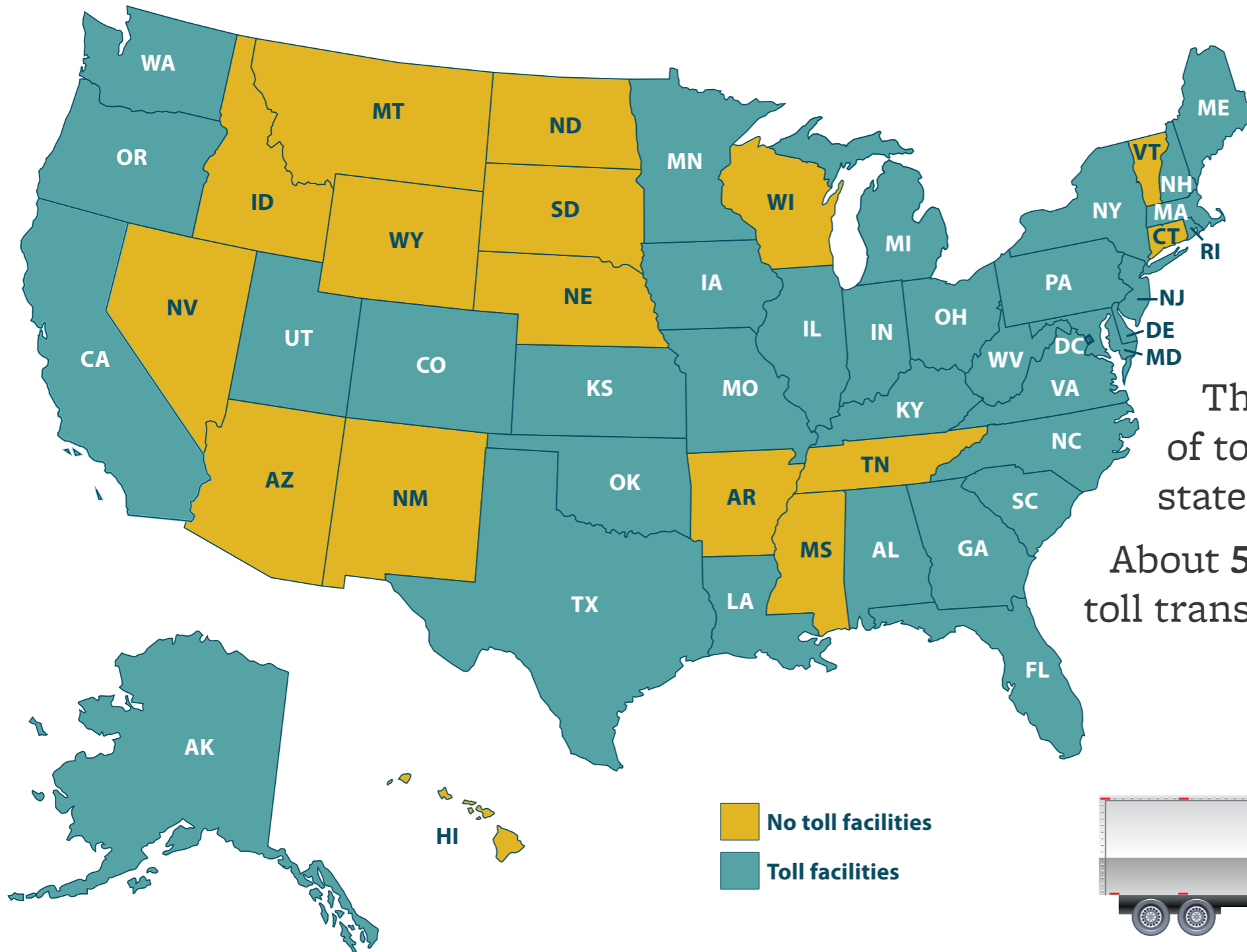
What about state laws?

State

- Need new authority and assignment to an agency
- Need to comply with [Wisconsin Constitution Article VIII, Section 11](#) on use of transportation revenue
- Many other state laws or rules would be needed for operations



Where is tolling currently used?



There is a wide variety of tolling agencies at the state and regional level.

About **5 billion** U.S. toll transactions in 2015.



Study assumed All Electronic Tolling (AET) for Wisconsin

- No slowing down — all open traffic
- No cash bypass lanes
 - Safety concerns for merging traffic
 - Land needed for toll plazas
 - Cash handling issues
 - 24/7 labor needs
- Industry clearly moving to AET
 - Most tolls are collected through transponders that deduct from a prepaid account
 - If a vehicle does not have a transponder, the vehicle owner will be mailed a bill for the tolls owed
 - Non-transponder tolls are typically assessed a surcharge due to the higher mail and processing costs



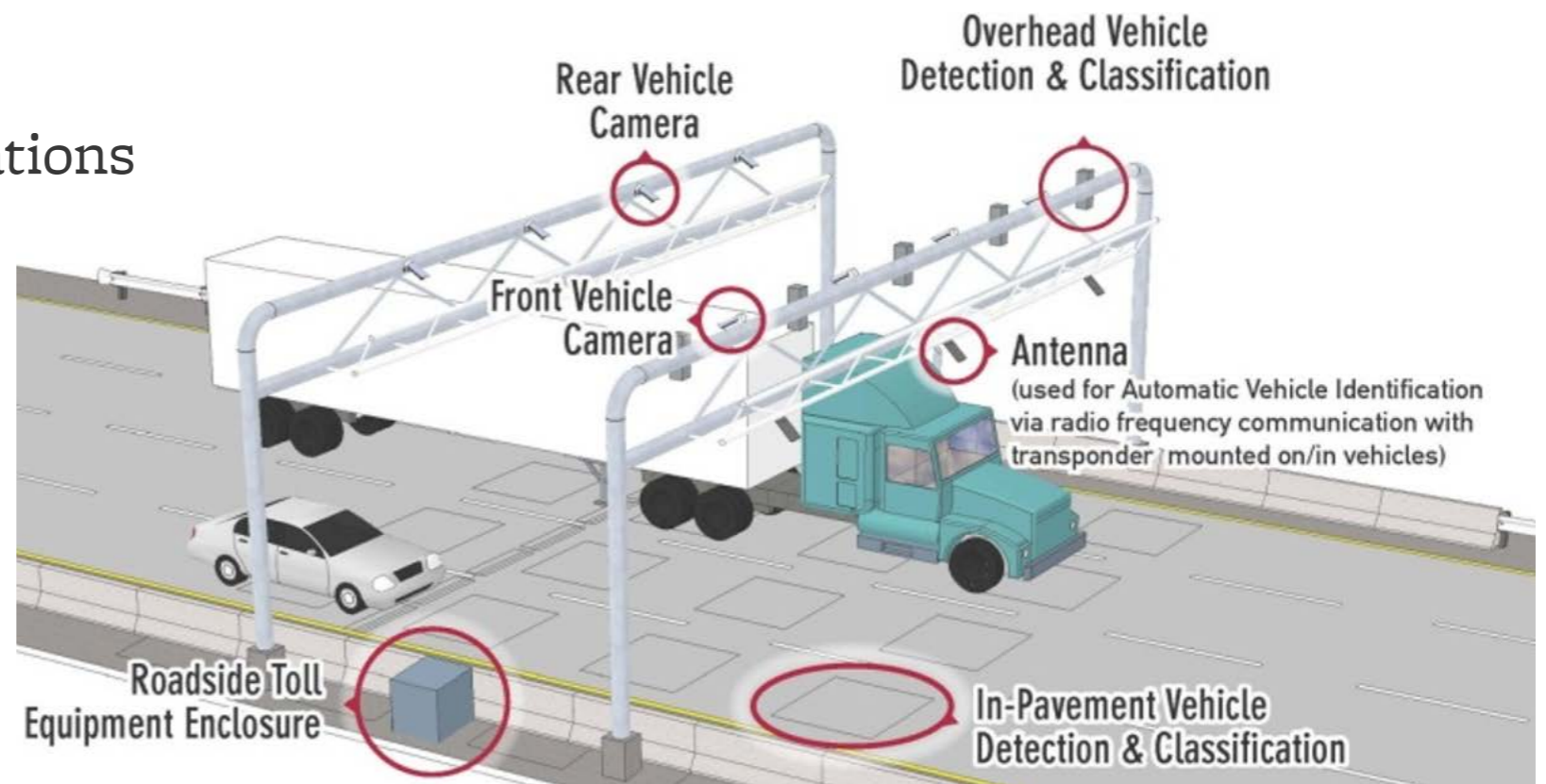
What does it cost to have tolling?

● Up-front capital/infrastructure

- Overhead gantries
- In-pavement sensors for axle counts
- Back office equipment
- Could be covered by initial bonding/borrowing

● Day-to-day operations

- Computer systems
- Customer service operations
- Collection operations
- Storefront operations



Predicting how traffic will respond

- The study utilized forecasting models for current and future traffic
- Each trip on an Interstate highway was charged a certain cents per mile to represent a hypothetical toll
 - Three pricing scenarios of 4, 8 and 12-cents per mile for a two-axle vehicle using a transponder
 - Tolls increased as number of vehicle axles increased
 - Some vehicles were assumed not to use a transponder and paid a higher rate
- Diversion can happen when a driver chooses not to pay a toll even though the Interstate route is faster than an alternate route



Examples of lowest level of toll charges used in the study

50 mile trip at 4 cents per mile

Vehicle	Base Rate at 4 cents	Toll with Transponder	Toll without Transponder (50% surcharge)
2-axle	base rate	\$2	\$3
2-axle + 2-axle trailer	2 × base rate	\$4	\$6
5-axle (truck)	4 × base rate	\$8	\$12



Illinois Tollway rates are typically 5 to 6 cents per mile for a 2-axle vehicle when using a transponder. There is 100% surcharge (double the toll) for no transponder.

2-Axle Vehicle Sample Trips

Kenosha WIS 50 to Milwaukee airport	\$1.04
Miller Park to Madison exit at WIS 30.	\$2.72
Wauwatosa to Green Bay.	\$5.00
Madison to La Crosse	\$5.16
Wisconsin Dells to Hudson.	\$7.44

System revenue forecast, year 2025

- Annual revenue forecast at 4 cents per mile
 - \$519 million gross
 - \$372 million net after infrastructure/operating costs
 - 72% operating margin
- Average diversion of 17%
 - Diversion is likeliest to happen over short distances
 - Study model has the ability to identify likely diversion routes

The study cannot predict exactly how much toll revenue would be collected from non-Wisconsin drivers. Between 5% and 40% of trips on Interstate highways either start or end (or both) outside of Wisconsin, but this may also involve Wisconsin residents traveling to or from other states.



Digging even deeper

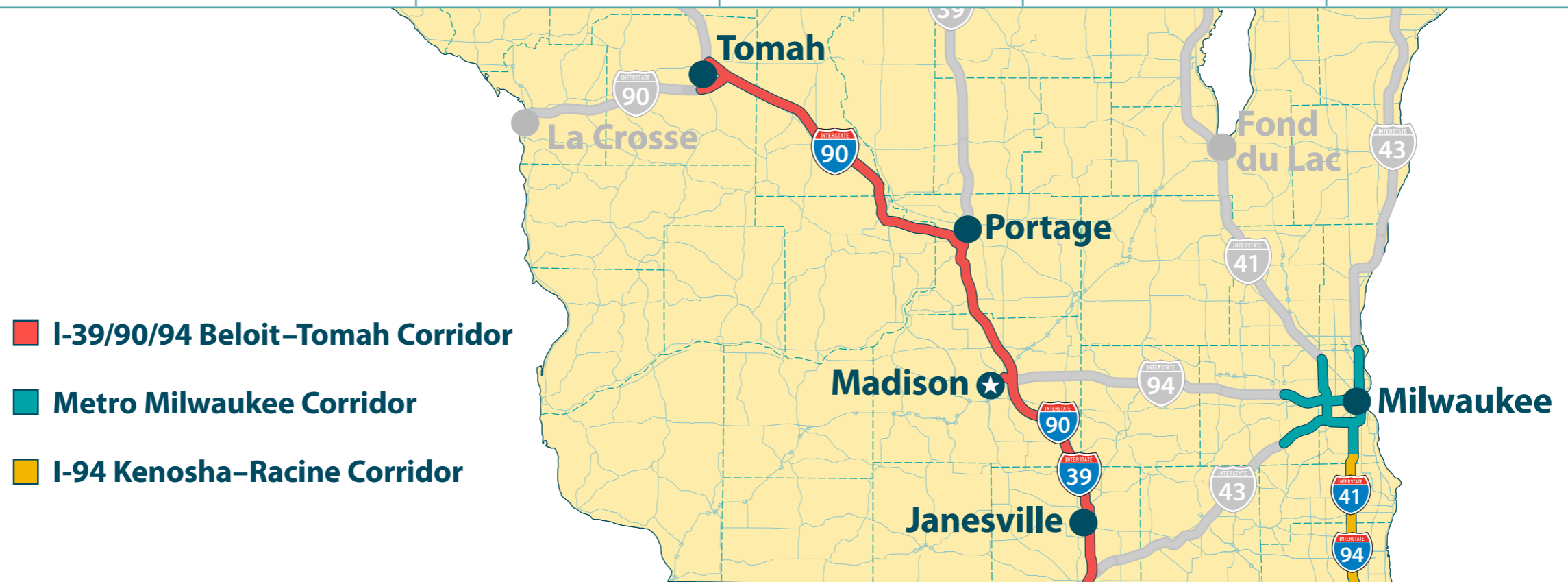
- The study took a closer look at three sample corridors to get a stronger analysis of how tolling really works and how drivers might respond
 - Identified specific toll collection points on highways and ramps
 - Established a minimum toll at each collection point to make sure to cover operating expenses
 - Allowed some free movements over short distances where a toll would not be collected, either because the toll wouldn't cover operating expenses or because traffic diversion would be too severe
 - Added a 6-cent per mile scenario to be closer to industry averages
- Selected corridors represented the best mix of scenarios to study and are not meant to indicate any recommendations



Results of detailed corridor review

6 cents per mile, partially open – Year 2025 (in millions)

Corridor	Gross	Net	Op Margin	Diversion
I-39/90/94 Beloit–Tomah	\$125.7	\$109.9	87%	35%
Metro Milwaukee	\$196.5	\$112.2	57%	34%
I-94 Kenosha–Racine	\$44.1	\$32.1	73%	34%



- I-39/90/94 Beloit–Tomah Corridor
- Metro Milwaukee Corridor
- I-94 Kenosha–Racine Corridor



What happens now?

- WisDOT has delivered the full report to the Wisconsin Legislature
- If state authority is granted
 - Wisconsin would need to pursue federal authorization
 - Additional advanced study, design, engineering and deployment activities would need to take place
 - Estimated to take 48 months before launch



Staying involved

- Additional study information at wisconsindot.gov/Pages/projects/solvency.aspx including all study technical reports
- Find contact information for the Legislature at wisconsin.gov



How to use this document

The Wisconsin Transportation Fund Solvency is an interactive guide designed to be read on the screens of desktop computers and tablets. You will need Adobe Reader to view the PDF and can [download it free of charge](#). This guide is a very large file and may take several minutes to download.

Navigation tips

On the gray bar at the bottom of each page, click on “Go to Cover” to go to page 1, click on “Table of Contents” to go to this guide’s contents listing.

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