FYI in 45

Thinking about Tolling: Keys to Success

Panelists:
Terri Slack
Justine Sydello

Moderated by:
Andrew Beaton

June 6, 2019

CDM Smith

Today's Discussion

- Why tolling is a worthy tool for your funding toolbox
- Federal laws about tolling restrictions and exceptions
- Considerations and practical steps your agency should take when evaluating tolling
- How some state DOTs have taken on tolling for the first time

Before We Begin…

Technical Difficulties*

Webinar is being recorded

Questions are encouraged

PDH certificate

* Contact our webinar producer: Danielle Jackson

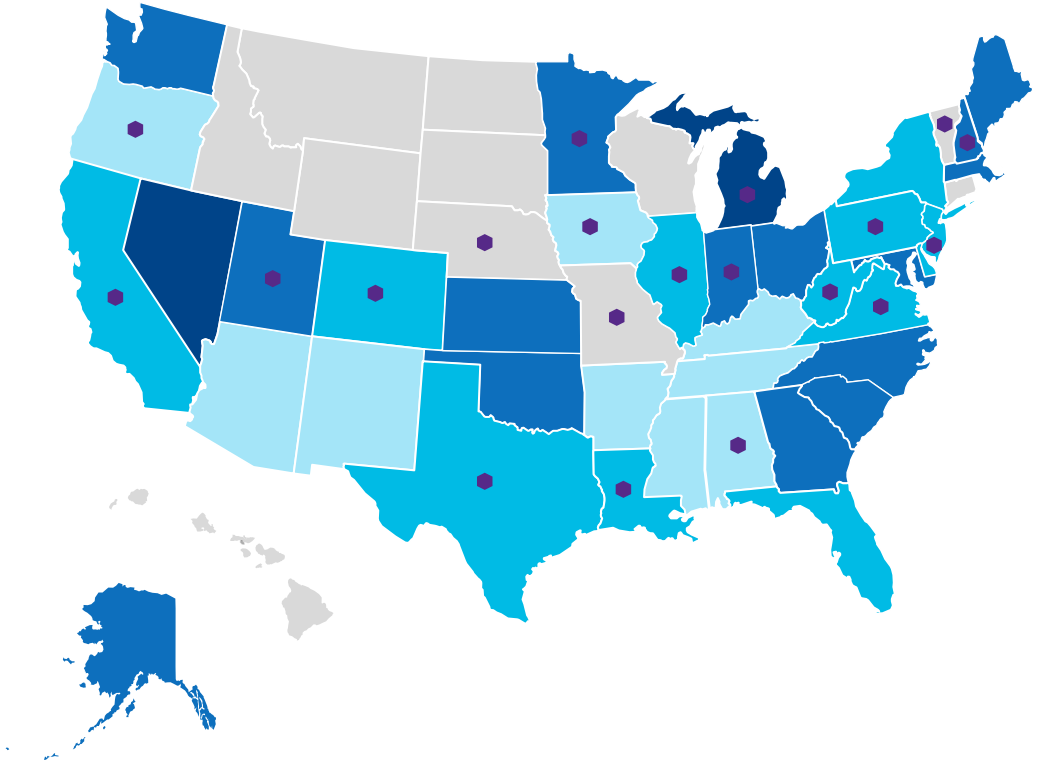
Our Panel

Terri Slack
Toll Program
National Practice Leader

Justine Sydello
Transportation Policy
National Practice Leader

Opening the
Case for Tolling

Interstate Highway System

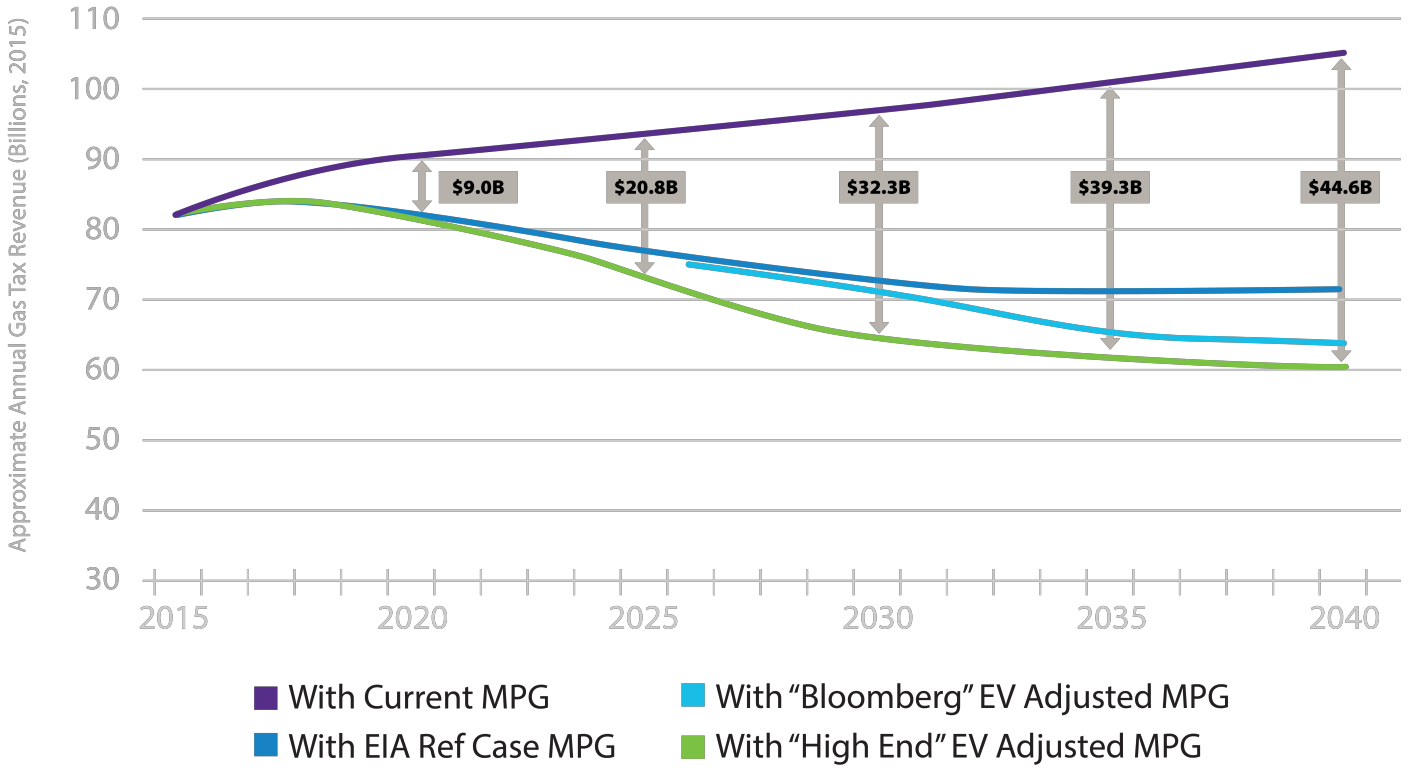


- Statewide operating entity
- Regional operating entity
- Statewide and regional operating entity
- Private operating entity
- Authorization to toll, but no state or regional facilities
- No toll facilities

Estimate of Revenue for Entire Interstate

Rate per Mile	Avg Annual $[Billions] (2020-2040)	
	Toll Revenue	Net Revenue
$0.04	$68.40	$54.60
$0.06	$93.80	$80.90
$0.08	$119.50	$106.90

Gas Tax


Approximate Annual Gas Tax Revenue (Billions, 2015)
110
100
90
80
70
60
50
40
30
2015
2020
2025
2030
2035
2040
$9.0B
$20.8B
$32.3B
$39.3B
$44.6B
With Current MPG
With EIA Ref Case MPG
With "Bloomberg" EV Adjusted MPG
With "High End" EV Adjusted MPG

Future Interstate Highway System

www.trb.org/FutureInterstate/Future_Interstate_Legislation.aspx

FUTURE INTERSTATE STUDY LEGISLATION

Future Interstate Home
Committee
Reports
Resources
Legislation
Staff

Section 6021 of the Fixing America's Surface Transportation (FAST) Act of 2015

SEC. 6021. FUTURE INTERSTATE STUDY.

(a) FUTURE INTERSTATE SYSTEM STUDY.—Not later than 180 days after the date of enactment of this Act, the Secretary shall enter into an agreement with the Transportation Research Board of the National Academies to conduct a study on the actions needed to upgrade and restore the Dwight D. Eisenhower National System of Interstate and Defense Highways to its role as a premier system that meets the growing and shifting demands of the 21st century.

(b) METHODOLOGIES.—In conducting the study, the Transportation Research Board shall build on the methodologies examined and recommended in the report prepared for the American Association of State Highway and Transportation Officials titled "National Cooperative Highway Research Program Project 20–24(79): Specifications for a National Study of the Future 3R, 4R, and Capacity Needs of the Interstate System", dated December 2013.

(c) CONTENTS OF STUDY.—The study— (1) shall include specific recommendations regarding the features, standards, capacity needs, application of technologies, and intergovernmental roles to upgrade the Interstate System, including any revisions to law (including regulations) that the Transportation Research Board determines appropriate; and (2) is encouraged to build on the institutional knowledge in the highway industry in applying the techniques involved in implementing the study.

(d) CONSIDERATIONS.—In carrying out the study, the Transportation Research Board shall determine the need for reconstruction and improvement of the Interstate System by considering—(1) future demands on transportation infrastructure determined for national planning purposes, including commercial and private traffic flows to serve future economic activity and growth; (2) the expected condition of the current Interstate System over the period of 50 years beginning on the date of enactment of this Act, including long term deterioration and reconstruction needs; (3) features that would take advantage of technological capabilities to address modern standards of construction, maintenance, and operations, for purposes of safety, and system management, taking into further consideration system performance and cost; (4) those National Highway System routes that should be added to the existing Interstate System to more efficiently serve national traffic flows; and (5) the resources necessary to maintain and improve the Interstate System, including the resources required to upgrade the National Highway System routes identified in paragraph (4) to Interstate standards.

(e) CONSULTATION.—In carrying out the study, the Transportation Research Board— (1) shall convene and consult with a panel of national experts, including operators and users of the Interstate System and private sector stakeholders; and (2) is encouraged to consult with—

(A) the Federal Highway Administration;

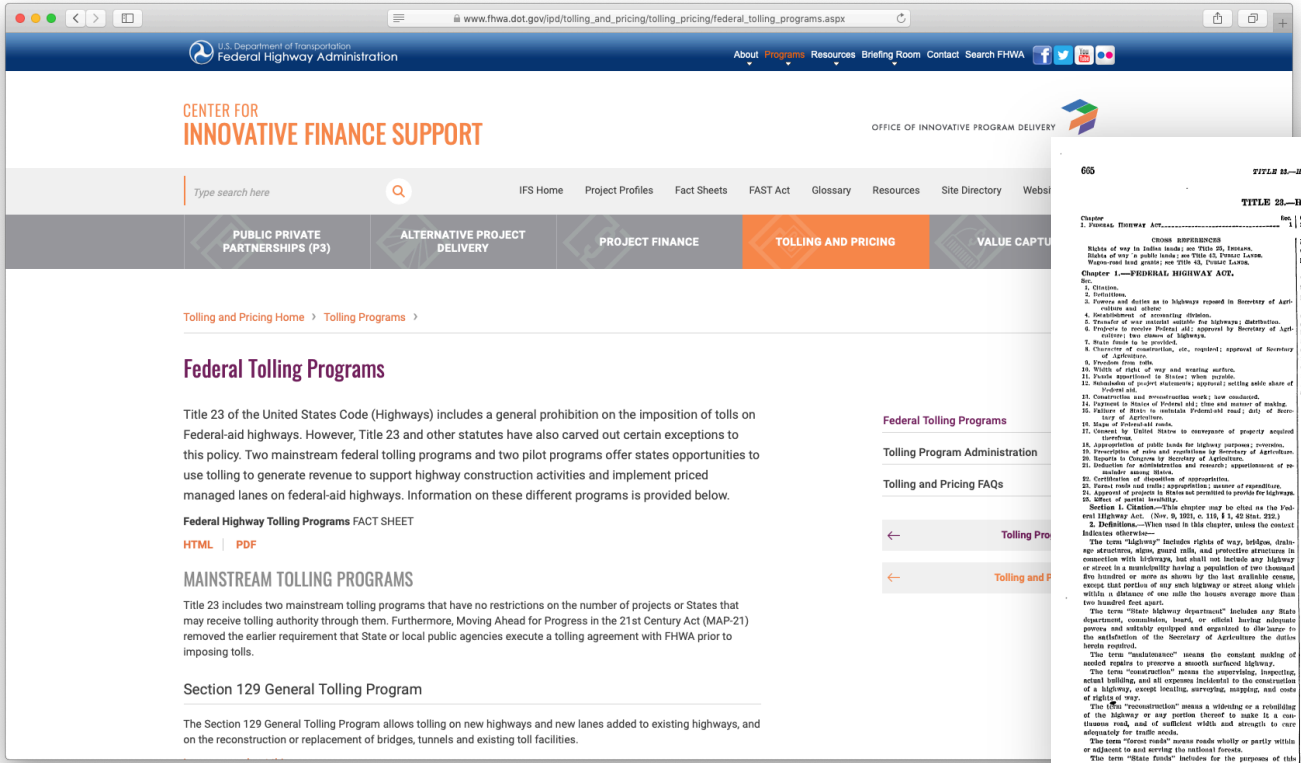
ANY VEHICLE
CASH / RECEIPTS
ANY VEHICLE
CASH / RECEIPTS
LANES
5 4
LANES
3 2
SPEED
LIMIT
10
NORTH TURNPIKE
DRIVE
SAFELY

OPEN ROAD TOLLING
DEVON AVE PLAZA 17
Lee St
1/2 MILE

Exit 45
River Rd
S. Lawrence
1 MILE
MARKET B
"MORE FOR YOUR DO

Legislative Landscape

Federal Restrictions



General Tolling Program

HOV to HOT

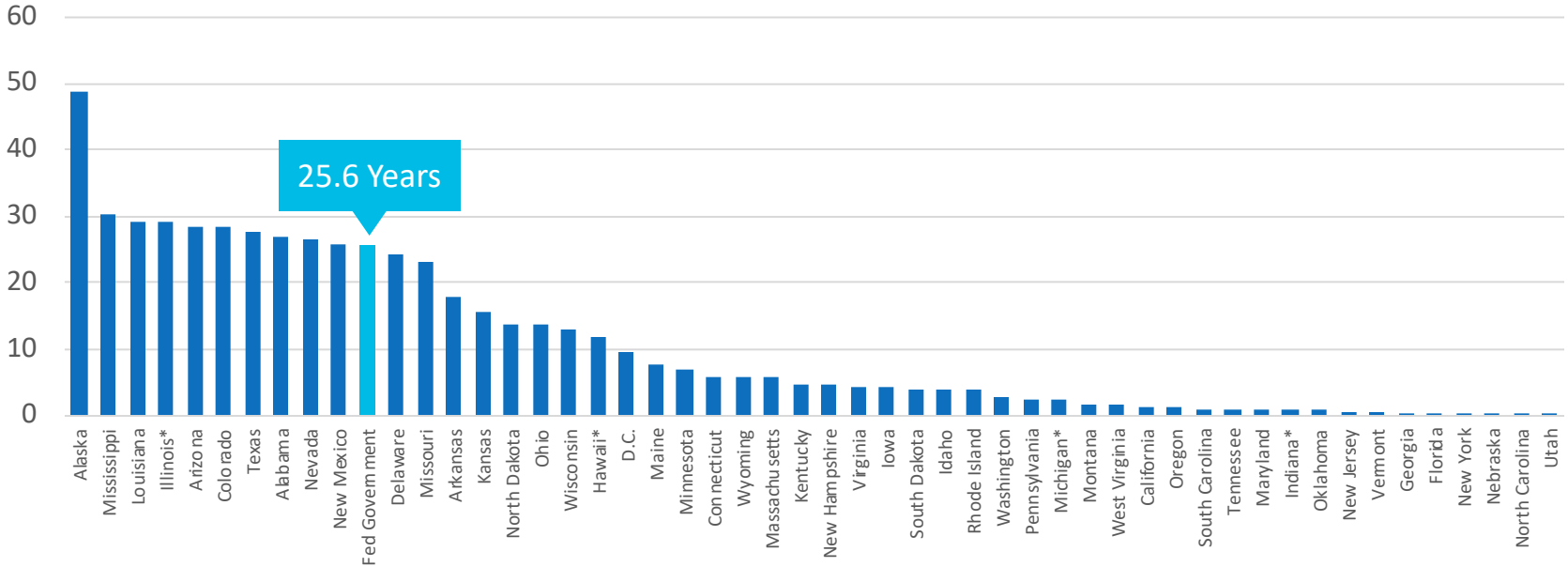
© Colorado Department of Transportation, High Performance Transportation Enterprise

Federal Government Pilot Programs

Federal Government Pilot Programs

Years Since Last Gas Tax Increase

As of February 2019



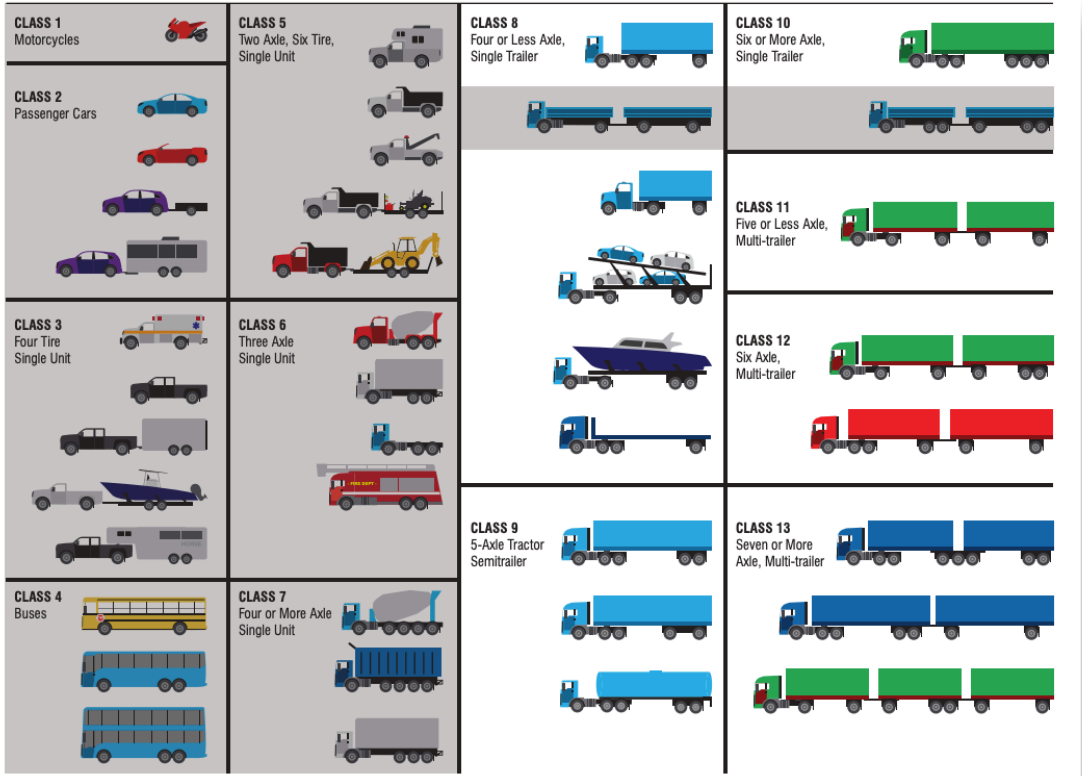
*Apply their general sales taxes to gasoline and thus see ongoing changes in their overall gas tax rates based on changes in the price of gas. This chart excludes these price-based fluctuations in the sales tax and instead looks only at these states' excise taxes on gasoline.

© Source: Institute of Taxation and Economic Policy | https://itep.org/how-long-has-it-been-since-your-state-raised-its-gas-tax-0219/

CASE STUDY

RIDOT Truck-only Tolling

Trucks to be Tolled



GREY SHADING
Non Tolled Vehicles

WHITE SHADING
Tolled Vehicles

© CCJ digital | Rhode Island Department of Transportation

SERVING NEW ENGLAND
SINCE 1972
Brothers
RI dot

CASE STUDY
WSDOT State Route 520

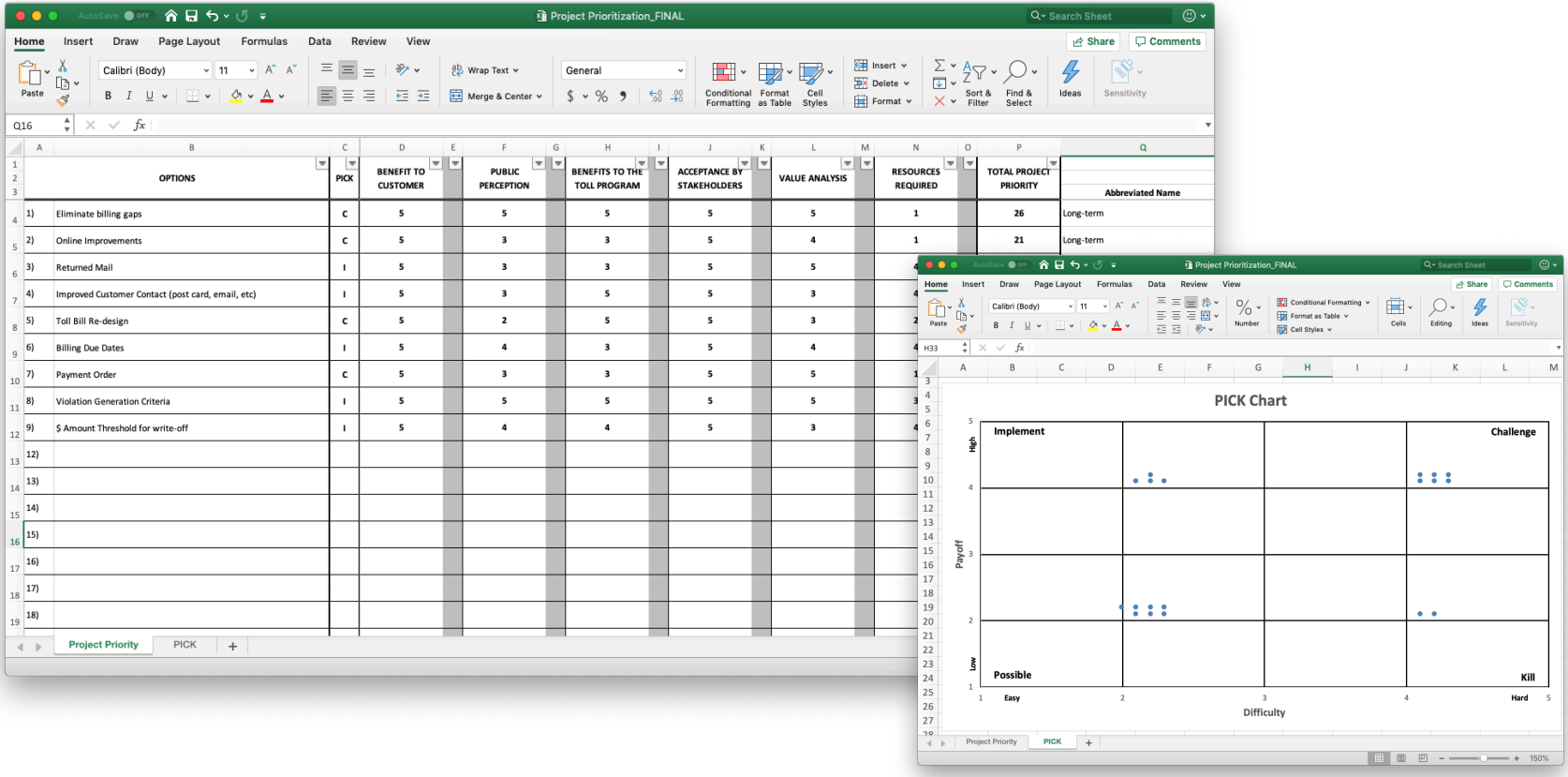
520
TOLL BRIDGE
Good To Go!
PAY BY MAIL
2 AXLES
$3.10
$4.70
ADDED TOLL PER AXLE
STOP AHEAD WHEN FLASHING
YELLOW

© Washington State DOT

Considerations & Practical Steps Forward

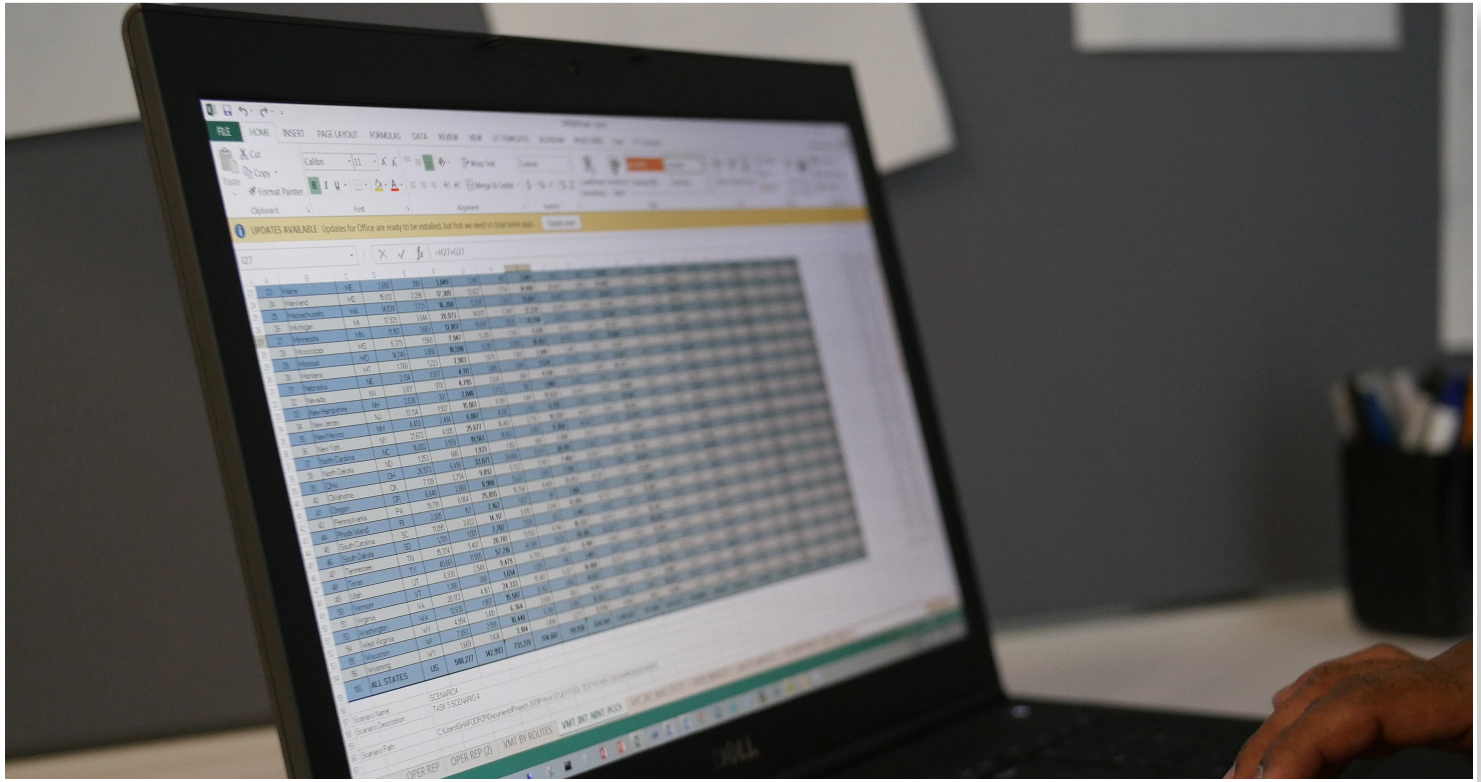
Timeline of Tolling

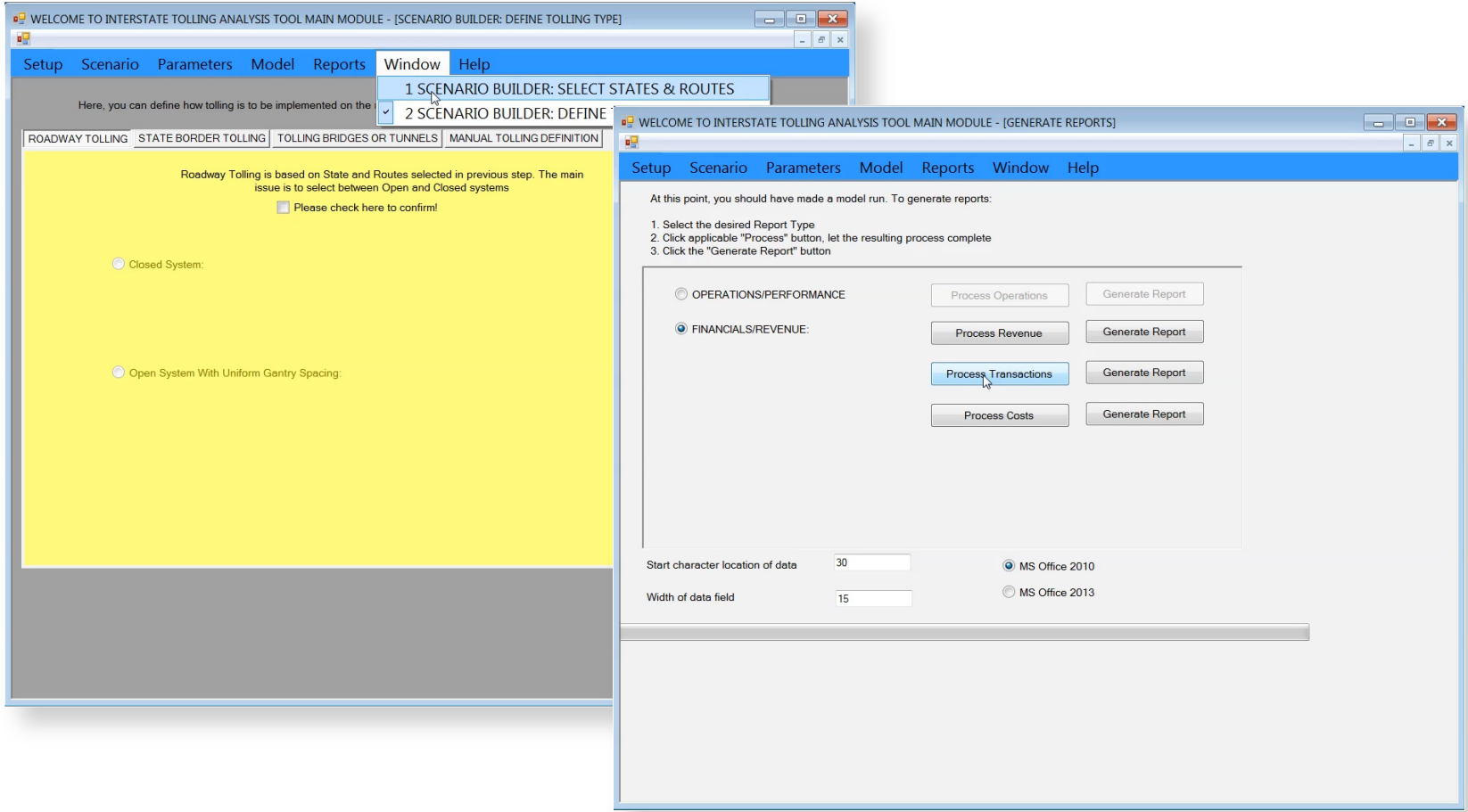
Prioritization Matrix



	OPTIONS	PICK	BENEFIT TO CUSTOMER	PUBLIC PERCEPTION	BENEFITS TO THE TOLL PROGRAM	ACCEPTANCE BY STAKEHOLDERS	VALUE ANALYSIS	RESOURCES REQUIRED	TOTAL PROJECT PRIORITY	Abbreviated Name
1)	Eliminate billing gaps	C	5	5	5	5	5	1	26	Long-term
2)	Online Improvements	C	5	3	3	5	4	1	21	Long-term
3)	Returned Mail	I	5	3	3	5	5			
4)	Improved Customer Contact (post card, email, etc)	I	5	3	5	5	3			
5)	Toll Bill Re-design	C	5	2	5	5	3			
6)	Billing Due Dates	I	5	4	3	5	4			
7)	Payment Order	C	5	3	3	5	5			
8)	Violation Generation Criteria	I	5	5	5	5	5			
9)	$ Amount Threshold for write-off	I	5	4	4	5	3			
12)										
13)										
14)										
15)										
16)										
17)										
18)										

Tolling Analysis Planning Tool




WELCOME TO INTERSTATE TOLLING ANALYSIS TOOL MAIN MODULE - [SCENARIO BUILDER: DEFINE TOLLING TYPE]
Setup
Scenario
Parameters
Model
Reports
Window
Help
1 SCENARIO BUILDER: SELECT STATES & ROUTES
2 SCENARIO BUILDER: DEFINE
Here, you can define how tolling is to be implemented on the
ROADWAY TOLLING
STATE BORDER TOLLING
TOLLING BRIDGES OR TUNNELS
MANUAL TOLLING DEFINITION
Roadway Tolling is based on State and Routes selected in previous step. The main issue is to select between Open and Closed systems
Please check here to confirm!
Closed System:
Open System With Uniform Gantry Spacing:
WELCOME TO INTERSTATE TOLLING ANALYSIS TOOL MAIN MODULE - [GENERATE REPORTS]
Setup
Scenario
Parameters
Model
Reports
Window
Help
At this point, you should have made a model run. To generate reports:
1. Select the desired Report Type
2. Click applicable "Process" button, let the resulting process complete
3. Click the "Generate Report" button
OPERATIONS/PERFORMANCE
Process Operations
Generate Report
FINANCIALS/REVENUE:
Process Revenue
Generate Report
Process Transactions
Generate Report
Process Costs
Generate Report
Start character location of data
30
Width of data field
15
MS Office 2010
MS Office 2013

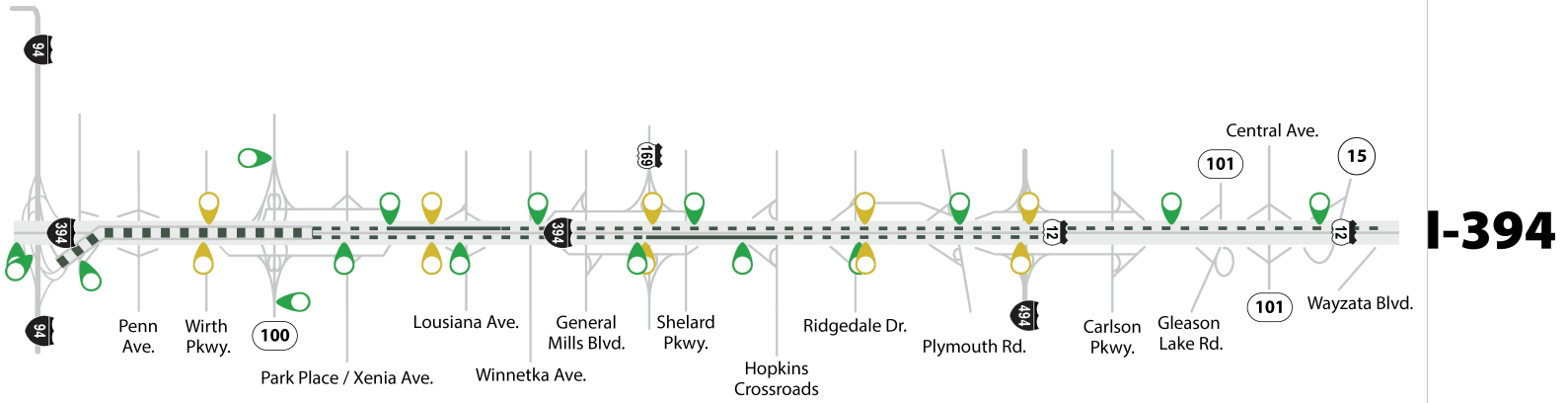
Building Political Favor

- ☑ Understand your political climate
- ☑ Outreach and education
- ☑ Legalize tolling on state level
- ☑ Define the needs
- ☑ Build relationships with other relevant agencies
- ☑ Tolling impacts for different driver types
- ☑ Look at an economic value
- ☑ Go grass roots

ROUTE 7
EXIT 7
EXIT 8
I-84
GROUP 1

Biking
Walking

Effective Outreach



N

Legend

- Toll rate sign
- Tolling location
- MnPASS open access (single or double-dashed white lines)
- MnPASS restricted access (solid, double-white lines)

MnPASS

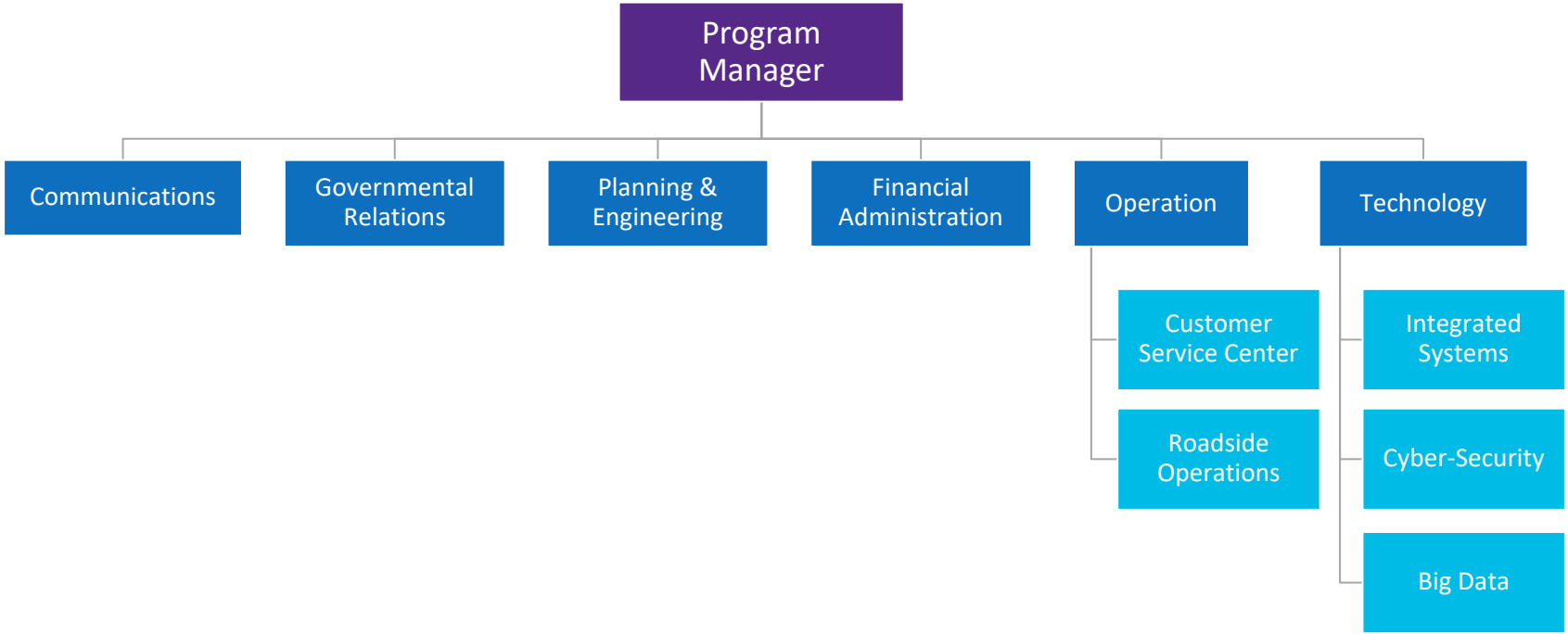
I-394 MnPASS Express Lanes

Illinois DOT

Priority	Better handle congestion
Problem	Can add more capacity, but better manage existing capacity
Solutions	Managed/Express Lanes
Political Challenges	• P3/Risk Transfer • Political will

Proposed Disciplines for Toll Practice

Mirror Toll Agencies



What’s Next for Tolling?

Questions & Answers

Contact Information

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Moderator

Andrew Beaton
Moderator
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Thank You