

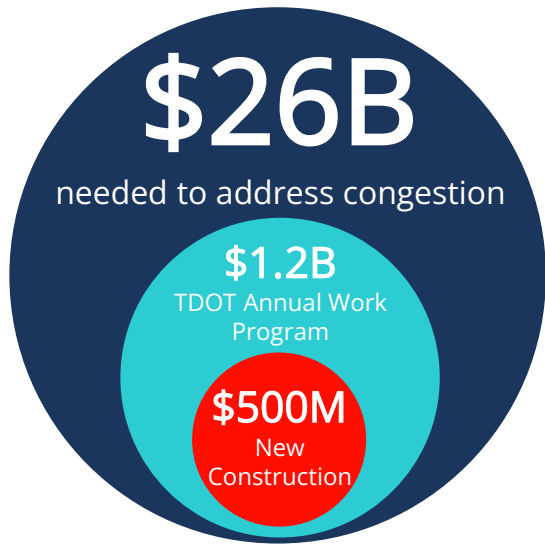
**Build
With
Us**



TDOT
Department of
Transportation

Infrastructure Priorities

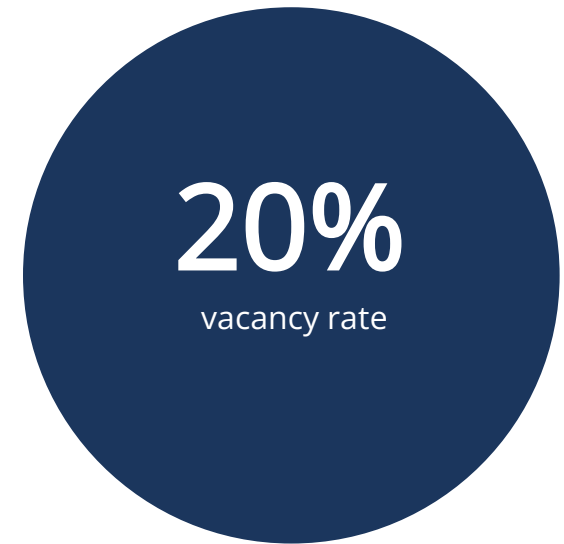
Bottom-Line Up-Front: Challenges



Congestion



Delivery

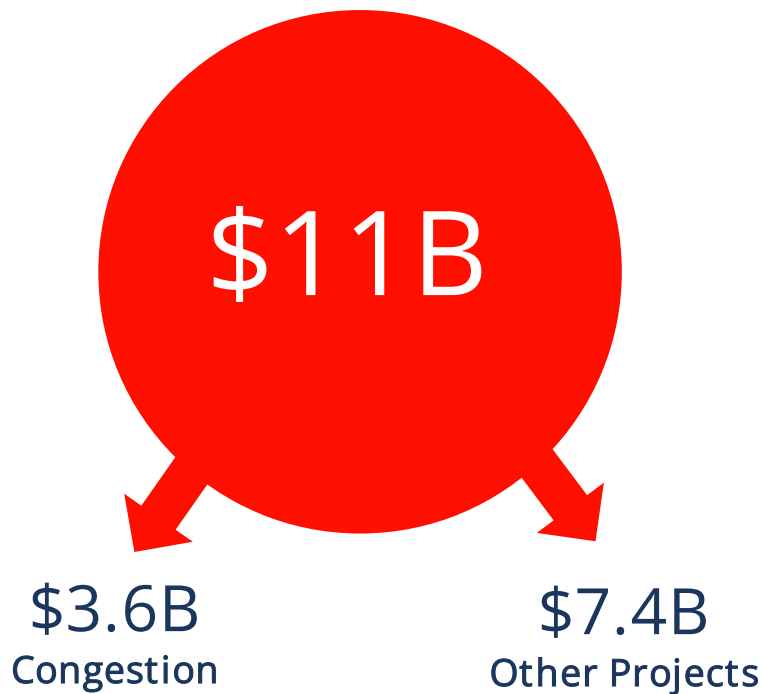


Workforce

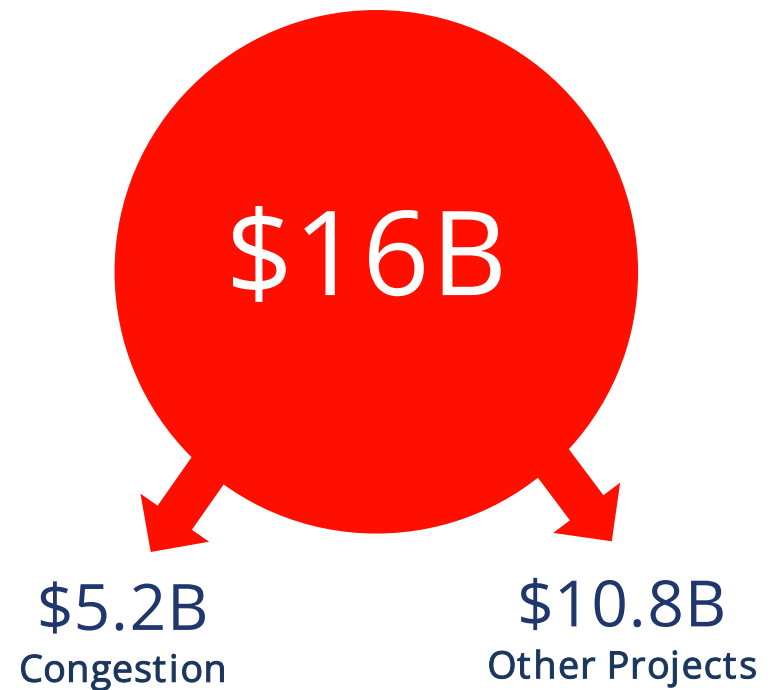


Bottom-Line Up-Front: Challenges

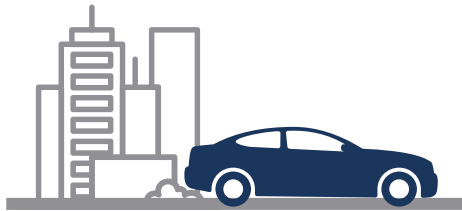
IMPROVE Act Cost:
2017



Remaining IMPROVE Act Costs:
2022



Bottom-Line Up-Front: Challenges



\$17.5B

Urban Congestion



\$12.4B

Rural Congestion

=



\$29.9B

Congestion Total







(\$3.6B)
IMPROVE Act

\$26B

Statewide Congestion Needs

Bottom-Line Up-Front: Off the Table

This proposal does **NOT**:

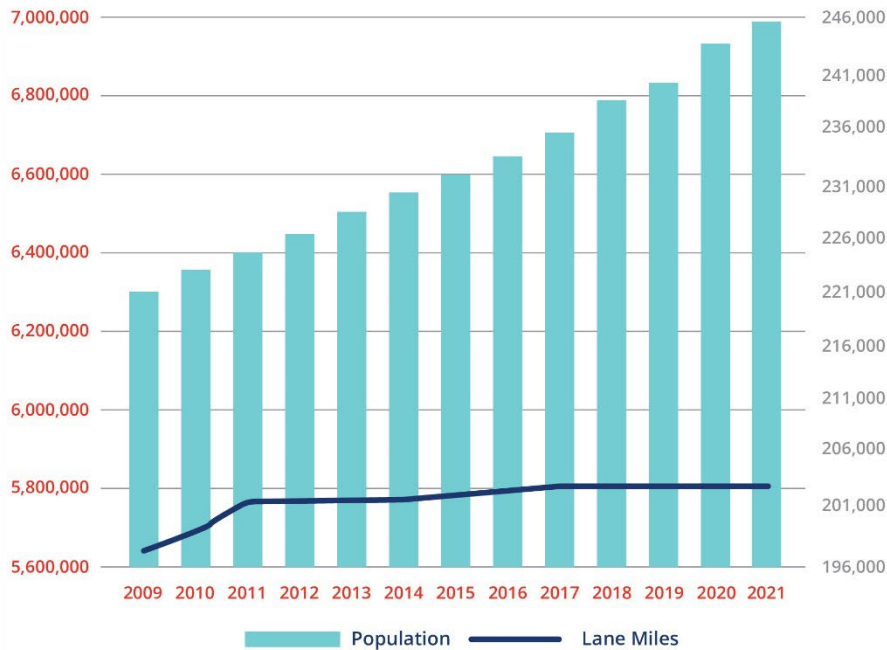
-  Do nothing
-  Propose raising the gas tax
-  Propose issuing road debt
-  Spend a disproportionate amount of funds in urban areas, to the detriment of rural areas
-  Reduce road and bridge maintenance budget
-  Propose toll roads

Challenge: Congestion

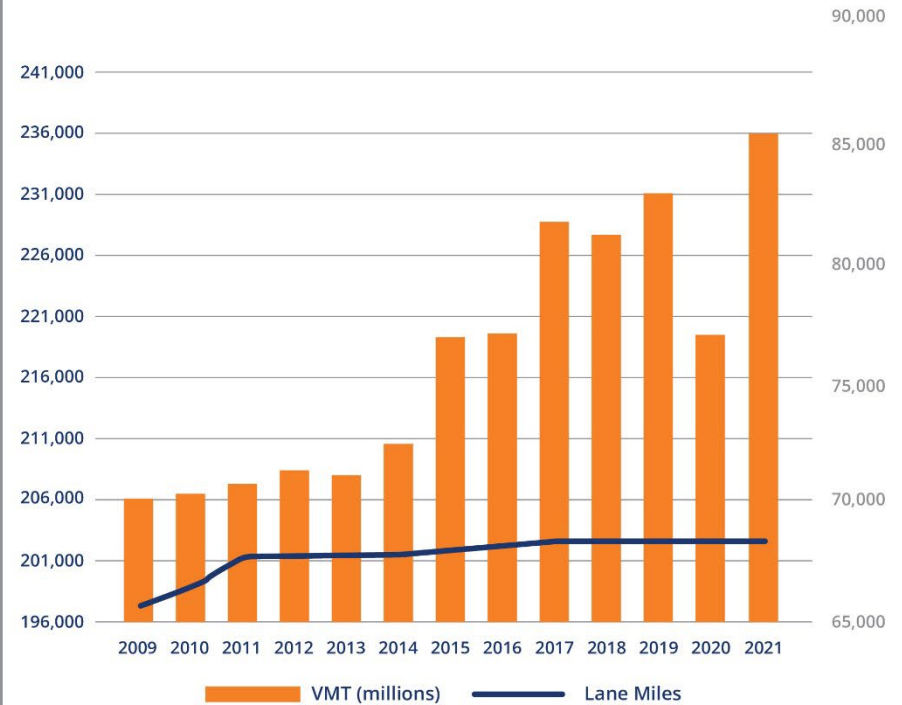
Growth in Population & Traffic Outpacing Roadway Capacity Investments

Recent Population and Vehicle Miles Traveled (VMT) Growth vs. Lane Miles

Growth of Population vs. Lane Miles



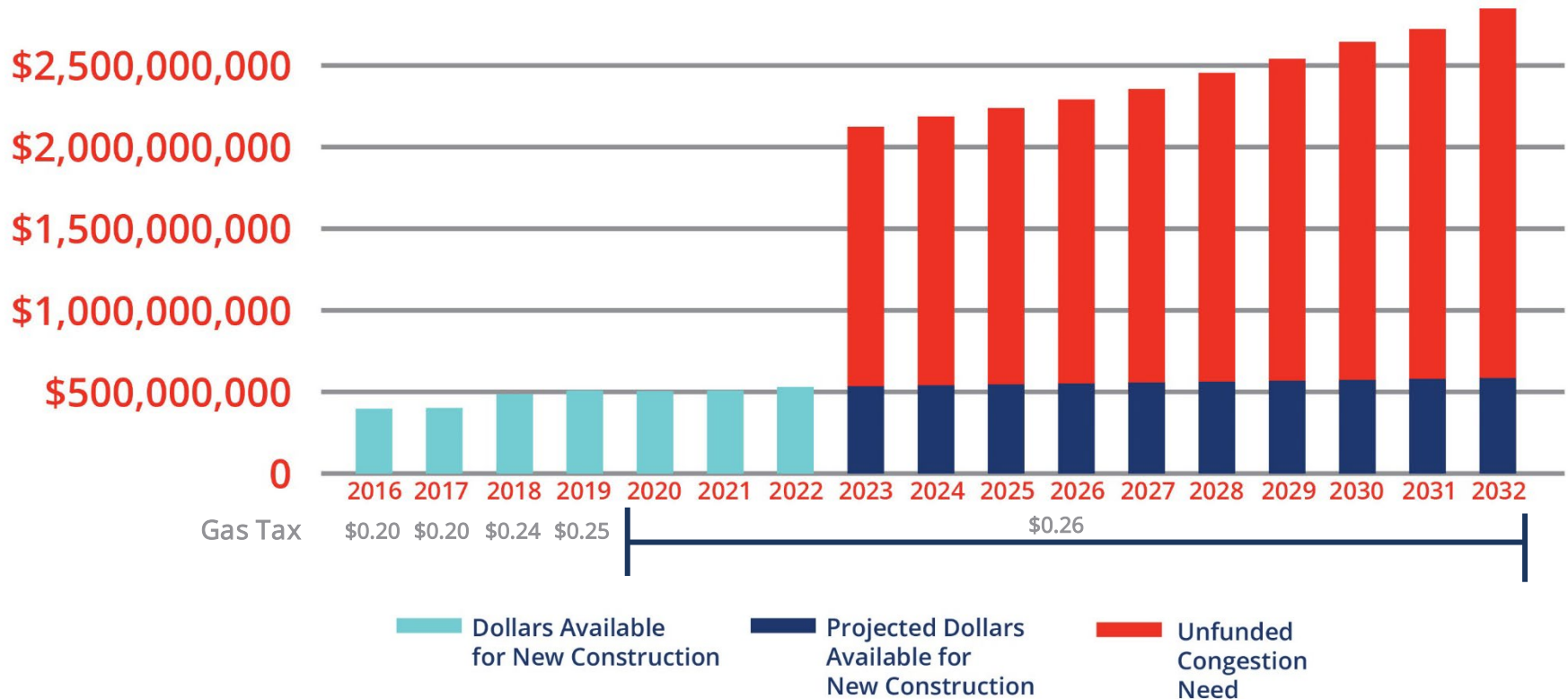
Growth of VMT vs. Lane Miles



Challenge: Congestion

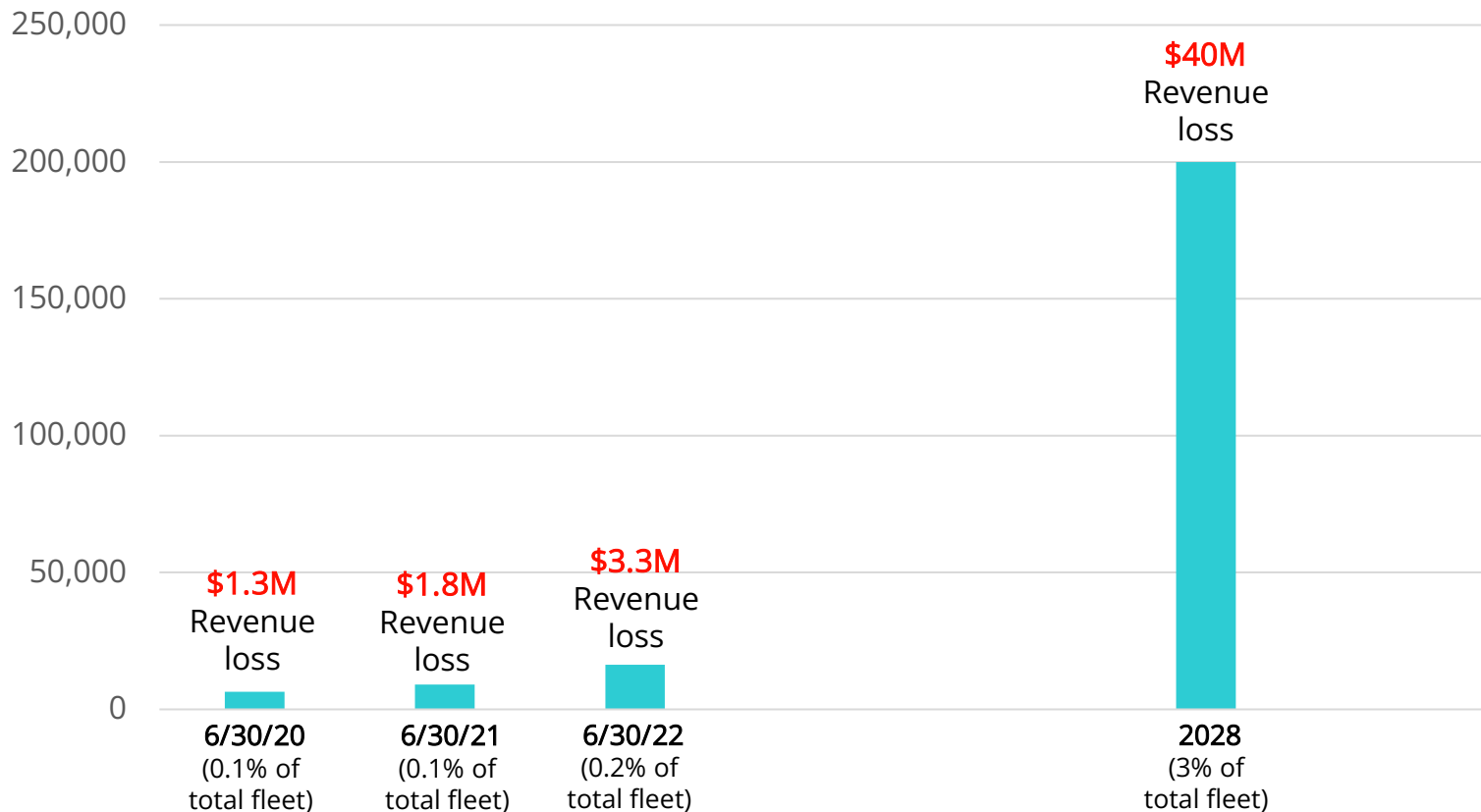
Why Current Revenue Doesn't Keep Pace

Dollars Available vs. Needed Revenue to Address Congestion



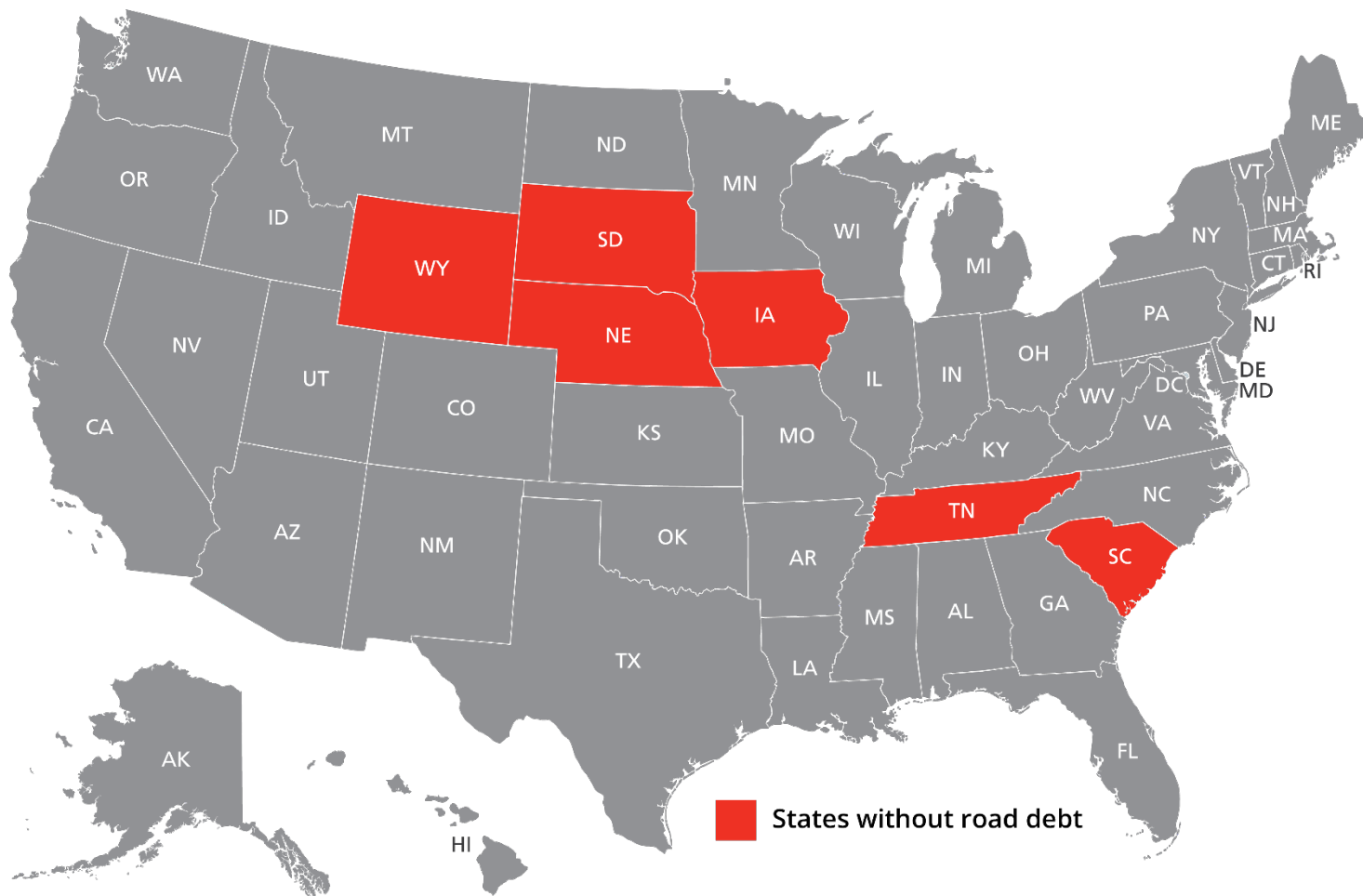
Challenge: Congestion

Growth in Purely Electric Vehicles

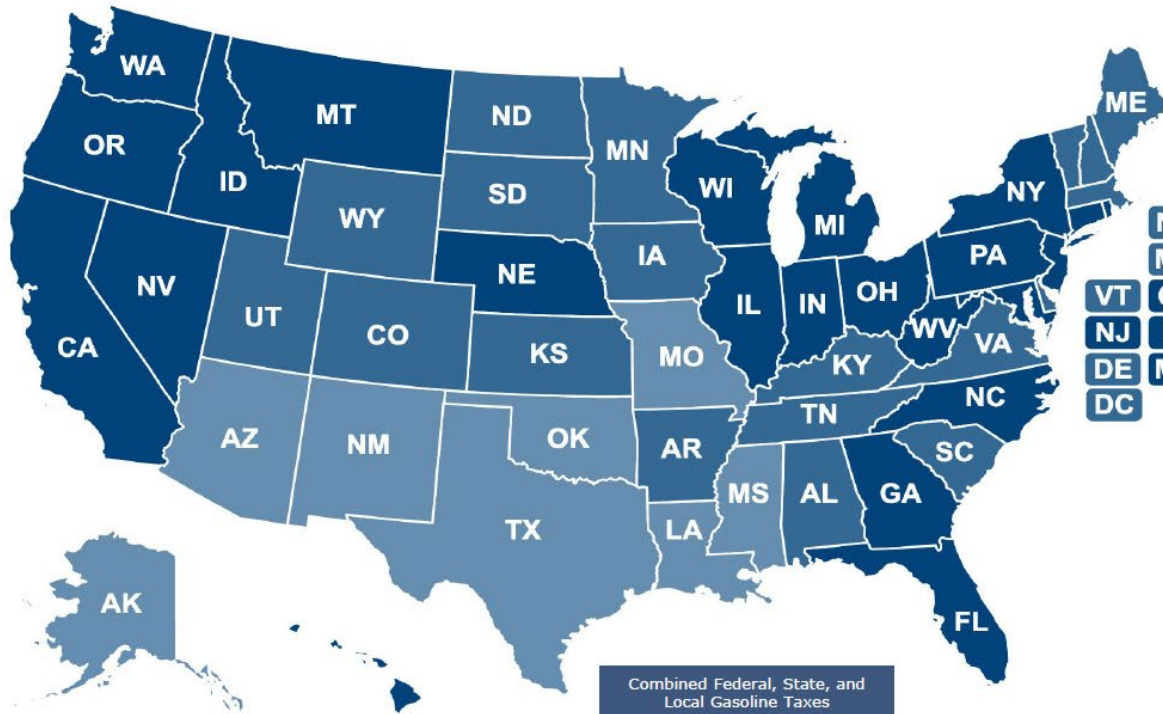


Challenge: Congestion

We Don't Take on Road Debt

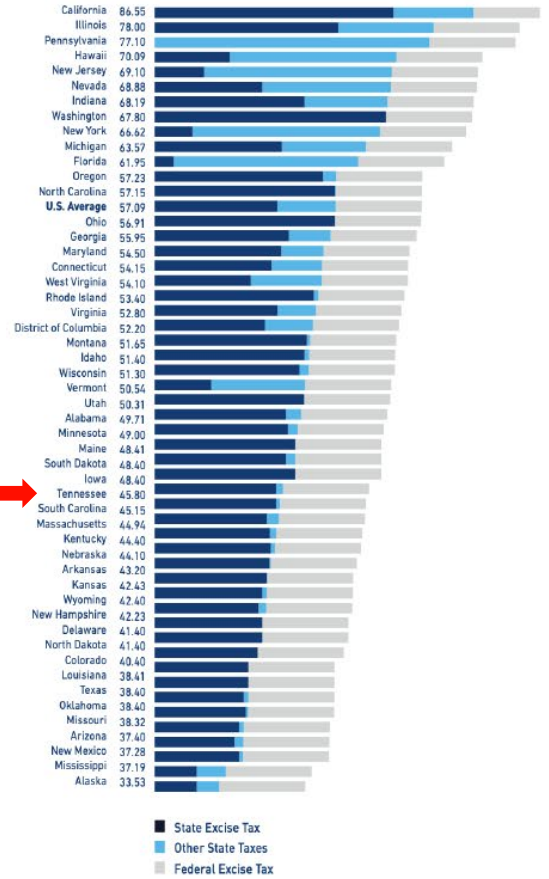


Challenge: Congestion State Motor Fuel Taxes



GASOLINE MOTOR FUEL TAXES BY STATE

(cents per gallon)



Challenge: Congestion Increased Opportunity in Tennessee

BUSINESS

**Smith & Wesson moving HQ from
Springfield to Tennessee**

Tennessee Keeps Attracting Headquarters Operations

With 18 Fortune 1000 company headquarters located in Tennessee, the number of headquarters jobs is surging.

**Ford, partner to spend \$11.4B on four new
plants in Tennessee, Kentucky to support EVs**

Challenge: Congestion

Current and Future (2045) Congestion Comparison



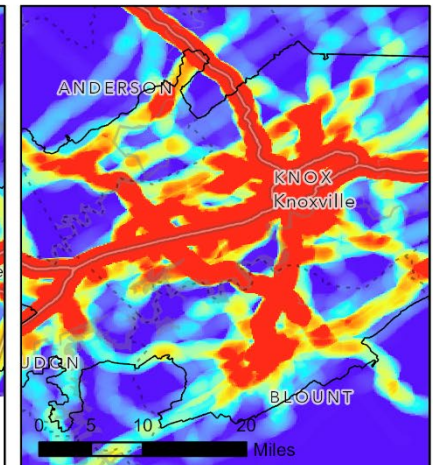
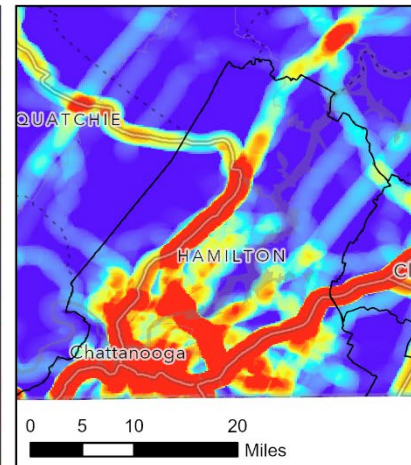
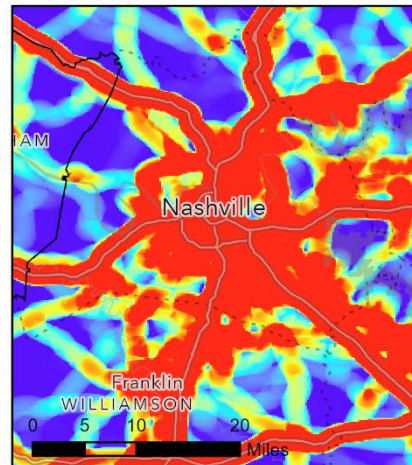
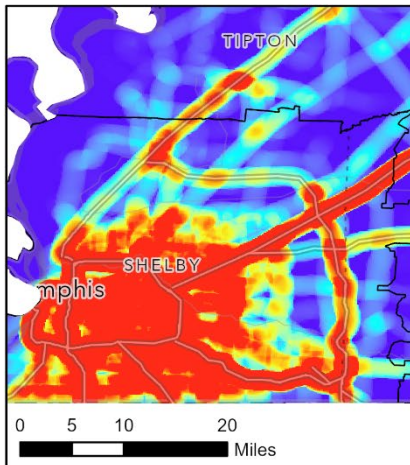
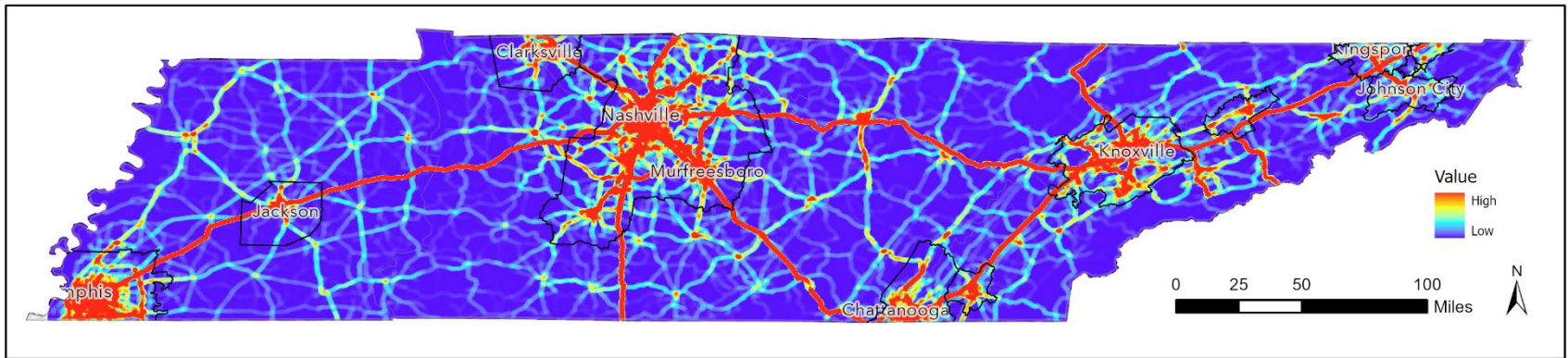
Notes:

- 1) Future Roadway Network Includes IMPROVE Act Projects
- 2) Red Indicates Locations Where Trip Reliability is Severely Impacted

Challenge: Congestion

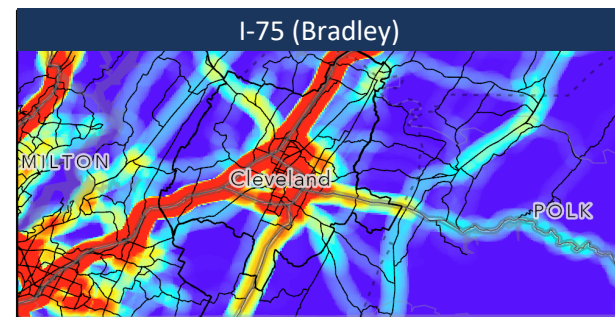
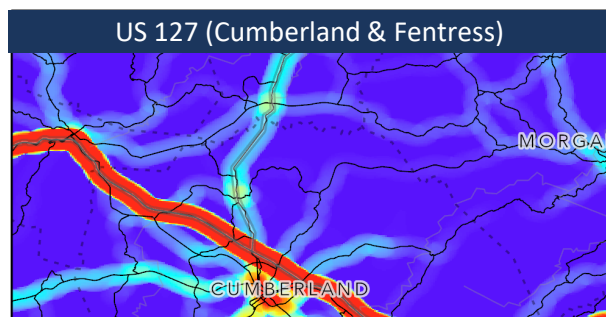
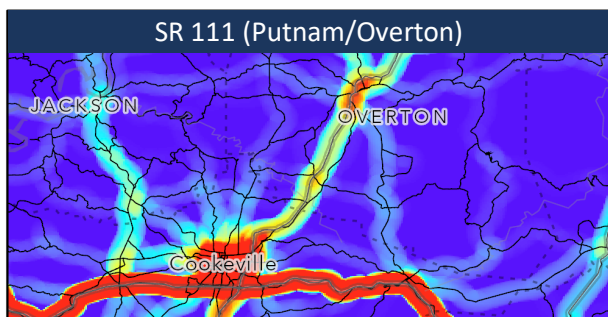
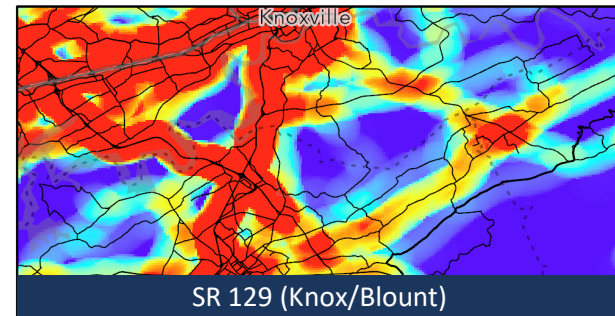
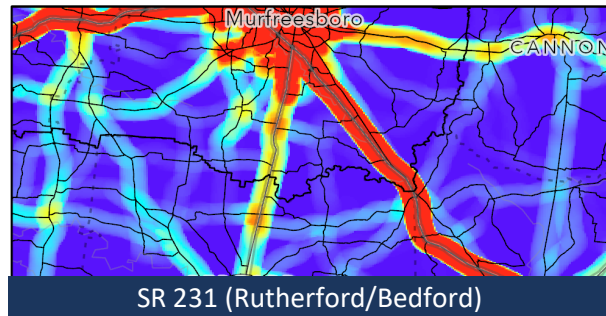
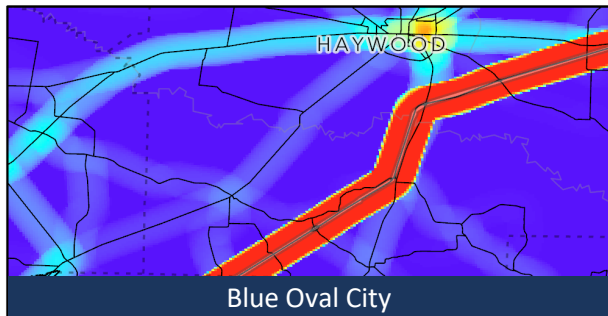
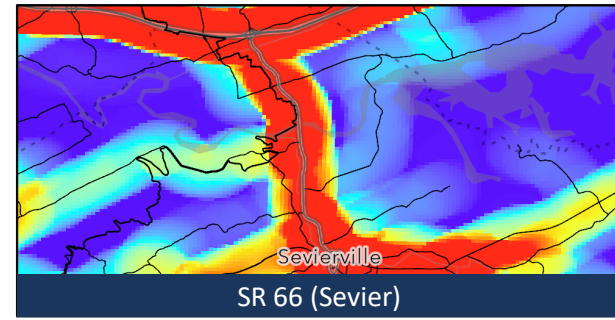
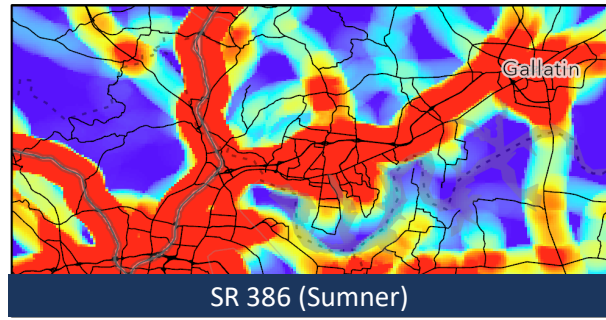
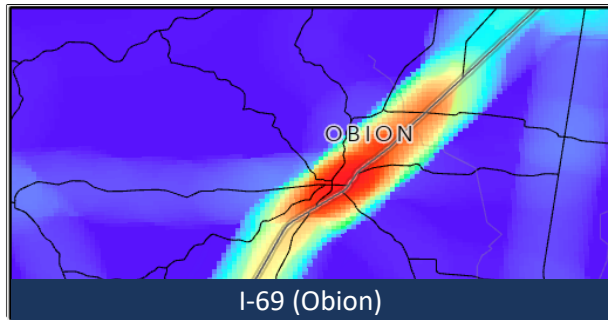
What This Means for Tennesseans

Commute times will **increase by 60%** and intercity travel times between major Tennessee cities will increase by up to **one hour**.



Challenge: Congestion

It's a Statewide Problem



Challenge: Congestion

Long-Haul Truck Traffic - 2012



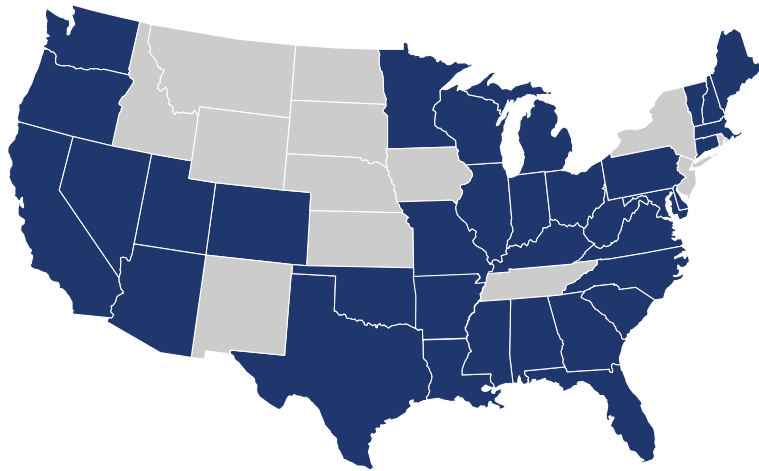
Challenge: Congestion

Long-Haul Truck Traffic - 2040

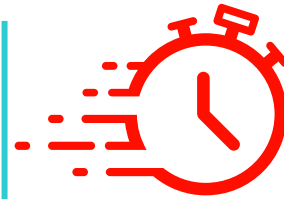


Solutions: Public-Private Partnerships (P3)

Public-Private Partnership (P3) Authorization Across the United States



■ States with Public-Private Partnership (P3) authorization for highways



Expedited Delivery & More Projects



Design/Construction Innovation



80% Private Investment



Private Investment = Rural Solutions



Efficient Risk Transfer

Solutions: Public-Private Partnerships (P3) Lead to More Rural Investment

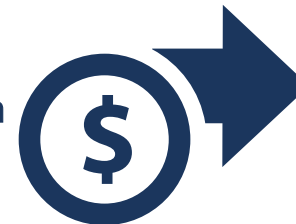
Non-Viable Option



Viable Option



Public-Private Partnerships in urban areas



Frees \$\$ for rural investment (such as adding interstate lanes)

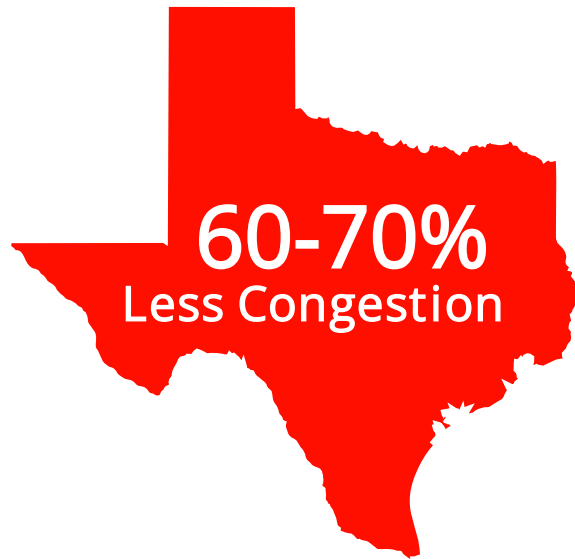
New Construction from IMPROVE Act

New Construction > **\$500M**
Annual Construction Budget

Examples

I-24 Congestion Reduction **\$400M**
Interchange at I-640/275 (Sharps Gap) **\$304M**

Solutions: Choice Lanes Decrease Congestion and Increase Economic Impact



- 60-70% reduction in congestion
- 10-15% increase in speed



70%, on average,
performed by **local**
contractors



- 30 mph to 50 mph speed increase in general purpose (GP) lanes
- 10% increase in on-time bus performance

Solutions: Thinking Outside the Box

Expanding Technology Opportunities

- As technology evolves, so must our infrastructure
- Prioritizing research and technology advancement, like on I-24 where technology is a congestion management strategy
- I-24 MOTION is a step forward in innovative and outside the box solutions



Choice Lanes Result in Transit Success

73%

More customers due to improved travel reliability



x4

Ridership quadrupled in first 5 years



10%

Increase in on-time performance



68%

Reduction in travel times



Solutions: TDOT and Transit

Tennessee's Transit Program

\$200M

TDOT's annual transit budget

2017

P3 authority passed for transit

Current law allows for transit Public-Private Partnerships (P3) to advance transit solutions

IMPROVE Transit Capital Grant

- Supports both urban and rural transit investments
- New or replacement vehicles, bus stops and bus shelters, and maintenance facility improvements
- Electric buses in Knoxville and a transit center in Pigeon Forge

\$77M

State transit funds



\$26M

Matches federal funding

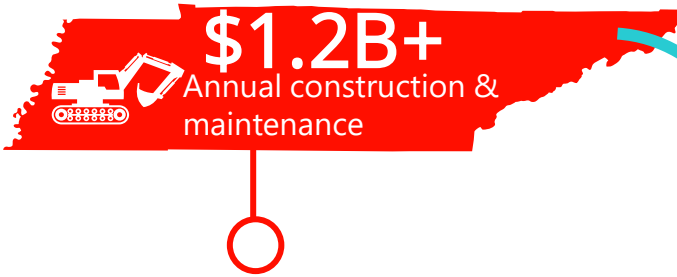
\$30M

Operating assistance

\$21M

Capital assistance

Solutions: Tools can Benefit the Industry; Grows Revenue and Advances Growing Project Needs



Tennessee's construction industry providers will continue to build these jobs.

Alternative revenue sources allow for new and increased revenue to industry.



In Public-Private Partnership (P3) delivery, an average of 70% goes to local contractors.

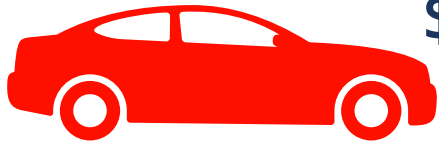
Texas LBJ Managed Lanes cost \$2.6 billion; local contractors received \$1.8 billion on top of Texas annual letting program



Solutions: Electric Vehicle Revenue

Current

Combustible engine owners pay
\$300 annually
into highway fund



EV owners pay
\$100 annually
into highway fund



Future


Combustible Engine


Hybrid


EV

Creating parity between combustion engine drivers and electric vehicle drivers

Challenge: Delivery

15
total years



Current
Traditional
Project
Delivery Time

Traditional
delivery
projects cost

40%
more

than original
estimates

Bottom Line:
Projects take too long
and cost too much

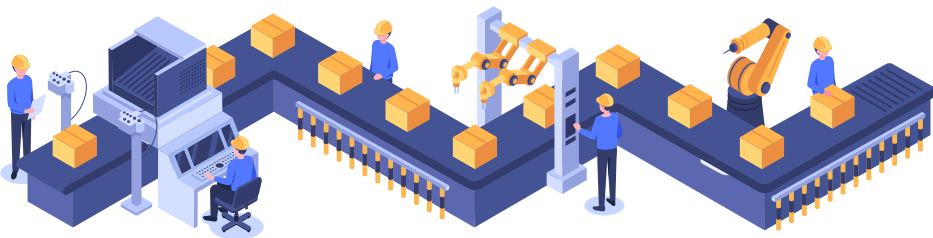
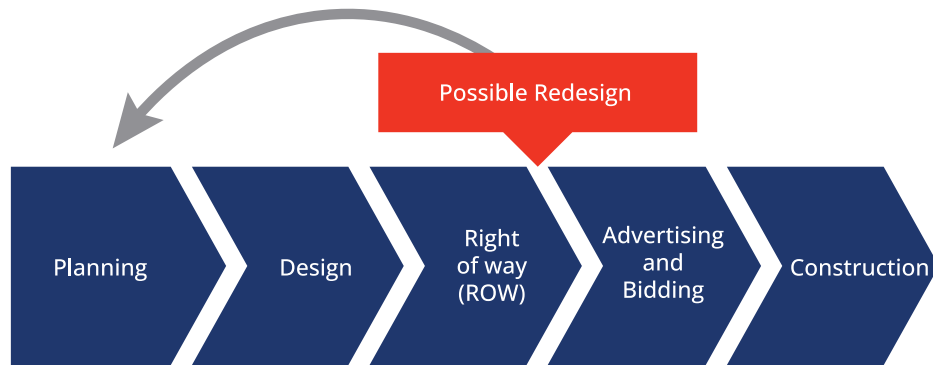


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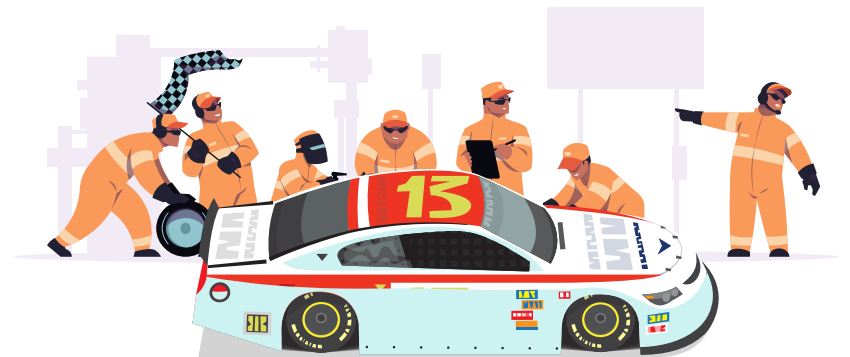


Challenge: Delivery Limited Tools to Deliver Projects Efficiently

Traditional Delivery



Alternative Delivery

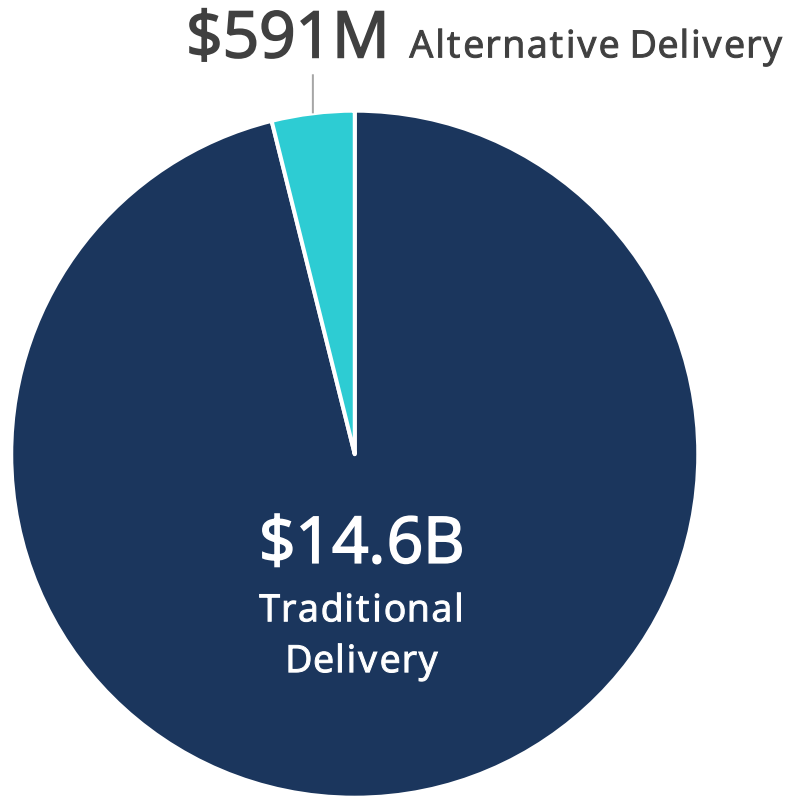


Note: Alternative delivery currently statutorily limited

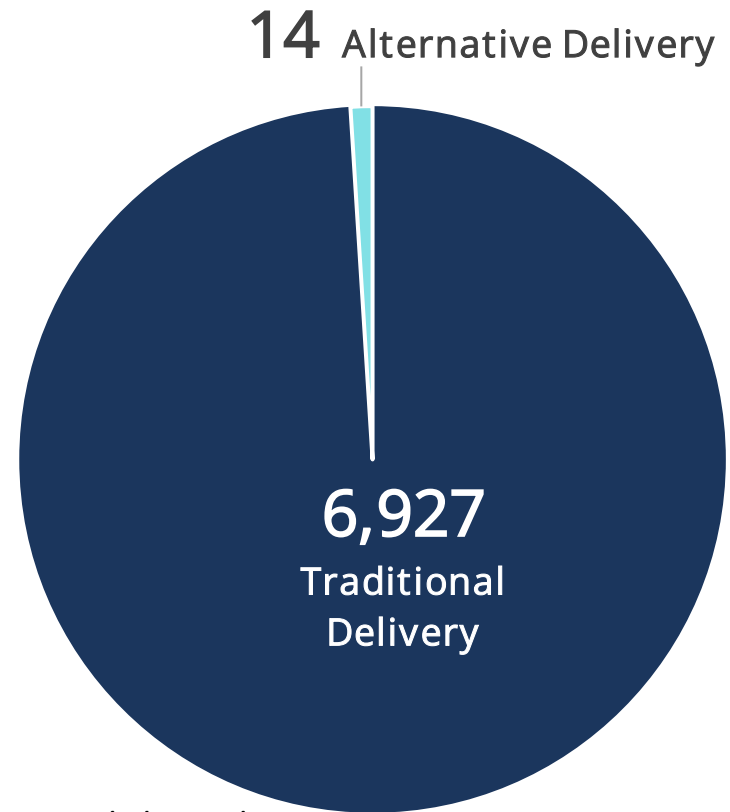
Challenge: Delivery

Traditional vs. Alternative Delivery (2004-2022)

Types of Contracts (Dollars)



Types of Contracts (Number)



Note: Alternative delivery currently statutorily limited

Challenge: Delivery

Alternative Delivery/Demonstrated Results

Traditional and Alternative Delivery Project Examples

I-75 Phase 1 (Alternative Delivery)

\$132M	\$133M	945
Original Contract	Adjusted Contract	Days

I-124/US 27 Widening & Olgiate Bridge (Traditional Delivery)

\$126M	\$144M	1,723
Original Contract	Adjusted Contract	Days

Note: Construction started at the same time

TDOT Alternative Delivery Program Saves Time and Money



\$22M
Cost Savings

70%
Faster Delivery

*Statutorily-limited Alternative Delivery Program

Challenge: Delivery

Delivery Comparisons

County	Description	Total Duration (Days)	Total Time Savings
Polk	SR 40 Bridge over Ocoee River	900	
Coffee	SR 127 Bridge over Bradley Creek	1,469	569
Multiple	Region 4 Bridge Bundles (6 bridges)	830	
Fayette	SR 196 Bridge over Shaw Creek	2,699	1,869

Note: Bold in table indicates alternative delivery project. Nonbold indicates traditional delivery project.

Madison County – I-40 Widening (3 phases)

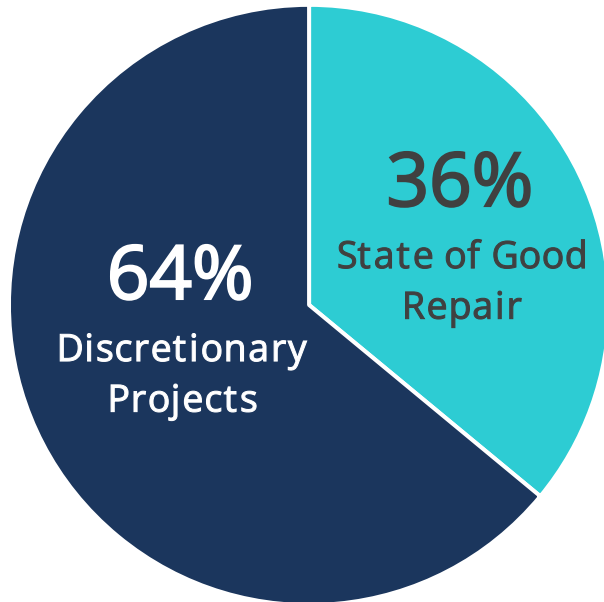
If alternative delivery was used, 1,777 days of construction would have been reduced



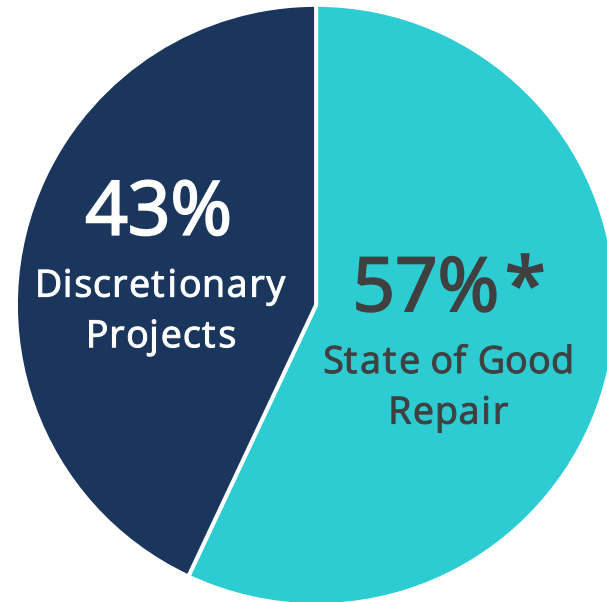
Challenge: Delivery

New Construction Program Shrinking

Current (FY 22)



Future (FY 45)

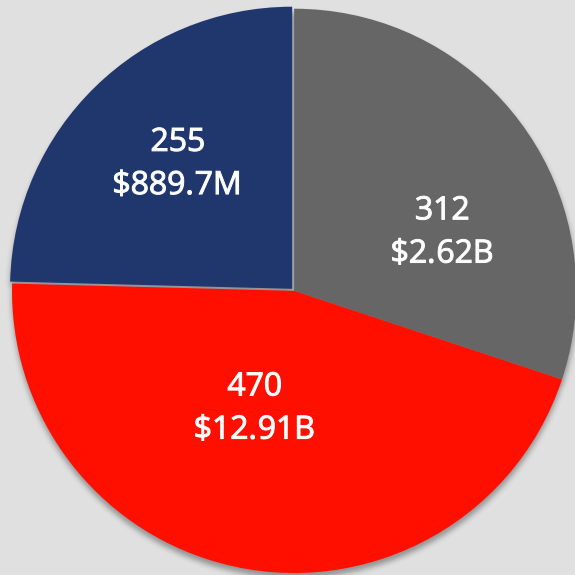


**Assumes \$10M annual increase in state of good repair costs*

“...the Department of Transportation will become the Department of Maintenance.”
-IMPROVE Act Debate

Status of 2017 IMPROVE Act – Financial Update

1,037 Projects
\$16.4B



■ Not Started ■ In Progress
■ Completed

Federal

IIJA – TDOT has FY23 apportionment

State

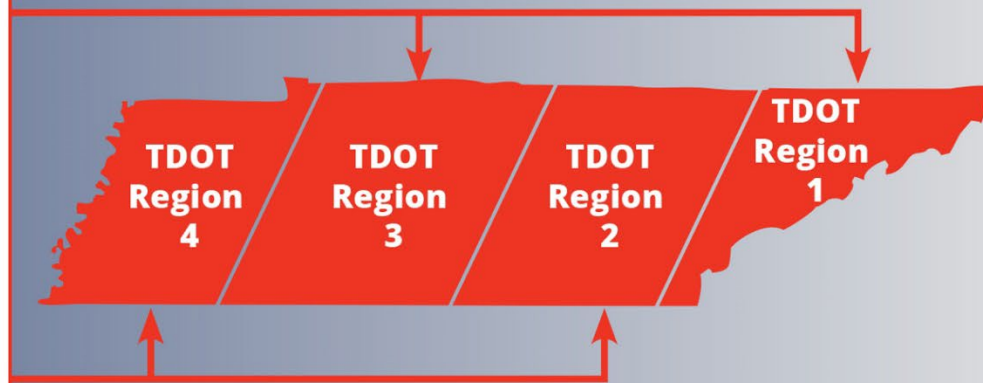
	FY23 Budget	FY23 Projected*	Variance
Gas	\$539M	\$529M	(\$10M)
Diesel	\$233M	\$237M	\$4M
Special Petroleum	\$38M	\$39M	\$1M
Vehicle Registration	\$192M	\$234M	\$42M

FY24 Proposed Budget – Transportation Investments

**\$3 Billion
Total
Proposed Allocated
to State
Transportation
Projects**

\$750 Million for EACH Region

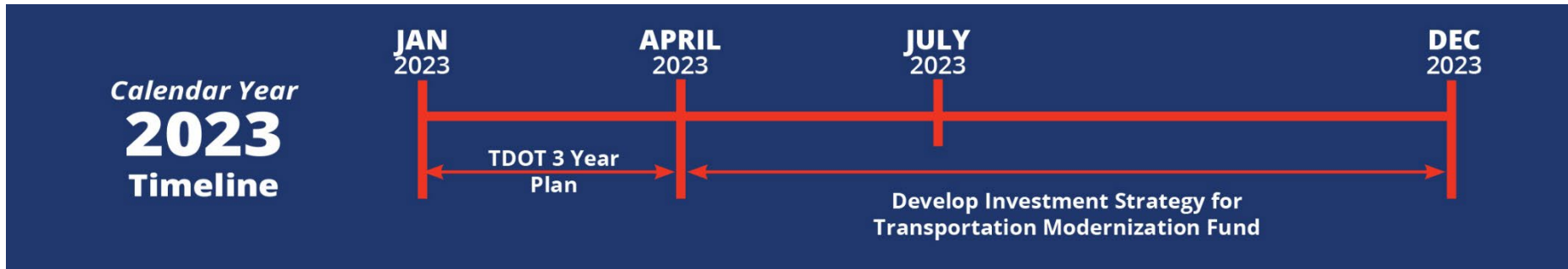
- IMPROVE Act Acceleration
- Rural Interstate Widening
- Major Urban Congestion Projects
- Statewide Partnership Program Projects
- Safety and State of Good Repair Acceleration
- Economic Development Projects



**\$300 Million
for State Aid Program**

*Flows to counties for local
transportation projects*

Proposed General Fund Investments Timeline



Additional Funding is Critical



20,000+ Bridges in Tennessee



53% Bridges in fair condition



536 Local bridge replacements in 2017 IMPROVE Act



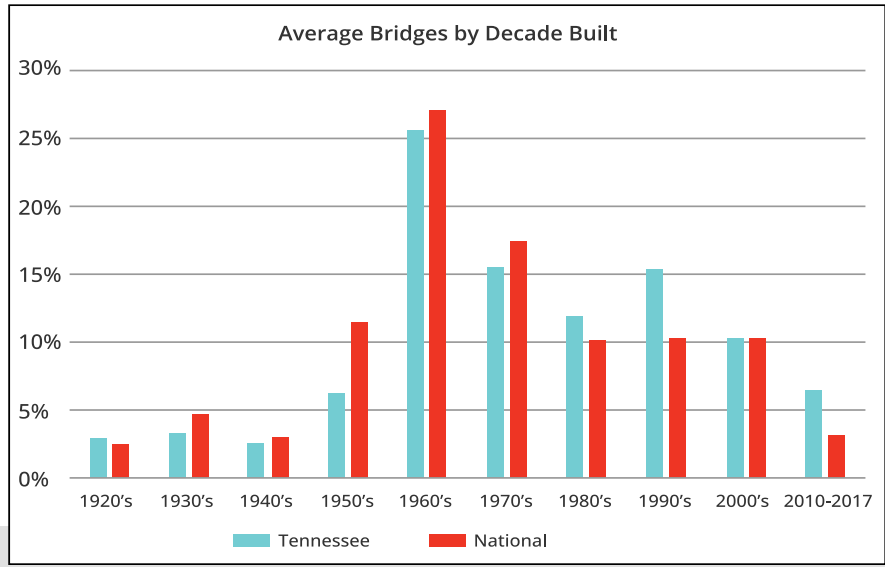
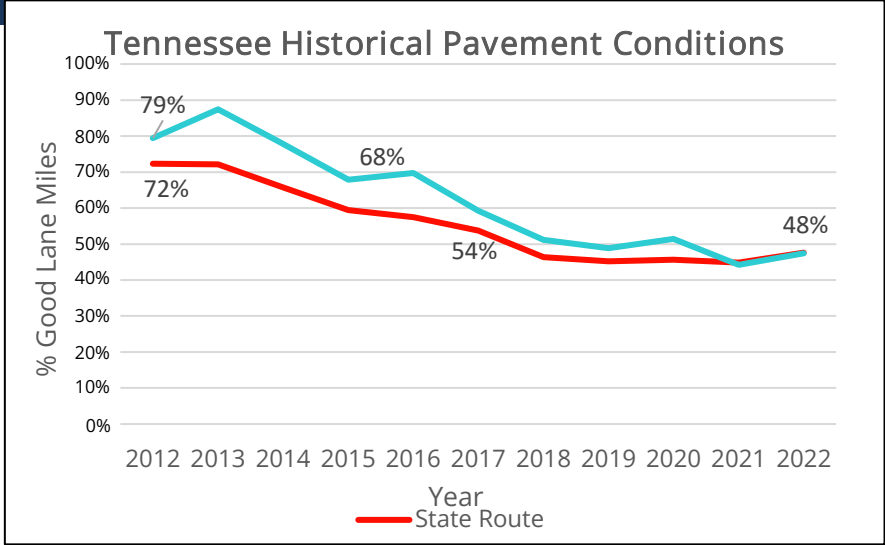
95,000+ Miles of highway



9% Population grew 9% since 2010

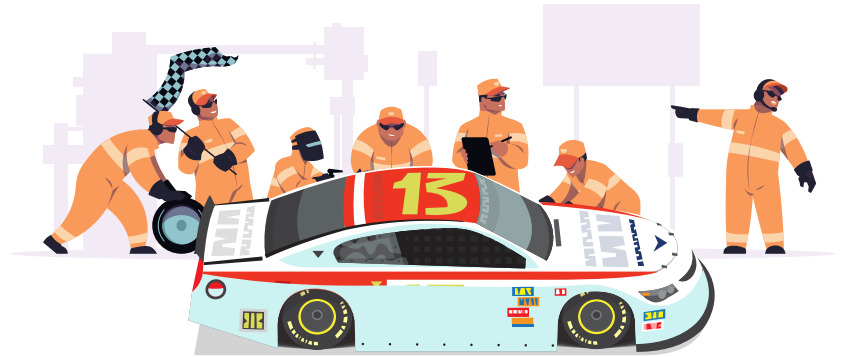
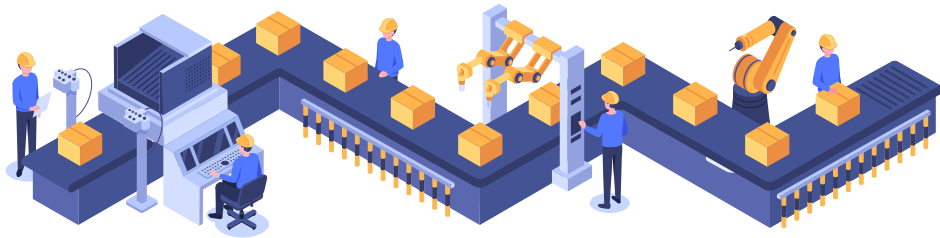


Funding Deferring maintenance projects



Solution: Delivery

The Right Tools for the Right Job

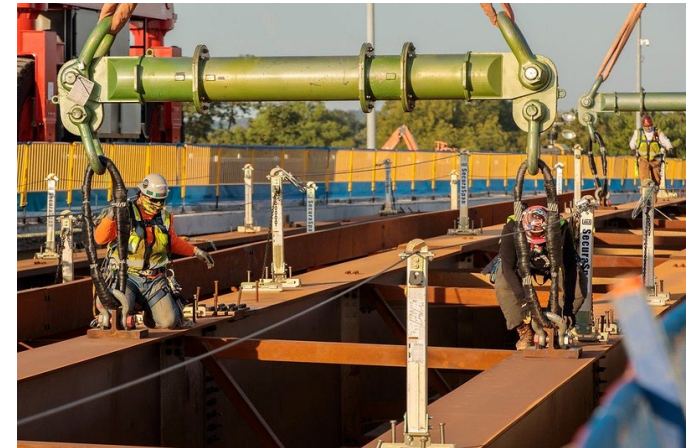


Challenge: Workforce



OLD

VS



NEW

3,600

Current TDOT employees

0

Filled positions eliminated

10-15%

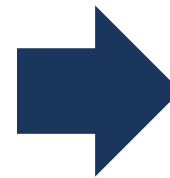
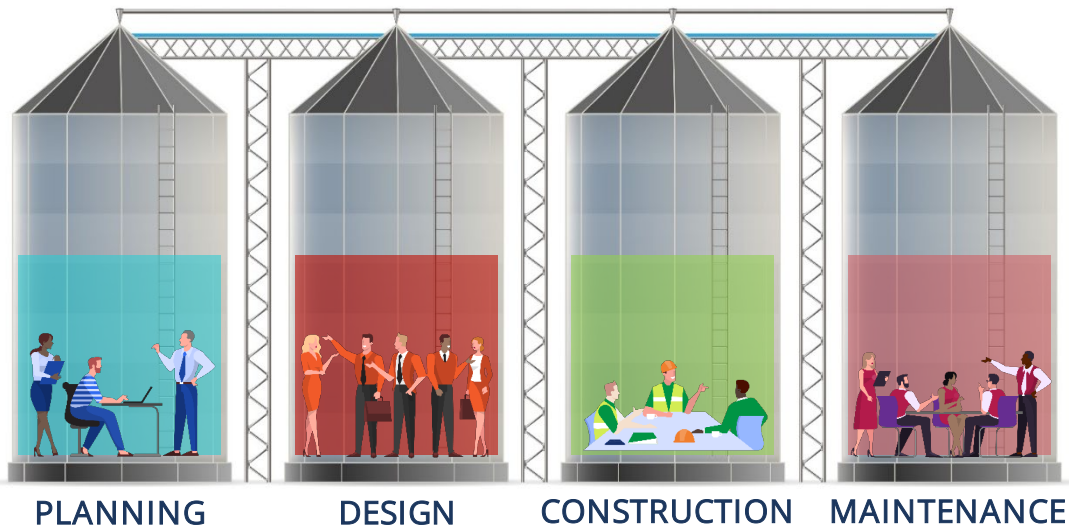
Below market level salaries for employees

\$34M

pumped into salaries

Improving our Workforce

- ✓ Improving TDOT processes for on-time & on-budget delivery
- ✓ Silos disappear = more teamwork
- ✓ Eliminating vacancies = market pay for staff



Tennessee: Build With Us



Public-Private Partnerships in urban areas



Frees \$\$ for rural investment (such as adding interstate lanes)



Decreased Congestion & Increased Economic Activity

50% Faster Delivery & **40%** Cost Savings

Decreased Project Delivery Time & Increased Cost Savings



Tennessee

Build With Us



Visit the Build With Us website