

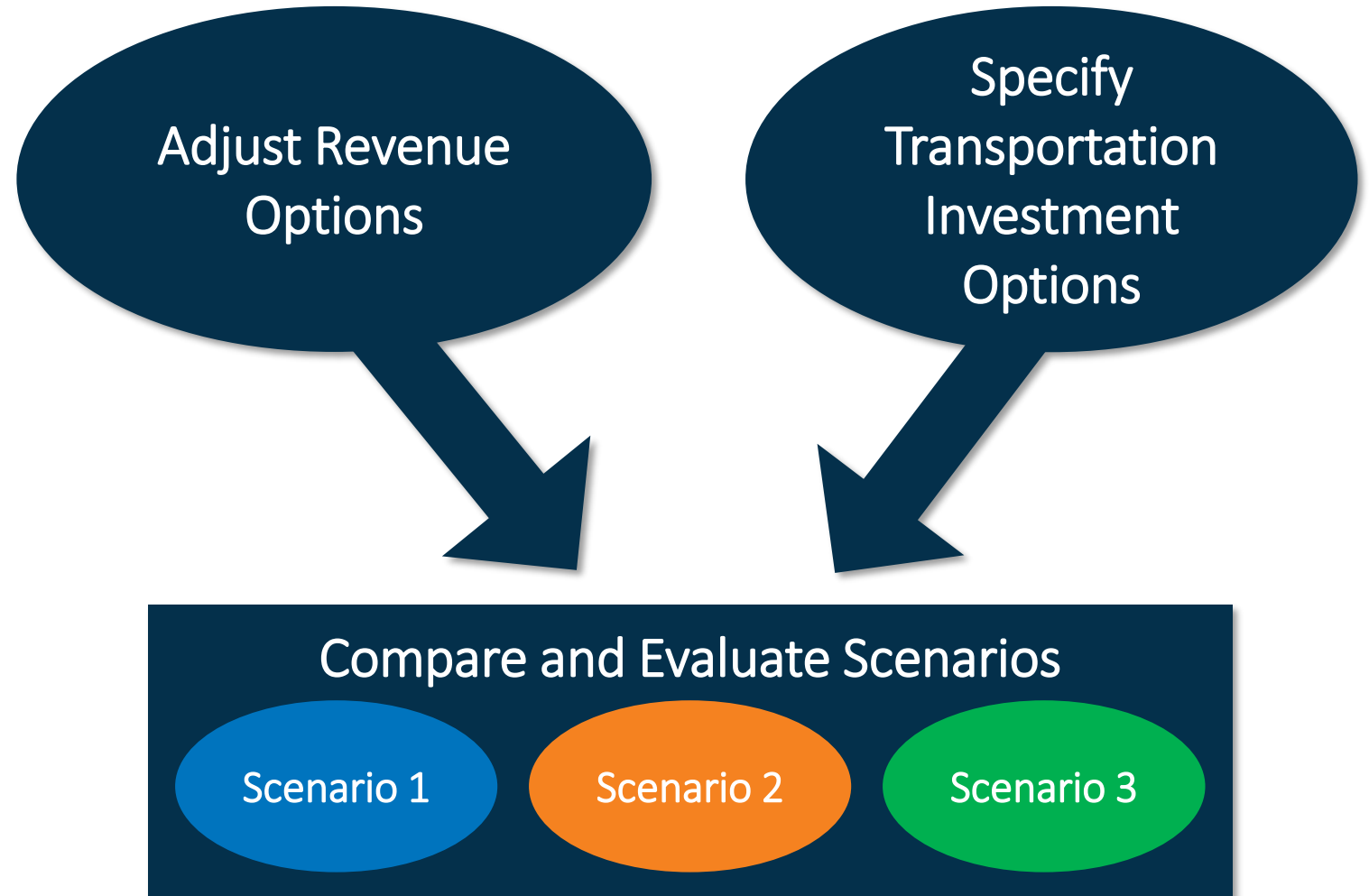


Transportation Investment Needs Simulator (TINS)

August 30, 2019

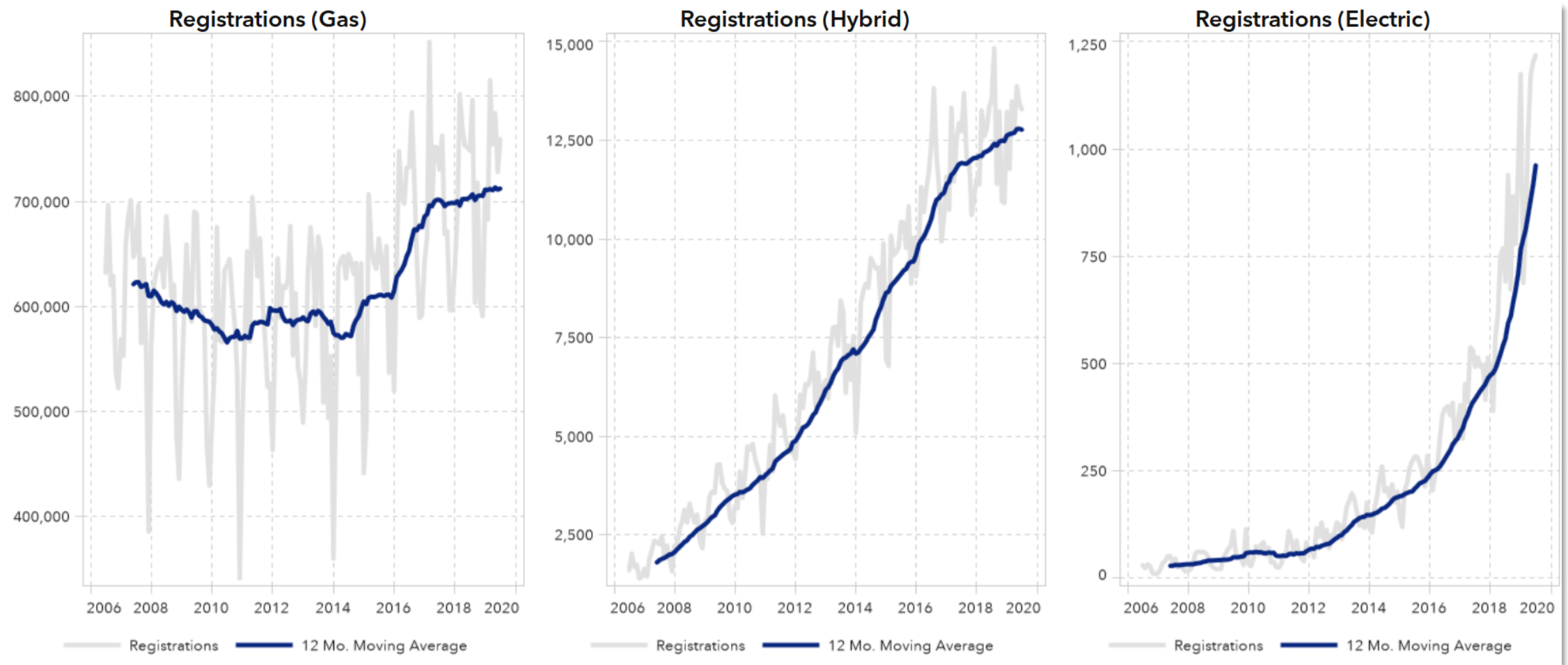
Objective:

This NCDOT Investment Calculator is a tool that enables users to find options to pay for enhancements to the transportation system.



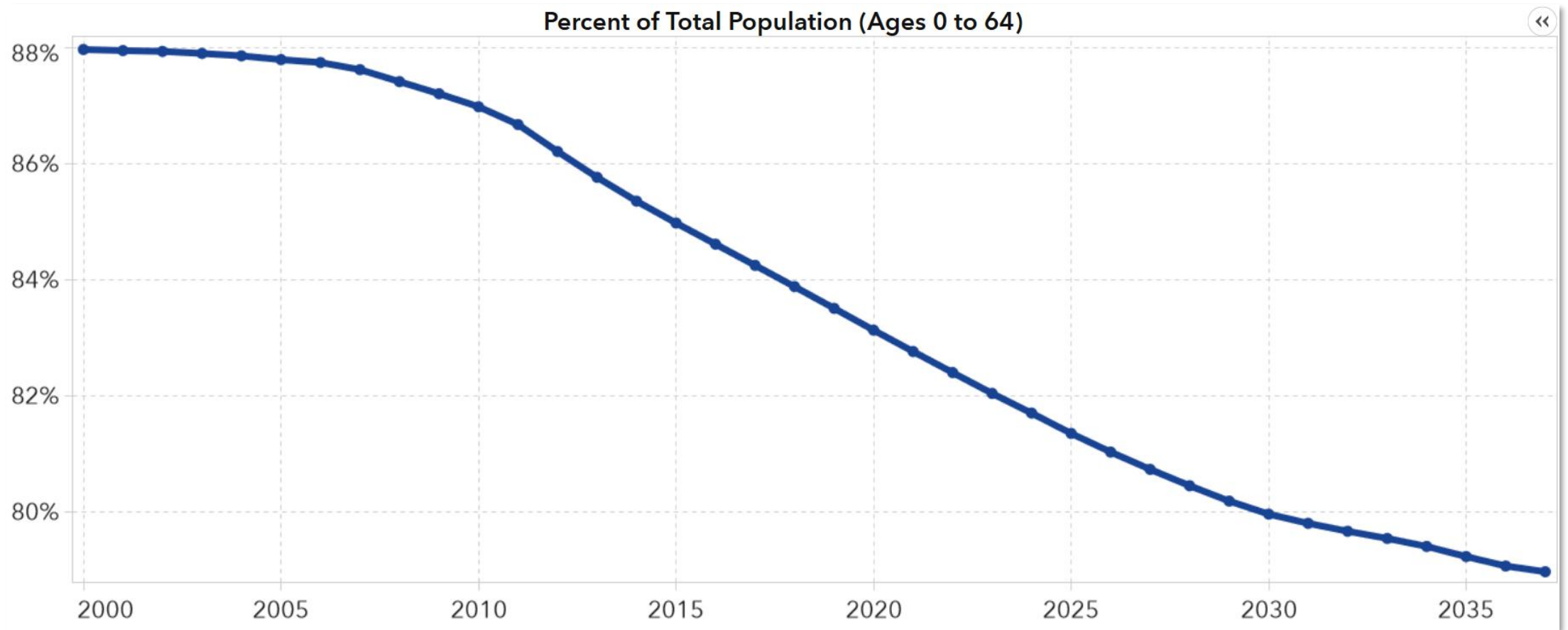
Background

Historical NC Vehicle Registrations



More fuel efficient vehicles on the rise

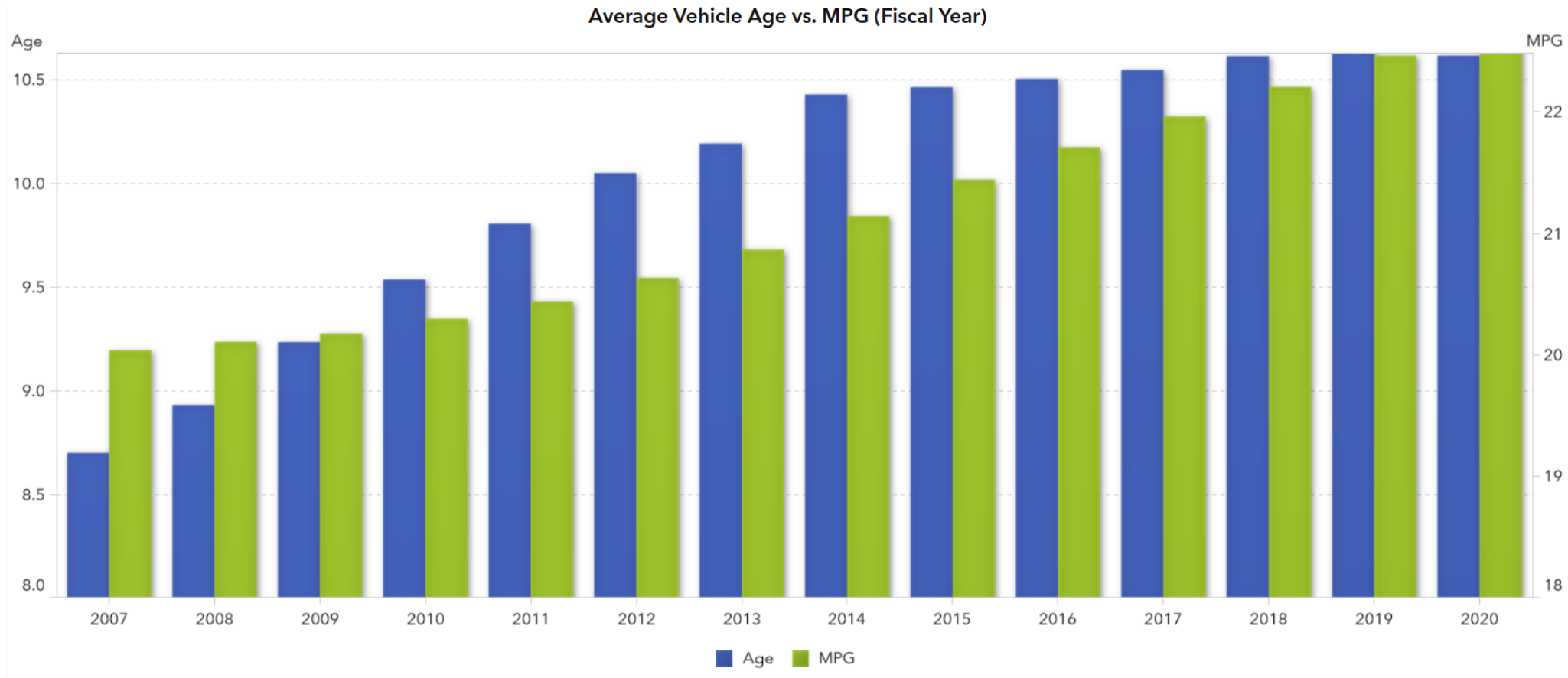
Background Population



Driving population expected to continue to decrease

Background

Average Vehicle Age vs. MPG



Average vehicle age and MPG both on the rise

10 Year Revenue

Current

\$45.0B

Proposed

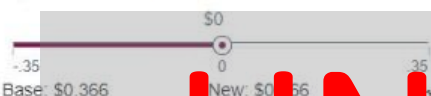
\$45.0B

Existing Statewide New Revenues

Motor Fuel Tax - Gas



Motor Fuel Tax - Diesel



Driver's Licenses



Vehicle Registration



Highway Use Tax



10 Year Citizen Cost

Current

\$480

Proposed

\$570



NCDOT Investment Calculator

Transportation revenues are essential to provide a connected and multi-modal transportation infrastructure, which is critical to the State's economic vitality. This NCDOT Investment Calculator is a tool that enables users to find options to pay for enhancements to the transportation system. Based on your selections, you will learn how much these changes cost each person, how much it costs NCDOT to implement and the level of economic benefit to North Carolina.

Step One: Choose Investment Options

Start by selecting one or more transportation improvements on the right-hand side. The improvements can be statewide or be more limited in scope. Select the travel mode you want to change. For example, if you'd like to increase the number of sidewalks, select "Pedestrian" then scroll down sidewalks and use the bar to add sidewalks. The cost to create the transportation enhancement appears at the top right corner.

Step Two: Choose Revenue Options

The left-side contains options to increase revenues to pay for your transportation enhancement. Choose one or more options to alter existing revenue sources or diversify revenues by adding a new funding source. Try to balance the amount you spend and the amount of revenue you raise.

Step Three: Compare Options

You can create three scenarios to build your ideal transportation network. You can scroll between these scenarios at the bottom of the screen.

Transportation Goals

Current

\$45.0B

Proposed

\$45.0B

Highway



Primary Roads

24700 miles



Economic Benefits

Current

\$25B

Proposed

\$35B

Scenario 1

Select

Revenue: \$0

Expenditure: \$0

Scenario 2

Select

Revenue: \$0

Expenditure: \$0

Scenario 3

Select

Revenue: \$0

Expenditure: \$0

UNDER DEVELOPMENT

10 Year Revenue

Current Proposed
\$45.0B \$46.5B

Existing Statewide New Revenues

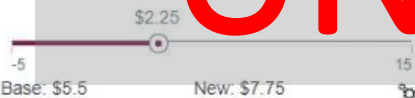
Motor Fuel Tax - Gas



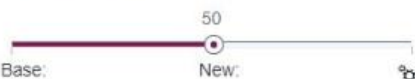
Motor Fuel Tax - Diesel



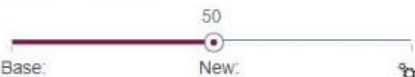
Driver's Licenses



Vehicle Registration



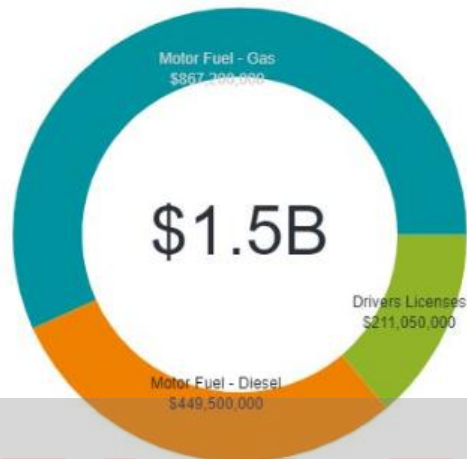
Highway Use Tax



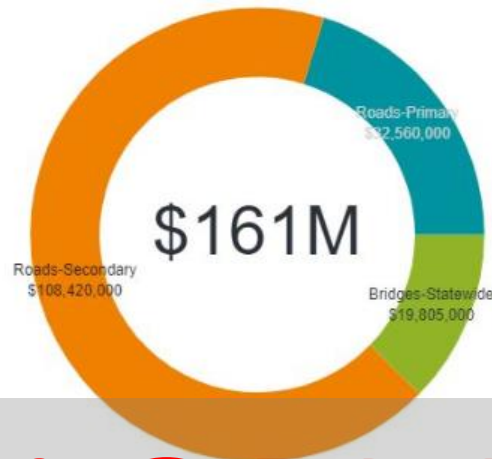
10 Year Citizen Cost

Current Proposed
\$480 \$570

Revenue



Cost

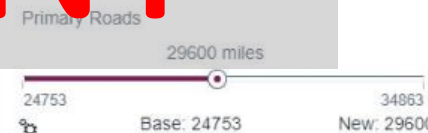


Revenue	Base	New	Revenue	Scenario	Base	New	Cost
Motor Fuel - Gas	0.366	0.4	\$867.2M	Highway	Roads-Primary	73501	\$12.6M
Motor Fuel - Diesel	0.366	0.4	\$449.5M	Highway	Roads-Secondary	73501	\$108.4M
Drivers Licenses	5.5	7.75	\$211.1M	Highway	Bridges-Statewide	1603	\$19.8M
State Occupancy	0	0	\$0	Highway	Bridges-Adv-Interstate	33	\$0
				Highway	Bridges-Adv-Primary	338	\$0
				Highway	Bridges-Adv-Secondary	1237	\$0

Transportation Goals

Current Proposed
\$45.0B \$45.2B

Highway



Economic Benefits

Current Proposed
\$25B \$35B

Scenario 1

Select
Revenue: \$1.5B
Expenditure: \$160.8M

Scenario 2

Select
Revenue: \$0
Expenditure: \$0

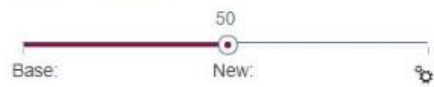
Scenario 3

Select
Revenue: \$0
Expenditure: \$0

UNDER DEVELOPMENT

Current	Proposed
45.0B	\$46.5B

Motor Fuel Tax - Gas



Current	Proposed
\$480	\$570

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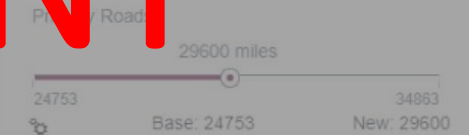
Revenue

Cost

Revenue Options

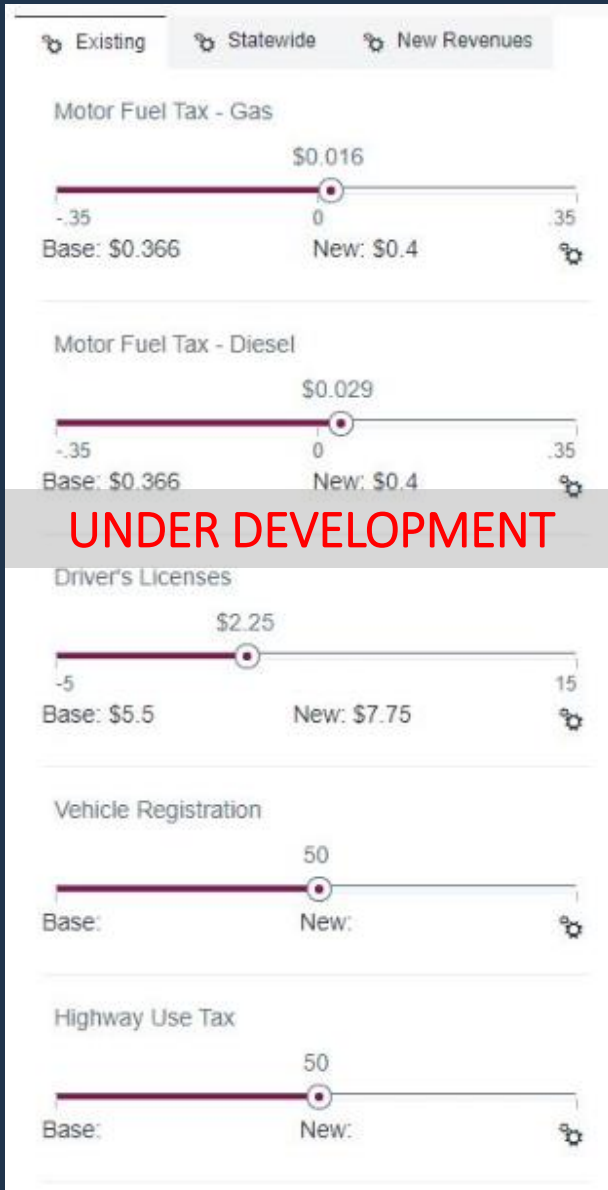
UNDER DEVELOPMENT

Current	Proposed
\$45.0B	\$45.2B



Revenue

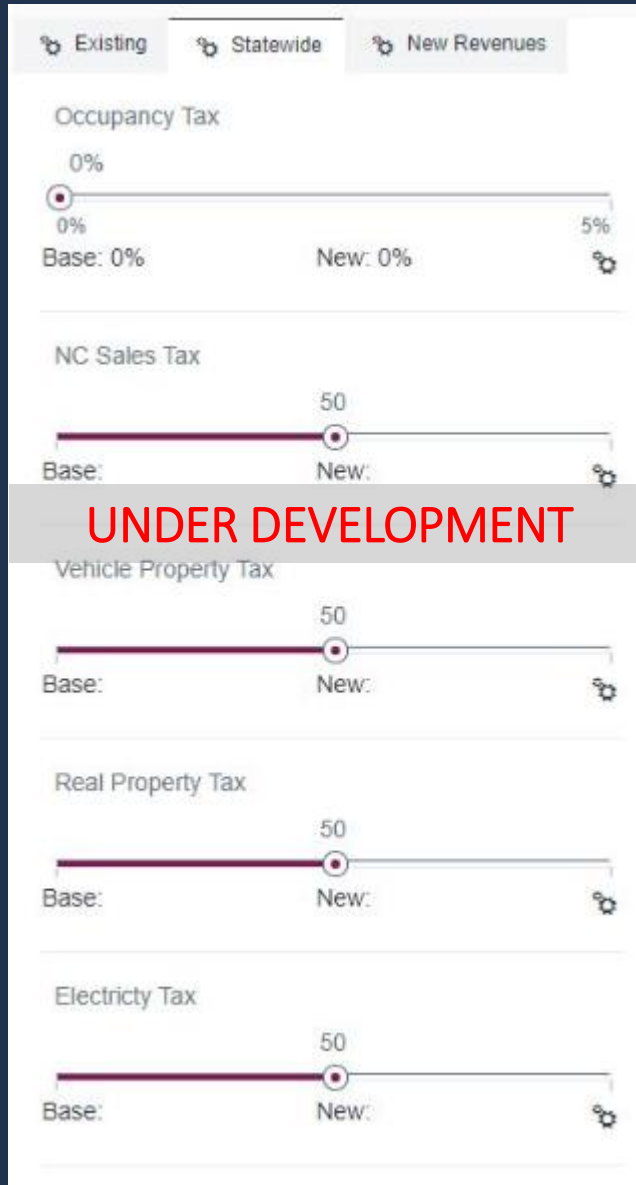
Existing Transportation Revenue Sources



- MFT Gas Tax*
- MFT Diesel Tax*
- Driver Licenses*
- Vehicle Registrations
- Highway Use Tax Rate
- Electric Vehicle Fee

*Underlying data received; calculation for 10-year revenue amount is working in demo

Revenue



Statewide Revenues

- Occupancy Tax*
- NC Sales Tax
- Vehicle Property Tax
- Real Property Tax
- Electricity Tax

Proposal: *Allocate portion of collected statewide revenues to meet transportation needs*

*Underlying data received; calculation for 10-year revenue amount is working in demo

Revenue



Potential Revenue Sources

- Road User Charge (MBUF)
- Statewide Interstate Tolling
- Hybrid Vehicle Fee
- Carbon Tax
- Congestion Management Fee/Toll
- Transportation Network Companies gross premium/sales tax
- Car Subscription / Car share taxes



Transportation Goals



Categories

- Highway (Roads and Bridges)*
- Public Transit (Bus Lanes)
- Aviation (Airport repair/renovations)
- Ferry (Upgrades to fleet)
- Rail (New rail lines)*
- Bicycle and Pedestrian (Additional paths)

*Underlying data received; calculation for 10-year revenue amount is working in demo

TINS

Next Steps

- Receive feedback from NC First Commission
- Complete buildout of remaining revenue and investment options
- Quality Assurance
- Production



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