



PUBLIC PERCEPTIONS OF TRANSPORTATION FEES & TAXES IN NORTH CAROLINA



ITRE

Institute for Transportation
Research and Education

PUBLIC PERCEPTIONS OF TRANSPORTATION FEES & TAXES IN NORTH CAROLINA

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Background

The North Carolina Department of Transportation (NCDOT) provides transportation services across North Carolina for a variety of functions and uses, including highway and roadway construction and maintenance, operation of airports, railroads, transit, ferry system, and bicycle and pedestrian infrastructure. Currently, however, the state's funding sources that support these services are being strained due to long-term gas tax revenue sustainability and fuel source and economy innovations in the automobile market. The growing gap between needs and revenue continue to increase as tax revenues drop due to the increasing fuel efficiency of today's vehicles, leaving the motor fuel tax insufficient to cover the full needs of the state. In addition, it is projected that the North Carolina population will increase more than 25 percent from 10.3 million residents to 12.8 million residents by 2035, creating additional demand and funding needs for the state's transportation infrastructure, and further overstressing the capability of the current funding mechanisms.¹ The growing gap between needs and revenue for transportation funding is not a problem specific to North Carolina. Since 2012, 35 states, including North Carolina, have taken some form of legislative action to increase transportation funding.²

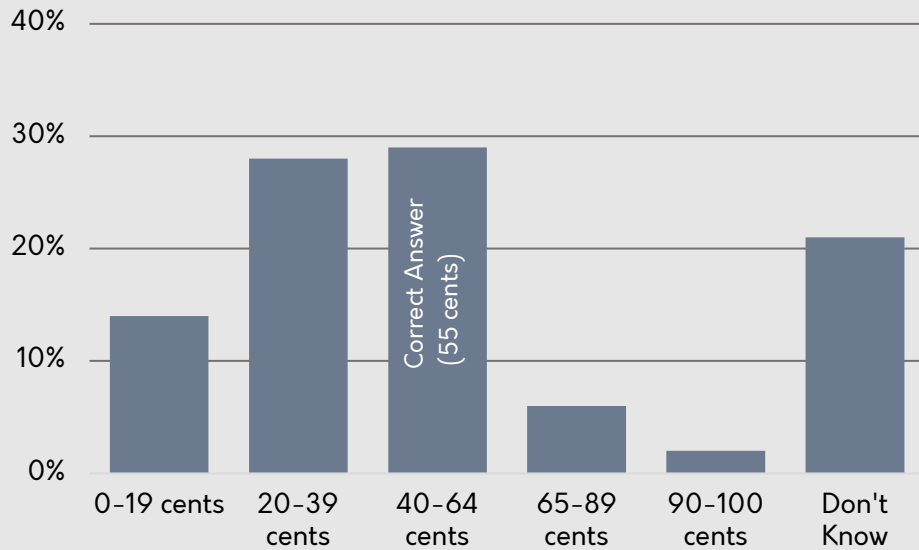
In response, NCDOT commissioned a survey to better understand how the public perceives transportation taxes and fees. The research team designed and administered a 21-question survey to 37,000 randomly selected households in North Carolina. The final sample included over 2,200 responses from across the state, with each of the NCDOT divisions represented. Survey responses were weighted by county, gender, age, and education to ensure the sample is representative of North Carolina's overall population. In addition, we randomly assigned respondents to one of two versions of the survey to measure how introducing or withholding contextual information about transportation that experts deem important affects their preferences.

Several findings emerged regarding North Carolina residents' perceptions of transportation taxes and fees. Overall, North Carolinians support increasing transportation funding. The results suggest a preference for the gas tax; however, there also appears to be support for a diverse portfolio of funding sources, such as using motor vehicle and drivers' license fees and a highway use tax, and a fee based on the amount of miles driven. Despite this, however, North Carolinians are split over whether road funding should come from general taxes or usage-based fees. There also seemed to be very few major differences in preference and opinion between demographic groups. Despite popular belief, this study showed that rural and urban North Carolinians share many common opinions when it comes to transportation funding in the state. While the results here provide insight into the perceptions of transportation funding and financing, additional research is needed to be able to fully assess the perceptions of key groups in the future.

¹ North Carolina State Demographer, 2019

² NC Budget and Management, 2019

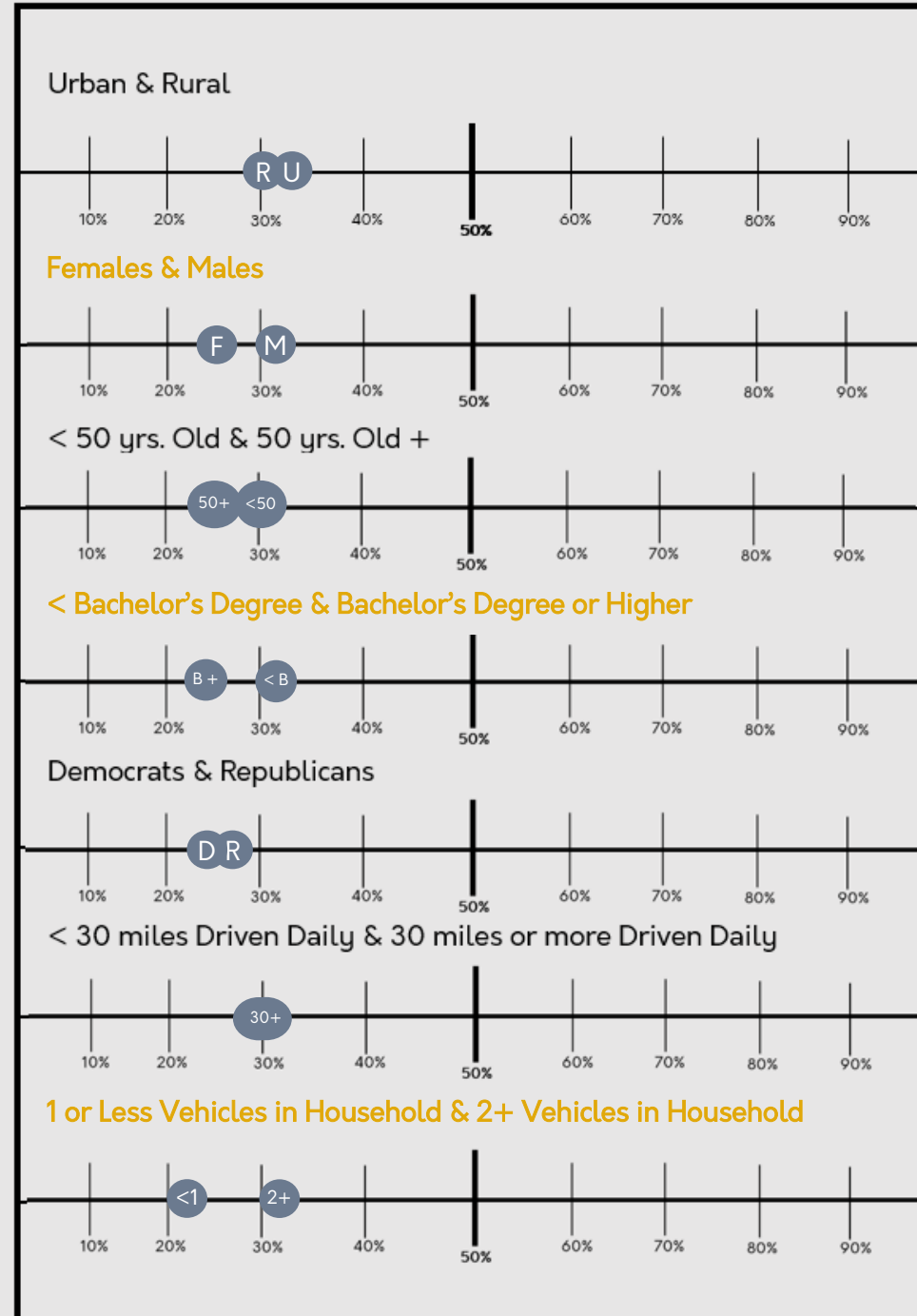
Estimates of the Current State + Federal Gas Tax Rate per Gallon of Gas



When it comes to estimating the current gas tax rate (state and federal), most North Carolinians either do not know the current rate or believe that it is lower than it currently is. This is consistent across all demographic groups.

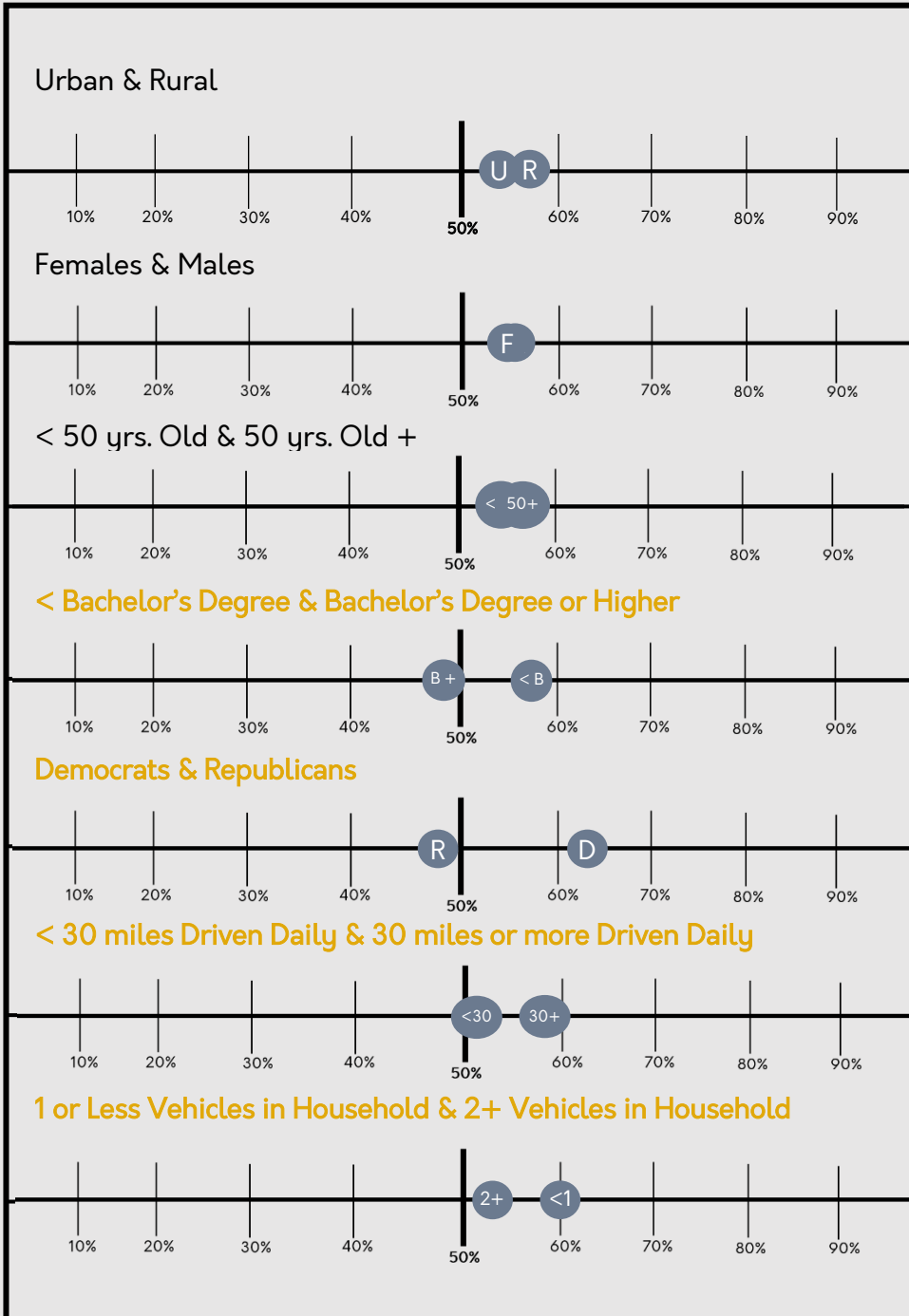
Percentage of Group Who Responded Accurately

Yellow Indicates Statistically Significant Difference (p-value < .05)

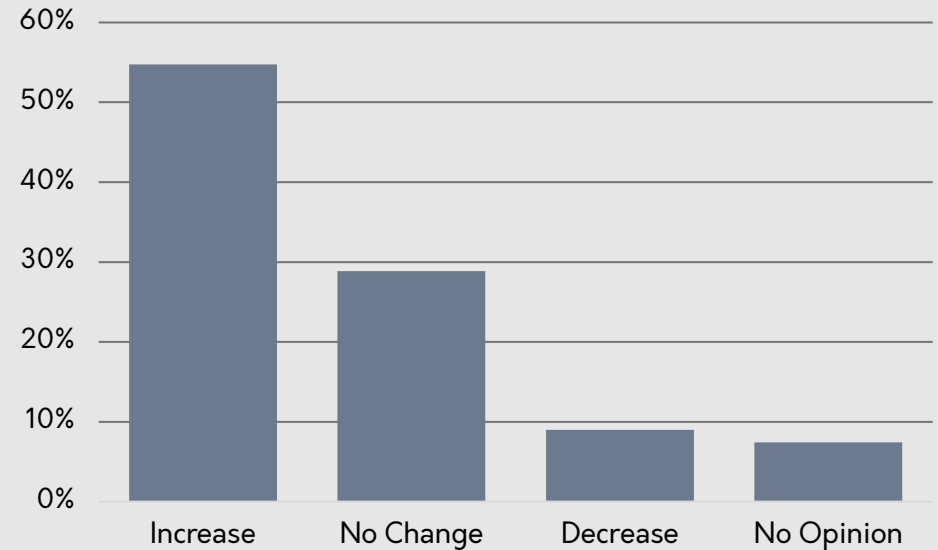


Support Funding Increase, Difference by Group

Yellow Indicates Statistically Significant Difference (p-value < .05)

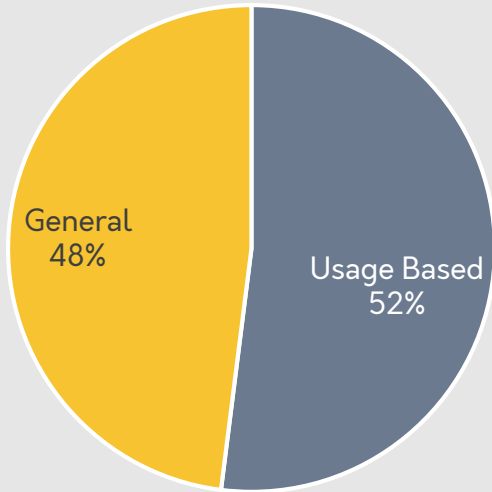


Majority Supports Increasing Transportation Spending



More than 55% of North Carolinians support an increase in transportation spending in the state. This is consistent for all demographic groups with the exception of self-identified Republicans and individuals with a Bachelor's degree or higher. Only 9% of North Carolinians believe that the state should decrease the amount it spends on transportation.

Where Should Road Funding Come From?



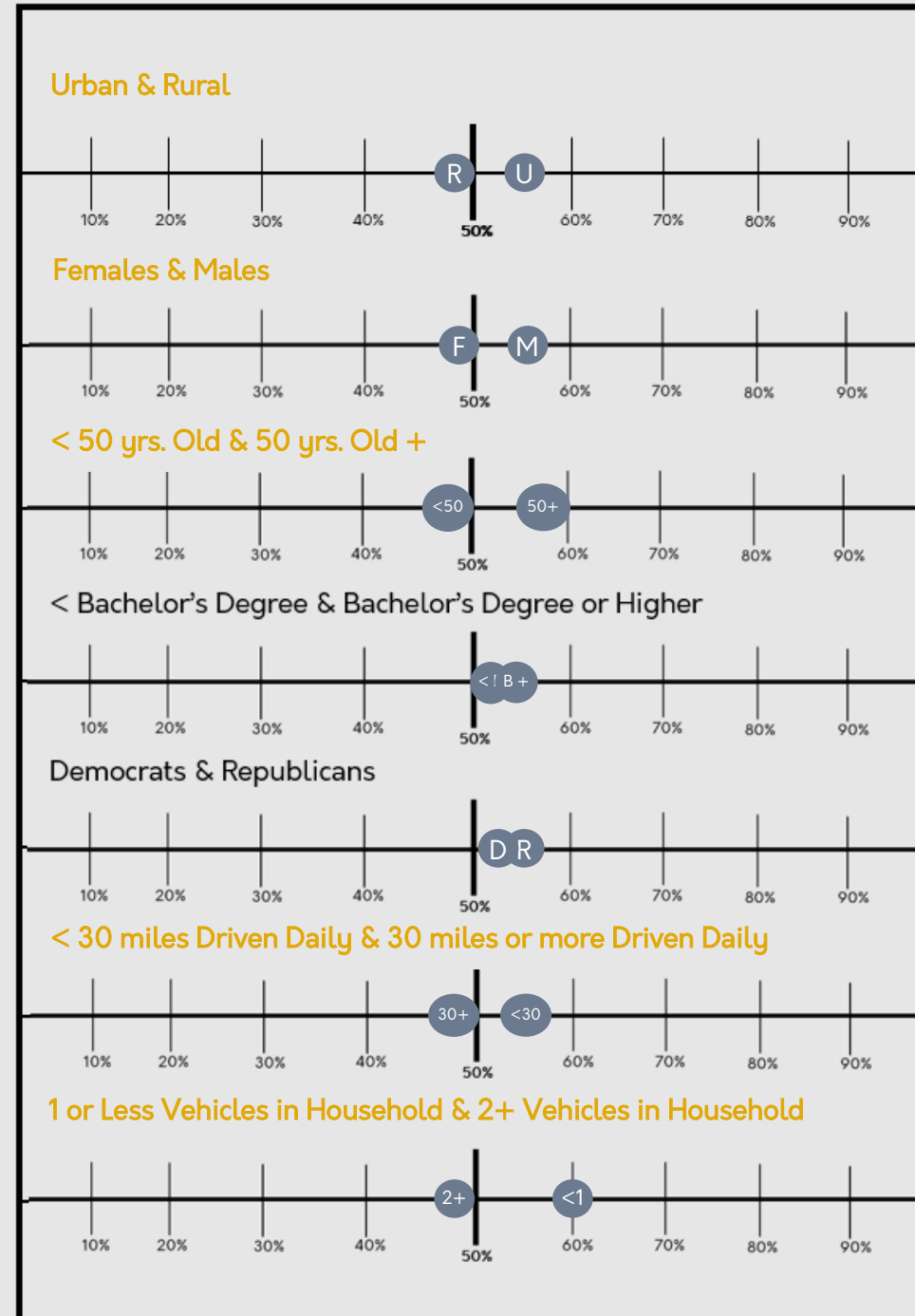
General Taxes: General sales tax, property tax, vehicle property tax

Usage Based Fees: Fees from gasoline, tolls, or miles driven

When asked about potential funding methods for transportation in the state, North Carolinians are split between preference for general tax revenues and usage based fees. Older individuals, urban residents, males, those who drive less than 30 miles a day, and households with one or fewer vehicles are more likely to support usage based fees.

Preferred Usage-Based, Difference by Group

Yellow Indicates Statistically Significant Difference (p-value < .05)



Selected Fuel Used as Most Preferred, Difference by Group

Yellow Indicates Statistically Significant Difference (p-value < .05)

Urban & Rural



Females & Males



< 50 yrs. Old & 50 yrs. Old +



< Bachelor's Degree & Bachelor's Degree or Higher



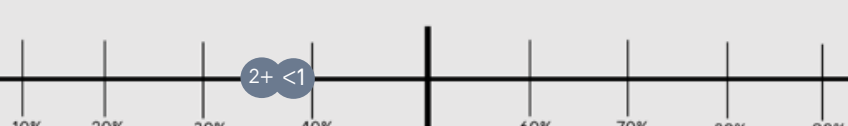
Democrats & Republicans



< 30 miles Driven Daily & 30 miles or more Driven Daily

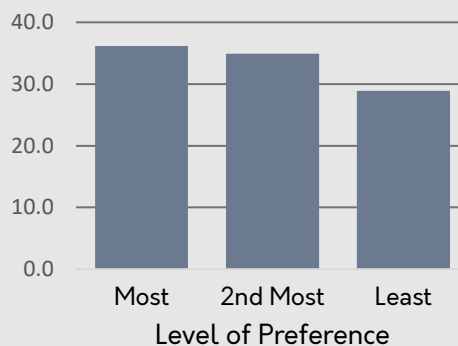


1 or Less Vehicles in Household & 2+ Vehicles in Household

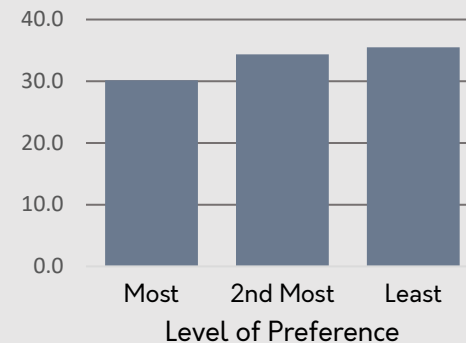


Preference Ranking for How Transportation Should be Funded: By Amount of Fuel Used, Miles Driven, or Vehicle Weight

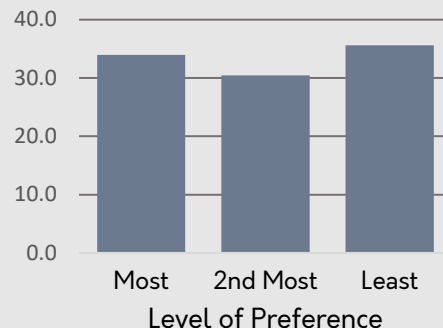
Fuel Used



Miles Driven



Vehicle Weight



When limited to three of the most common usage based fee options, North Carolinians most preferred funding state transportation by a fee based the amount of fuel used. The second most preferred option, on average, was vehicle weight and the least preferred option was miles driven. The only demographic group to prefer another option over fuel used was younger individuals, who on average, preferred vehicle weight the most.

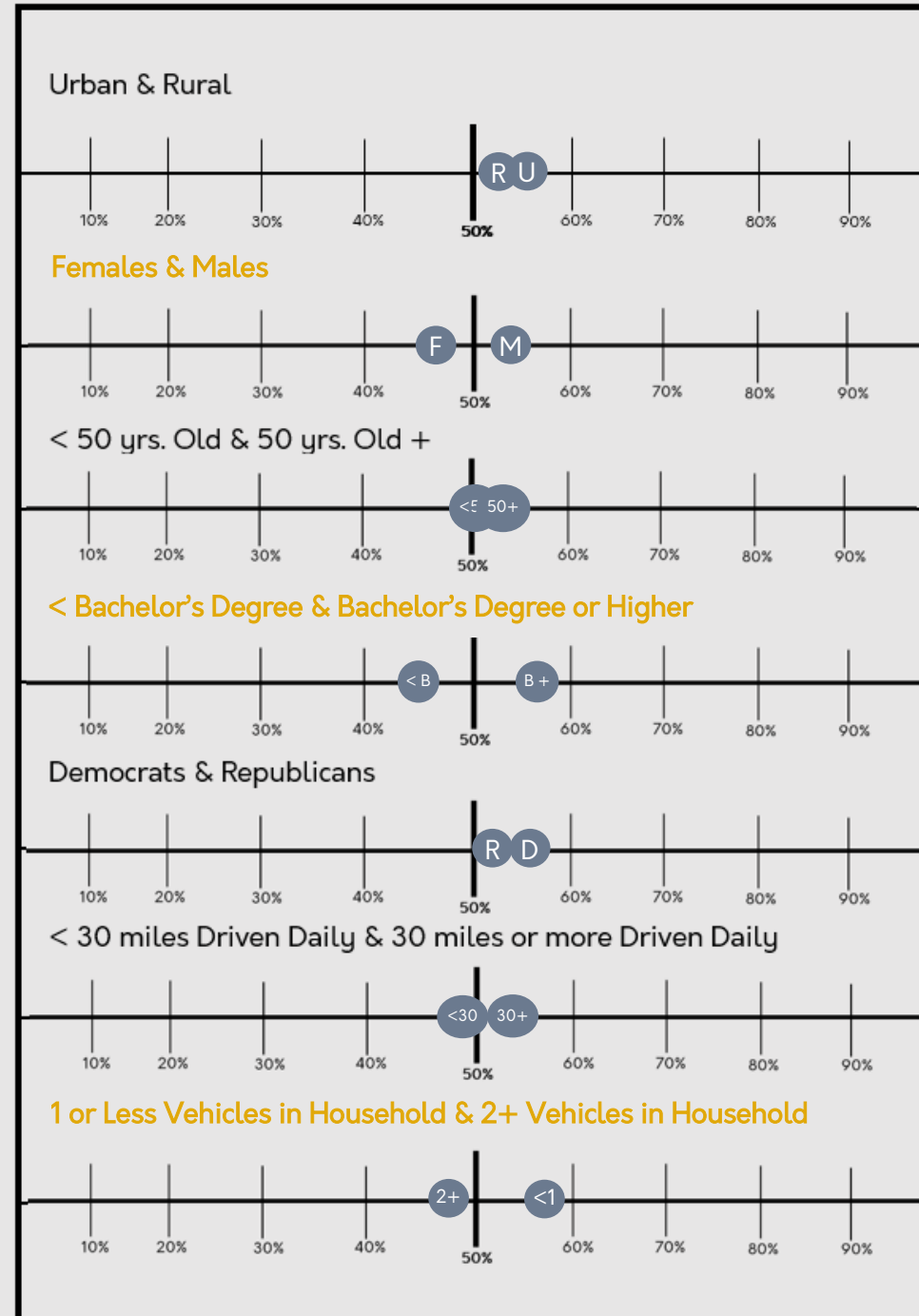
Perceived fairness of paying \$400 in gas tax annually to drive 15,000 miles



Resulting from the current gas tax system, someone driving an average fuel economy vehicle pays approximately \$400 in state gas tax to drive 15,000 miles. When asked about the fairness of this amount, over 50% of North Carolinians believed this was fair. Females, individuals with less than a Bachelor's degree, and households with two or more vehicles were less likely to believe this was a fair amount.

Considered Fair, Difference by Group

Yellow Indicates Statistically Significant Difference (p-value < .05)



Preferred Miles Driven, Difference by Group

Yellow Indicates Statistically Significant Difference (p-value < .05)

Urban & Rural



Females & Males



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Democrats & Republicans



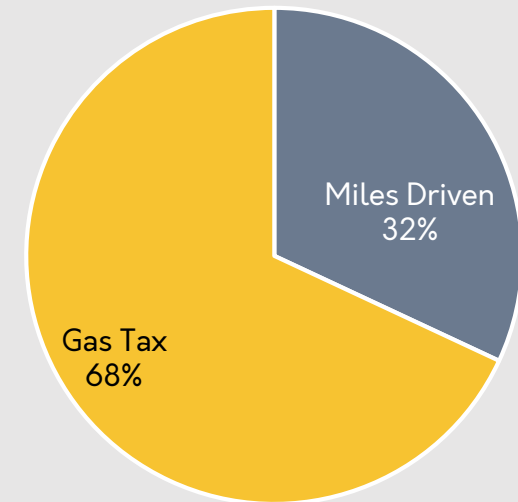
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1 or Less Vehicles in Household & 2+ Vehicles in Household



Preference for Transportation Funding: Gas Tax Versus Vehicle Miles Driven



68% of North Carolinians preferred funding transportation in the state with the gas tax when given a choice between that or a miles driven fee. This was consistent among all demographic groups with only slight increases in preference of a miles driven fee among urban residents and people who drive less than 30 miles a day. A 32% support for a miles driven fee is consistent with the current literature, with multiple national studies finding support levels around 25%.

Reasons for Selecting Gas Tax or Miles Driven Fee

When asked to explain their selection of the gas tax as the preferred funding mechanism, the majority of survey respondents provided reasons related to either fairness, logistics, environmental reasons, or privacy. For those who preferred a miles driven fee, the overwhelming reason was fairness.

Quotes:

Fairness reason for selecting Miles Driven fee:

"[With a miles driven fee,] everyone would contribute, even the electric car drivers."

Fairness reason for selecting Gas Tax:

"Gasoline purchase is the result of size and efficiency of car, and amount miles driven by that car."

Environmental reason for selecting Gas Tax:

"Taxing fuel usage should encourage fuel conservation which also will reduce environmental impact."

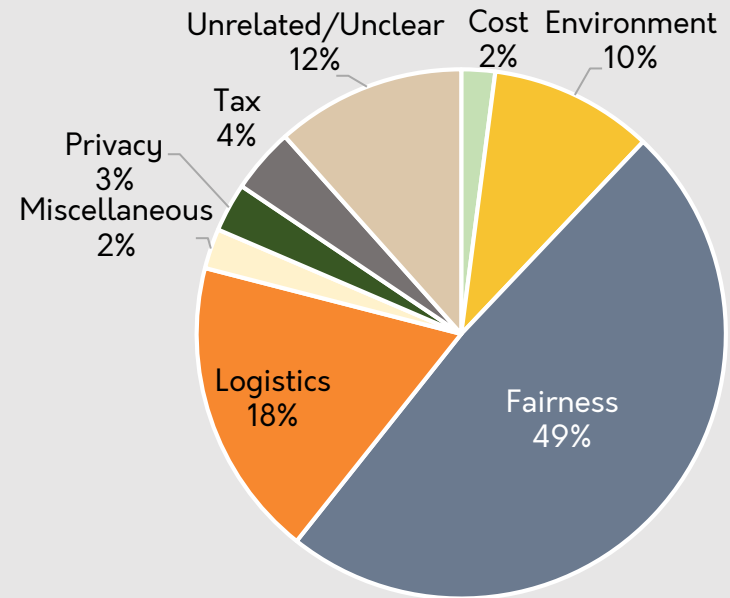
Privacy reason for selecting Gas Tax:

"A tax on miles driven is too invasive on privacy. If you don't GPS track, it would be too easy to cheat the system. I certainly don't want the State tracking me."

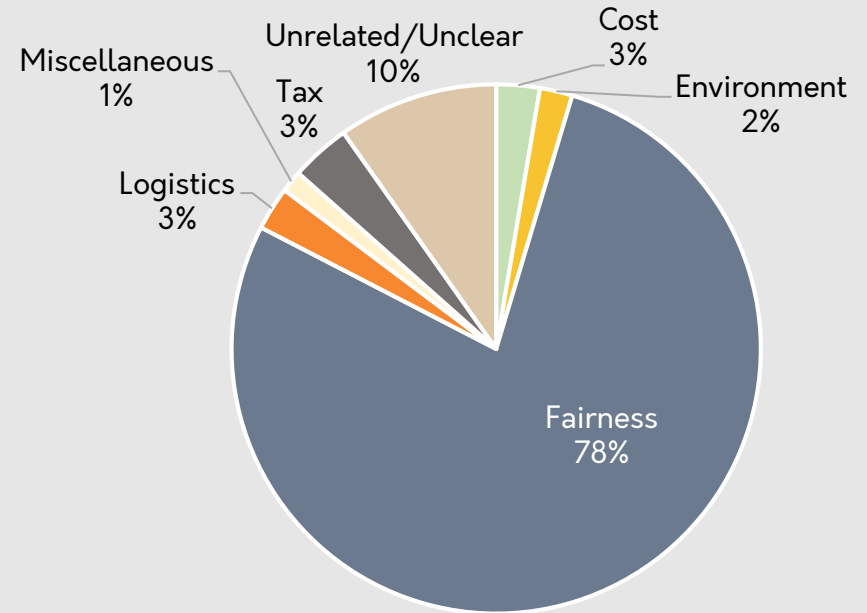
Logistic reasons for selecting Gas Tax:

*"Because you can't cheat the gas pump, people will lie about their mileage."
"Your tax would be built into your fuel purchase, not a separate one-time bill you pay."*

Reasons for Selecting Gas Tax



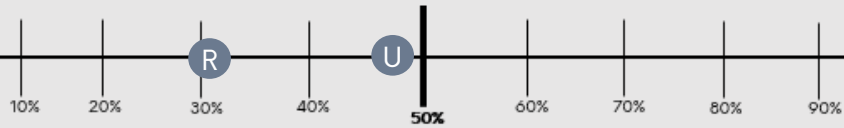
Reasons for Selecting Miles Driven Fee



Supported Statement, Difference by Group

Yellow Indicates Statistically Significant Difference (p-value < .05)

Urban & Rural



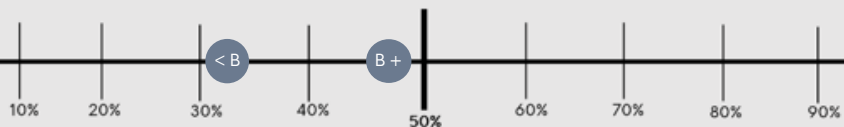
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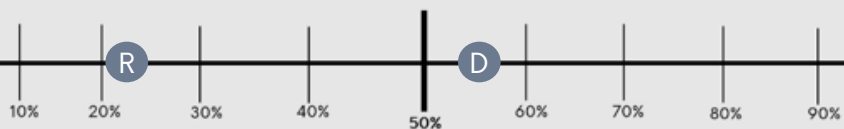
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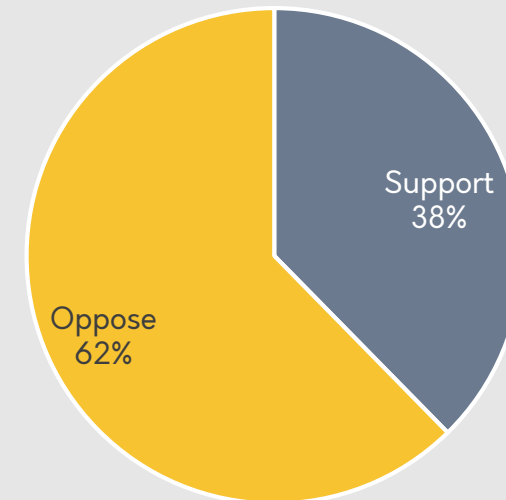
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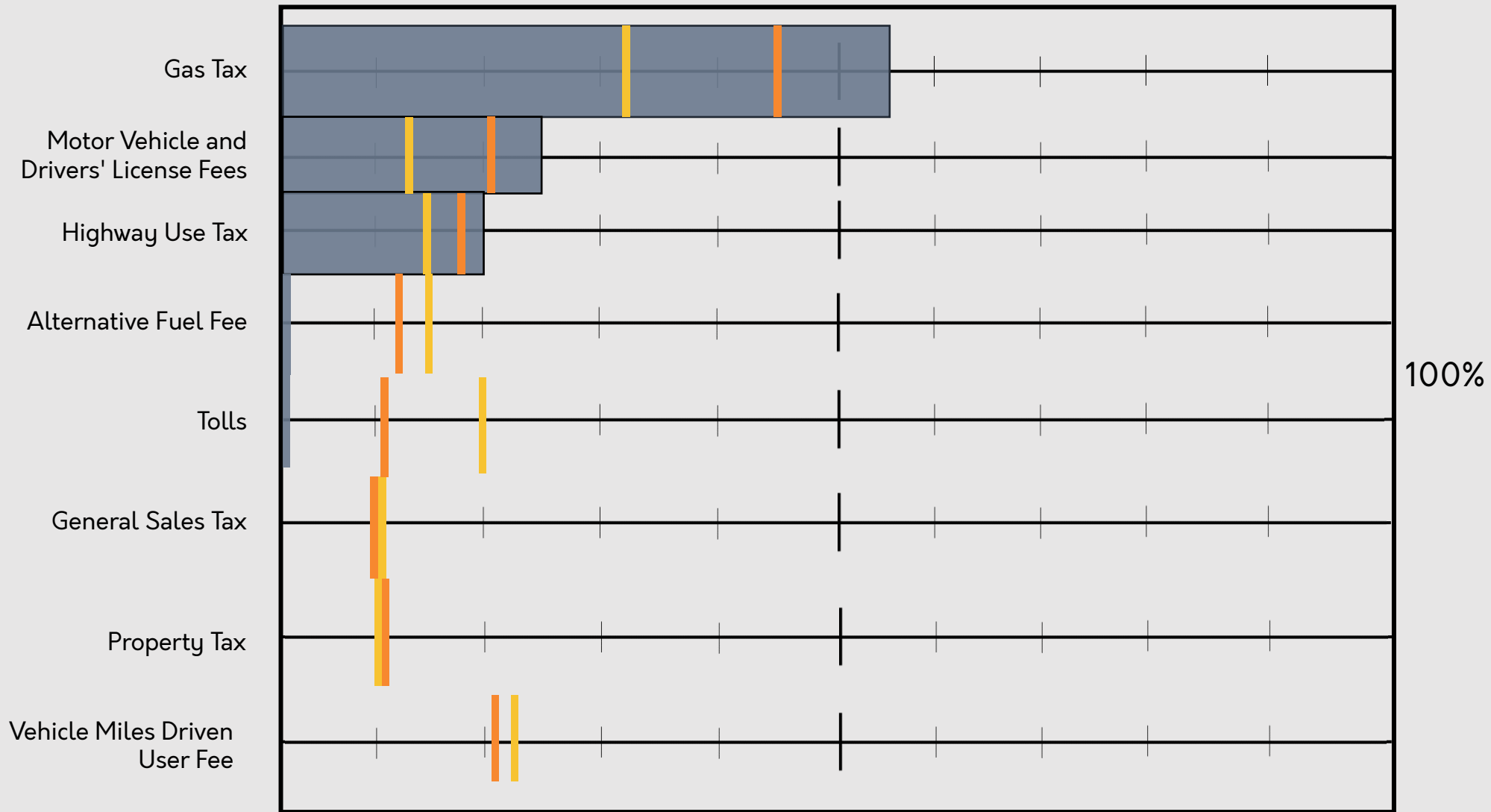
Do you Support Hybrid Vehicle Drivers Paying Less in Tax Due to Higher Fuel Efficiency?



62% of North Carolinians oppose hybrid vehicle drivers paying less in tax due to higher fuel efficiency. Opinions on this issue vary significantly by demographic groups. Urban residents, females, younger individuals, individuals with a bachelor's degree or higher, democrats, and households with one or fewer vehicles each has much higher levels of support for hybrid drivers paying less.

How much should each of these potential revenue sources contribute to NC roads?

Survey respondents were asked to budget how each of the funding sources below should contribute to transportation funding in the state. Half of survey respondents were provided the current allocation of funding (orange lines), while half of respondents received no information (yellow lines). The survey found that while people on average still prefer that the gas tax contribute the most to transportation funding, people would prefer to diversify funding sources.



Actual
 Baseline
 Additional Information

Summary



Image Source: NCDOT

North Carolinians say they support increasing transportation funding. At the same time, they are only moderately aware of how much they contribute via taxes on gas purchases and a bare majority said that paying \$400 for driving 15,000 miles annually was a "fair" price to pay in gas taxes, even though \$400 is the actual average cost. Residents preferred the gas tax when asked to choose between specific types of usage based fees, but they are evenly split in principle between preferring usage based fees to more general sources of revenue. Thus, we also find that respondents support raising revenue from many types of sources, including motor vehicle and drivers' license fees, a highway use tax, and a vehicle miles driven fee. In fact, respondents said that about 20% of revenue for transportation should come from a fee based on the amount of miles driven. In prior opinion research, privacy concerns were often cited as a reason for opposing a vehicle miles driven fee, but very few respondents in this study expressed that concern. Last, we rarely uncovered meaningful differences in preferences according to respondents' demographic characteristics, such as between urban versus rural residents, despite the widespread perception these divisions exist.

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