

To: Joe Milazzo II, RTA executive director

From: Michael Hogan, RTA policy and research coordinator

RTI authors: Michael Hogan, Joshua Fletcher

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Access Fee Calculations

The regional and statewide business community has proposed an “access user fee” concept as a potential method of replacing the gas tax to modernize and stabilize funding for transportation. State motor fuels taxes currently make up approximately half of state transportation revenue. In determining the potential cost of an access user fee under a revenue neutral framework, the model calculates the access fee in two ways, based on the average gas tax paid annually per vehicle (not per driver):

1. the national average fuel economy for the entire motor vehicle fleet, average vehicle miles traveled (VMT), registered passenger vehicles, and the state motor fuels tax rate per gallon.
2. The total tax revenue collected by the NCDOR, divided by the number of registered passenger vehicles in the state

The fee is calculated based solely on private, gasoline powered vehicles (excluding diesel and state-owned vehicles) to be revenue neutral in the year of implementation.

2023 access fee calculations

RTI examined the equivalent of an access user fee to replace North Carolina’s existing gasoline tax of **\$0.405** per gallon in 2023. On average, each vehicle in 2022 contributed just under **\$251** per year to fund transportation through gasoline taxes in North Carolina, based on the average vehicle mileage, fuel economy, and gasoline taxes.

- 14,369 miles annual miles per vehicle based on 2019 values of 122,475 million vehicle miles traveled, with 8.5 million gasoline powered vehicles registered in North Carolina according to FHWA. Note we did not use 2020 values due to an estimated 13% decline in vehicle miles traveled due to the pandemic.
- Fuel efficiency is for the entire stock of vehicles on the road in 2019, including new and existing vehicles, as reported by EPA.

As an alternative, RTI examined NCDOR historic data, assuming the following:

- 5.6 billion gallons of gasoline purchased in the state
- 8.5 million registered gasoline-powered, private passenger vehicles in the state
- gasoline tax of **\$0.405** per gallon in 2022

This gives an average of 620 gallons of fuel purchased per vehicle per year, or just over **\$251** paid in gas taxes annually per vehicle per year which, with rounding, is identical to the result from the prior calculation.

A hypothetical uniform access user fee implemented in 2022 of **\$251 per year, or about \$21 per month**, would be revenue neutral at the time of implementation and would offset the loss of revenue from eliminating the current gas tax and all EV fees.

In 2023, the state will collect an estimated \$2.3 billion in gas taxes and EV fees; a uniform access fee of \$251/year on all non-diesel vehicles (gasoline, hybrid, and electric) would generate an estimated **\$2.3 billion annually** (while replacing all gas taxes and EV fees).

Sources

- Vehicle Miles Traveled: <https://www.fhwa.dot.gov/policyinformation/statistics.cfm>
- Registered Vehicles: <https://www.fhwa.dot.gov/policyinformation/statistics.cfm>
- Fuel Efficiency: <https://www.bts.gov/content/average-fuel-efficiency-us-light-duty-vehicles>
- North Carolina Tax Revenue: <https://www.ncdor.gov/documents/reports/statistical-abstract-north-carolina-taxes-2021/open>
- North Carolina Motor Fuels Tax Rates: <https://www.ncdor.gov/taxes-forms/motor-fuels-tax/motor-fuels-tax-rates>