

The NC FIRST Commission was created in March 2019 to evaluate North Carolina's transportation investment needs. Their job is to advise the Secretary of Transportation of new or better ways to ensure that critical financial resources are available in the future. As part of this process, we'll be looking for input from you, the people of North Carolina! This brief overviews the highway use tax and discusses why NCDOT expects these revenues to decline in the future.

The North Carolina Highway Use Tax

Overview

Upon passage of the historic 1989 legislation that established the North Carolina Department of Transportation's (NCDOT) Highway Trust Fund, the state started assessing a Highway Use Tax (HUT) on vehicle purchases rather than a sales tax. Today, the HUT is the largest source of revenue for the Highway Trust Fund's capital construction account and represents 22.7 percent of the state's total revenues for transportation investments. In FY 2020, the N.C. Division of Motor Vehicles processed 2.1 million title transactions that netted \$837 million in revenue, only \$1.2 million less than FY 2019.

While a decrease in vehicle purchases was expected due to COVID-19 impacts, gains in the first half of the fiscal year offset revenue loss. In the future, declining vehicle sales and changes in consumer mobility preferences may lead to diminishing HUT revenues.



Highway Use Tax Revenues

\$837.5 Million

22.7% of NCDOT Revenues

54.3% of HTF Revenues

How does the Highway Use Tax work?

In 1989, the state switched from a 2 percent sales tax on vehicle purchases to the Highway Use Tax (HUT). Today, whenever a vehicle title is transferred in North Carolina, the buyer is charged a one-time, 3 percent HUT on the vehicle's purchase price, less any trade-in value if the vehicle was purchased at a dealership. Caps apply to vehicles registered from new residents moving into North Carolina (\$250 maximum) and to commercial and recreational vehicles, such as RVs (\$2,000). Motor home purchases pay a 2 percent sales tax, not a HUT, with revenue deposited in the state's General Fund. Depending on where a car is purchased, the tax can be paid at the dealership, at select DMV offices, or at any License Plate Agency.

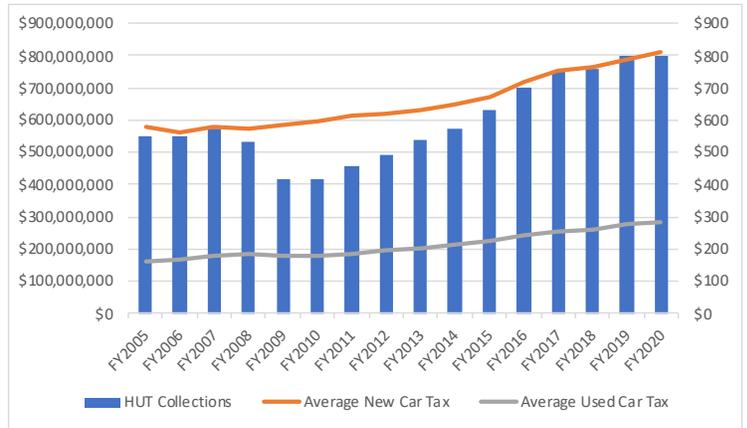
If you rent or lease a vehicle, you are taxed an Alternative Highway Use Tax (AHUT). A long-term lease or rental is charged a 3 percent rate on the gross receipts. Revenues from the long-term AHUT are deposited in the NCDOT Highway Trust Fund. A short-term lease or rental, such as a car rental at an airport, and car sharing services are charged an 8 percent rate on the gross receipts. A 5 percent AHUT applies to vehicle subscription services.¹ Since FY 2018, \$10 million of AHUT revenues are annually transferred to an NCDOT fund for airport improvements while the remainder goes to the General Fund.

¹ Vehicle subscription services are defined in N.C. Gen. Stat. §105-189.1(a)(9) as "a written agreement that grants a person the right to use and exchange motor vehicles owned, directly or indirectly, by the person offering the agreement upon payment of a subscription fee, but it does not include a vehicle sharing service. The subscription fee must provide a person exclusive use of an agreed-upon number of motor vehicles at any given time during the full term of the subscription."

How much do I pay in Highway Use Tax?

The amount you pay in taxes depends on your vehicle’s purchase price and your trade-in value. In FY 2020, the average transaction totaled \$379 in Highway Use Tax. As shown in **Figure 1**,² you paid much less tax in FY 2020 if you bought a used vehicle, averaging \$283 per transaction, compared to \$811 for a new vehicle purchase.

Figure 1: HUT Transactions



Is North Carolina’s Highway Use Tax rate competitive?

Policy makers often want to know if North Carolina charges a competitive tax rate compared to surrounding states. As shown in **Figure 2**,³ based on the average FY 2020 transaction data, vehicle buyers in North Carolina pay significantly less tax on vehicle sales than in all surrounding states. While these states use different taxing methods, such as Tennessee’s Title Ad Valorem Tax or South Carolina’s Infrastructure Maintenance Fee, the base is either the vehicle’s sale price or its fair market value.

Figure 2: State Comparison Chart

	NC	FL	GA	SC	TN	VA
RATE	3% less net of trade	6% plus local tax	6.6%	5% (\$500 cap)	7% less net of trade	4.15%
TAX	\$450	\$900	\$990	\$500	\$1,050	\$830

² North Carolina Department of Transportation

³ This information uses the average HUT paid per transaction to NCDOT in FY 2020 and assumes a vehicle value of \$20,000 with a \$500 trade-in allowance. This figure is used to calculate the tax due in surrounding states.

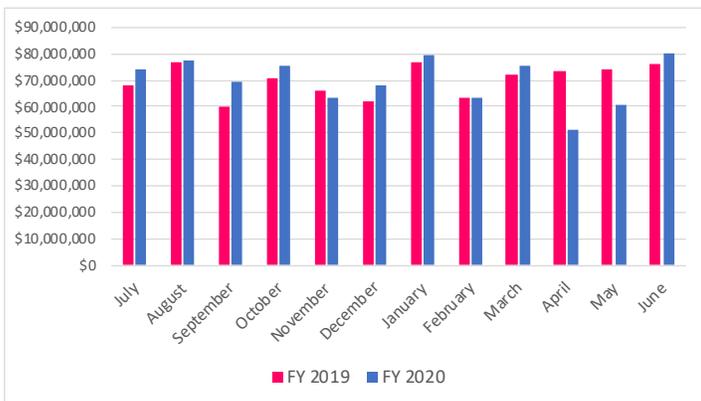
Are Highway Use Tax revenues secure?

Several factors may limit or reduce HUT revenues in the future. Today, growing HUT revenues correlate with a slowly recovering economy. In the future, an economic downturn, shifting mobility preferences, technological changes, and improved vehicle durability are likely to reduce car sales.

Economic downturns. The amount of HUT revenues collected by the DMV is linked to the state’s economic health. As the economy improves, people feel more financially secure to trade in vehicles, but during economic downturns, they keep their old vehicles longer or buy less costly options. As shown in **Figure 1**, HUT revenues plunged during the Great Recession. From 2007 to 2009, HUT transactions declined 21.3 percent and revenues declined 27.4 percent.

Prior to the economic impact from the COVID-19 pandemic, many economists believed the United States would enter the next recession in 2020 or 2021. In fact, the United States entered this recession in February 2020 after experiencing a sharp decline in economic activity.⁴ While the pandemic is “forecast to cause the worst global recession since World War II,”⁵ unlike prior recessions, HUT revenues have so far been largely unaffected. While vehicle sales declined in April and May, strong sales at the beginning of the fiscal year offset the revenue loss. Currently, FY 2020 HUT revenues are only \$1.2 million lower than in FY 2019 (see **Figure 3**).⁶

Figure 3: Monthly Comparison of HUT Revenues, FY 2019 and FY 2020



Consumer preference for vehicle ownership will make less financial sense. Various studies suggest that it costs \$706 a month to own a vehicle that sits idle 95 percent of the time while losing 60 percent of its value within the first 5 years.⁷ As ridesharing, car sharing, micromobility solutions, and vehicle subscription services increase their market share, and as public transit services work to become more dynamic, these options may become more convenient and less costly than owning a vehicle, especially in urban areas. Research supports the growth of these markets. While public transit ridership declined 2 percent from 2017 to 2018,⁸ commuter rail ridership increased 0.41 percent in 2018.⁹ According to the National Association of City Transportation Officials, the number of shared micromobility trips, including e-bikes, scooters, and bicycles, more than doubled from 35 million trips in 2017 to 84 million trips in 2018.¹⁰

Consumer opinion surveys show a weakening of Americans’ preference for car ownership. A 2018 Cox Automotive survey¹¹ found that 40 percent of all survey respondents and 57 percent of urban respondents said that while access to transportation is necessary, owning a vehicle is not. The Zipcar-commissioned Harris Poll¹² also supported the concept that people increasingly view transportation as a service. The results revealed that 70 percent of American drivers believe it is more economical to use a car-sharing service than to own a vehicle.

Connected and autonomous vehicles will reduce individual vehicle ownership. Ford is an example of a company that is changing business models to invest heavily in the development of connected and autonomous technologies.¹³ As vehicles become smarter and connected to a larger grid, some analysts believe individual car ownership will decline. The University of Michigan Transportation Research Institute and Barclays each estimate that car ownership will decline from today’s 2.1 vehicles to 1.2 vehicles per average U.S. household.¹⁴

Analysts estimate that one self-driving car could replace 12 regular vehicles. Data from a car-sharing service also show reductions in vehicle ownership. A recent study¹⁵ commissioned by Zipcar found that one Zipcar replaces up to 13 personally owned vehicles, suggesting that Zipcar’s 12,000-vehicle fleet may have taken up to 156,000 cars off the road nationwide. The study also found that 54 percent of Zipcar members stopped owning a vehicle after joining.

⁴ National Bureau of Economic Research

⁵ World Bank

⁶ North Carolina Department of Transportation

⁷ Data from AAA and Donald Shoup, *The High Cost of Free Parking*. Routledge; 1st edition (June 21, 2011)

⁸ American Public Transportation Association, *Public Transportation Ridership Report*, 4th Quarter 2018, April 12, 2019

⁹ www.apta.com/news-publications/press-releases/releases/americans-took-9-9-billion-trips-on-public-transportation-in-2018-public-transit-ridership-growth-exceeds-population-growth/

¹⁰ nacto.org/wp-content/uploads/2019/04/NACTO_Shared-Micromobility-in-2018_Web.pdf

¹¹ www.autonews.com/article/20180825/RETAIL01/180829844/more-consumers-say-they-don-t-need-a-car, August 25, 2018

¹² finance.yahoo.com/news/state-car-ownership-generations-across-130700182.html, September 19, 2019

¹³ media.ford.com/content/fordmedia/fna/us/en/news/2018/07/24/ford-creates-ford-autonomous-vehicles-llc.html, July 24, 2018

¹⁴ www.governing.com/columns/public-money/gov-driverless-car-state-local-revenue.html, January 2017

¹⁵ finance.yahoo.com/news/state-car-ownership-generations-across-130700182.html, September 19, 2019

Vehicles are lasting longer. Due to advances in materials and technologies, vehicles are lasting longer. In 1970, automobiles lasted 5.6 years;¹⁶ now, according to IHS Markit, the average age of light vehicles in operation in the U.S. is 11.8 years.¹⁷ As shown in **Figure 4**, average vehicle age is rising in every region in the country.¹⁸ Reflecting national trends, North Carolina’s average vehicle age increased from nine years in 2007 to 10.9 years in 2019 (**Figure 5**).¹⁹ As owners keep their vehicles longer, the state collects the one-time HUT less frequently.

Figure 4: Average Age of Light Vehicles by U.S. Region

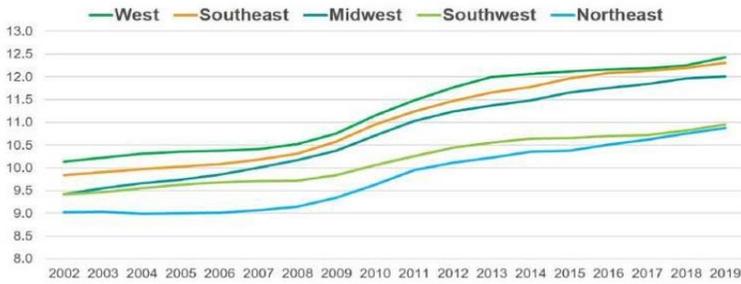
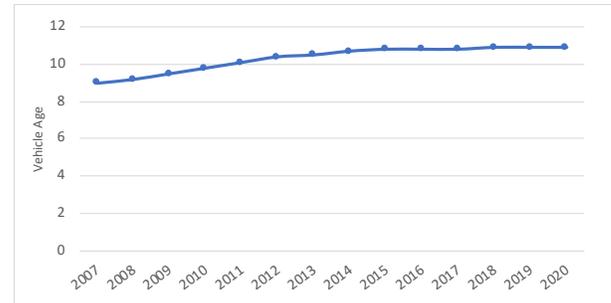


Figure 5: Average Age of NC Vehicles



What options are available to increase Highway Use Tax revenues?

Several options are available to increase HUT revenues

- North Carolina’s tax rate could be more competitive with those in neighboring states (**Figure 2**). Increasing the rate by 1 percent would yield about \$275 million more per year.
- North Carolina lawmakers may consider eliminating the incentive to trade in a used vehicle when purchasing another. Buying trends indicate that consumer preference will shift away from dealership purchases. The emergence of car subscription purchases, like those available in Raleigh and Winston-Salem from Drive Flow, online car buying programs used by companies like Tesla or Carvana, or companies like Costco that offer pre-arranged pricing are likely to reduce the number of trade-in transactions at dealerships.
- Lawmakers may consider eliminating or raising the \$2,000 cap on recreational vehicles and commercial vehicles.
- While \$10 million of the proceeds from short-term leases is deposited in the Highway Fund, lawmakers could choose to increase this transfer. Shifting the remaining funds to the Highway Fund or Highway Trust Fund would increase revenues by approximately \$90 million each year.

¹⁶ Average Age of Automobiles and Trucks in Use, 1970-1999, FHWA

¹⁷ news.ihsmarket.com/press-release/automotive/average-age-cars-and-light-trucks-us-rises-again-2019-118-years-ihs-market-, June 27, 2019

¹⁸ Ibid. Based on a snapshot taken January 1 of each year shown.

¹⁹ North Carolina Department of Transportation