Introduction

Across the nation, there has been increased excitement about the future of autonomous vehicles (AVs), with rollouts from Waymo, Cruise, Motional, and other ride-share services, not to mention small pilot programs of autonomous shuttles and autonomous trucking. Autonomous vehicles are being hailed as a disruptive and transformative technology that will create considerable positive change and promote safety in the automobile industry. There are many safety benefits to rule-abiding technology, ranging from decreased negative driving behaviors (speeding, running red lights, distracted driving, and lane weaving) to other benefits that include increased mobility as well as access to healthcare, food, and jobs. Even more important will be the decline in automobile accidents that result in damaged property—and, in some cases, personal injury or loss of life. While it is evident that there are many benefits to adopting this new technology, governments are encouraged to focus on the consequences that will result from widespread use.

As mentioned previously, this new technology will be designed to obey the rules of the road: AVs are designed to refrain from running red lights, tailgating, parking illegally, speeding, or committing other traffic offenses. New questions and concerns arise, ranging from skepticism about self-driving vehicles and parking garages (are there enough or do we have too many?) to fines and fees. AVs certainly bring a transportation shift given that they enable personal travel without a licensed driver behind the wheel.

Discussion

There are approximately 195 million drivers in the United States, of whom approximately 20% receive at least one traffic violation fine each year. Those fines generate around $6 billion in revenue for states and municipalities.
The Ten States with the Highest Number of Tickets Issued

- Ohio
- Pennsylvania
- New York
- California
- Texas
- Georgia
- Virginia
- North Carolina
- Massachusetts
- Connecticut

State motor vehicle agencies (i.e., DMVs) and local government courts use vehicle infraction monies like an IV infusion of revenue. DMVs bring in millions (or even billions) of dollars annually, depending on the state. In addition, states’ budgets predict the number of parking violations as well as other vehicle-related offenses that will bring in funds to state coffers. Offense-related fees come not only from violations adjudicated at the state level but also very often from localized municipality-level enforcement of vehicle and traffic laws. Individuals pay infraction fines, and many states additionally assess an administrative fee for those who choose to go to court to contest or plead traffic offenses. Therefore, the revenue is compounded; one component comes from payment to the state for the infraction and one comes in the form of a fee paid to the locality for enforcing and adjudicating the violation. In addition, in the New Jersey municipalities where motorists are ticketed by law enforcement, each ticket carries an additional court-assessed municipal fee of $33 (New Jersey Courts, 2018) on top of the cost of the underlying infraction.

The Ohio State Court ruled on a case involving Vincent Quinones, who went to trial on a charge of speeding, failure to wear a seatbelt, and weaving across marked lanes of traffic. He was convicted, and in addition to suspending his license, the court fined him $565 for the charges plus an additional $588 in court-assessed fees. The case went to the Ohio Supreme Court with a finding that a municipal court may charge a fee, in addition to all other court costs, on the filing of each case. That ruling affirmed jurisdictions’ ability to levy significant fees—in this case, fees even greater than that associated with the underlying charge. States and localities have fought for the right to charge these fees and have become accustomed to the revenue, which they use to run their localities.

Many states budget each year for the revenue collected by citations, violations, infractions, and so on. New Jersey’s Motor Vehicle Commission yearly collects approximately $1.8 billion in revenue a portion of which comes from vehicle traffic violations and infractions. The operating budget of the agency is approximately $388 million. This leaves more than $1.4 billion which is then added to the state general fund to be used at the discretion of the state government. In Washington, D.C. alone, the District government budgeted $324 million in revenue collection in 2019 for vehicle and parking infractions, and during that year 2,719,600 citations for fee were handed out to individuals. Government agencies find additional ways to use vehicle driving behavior to excise fees from drivers. In Maryland, speed cameras across the state generated over $288.5 million in revenue from 2014 to 2018 (Higgins, 2019). Additionally, in Georgia, the state brings in $21,406,516 in revenue (out of their $74,352,292 revenue collection) through “super speeder fines.”
Some states have found additional means to force payment for traffic violations. Louisiana allows all traffic citations issued by state police to be handled in the traffic courts in each parish through their respective local police departments. This process includes suspending driver’s licenses until full payment of fines and fees is made, and in some instances, parishes will intercept state tax returns for outstanding court assessments, report the debt to a credit reporting agency, or revoke a professional license.

State motor vehicle agencies collected revenue is used in many different ways. Beyond the amount needed for administration and other DMV expenses, a lot of the money that the DMV collects may be diverted to the state general fund, state highway funds, motor vehicle funds, or special funds. At the agency level, compared to other state agencies, many DMVs collect a significant amount of funds—even more than needed to cover the DMV’s expenditures. For example, the Florida DMV budget for the fiscal year 2019–20 is $487,311,309, yet the department collected $2,097,005,376. Florida’s state budget is around $90.8 billion, and the DMV revenue contributes about 2% to the budget. A similar situation holds for many states, where the DMV’s revenue (which includes infraction collection) makes up around 0–3% of the overall state budget. In many instances, the infraction money that the DMV collects is among the state’s top ten revenue sources.

In Nevada, the DMV collects about $877,900,000 for their special motor vehicle fund (SMVF). A portion of the SMVF (about $483,916,544) becomes part of Nevada’s special fund. The special motor vehicle fund could pay for the entire amount of the state special fund; even half or a quarter of the SMVF would be a significant contribution to Nevada’s special fund. Overall, for the states whose DMV revenue is sent to the special fund, the DMV’s total revenue is significant, as the amounts collected can equate to anywhere from 10% to nearly 100% and more of a state’s special fund.

The DMV revenue collected from traffic violations varies, by state and across fiscal years and is more complex than just registration or licensing fees. While DMVs collect state fees for violations and infractions, they are not the only parties who do so. Evidence shows that traffic violation revenue may be collected under the guise of different sources and different DMV revenue categories within the DMV’s revenue categories, such as license/fees/permits/fines, other, or transportation civil fees. The unfortunate part is that the financial reports do not break up sources item-by-item so there is no real way to discern how much is being collected for each category. Thus, making it difficult to provide an analysis or comparison between fines and fees. Records nationwide reveal that traffic violation revenues are not solely collected by the state motor vehicle agency. For example, in Missouri, the DMV only collects excess traffic fines if a county/city/town/village makes more than 30% of its revenue from motor vehicle traffic fines. This creates an idea that traffic violation revenue might be more important at the city/county level of government revenue than at the state level as the local level is the immediate recipient of infraction revenue. If the state was dependent upon it they likely would have had a structure where they split the revenue received from traffic violations at the first penny.

Another revenue loss associated with AVs will be related to motor fuel taxes. Pennsylvania’s state and federal gas taxes make up 74% of their highway and bridge funding and brought in a revenue of about $1 billion in the 2018–19 fiscal year (PennDOT, 2019; PennDOT, n.d.). Washington collected $27.9 million in fuel taxes in 2019 (Bowser, 2020). Additionally, in the state of Texas, motor fuel taxes in 2018 brought in $3.7 billion (Halbrook and Donald, 2019). Virginia forecasts
that their second-highest revenue stream in 2021 will be motor fuel taxes adding up to $1,010,400 (Virginia DMV, 2020). It is evident that the motor fuel taxes play a vital role in the transportation revenues of practically all states, leading to another concern, as many autonomous vehicles are environmentally friendly and combine fuel and electricity or are electric-only. The U.S. power grid will be more than able to handle a switch to fully electric vehicles across the country. The issue will be what will the cost structure be to charge a vehicle, and how much will governments add to that fee as a sur-charge to pay for infrastructure and local community needs.

While not disputing that motor fuel tax, licenses, and titling make up the majority of any DMV’s revenue, we know that large amounts of the fees collected or sums of debt sitting on the books of DMVs are related to traffic violations—specifically in places like Oregon, Georgia, Maryland, Washington, D.C., and Illinois, as these jurisdictions list traffic violation revenue in particular and not just “other” or “miscellaneous” in their budget categories.

Many states also charge reinstatement fees after the underlying charge is adjudicated, and these are not trivial amounts. For instance, in Michigan, the reinstatement fees collected sum to $4 million annually, while the numbers in Florida and Ohio are $80 million and $19 million, respectively. Given the volume and diversity of funding sources related to traffic infractions, DMV revenue will be affected by the changes brought by the widespread use of autonomous vehicles, but the degree of impact may depend on the state and its reliance on the DMV (and infraction revenue) as a source of income; we see that the impacts so far vary from about 1% to 10% of the total state budget.

It appears that the use of autonomous vehicles will affect local governments and their roadway funds and projects. States will have to rely more on federal funding and infrastructure (including bridges, waterways, roadways, rail, airways, wastewater and drinking water systems) legislation. States and localities will need to grapple with the inevitability of widespread autonomous vehicle usage. Questions arise like: What will be the role of highway and traffic law enforcement if cars do not break laws? How will autonomous vehicles affect county revenue? How should we fund roadway infrastructure?

Undoubtedly, a large portion of government funding comes from fines and violation fees issued by states, cities, and localities. With autonomous vehicles either greatly reducing or eliminating these funds from their balance sheets, states will have to look elsewhere to make up for revenue loss in their budgets. It is important that states and cities look beyond streets, highways, and sidewalk infrastructure. They will also need to do a significant review of their traffic and driving fees and fines and start to strategize from where the new streams of revenue will come. While states may prefer to wait on a federal framework to direct regulations about whether autonomous vehicles can cross from state to state and how quickly they will be rolled out en masse, it is important that states begin to strategize and develop ways to address their funding structure, or else they will certainly find themselves in a difficult position when autonomous vehicles take to our roadways as a significant proportion of traveling vehicles.
**Recommendation**

States would do well to appoint advisory groups to prepare for the impact of the widespread use of autonomous vehicles. This preparation should begin with canvassing resident populations for concerns, cares, and expectations; such a step would help inform jurisdictional priorities.

Having tens of thousands (or in some cases millions) of dollars of unpaid fines and fees is not good for state and local governments. The violations and the revenue that they would produce can stretch across municipal, county, and state agencies. It is uncollected revenue until paid in full. However, the time, labor power, computer programming, and overall tracking efforts are resource-intensive for the entity. A review of existing debt on states’ books from motor vehicle and attendant violations reveals that such debt may need to be forgiven, as these are likely debts sitting on the books, weighing down balance sheets and unlikely to be collected. As entities are addressing new rules and regulations as a result of autonomous vehicles they can also forgive this uncollected revenue as it is often based upon late fees for underlying vehicle infractions and the debt is usually held by the most disenfranchised segments of our society.

Municipalities, states, and localities alike must begin to draft new violations which will in turn have their own fines and fees that take into account autonomous vehicles’ features or parameters to avoid anthropomorphizing autonomous vehicles under the law, so that we understand that the mistakes humans make will not be made by cars. This would burden regulation and likely create unnecessary laws. Jurisdictions must also identify new ways to obtain revenue and begin to wean themselves off of infraction-based municipal and state budgeting.
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Acknowledgement

The author thanks Editing Press, for editorial services, as well as MTI staff, including Executive Director Karen Philbrick, PhD; Deputy Executive Director Hilary Nixon, PhD; Graphic Designer Alverina Eka Weinardy; and Communications and Operations Manager Irma Garcia.

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This report can be accessed at transweb.sjsu.edu/research/2053