Published on *The National Law Review* https://natlawreview.com

Auto 2.0 Will Test Government Revenue Sources in More Ways Than One

Article By:

Over the last decade, we have seen global automakers shift production and engineering objectives towards more fuel-efficient internal combustion engines, hybrid and fully electric vehicles, and autonomous and semi-autonomous vehicles. This push has not only impacted the economics of the automaker's business but impacted how cities and states collect revenue for road maintenance and growing their general fund. From fuel tax and parking meters, to speeding tickets and toll booths, this transition in consumer demand has impacted all facets of revenue generation for local and national governments, forcing governments around the world to reconsider the economics of public services, as well.

In our November 2018 article, Autonomous Cars Will Change More Than Just the Way We Drive we noted that "As people drive less, and move more efficiently by means of autonomous transit modalities, it also means the wear and tear imposed on the infrastructure may be reduced. But as this is reduced, so will be the taxes collected by traditional taxing regimes to fund the infrastructure improvements our roads desperately needs." As we noted, the drop in revenue won't be impacted by commuters driving fewer miles, but rather by each vehicle milking more miles out of each gallon of gas. And, in some instances, traversing miles without the use of gas at all.

Currently, the federal gas tax raises approximately $30-40b per year, with $36b raised in 2016 alone. Further, this amount doesn't reflect that collected by individual states, which averages $0.30 per gallon of gas and $0.32 per gallon of diesel fuel. Transportation industry leaders, such as HNTB and CDM Smith, have noted that this source of revenue will begin to decline as electric vehicles make ever increasing inroads into the consumer market. In some instances, "Electric vehicles could wipe out this primary source of transportation funding" because "electric vehicles will be responsible for up to 90 percent of vehicle miles traveled" while under the current taxing regime. Because electric vehicles will skip the pump and charging has no current taxing system in place, their use will account for no increased revenue generation for electric vehicle miles driven.

The Edison Electric Institute estimated that since 2018 the number of all electric vehicles sold in the US increased 81% from 2017 to 2018. By the start of 2018, over 800,000 electric vehicles had been sold in the US and by October 2019 that number exceeded 1,300,000 electric vehicles. With those numbers in mind, the penetration of electric vehicles accounted for 2.9% of new car sales in September 2019, but their share of new car sales has increased while the overall market declined.

In light of these figures, regulators at the state and federal level have started brainstorming alternatives to a revenue source in risk of shrinking. One alternative, identified is based on Oregon’s vehicle-miles-traveled tax that assesses a tax based on a vehicles annual miles driven. In this form, the tax will accurately account for the actual use of a vehicle, irrespective of their fuel economy or fuel source. Even further, many estimate that the use of autonomous vehicles will actually increase the number of miles driven “because of empty trips they'll be taking instead of sitting idle in parking lots or garages”.

National Law Review, Volume X, Number 14