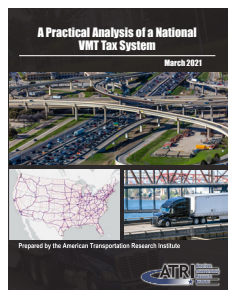


# A Practical Analysis of a National VMT Tax System

New research from the American Transportation Research Institute details the costs of deploying and operating a national vehicle miles traveled (VMT) tax. This study was identified as a top research priority by ATRI's Research Advisory Committee in 2020.



ATRI's research identified myriad approaches to designing, developing, managing and enforcing a national VMT tax system, and all come with complex challenges. While a VMT tax program is technologically feasible today, very few of the pressing non-technology issues have been researched and addressed. Ideally, a successful user-pays program would see the vast majority of the collected VMT revenue go directly into the transportation system, rather than to administrative tasks, hardware, transaction costs or even outside of surface transportation in support of other modes.

Most advocates of VMT systems argue that users are underpaying for the roadways on which they travel. Since most of ATRI's financial analyses and cost calculations utilize existing fuel tax rates and revenue levels, the findings reflect very conservative costs. Most infrastructure needs assessments propose dramatic increases in transportation investments, so it is safe to assume that most jurisdictions would utilize a VMT program to substantially increase revenue streams from roadway users.

In addition, a literal interpretation of the user-pays mantra in a VMT program creates many new challenges as described below.

- Some believe that roadway users should not have to pay for the roads they do not use.
- Rural roads, with fewer users, could receive less funding, regardless of their strategic role in connectivity.
- Travelers who do use rural roadways for longer trips will pay more for the same services and connectivity than their urban counterparts.
- Urban users could argue for more transportation revenue, but will not likely see improvements in travel times – due to limited opportunities to increase roadway capacity.



## NATIONAL VMT TAX PROGRAM REALITIES



A VMT tax program will move fuel tax revenue collection from fewer than **300** federal taxpayers to **272 million** vehicle accounts



**Millions of vehicles and/or households will be unable to participate** in a national VMT tax program, due to obsolete vehicles, and/or inaccessibility to bank accounts, internet transactions and/or cellular coverage



The estimated cost to provide dongles to **272 million vehicles** is approximately **\$13.6 billion**



Collection costs of **40%** for a federal VMT tax would be **300 times more expensive** than collection costs for the federal motor fuels tax



Evasion and noncompliance with the program will exceed **\$7.87 billion** annually



VMT financial transaction costs will be **\$4.3 billion** annually



**Urban systems will generate far more revenue than rural systems** – although rural roadways possess far more miles and provide strategic connectivity between urban centers



**Consequently, a critically needed VMT Tax Public Education Plan must convince people that the system will be:**



**Fair.** Compliance must be ubiquitous; cheating must be prosecuted.



**Unintrusive.** Privacy must be insured and the data must not be used for any secondary purposes. The goal of the system is to pay for roadways, not track individuals, or overtly control human behavior.



**Cost-efficient.** Administrative costs must be relatively minimal; on par with existing fuel tax efficiencies as that is the primary promise of technology utilization. Anything more will be viewed as inflationary and wasteful.