

# Public Works Financing

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## Transportation Policy Review

### Mileage-Based User Fees or Vehicle Mile Tax?

By Robert W. Poole, Jr., Director of Transportation Studies, Reason Foundation

In finally enacting a reauthorization measure, MAP-21, Congress kicked the can down the road when it comes to sustainable highway funding. Instead of repairing the increasingly broken system of dedicated fuel taxes, our lawmakers once again dumped general fund money into the Highway Trust Fund, “paying for” two years of that support with 10 years of non-transportation revenue tweaks.

Two years from now, when MAP-21 expires, the fiscal hole (the gap between fuel tax revenues and desired spending) will be even larger. So it is incumbent on those of us concerned about a well-funded highway system to devote serious effort during these two years to building support for a replacement funding system. The consensus among transportation researchers (and most state DOTs) is that the new system should be based on miles driven rather than gallons of fuel consumed. But the real question is how that per-mile charging should be done.

The apparent consensus on charging per vehicle mile of travel (VMT) breaks down once you start getting into details, as a session I attended in January at the annual meeting of the Transportation Research Board illustrates. One presentation, by an academic transportation planner, focused on how to calculate what the per-mile charge should be. It included reams of data on a long list of negative externalities of highway use (tailpipe emissions, CO<sub>2</sub>, noise, runoff, congestion, etc.), each of them quantified in cents per mile, plus (almost as an afterthought) a small charge for the cost of “maintaining” highway infrastructure. The total came to 6.4 to 9.6 cents per mile, with only 0.3 cents of this for infrastructure; all the rest was externality taxes.

In short, what this academic was proposing was a VMT tax—a measure designed to encourage people not to drive and shippers not to use trucks, by making the price of using highways vastly

higher than it is today.

In sharp contrast, another presentation at this very same session reported on focus groups and field tests with actual drivers exploring their reactions to various forms of per-mile charging systems as an alternative to current per-gallon fuel taxes. The general thrust of these presentations was on simplicity and on paying for the costs of building, maintaining, and modernizing highway infrastructure. (This research was funded by a state DOT.) In short, what was being researched here is a VMT charge—a measure designed to provide a viable, long-term replacement for fuel taxes as the way to pay for highway infrastructure.

Measuring everything needed to accomplish planners' vision of a VMT tax would almost certainly require a GPS box in every vehicle, connected to the on-board diagnostics that measure numerous vehicle performance parameters, as well as keeping precise track of where the vehicle is at all times, so that the long list of tax components can be calculated for each vehicle. And it is that vision—of “Big Brother” in your car by government mandate—that has been accepted by the media whenever the subject of VMT charging is covered. And that kind of coverage has already fueled mostly right-wing, populist opposition to the very idea of paying for highway use by the mile, rather than by the gallon. Even Glenn Reynolds, the generally libertarian University of Tennessee law professor who blogs as “Instapundit,” has embraced a version of this critique, most recently criticizing Oregon DOT's pioneering efforts in a *Popular Mechanics* piece.

After nearly a decade of research on VMT charging, my assessment is that implementation involving anything like the GPS-based VMT tax beloved of planners is highly unlikely. In addition to the overwhelming political opposition to “Big Brother tracking,” this approach is far too complex and costly if the goal is to replace charging per—in other words, if what we seek is a robust highway funding source rather than a new tax on driving.

My current thinking on how to implement mileage-based user fees starts with the premise that we should not focus on a one-size-fits-all solution. What makes sense for fleets of heavy trucks may be different from what makes sense for ordinary drivers. And what makes sense for congested urban freeways may be different from what makes sense for local streets and roads. In addition, it is unlikely that this transition will be led and managed by the federal government. A state-by-state approach, with some federal support, is far more realistic and likely.

My current scenario for change is along the following lines: There would be a simple, basic state per-mile charge (let's say one cent per mile) that would cover ordinary roads and highways but not the far more costly limited-access system (expressways and Interstates). The basic charge would be collected based on annual odometer readings, perhaps billed monthly. Premium facilities, which are already limited-access, would in effect be converted into toll roads, using current all-electronic tolling (AET) technology—transponders and video license-plate imaging. Charges for these facilities would be higher than the basic charge, given the much higher costs to build, operate, and maintain them compared with ordinary roads. And where congestion is a problem, variable pricing is quite feasible with current AET systems—no need for “Big Brother” GPS.

What is needed from the federal government is only a few enabling measures. First, of course, is

permission to charge for Interstates, as part of a transition to mileage-based user fees, and preferably in accordance with the Value-Added Tolling principles that I outlined in last month's column. Second, since lots of travel crosses state lines, Congress could assist with ongoing toll industry efforts toward nationwide interoperability of electronic tolling systems and nationwide enforceability measures involving state motor vehicle departments. Interstate tolling is a potential major first step in this transition toward mileage-based user fees, and is an appropriate goal for the next reauthorization bill.

But in the court of public opinion, what is most urgently needed is for highway advocates, such as the readers of this newsletter, to engage in the battle for hearts and minds on the issue of per-mile (rather than per-gallon) charging. We need to make it clear that we don't want a "VMT tax" as conceived by planners. Instead, we seek mileage-based user fees that are analogous to the bills people pay every month for their other network utility services: electricity, natural gas, water, phones, cable, etc. Those are all charges for services, not taxes, whether they are paid to an investor-owned utility or a government utility. That's what we need in the highway sector, as well.