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## Driving to replace the gas tax

There is a perfect storm brewing in surface transportation. Our infrastructure is eroding at an alarming rate, and the revenue to replace it isn't keeping pace.

Highways alone will require nearly \$5 trillion for preservation and congestion relief during the next decade, at a time when traffic congestion already has reached record levels. Even with recent declines in the U.S. motor vehicle fatality rate, traffic deaths still claim more than 33,000 lives each year.

Ignoring this Category 5 crisis isn't an option. As Congress continues to debate the next surface transportation funding bill, we risk compromising our way of life in far greater ways than being late for supper or missing a child's soccer game. Our nation's competitive edge depends on a robust infrastructure system. Solving our transportation funding problems will mean looking beyond the nozzle. We can no longer rely on the gas tax, an outdated concept negatively impacted by inflation, increased fuel efficiency and changing driving habits.

New solutions will take years to implement, yet technology actively under development, testing and usage right now can help us move toward a more equitable mileage-based user-fee system.

Since the 2005 passage of SAFETEA-LU, the last federal transportation funding bill, intelligent transportation systems have moved from the realm of research to real-world application.

Testing of advanced applications on actual roadways is underway in several major metropolitan areas, including metropolitan Detroit. It has successfully demonstrated a variety of benefits, such as stopped and merging vehicle

warnings, traffic signal alerts and electronic payment of parking tolls.

ITS already has become part of the American driving experience, whether motorists realize it or not. Most large cities use a variety of proven ITS technologies on freeways and tollways to monitor traffic conditions and improve incident management. The National Highway Traffic Safety Administration estimates new and near-future applications, such as lane-departure warning systems, adaptive cruise control, and emergency electronic braking systems, could prevent nearly half of all rear-end collisions.

Beyond safety considerations, when integrated with toll technology, such systems make it possible to charge road users for actual miles driven rather than using a surrogate, such as fuel consumption.

Mileage-based pricing is a true user-fee, a strategy much more in line with U.S. energy and environmental policy. You pay for the resources you consume, nothing more, nothing less. It takes into consideration actual miles driven, the time of day the travel occurred, the transportation facility or its jurisdiction, and vehicle type.

Executing the deployment of these systems and ensuring interoperability – avoiding the piecemeal and sporadic rollout consumers have experienced with toll tags – will require unprecedented collaboration among local, state and federal officials, as well as engineers, technology providers and the automotive industry.

Congress, for its part, should work more closely with the U.S. Department of Transportation to conceive a new program that reduces earmarks or requires them to meet specific criteria for approval. Funding for such

expenditures must be weighed against their ability to help solve the crisis we're facing.

Elected officials at every level need to build consensus and break down strong barriers and mindsets to such a dramatic change.

It is time. We can no longer assume driving on 1950s infrastructure will support America's challenges of congestion, safety and economic competitiveness. We have to move forward, reshaping how transportation projects are funded and delivered. Policy making at the pump must end.

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