Kirk T. Steudle, PE Director, Michigan Department of Transportation Hearing of the U.S. House Energy & Commerce Committee Subcommittee on Commerce, Manufacturing and Trade Tuesday, November 15, 2016

Thank you Chairman Upton, Ranking Member Pallone, Chairman Burgess and Ranking Member Schakowsky. I appreciate the opportunity to sit before this committee today to discuss with this esteemed panel a truly revolutionary technology: connected and autonomous vehicles.

When it comes to connected and autonomous vehicles, you could say I was an early adopter. My interest in this technology dates back more than a decade and while there are many benefits, none matter more than the potential to save lives.

At the Michigan Department of Transportation, safety is paramount. It defines everything the department does from road and bridge design to managing work sites to overseeing the work of contractors. That is why MDOT has embraced an ambitious Toward Zero Deaths goal.

Some 35,000 people died on our nation's roads last year, yet the reporting seems to fade into the background.

That is the equivalent of 350 plane crashes with 100 passengers each. Such catastrophes would each generate wall-to-wall media coverage. Yet, we seem to accept the automobile crash deaths that happen a few at a time.

As reported in a recent story in *The Atlantic Monthly*, published in September 2015, researchers estimate driverless cars could, by mid-century, reduce traffic deaths by as much as 90 percent. In the U.S. alone, that would mean saving 300,000 lives over a decade.

Let's face it. The exponential advent of technology shows no signs of slowing. That technology both enables and demands multi-tasking. Multi-tasking might be fine in some instances but not when it comes to driving. Despite ever-evolving laws and prolific safety messages, distracted driving continues to cause more crashes and more injuries and deaths as a result of those crashes. Automakers have made tremendous strides in building safer vehicles -- seat belts, air bags, antilock brakes, and more recently, lane control, adaptive cruise control, forward and rear assist and more.

But even while the technology and research continues to save lives, discovery of new distractions offset the gains. Today, more than 68 percent of U.S. adults have a smart phone. That is up from 35 percent just five years ago, according to the Pew Research Center. And the use of electronic devices is just one category in a growing list of driver distractions.

But I am not here to preach about the dangers of distracted driving. There are many wellresearched, poignant and compelling public education campaigns tackling that subject. But laws and safety messages can only effect so much change in behavior. If we refuse to accept increasing numbers of our friends and loved ones dying needlessly while exercising the basic human function of mobility, the solution should be to eliminate the conflict.

We are going to demand more and better personal mobility options even while we seek ways to maximize our time and complete many tasks at once. If you accept those basic truths, then you know the answer has to be autonomous vehicles.

While safety is the over-riding imperative, there are other vital benefits to autonomous or driverless cars. Chief among these are the extension of the freedom that comes with personal mobility in our golden years. If any of you have been in the position of taking a parent or other elderly relative's keys, you know how painful that can be.

My state has one of the oldest populations in the country, with 14 percent of residents being 65 or older in the 2010 census. I am thrilled at the prospect of automakers in Michigan leading in developing technology that will give those people mobility options.

Driverless cars, which evolve in many forms, offer the opportunity to grant us all precious autonomy. Soon, we will no longer define driving as something limited to those of us between the ages of 16 and 85 or 90 who are physically able to drive.

Just think of the quality of life benefits.

Autonomous vehicles will fundamentally change the way we move people and goods. Ridesharing is already having an impact on urban living, as more people choose that option, freeing up their time and disposable income.

This presents many questions about future land use, parking, consumption of fossil fuels, the evolution of public transit and others.

I should also emphasize some key things going on back in Michigan. With overwhelming bipartisan support, the Legislature last week adopted and sent to Gov. Snyder a package of bills that will keep Michigan at the forefront of these developments. Chiefly, the bills:

- allow complete AV operations on any road, any time, with no special license;
- allow for truck platooning;
- allow on-demand automatic networks; and
- create a council on future mobility

As for NHTSA, I think the agency has done a good job of identifying and distinguishing between the state and federal regulatory roles related to autonomous vehicles. States would regulate the operator or driver. Those regulations currently vary by state, just like graduated licenses requirements and the effects of penalties for impaired drivers.

The federal government has a long history of vehicle regulations for original equipment manufacturers and should continue. But Michigan strongly disagrees with the third-party certification process. That would create a middle man which will slow progress and the adoption of life-saving innovations. It will also introduce a third party into the liability equations.

This technology is best tested and validated by those that developed and understand the technology. They should be responsible for what is included in the vehicle and not abdicate responsibility by hiding behind a third-party tester.

For an example, look no farther than the current airbag recall. Imagine the finger pointing if a third party was in the middle of this discussion.

Thank you for the opportunity to testify on this important topic. I applaud the Committee for its continued exploration of autonomous vehicles, mobility, and the opportunities this game changing technology will present.