

Testimony of Troy Clarke,

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Senate Commerce, Science and Transportation Committee

“Transportation Innovation: Role of Automated Trucks and Our Nation’s Highways”

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Good morning Chairman Thune, Ranking Member Nelson and members of the committee. I am honored to be here this morning to discuss an important topic in our industry...autonomous technology applications in commercial trucks.

I am Troy Clarke, and I currently serve as the Chairman, President and Chief Executive Officer at Navistar, Inc., the manufacturer of International trucks, IC school buses, diesel engines and military vehicles. Navistar is headquartered in Lisle, Illinois just outside of Chicago and has over 12,000 employees worldwide.

I would like to first provide a quick overview of our industry.

There are four major commercial truck manufacturers in the country today. Ours is a small, highly competitive industry which expects to produce around 325,000 vehicles this year--a small fraction compared to the passenger car and light truck market.

Our customers range from large fleets like JB Hunt and Penske with thousands of vehicles to independent drivers operating one truck. We build our trucks and buses via mass customization ...each one tailored to meet the specific needs of a particular customer. Reliability, upfront costs and the vehicles’ residual value all impact purchasing decisions. A new truck ranges in price from \$60,000 to \$150,000....in other words, they represent major capital investments. And they only generate revenue for our customers when they are up and running. Given all of this, our customers invest significantly in the latest safety technology to protect this valuable capital asset as well as their most important human capital—the driver.

This explains why market penetration rates for technologies like electronic stability control, radar and cameras for object detection, lane departure warning systems, and collision mitigation systems have been increasing every year. We call these advance driver assistance systems or ADAS, and they offer quantum leaps of safety, productivity and environmental benefits. Many of them also serve as the building blocks to greater automation. An example of early automation in our industry is adaptive cruise control.

Navistar sees autonomous technology as an extension of the safety technology already in place and we believe that these greater levels of self-driving technology will help reduce human error, which accounts for approximately 94% of all motor vehicle accidents.

Before we arrive at that future, however, our customers tell me that they have much more immediate needs – they already have driverless trucks, but that’s because they have trouble recruiting and retaining drivers.

As truck makers, we don't hire or train drivers. Our customers do. But as we continue to develop technologies that could lead to completely autonomous vehicles, we will make many of them available to provide today's drivers with greater ease of use, comfort, safety, productivity and efficiency—factors that, I believe, will attract more people to this important and noble profession.

Personally, I believe drivers will become more like airline pilots—even more highly trained and skilled than they are today. They will be employed to manage multiple vehicle assets, for optimized safety and efficiency. For example, an autonomous vehicle may be deployed on a straight highway with mixed vehicles, while the driver sitting in his or her seat is managing the controls and monitoring several platooning trucks, and ensuring the safe and secure operation of the trucks under their care.

Autonomous technology is not being created in a vacuum. Our industry is developing Vehicle to Vehicle (V to V) systems to allow cars and trucks to “talk” to one another. As federal regulations are being drafted and implemented, we want to ensure that passenger and commercial vehicles are following similar safety and design standards for optimal compatibility. Otherwise, passenger cars equipped with V to V may not be able to communicate with large commercial vehicles which will create enormous blind spots in the transportation network and potentially create inadvertent hazards.

Ours is an industry of business to business transactions. Development and validation cycles are long, and penetration and adoption rates take more time than in the light vehicle industry. When we test on the road we have to match the conditions our customers face so we test trucks in many different states and climates. Trucks cross multiple state lines daily and sometimes traverse the same state multiple times in one day. It's important for industry to participate in the creation of advanced driving technologies now. Providing clarity on the legislative and regulatory front will allow us, truck manufacturers, to design and validate systems that meet the future needs of our customers while minimally disrupting the industry.

Advanced driving and autonomous technologies will come to our industry. Large scale displacement of drivers is not likely to happen, especially in the short and medium term. We believe these technologies will improve safety, improve productivity and lower cost, as well as lead to more efficient use of existing infrastructure. The commercial vehicle industry has proven that regulations and technology have worked together to advance the interests of all stakeholders.

The time for these discussions is now and I applaud the committee on holding this hearing so that we can begin the dialogue on this issue. I welcome any questions that you might have.