Opening Statement of the Honorable Robert E. Latta
Subcommittee on Digital Commerce and Consumer Protection
Hearing on "Self-Driving Vehicles: Levels of Automation"
March 28, 2017

(As prepared for delivery)

Good morning. Last month, this Subcommittee examined how automakers and other entities are testing self-driving vehicles and preparing for the deployment of this life-saving technology. While projections for the deployment of self-driving vehicles remain years out, advanced driver assistance systems that offer semi-autonomous driving capabilities are entering the marketplace today.

Advanced driver assistance systems are crash avoidance technologies that can protect drivers, reduce crashes, and enhance the convenience of driving. "Forward Collision Warning," "Blind Spot Detection," and "Lane Departure Warning" are examples of advanced driver assistance systems. These systems help drivers make safer decisions on the road by providing real-time information about surrounding roadway activity. The driver can receive this information through audible tones, steering wheel vibrations, or small flashing lights on side mirrors, alerting the driver to potential safety hazards on the road.

Increasingly, advanced driver assistance systems now entering the market are capable of taking a more active role in the driving task. Innovative systems such as "Automatic Emergency Braking" and "Lane Departure Prevention" can temporarily take control over parts of the vehicle's critical safety functions such as braking or steering. This can occur by the system either applying the brakes without input from the driver or steering the vehicle back into marked lanes following unintended drifting.

Automakers and equipment suppliers have announced additional innovative driver assistance systems that are currently in line for deployment. "Traffic jam assist" can take control of a vehicle's functions in low-speed, stop and go traffic. "Autonomous valet parking" can park itself and retrieve itself when summoned by the owner. And, "highway autopilot with lane changing" is being developed to change lanes and pass other vehicles without the input of a human driver.

The deployment of advanced driver assistance systems is demonstrating significant safety benefits across the country. Studies are showing that advanced driver

assistance systems and crash avoidance technologies are reducing crashes, roadway injuries, and insurance claims.

Advanced driver assistance systems are also an essential part in laying the groundwork for the deployment of fully self-driving vehicles. Through technological advancements by manufacturers and equipment suppliers, basic driver assistance systems are taking on more advanced capabilities that assume greater control of the vehicle's critical safety functions throughout a driving trip. The progression of these technologies is incrementally removing the human driver from the driving task and paving the way to full autonomy.

To provide consistency in the development of driver assistance safety technologies, standards-setting organization, SAE (S-A-E) International, developed a classification system that defines six different levels of driving automation. SAE's levels of automation establish the general scope of the driver assistance system and the role of the human driver in vehicles taking on increasing autonomous driving capabilities. The levels span from a vehicle with no automation all the way to a vehicle with full automation or a fully self-driving vehicle. Last September, the National Highway Traffic Safety Administration adopted SAE's levels of automation for its own use in its Federal Automated Vehicles Policy.

As we discuss the levels of vehicle automation today, I look forward to learning more about the capabilities of advanced driver assistance systems currently on the market and how these technologies are increasing vehicle safety and protecting America's motorists. I look forward to examining how these systems are informing the development of fully self-driving vehicles and how the auto industry is working to make these systems available across all models and fleets. I also look forward to hearing from witnesses about how consumers are adopting these technologies and how they are helping to build consumers' confidence in automated driving systems.