Automated driver assistance system (ADAS) and automated driving system (ADS) technology is evolving rapidly, and the increasing automation of the driving function presents an opportunity for society to improve road safety and mobility. It also presents a challenge for policy makers to develop an appropriate regulatory framework for the testing and deployment of highly automated vehicles or “self-driving” vehicles. As these innovations fundamentally change the nature of driving, property casualty insurers will have a key role to play in encouraging the safe and efficient introduction of advanced vehicle technology. In order to do so, insurers must have access to information and data to innovate and develop services, products and pricing to support the new automotive technologies.

The American Property Casualty Insurance Association (APCIA) is the primary national trade association for home, auto, and business insurers. APCIA promotes and protects the viability of private competition for the benefit of consumers and insurers, with a legacy dating back 150 years. APCIA members represent all sizes, structures, and regions – protecting families, communities, and businesses in the U.S. and across the globe. Together, APCIA members write 53 percent of the automobile insurance in the United States. We offer these comments to provide the Senate Committee on Commerce, Science and Transportation our perspectives on the safe testing and deployment of ADS equipped vehicles.

**Safety Standards, Exemptions and Testing of ADS Equipped Vehicles**

As vehicle automation increases, safety standards for the use of vehicle automation on public roads should be established to set clear expectations for the public and provide clear direction for technology developers and manufacturers for compliance. Separate safety standards should be developed appropriate to each level of automation, and regulatory agencies should have enough staff and funding to function effectively and keep pace with the rapidly evolving vehicle technology.

There should be standardization of terminology used to describe both automated driver assistance (ADAS) and automated driving systems (ADS) used for highly automated or “self-driving” vehicles. Common terminology would allow insurers to identify and differentiate systems by performance, for insurance product development and pricing. Common terminology would also enable the public to have a clearer understanding of the technology. Safety evaluation reports provided by developers and manufacturers of these systems should contain enough detail for regulators, insurers and the public to understand the technology, how it works and how to use it properly. Additionally, a public education program should be developed that addresses the proper use of both assisted (ADAS) and automated (ADS) driving systems and the associated risks.

All vehicles, including highly automated vehicles, should meet all federal and state safety requirements and be capable of complying with all state and federal motor vehicle laws. Exceptions to existing auto safety laws and motor vehicle safety standards should be rare, limited to only the highest levels (i.e. fully autonomous) of automated driving and should clearly define the levels of automation to which the modification applies.
Exceptions should not be made for collision protection standards.

Highly automated vehicle testing standards should address both road and simulated testing, include a variety of road, weather and traffic conditions and apply to vehicles intended for both personal and commercial transportation.

Development of a Single Data Access Standard and Data Set
As the driving function becomes increasingly automated, it will be necessary for insurers to determine what automated driving technology was engaged and how the vehicle was being operated at the time of an accident. Just like a human driver stores his or her recollections of an accident, automated driving systems should be capable of recording and reproducing data about how the vehicle was being operated, and the information used by the system to operate the vehicle. This includes, but is not limited to, what driving function the system was performing, speed of travel, braking and steering status, objects and other vehicles detected by cameras and sensors as well as information to determine if an automated vehicle operating system software was up to date at the time of the accident. Insurers will need access to accident data, pictures and video from an automated driving system on reasonable terms and in easily usable formats to allow for prompt resolution of claims for damage and injury arising from the accident.

To facilitate that exchange, APCIA urges Congress to direct the appropriate federal agencies to create a single standard for automated vehicle data access that follows the precedent of the Driver Privacy Act of 2015 which allows the vehicle owner to authorize access without the involvement of a third party (such as the manufacturer), provides access via court order or subpoena and provides access for federal, state and local government for safety research or for emergency response.

As part of the development of the data access standard, Congress should direct the appropriate federal agencies to work with state motor vehicle regulators and insurance regulators to develop a standard set of data elements to be recorded by an automated vehicle for crash investigation purposes.

Federal, State and Local Roles and Access to Courts
APCIA supports preservation of the current division of federal and state regulatory responsibilities for motor vehicles, with the federal government setting and enforcing safety standards for motor vehicles and recalls, as well as setting requirements for large vehicles. The states should continue to have primacy on motor vehicle “rules of the road”, liability issues, insurance requirements and regulation, as they do today. APCIA believes that our state based legal liability system has proven to be very adaptable to new technology and as such, APCIA opposes blanket immunity for manufacturers as well as strict liability imposed on vehicle owners for accidents involving automated vehicles.

Cybersecurity and Privacy
To protect the safety of the users and other motorists, standards for automated and connected vehicle systems should address protection of safety critical systems against cyber-attack. There should also be standards in place to protect the privacy of vehicle owners and users. However, ensuring the vehicle owners ability to authorize sharing of vehicle data on a secure and transparent basis, must be an essential element of the cybersecurity or privacy regulatory framework for automated vehicles.

Advisory Committees
The insurance industry has an essential role to play in encouraging the safe and efficient introduction of advanced vehicle technology, and the industry should be represented on any advisory committee related to automated vehicle safety or liability issues. APCIA would support an advisory committee on data access, however such an advisory committee should be in addition to, and not take the place of legislative language
that would establish a data access framework as recommended earlier in these comments.

**Conclusion**

Automated driving technology holds great promise for the future, and implementing clear standards for safety, maintaining the current federal and state roles in regulating automated vehicle technology and ensuring that insurers have access to vehicle data on reasonable terms to efficiently handle claims, develop products and underwriting methods are an essential first step toward that future. APCIA and its members stand ready to assist members of Congress and look forward to working together to establish a regulatory framework for automated driving.