



**AUTO ALLIANCE**  

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**DRIVING INNOVATION®**

STATEMENT

OF

**THE ALLIANCE OF AUTOMOBILE MANUFACTURERS**

BEFORE THE:

**SUBCOMMITTEE ON CONSUMER PROTECTION, PRODUCT SAFETY, AND INSURANCE  
OF THE COMMITTEE ON COMMERCE, SCIENCE AND TRANSPORTATION**

**HEARING ON “OVERSIGHT OF AND POLICY CONSIDERATIONS FOR  
THE NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION”**

**SEPTEMBER 16, 2014**

PRESENTED BY:

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VICE PRESIDENT, VEHICLE SAFETY & HARMONIZATION**

On behalf of the twelve automakers who are members of the Alliance of Automobile Manufacturers (Alliance), thank you for this opportunity to provide the Committee with an update on the state of motor vehicle safety and our industry's thoughts on developing a reauthorization proposal.<sup>1</sup>

It is important to recognize that this is the *safest* time in our nation's history in terms of motor vehicle safety. From 2007 to 2013, traffic fatalities fell by 20%.<sup>2</sup> Preliminary estimates released last month by the National Highway Traffic Safety Administration (NHTSA) and the National Safety Council project continued declines in 2014.<sup>3, 4</sup>

These are not just declines in the rate of traffic deaths (which is measured per 100 million vehicle miles traveled), but more remarkably, an absolute decline in the number of fatalities, even as the "exposure rate" – the number of Americans driving and vehicle miles driven – has increased dramatically. Nearly 18,000 fewer people died in traffic related crashes in 2012 than in 1980, even though there are approximately twice as many licensed drivers driving about twice as many vehicle miles as there were three decades ago.<sup>5</sup>

There is another facet of this success story of which auto manufacturers and the eight million Americans working in the auto sector are justifiably proud – motor vehicle occupant deaths have declined at a faster pace than the overall decline in traffic deaths. In 2007, 70% of people killed in traffic crashes were in passenger vehicles. By 2012, 65% were in passenger vehicles. At the same time overall traffic deaths were declining by 19%, deaths in passenger vehicles declined by 26%.<sup>6</sup>

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<sup>1</sup> The Alliance is a trade association of twelve car and light truck manufacturers comprised of BMW Group, Chrysler Group LLC, Ford Motor Company, General Motors Company, Jaguar Land Rover, Mazda, Mercedes-Benz USA, Mitsubishi Motors, Porsche Cars, Toyota, Volkswagen Group, and Volvo Cars. Together, Alliance members account for roughly three out of every four new vehicles sold in the U.S. each year. Auto manufacturing is a cornerstone of the U.S. economy, supporting eight million private-sector jobs, \$500 billion in annual compensation, and \$70 billion in personal income-tax revenues

<sup>2</sup> "Early Estimate of Motor Vehicle Traffic Fatalities for the First Quarter of 2014," NHTSA, DOT HS 812 055 (August 2014)

<sup>3</sup> Ibid

<sup>4</sup> "Motor-vehicle deaths down 4% in first six months of 2014," National Safety Council (August 2014)

<sup>5</sup> "Chart VMT 421-C," FHWA, Office of Highway Policy Statistics (2012)

<sup>6</sup> Analysis of "Passenger Vehicle Occupant Fatalities: The Decline for Six Years in a Row From 2005 to 2011," NHTSA, DOT HS 812 034 (June 2014) and "Traffic Safety Facts 2012," NHTSA, DOT HS 812 032 (2014)

A recent study by NHTSA confirms that automakers deserve a significant portion of the credit for the reduction of deaths and serious injuries for occupants of motor vehicles. In an analysis of fatal crashes in MY 1985 through MY 2012 vehicles, NHTSA found that drivers of MY 1985 – MY 1992 vehicles were 76% more likely to be killed in a crash than drivers of MY 2008 – MY 2012 vehicles.<sup>7</sup> Similarly, drivers of MY 2003 – MY 2007 vehicles were 20% more likely to be killed in a crash than drivers of MY 2008 – MY 2012 vehicles. These numbers represent dramatic improvements, but even so, motor vehicle safety remains a top concern for all Alliance members.

More than 90% of all crashes are a result of driver error, according to a recent NHTSA study of crash causation.<sup>8</sup> Thus, if our shared goal is to continue to reduce traffic fatalities and injuries, we need to continue our efforts on ways to reduce driver error or mitigate its effects. Moving forward, this is clearly the industry’s focus – one we hope is shared by NHTSA and the Congress.

The future of vehicle safety is evolving to include “crash avoidance” technology that helps prevent or mitigate crashes. Crash avoidance systems employ sophisticated software to interpret data from sensors, cameras, global positioning devices, and/or radar-based technologies that allow vehicles to sense the environment around them. Their features assist drivers to be aware of impending dangers, in some cases even taking over for drivers to help avoid accidents. There are about twenty different crash avoidance technologies available already on today’s vehicles, with more coming. Notably, all of these systems are being initiated and developed by automakers and suppliers and installed on vehicles – not as the result of government mandates.

Intervention technologies include electronic stability control and anti-lock brakes that help the driver keep the vehicle under control. These two technologies are present in nearly every new passenger car sold in America. In addition to these systems, new technologies, such as crash imminent braking and dynamic brake support, are being introduced to assist drivers to avoid or mitigate crashes in emergency situations. According to recent data compiled by the Highway Loss Data Institute, vehicles that brake automatically are expected to offer significant safety benefits.<sup>9</sup> Drivers of vehicles with these systems file 15-25% fewer property damage claims, and they are 33% less likely to file claims for crash injuries than the owners of similar, but unequipped, vehicles.<sup>10</sup>

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<sup>7</sup> “How Vehicle Age and Model Year Relate to Driver Injury Severity in Fatal Crashes,” NHTSA, DOT HS 811 825 (August 2013)

<sup>8</sup> “National Motor Vehicle Crash Causation Survey; Report to Congress,” NHTSA DOT HS 811 059 (July 2008)

<sup>9</sup> “Collision Avoidance Features: Initial Results,” Matthew Moore (Highway Loss Data Institute) and David Zuby (Insurance Institute for Highway Safety), ESV Paper Number 13-0126

<sup>10</sup> Ibid

Warning technologies – including blind spot warnings, lane departure warnings, cross traffic alerts, and forward collision warnings – provide audio, visual or other sensory alerts to help drivers take corrective action to avoid a crash. While drivers have the means to operate a vehicle safely without these features, these systems provide early warnings so that drivers can react to situations prior to a crisis or emergency developing.

Active driver assistance technologies may include lane keeping systems, adaptive cruise control, and automatic high beams. Drivers decide when to activate these systems, which then may assist the driver during routine driving tasks, provided road and environmental conditions permit.

As we move into the future, continuing to develop and implement crash avoidance beyond the constraints of a discrete vehicle by developing infrastructure and vehicles that communicate with each other has the potential to further enhance road safety. According to NHTSA, when fully deployed, connected vehicle technology could potentially address approximately 80% of crash scenarios involving non-impaired drivers. Connected vehicles also may help to enhance or enable a host of critical crash avoidance technologies.

The promise of a connected vehicle transportation system, however, requires the successful resolution of a number of complex policy and technical issues that will require unprecedented coordination between the public and private sectors and among disparate federal agencies for such things as governance, funding, implementation, and enforcement. Among the issues that Congress should be watching in this area are: infrastructure for connected vehicle security networks; governance of connected vehicle security certificates for safety; protection of consumer privacy, including data ownership, for connected vehicle data generation, transmission, and use (proper use and misuse); sustainable funding for implementation, and ongoing operations, governance, and maintenance of a connected vehicle infrastructure; international cross border needs and agreements; liability risk and intellectual property protection; and security licensing requirements.

Auto manufacturers are doing a great deal to usher in a new era in motor vehicle safety. As you consider the next NHTSA reauthorization bill, we recommend that the Committee focus on how the legislation can help NHTSA and the industry continue to improve traffic safety. The Alliance does not believe that increasing fines for the auto sector or potentially criminalizing interactions between auto manufacturers, suppliers and NHTSA will help make vehicles safer. Our overall record and approach speaks to our commitment to traffic safety, and the dramatic reduction in motor vehicle deaths confirms we are doing the right things.

Earlier this year the Department of Justice announced a fine against one automaker that vastly exceeded the civil penalty cap authorized under Title 49, demonstrating that the government already has adequate authority to address situations where it feels larger penalties are appropriate. We believe it a much more useful exercise to focus efforts on public policies that are critical to the broader safety goal of reducing driver errors that lead to fatal crashes on our nation's roads.

There are several things we believe that Congress can do to help expand auto safety.

First, protecting the radio frequency spectrum reserved for vehicle-to-vehicle (V2V) and vehicle-to-infrastructure (V2I) communications is critical. With the recent release of its ANPRM for V2V systems, the DOT has initiated rulemaking to require the industry to develop and implement these systems. The Federal Communications Commission (FCC) is proposing to open the 5.9 GHz band of spectrum to unlicensed users. To support the mission of reducing traffic fatalities, the FCC should adopt a "do-no-harm" policy of preserving this band of spectrum for V2V use unless and until rigorous testing has shown that auto safety potential will not be compromised.

The Alliance believes that the potential exists to achieve a good public policy outcome both for vehicle safety and for expanded wireless access; however, the requisite interference testing must be completed, and any outstanding issues must be resolved before a final rule is issued by the FCC. We encourage this Committee – which has jurisdiction over both agencies – to use the reauthorization to make very clear where it stands on this critical public safety issue.

Second, there needs to be renewed focus on reducing impaired driving and support of enhanced enforcement efforts. Impairment is a leading cause of driver error, and by far the leading cause of fatal crashes. Eliminating impaired driving would significantly help to reduce the number of people who die on our roads each year. For years, our primary focus – for obvious reasons – has been on reducing the number of alcohol-related crashes. The Alliance supports section 103 of S. 2760, which would make alcohol interlock grants more usable by states. In addition, Alliance members have been working in partnership with NHTSA to research advanced in-vehicle technology (a program called "DADSS") – that holds promise to help greatly reduce drunk driving. The Alliance appreciates the leadership role taken by this Committee in the last reauthorization to support this effort.

Looking ahead, we are concerned that the recent move by some states to legalize marijuana may open new challenges in the fight to stem impaired driving. We feel that any reauthorization should include resources for NHTSA to study this emerging issue and explicit additional flexibility for states to use federal safety grants to tackle this issue prior to the next reauthorization cycle.

Third, we urge you to continue to focus on distracted driving. As you are aware, NHTSA is only one-third of the way through its proposed strategy to address sources of distraction in motor vehicles. Almost 18 months ago, NHTSA published guidelines for in-vehicle systems, based on similar guidelines developed by Alliance members a decade ago. The Agency's stated next step is to develop similar guidelines for portable devices, such as smartphones and portable navigation systems, when they are used by drivers. Failing to develop such complementary guidelines could have significant adverse safety consequences because it likely will incentivize drivers to use unregulated, hand-held devices rather than more limited, hands-free in-vehicle systems.

One reason for the apparent delay in progress on portable device guidelines is the question over NHTSA's authority to regulate such devices, even when used in vehicles. Former Administrator Strickland has said that the Agency has that authority, and we agree. The DOT requested that Congress further clarify the Department's authority in Section 4105 of the reauthorization proposal it submitted to Congress. We encourage the Committee to provide the requested clarification or otherwise clearly delineate the Agency's authority to carry out this important task. We live in a world where smart phones and other portable devices are far more ubiquitous than in-vehicle systems, and policies should be developed to address this key factor of the distracted driving problem.

Fourth, we encourage the Committee to set aside some resources to help address the growing need for cybersecurity measures in the auto sector. The implementation of advanced computer systems has resulted in significant improvements to vehicle safety and the overall driving experience; however, it also raises our awareness that bad actors could try to hack into vehicle systems. The industry as a whole has demonstrated its clear intent to address possible future threats. Recently, the Alliance and Global Automakers announced that we are jointly investigating the development of a cyber-threat information-sharing platform, such as an Information Sharing and Analysis Center (ISAC), which further demonstrates our members' collective and proactive approach. Setting up a properly functioning ISAC or other comparable program is a significant undertaking, as evidenced by the recent announcements by the aviation and oil and gas industries. Those industries are expected to stand up their ISACs later this year after a thorough 12- 18 month process. Historically, the federal government has provided seed money in partnership with the private sector to help jump-start the process and in recognition that protecting against cyber-attack is a shared responsibility and a public good.

In the coming years, NHTSA and the auto sector will also have to ensure that safety critical applications, such as V2V communications, are secure, particularly given that those systems depend on transmission and receipt of data outside the vehicle. A properly functioning V2V system will require a robust security certificate management system (SCMS). NHTSA's research report has indicated that the initial costs of setting up a SCMS just for V2V will run into the tens

of millions of dollars. The SMCS in effect will function as a highway version of an air traffic control system. An SCMS that additionally comprehends wireless connections between vehicles and infrastructure, as well as between vehicles and other devices, will require a much larger SCMS that will have to manage a significantly more complex security space. As such, it will cost even more and require more oversight. Given that the potential societal benefits will be to public roads, the funding model and rule structure for creating and operating the SCMS should be fully evaluated.

Finally, we encourage the Committee to accelerate the proliferation of crash avoidance technologies in the new car fleet by directing NHTSA to provide fuel economy compliance credits for the installation of these technologies. In a recent white paper, NHTSA noted that “Vehicle control systems that automatically accelerate and brake with the flow of traffic can conserve fuel more efficiently than the average driver. By eliminating a large number of vehicle crashes, highly effective crash avoidance technologies can reduce fuel consumption by also eliminating the traffic congestion that crashes cause every day on our roads.”<sup>11</sup> The Federal Highway Administration estimates that 25% of congestion is attributable to traffic incidents, around half of which are crashes.<sup>12</sup> The addition of crash avoidance technologies has the potential to reduce crashes, which will in turn reduce congestion.

NHTSA should be directed to estimate potential fuel savings of crash avoidance technologies and to incorporate equivalent credits into manufacturers’ fuel economy compliance. The credits are a win for safety, for the environment, and for consumers, who will see the proliferation of such systems sooner and at a lower price point, if installing them helps to offset the costs of fuel economy compliance.

The Alliance believes that the future of driving safety is very bright, and with the right public policies in place, industry and government can work together to continue the reduction in fatalities and serious injuries that we have been seeing. Getting there will require many pieces of a complex policy puzzle to fit together in addition to the technological advancements the industry is making.

Working together, we can make this vision reality.

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<sup>11</sup> National Highway Traffic Safety Administration (May 30, 2013) Preliminary Statement of Policy Concerning Automated Vehicles. Washington, DC

<sup>12</sup> Federal Highway Administration (2005). Traffic Congestion and Reliability: Linking Solutions to Problems. Washington, DC