December 11, 2017

The Honorable Sam Graves, Chairman

The Honorable Eleanor Holmes Norton, Ranking Member

Subcommittee on Highways and Transit

Committee on Transportation and Infrastructure

U.S. House of Representatives                                                                         
Washington, DC 20515

Dear Chairman Graves and Ranking Member Norton:

The Truck Safety Coalition (TSC) and Road Safe America (RSA) thanks Members of the U.S. House Subcommittee on Highways and Transit for holding the important roundtable, “Emerging Technologies in the Trucking Industry.” We look forward to collaborating with Members of the Subcommittee, safety advocates, technology companies, and leaders in the trucking industry to determine the benefits of requiring currently available driver assisted technologies in commercial motor vehicles. We will also remain committed to working with all parties to create an oversight framework that ensures safety is the top priority in the development of future autonomous vehicle (AV) policies.

TSC and RSA recognize the potential safety benefits of AV technologies in trucking, especially at a time when truck crashes continue to climb. Since 2009, truck crashes have gone up by 45 percent, resulting in a 57 percent increase in truck crash injuries. From 2009 to 2016, the number of truck crash fatalities increased 28 percent, totaling 4,317 fatalities. There are technologies, like automatic emergency braking and speed limiters, which have been proven effective by numerous motor carriers. Unfortunately, these regulations have not yet been finalized. This must change. These technologies can prevent crashes, reduce injuries, and save lives, all while enhancing the efficiency of motor carriers in a cost-beneficial manner.

**Current Technologies**

We are excited by the potential of AV technology to prevent and mitigate thousands of crashes in which human error is a factor, but want to remind lawmakers of their responsibility to ensure that the process for testing and developing these technologies in commercial motor vehicles does not jeopardize public safety. As we continue to discuss future autonomous vehicle technologies, we urge Members and policymakers to finalize rulemakings requiring automatic emergency braking (AEB) and heavy vehicle speed limiters on all class 7 and 8 trucks.

Mandating speed limiters be set on all such trucks is a commonsense step to improving truck safety that will produce more benefits than costs. Since the 1990s, speed limiter technology has been built into all such truck engine control modules, which eliminates the cost of installing this life saving technology. Additionally, motor carriers will see a return on investment by reducing their speed-related, at-fault crashes – some of the deadliest and costliest types of truck crashes. In fact, the Ontario Ministry of Transportation found that speed-related, at-fault truck crashes dropped by 73 percent after Ontario’s truck speed limiter mandate took effect. Moreover, the Ontario study debunked a common claim that requiring speed limiter settings on trucks would lead to an increase in crashes due to speed differentials.

Automatic emergency braking is not a new technology either. The European Union mandated AEB on large trucks back in 2012, requiring all new trucks to be equipped with it by 2015. Here in the U.S., motor carriers have been using AEB long enough to establish its effectiveness and reliability. In fact, one trucking company saw their number of rear-end collisions decrease by nearly 80 percent from 2003 to 2015 after equipping their fleet with an active system of collision avoidance and mitigation.

Another large trucking company, performed an internal study over a 30-month period on approximately 12,600 of its trucks to determine the extent to which a suite of safety technologies (AEB, electronic stability control (ESC), and lane departure warning) installed on the trucks in its fleet reduced the frequency of various types of collisions. The results were clear and compelling: trucks equipped with the suite of safety systems had a lower crash rate and frequency of engagement in risky driving behavior compared to vehicles without such systems; these trucks exhibited a 71 percent reduction in rear-end collisions and a 63 percent decrease in unsafe following behaviors.

Members of the Subcommittee should acknowledge the drastic reductions in truck crash fatalities in the European Union, which requires both speed limiters and automatic emergency braking. They should listen to safety officials of successful companies, like Mr. Woodruff of J.B. Hunt, who discussed at the roundtable the safety and cost benefits of equipping their trucks with a suite of safety technologies. The fact the 96 percent of J.B. Hunt’s fleet is equipped with a combination of technologies that has resulted in a 60 percent reduction in crashes is a clear, real-world example that the rest of the industry should follow.

We are hopeful that Members will join us in calling on the Federal Motor Carrier Safety Administration and National Highway Traffic Safety Administration to finalize rulemakings for heavy vehicle speed limiters and automatic emergency braking. If we are truly serious about realizing a future with fully autonomous commercial vehicles, we must recognize that these technologies serve as building blocks to achieving that. More importantly, we must recognize that these technologies can improve safety today, rather than several years from now.

**Autonomous Vehicle Technology**

Fully autonomous trucks are both inevitable and fast approaching. The speed of the technological advancements in trucking, however, does not absolve the Department of Transportation (DOT) of its responsibility to promote safety across an industry that engages in Interstate commerce on publicly funded roads. The DOT cannot abide by a weak voluntary agreement. Instead, the Department must develop an oversight framework that protects public safety without inhibiting innovation.

It may only be several years before driver-assisted and autonomous commercial motor vehicles will be operating alongside driver-operated vehicles. Consequently, it will become increasingly important for the federal government to standardize the tests, methods, and metrics to determine the effectiveness of AV technology. Failure to do so could result in trucks operating with unreliable and unsafe technologies and testing that does not accurately assess whether a technology will perform as intended. This creates two potential problems: 1) a technology intended to make our roads safer will weaken safety on our roads, and 2) public confidence in this technology will erode, making it more difficult for manufacturers to roll out on a large scale.

**No Exemptions for Trucks**

Our organization supports several recommendations that we believe will make sure that the rollout of AV technology in trucks is both safe and smooth. There is an important role for federal oversight regarding the development and deployment of autonomous vehicle technology. Factors that should be considered in AV technology in trucks includes:

**Manufacturers of AV Technology Requirements**

* AV systems must comply with Federal Motor Vehicle Safety Standards without any exemptions
* AV systems must meet or exceed a “functional safety standard” as to be determined by the National Highway Traffic Safety Administration (NHSTA)
* AV systems must meet or exceed a minimum cybersecurity standard as to be issued by the Secretary within 3 years of enactment of this legislation
* Submit a detailed report that analyzes the safety performance of automated driving systems and automated vehicles
* Remove from operation any autonomous commercial motor vehicle with a defect
* Determine whether a defect affects one vehicle or if the defect is fleet-wide
* Report all fatal, injury and property damage only crashes involving driver-assisted and autonomous trucks to NHTSA
* Establish a privacy plan

**Motor Carrier Requirements for Testing**

* Apply for additional operation authority
* An operator with a valid commercial driver’s license must be in the autonomous commercial motor vehicle at all times during testing
  + The operator shall have an additional endorsement on his CDL denoting that he has been adequately trained to manage the AV technologies in the truck

**Secretary of Transportation Requirements**

* Establish a database for autonomous commercial vehicles. Information should include:
  + Vehicle’s identification number
  + Manufacturer, make, model and trim information
  + Level of automation and operational design domain of each of the vehicle’s automated driving systems
  + Any exemptions from federal motor vehicle safety standards granted to the vehicle
* Promulgate a regulation on driver engagement
* Determine any additional enforcement measures pertaining to AV technology that state and local law enforcement should consider during road side inspections
* Request and direct additional resources to NHTSA and the Federal Motor Carrier Safety Administration (FMCSA) to develop regulations and execute enforcement efforts relating to AV technology.

AV technology can potentially eliminate many preventable injuries and needless deaths, but we strongly advise policy-makers to proceed prudently and ensure that safety is paramount in all discussions of it. We look forward to more opportunities to collaborate, like last week’s roundtable, to determine the benchmarks of adequate testing, the extent of federal oversight, and the details of safety standards as we work towards realizing driver assisted and autonomous trucks that reduce crashes, and the resulting death and injury tolls.

Sincerely,

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| John Lannen  Executive Director  Truck Safety Coalition | Steve Owings  Co-Founder  Road Safe America |

cc: Members of the House Committee on Transportation and Infrastructure