House Committee on Energy and Commerce
Subcommittee on Consumer Protection and Commerce
Hearing on "Summer Driving Dangers: Exploring Ways to Protect Drivers and Their Families"
Testimony of Gary Shapiro, president and CEO, Consumer Technology Association
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Chair Schakowsky, Ranking Member McMorris Rodgers, and members of the subcommittee, thank you for the opportunity to testify today. I am Gary Shapiro, president and CEO of the Consumer Technology Association (CTA)<sup>TM</sup>.

The Consumer Technology Association is the trade association representing the \$398 billion U.S. consumer technology industry, which supports more than 18 million U.S. jobs. CTA represents more than 2,200 American companies – 80% of which are small businesses and startups. We also own and produce CES – the largest and most influential tech event in the world, held each January in Las Vegas. I am fortunate to have a front row seat each day as our members develop and introduce innovative and life-changing products and services, create jobs, and grow the economy. At CTA, we work to advance public policy that fosters innovation, advances competitiveness, and promotes job and business creation. Today I will highlight the role advanced vehicle technologies and innovation can play in reducing roadway deaths.

Technology is changing our lives for the better, including innovations that can save thousands of lives every year in the U.S. More than 37,000 people died on U.S. roads in 2017 – that's more than 100 traffic deaths per day – and 94% of serious crashes are due to human error, according to the National Highway Traffic Safety Administration.<sup>1</sup>

This weekend alone, more than 37 million Americans will hit the road for holiday travel over Memorial Day weekend—up 3.5% from last year. This increase in travel – an extra five miles a day per driver, according to AAA – can also lead to a higher risk of accidents.<sup>2</sup>

Fortunately, technology continues to improve vehicle safety and provide options for consumers. Many technologies exist today, and others, like self-driving technology, are advancing rapidly. At CES® 2018, Carol Staninger, a passionate advocate for the welfare of children and president of Ancer, LLC, exhibited for the first time at age 82. After seeing news stories about children and dogs accidentally left in hot cars, Carol decided she could make a difference—through technology. Carol invented a presence detector and alarm device called Save Our Loved Ones (SOLO) to prevent children, pets or seniors being left alone in cars.<sup>3</sup> Many other entrepreneurs have introduced devices to solve this problem using connected car seats, apps, and Bluetooth devices. They all help remind parents to check the back seat.

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<sup>&</sup>lt;sup>1</sup> https://www.nhtsa.gov/press-releases/us-dot-announces-2017-roadway-fatalities-down

<sup>&</sup>lt;sup>2</sup> https://newsroom.aaa.com/2019/05/memorial-day-travel-forecast-2019/

<sup>&</sup>lt;sup>3</sup> https://saveourlovedones.com/about-us/

Automakers have also worked to address this problem. Nissan has the Rear Door Alert system, which monitors when the rear door is opened and closed before and after the vehicle is in motion. The system responds with a series of notifications if a rear door was used prior to a trip but was not re-opened after the trip.<sup>4</sup>

Several other tech-enabled safe-driving products on the road today can help increase safety—there are tools to help parents monitor teenage drivers, prevent distraction and alert first responders in the case of an emergency.

Vehicle technology has an enormous presence at CES and grows every year. At CES 2019, more than 170 vehicle technology exhibitors showcased the latest in self-driving technology—from Bosch's all-electric, self-driving pod to Qualcomm's 5G-enabled, self-driving chipset. These innovators underscored how self-driving technology will save lives, boost our economy and open a world of possibilities for passengers.

CTA represents innovators in the diverse vehicle transportation ecosystem who are developing an array of highly automated and self-driving technologies. Self-driving vehicles will lead to an enormous reduction in roadway fatalities. Self-driving vehicles cannot become distracted, fatigued or impaired and have a 360-degree view around the vehicle. By avoiding a myriad of traffic violations that cause so many accidents, self-driving technology has the power to save thousands of lives a year.

Not only will self-driving vehicles save lives, they'll also provide new opportunities for mobility to seniors and people with disabilities. A report from the Ruderman Family Foundation estimates that self-driving cars could open two million employment opportunities for people with disabilities. But the impact it will have on the quality of life of people with disabilities cannot be captured by a number. Self-driving vehicles will enable seniors to maintain their independence for longer—no more waiting for a family member to drive to a doctor's appointment or run important errands.

The potential economic benefits of self-driving vehicles are enormous—up to \$796 billion by 2050 according to a study by Securing Americas Future Energy. Full adoption of self-driving vehicles in the U.S. could cut insurance premiums by 40%. As they reduce vehicle injuries they will cut medical costs and productivity losses, now estimated to be \$63 billion annually in the U.S. for driving related injuries.

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<sup>&</sup>lt;sup>4</sup> https://nissannews.com/en-US/nissan/usa/releases/rear-door-alert-technology-to-become-standard-on-all-four-door-nissan-nameplates

<sup>&</sup>lt;sup>5</sup> https://rudermanfoundation.org/white papers/self-driving-cars-the-impact-on-people-with-disabilities/

<sup>&</sup>lt;sup>6</sup> https://avworkforce.secureenergy.org/wp-content/uploads/2018/06/Americas-Workforce-and-the-Self-Driving-Future Realizing-Productivity-Gains-and-Spurring-Economic-Growth.pdf

<sup>&</sup>lt;sup>7</sup> https://www.bloomberg.com/news/articles/2016-09-11/self-driving-cars-to-cut-u-s-insurance-premiums-40-aon-says

<sup>8</sup> https://www.cdc.gov/motorvehiclesafety/costs/index.html

We will see increases in productivity as people waste less time in traffic. We will need fewer parking structures, opening new areas for green space and development. Research suggests self-driving cars and related innovations have the potential to create millions of new jobs and generate billions of dollars' worth of economic activity in the years ahead, making it crucial to maintain U.S. leadership in this emerging industry.<sup>9</sup>

Development of self-driving vehicles is happening rapidly. Several companies are already testing self-driving vehicles today. Waymo is operating a ride hailing service with Level 4 minivans outside of Phoenix, Arizona, and the company recently announced a partnership with Lyft to offer the service to more local consumers through the Lyft app. <sup>10</sup> The vehicles currently have trained drivers behind the wheel, but providing this self-driving experience to consumers will go a long way in educating them on the capabilities and benefits of this technology.

Providence, Rhode Island, just launched a public pilot project with self-driving shuttles, one of many cities that have recognized early the value this technology can bring to its citizens. The project highlights the opportunity to fill existing gaps in public transportation by linking commuters in underserved communities to Amtrak, commuter rail and other bus stops.

The road to fully self-driving vehicles is a global competition and we expect every leading nation to confront tough issues, as self-driving accidents will occur—although in minuscule numbers compared to our national annual carnage from human drivers. Some argue self-driving vehicles should not be deployed until systems are perfect. This is a dangerous road, as perfection may be an unreachable goal. Human drivers make many preventable errors while behind the wheel. Delaying self-driving vehicles by insisting upon an impossible-to-achieve standard for perfection will cost tens of thousands of lives each year. A Rand report found that deploying cars that are just 10% safer than the average human driver will save more lives than waiting until they are 75% or 90% better. We will be able to save millions of lives in the future, but only if we are willing to continue moving forward. The perfect must not be the enemy of the great.

We don't have to wait for fully self-driving vehicles to start cutting down on roadway deaths. Driver-assist technology is already saving lives, avoiding accidents and paving the way for completely self-driving innovations still to come. Advanced Driver Assistance Systems (ADAS) can prevent nearly 30% of all crashes, saving 10,000 lives. Lane-departure warning lowers rates of certain crashes by 11% and lowers the rates of injury from crashes by 21%. We should promote technologies that help drowsy or inattentive drivers stay focused or provide specific responses such as automatic braking and lane-drift avoidance—all of which are now

<sup>&</sup>lt;sup>9</sup> https://avworkforce.secureenergy.org/wp-content/uploads/2018/06/Americas-Workforce-and-the-Self-Driving-Future Realizing-Productivity-Gains-and-Spurring-Economic-Growth.pdf

<sup>&</sup>lt;sup>10</sup> https://www.theverge.com/2019/5/7/18536003/waymo-lyft-self-driving-ride-hail-app-phoenix

<sup>&</sup>lt;sup>11</sup> https://www.wpri.com/news/local-news/providence/self-driving-shuttles-set-to-hit-the-road-in-providence/2001011552

<sup>12</sup> https://www.rand.org/pubs/research reports/RR2150.html

<sup>&</sup>lt;sup>13</sup> https://www.mema.org/sites/default/files/MEMA%20BCG%20ADAS%20Report.pdf

<sup>&</sup>lt;sup>14</sup> https://www.automotive-fleet.com/141839/lane-departure-warning-drops-crash-rates-study-shows

increasingly available in newer model vehicles. The aftermarket industry provides a valuable service in allowing consumers to add life-saving technologies to vehicles they already own. As the average age of vehicles on the road today tops 11 years, aftermarket solutions will continue to play a critical role in increasing the use of vehicle safety technologies.

Congress and the Department of Transportation have recognized the value of self-driving vehicles. Last year, the SELF DRIVE Act, which CTA supported, passed out of this committee and onto the House floor unanimously. This important legislation would have been a jump start toward adapting our vehicle safety laws to address self-driving technology and would have created more opportunities for testing and deployment. While politics got in the way of getting it across the finish line, I am encouraged by the continued efforts of the Department of Transportation and members on both sides of the aisle to move our country forward and advance this life-saving technology.

I ask the committee to continue this leadership. Challenges remain on the road to self-driving vehicles. Current vehicle safety standards and regulations will need to be updated. Consumers will need to be educated on the capabilities of the technology. Insurance and liability laws will need to adapt. While there is much work to be done, it is essential we keep working together to make the goal of zero road fatalities a reality.