April 12, 2016

TO: Members, Subcommittee on Commerce, Manufacturing, and Trade

FROM: Committee Majority Staff

RE: Hearing entitled "NHTSA Oversight."

I. INTRODUCTION

On Thursday, April 14, 2016 at 10:00 a.m. in 2123 Rayburn House Office Building, the Subcommittee on Commerce, Manufacturing, and Trade will hold a hearing entitled "NHTSA Oversight."

II. WITNESSES

First Panel

• Mark Rosekind, Ph.D., Administrator, National Highway Traffic Safety Administration.

Second Panel

- Mitch Bainwol, President and CEO, Alliance of Automobile Manufacturers;
- John Bozzella, President and CEO, Global Automakers;
- Michael Wilson, CEO, Automotive Recyclers Association;
- Ann Wilson, Senior Vice President, Motor & Equipment Manufacturers Association; and
- Jackie Gillan, President, Advocates for Highway and Auto Safety.

III. BACKGROUND

The National Highway Traffic Safety Administration (NHTSA) was established by Congress in 1970 through the Highway Safety Act to reduce deaths, injuries, and economic losses resulting from motor vehicle crashes. A combination of rapid changes in vehicle technology and large scale recalls has challenged the agency over the last several years. The following issues may be examined at the hearing:

A. IG Recommendations

In June 2015, the Department of Transportation's Office of Inspector General (IG) issued an Audit Report examining NHTSA's internal processes and procedures for identifying and

¹ See http://www.nhtsa.gov/About+NHTSA/Who+We+Are+and+What+We+Do

investigating potential vehicle safety issues.² The IG found that NHTSA's data collection and analysis processes were inadequate and undermined the agency's ability to effectively identify and investigate vehicle safety concerns.³ In light of the IG's findings, in addition to increasing vehicle recalls over the last two years, stagnant vehicle recall completion rates, and an increase in traffic fatalities, a number of questions have been raised about NHTSA's ability to fulfill its core mission.⁴

Following the IG's June 2015 Audit Report finding of inadequate data collection and analysis processes at NHTSA, the IG proposed seventeen recommendations targeted towards improving those processes at NHTSA's Office of Defects Investigation (ODI).⁵ Recommendations included the implementation of standardized processes at ODI for its review of early warning reporting data and its verification of vehicle manufacturers' compliance with reporting requirements.⁶ Recommendations were also aimed at improving the agency's ability to identify potential vehicle safety issues that warrant investigation.⁷ After reviewing the IG's report, NHTSA announced that its anticipated completion date for all seventeen recommendations would be June 30, 2016.⁸

In addition to NHTSA's commitment to implement the IG's recommendations, the Fixing America's Surface Transportation (FAST) Act, signed into law on December 4, 2015, created monetary incentives for NHTSA to implement the recommendations. The FAST Act provides NHTSA with budgetary increases ranging from \$46 to \$69 million for fiscal years 2016 to 2020 if it certifies to Congress that it has implemented all seventeen recommendations contained in the IG's Audit Report.

B. FAST Act Implementation

The FAST Act included a title on motor vehicle safety, which contained several provisions intended to improve NHTSA's internal processes and aid the agency's efforts to increase vehicle safety and protect motorists. ¹¹ Specifically, the safety title authorized increased funds to NHTSA to support its vehicle safety programs (as mentioned above), established requirements for NHTSA to increase the availability of safety recall information to consumers, and included a requirement to submit an annual agenda to Congress detailing the agency's projected activities

 $^{^2}$ See https://www.oig.dot.gov/sites/default/files/NHTSA%20Safety-Related%20Vehicle%20Defects%20-%20Final%20Report%5E6-18-15.pdf

³ Id.

⁴ See http://www.safercar.gov/Vehicle+Owners/vehicle-recalls-historic-recap;

See also http://www.nhtsa.gov/About+NHTSA/Press+Releases/nhtsa-sees-roadway-deaths-increasing-02052016

⁵ See https://www.oig.dot.gov/sites/default/files/NHTSA%20Safety-Related%20Vehicle%20Defects%20-%20Final%20Report%5E6-18-15.pdf

⁶ Id.

⁷ Id.

⁸ Id.

⁹ See https://www.gpo.gov/fdsys/pkg/BILLS-114hr22enr/pdf/BILLS-114hr22enr.pdf

¹¹ See https://www.gpo.gov/fdsys/pkg/BILLS-114hr22enr.pdf

Page 3

for the upcoming calendar year.¹² In addition, the title contained a measure requiring automakers to provide more information about defective components or parts involved in a safety recall.¹³

In addition to those reforms, the safety title directed NHTSA to increase its notification and outreach practices among consumers to improve recall completion rates; it updated remedy and repair obligations among automakers for cars under recall; and it required automakers to certify the accuracy of documents submitted to NHTSA by a senior official of the company. ¹⁴ The title also directed NHTSA to do more to facilitate the deployment of advanced automotive safety technologies capable of reducing vehicle collisions and traffic fatalities. ¹⁵

C. Recalls

In 2014, there were over 63 million vehicles recalled for safety defects and noncompliance with federal motor vehicle safety standards. ¹⁶ The number of vehicles recalled in 2015 was also above traditional levels. ¹⁷ The rise in safety recalls over the past few years has been attributed to increased vehicle technology and complexity, shared supply chains among vehicle manufacturers, increased scrutiny from safety regulators and government officials, and consumers holding onto their vehicles for longer periods of time. ¹⁸ However, despite increased vehicle recalls, overall recall completion rates among consumers have remained around 70 percent. ¹⁹ For cars aged five to ten years old, recall completion rates are much lower at approximately 44 percent, and for cars above ten years old, recall completion rates are estimated to be at 15 percent. ²⁰

Last April, NHTSA held a workshop with auto industry representatives, safety advocates, and researchers to examine how to increase low recall completion rates. The agency issued a challenge to attain 100 percent recall completion rates for cars with safety defects by encouraging the auto industry to improve communications with customers; speed up parts availability and prioritize distribution; and create incentives and innovative ideas to get to 100 percent recall completion. ²²

¹² See https://www.gpo.gov/fdsys/pkg/BILLS-114hr22enr/pdf/BILLS-114hr22enr.pdf

¹³ Id.

¹⁴ Id.

¹⁵ Id.

¹⁶ See Annual Recall Reports 1966-2014. Available at: http://www.safercar.gov/Vehicle+Owners/vehicle-recalls-historic-recap

¹⁷ See http://www.detroitnews.com/story/business/autos/2015/08/16/stringent-auto-recalls-new-normal/31834869/
New York Times. "More Complex Cars and Stricter Rules Lead to More Recalls." October 26, 2005. Available at: http://www.nytimes.com/2005/10/26/automobiles/autospecial/more-complex-cars-and-stricter-rules-lead-to-more-recalls.html

¹⁹ Timian, Jennifer. Chief, Recall Management Division, Office of Defects Investigation, NHTSA. Safety Recalls Completion Presentation. 2012 Government/Industry Meeting. January 25, 2012. Available at: http://www.sae.org/events/gim/presentations/2012/timian.pdf; See also GAO Report on Auto Safety: NHTSA Has Options to Improve the Safety Defect Recall Process. June 2011. Available at: http://www.gao.gov/assets/320/319698.pdf

²⁰ See http://www.autonews.com/article/20160308/OEM11/160309882/automakers-facing-u.s.-fines-try-novel-ways-to-reach-owners-of

See http://www.nhtsa.gov/About+NHTSA/Press+Releases/2015/nhtsa-retooling-recalls-workshop-04282015

²² See http://www.nhtsa.gov/nhtsa/symposiums/april2015/index.html

In January, NHTSA, along with eighteen automakers, released Proactive Safety Principles for 2016. The principles included an objective to maximize safety recall participation rates by sharing industry best practices among all automotive industry stakeholders and increasing public awareness of ongoing recalls to achieve 100 percent consumer participation. The principles also included an objective to conduct outreach to new and used vehicle retailers, insurers, state legislators, and DMVs (Departments of Motor Vehicles), with "a particular focus on older vehicles" to help remove defective vehicles from the road and get them fixed. 25

1. Takata Airbag Inflator Defects and Safety Recalls

Last June, the Commerce, Manufacturing, and Trade Subcommittee held its second hearing to examine NHTSA's ongoing investigation into the Takata airbag ruptures.²⁶ At that time, six confirmed deaths, hundreds of injuries, and recalls affecting eleven automakers had been reported.²⁷ The total number of defective Takata airbags in U.S. vehicles was reported to be over 30 million however that figure was later revised to 19.2 million defective airbags.²⁸ Since the Subcommittee's June hearing, five additional deaths have been linked to the Takata airbag ruptures, including the tenth death in the U.S. that occurred on March 31 in Fort Bend County, Texas.²⁹ In addition, more automakers have been implicated, and approximately 5 million more vehicles have been recalled because of the safety defect.³⁰

The magnitude and complexity of the Takata airbag inflator defects and recalls prompted NHTSA to issue a Coordinated Remedy Order in November 2015, which established a Coordinated Remedy Program to accelerate the replacement of defective Takata airbag inflators in vehicles across the United States.³¹ As part of the Coordinated Remedy Program, the order prioritized defective vehicles in need of repair into four groups based on their risk of experiencing an airbag inflator rupture.³² To accelerate the repair process, the order established target dates for affected vehicle manufacturers to have sufficient replacement parts available to fix vehicles in each of those four priority groups.³³ The order also established a target deadline for automakers to fully implement and execute their recall remedy program for each respective priority group, having all completed by December 31, 2019.³⁴

In addition to the Coordinated Remedy Order issued in November, NHTSA also signed another Consent Order with Takata.³⁵ In the Consent Order, Takata admitted that it failed to

https://www.transportation.gov/sites/dot.gov/files/docs/ProactiveSafetyPrinciples2016.pdf

Id.

Id.

See https://energycommerce.house.gov/hearings-and-votes/hearings/update-takata-airbag-ruptures-and-recalls

Fee http://docs.house.gov/meetings/IF/IF17/20150602/103546/HHRG-114-IF17-20150602-SD002.pdf

See http://www.reuters.com/article/autos-takata-idUSL1N1171VB20150901

http://www.reuters.com/article/us-autos-takata-texas-idUSKCN0X32EE

See http://www.nytimes.com/2016/01/23/business/takata-airbag-death-recall.html?_r=0

See Coordinated Remedy Order (Nov. 3) http://www.safercar.gov/rs/takata/index.html

Id.

Id.

See Consent Order to Takata (Nov. 3) http://www.safercar.gov/rs/takata/index.html

provide timely notification to NHTSA about information potentially relevant to the airbag inflator defects, and Takata admitted that it did not provide NHTSA with required explanatory documents during the agency's investigation into the airbag defects. The Consent Order subjected Takata to a \$200 million civil penalty for violations of the Motor Vehicle Safety Act and required the company to end production of inflators with phase-stabilized ammonium nitrate propellant by December 31, 2018. Takata also agreed to retain an independent monitor to monitor its compliance with the Consent Order and oversee its compliance with the Coordinated Remedy Program. On December 23, 2015, NHTSA announced that it had selected John D. Buretta, a partner with the law firm Cravath, Swain & Moore, to serve as Takata's independent monitor.

On February 2, the Independent Takata Corporation Quality Assurance Panel, led by former U.S. Secretary of Transportation Samuel Skinner, released a report evaluating Takata's quality-related practices in its product manufacturing facilities. The panel, which was commissioned by Takata in response to the airbag inflator defects, found that Takata needed to make "significant improvements" in its quality assurance management practices, and in its design and manufacturing processes. According to the report, Takata has committed to the panel to "do everything within its power" to implement that panel's recommendations.

On February 23, the Independent Testing Coalition (ITC), a partnership of ten auto manufacturers affected by the Takata airbag ruptures and recalls, issued a statement on the first phase of its investigation into the defective equipment. The statement announced that an independent engineering firm, Orbital ATK, commissioned by the ITC to investigate the Takata airbag defects had identified a root cause of certain Takata airbag inflator ruptures. The root cause included a combination of the following three factors: 1) the presence of pressed phase-stabilized ammonium nitrate propellant without moisture-absorbing desiccant; 2) long-term exposure to repeated high temperature cycling in the presence of moisture; and 3) an inflator assembly that does not adequately prevent moisture intrusion in high humidity. In response, Takata issued a statement announcing that the ITC's findings were consistent with its own research.

D. Advanced Automotive Technologies

³⁶ Id.

³⁷ Id

³⁸ Consent Order. EA15-001 Airbag Inflator Rupture. November 3, 2015. Available at: http://www.safercar.gov/rs/takata/index.html

³⁹ See Recalls Spotlight – Takata Air Bag Recalls at Dec. 23 http://www.safercar.gov/rs/takata/index.html

⁴⁰ See http://cdn.gonorthwebsites.com/849924ae5f53e170e674a17a200c467e5f1f0dae/panel_report.pdf

⁴¹ Id.

⁴² Id.

⁴³ Independent Testing Coalition, Press Release. ITC Identifies Root Cause of Certain Takata Airbag Inflator Ruptures. February 23, 2016

⁴⁴ Id.

⁴⁵ Id

⁴⁶ See http://bigstory.ap.org/article/5e77d270c5ff447f8f283923a1a75220/ap-source-scientists-find-cause-air-bag-explosions

Automatic Emergency Braking Systems and Crash Avoidance Technologies

Automatic emergency braking (AEB) is an automotive technology system that helps prevent vehicle crashes or reduce the severity of a crash by engaging the brakes for a driver. 47 If the driver does not take sufficient action with the brakes to avoid a crash, the AEB system will engage to provide additional braking support through the use of sensors, cameras, or lasers, which can detect an imminent crash. 48 According to the Insurance Institute for Highway Safety (IIIHS), AEB systems can help reduce rear-end crashes by about 40 percent and reduce injury claims by as much as 35 percent.⁴⁹

In January 2015, NHTSA announced a proposal to add AEB to the list of recommended advanced safety features included in its New Car Assessment Program. ⁵⁰ In September 2015, NHTSA announced that ten auto manufacturers had voluntarily committed to making AEB systems a standard feature on all new cars. 51 In March 2016, NHTSA in conjunction with IIHS announced an updated commitment by twenty automakers to make AEB systems a standard feature on virtually all new cars by 2022.⁵² According to NHTSA, this voluntary agreement will make AEB systems a standard feature in new cars three years faster than they would have become a standard feature had NHTSA pursued this effort through a formal regulatory process.⁵³

New Car Assessment Program

NHTSA introduced the New Car Assessment Program (NCAP) in 1978 to evaluate the safety performance of passenger cars in frontal impact tests. 54 The 5-Star Safety Ratings program was created as part of the NCAP to "help measure the level of increased safety for vehicle occupants in frontal crashes" and to "provide comparative information on the safety of new vehicles to assist consumers with vehicle purchasing decisions and encourage motor vehicle manufacturers to make vehicle safety improvements."55

In December 2015, NHTSA issued a Request for Comment (RFC) seeking public comment on the agency's plans to update the NCAP. ⁵⁶ In updating the NCAP, NHTSA plans to conduct new tests that address routinely fatal crash scenarios, incorporate the use of more human-like crash-test dummies, enhance pedestrian crashworthiness testing, and revise current rollover

⁴⁷ See http://www.nhtsa.gov/About+NHTSA/Press+Releases/nhtsa-iihs-commitment-on-aeb-09112015

⁴⁹ See http://www.iihs.org/iihs/news/desktopnews/crashes-avoided-front-crash-prevention-slashes-police-reportedrear-end-crashes; See also http://www.nhtsa.gov/About+NHTSA/Press+Releases/nhtsa-iihs-commitment-on-aeb-09112015

⁵⁰ See http://www.nhtsa.gov/About+NHTSA/Press+Releases/NHTSA-sets-AEB-plans,-highlights-lives-saved-

See http://www.nhtsa.gov/About+NHTSA/Press+Releases/nhtsa-iihs-commitment-on-aeb-09112015

⁵² See http://www.nhtsa.gov/About+NHTSA/Press+Releases/nhtsa-iihs-commitment-on-aeb-03172016

⁵⁴ See http://www.nhtsa.gov/CARS/PROBLEMS/studies/1999-01-0064/1999-01-0064.html

⁵⁵ See http://www.safercar.gov/Vehicle+Shoppers/5-Star+FAQ#one; See also https://www.gpo.gov/fdsys/pkg/FR- $\frac{2015-12-16/pdf/2015-31323.pdf}{^{56}}$ Id.

Page 7

standards.⁵⁷ NHTSA also plans to add safety ratings for crash avoidance technologies (a requirement contained in the FAST Act), and develop a new approach for determining a vehicle's overall 5-star safety rating.⁵⁸ NHTSA plans to issue a final decision on its RFC this year and will begin implementation of the NCAP updates in 2018 for 2019 model year vehicles.⁵⁹

Rulemaking on Vehicle-to-Vehicle Communications

Vehicle-to-vehicle communications technology is a communications system "designed to transmit basic safety information between vehicles to facilitate warnings to drivers concerning impending crashes." According to the Department of Transportation (DOT), V2V technologies, if widely deployed, could provide safety warnings to drivers in at least 76 percent of potential multi-vehicle collisions involving a light vehicle. When V2V technologies are combined with V2I (vehicle-to-infrastructure) communications systems, the DOT estimates that this technology could help prevent about 81 percent of all vehicle crashes involving non-impaired drivers, 83 percent of all light-vehicle crashes, and 72 percent of all heavy truck crashes annually. Overall, the reduction in traffic accidents due to V2V is projected to prevent approximately 5.1 million accidents a year and save 18,000 lives.

On February 3, 2014, NHTSA announced that it would begin working on a rulemaking to require V2V devices in new vehicles due to their ability to warn drivers of safety risks and help them avoid impending crashes.⁶⁴ On January 12, 2016, the Office of Management and Budget (OMB) announced that it had received NHTSA's proposal for a federal motor vehicle safety standard for V2V communication.⁶⁵ The proposal remains under review at the OMB.

Autonomous Cars

⁵⁷ Id.

⁵⁸ Id.

⁵⁹ Id.

Harding J., Powell, G., R., Yoon, R., Fikentscher, J., Doyle, C., Sade, D., Lukuc, M., Simons, J., & Wang, J. (2014, August). Vehicle-to-vehicle communications: Readiness of V2V technology for application. (Report No. DOT HS 812 014). Washington, DC: National Highway Traffic Safety Administration. (V2V Readiness Report).
 GAO Report to Congressional Requesters. Intelligent Transportation Systems: Vehicle-to-Vehicle Technologies Expected to Offer Safety benefits, but a Variety of Deployment Challenges Exist. November 2013. Available at: http://www.gao.gov/assets/660/658709.pdf.

⁶² U.S. Department of Transportation: Office of the Assistant Secretary for Research and Technology: Intelligent Transportation Systems Joint Program Office. Connected Vehicle Research in the United States. Available at: http://www.its.dot.gov/connected-vehicle/connected-vehicle-research.htm.

⁶³ See: http://www.washingtonpost.com/local/trafficandcommuting/direct-communication-between-car-computers-may-reduce-accidents-by-up-to-80-percent/2014/02/03/b55e9330-8d1a-11e3-833c-33098f9e5267 story.html.

⁶⁴ NHTSA Press Release. U.S. DOT Announces Decision to Move Forward with Vehicle-to-Vehicle Communication Technology for Light Vehicles. February 3, 2014. See:

http://www.nhtsa.gov/About+NHTSA/Press+Releases/2014/USDOT+to+Move+Forward+with+Vehicle-to-Vehicle+Communication+Technology+for+Light+Vehicles.

⁶⁵ http://www.reginfo.gov/public/do/eoDetails?rrid=125873

In 2013, NHTSA issued a Preliminary Statement of Policy Concerning Automated Vehicles.⁶⁶ The statement contains proposed recommendations directed towards states to help them oversee the deployment of vehicle automation technology for both testing and operation purposes.⁶⁷ The recommendations address how states should license drivers, govern testing, and develop safety performance metrics for self-driving vehicles.⁶⁸ The statement also outlines NHTSA's plans to research safety issues associated with autonomous vehicles.⁶⁹

In January 2016, NHTSA released an update to its 2013 Preliminary Statement on autonomous vehicles. ⁷⁰ In the update, NHTSA acknowledged the rapid development of automation technologies and their life-saving potential, but cautioned that the safe deployment of the technologies would require "a rigorous testing regime that provides sufficient data to determine safety performance," and informs policymakers about deployment rules and regulations. ⁷¹ NHTSA also reiterated its intent to continue its research program addressing automation technology and pledged to propose best-practice guidance to industry, and model policy guidance for states to ensure the safe operation of fully autonomous vehicles. ⁷²

In addition to the 2013 and 2016 policy statements, NHTSA has taken other noteworthy actions with respect to autonomous vehicles. In February, NHTSA issued a response to Google's request for interpretation of federal motor vehicle safety standards applicable to self-driving vehicles. NHTSA's response reported that it would "interpret driver in the context of Google's described motor vehicle design as referring to the [Self-Driving System], and not to any of the vehicle occupants."

The following month, the agency released a report in conjunction with the Department of Transportation's Volpe Center assessing how existing FMVSS (Federal Motor Vehicle Safety Standards) might create certification challenges for manufacturers producing automated vehicle technologies. The report specified that unconventionally designed autonomous vehicles with alternative layouts lacking traditional manual controls maybe constrained by current FMVSS. Most recently, in April, NHTSA held a public meeting on the safe operation of automated

 $\underline{http://www.nhtsa.gov/About+NHTSA/Press+Releases/U.S.+Department+of+Transportation+Releases+Policy+on+Automated+Vehicle+Development}$

⁶⁶ See

⁶⁷ Id.

⁶⁸ Id.

⁶⁹ Id.

⁷⁰ "Department of Transportation/NHTSA Policy Statement Concerning Automated Vehicles." 2016 Update to "Preliminary Statement of Policy Concerning Automated Vehicles. Available at: <a href="http://webcache.googleusercontent.com/search?q=cache:EA2WBcPn7ToJ:www.nhtsa.gov/staticfiles/rulemaking/pdf/Autonomous-Vehicles-Policy-Update-2016.pdf+&cd=1&hl=en&ct=clnk&gl=us

⁷¹ Id.

⁷² Id.

⁷³ See http://isearch.nhtsa.gov/files/Google%20--

<u>%20compiled%20response%20to%2012%20Nov%20%2015%20interp%20request%20-</u>%204%20Feb%2016%20final.htm

⁷⁴ Id.

⁷⁵ See http://ntl.bts.gov/lib/57000/57000/57076/Review FMVSS AV Scan.pdf 76 Id

Page 9

vehicles to inform its work on the development of guidelines for the deployment of autonomous safety technology.⁷⁷

The president's FY 2017 budget also included a request for \$200 million – and \$3.9 billion over ten years – to fund an autonomous vehicle pilot program. This pilot program is intended to accelerate the development and adoption of autonomous vehicles, fund large-scale deployment pilots to test autonomous vehicles across the country, and facilitate coordination with industry in developing a common multistate interoperability framework for autonomous and connected vehicles. The president of the program is intended to accelerate the development and adoption of autonomous vehicles, fund large-scale deployment pilots to test autonomous vehicles across the country, and facilitate coordination with industry in developing a common multistate interoperability framework for autonomous and connected vehicles.

E. Cybersecurity

The advance of Internet-connected and software-based automotive technologies has given rise to new vehicle safety issues such as cybersecurity. Last July, the first ever vehicle safety recall was conducted due to a cybersecurity vulnerability discovered in a vehicle's radio software. The safety recall covered 1.4 million vehicles and highlighted the increasing threat that automotive cybersecurity vulnerabilities may pose to vehicle safety if those system weaknesses are exploited.

To protect against cyber-related safety risks, NHTSA has taken action to enhance the security of vehicle systems and guard against malicious attacks and unauthorized access. In December, NHTSA published a report to Congress examining the security needs of electronic systems and components as required by the Moving Ahead for Progress Act in the 21st Century enacted in 2012. Based on its research, NHTSA found that developing cybersecurity guidelines that address risks, safety hazards, and mitigation priorities for automotive electronics is the most appropriate step forward given the "highly dynamic nature of cybersecurity risks and threats." Security risks and threats.

In addition to the report on electronic systems, NHTSA held a Vehicle Cybersecurity Roundtable with the auto industry, security researchers, government agencies, and other stakeholders in January. The purpose of the roundtable was to help inform the industry's development and adoption of vehicle cybersecurity standards and best practices. In March, NHTSA issued a joint public service announcement with the Federal Bureau of Investigation

 80 See http://www.wired.com/2015/07/hackers-remotely-kill-jeep-highway/ and http://www.nytimes.com/2015/07/25/business/fiat-chrysler-recalls-1-4-million-vehicles-to-fix-hacking-issue.html?r=0; See also http://www-odi.nhtsa.dot.gov/acms/cs/jaxrs/download/doc/UCM483036/RCLRPT-15V461-9407.pdf

⁷⁷ See http://www.nhtsa.gov/Research/Crash+Avoidance/Automated+Vehicles

⁷⁸ See https://www.transportation.gov/sites/dot.gov/files/docs/DOT BH2017 508%5B2%5D.pdf

⁷⁹ Id.

Report to Congress: "Electronic Systems Performance in Passenger Motor Vehicles." Prepared by the U.S. Department of Transportation, National Highway Traffic Safety Administration. December 2015. Available at: <a href="http://webcache.googleusercontent.com/search?q=cache:53AtGsmonnsJ:www.nhtsa.gov/staticfiles/laws_regs/pdf/Electronic-Systems-Performance-in-Motor%2520Vehicles.pdf+&cd=1&hl=en&ct=clnk&gl=us

⁸² Id. See also Secretary of Transportation Anthony Foxx letter to Chairman Fred Upton Regarding the Electronic Systems Performance in Passenger Motor Vehicles Report. Dated January 15, 2016.

⁸³ See http://www.nhtsa.gov/Research/Crash+Avoidance/NHTSA+Vehicle+Cybersecurity+Roundtable Id.

warning consumers that vehicles were increasingly vulnerable to remote exploits. ⁸⁵ NHTSA also recently issued a Request for Public Comment on its proposed Enforcement Guidance Bulletin, which suggests guiding principles and best practices for vehicle and equipment manufacturers regarding vulnerabilities in emerging automotive technologies. ⁸⁶

The auto industry has also taken steps to address cyber threats facing vehicles. Last year, the auto industry established an Auto Information Sharing and Analysis Center (Auto ISAC) to facilitate information sharing among automakers about potential cyber threats and advance cybersecurity protections for vehicles. To some automakers have also created "bug bounty" or "coordinated disclosure" programs that invite security researchers to identify potential cybersecurity gaps in vehicle software before those gaps are exploited by malicious hackers. Both NHTSA and the auto industry have committed to developing best practices in the Proactive Safety Principles to enhance cyber resiliency and effective remediation.

F. Distracted Driving

In June 2012, NHTSA issued a "Blueprint for Ending Distracted Driving" outlining actions the agency would take to "eliminate crashes attributable to driver distraction." One action called for the development of "nonbinding, voluntary guidelines for minimizing the distraction potential of in-vehicle and portable devices," and would occur in three phases. In April 2013, NHTSA released its first phase of driver distraction guidelines on visual-manual interfaces of electronic devices. In November 2014, Majority members of the Committee on Energy and Commerce and the Committee on Transportation and Infrastructure sent Secretary of Transportation Anthony Foxx a letter questioning NHTSA's authority and expertise to develop guidelines and regulate consumer electronics brought into vehicles. However, on March 22, 2016, NHTSA sent the second phase of driver distraction guidelines on visual-manual interfaces of portable and aftermarket devices (e.g. smartphones, electronic tablets) to OMB for review. The Phase 2 Driver Distraction Guidelines remain under review at OMB.

G. Corporate Average Fuel Economy

⁸⁵ See http://www.ic3.gov/media/2016/160317.aspx

⁸⁶ See https://www.gpo.gov/fdsys/pkg/FR-2016-04-01/pdf/2016-07353.pdf

⁸⁷ See http://www.autoalliance.org/index.cfm?objectid=2A25D140-7826-11E5-997E000C296BA163

⁸⁸ See http://www.wsj.com/articles/gm-invites-hackers-to-uncover-cybersecurity-gaps-1457650263

⁸⁹ See https://www.transportation.gov/sites/dot.gov/files/docs/ProactiveSafetyPrinciples2016.pdf

⁹⁰ See http://www.nhtsa.gov/About+NHTSA/Press+Releases/U.S.+DOT+Releases+Guidelines+to+Minimize+In-Vehicle+Distractions

⁹¹ Id.

 $^{{}^{92}\,\}text{See}\,\,\underline{\text{http://www.nhtsa.gov/About+NHTSA/Press+Releases/U.S.+DOT+Releases+Guidelines+to+Minimize+In-Vehicle+Distractions}$

⁹³ Letter to Secretary of Transportation Foxx Regarding Phase 2 Driver Distraction Guidelines. Sent by Chairmen Fred Upton (Energy and Commerce), Lee Terry (Commerce, Manufacturing, and Trade), Greg Walden (Communications and Technology), and Bill Shuster (Transportation and Infrastructure). Dated November 26, 2014

⁹⁴ See http://www.reginfo.gov/public/do/eoDetails?rrid=126091

In October 2012, NHTSA and the Environmental Protection Agency (EPA) issued joint rules regarding greenhouse gas (GHG) emissions and corporate average fuel economy (CAFE) for 2017 to 2025 model year passenger cars and light trucks. 95 Both agencies committed to conducting a Midterm Evaluation in 2016 for GHG and CAFE standards developed for model year vehicles 2022 to 2025 to assess developments in technology, marketplace penetration of fuel efficient technologies, and other factors that may impact the suitability of those standards for future years. 96 The Midterm Evaluation consists of a three-step process: 1) a June 2016 Draft Technical Assessment Report issued jointly by NHTSA, the EPA, and the California Air Resources Board examining the relevancy of the 2022 to 2025 standards; 2) a notice of proposed rulemaking from NHTSA on CAFE standards for 2022 to 2025 vehicles, and a proposed determination from the EPA on whether its GHG standards are appropriate for those model year vehicles; and 3) a final rule and determination from both agencies on those standards, which is expected April 2018.⁹⁷

IV. **STAFF CONTACTS**

If you have any questions regarding this hearing, please contact Paul Nagle or Olivia Trusty of the Committee Staff at (202) 225-2927.

⁹⁵ See http://www.nhtsa.gov/Laws+&+Regulations/CAFE+-+Fuel+Economy/ld-cafe-midterm-evaluation-2022-25

⁹⁷ Id.