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June 25, 2019

To: House Committee on Energy and Commerce, Consumer Protection and Commerce Subcommittee

From: Jason Levine, Executive Director

Re: Responses to Questions for the Record from Chairwoman Schakowsky following up to the May 23, 2019 hearing entitled *Summer Driving Dangers: Exploring Ways to Protect Drivers and Their Families.*

On behalf of the Center for Auto Safety, and all of our members across the country, once again we wish to express our appreciation for the opportunity to testify before your committee on the importance of using safety technology to address the public health crisis of auto-related deaths and injuries.

1. **According to Consumer Reports, 65 percent of consumers state that safety is the most important consideration when determining which car to purchase. But from a car buyers' perspective, it can be extremely difficult to determine if one make of vehicle is safer than another. That's why the 5-Star Safety Rating, which provides ratings for vehicle performance in crash and rollover tests, was created. But with nearly every car receiving top ratings, this crucial consumer education tool is failing to provide meaningful information to the driving public, dulling the competitive forces encouraging auto manufacturers to voluntarily improve the safety of their vehicles.**

a. **Do you agree that the current 5-Star Safety Rating system is failing to draw meaningful distinctions between the safety of different vehicles? How would you recommend modernizing the 5-Star Safety Rating so it can provide greater distinctions between vehicle models?**

The U.S. New Car Assessment Program (NCAP or 5-Star Safety Rating System) fails to make meaningful distinctions between the safety of different vehicles. Recent NCAP ratings give frontal and side impact crash ratings of 4- or 5-stars to 98% of all vehicles tested. It is self-evident that if 98% of cars achieve superior ratings, it is impossible to distinguish between them in any significant way. The NCAP testing program must be updated with more and better testing so that real distinctions can be drawn between cars and consumers can make informed buying choices based on this information.

Though NCAP can be modernized in many ways, there are four areas that should be improved immediately: pedestrian safety, safety of older people, crash avoidance technology, and rear seat passenger safety.

First, NCAP must include testing to improve pedestrian safety in auto crashes. According to the Centers for Disease Control and Prevention, "in 2015, 5,376 pedestrians were killed in traffic crashes in the United States. This averages to one crash-related pedestrian death every 1.6 hours. Additionally, almost 129,000 pedestrians were treated in emergency departments for non-fatal crash-related injuries in 2015. Pedestrians are 1.5 times more likely than passenger vehicle occupants to be killed in a car crash on each trip."[1] These figures have only increased, as almost 6,000 pedestrians were killed in 2016 and an estimated 6,200 were killed in 2018.[2] The death/injury rate for a pedestrian involved in accident is 5.7 times the rate for a motor vehicle occupant.[3]

Any evaluation of vehicle safety should be considered incomplete without an assessment of vehicular design impact on pedestrian safety, but NCAP has none. There is an urgent need to stem the appalling increase in pedestrian-involved crashes, and NCAP should be part of the solution. The European New Car Assessment Programme ("Euro NCAP") has recognized this need and includes in its vehicle ratings both collision avoidance technologies and automobile design features that protect pedestrians and minimize injury and death in an accident.[4] This incentivizes automakers to include these features in their cars and should be adopted in the U.S. NCAP.

Updates to NCAP's ratings should include assessment of design features and component capabilities that detect and protect pedestrians. This need is particularly urgent with the emergence of automated driver assistance and automated driving systems, which have unfortunately already caused the death of a pedestrian.[5] The potential use of advanced sensors such as RADAR, LIDAR, infrared detectors, and advanced lighting systems to enhance pedestrian safety has tremendous potential for improving pedestrian collision avoidance.

In 2018, the National Transportation Safety Board (NTSB) issued eight safety recommendations to the National Highway Traffic Safety Administration (NHTSA) addressing the need to include performance-based standards for vehicle headlight systems, development of performance test criteria for vehicle designs that reduce pedestrian injuries, and incorporation of pedestrian safety

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[1] *Pedestrian Safety*, CTRS. FOR DISEASE CONTROL AND PREVENTION, https://www.cdc.gov/motorvehiclesafety/pedestrian_safety/index.html.
[2] *New Projection: 2018 Pedestrian Fatalities Highest Since 1990*, GOVERNORS HIGHWAY SAFETY ASS'N (Feb. 28, 2019), https://www.ghsa.org/resources/news-releases/pedestrians19.
[3] *Center for Auto Safety Calls on NHTSA to Keep NCAP Independent of Manufacturers*, CTR. FOR AUTO SAFETY (Oct. 1, 2018), https://www.autosafety.org/1005021-2/.
[4] *Vulnerable Road User (VRU) Protection*, EURO NCAP, https://www.euroncap.com/en/vehicle-safety/the-ratings-explained/vulnerable-road-user-vru-protection/ (last visited June 21, 2019).
[5] Troy Griggs & Daisuke Wakabayashi, *How a Self-Driving Uber Killed a Pedestrian in Arizona*, N.Y. TIMES (March 21, 2018), https://www.nytimes.com/interactive/2018/03/20/us/self-driving-uber-pedestrian-killed.html.

systems including pedestrian collision avoidance systems and other more passive safety systems into NCAP.[6] The Center supports the NTSB recommendations and urges NHTSA to incorporate a focus on pedestrian safety into the NCAP rating system, incentivizing companies offering cars for sale in the U.S. market to address the horrendous pedestrian death rate from crashes and protect the American public.

Next, NHTSA should update NCAP to reflect the aging of the American population. According to the U.S. Census Bureau, by 2030, one of out every five Americans will be 65 years of age or older.[7] Many studies have shown that older drivers and passengers are more vulnerable to chest injuries in crashes than younger adults.[8] NCAP frontal impact tests, however, treat all passengers as one of two body types, a 50th percentile male or a 5th percentile female.[9] Technologies that improve safety for seniors also improve the survival of women and children. Manufacturers are increasingly including technologies in vehicles that enhance the survival of older people in crashes, including adaptive air bags,[10] limited force restraint systems that anticipate crash severity and automatically adjust belt restraint tension to minimize injury,[11] and inflatable seat belts.[12]

Without NCAP acknowledgement of these lifesaving technologies, however, automakers have far less incentive to speed up their adoption. NCAP should include evaluation and rating of safety technologies adapted for the survival of the elderly and other vulnerable populations so that manufacturers receive credit for their investments in lifesaving innovations and every demographic enjoys the benefits of safer cars. We suggest using a silver star to indicate a given vehicle possesses such technology.

NCAP must also be updated to reflect the dramatic increase in driver assistance and crash avoidance technologies. When NCAP was last updated in 2010, crash avoidance technologies as currently understood were in their infancy. Now, there are a wide variety of such technologies, including computer-controlled disc brakes, antilock braking systems, lane change warning, blind spot detection and warning, rear cross-traffic alert, pre-collision braking, rear vision cameras, reverse automatic braking, V2X, and electronic stability control. NCAP should be updated to assess the effectiveness of these technologies in vehicle safety. This would increase the adoption

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[6] *Public Meeting of September 25, 2018, Highway Special Investigation Report Pedestrian Safety*, NTSB/SIR-18/03, NAT'L TRANSP. SAFETY BD. https://www.ntsb.gov/news/events/Documents/2018-DCA15SS005-BMG-abstract.pdf.
[7] *Older People Projected to Outnumber Children for First Time in U.S. History*, UNITED STATES CENSUS BUREAU (Sept. 6, 2018), https://www.census.gov/newsroom/press-releases/2018/cb18-41-population-projections.html.
[8] J. Augenstein et al., *Age Appropriate Restraints For The Right Front Passenger*, ANNU. PROC. ASSOC. ADV. AUTOMOT. MED. 51: 381–394 (2007); J. Augenstein et al., *Investigation Of The Performance Of Safety Systems For Protection Of The Elderly*, ANNU. PROC. ASSOC. ADV. AUTOMOT. MED. 49:361-9 (2007).
[9] 49 C.F.R. § 572.5.
[10] *Adaptive Safety* System, FORD MOTOR CO. http://online.wsj.com/public/resources/documents/Eyesontheroad02132005.pdf (last visited June 21, 2019).
[11] *Advanced Restraint Systems (ARS) Final Report*, DOT HS 811 794A, NAT'L HIGHWAY TRAFFIC SAFETY ADMIN. https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/811794a.pdf.
[12] *The Ford inflatable seat belt: How it affects car seats and children*, CONSUMER REPORTS (March 1, 2011, 6:08 AM), https://www.consumerreports.org/cro/news/2011/03/the-ford-inflatable-seat-belt-how-it-affects-carseats-and-children/index.htm.

of these lifesaving features in cars, stimulate competition, and incentivize continual safety improvement. Euro NCAP assesses forward collision warning, automatic emergency braking, seatbelt reminders, and lane keeping support systems. It is past time that U.S. NCAP be updated to assess these and other safety systems to protect vehicle occupants, pedestrians, and others.

NCAP should also be modified to include rear seat passenger crash testing. Front seat safety has improved because of NCAP testing. NCAP must recognize the increasing risk of rear seat passengers to crash injuries, especially as this risk may be related to enhancements in front seat safety. As the number of rear seat passengers continues to increase with the rise of ridesharing services, such as Uber and Lyft, it is crucial that NCAP crash testing include rear seat anthropometric test devices (ATDs) of adults, infants, and others, with the goal of making the rear seat as safe as the front. This may become even more relevant with the further development of more successful autonomous vehicle technology.

b. **America's 5-Star Safety Rating system seems to be falling behind similar programs in Europe and other countries. What can we can learn from these international programs?**

Despite being the first program of its kind, NCAP has fallen grievously behind its international counterparts. Euro NCAP uses many more tests to evaluate passenger safety, including rear seat occupant protection in frontal crashes, far side impact protection, rear impact whiplash protections, child seat installation and occupant protection, and pedestrian impact protection. Euro NCAP also assesses driver assistance systems such as forward collision warning, automatic emergency braking, seatbelt reminders, speed assistance systems, and lane support systems (including lane departure warning, lane keeping assist, and emergency lane keeping systems). U.S. NCAP covers none of these systems. Japan NCAP and Australia NCAP also provide more useful information to their consumers than U.S. NCAP. NHTSA should study and adopt many of the vehicle assessments that international NCAP programs feature, and U.S. NCAP lacks.

c. **In 2018, NHTSA sought comments on updating the 5-Star Safety Rating. Are you confident that NHTSA will use its existing authority to make the appropriate updates to the 5-Star Safety Rating?**

It is hard to believe that NHTSA will appropriately use its authority to improve the 5-Star Safety Rating system. The agency continues to drag its feet in all aspects of its mandate, including rulemaking and recall investigations. The agency is inadequately funded to perform its function and protect the American public. Moreover, NHTSA's recent request for comments regarding NCAP indicated that the agency is considering allowing automakers to self-certify their cars for certain tests. A pillar of the NCAP program has been its role as an independent assessor of safety and occupant protection technology. NCAP tests are conducted by the government independent of automaker influence using blind car buying to prevent automakers from gaming the system. NCAP test results are fully available to the public for review, while self-certifications are not. Self-certifications would also undoubtedly be deemed protected by the agency's confidential

business information regulations. The risk of self-certification by manufacturers was recently brought to the forefront of public attention by the tragic and deadly crashes of two Boeing 737 MAX airplanes due to software issues that Boeing downplayed in the self-certification process.[13] It is critical that NCAP continue to exist as an independent vehicle assessment program that is not subject to the pressures of manufacturers focused on maintaining 'perfect ratings' and their profits, instead of investing in safety.

2. **Modern cars are far more complex than they used to be. Today's cars are equipped with sophisticated sensors, camera, and technologies that can automatically detect and avoid hazards. And while vehicles have evolved and grown more sophisticated, I am concerned that NHTSA does not have the resources or expertise needed to set appropriate safety standards for these advanced systems.**

a. **How can Congress help NHTSA evolve to appropriately oversee these advanced automobile safety technologies?**

The most important thing Congress can do to help NHTSA oversee advanced auto safety technologies is to provide NHTSA with adequate funding. NHTSA's budget request for FY 2020 follows the larger Department of Transportation (DOT) philosophy of promising safety but cutting areas that actually deliver on those promises. The budget request aims to significantly decrease funding to the areas of the agency that are the likeliest to deliver safety results to the American people. In FY 2019, thanks to Congress ignoring the levels requested by DOT, NHTSA's enacted appropriation for "Vehicle Safety Programs,"—which are the heart of the agency—were $190,000,000. For FY 2020, DOT has requested $151,000,000 for this vital program – a 21% decrease in funding.

DOT is choosing to underfund the Rulemaking, Enforcement, and Research and Analysis departments at NHTSA, which have been directly responsible for vehicle crashworthiness and other safety standards that have saved hundreds of thousands of lives since NHTSA's founding five decades ago.[14] Smart, targeted regulations make a real difference when it comes to safety in our cars and on our roads. Congress has chosen before to enact a higher level of funding for a safety agency than the level requested by the Executive branch. Ignoring the DOT funding levels request again would be a step forward for safety.

This is particularly true when examining the FY 2020 budget request wherein NHTSA asks for a reduction related to "Vehicle Safety Research and Analysis activities" of over $16 million, a 33% decrease from enacted FY 2019 levels (down to $32.8 million). These activities are designed to "enhance the safety and security of automotive electronic control

[13] Dominic Gates, *Flawed Analysis, failed oversight: How Boeing, FAA certified the suspect 737 MAX flight control system*, SEATTLE TIMES (March 21, 2019), https://www.seattletimes.com/business/boeing-aerospace/failed-certification-faa-missed-safety-issues-in-the-737-max-system-implicated-in-the-lion-air-crash/.
[14] *Annual Vehicle Recalls Since 1996*, NAT'L HIGHWAY TRAFFIC SAFETY ADMIN. https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/annualvehiclerecallssince1996.pdf.

systems while supporting the safe adoption of vehicle automation technologies."[15] At a time when private industry is spending tens of billions of dollars in this area, the federal government must be able to, at the least, maintain its current funding levels to provide the necessary oversight of this potentially society-changing technology. A reduction in research funding works in opposition to this goal.

When it comes to advanced automotive safety technologies, it is also essential the DOT plays an integral role in ensuring the safe operation of future self-driving vehicles. Research has always been a key function of the Department and must continue to be a priority as the cars of the future are being conceived, tested on the open road, and eventually deployed in our neighborhoods. Accordingly, we were pleased to see the recent House appropriations bill provide $10 million devoted to creating a Department-wide Center of Excellence dedicated to ensuring the federal government has a workforce capable of reviewing, validating, and certifying the safety of automated technologies. We believe this is a good start in providing DOT and NHTSA career staff the opportunity to perform necessary research across the Department in this area.

Money alone will not make any safety agency function perfectly. NHTSA's ability to realize its full potential to save lives, prevent injuries, and reduce the economic burdens due to crashes on our nation's roads lies with political leadership committed to fulfilling the agency's statutory mission, a dedicated career staff, and the multitude of stakeholders with which those civil servants work on a daily basis. However, the agency tasked with overseeing so much of our nation's traffic and vehicle safety cannot reach this potential with one arm tied behind its back. Underfunding NHTSA is counterproductive to the safety goals shared by all.

b. **Are safety standards needed for some of these advanced safety systems, such as automatic emergency braking or lane keeping support? If so, for which safety technologies or safety systems are safety standards needed?**

Safety standards are needed for automatic emergency braking (AEB) and adaptive headlights. NHTSA should also work toward establishing standards for lane keeping support systems (LKS).

NHTSA should establish safety performance standards for AEB systems. AEB systems use sensors including cameras, RADAR, and LIDAR to determine when a vehicle is coming too close to another one in front of it. The AEB system will then give the driver a warning, alert the driver to brake, and automatically brake if the driver does not respond.

[15] NAT'L HIGHWAY TRAFFIC SAFETY ADMIN., BUDGET ESTIMATES, FISCAL YEAR 2020 (2019), https://www.transportation.gov/sites/dot.gov/files/docs/mission/budget/334271/fy-2020-nhtsacbj-submission-final-31219-tag.pdf.

In 2015 and 2016, NHTSA reached a voluntary agreement with 20 automobile manufacturers to equip "virtually all light-duty cars and trucks with a gross vehicle weight of 8,500 pounds or less" with AEB systems by 2022.[16] This agreement is deeply inadequate. The voluntary agreement is unenforceable, lacks oversight, and has no minimum performance standard for AEB technology. NHTSA should immediately work to establish safety standards for AEB systems as well as mandating their installation on all new vehicles in the United States.

NHTSA should also establish standards for adaptive headlights (also called "smart headlights"). In September 2018, the National Transportation Safety Board (NTSB) recommended that NHTSA revise Federal Motor Vehicle Safety Standard (FMVSS) 108 to "include performance-based standards for vehicle headlight systems correctly aimed on the road and tested on-vehicle to account for headlight height and lighting performance."[17] Unlike the current high/low beam, the new headlights can adjust intensity to alert drivers to pedestrians and other vehicles sooner, allowing greater time to react during low-light hours.

When working as designed, adaptive headlights can improve pedestrian safety and reduce glare for oncoming traffic. Once again, Europe, Japan, and elsewhere have moved ahead of the U.S. in the use of this safety technology, but in the instance of adaptive headlights it is because a regulatory change is needed.

In a promising move, NHTSA recently responded to a 2013 Toyota petition to amend the regulation to allow for use of such technology.[18] In theory, a proposed rulemaking on this issue will be put forth soon. It is unfortunate it took NTSB having to make this its number one recommendation to NHTSA on pedestrian safety to move this issue along. Six years after Toyota's original request, one can hope that a minimum performance standard will emerge that validates the utility of the headlights and requires their use instead of simply allowing adaptive headlights as a luxury add-on.

NHTSA should also continue to research standards for Lane Keeping Support (LKS) systems. LKS systems include lane-departure warning (LDW), which gives a driver feedback—either visual, auditory, or tactile (such as vibrations from the steering wheel or driver's seat)—when their car crosses lane markings. Lane-keeping assist (LKA) goes further and provides either braking or steering input to direct the vehicle back into its lane.

LKS systems can help drivers by reducing the occurrence of crashes in which their vehicle drifts off the road or hitting a car in an adjacent lane, whether sideswiping another vehicle moving in the same direction or hitting a vehicle in oncoming traffic. LKS systems are far

[16] *NHTSA-IIHS Announcement on AEB: Manufacturers make progress on voluntary commitment to include automatic emergency braking on all new vehicles*, NAT'L TRANSP. SAFETY BD. (Dec. 21, 2017), https://www.nhtsa.gov/press-releases/nhtsa-iihs-announcement-aeb.
[17] NAT'L TRANSP. SAFETY BD., *supra* note 5.
[18] Federal Motor Vehicle Safety Standards: Lamps, Reflective Devices, and Associated Equipment, 83 Fed. Reg. 51766 (proposed Oct. 12, 2018) (to be codified at 49 C.F.R. pt. 571).

from perfect at this point and it important to note that the systems have limitations—lane monitoring may not work as well at lower speeds, in inclement weather, on hilly and winding roads, and with worn or faded lane markings. Additionally, many vehicles equipped with LKS systems allow the driver to turn off the features, leading to lower benefits gained from the systems.

The limitations of LKS systems highlight the value of standards. A minimum performance standard could provide a baseline for developers to implement, improve, and install this technology. However, NHTSA has been studying mandating lane-departure warning for a decade now, with no definitive conclusions.

c. **Should NHTSA or Congress require any of these safety features to be on all new vehicles? If so, which safety features should be made standard?**

NHTSA or Congress should mandate that both automatic emergency braking and adaptive headlights be included on all new vehicles in the United States. These systems have great potential to save lives, prevent injuries, and reduce property damage. It is long overdue that these safety features be made standard on all new cars. AEB and adaptive headlights cannot be allowed to remain as luxury items instead of standard features. Further delay in mandating these safety features will only lead to more lives unnecessarily lost to agency inaction.

3. **Any recalled automotive part endangering the lives of the vehicle occupants and other motorists on our nation's roads must be swiftly remediated and repaired, regardless of whether that defective part is on a new car, rental car, or used car. While current law prohibits the sale of new cars or previously rented cars with unrepaired recalls and the rental of cars with unrepaired recalls, there are no federal protections requiring recalled parts on used cars to be repaired prior to the vehicle's sale.**

   a. Does the sale of used cars with open recalls endanger the driving public? Please explain.

   b. Should Congress explicitly prohibit the sale of used cars with unrepaired recalls?

Vehicles with unrepaired recalls are unsafe for drivers, passengers, pedestrians, bicyclists, and everyone on the road. Whether the vehicle was purchased new or used the danger from non-deploying or exploding airbags, ignition switch failures causing a loss of motive power, or preventable vehicle fires is the same. This is the reason NHTSA continues to proclaim that "every recall is serious."[19] The loved ones of victims of used vehicle defect related fatalities sold

[19] *See* e.g., @NHTSAgov, TWITTER (May 30, 2018, 6:12 AM), https://twitter.com/i/web/status/1001813477063671808 ("Every recall is serious. If you know your vehicle has open recalls, contact your dealer to make an appointment to get it fixed for free.").

with open recalls do not mourn them any less than those that occur in a new vehicle with the same defect. Put another way: "All safety recalls resulting from defects present an unreasonable risk to safety and we believe it is inappropriate to suggest that some defects are not risky enough to require repair. For the safety of the motoring public, all recalled vehicles should be fixed promptly."[20] NHTSA does not limit this advice to new or rental vehicles, nor should the federal law.

Currently there are explicit federal prohibitions on the sale of new cars with unrepaired recalls, the sale of previously rented cars with unrepaired recalls, and the rental of cars with unrepaired recalls, but no such federal prohibition exists for the sale of used cars. Amazingly, it is legal to resell a used vehicle with an unrepaired ignition switch, but it is illegal to sell a recalled French fry cutter, a recalled coffee press, or even a recalled toy car. The same is true for food, medicine, and cosmetics. As summer comes to the United States in 2019 and as temperature and humidity rise across the country, used cars with unrepaired Takata airbag inflators - which are most likely to degrade and ultimately explode in such conditions - will be sold, along with thousands of other unrepaired and unsafe vehicles. This is one danger that can be addressed sooner rather than later by explicit Congressional action.

4. **According to a Consumer Reports investigation, nearly one and six ride-share vehicles in two major U.S. markets are subject to open safety recalls. The analysis found vehicles with glaring safety defects that pose serious risks, such as deadly airbags that could hurt or kill the driver or front-seat passengers. How can we best address this safety issue?**

The danger that is clearly posed by rideshare companies, including Uber, Lyft, Via, and Juno failing to protect consumers by allowing recalled vehicles on their platforms is real and significant. From defective Takata airbag inflators endangering passengers in the front seat of vehicles to faulty GM ignition switches endangering everyone on the road, to seat-belt detachment issues, to engine fires – defective vehicles should be off the road, not used as profit centers for giant public companies.

Generally, these types of services are regulated at a state or local level, and the Center for Auto Safety continues to support local authorities prohibiting the use of any vehicle for commercial purposes which is known to be under recall. Yet, such a process requires consumers to simply be lucky based on where they live. Another approach would be to address the issue through interstate commerce. For example, Congress could prohibit entities like Uber and Lyft from facilitating the commercial use of any vehicle which has an open recall as a violation of the Motor Vehicle Safety Act. Thus, even if rideshare companies claim no ownership over the

[20] Christopher Jensen, *Faced With Recalls, Rental Companies Sometimes Decide to Wait*, N.Y. Times (Apr. 19, 2011), https://wheels.blogs.nytimes.com/2011/04/19/faced-with-recalls-rental-companies-sometimes-decide-to-wait/(NHTSA spokesperson, as quoted on the urgency of auto recalls).

vehicles in question, they would be required to use their technology platforms to prohibit this dangerous commercial activity which impacts not only passengers but the drivers as well.

5. **Keyless ignition systems, in which a driver merely pushes a button to start or turn off a car, now comes standard in over half of all new vehicles sold in the United States. While these features may add an additional layer of convenience for the driver, they may also pose additional risks. Nearly three dozen people have died of carbon monoxide poisoning since 2006 after a keyless-ignition vehicle was inadvertently left running in a garage. Further, while vehicles with traditional keys prevent a driver from removing the key if the vehicle is not in park, consumers are reporting that drivers can turn off and exit a keyless ignition vehicle without the car in park, increasing the risk of a vehicle rollaway. While NHTSA proposed a rule to address these safety issues in 2011, the rulemaking has yet to be completed. How does NHTSA's failure to complete the rulemaking to establish safety standards for keyless ignition systems present a safety issue?**

Keyless ignitions continue to become more common in new vehicles - the majority of new cars on the U.S. market can be powered on and off without a key. This new technology, however, presents a strikingly different way for people to turn their car on and off. Confusion as to whether a vehicle was on or off has led to at least 28 deaths and over 45 injuries since 2006 due to carbon monoxide poisoning from a vehicle that was left running in a driver's garage.[21]

The solution to this problem is simple: require cars with keyless ignitions to shut off after a certain period of time if the car is not in use. NHTSA began rulemaking in 2011 (76 FR 77183, Dec. 12, 2011)--eight years ago--but still has not finalized a standard for these vehicles. By failing to complete this rulemaking regarding automatic shut-off of keyless ignitions, NHTSA is unnecessarily risking more lives. While some automakers, such as Ford and General Motors, have implemented technologies to mitigate this risk, including automatic shut-off mechanisms, most manufacturers have not acted because of the lack of a clear federal rule. Toyota has recently announced plans to follow suit, but only after 17 deaths.[22]

Keyless ignitions also present the problem of vehicle rollaway. Many keyless ignition systems allow drivers to turn off their car and exit the vehicle without putting the vehicle in the 'Park' position. This can lead to the vehicle unintentionally rolling away and potentially causing property damage, injury, and death. The problem has been widely acknowledged--NHTSA has opened 18 investigations on rollaway vehicles, and there have been at least 93 recalls by

[21] David Jeans & Majlie De Puy Kamp, *Deadly Convenience: Keyless Cars and Their Carbon Monoxide Toll*, N.Y. Times (May 13, 2018), https://www.nytimes.com/2018/05/13/business/deadly-convenience-keyless-cars-and-their-carbon-monoxide-toll.html?nl=top-stories&nlid=16324671ries&ref=cta.
[22] Jeff Plungis, *Toyota Announces Fixes Designed to Prevent Rollaway and Carbon Monoxide Deaths*, Consumer Reports (June 13, 2019), https://www.consumerreports.org/car-safety/toyota-announces-fixes-designed-to-prevent-rollaway-and-carbon-monoxide-deaths/.

automakers related to rollaways.[23] The solution here is also plain: require cars with keyless ignitions be placed in 'Park' before the driver can turn the car off, or institute another solution that would provide equivalent protection against rollaways.

It is imperative that NHTSA end this inexplicable delay and institute a rule requiring all vehicles with keyless ignitions to have automatic shut-off technology and roll-away protection. Continued delays will only lead to more unnecessary injury and death.

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cc: Honorable Frank Pallone, Chairman
Honorable Greg Walden, Ranking Member
Honorable Cathy McMorris Rodgers, Ranking Member

[23] *Blumenthal Announces Legislation to Protect Against CO and Rollaway Risk Raised by Keyless Cars*, KIDS AND CARS.ORG (Feb, 25, 2019, 9:29 PM), https://www.kidsandcars.org/2019/02/25/blumenthal-announces-legislation-to-protect-against-co-and-rollaway-risk-raised-by-keyless-cars/.