



Testimony of Jason Levine, Executive Director, Center for Auto Safety before the

**House Committee on Energy and Commerce  
Consumer Protection and Commerce Subcommittee**

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*Summer Driving Dangers: Exploring Ways to Protect Drivers and Their Families*

Good morning. Thank you Chairman Pallone, Chairwoman Schakowsky, Ranking Member Walden, and Ranking Member McMorris Rodgers for holding this important hearing today. My name is Jason Levine and I am the Executive Director of the Center for Auto Safety. Since 1970, the Center has been the nation's premier independent non-profit advocacy organization focused on auto safety, quality, and fuel economy. On behalf of our members, and all drivers, passengers, and pedestrians, we work every day to get unsafe cars and trucks off the road as quickly as possible. There are far too many defective vehicles and unrepaired recalled cars and trucks on our nation's roads.

Yet, our mission has also always included pressing for the vehicles of tomorrow to be as safe as possible. In our five-decades we have successfully advocated for car companies to install advanced safety technology: from airbags to electronic stability control, from anti-lock brakes to back-up cameras. During that same time, we have urged the Department of Transportation, and the National Highway Traffic Safety Administration, to write performance standards to be sure these new technologies work as advertised, provide the appropriate level of safety, and make safety features standard equipment and not luxury add-ons.

Sadly, while Silicon Valley, Detroit, and Wall Street use a lot of happy talk about millions of robot cars coming to save the world in the next few months, back here on planet Earth auto crash deaths and injuries continue to represent a public health crisis. According to the Centers for Disease Control they are the leading cause of death for 5-24 year olds in the United States and are responsible for more than 38,000 funerals annually. That is the equivalent of almost every man, woman, and child in Marlboro Township, NJ, or Park Ridge, Illinois, or Redmond, Oregon, or Pullman, Washington.

Unfortunately, instead of writing minimum performance standards to require existing safety technology the current administration seems to prefer deferring to whatever the auto industry finds most profitable. The crash avoidance technology features, often highlighted in TV commercials, including automatic emergency braking, lane departure warnings, or adaptive headlights, all exist in an unregulated state with varying,

unpredictable, and poorly measured performance. This lack of standards leads to consumer confusion and diminishes the increased safety protections that this technology promises.

Moreover, even existing Congressional mandates to the Department of Transportation are regularly ignored. Rules for rear seat belt reminder systems, front and side impact-requirements for child seats, rollover integrity for buses, and the use of email for recall notifications, are each many years overdue.

Sadder still, the groundbreaking, paradigm shifting, non-regulatory New Car Assessment Program (NCAP) – better known as America’s 5-Star Crash Rating System has been allowed to become an afterthought when compared our foreign competitors. All of these programs were originally based on NCAP. This is the equivalent of the United States not even being a top-3 country at basketball on the world stage.

NHTSA’s failure to update the ratings, combined with steps taken last year to freeze the current ratings in place, means that receiving a 5-star crash rating will soon be the equivalent of receiving a little league participation trophy.

The ability to improve the safety of the 17 million new vehicles sold in the U.S. every year remains in our collective reach. NHTSA must set mandatory performance standards in order to create a level playing field and ensure that safety technology meets minimum levels of functionality. Otherwise, consumers are dependent either upon their economic status for safety or relying on seeking civil justice after a tragedy, neither of which is a long-term solution.

For example, the Center recently petitioned NHTSA to investigate Nissan over a defective automatic emergency braking system. The problem is that it will brake even when there is no obstacle - thus creating a hazard for the vehicles behind these Nissans. This creates many issues: Because there is no standard, it takes longer to determine whether this feature is defective. In the meantime, people are turning it off because they don’t know if it will work, thus undermining consumer confidence in the technology. Testing to a minimum AEB performance standard potentially would have identified and avoided the problem ahead of time.

Yet, as part of the deregulatory fever which has gripped NHTSA, instead of writing safety standards the agency is withdrawing rulemakings with known safety benefits including updating event data recorders and requiring electronic throttle control to mitigate instances of sudden acceleration.

Auto Safety is not now, and should never be, a partisan issue. The safety of our families and friends, our neighbors on the road, the pedestrians on our streets, the bicyclists in our bike lanes can be improved today, through technology and Congressional leadership. We greatly appreciate this Committee shining your spotlight on an issue that impacts every single American. On behalf of our members, the Center for Auto Safety stands ready to help you in these efforts.

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### Addressing Critical Safety Issues and Saving Lives

No single mistake should ever cost someone their life - especially when existing technology, available at reasonable price, can mitigate or eliminate potential tragedy and does not interfere with the utility of the vehicle. Below are areas where technology, in combination with required minimum performance standards, could address critical safety issues and save lives.

#### No Child Should Die Because Of A Single Mistake by A Parent or Guardian

As so clearly illustrated by the Harrison's experience, movingly described by Miles Harrison in his testimony at today's hearing, tragedies can be one mistake away for any person, particularly our most vulnerable populations. Technology will never address all of our issues, but it can help us to reduce the chance that we make them. Fifty-two children died of heatstroke in the back seat of cars in 2018 - more than in any previously recorded year.<sup>1</sup> That's one every week. Early indications are that 2019 is on pace to surpass that figure.

In many cases, a simple reminder would have prevented such a death. A reminder akin to seat belt alerts in the front seat, a technology that no one questions in terms of utility. In fact, if it so chose, NHTSA could initiate rulemaking tomorrow that would require all new motor vehicles have a child safety alert system to ensure via flashing symbols and warning sounds that the driver is aware of a backseat passenger. A very few manufacturers have started to install this sort of technology. No child's life should be dependent upon the luck of being in the back of one of those chosen vehicles.

#### No One Should Die Because Their Car Has A Keyless Ignition

Once thought impossible, the majority of new vehicles entering the U.S. market can be powered on and off without a key. Yet, this new technology does not come without drawbacks, as it represents such a dramatic change from the way people have traditionally interacted with their vehicles and has led to several dozen deaths. As recently as last week there were two more reported fatalities which appear to have resulted from a vehicle equipped with keyless ignition left running unintentionally. Retired MIT professor James Livingston and his wife, Sherry Penney, the first woman to lead the Massachusetts University system, were overcome in their Sarasota, Florida home by carbon monoxide exhaust that followed them into their house.

What is most troubling is there a relatively simple solution that would prevent these deaths: require the vehicles to shut off after a given period of time if the vehicle is not in use. Tragically, NHTSA began rulemaking on just such a solution 8 years ago, (76 FR 77183, Dec. 12, 2011) but has yet to finalize the standard. This delay has cost lives.

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<sup>1</sup> See [www.Kidaandcars.org](http://www.Kidaandcars.org)

It is true that some auto manufacturers, including General Motors and Ford, have taken proactive steps to respond to these hazards, implementing additional safety features such as auto shut-off systems to prevent CO poisoning. Yet, absent a requirement, most automakers have not addressed the various risks posed by keyless ignition technology, from carbon monoxide poisoning to vehicle rollaway. The next death is only a mistake away.

### No One Should Die Because Their Headlights Aren't Good Enough

In September 2018, the National Transportation Safety Board (NTSB) recommended that NHTSA revise 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.”<sup>2</sup> The headlights in question are sometimes referred to as adaptive or smart. Unlike the current high/lo 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. In theory, a proposed rulemaking on this issue will be put forth in the near future. 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.

### The Life Saving Value of Staying in your Lane

Lane-departure warning (LDW) is a system that 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. The Insurance Institute for Highway Safety (IIHS) estimates that up to 8,000 lives a year could be saved from preventing lane-departure crashes. Yet, as of model year 2017, LDW was standard on only 6 percent of new U.S. passenger vehicles.

These features (LDW and LKA) are designed to reduce the occurrence of crashes where vehicles drift off the road or hit a car in an adjacent lane. When used appropriately, the technology can help drivers avoid sideswiping another vehicle moving

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<sup>2</sup> <https://www.nts.gov/news/events/Documents/2018-DCA15SS005-BMG-abstract.pdf>

in the same direction, hitting a vehicle in oncoming traffic, and protects bicyclists and other vulnerable road users. It is important to note that the systems have limitations—lane monitoring may not work as well at all speeds, weather conditions, or road conditions.

But those limitations 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.

### It's 2019 and Your New Car's Black Box Thinks it's 2006

In 2006, NHTSA published a final rule regarding Event Data Recorders (EDRs or “black boxes”).<sup>[1]</sup> The rule set out data element requirements for vehicles where the manufacturer chose to install an EDR but did not mandate EDRs in vehicles. Six years later, in 2012, NHTSA published a Notice of Proposed Rulemaking, proposing that EDRs be required in all vehicles, yet did not update any of the data elements collected by the EDRs.<sup>[2]</sup> Seven years later, in February 2019, NHTSA’s proposal to mandate EDR installation was withdrawn based on wide voluntary adoption of EDRs. However, the data elements required to be collected have not been updated since 2006, long before the implementation of many of today’s advanced vehicle technology.

This would include AEB, lane departure, and adaptive cruise control, amongst others. Moreover, the EDRs do not capture whether the vehicle is using any of the commercially available ‘semi-autonomous modes’ more accurately known as Advanced Driver Assist Systems. Therefore, investigators do not have the necessary tools to accurately reconstruct crashes based on currently available EDR data and must rely on the least objective party after a crash – the manufacturer.

In order to assist crash investigators, such as the government’s own experts at NTSB, the Center for Auto Safety believes an immediate expansion of EDR data elements to capture events where driver assistance technologies played a role in the crash is necessary. Further, NHTSA would serve the motoring public, and the automotive and technology industries, well by expanding the role of EDRs to capture a broad range of autonomous vehicle operation information in order to inform future research and rulemaking. It is often said that new vehicles are computers on wheels. Yet, these computers still crash, and determining what happened, and how to avoid it happening again, will require not only additions to traditional data elements, but may well necessitate the incorporation of video, LIDAR, RADAR and other sensors as well. Long-term consumer acceptance is dependent upon confidence in why crashes are happening in driverless vehicles. The best way to know is to have useful data from EDRs when vehicles are in person-driving mode, autonomous-driving mode, and everything in between.

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<sup>[1]</sup> 49 CFR 563, at 71 Fed. Reg. 50998 (Aug. 28, 2006).

<sup>[2]</sup> 77 Fed. Reg. 74144

## The U.S. Version of the New Car Assessment Program (NCAP) Currently Rates Zero Stars

The New Car Assessment Program (NCAP) is celebrating its 40<sup>th</sup> anniversary this year. Originated in 1979 by NHTSA, under then Administrator Joan Claybrook, the program was designed to make government crash test results widely available to the public in the interest of better understanding the safety of the make and model of each new vehicle. The program was amongst the most successful consumer information programs in the history of the U.S. government and helped demonstrate to the auto industry that safety does indeed sell. Years later, the 5-star system that is widely synonymous with NCAP was introduced, providing a simple metric for consumers to understand the relative safety of new vehicles. Copycat versions of NCAP sprang up all over the world, saving countless thousands of lives. Sadly, the current custodians of this ground-breaking program have let it become nothing more than window dressing for advertising purposes.

The last update to the U.S. NCAP standards was in 2010. In 2015, NHTSA announced it would provide a major update of the ratings. In 2018, NHTSA sought further comments. The 2010 version of the ratings remain in place, which means with every new model year, NHTSA misses an opportunity to incentivize vehicle manufacturers to improve occupant protection without even requiring new regulations. The fact is that recent years' NCAP star ratings suggest that the program is failing to sufficiently distinguish between models, resulting in overall frontal and side impact ratings of 4- or 5-stars for over 98% of all vehicles tested.<sup>3</sup> This stagnation in ratings provide incredibly little comparative information for consumers in purchasing vehicles, and no incentive for manufacturers to improve crashworthiness and safety technology.

Yet, the recent request for comments suggests that the agency is considering allowing automakers to self-certify certain tests. This idea threatens one of the pillars of the NCAP program - that it is an independent assessor of safety and occupant protection technology. NCAP tests have long been conducted by the federal government independent of automaker influence. This independence is why the program still relies on blind car purchases to prevent manufacturers from gaming the system. NCAP test results are fully available to the public for review, while self-certifications are not. Further, such self-certifications would undoubtedly be deemed protected by the agency's confidential business information regulations. NCAP must continue to function independently of the whims of manufacturers whose main concerns are maintaining perfect ratings, and share prices, rather than investing in safety.

It should be a mark of shame on the Department of Transportation, not only that the ratings have not been updated for almost ten years, but that their counterparts around the world are lapping the United States when it comes to safety ratings. Euro NCAP uses far more tests to evaluate rear seat occupant protection in frontal crashes, far side impact protection, rear impact whiplash protections, child seat installation and occupant

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<sup>3</sup> See NCAP Combined Crashworthiness Rating Calculator, September 19, 2018, at: <https://www.regulations.gov/document?D=NHTSA-2017-0037-0037>.



protection, and pedestrian impact protection. Further, Euro NCAP evaluates driver assistance systems such as forward collision warning, automatic emergency braking, seatbelt reminders, speed assistance systems, and lane support systems such as lane departure warning, lane keeping assist, and emergency lane keeping systems, none of which are covered by U.S. NCAP. The Japan NCAP and Australian NCAP are also providing more helpful information to their consumers than the U.S.

The time for NHTSA to update NCAP is now. The Center for Auto Safety has previously submitted to NHTSA a variety of areas that should be part of that update. They include:

### Pedestrian Safety NCAP

According to the CDC, “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.”<sup>4</sup>

In other words, in 2015 pedestrian deaths accounted for more than 16% of people killed<sup>5</sup> in police-reported motor vehicle traffic crashes. The figures only increased, as almost 6,000 pedestrians were killed in 2016 and an estimated 6,200 were killed last year.<sup>6</sup> The death/injury rate for a pedestrian involved in accident is 5.7 times the rate for a motor vehicle occupant. Clearly, no assessment of vehicular safety should be considered complete without an assessment of vehicular design impact on pedestrian safety, yet NCAP has none. There is an urgent need to reduce the incidence of pedestrian involved crashes and reduce the appalling death rate and NCAP can be part of the solution. Euro NCAP has recognized this need and now includes in its vehicle ratings both collision avoidance features and automobile design features that protect pedestrians and minimize death and injury in an accident,<sup>7</sup> incentivizing car designers to incorporate pedestrian safety design features into their offerings.

Updates to NCAP’s ratings should also 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.<sup>8</sup> 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.

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<sup>4</sup> Pedestrian Safety, CDC, [https://www.cdc.gov/motorvehiclesafety/pedestrian\\_safety/index.html](https://www.cdc.gov/motorvehiclesafety/pedestrian_safety/index.html).

<sup>5</sup> Traffic Safety Facts, NHTSA, 2015, <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812375.pdf>.

<sup>6</sup> Governor’s Highway Safety Association: New Projection: 2018 Pedestrian Fatalities Highest Since 1990, <https://www.ghsa.org/resources/news-releases/pedestrians19>

<sup>7</sup> Vulnerable Road User (VRU) Protection, <https://www.euroncap.com/en/vehicle-safety/the-ratings-explained/vulnerable-road-user-vru-protection/>.

<sup>8</sup> How a Self-Driving Uber Killed a Pedestrian in Arizona, <https://www.nytimes.com/interactive/2018/03/20/us/self-driving-uber-pedestrian-killed.html>.

In 2018, the NTSB issued eight safety recommendations to NHTSA addressing the need 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 systems including pedestrian collision avoidance systems and other more passive safety systems into NCAP.<sup>9</sup> 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 US market to address the horrendous pedestrian death rate from crashes and protect the American public.

### Older Americans (Silver NCAP)

Numerous studies have shown that older drivers and passengers are more susceptible to chest injuries in crashes than younger adult populations,<sup>10</sup> yet NCAP frontal impact tests treat all passengers as one of two body types, a 50<sup>th</sup> percentile male or a 5<sup>th</sup> percentile female.<sup>11</sup> Americans over 65, functioning as both drivers and passengers, are a significant and growing proportion of the population. Technologies that improve the survivability of this population also improve the survival of women and juveniles. Manufacturers are contemplating and including technologies in vehicles that enhance elderly survival such as, e.g., adaptive air bags,<sup>12</sup> limited force restraint systems that anticipate crash severity and automatically adjust belt restraint tension to minimize injury,<sup>13</sup> and inflatable seat belts.<sup>14</sup>

Yet, without NCAP recognition of these lifesaving technologies, manufacturers have less incentive to accelerate 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 their life saving innovations and every demographic enjoys the benefits of safer cars. We suggest using a silver star to indicate a given vehicle possess such technology.

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<sup>9</sup> NTSB Public Meeting of September 25, 2018, Highway Special Investigation Report Pedestrian Safety NTSB/SIR-18/03, <https://www.nts.gov/news/events/Documents/2018-DCA15SS005-BMG-abstract.pdf>.

<sup>10</sup> Op cit., *Age Appropriate Restraints For The Right Front Passenger*, Augenstein, Perdeck, Digges, Bahouth; *Investigation Of The Performance Of Safety Systems For Protection Of The Elderly*, J. Augenstein, K Digges, G. Bahouth, D. Dalmotas, E. Perdeck, J. Stratton, Annu. Proc. Assoc. Adv. Automot. Med. 2005;49:361-9

<sup>11</sup> 49 CFR Part 572, Subpart B.

<sup>12</sup> <http://online.wsj.com/public/resources/documents/Eyesontheroad02132005.pdf>.

<sup>13</sup> Advanced Restraint Systems (ARS) Final Report, DOT HS 811 794A, <https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/811794a.pdf>.

<sup>14</sup> *The Ford inflatable seat belt: How it affects car seats and children*, Consumer Reports News: March 01, 2011. <https://www.consumerreports.org/cro/news/2011/03/the-ford-inflatable-seat-belt-how-it-affects-car-seats-and-children/index.htm>.



### Crash Avoidance Technology

When NCAP was initiated there were no crash avoidance technologies, as they are currently understood, available to manufacturers or consumers. Now there are many crash avoidance features 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. To accelerate incorporation of these life-saving technologies into cars, to stimulate competition and incentivize continuous safety improvement, NCAP could, and should, evaluate the efficacy of these important systems and provide buyers with assessments of crash avoidance features, both in absolute terms and relative to other vehicles.

### Anthropometric Test Device upgrades

NHTSA should standardize test procedures and the biomedical design of advanced Anthropometric Test Devices (ATDs) and approve their use in NCAP, in order to enhance the ability of researchers and analysts to interpret test results from one test condition into equivalent results at other conditions. Extensive research has shown much greater susceptibility to chest injuries in lower speed front crashes by older Americans and 5% young female passengers than the standard 50% male.<sup>15</sup> Data collected from appropriately standardized ATDs collected at higher speeds as per current standards would provide a means of interpreting those higher speed crash results for the more susceptible elderly and female cohorts without the need for additional tests.

Analysis of test data has also shown sensitivity to placement of restraints, especially shoulder belts. ATD upgrades should also include standardization of seat belt placement to complement ATD sensor location(s), to assure collection of the most meaningful data for both acceleration and chest compression.

### Rear Seat Passengers

Without changes to NCAP ratings, manufacturers have no incentive to improve rear seat safety. It would be tragic if overall passenger safety is degraded by design changes reflected in high NCAP ratings based solely on front seat test results. As front seat safety has improved in response to NCAP tests and resultant car design evolution, the once accurate appraisal of rear seat passengers as being safer is no longer necessarily accurate. It is imperative that NCAP acknowledge the significant and increasing susceptibility of rear seat passengers to crash injury risk, particularly since this risk appears to be related to design changes that have enhanced front seat safety.

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<sup>15</sup> *Age Appropriate Restraints For The Right Front Passenger*, Augenstein, Perdeck, Digges, Bahouth. 51st Annual Proceedings Association For The Advancement Of Automotive Medicine, October 15 – October 17, 2007.

NCAP crash tests should include rear seat occupant ATDs of 5% female and 50% male, as well as infants and other ATDs as they become available, to validate vehicle safety, with the purpose of making the rear seat as safe as the front.

### Far-Side Impact

Far-side impact is a significant source of injury and death to American motorists.<sup>16</sup> Related injuries and deaths are usually associated with the occupant sliding out from under the shoulder belt, causing a wide range of injuries, with head injuries being predominant. Countermeasures that would minimize or eliminate such injuries have been identified.<sup>17</sup> Accelerating adoption of these countermeasures, especially inflatable curtains, would save many lives in far-side impacts and also reduce injuries in rollovers. One of the purposes of NCAP is to motivate investment in life saving technologies, such as inflatable curtains.

Extending NCAP assessments to include far-side impacts would likely motivate additional investment in these technologies. Some manufacturers are already including inflatable curtains in their automobiles, and they should receive NCAP credit for their investment and the added safety this addition provides to consumers. The public should also be made aware, through NCAP ratings, of the differential in safety between vehicles that include this life-saving technology, and those that have chosen not to provide this safety feature.

### Post-Crash NCAP

NCAP should be expanded to include important post-crash characteristics of automobiles which effect occupant survivability, including ease of vehicle egress, flammable material concerns, and the performance of automatic crash notification (ACN) systems. NCAP ratings can be a powerful motivator for manufacturers to promote post-crash safety.

The ability of occupants to open doors and safely egress from the post-crash vehicle should be evaluated and included in NCAP ratings. The ability to safely egress a damaged vehicle is fundamental to post-crash survival, and consumers should know if the vehicle they are considering is a death trap.

Second, NCAP should assess the propensity of vehicles to burn after a crash. There are many flammable components in modern cars, including fuel, engine compartment fluids (e.g., power steering fluid and transmission fluids) that can be released in a crash, and numerous ignition sources including environmental items, dynamic metal objects, catalytic convertors, and electrical sparks that can easily ignite these fluids, starting a

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<sup>16</sup> *Characteristics Of The Injury Environment In Far-Side Crashes*, K. Digges<sup>1</sup>, H Gabler<sup>2</sup>, P. Mohan<sup>1</sup>, B. Alonso, *Annu Proc Assoc Adv Automot Med*. 2005; 49: 185–197.

<sup>17</sup> *Injury Reduction Opportunities of Far side Impact Countermeasures*, Ola Bostrom<sup>1</sup>, Hampton C. Gabler<sup>2</sup> Kennerly Digges<sup>3</sup>, Brian Fildes<sup>4</sup>, Cecilia Sunnevang, *Ann Adv Automot Med*. 2008; 52: 289–300.

conflagration that can end in the death of injured or trapped vehicle occupants. Electric car batteries are also known to spontaneously ignite after collisions, sometimes quickly and sometimes hours or days after the crash.

All of these potential fires are dangerous to the vehicle's occupants, surrounded as they are by flammable fluids, plastics, and unexpended gas generator propellants, and to first responders. NCAP should provide test data to potential consumers ranking the post-crash fire hazard assessments of new cars as part of the crash test results.

Finally, NCAP should evaluate the performance of ACN systems. NHTSA has yet to set performance specifications for ACN technology, nor is it required in vehicles. As a result, installation and performance of ACN varies widely across manufacturers. The ability to provide first responders and trauma centers with crash data immediately after an event occurs can be critical to proper response and treatment of crash victims.

#### How is Selling a Recalled Toy Car is Illegal but Selling a Recalled Used Car is Acceptable?

Finally, the main focus of the Center's testimony, and today's hearing, is on how to make the cars that will be rolling off assembly lines and into America's driveways in the next few years safer. Minimum performance standards requiring the use of existing advanced technology can help drivers avoid crashes and improve the likelihood of vehicle occupants surviving crashes. Yet, one step that could be taken which does not require regulation, but would require Congressional action, is to ban the sale of used cars with unrepaired recalls.

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. But this summer, 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.