New Car Assessment Program
Fact Sheet & Call to Action

Overview

As directed by the Infrastructure and Investment in Jobs Act, the U.S. Department of Transportation's (USDOT) National Highway Traffic Safety Administration (NHTSA) has proposed changes to the New Car Assessment Program (NCAP) and is soliciting feedback. **The Request for Comment period extends through June 8, 2022 (extended from original date of May 9th here).** This is our chance to raise our voices and our concerns. If you have been directly impacted by a crash, your voice will be particularly important and impactful. There are two ways you can take action: (1) share your personal story here so that we can include it in the Families for Safe Streets reply; and (2) submit your own comment online here to the proposed rule changes. Details for both are below.

NCAP is a federal car safety program that rates the safety of new vehicles on a five-star rating system. The rating system is compiled based on various crash tests with results shared as a one to five star sticker placed on all new vehicles for sale.

The new rules include some long-overdue technological changes including the incorporation of testing the effectiveness of blind spot detection, blind spot intervention, lane keeping support, and pedestrian automatic emergency braking, or AEB (including its effectiveness at night), and incorporating the results into the rating system.

The United States created the NCAP rating system but Europe then adopted it and advanced its program to include ratings for vehicle safety technology while the US NCAP has fallen behind. It is far past time we caught up to and surpassed other nations.

NHTSA's NCAP falls short in many egregious ways, including:

- **Vehicle weight/hood size:** The NCAP prioritizes auto-manufacturer profit over safety by not directly addressing the dangers very large SUV's and pick-up trucks pose to all other road users. The proposed NCAP offers inadequate protections for people walking, biking, or rolling by overlooking dangerous vehicle-design features found on large vehicles such as oversized front ends that limit visibility, despite NHTSA's own research demonstrating the particular danger large vehicles present to other road users. In its current form, the NCAP skirts around addressing the inherent safety problems posed by increasing vehicular height and weight by proposing in-vehicle technologies to mitigate those hazards, but these are far from sufficient.
- **Detection systems for vulnerable road users:** The NCAP proposal offers a muted response to the surge in pedestrian and cyclist fatalities that Transportation Secretary Buttigieg has recognized as a national crisis. The new updates do include a new rating for automated pedestrian detection but fail to commit to their effectiveness in all conditions. Moreover, they also fail to include a test for technology to detect and alert drivers to cyclists. Instead, USDOT proposed to perform research to determine the viability of Euro NCAP's AEB cyclist tests. NHTSA will then compare test data with preliminary crash populations to assess the adequacy of the test procedure for the U.S. vehicle fleet and roadway system. Given the huge rise in people killed while cycling and the fact that the Euro NCAP already includes these tests and rating systems, the USDOT proposal is not sufficient.
- **Driver Monitoring Systems & Intelligent Speed Assistance:** There is existing technology that has been included in the EuroNCAP for awhile and is now being mandated in all new vehicles in the EU to identify and intervene when drivers are speeding, drowsy, impaired or distracted. However, the USDOT's proposed rules are only soliciting feedback on the timing of when these should be included in the NCAP rating system in the coming decade.
- **Female and child occupants:** The new rules also do not include a requirement to test vehicles using crash "dummies" that reflect female and child physiology. Studies show that women are dying at higher rates than men and there has been a call to improve crash dummies to reflect female anatomy that the new rules did not include. In 2019, 608 child passengers age 12 and younger died in motor vehicle crashes, and more than 91,000 were injured.
- **Rating System:** The US NCAP has lost its effectiveness as a meaningful tool for consumer choice. Today, nearly all new cars receive 4 or 5 stars, rendering the program meaningless. It's past time for a more discriminatory rating system, one that accurately reflects the dangers vehicles pose and that offers a meaningful guide to consumers. The EU uses a 4-pronged rating system assessing the safety of the vehicles for adult occupants, child occupants, and vulnerable road

users, as well as the effectiveness of driver assist technologies to avoid and mitigate crashes. Each category receives a percentage rating from 0%-100%. This is an approach that the NHTSA should take to make the NCAP more meaningful.

Importantly, the EU not only includes proven safety features in its Euro NCAP rating system far more effectively than the U.S., but it also requires that many of these proven safety features be standard in *all* new automobiles so that *everyone* can benefit from these proven life-saving tools. USDOT needs to take drastic action to make vehicles safer to address the crisis on our roadways.

Call to Action

As indicated above, there are two ways you can take action: (1) share your personal story so that we can include it in the Families for Safe Streets reply; and (2) submit your own reply to the proposed rule changes. (Note that you can do both.)

1) Share Your Story with Families for Safe Streets

We would like to submit a reply from Families for Safe Streets with your stories to highlight the inadequacy of the changes proposed.

Our voices are particularly important because of the suffering and pain we have endured. To make this task short and easy for those whose time is limited, all we are asking is that you complete a short questionnaire so that we can include your stories in our response. You can complete the questionnaire here. Please respond promptly so that we can include your response. Please make sure to share some information to give life to who was killed/injured and email a photo to info@familiesforsafestreets.org.

Our response with all of your personal stories will have a powerful impact and will help argue that not only should NCAP include certain safety features in its testing protocol, but also that these safety features should be mandatory equipment and required to be included in all new vehicles.

2) ***Submit Your Own Response Directly to NHTSA***

Comments will be accepted through June 8, 2022 via this link, which will also direct you to the revised NCAP document itself. To submit a comment, click on the green tab near the top on the right-hand side.

Please express your outrage at the woeful inadequacy of the proposed rule changes. If you lost a family member, colleague or friend, please share his/her story and, to the extent possible, link the crash details to the need for specific revisions and/or more stringent standards. Feel free to include photos of the person who was killed, photos of the injuries, the crash sites, etc. Below is a sample letter as well more details of issues you may want to address.

Sample Letter

I am writing to urge you to significantly strengthen the NCAP program. It is outrageous that the US has not made meaningful change to make cars safer and it is coming at a really high price. This is an issue that is so important to me because …*[Share your personal story or why this is important to you. Talk about who was killed or seriously injured, the crash, how it has impacted your family.]*

THEN SELECT ANY OR ALL OF THE ITEMS BELOW IN KEY TALKING POINTS THAT APPLY TO YOUR SITUATION OR ARE IMPORTANT TO YOU

Please, for [my husband/brother/sister/friend/colleague], I urge you to address these concerns.

Key Talking Points

The following information is intended to guide you through the issues that Families For Safe Streets and other road-advocacy groups have identified as most important. That said, it is not a comprehensive list nor is it intended to be limiting; there may be additional issues that you feel are important to address. You should try to make your comment reflect your specific situation (injured yourself or lost a loved one) and your specific concerns.

VEHICLE SIZE/HEIGHT

Background

Large SUV's and pick-up trucks have created a safety-crisis on our roads. These vehicles are getting ever larger and accounting for an ever-greater share of vehicular traffic. SUV's, pick-ups and other big, heavy vehicles claimed 78% of the market last year. Large vehicles are 2 to 3 times more likely to kill a pedestrian than smaller models due to their weight, height, and aggressive front-end vehicle design – all of these factors inflict more damage on the internal organs, heads, and necks of walkers than lighter lower-profiles cars which are more likely to strike a pedestrian's lower extremities. Federal safety regulators have known for years that SUVs with their higher front-end profile are at least twice as likely as cars to kill walkers, joggers and children yet have done little to reduce deaths or publicize the danger.

Moreover, SUVs are three times and pick-up trucks four times more likely to hit a pedestrian while turning left than drivers of smaller cars ***because common design features make it impossible for megacar drivers to see walkers*** according to a study two blind zone related studies. The USDOT itself even has an online tool showing how many walkers and bikers fall into these blind zones and this has also been studied by the GHSA. Researchers cited design of A-pillars—the vertical struts on either side of the windshield that connect the roof to the body of the car—as the source of the blind spot. Despite these known dangers, automakers have opposed calling these safety concerns out explicitly. While IIJA mandates that DOT issue next year a notice for public review and comment regarding potential updates to NCAP hood and bumper standards for motor vehicles, these hood/bumper standards should be addressed now in the current NCAP RFC to ensure that crash test protocols evaluate the safety of bumpers and hoods of different sizes, heights and designs.

Suggested NCAP Comment: It is inexcusable that the proposed NCAP rules fail to consider vehicle size, weight, hood height, limited visibility, or distracting screens and how these attributes endanger road users who are either outside of the vehicle or driving smaller vehicles. Very large SUVs and light trucks make up an ever-increasing share of vehicular traffic. Instead of addressing the specific problems with large vehicles, 'Emergent' Advanced Driver Assistance Systems (ADAS) technologies do not reduce the dangers the car companies created by marketing and selling oversized vehicles because: (1) ADAS technologies does not directly address the specific safety problems large vehicles pose; and (2) AEB (Automatic Emergency Braking) and PAEB (Pedestrian AEB) systems are problematic because they are known to fail in low light and in inclement weather, have trouble detecting cyclists, and fail to protect vulnerable

road users when drivers exceed 40 MPH. SUVs and pick-up trucks have grown and continue to grow exponentially in size and weight and this growth has been directly correlated with pedestrian and cyclist fatalities. Large SUVs and pick-up trucks are particularly dangerous to society's most vulnerable road users: children. **NHTSA must commit to a rapid timeline for requiring pedestrian-safe hood and bumper design.** If NHTSA fails to directly address the safety issues created by size, weight, and visibility, more people like [MY SON/HUSBAND/FRIEND] will continue to die on our roadways.

TECHNOLOGY TO PROTECT VULNERABLE ROAD USERS

Background

Automatic Emergency Braking (AEB) systems complement forward-collision warning systems by sensing a potential collision and initiating automatic braking if the driver does not react in time. Pedestrian Automatic Emergency Braking (PAEB) systems use the features of forward collision warning and AEB to protect pedestrians while Cyclist AEB (CAEB) uses the same features to protect cyclists.

The problem with AEB is that the sensors do not work well in low light which is problematic because an estimated 75% of all pedestrian fatalities and 47% of cyclist fatalities occur at night. They also tend to fail in inclement weather. In addition, PAEB systems don't help much at speeds above 40 MPH.

There is technology now, particularly with improved headlamps that would address many of these shortfalls. Headlight technology has experienced dramatic improvements over the last half-century, but the absence of modernized standards has resulted in automakers installing poorly performing headlights. The range of systems has been demonstrated in ratings from the Insurance Institute for Highway Safety (IIHS) which found that the nighttime crash rates are nearly 20% lower for vehicles earning the organization's "good" rating for headlight performance versus those earning a "poor" rating. Recognizing the potential safety benefits, the National Transportation Safety Board (NTSB) recommends upgrading headlight standards.

***Suggested NCAP comment*:** The NCAP proposal offers a muted response to the surge in pedestrian and cyclist deaths that Transportation Secretary Buttigieg has recognized as a national crisis. NHTSA itself identified forward-impact pedestrian crashes as the second highest fatality type and the deadliest based on frequency of fatalities. Table 1 on page 13 of the NCAP Request for Comment (RFC) indicates this technology could save 4,106 lives. The proposed rules must ensure that PAEB systems detect pedestrians in low light, inclement weather, and speeds in excess of 40 MPH and high ratings should only be given to systems that work in all conditions.

Moreover, the NCAP update MUST include testing technology to detect and alert drivers to cyclists. This is a hugely concerning omission in the proposed NCAP language, given the stark rise in cyclist fatalities over the past decade. Cyclist AEB is already a basic feature in EuroNCAP where European cyclist deaths are dropping. NHTSA is only proposing to perform research to determine the viability of the EuroNCAP' protocol. NHTSA's NCAP proposal would put the U.S. nearly a decade behind EuroNCAP by proposing a Notice and Comment Rulemaking no sooner than 2025 and testing no sooner than 2026-27. Given the rise in cyclist fatalities, this proposed timeline is nothing short of outrageous. Cyclist AEB systems should be included in the testing protocol immediately.

Finally, it is imperative that NHTSA include testing of new and improved headlamp technology so that drivers can see vulnerable road users at night, **making it safer for all road users** but particularly those walking and biking because better headlamps improve the effectiveness of PAEB and CAEB. But rather than only rate headlamps in NCAP, NHTSA should also pursue a requirement for solutions such as adaptive driving beam technology now and update the now decades old standard for headlamp requirements. Proven solutions, including adaptive driving beam (ADB) technology, should be standard equipment in new vehicles to address this preventable death toll.

DRIVER MONITORING SYSTEMS & INTELLIGENT SPEED ASSISTANCE (ISA)

Background

Driver Monitoring Systems such as adaptive cruise control and land centering use computers and cameras to monitor driver attentiveness and utilize driving assistance features that automate steering, braking and acceleration. EuroNCAP has included Driver Monitoring Systems in its assessment since 2014. In November 2019, the EU passed a general safety regulation ***mandating*** automakers to install camera-based driver monitoring to detect driver inattention or drowsiness and to issue an audible warning if driver distraction is identified. The EU's new regulations will be gradually implemented over the course of four years, starting in 2022.

Another key technology tool to address driver behavior is Intelligent Speed Assistance (ISA). ISA systems use a speed sign recognition video camera and/or GPS-linked speed-limit data to advise drivers of the current speed limit and automatically limit the speed of the vehicle as appropriate. The Euro NCAP has assessed ISA for well over a decade and awards full credit to ISA systems that detect the speed limit and automatically adjust the speed of the vehicle to prevent the driver from exceeding the

posted speed limit. European researchers have thoroughly researched the difference between systems that simply alert the driver of excessive speed and those which limit the speed to the posted limit, concluding that the latter is associated with a larger reduction in speed. Moreover, not only is the EU rating ISA part of the EuNCAP process; it will become mandatory in all new vehicles starting in July 2022 in the EU and some other countries. Researchers, such as IIHS, have long advocated that ISA be mandated as it is a key tool to address the speeding crisis on U.S. roadways.

***Suggested NCAP comment*:** The proposed NCAP rules on Driver Monitoring Systems and Intelligent Speed Assistance are woefully inadequate. The proposed rules only solicit feedback on the timing of when Driver Monitoring Systems (DMS) should be included in NCAP's rating system in the coming decade. Again this puts the U.S. significantly behind the Euro NCAP, which has included DMS for well over a decade.

NHTSA also has shown no commitment to ISA and speed limiters, despite its repeated concerns about speeding and the clearly documented research showing that ISA saves lives. The EU's European Transport Safety Council conclusively found a strong safety benefit in mandating ISA technology in 2019. In the EU, universal ISA systems have resulted in a 30% reduction in collisions and a 20% reduction in deaths.

It is critical that NHTSA align its NCAP ratings with EuroNCAP and save lives by including DMS and ISA systems in its revised NCAP.

Moreover, USDOT should follow the EU's lead and make DMS and ISA mandatory in all vehicles. These proven, well-studied safety features should not only go to those who can afford them—at some undetermined future date—but should be made standard in all vehicles. If USDOT is truly committed to equity, then everyone should be able to have these proven safety measures, regardless of income levels.

RATING SYSTEM

Background

As indicated above, the US NCAP has a 5-star rating system but rates almost all cars either 4 or 5. The EU uses a multi-pronged approach with a percentage rating. It's long past time for a more discriminatory rating system, one that accurately reflects the dangers vehicles pose and that offers a meaningful guide to consumers. In addition, EuroNCAP's AEB for VRUs addresses: 1) Adult crossing either walking or running, 2) Child crossing obstructed, and 3) Adult longitudinal walking.

Suggested NCAP Comment: It is imperative that NHTSA dramatically revise its rating system to give consumers meaningful choice. Rating all cars a 4 or 5 is clearly not adequate. I urge NHTSA to adopt the EuroNCAP rating system's multi-pronged approach, which offers a percentage-rating system with clear delineation, making clear that higher-rated vehicles have specific stronger safety measures.

INADEQUATE CRASH TESTING

Background:
Crash test dummies reflect only some body types. VERITY Now, a coalition advocating for gender equity in car safety, is leading work on this issue. Their overriding concern is that crash tests only test for the average-sized male body and overlook women, pregnant women, the elderly, children and a range of other body types. This is an inherent inequity issue. According to VERITY Now, women are 17% more likely to die and 73% more likely to be injured in a Vehicular crash than men. Moreover, NHTSA has punted on pedestrian crash impacts, failing to adequately test vehicles for pedestrian safety.

Suggested NCAP Comments: NHTSA discriminates against non-average-male individuals by failing to require crash testing to take into account different body anatomies. It is time to modernize and enhance crash tests. It is imperative that NHTSA require use of dummies reflective of the multitude of body sizes and physiology subject to being injured or killed in crashes.

Additional Articles for more background info:

- Streetsblog USA and Bloomberg News wrote articles about the failure to address the growing size of vehicles and protect those walking and biking.
- Articles on the issue about not using female crash test dummies in Forbes and StreetsBlog USA.
- Comparison on US NCAP to Euro NCAP by Advocates for Auto & Highway Safety and reported in Consumer Reports.

Families for Safe Streets (FSS) confronts the epidemic of traffic violence by advocating for life-saving changes and providing support to those who have been impacted by crashes. Comprised of individuals who have been injured or lost loved ones, FSS was founded in 2014 in New York City and is now growing as a national movement with

chapters forming across the country. For more information, contact info@familiesforsafestreets.org.

Revised 4/29/22