

May 27, 2022

The Honorable Pete Buttigieg Secretary U.S. Department of Transportation Docket Management Facility, M-30 West Building, Ground Floor, Room W12-140 1200 New Jersey Avenue, SE Washington, DC 20590

Re: NHTSA-2021-0002 New Car Assessment Program Request for Comment

Dear Secretary Buttigieg:

Thank you for allowing Families for Safe Streets (FSS) to respond to the National Highway Traffic Safety Administration's (NHTSA) Request for Comment (RFC) on the updates proposed to the New Car Assessment Program (NCAP).

All of us in FSS have lost loved ones or were, ourselves, injured in road crashes. Together, we transform our grief by telling our personal stories of trauma and loss to bring about policy and legislative change. We fight to end all traffic violence because no death or life-altering injury is acceptable. These are preventable crashes — not "accidents" — and the problems that cause these crashes have proven solutions. With chapters forming across the country, we have begun a national movement to end this epidemic.

We write and share our stories in this letter to urge you to use this opportunity in updating the NCAP to drastically improve the program so that, at a minimum, it will be on par with the Euro NCAP or, ideally, once again make the U.S. a leader in automotive safety.

We commend the U.S. Department of Transportation (U.S. DOT) for adopting the Safe System approach to roadway safety. This proven approach recognizes that people are not perfect and make mistakes. By focusing on ensuring that the upstream systems of our transportation system – including vehicle design – using a data-driven approach that prioritizes safety, inevitable human error will not have to result in the horrific deaths and injuries we have all experienced.

Airplanes, trains, and ships have been built according to this principle for decades. Society would never accept less, given the consequences of a crash of a mass transit vehicle. We should accept no less when tens of thousands are killed and hundreds of thousands suffer life-altering injuries in separate vehicular crashes each year. Vehicles kill the equivalent of a jumbo jet of passengers every four to five days on American roads and things are only getting worse. Traffic deaths are now at a 16-year high. That this has become the 'norm' is unacceptable, given that current technology, if made mandatory, will vastly reduce that number.

While we commend NHTSA for proposing some improvements to testing protocols in this rule-making, especially including some vehicle non-occupant testing, we strongly urge NHTSA to go further. The NCAP proposal offers a particularly muted response to the surge in pedestrian and cyclist deaths that you have recognized as a national crisis. There is too much at stake to not take much more dramatic action. In the National Roadway Safety Strategy released this year, the U.S. DOT committed to eliminating traffic deaths on our roadways. We will never get to "zero" without a much bolder approach to vehicle safety, including a stronger NCAP and enhanced vehicle regulation.

The <u>United States was once a leader</u> in automotive safety and started the world's first NCAP program in 1979 over the objections of the automobile lobby – nearly two decades ahead of the European Union, Japan and Australia. Yet we are at least a decade, if not more, behind these nations in mandatory vehicle regulation and NCAP testing and rating protocols. In the past decade, the EU and others have made dramatic improvements to their NCAP and automobile regulations, resulting in a steady decline in the number of people killed and seriously injured in traffic crashes – even during the past two years of the pandemic. If only we had made these same gains in the last ten years, hundreds of thousands of lives would have been saved and millions of life-altering injuries averted.

NCAP is a critical tool for measuring car safety innovation and affords an opportunity to test technologies and reward car makers who implement safety measures over and above those mandated in all vehicles. Many countries currently mandate safety features that are only now being proposed in the U.S. for NCAP testing. <u>It is a disgrace.</u>

A data driven approach requires, at a minimum, that the U.S. follow the lead of the European Union, utilize their decades of research and data, adopt their proven safety protocols as appropriate for the U.S, and use this opportunity to address the crisis on our roadways.

Specifically, we urge the U.S. DOT and NHTSA, within the next two years, to:

- Address the deadly weight and hood size of SUVs/pickup trucks
- Improve testing of Advanced Driver Assistance Systems (ADAS) technologies to protect vulnerable road users, and include automatic cyclist protection in your list of required features
- Go beyond tentatively exploring Intelligent Speed Assistance (ISA) systems we know could save thousands of lives annually, and bring our standards in line with the European Union
- Address distractions of Infotainment Systems and cell phones, both in the dash systems and in the use of automatic anti-distraction technology
- Expand crash testing to include female and child test dummies
- Expedite rule-making on vehicle regulations for mandatory safety features

We detail these items below and highlight the stories of crash victims who would likely be alive today or whose life-altering injuries would have been averted had those safety features been in the vehicles that hit them. **Please, we urge you, take bold action.** Resist the pushback from the automobile lobby and make sure our children, our parents, our siblings, and our loved ones who were killed did not die in vain. Please make sure the horror of these crashes and this deadly crisis finally ends.

Our family members died violent, bloody, horrific deaths. Some suffered unimaginable pain before they died. Others, still alive today, live daily with devastating injuries. We share below the stories of these loved ones and their photos before they died or were seriously injured. But we are starting this letter with a few images of a gruesome crash to press upon you to do much more than NHTSA has proposed in its NCAP revisions.



Photos of the crash that killed 18-year-old Henry Zietlow

VEHICLE WEIGHT / HOOD SIZE / LIMITED VISIBILITY

The growth in size and market share of large SUVs and pick-up trucks has created a safety-crisis on our roads that directly correlates with the surge in pedestrian and cyclist deaths. Large SUVs and pick-up trucks are also particularly dangerous to society's most vulnerable road users: children.

Large vehicles, which made up 78% of the market last year, are 2 to 3 times more likely to kill a pedestrian than smaller models due to their weight, height, aggressive front-end vehicle design that limit visibility – 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 two blind zone-related studies. The U.S. DOT itself even has an <u>online tool</u> showing how many walkers and bikers fall into these blind zones and this has also been studied by the Governors Highway Safety Association. Researchers cite the design of A-pillars — the vertical struts on either side of the windshield that connect the roof to the body of the car — as one source of the blind spot, and the increasing height and profile of the hood as another source of the problem.

Direct Vision Standard (DVS) objectively measures how much the driver of a large truck and SUV can see through their windows and mirrors and how big the resulting blind spots are – and should be used to assess blind spots on SUVs and pick-up trucks. U.S. DOT's Volpe Center recently concluded research on DVS on large trucks, summarized in this graph:



While NCAP only concerns cars, pickups, and SUVs, NCAP should include testing of DVS on those vehicles. The EU has had a minimum direct vision forward field of view regulation for well over a decade for all light-duty vehicles. The United Nations Economic Commission for Europe limits the maximum A-pillar blind spot angle and sets the minimum downward angle of visibility for the driver (Regulation 125 section 5). With such a regulation in the U.S., some of our tragic stories of blind zone deaths because of massive hoods would not have happened.

Despite these known dangers, <u>automakers</u> have resisted calls to address this crisis. While the Infrastructure and Investments in Jobs Act (IIJA) mandates that US DOT issue next year an NCAP notice for public review and comment regarding hood and bumper standards for motor vehicles, NCAP protocols should be changed now to ensure that crash test results evaluating the safety of bumpers and hoods of different sizes, heights and designs are available when next year's request for comment is issued.

In its current form, the NCAP skirts around addressing the inherent safety problems by proposing in-vehicle technologies to mitigate those hazards, but these are far from sufficient. ADAS technologies do not reduce the dangers the car companies create by marketing and selling oversized vehicles, because they do not directly address the specific visibility safety problems large vehicles pose.

Moreover, as discussed further below, Automatic Emergency Braking (AEB) and Pedestrian AEB (PAEB) systems are known to have limitations in low light and in inclement weather, have trouble detecting cyclists, and fail to protect vulnerable road users when drivers exceed 40 MPH.

NHTSA's proposed changes to the NCAP testing protocols fail to address these critical issues head-on, despite NHTSA's own research demonstrating the particular danger large vehicles present to other road users. One can only conclude that auto industry pressure is to blame, given the enormous profits it enjoys from the sale of large SUVs and pickup trucks.

NHTSA must commit to a rapid timeline for requiring pedestrian-safe hood and bumper design with "softer" front ends as well as implementing direct vision standard testing. If NHTSA fails to directly address the safety issues created by size, weight, and visibility, more people like our loved ones will continue to die on our roadways. A teenager speeding in his large SUV with limited visibility broadsided Susan Hering's cycling husband, Bill, in San Diego. The impact threw Bill 150 feet into the air, killing him, and crushing his bike. The driver said: "I didn't see him until I hit him." A respected CPA by profession, Bill was a lifelong outdoorsman and adventurer who enjoyed bicycling throughout the West, but especially in the mountains near his chosen home in Durango, Colorado. One of his greatest joys was sharing these passions with his children.

On January 12, 2022, Marcia's husband, Paul Moore was crossing a busy street on his recumbent bike. He was in the crosswalk with a green light when the driver of a large Dodge Ram 4x4 pickup turning right hit and killed him. The driver said he had a blind spot near the front wheel well and where the frame on the right of the windshield blocked his view. Paul was an experienced rider but that was no match for the Dodge Ram. Paul loved to travel and lived abroad in Japan, where he met his wife, before settling down in his native California where he taught English at Kerman High School for 24 years. He left behind a devastated family including a wife of 26 years, a 17-year-old son, a 92-year-old mother, and two sisters. "Our lives have been changed forever. The tragedy is crushing. The images of him are forever etched in our memories," said Marcia.







The driver of a Ford F-150 hit and killed Deborah Hsiung's 7-year-old son Aidan Tam, who was crossing the street with his family in Pasadena, California. Aidan was in a crosswalk with the light, when the driver struck him. Aidan was no match for the giant Ford F-150, which had limited visibility and lacked any kind of pedestrian detection system. He was rushed to the hospital but succumbed to multiple traumatic injuries shortly after the crash. Aidan was a bubbly child whose favorite drink was bubble tea, so every year his family asks everyone to drink bubble tea in his memory on his death anniversary.



ADVANCED DRIVER ASSISTANCE SYSTEMS (ADAS)

Despite the concerns raised above, we recognize that ADAS, electronic systems in a vehicle that use advanced technologies to assist the driver, are an important component to safety so we were pleased to see that the proposed rules included testing the effectiveness of blind spot detection, blind spot intervention, lane keeping support, and pedestrian automatic emergency braking. Essentially, by using sensors in the vehicle such as radar and cameras to perceive the world around the car, these technologies can then either provide information to the driver or take automatic action based on what it perceived.

However, the proposed testing rules are inadequate because they fail to fully address issues detecting pedestrians, do not expedite cyclist detection and fail to ensure lane keeping support does not pose a threat to cyclists.

Pedestrian Detection Systems

NHTSA itself identified forward-impact pedestrian crashes as the second highest fatality type and the deadliest based on frequency of traffic deaths. Table 1 on page 13 of the NCAP Request for Comment indicates this technology could save 4,106 lives. Moreover, <u>research performed</u> by the Insurance Institute for Highway Safety (IIHS) and the Highway Loss Data Institute (HLDI) indicates that Pedestrian Automatic Emergency Braking (PAEB) safety systems can reduce pedestrian crash risk by as much as 33%. It is well documented that blind spot detection, a critical component of PAEB, does not work in all conditions, including at night, at high speed, and in poor weather. Moreover,

pedestrian detection systems may fail to properly recognize people with darker skin colors. However, over a third of pedestrian deaths occur in dark/unlit conditions, and research also indicates that PAEB does not reduce pedestrian crash risk in the dark without street lighting. However, testing performed by IIHS-HLDI and NHTSA indicates that PAEB systems have the ability to properly perform in the dark, so we are pleased to see that there would be new testing of these systems in all light conditions. But there is no mention of testing the other limitations of the systems.

The proposed testing protocols must rate PAEB systems on their ability to detect all pedestrians, including people of color, and do so in inclement weather and at speeds in excess of 40 mph. High ratings should only be given to systems that work well in a variety of conditions. If only there had been fully functional pedestrian detection systems in the vehicles involved in these crashes below, these deaths could likely have been averted:

Michelle DuBarry lost her 1-year old son Seamus. An elderly man making a right turn through a crosswalk struck her husband and her son in what police called a "misapplication of pedals" crash, in which the driver mistook the accelerator for the brake. Her husband was thrown 20 feet into oncoming traffic but sustained only minor injuries. Their son's stroller was pinned to a telephone pole. He was rushed by ambulance to a hospital where he endured two surgeries and a night in intensive care before succumbing to his injuries. Twenty-seven hours after arriving at the hospital, Michelle walked out with a bandaged, shell-shocked husband, a manila envelope full of grief pamphlets, and five tufts of wispy blonde curls tied neatly with purple ribbons and tucked into tiny envelopes — mementos the nurses had prepared for them while they filled out organ donation paperwork.



Last photo of Seamus

A speeding MTA bus driver, making a left-hand turn killed Debbie and Harold Kahn's 22-year-old son, Seth. The driver hit, ran over, and killed Seth while he was in the crosswalk. Seth was a student at the Fashion Institute of Technology and wanted to be a toy designer. He was an incredibly creative and talented young man and was already designing holiday display windows for Manhattan's most exclusive stores. He was killed just a few days after his favorite holiday, Halloween. Seth was their only child.



The driver of a commercial van was speeding in front of Amy Cohen and Gary Eckstein's home in Brooklyn, NY. The driver struck and killed their 12-year-old son, Sammy. Sammy was in 8th grade and had stopped off for a snack after school before walking to soccer practice in the park across the street. He had left later than usual for practice because he wanted to study for an exam to get into one of NYC's competitive high schools. He was bright, athletic, and a natural born leader. He was killed just weeks before his Bar Mitzvah, which they marked without him by reading the speech he had written.



Cyclist AEB (CAEB)

The proposed NCAP update also fails to include a test of technology to detect and alert drivers to cyclists and other mobility devices such as scooters and wheelchairs. Cyclist AEB (CAEB) has been tested in the Euro NCAP since 2019 and European cyclist deaths have declined dramatically, unlike the pattern we see in the U.S. NHTSA is proposing to perform research to determine the viability of the Euro NCAP protocol, but stops short of adopting it. NHTSA's NCAP proposal would put the U.S. nearly a decade behind Euro NCAP by proposing a Notice and Request for Comment no sooner than 2025 and testing no sooner than 2026-27. **Given the rise in cyclist deaths, this proposed timeline is nothing short of outrageous.** Cyclist AEB systems should be included in the testing protocol immediately to avoid the deaths of others like the individuals below.

Stephen Bingham lost his daughter Sylvia in a preventable traffic crash. The driver of a 40,000-pound box truck made an unsignaled sharp right turn after entering an intersection in downtown Cleveland, Ohio as if intending to go straight. Sylvia was on his right – likely in the driver's blind spot – and was knocked down. The truck had no protective side guard between the front and rear axle so the truck crushed Sylvia to death under its wheels. The driver, impaired with 8x the legal limit of THC, claimed he didn't know Sylvia was to his right. The truck lacked specialized blind-spot warning, bicycle detection system, or driver monitoring technology. Sylvia had just graduated from college and had moved to Cleveland for her new AmeriCorps VISTA job helping low-income women access well-paying jobs.

Julie Mitchell's 21-year-old son Dylan was riding his bicycle to work in San Francisco where he had landed a coveted apprenticeship as an electrician. The driver of a garbage truck in front of him made a wide right turn without signaling and struck Dylan who was proceeding straight through the intersection. The truck had limited visibility, no side guards, and no cyclist detection system. Dylan Mitchell was a star athlete who was an inspiration to his younger brothers and friends. He was just starting his career following in the footsteps of four generations of electricians in his family. "I was in fourth grade when Dylan was killed," said Dylan's brother Matteo. "He was my role model. He looked after me. There are so many things I miss about Dylan every single day. Our family will never be the same."







In 2006, Mary Beth Kelly and her husband Dr. Carl Henry Nacht were cycling together when a driver of an NYPD tow truck failed to yield at the intersection they were crossing where they had the right of way. The driver did not signal, despite the fact that he was turning. He died three days after the crash from his injuries leaving her two children without their father. He was a husband, a loving father, a beloved physician, a marathon runner and a soul of the community that he served.



Eugene Green, the 48 year-old brother of Yolanda Green-Samuel, was killed in 2014. Green stepped off a bus in Miami Gardens, grabbed his bicycle and was struck as he was riding. The bus's video camera captured the fatal crash preceded by a black four-door Volkswagen zooming by that is believed to be the car that hit and killed Eugene. A police officer who was at a red light witnessed the crash, but stayed at the scene to help Eugene. Unfortunately, it was not enough to save his life.

In 2012, the driver of a tractor trailer truck took a right hand turn from the left lane of a two lane road in downtown Boston and killed Dustin Weigl's brother, Christopher who was biking. Christopher was traveling straight in a designated bike lane through a green light and was following all of the rules of the road. Despite being extra careful after his brother's death, Dustin himself was also hit by a left-turning SUV while biking in November 2021 in Westborough, MA.



Lane Keeping Support

Lane keeping support – which alerts drivers when they drift out of the lane and, if the driver does not change course, will steer the vehicle back to the center of the lane – is a critical safety feature. As indicated in the Request for Comment, lane departure causes

an average of 1.13 million crashes annually or 19.4% of all crashes that occurred on U.S. roadways, and resulted in 14,844 deaths and 479,939 serious injuries.

While it is a welcome addition to the NCAP testing protocol, it is imperative that the technology be tested to measure its ability to adjust for situations when a vehicle is passing a cyclist or pedestrian. Reports indicate that LKS warnings or corrective inputs make it more difficult for drivers to give safe passing distance when overtaking a person bicycling or a pedestrian on the shoulder.

Lane keeping support would have prevented the heartache of Diane Gonzalez:



Diane Gonzalez was riding her motorcycle on a two lane road. On a curve, a teenage driver of a 2015 Volvo S60 who was looking down at his phone, drifted out of his lane and drove into Diane head-on. Diane's injuries included a concussion which she still suffers from, pelvic fracture, broken femur and sacrum broken in two places. Diane now has titanium on her pelvic bone, two screws through her sacrum, a femur rod and post-concussion syndrome.The injuries were life-altering for Diane. The vehicle did not have a lane departure warning system.

INTELLIGENT SPEED ASSISTANCE (ISA)

There is currently an epidemic of speeding in the U.S. The number of speeding drivers has reached truly astonishing proportions, with many going more than double the posted speed limit.

Safe Speeds is a critical component of a Safe System Approach yet the proposed NCAP testing protocols are widely insufficient to address the speeding crisis. Currently, vehicle advertisements show cars, SUVs and pick-ups speeding through urban streets and on highways, yet these same vehicles can receive a 5-star rating system even when they can go from 0 to 60 mph in under three seconds and can reach speeds far in excess of 85 mph, the maximum posted speed limit anywhere in the U.S. **Why is that even permitted?**

Intelligent speed assistance is a proven safety technology that can identify and intervene when drivers are speeding. ISA automatically adjusts the speed of the vehicle to the posted limit or prevents the driver from exceeding that limit. Despite the fact that such technology is currently market ready, NHTSA's proposed NCAP disappointingly only solicits feedback on the timing of when these features should be included in the U.S. NCAP's rating system in the coming decade.

Australia has been testing ISA since the 1990s and a 2014 Norwegian study found ISA to be the 'most effective' technology in saving lives. The EU's European Transport Safety Council found that ISA resulted in a 30% reduction in collisions and a 20% reduction in deaths. 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.

The Euro NCAP has included ISA in its rating system for well over a decade and only 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. ISA also is included in other countries and regional NCAPs, including Latin America.

Because ISA has been proven to be so effective, the EU passed legislation in 2019 making it mandatory in all new vehicles starting in July 2022. Other countries have followed suit mandating ISA.

It is inexcusable that we are so far behind. Researchers, such as the <u>Insurance</u> <u>Institute for Highway Safety</u>, have long advocated that ISA be mandated, as it is a key tool to address the speeding crisis on U.S. roadways. It is critical that NHTSA align its NCAP ratings with Euro NCAP and make ISA mandatory in all vehicles.

These lives would likely have been saved with ISA:

A distracted, unlicensed,18-year-old was speeding in his SUV when he killed Jeri Lynch's 16-year-old son, Conor and then fled the scene. Conor was a triathlete as well as an accomplished skier, surfer and basketball player. Conor is survived by his younger brothers Riley and Parker who remember him as the finest and most protective big brother they could have had.

In 2020, a speeding and distracted driver in Tennessee hit and killed Charles Isbell and Janeesa Perkins' 13-year old son Nate while he was out skateboarding on Halloween. Nate was an eighth grader at Rock Springs Middle School. He excelled at playing electric and acoustic guitar. "We miss him, and it's just been very hard on our family," said his father Chuck Isbell. "Nate was my only child and my world," said his mother.

A young man was street racing in Southern California when he crashed and killed 16-year-old Valentina, daughter of Lili Trujillo, while he was giving her a ride home. The driver, a 17-year old man, was driving a Mustang when a driver of another car challenged him to race. The Mustang blew through a red light, striking an SUV in the intersection. In this horrific crash five people were injured and one did not survive: Valentina. Valentina was in high school and was an aspiring fashion designer who never got to fulfill her dream.







On June 5, 2013, a speeding driver going 54 mph on a 40 mph road struck Joe Martinez's only child Paul as he was crossing the street. Paul was rushed to the hospital and fought valiantly to live, but, after one hour during which a team of ER trauma doctors tried desperately to save his young life, he succumbed to his injuries. Joe and his family had been waiting and praying for a miracle but instead, after kissing his son for the last time and hugging his lifeless body, Joe left the hospital with blood on his face and on his clothes.



DRIVER MONITORING SYSTEMS (DMS)

The proposed NCAP testing protocol on Driver Monitoring Systems is woefully inadequate, only soliciting feedback on the timing of when DMS should be included in NCAP's rating system in the coming decade. Driver Monitoring Systems, such as adaptive cruise control and lane centering, use computers and cameras to monitor driver attentiveness and utilize driving assistance features that automate steering, braking and acceleration. All are well-tested, proven technologies and the need for delay is unclear, in our opinion, and will cost people their lives. The most robust driver monitoring systems utilize multiple simultaneous methods (i.e. multiple independent behaviors, such as eye glance and hand activity) to identify driver disengagement, because the more that varied data converges on the DMS, the more reliable and accurate the reading will be.

Euro NCAP has included Driver Monitoring Systems in its safety 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. Euro NCAP roadmap notes DMS can also help to prevent impaired driving as well. The EU's new regulation will be gradually implemented over the course of four years, starting this year.

NHTSA's proposed updated NCAP once again puts the U.S. significantly behind the Euro NCAP. The NCAP protocol should include testing of various Driver Monitoring Systems. NHTSA also should have a timeline for mandating them in all vehicles. If DMS had been present in the vehicles involved in the crashes below, these lives may have been saved:

The driver of a Dodge Ram pick-up truck, illegally hauling an overloaded flatbed trailer, crossed the center line and killed 18-year-old Henry and injured his mother, Sarah Risser. They were driving a 2014 Subaru Forester on a rural road in Wisconsin. All passenger airbags were deployed but the force of the impact was too much. Henry died at the scene. Henry was a freshman at Bowdoin College, a gifted musician, competitive rower, and thrived in the outdoors.

On the morning of November 28, 2017, 24-year-old Emily Fredricks was riding her bicycle to her job as a French pastry chef at Le Cheri in Philadelphia when the driver of a sanitation truck made a right hook into her, killing her. She was traveling in a bike lane but it was unprotected. She was a creative and promising pastry chef who had moved to Philadelphia for her dream job just months before she was killed. The driver did not use a turn signal, was wearing ear buds, did not yield to Emily, dash cam video showed he was not paying attention, he also had a passenger that did not make sure he was paying attention. Emily had made the selfless decision to be an organ donor on her license. After her death, she donated her corneas, bone and skin.

Dr. Jim Jones was walking across a road near his home in Napa Valley, California when a 19-year-old driver of a Ford pick-up truck struck him. The driver was speeding and talking to his girlfriend on his cell phone. When Dr. Jones reached the intersection, he looked to his right but turned his steering wheel to the left, crashing into Jim and propelling him into the air. He landed on his head and then was dragged by the truck. His family was told he would not survive, but fortunately he did and is considered one of the "lucky ones". However, he lives with a traumatic brain injury and has a titanium rod as a spinal brace.







Sherry Chapman's son Ryan was killed when the intoxicated teen driver of the car in which he was riding as a passenger lost control and crashed in Hebron, Connecticut. Ryan, who shares a birthday with his mom, celebrated his 19th birthday just 19 days prior to his death. He was an apprentice electrician with a promising future who loved the outdoors, excelled in water and winter sports, and had a comedic wit that often left his friends and family bowled over in stitches. Driver monitoring systems might well have saved Ryan's life.



HEADLIGHT TESTING AND ADAPTIVE DRIVING BEAM (ADB)

Despite the fact that <u>crashes kill more people at night</u>, particularly those walking and biking, the proposed rule-making does not include testing for headlight technology and adaptive driving beam (ADB), which actively modifies a vehicle's headlamp beams to provide more illumination while limiting glare projected onto oncoming drivers. Not only does improved lighting help drivers see oncoming traffic and others in the roadway, it improves the effectiveness of PAEB and CAEB.

More than half of crashes killing people in the U.S. occurred at night in 2019, according to NHTSA. In that same year, 76% of pedestrian deaths and 47% of cyclist deaths happened when it was dark.

Although the Infrastructure Investment and Jobs Act will require additional headlight safety standards to be used in 2023, there is a wide range in quality of these systems. Some automakers have included optional ADB systems before the issuance of regulations but not all are of the same quality. <u>IIHS has found</u> 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.

It is imperative that NHTSA include testing of new and improved headlamp technology and ADB technology, with a view to making it standard equipment in new vehicles, making it safer for all road users but particularly those walking and biking. Kirill, Kyle, and many others might still be alive if the vehicle that struck him had better headlights: The cousin of Kate Fefelova, Kirill Siptak, was riding his bicycle on September 30, 2019 in Pearland, TX when the driver of a GMC-Yukon SUV, speeding early in the morning when it was still dark, hit and killed Kirill, and then fled the scene. The crash happened on a rural road with a 40 mph speed limit.

Gina LaBlanc's 18-year-old son Kyle stepped off the sidewalk into the bike lane when the driver of a tow truck hit him from behind under an overpass near their home in San Jose, California. The driver was traveling too fast for the dark and wet conditions of the roadway with an unprotected bicycle lane. Kyle suffered a fatal head injury. Kyle was a "techie" and loved building computers from scratch then networking them all together. He built his first electrical circuit when he was five and dreamed of one day working for Google. "I miss his energy," said LaBlanc, a nurse who quit her job at Valley Medical Center after her son died there. "He was funny and brilliant. His loss has left a huge hole in my life and living without him is a daily painful struggle. We're not supposed to outlive our children. It hurts every day and it'll never stop hurting."





DISTRACTIONS OF ONBOARD SCREENS & CELL PHONES

Driver distraction from onboard screens and cell phones is a major contributor to traffic deaths and the problem is only growing worse as distractions grow. NHTSA's proposed NCAP revisions fail to mention the danger of distracting onboard screens – including the growing Infotainment systems in new vehicles. Increasingly, vehicle manufacturers are doing away with knobs which can be manipulated without taking one's eyes off the road. Looking away from the path of travel for two or more seconds doubles the likelihood of a crash, according to AAA. Some infotainment systems monitor the driver's interaction with the vehicle's infotainment touchscreen, and restrict the driver's interaction with the system if it detects the driver has exceeded the number of touchscreen inputs permitted

within a period. Temporary restricted access forces the driver to focus on the driving task. Likewise, some systems have driver gaze monitoring which can restrict infotainment access based on how long the driver has been looking at the infotainment touchscreen location without looking at the road. While some driver monitoring systems may address some distractions, it is imperative that more be done.

A similar approach could have the Bluetooth system automatically block cell phone notifications while the vehicle is in motion. Over two-thirds of Americans support such a cell phone blocker application according to a recent survey by the Insurance Institute of Highway Safety.

NHTSA needs to issue regulations to limit distraction caused by in vehicle and nomadic communication and infotainment devices rather than continue with guidelines which are non binding. Improved distraction technology could have saved these lives and prevented their life-altering injuries:



through AmeriCorps to be a team leader for Habitat For Humanity but never got to pursue that dream.



IMPROVED CRASH TESTING OF FEMALE AND CHILD OCCUPANTS & VULNERABLE ROAD USERS

The new rules also do not include a requirement to test vehicles using crash "dummies" that reflect women, pregnant women, older adults, children and a range of other body types. Studies show that women are 17% more likely to die and 73% more likely to be injured in a crash than men. In 2019, 608 child passengers age 12 and younger died in motor vehicle crashes, and more than 91,000 were injured. Moreover, it is imperative that NHTSA improve its testing to include an assessment of a vehicle to those walking, biking and rolling, including individuals in wheelchairs and who use other assistive devices.

Better testing of various SUV/truck body types may have prevented this tragedy:

A reckless driver of an F-150 truck, going approximately 75 mph, with the incorrect tire size to make his car go faster – struck the compact car of Wanda – 64-year-old mother of Janine Fletcher-Thomas, killing her. Wanda was driving at the speed limit. She was a loving and selfless mother, grandmother, sister, aunt, friend, and nurse. Helping others brought her tremendous joy, but her greatest happiness came from her children and grandsons. Wanda loved to spoil them with love, attention, hugs, kisses, and gifts.



On June 25, 2020, the driver of a big rig in Wilmington, California rear-ended and killed Jasmine Waddle's 22-year-old daughter, Chyna, who was pregnant at the time. The crash killed Chyna instantly, who was a passenger in the car as well as the driver of her car.

Lori Argumedo's niece Bethany Holung was killed in a traffic crash in Compton, California, and her nephew was left in critical condition. The driver of an Infinity SUV was street racing on a residential street and blew through a stop sign going an estimated 100 mph, crashing into Bethany's small Honda Civic and killing her. Bethany is survived by her 6-year-old daughter.

RATING SYSTEM

U.S. NCAP has lost its effectiveness as a meaningful tool for consumer choice and is not updated frequently enough to include in its testing protocols emerging technologies. Today, nearly all new cars receive 4 or 5 stars, rendering the program's safety rating system meaningless. As indicated above, even vehicles that can travel ridiculous speeds, have dangerous front ends, and limited visibility have been receiving stellar ratings. It's long past time for a more useful 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%. In addition, Euro NCAP testing includes multiple methods of crash types including: 1) an adult crossing the street, walking and running; 2) a child crossing; and 3) an adult walking longitudinally.



In 2016, Congress passed legislation that required NHTSA to add a crash avoidance rating to the NCAP 5-star "Monroney Label" within one year of enactment and yet in five and a half years, nothing has been done. Given that NHTSA already conducts tests of crash avoidance systems, these current tests could easily be used as a base to establish a crash avoidance rating system.

It is imperative that NHTSA dramatically revise its rating system to give consumers meaningful choice. We urge NHTSA to adopt the Euro NCAP rating system's multi-pronged approach, which uses a percentage-rating system on multiple fronts, making clear that higher-rated vehicles have specific stronger safety measures.

Until the rating system is updated to be on par with the Euro NCAP, we urge NHTSA to add a "cigarette-style" warning label on all new cars, specifying the level of risk of injury or death to vulnerable road users from crashes involving large and heavy vehicles, compared to the risk level for sedans.

Moreover, we urge NHTSA to update its program every other year as is done by the Euro NCAP.

EXPEDITE PROMULGATION OF NEW VEHICLE REGULATIONS

Finally, although it is not explicitly an NCAP issue, it is long past time for the U.S. DOT to dramatically expand the safety features required in all new vehicles and even require existing vehicles to add features where retrofitting is readily available. As indicated above, the EU and other countries are already requiring many safety features and are adding more this year. Many of these safety systems have have existed for years, even decades. Yet, despite automakers having to include them in cars produced for other markets, they are not yet mandatory here in the U.S. While we are pleased to see that the U.S. DOT will initiate rule-making for PAEB in 2024, this is too little, too late. Examples of safety technology that should be mandated in the U.S. includes but is not limited to:

- Forward Collision Warning (FCW): Detects impending collision while traveling forward and alerts the driver. Some systems include pedestrian or other object detection.
- Automatic Emergency Braking (AEB): Detects potential collisions while traveling forward, provides forward collision warning and automatically applies the brakes to avoid or lessen the severity of impact. Some systems include pedestrian or other object detection.

- City Automatic Emergency Braking (CAEB): Brakes are automatically applied to prevent a collision or reduce collision severity when traveling at city speed.
- High-speed Automatic Emergency Braking (HAEB): Brakes are automatically applied to reduce collision severity when traveling at highway speeds.
- Pedestrian Detection (PD)/(PAEB): The system can detect pedestrians, then issue a warning and trigger automatic emergency braking, if necessary. Some can detect cyclists.
- Lane Departure Warning (LDW): Monitors vehicle's position within driving lane and alerts driver as the vehicle approaches or crosses lane markers.
- Lane Keeping Assistance (LKA): Assists with steering to maintain a vehicle within the driving lane.
- Blind Spot Warning (BSW): Detects vehicles to rear in adjacent lanes while driving and alerts the driver to their presence.
- Rear Cross Traffic Warning (RCTW): Detects vehicles approaching from the side and rear of the vehicle while traveling in Reverse and alerts the driver.
- Rear Automatic Emergency Braking (Rear AEB): Detects potential collision while traveling in reverse and automatically applies the brakes to avoid or lessen the severity of impact. Some systems include pedestrian or other object detection.
- Lane-Centering Assist (LCA): Continuous active steering to stay in between lanes (active steer, autosteer, etc.)
- Adaptive Cruise Control (ACC): Assists with acceleration and/or braking to maintain a prescribed distance between it and a vehicle in front. Some systems can come to a stop and continue.
- Intelligent Speed Assistance (ISA): ISA automatically adjusts the speed of the vehicle to the posted limit or prevents the driver from exceeding the limit.

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 U.S. DOT is truly committed to equity, then everyone should be able to have these proven safety measures, regardless of income levels.

So many of our members, including the ones below, likely would be still alive had there been adequate safety systems in place:

The driver of a fully loaded 2.5 ton welding truck rolled through a stop sign rather than making a complete stop and ran over and killed Beverly Shelton's grandson Zachary while he was walking with a group of school children and teachers at an intersection in Berkeley in 2009. His classmates and brother saw the fatal crash but could not stop it.



On October 24, 2003, a driver of a Ford SUV ran a red light in Florida and t-boned the car in which Melissa's husband and brother were in. Melissa's husband Mark died instantly and her brother was seriously injured. Melissa was nine months pregnant and gave birth to their daughter Madisyn two weeks later. Madisyn has had to grow up without her father. Melissa's brother is now 49, walks with a cane, has limited mobility, and still suffers from the trauma of being in a crash that killed his brother-in-law.

Earlier this year, on January 5, a Hyundai SUV struck Lujain Al-Saleh in Durham, North Carolina. She was walking with her partner in the crosswalk with the green light. Although she survived, she suffered many injuries, including a life-threatening deep vein thrombosis in her lower calf which required months of blood thinner medication as well as broken bones and a torn meniscus which both required surgery.





Naomi Johnson's 22-year-old son Deshon Johnson, and her only child, was waiting for a bus to go to work on July 18, 2012 when the bus jumped the curb, knocked him down, ran over him twice, and then dragged him over 50 feet. He died instantly. Deshon had a promising future ahead of him. At the time of his death, he was attending college at Essex County College, pursuing a degree in finance and working part-time at Home Depot, helping support his mom, who was disabled as a result of a separate car crash.Deshon was also pursuing a career as a hip-hop artist, whose stage name was Sean Cos Mason.



In early December 2018, a driver of an SUV struck and killed Larry May's Aunt Bea. She was in the crosswalk with the light but her body was no match for the multi-ton vehicle. Bea turned 89 the previous day and was just trying to get home safely after a medical check-up. Despite her age, she was still very vibrant and active. She loved to dance and would even go to folks and square dance retreats in the Catskills. She also wrote poetry, was a voracious reader, and was very well informed about current events.



Thank you again for the opportunity to comment. We are counting on this administration to do much better than what was proposed with this NHTSA's proposed revisions to NCAP's protocol. As you said when launching the National Roadway Safety Strategy, "We cannot tolerate the continuing crisis of roadway deaths in America... because every driver, passenger, and pedestrian should be certain that they're going to arrive at their destination safely, every time." Our loved ones unfortunately did not realize the potential of this promise. All Americans deserve better.

Sincerely,

Amy Cohen Co-Founder, Families for Safe Streets Mother of Sammy Cohen Eckstein (12/8/00-10/8/13) Stephen Bingham San Francisco Bay Area Families for Safe Streets Chapter Father of Sylvia Bingham (04/22/87-09/15/09)

Sarah Risser St. Paul Minnesota, Families for Safe Streets Mother of Henry Zietlow (11/30/00-1/14/19)

Cc: Steven Cliff, Deputy Administrator, National Highway Traffic Safety Administration