

May 27, 2022

Dr. Steve Cliff
Deputy Administrator
National Highway Traffic Safety Administration
Department of Transportation
1200 New Jersey Avenue S.E., West Building
Washington, D.C. 20590-0001

Dear Deputy Administrator Cliff,

On behalf of the Charlotte Department of Transportation we are pleased to offer the following comments in response to NHTSA's proposed updates to the New Car Assessment Program (NCAP).

The City of Charlotte has always placed strong emphasis on a safe transportation system for all users. This drives our every decision. We believe it's our collective responsibility to create safe travel for all.

Over the past ten years our city has seen explosive population growth, adding close to 200,000 more drivers, pedestrians and cyclists to our streets, paths and intersections. Charlotte has responded by creating a variety of safe ways for people to move around the city and connect with each other – we've upgraded intersections, added more bike lanes and built additional sidewalks – as we continue to work towards the best possible transportation and pedestrian safety systems for our growing city.

In 2017, drivers in Charlotte logged more than 23 million miles on our streets, up nearly a million miles from the year before. While the number of crashes in our city actually decreased by 4% compared to 2016, the number of fatalities from those crashes increased by 35% in 2017.

Crashes and fatalities not only take a toll on human life, but also on the city's capital – affecting loved ones, health care facilities, businesses and many other areas of our community.

That's why Charlotte is renewing its commitment to safer streets in 2018 with the creation of Vision Zero, an action plan designed to reduce crashes and eliminate traffic-related deaths and severe injuries by 2030. Why? Because even one traffic-related death is too many.

Fatalities and serious injuries among pedestrians and cyclists have skyrocketed by more than 50 percent over the past ten years, dramatically outpacing overall roadway fatalities. Newly released estimates from NHTSA show that nearly 43,000 people died in crashes in 2021, a 10.8% jump from 2020. Data confirms the role of vehicle design in exacerbating the safety crisis unfolding on our nation's streets, with studies from the Insurance Institute for Highway Safety (IIHS) and Consumer Reports documenting direct links from vehicle size, speed, and weight to increasing traffic fatalities. Updates to NCAP have not kept pace with these realities, and international equivalents have surpassed the U.S. program. Current vehicle standards and rating systems have failed to protect people outside of cars, especially in multimodal urban environments.

Charlotte Transportation is encouraged to see NHTSA take the crucial step of incorporating safety features that protect people outside of vehicles into NCAP. However, the proposed changes to the Program can go further. In addition to incorporating several long-overdue technological changes, the rating system must address the outsized roles that vehicle speed, size, weight, and visibility from the driver's seat play in determining safety outcomes. To help alleviate the national traffic safety crisis, **NHTSA should ensure no vehicle receives a five star rating without scoring highly in the following categories:**

- **ADAS features capable of sensing and protecting people outside vehicles:** This RFC incorporates important technologies into NCAP, including blind spot detection and intervention (BSI/BSW), lane keeping support (LKS), and pedestrian automatic emergency braking (PAEB). To maximize safety benefits to people outside vehicles, NHTSA's testing protocols for these systems must account for documented shortcomings of ADAS features. These technologies are known to be less reliable in dark lighting, inclement weather, while turning, traveling at higher speeds, or at detecting people of color, and people carrying objects. NHTSA can significantly improve vehicle safety not only by reserving five-star ratings for vehicles equipped with ADAS, but ensuring these systems perform to a high standard.
- **Intelligent speed assistance systems that automatically limit unsafe speeds:** Vehicle speed plays a critical role in determining the likelihood and severity of traffic crashes, injuries, and fatalities. Crashes are more likely to occur as a driver's speed increases, as does the likelihood of a crash being fatal. Intelligent speed assistance (ISA) is a tool proven to reduce speed-related crashes and fatalities. This technology is already widely deployed across Europe and Euro NCAP's rating system provides a model for NHTSA to follow in considering ISA. NCAP can act as an incentive for automakers to make ISA standard in all vehicles, by reserving full credit only where it is available.
- **Pedestrian protection and crashworthiness/survivability for people outside the vehicle:** Since 2010, NHTSA has documented that large high-front vehicles present increased risks to people walking and biking. With very large SUVs and light trucks making up an ever-increasing share of vehicular traffic and driving a large share of fatalities and serious injuries among pedestrians and cyclists, federal action to address vehicle size is long overdue. NHTSA's proposal to include a crashworthiness pedestrian protection testing program in NCAP in 2022 is an opportunity to update vehicle test criteria to ensure safety for the widest possible range of people. NHTSA can do so by following the example of Transport For London and select, as their default "test case," a significantly smaller than average person, to ensure that all people are properly considered in the crashworthiness testing. Designing test criteria built around the smaller-than-average person will result in increased safety for everyone.
- **Direct visibility from the driver's seat ("direct vision"):** Cameras, mirrors, sensors and other ADAS features cannot replace the need for direct sight. Large vehicles, such as SUVs, light trucks, and heavy trucks, have large blind spots and visibility problems, which are directly connected to decreased safety and increases in fatalities. A recent IIHS study found that pick-up trucks are 4 times more likely, and SUVs are 3 times more likely, to cause a fatal crash when making a left turn because of limited visibility from the driver's seat. Data from the USDOT Volpe Center shows that when drivers are operating trucks with low visibility from the driver's seat they are able to detect pedestrians in a crosswalk in front of them only 13% of the time, versus 100% in vehicles that offer better

visibility from the driver's seat. NHTSA should use existing tools, such as USDOT's Blind Zone Calculator and international direct vision standards, to evaluate and address the safety impacts of blind spots on large vehicles. Vehicles with low direct visibility from the driver's seat should not receive 5-star ratings.

Charlotte Transportation greatly appreciates NHTSA's consideration of these comments. Ensuring that consumers have the necessary information. Safer vehicles are a pillar of USDOT's National Roadway Safety Strategy and NHTSA can do more to leverage NCAP and ensure consumers have a comprehensive understanding of vehicle safety. We welcome further opportunities to guide the continued development of the NCAP program as NHTSA takes important steps towards incorporating the safety of people traveling outside personal vehicles into the program.

Sincerely,



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