



City of Boston, Massachusetts  
Office of the Mayor  
**Michelle Wu**

June 2, 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 City of Boston we are pleased to offer the following comments in response to NHTSA's proposed updates to the New Car Assessment Program (NCAP).

Since 2015, the City of Boston has committed to a [Vision Zero](#) program aimed at eliminating traffic crashes and fatalities on our city streets. The City has drastically expanded funding and staff capacity to expedite [safer roadway redesigns](#), provide rapid response improvements in crash locations, and conduct nation leading [engagement programming](#). Boston has taken policy approaches as well - such as instituting a [citywide speed limit](#) of 25 mph to reduce the negative impacts of speeding on city streets and we were the first city in the country to [enact a side-underride ordinance](#) in direct response to multiple fatal side-impact crashes between cyclists and large trucks in the metro area. The systems approach espoused by Vision Zero is more than just better roadway designs, it needs to be about safer vehicles for those inside and outside the cabin.

In Boston, where the majority of resident's work trips involve walking for a portion or all of their journey, we are grateful that NHTSA is exploring how to protect people outside of the vehicle as well as inside. In [The Association Between Pedestrian Crash Types and Passenger Vehicle Types](#) report by the Insurance Institute for Highway Safety (IIHS) in March 2022 it was concluded that "Light truck vehicles were more likely to be involved in certain pedestrian crash types, implying a potentially problematic visibility of pedestrians near the front corners of these vehicles." In a city notorious for a complicated and non-rectilinear roadway network, we view this as a significant problem for our residents, but one where the authority to enact change sits at the federal level.

Nationally, 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. While we haven't experienced the same trend

in Boston, we do still average more than 10 fatalities each year. 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. These risks will increase in the coming years as electric vehicles bring heavier curb weights and fast acceleration to our urban streets.

The City of Boston 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](#). 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.
- **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](#) that was experimented with in the City of Boston at its early stage 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. Having better standards will help push the marketplace to where Boston would like to be - with more direct vision vehicles available.
- **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.

The City of Boston greatly appreciates NHTSA's consideration of these comments and ensuring that consumers have the necessary information needed to make decisions. 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,



Michelle Wu  
Mayor of Boston