ALLIANCE FOR AUTOMOTIVE INNOVATION

AUTOMATIC EMERGENCY BRAKING

What is Automatic Emergency Braking (AEB)?

AEB is a life-saving technology developed by automakers and suppliers. AEB systems use vehicle sensors to detect potential front-end collisions with other vehicles. They then provide a warning to the driver and automatically apply the brakes to help avoid or reduce the severity of the collision. Some AEB systems also include capabilities that detect pedestrians and cyclists.

Roughly 8 years ago (2016), automakers entered into a landmark voluntary agreement to deploy AEB systems on new vehicles and have spent over a billion dollars developing and implementing the technology.

Why is the auto industry petitioning NHTSA to reconsider the recently-finalized AEB rule?

Automakers and automotive suppliers support AEB technology and share the goals of the National Highway Traffic Safety Administration (NHTSA), Congress, and other safety stakeholders to mandate AEB systems.

The Alliance for Automotive Innovation filed a Petition for Reconsideration to give NHTSA an opportunity to get the rule right and ensure that the AEB systems that are mandated beginning in 2029 make sense for consumers. In its Petition, the Alliance for Automotive Innovation asks NHTSA to fix the rule in the following ways:

- ***Make the rule practicable.*** The physics of the test rule created by NHTSA simply do not work. Even with the best braking systems available on the market today, it is impossible to meet the required stopping distances at highway speeds. NHTSA's own data shows that only one tested vehicle met the stopping distance requirements contained in the final rule.
- ***Align the rule with other tests and test procedures.*** The rule is not aligned with current federal braking rules. To accommodate variations in environmental factors that can affect test outcomes, those rules permit automakers to demonstrate compliance in one of several test runs. The same is not true for the final AEB rule.
- ***Reduce anticipated increases in rear-end collisions.*** When driving at higher speeds, the overly stringent requirements contained in the rule will likely result in vehicles applying brakes far in advance of what the typical driver and others on the road would expect and contribute to a higher number of rear-end collisions. In the final rule, NHTSA concedes that false positives in real-world conditions could introduce a new safety risk.
- ***Provide clear and objective performance criteria.*** Automakers rely on well-defined performance criteria to comply with motor vehicle safety standards. NHTSA did not specify what constitutes clear and objective compliance with key aspects of the rule, including how a system malfunction is determined and how to comply with requirements to suppress in-vehicle audio when the AEB system is activated.
- ***Accurately assess the costs to consumers.*** NHTSA significantly underestimated the necessary and costly hardware and software vehicles will need to comply with the new rule. NHTSA drew incorrect conclusions about hardware requirements from data presented by at least one auto company. In addition, NHTSA incorrectly estimated that the marginal cost of required systems would be linear. Instead, these costs are likely to be exponential, especially for larger and heavier vehicles that already have more robust braking systems available.