The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant accidents in other modes of transportation—railroad, highway, marine, and pipeline. We determine the probable cause of the accidents and issue safety recommendations aimed at preventing future accidents. In addition, we carry out special studies concerning transportation safety and coordinate the resources of the federal government and other organizations to provide assistance to victims and their family members affected by major transportation disasters. We are providing the following information to urge the National Highway Traffic Safety Administration to take action on the safety recommendations being issued in this letter.

On May 19, 2015, the NTSB adopted our special investigation report, titled *The Use of Forward Collision Avoidance Systems to Prevent and Mitigate Rear-End Crashes.* We examined the prevalence of rear-end crashes, their cost in lives lost, and the extent to which collision avoidance systems could have prevented or mitigated such crashes. The report summarizes the current research on the efficacy of these systems, their prevalence in passenger and commercial fleets, and the necessary factors needed to speed up the deployment of these systems in all new vehicles. In addition to this report, we issued a safety alert on the benefits of collision avoidance systems. The report and the resulting recommendations may be found at our website, [www.ntsb.gov](http://www.ntsb.gov), under report number SIR-15-01.

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This report issues six new recommendations, reiterates two recommendations, and reclassifies four previous recommendations. Two of the six new recommendations were sent to 30 vehicle manufacturers—both commercial and passenger.

New Recommendations

The following four new recommendations are directed to NHTSA:

**H-15-4**

Develop and apply testing protocols to assess the performance of forward collision avoidance systems in passenger vehicles at various velocities, including high speed and high velocity-differential.

**H-15-5**

Complete, as soon as possible, the development and application of performance standards and protocols for the assessment of forward collision avoidance systems in commercial vehicles.

**H-15-6**

Expand the New Car Assessment Program 5-star rating system to include a scale that rates the performance of forward collision avoidance systems.

**H-15-7**

Once the rating scale, described in Safety Recommendation H-15-6, is established, include the ratings of forward collision avoidance systems on the vehicle Monroney labels.

Reiterated Recommendations

The following reiterated recommendations are directed to NHTSA:

**H-11-7**

Develop stability control system performance standards for all commercial motor vehicles and buses with a gross vehicle weight rating greater than 10,000 pounds, regardless of whether the vehicles are equipped with a hydraulic or a pneumatic brake system.
Once the performance standards described in Safety Recommendation H-11-7 have been developed, require the installation of stability control systems on all newly manufactured commercial vehicles with a gross vehicle weight rating greater than 10,000 pounds.

Reclassified Recommendations

The following reclassified recommendations are directed to NHTSA:

H-01-6
Complete rulemaking on adaptive cruise control and collision warning system performance standards for new commercial vehicles. At a minimum, these standards should address obstacle detection distance, timing of alerts, and human factors guidelines, such as the mode and type of warning.

Previously classified “Open—Unacceptable Response,” this recommendation is now classified “Closed—Unacceptable Action/Superseded.”

H-01-7
After promulgating performance standards for collision warning systems for commercial vehicles, require that all new commercial vehicles be equipped with a collision warning system.

Previously classified “Open—Unacceptable Response,” this recommendation is now classified “Closed—Unacceptable Action.”

H-01-8
Complete rulemaking on adaptive cruise control and collision warning system performance standards for new passenger cars. At a minimum, these standards should address obstacle detection distance, timing of alerts, and human factors guidelines, such as the mode and type of warning.

Previously classified “Open—Unacceptable Response,” this recommendation is now classified “Closed—Acceptable Alternate Action.”

H-08-15
Determine whether equipping commercial vehicles with collision warning systems with active braking and electronic stability control systems will reduce commercial vehicle accidents. If these technologies are determined to be effective in reducing accidents, require their use on commercial vehicles.
Previously classified “Open—Acceptable Response,” this recommendation is now classified “Closed—Unacceptable Action.”

Chairman HART, Vice Chairman DINH-ZARR, and Members SUMWALT and WEENER concurred with these recommendations.

The NTSB is vitally interested in these recommendations because they are designed to prevent accidents and save lives. We would appreciate receiving a response from you within 90 days detailing the actions you have taken or intend to take to implement them. Please reply electronically at correspondence@ntsb.gov and refer to the safety recommendation(s) by number in your response.

[Original Signed]

By: Christopher A. Hart,
Chairman
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