

National Transportation Safety Board

Washington, DC 20594

Safety Recommendation

Date: June 8, 2015

In reply refer to: H-15-4 through H-15-7 (new)

H-11-7 and 8 (reiterations) H-01-6 through H-01-8 and H-01-15 (reclassifications)

The Honorable Mark R. Rosekind Administrator National Highway Traffic Safety Administration Washington, DC 20590

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, under report number SIR-15-01.

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¹ See *The Use of Forward Collision Avoidance Systems to Prevent and Mitigate Rear-End Crashes*, Special Investigation Report NTSB/SIR-15/01 (Washington, DC: National Transportation Safety Board, 2015).

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:

<u>H-15-4</u>

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.

H-11-8

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

SR	Reiteration	Report	Report	Accident	Accident	Accident	Accident
Number	Number	Number	Date	Description	City	State	Date
H-15- 004	1	HAR- 20-01	3/19/2020	Collision Between a Sport Utility Vehicle Operating With Partial Driving Automation and a Crash Attenuator Mountain View, California March 23, 2018	Mountain View	CA	3/23/2018

SR Numbe r	Reiteratio n Number	Report Numbe r	Report Date	Accident Description	Accident City	Acciden t State	Accident Date
H-15- 005	1	HAR- 15-02	8/11/2015	Multivehicle Work Zone Crash on Interstate 95	Cranbury	NJ	6/7/2014
H-15- 005	2	HAR- 17-01	3/28/2017	Motorcoach Collision with Crash Attenuator in Gore Area, US Highway 101, San Jose, California	San Jose	CA	1/19/2016
H-15- 005	3	HAR- 17-04	11/21/201	Motorcoach Collision With Combination Vehicle After Traffic Break on Interstate 10 Palm Springs, California, October 23, 2016. Adopted October 31, 2017 and issued November 21, 2017	Palm Springs	CA	10/23/201
H-15- 005	4	HIR- 22-01	3/9/2022	Multivehicl e Crash Near Mount Pleasant Township, Pennsylvani a	Mount Pleasant Township	PA	1/5/2020
H-15-	5	HIR-	4/25/2023	Multivehicl	Phoenix	AZ	6/9/2021

SR	Reiteratio	Report	Report	Accident	Accident	Acciden	Accident
Numbe	n Number	Numbe	Date	Description	City	t State	Date
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005		23-04		e Collision			
				Involving a			
				Milk Tank			
				Combinatio			
				n Vehicle			
				and Stopped			
				Traffic			
				Queue			
H-15-	6	HIR-	8/28/2024	Rear-End	Williamsbur	VA	12/16/202
005		24-05		Collision	g		2
				Between			
				Combinatio			
				n Vehicle			
				and			
				Medium-			
				Size Bus			
H-15-	7	HIR-	9/24/2025	Multivehicl	Etna	ОН	11/14/202
005		25-05		e Collision			3
				and			
				Postcrash			
				Fire on			
				Interstate 70			

SR Numbe	Reiteratio n Number	Report Numbe	Report Date	Accident Description	Acciden t City	Acciden t State	Acciden t Date
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H-15- 006	1	SS-19- 01	12/5/201 9	Bicyclist Safety on US Roadways: Crash Risks and Countermeasure s	N/A	N/A	N/A

SR Numbe	Reiteratio n Number	Report Numbe	Report Date	Accident Description	Acciden t City	Acciden t State	Acciden t Date
r		r					
H-15- 007	1	SS-19- 01	12/5/201 9	Bicyclist Safety on US Roadways: Crash Risks and Countermeasure s	N/A	N/A	N/A