



# National Transportation Safety Board

Washington, D.C. 20594

## Safety Recommendation

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**Date:** May 25, 2001

**In reply refer to:** H-01-15

Mr. David Hensing  
President  
Intelligent Transportation Society of America  
400 Virginia Avenue, S.W.  
Washington, D.C. 20024

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The National Transportation Safety Board is an independent Federal agency charged by Congress with investigating transportation accidents, determining their probable cause, and making recommendations to prevent similar accidents from occurring. We are providing the following information to urge your organization to take action on the safety recommendation in this letter. The Safety Board is vitally interested in this recommendation because it is designed to prevent accidents and save lives.

This recommendation addresses informing the public and commercial drivers about the technological solutions for the prevention of rear-end collisions. The recommendation is derived from the Safety Board's special investigation report *Vehicle- and Infrastructure-Based Technology for the Prevention of Rear-End Collisions*<sup>1</sup> and is consistent with the evidence we found and the analysis we performed. As a result of this investigation, the Safety Board has issued 11 safety recommendations, 1 of which is addressed to the Intelligent Transportation Society of America. Information supporting this recommendation is discussed below. The Safety Board would appreciate a response from you within 90 days addressing the actions you have taken or intend to take to implement our recommendation.

Although requiring the use of the collision warning system (CWS) is critical, consumer acceptance of the technology is equally critical. For example, educating the public of the benefits of seat belts has been as important as equipping the vehicles with or requiring the use of seat belts. The U.S. Department of Transportation (DOT) study on consumer acceptance of various automotive technologies reported that drivers, particularly older drivers, were enthusiastic about the adaptive cruise control (ACC) and the CWS, but were wary of how they operated and their reliability. While only 43 percent of the drivers surveyed would purchase an ACC system, 98 percent of drivers who actually drove with an ACC in the field operational test said they would purchase the system. Some drivers may be wary of new technology before using it; when air

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<sup>1</sup> For more information, read: National Transportation Safety Board, *Vehicle- and Infrastructure-Based Technology for the Prevention of Rear-End Collisions*, Special Investigation Report NTSB/SIR-01/01 (Washington, DC: NTSB, 2001).

bags were first employed, people were initially apprehensive. To educate the public, the DOT and Allstate Insurance Company sponsored a demonstration of air bags using crash dummies.<sup>2</sup> The exhibit traveled to 100 cities over a 3-year period beginning in 1990. The purpose of the exhibit, according to Allstate's chairman and chief executive officer, was to "encourage consumers to purchase cars with air bags because we know they save lives and reduce injuries." A similar program could be developed to educate the public on the safety benefits of the CWS. The average driver, whether a passenger car or commercial vehicle driver, does not know what actually exists in the way of Intelligent Transportation Systems (ITS) and has never experienced what it is like to drive with some of these technologies.<sup>3</sup>

From August 31 through September 2, 1999, the Safety Board held the public hearing *Advanced Safety Technologies for Commercial Vehicle Applications*.<sup>4</sup> In discussing what the Government can do to promote the implementation of technology at the public hearing, a trucking company representative said that the Government could provide more information on the technologies, so that the data presented by the manufacturers is not suspect (consumers may think the manufacturer is just trying to sell something). He added that electronics in trucks is still relatively new and that consumers are not yet completely comfortable with it. If the Government would publish solid data on the benefit of a certain technology and the benefits of multiple technologies, the trucking industry may be more apt to adopt the electronics. Transmitting this information to the public is crucial to the acceptance of ACC and CWS technologies. The Safety Board has concluded that information concerning the use and benefits of effective CWSs and ACCs is critical to their acceptance by the driving public.

The Intelligent Transportation Society of America is a group that can help disseminate the positive experiences with the ACC and the CWS. In the past, it has sponsored demonstrations of technologies in the developmental stages resulting in positive perceptions of ITS for the future. A demonstration of existing technologies that are under deployment may show the driving public what is available and the success of the field operational test. The group is in an ideal position to champion the results of the field operational tests and to educate the public of the benefits of ACCs and CWSs.

Therefore, the National Transportation Safety Board recommends that the Intelligent Transportation Society of America:

Develop and implement, in cooperation with the National Highway Traffic Safety Administration, the Federal Highway Administration, and the truck, motorcoach and automobile manufacturers, a program to inform the public and commercial drivers on the benefits, use, and effectiveness of collision warning systems and adaptive cruise controls. (H-01-15)

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<sup>2</sup> Insurance Institute of Highway Safety, *IIHS Status Report*, Volume 25, Number 10 (Arlington, VA: November 17, 1990).

<sup>3</sup> Michael A. Regan, Claes Tingvall, David Healy, and Laurie Williams, "Trial and Evaluation of Integrated In-Car ITS Technologies: Report on an Australian Research Program," *Seventh World Congress on Intelligent Transport Systems, November 5-9, 2000, Turin, Italy*.

<sup>4</sup> National Transportation Safety Board, Docket No. DCA-99-FH-002.

The Safety Board also issued safety recommendations to the U.S. Department of Transportation; the National Highway Traffic Safety Administration; the Federal Highway Administration; automobile, motorcoach, and truck manufacturers; the American Trucking Associations, Inc.; the Owner-Operator Independent Driver Association; and the National Private Truck Council. In your response to the recommendation in this letter, please refer to Safety Recommendation H-01-15. If you need additional information, you may call (202) 314-6440.

Acting Chairman CARMODY and Members HAMMERSCHMIDT, GOGLIA, and BLACK concurred in this recommendation.

By: Carol J. Carmody  
Acting Chairman