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Docket Management Facility
U.S. Department of Transportation
1200 New Jersey Avenue, SE.
West Building Ground Floor, Room W12-140
Washington, DC 20590-0001

VIA: <http://www.regulations.gov>

Re: Comments on the Federal Motor Vehicle Safety Standard; Rearview Mirrors
Advanced Notice of Proposed Rulemaking, Docket No. NHSTA-2009-0041

The American Trucking Associations, Inc.¹ (ATA), is writing to comment on the U.S. Department of Transportation (DOT) National Highway Traffic Safety Administration (NHTSA) Notice of Proposed Rulemaking regarding Federal Motor Vehicle Safety Standard; Rearview Mirrors (hereinafter the "Proposed Rule") (Docket No. NHTSA-2009-0041).² As the national representative of the trucking industry, ATA and its members are interested in matters affecting the nation's motor carriers, especially the development of regulations to improve the safety of all vehicles.

Background

NHTSA is proposing to amend Federal Motor Vehicle Safety Standard (FMVSS) 111, Rearview Mirrors to improve the driver's ability to see areas that are near the rear of the vehicle in order to mitigate the fatalities and injuries associated with blind zones that are not covered by the current mirror requirements. The notice presents the agency's research efforts and is soliciting additional information to develop an effective proposal to minimize vehicle blind spots and thus prevent most back over incidents. This proposal is to be directed at light-duty vehicles (all motor vehicles under 10,000 lb. except motorcycles and trailers)

¹ ATA is the national trade association of the U.S. trucking industry. ATA is a united federation of motor carriers, state trucking associations, and national trucking conferences created to promote and protect the interests of the trucking industry. Its membership includes more than 2,500 trucking companies and industry suppliers of equipment and services. Directly and through its affiliated organizations, ATA represents over 37,000 companies and every size, type and class of motor carrier operation.

² See 74 *Federal Register* 99478 (March 4, 2009)

Although most of ATA members do not operate light-duty vehicles in their commercial operations, some do use light-duty vans for package deliveries and all have a few light-duty vehicles as service vehicles, generally pick up trucks. On November 14, 2005, ATA submitted comments to Docket No. NHTSA 2004 -19239, which was directed at rear object detection devices for vehicles from 10,000 lb – 26,000 lb. The current proposal for light-duty vehicles appears to have addressed the concerns expressed by ATA on the former proposal as it is proposing to establish performance criteria instead of dictating certain types of equipment. Many of the delivery vans used by package delivery fleets are equipped with rear convex corner mirrors to enhance rear visibility. Some of these vans are also equipped with rear video systems. Most of the pick up trucks do not have any type of enhanced rear visibility systems. In these commercial applications, the rear convex mirror systems are probably more apt to be used because these vans often have no windows in the cargo area due to security concerns.

Commercial driver training leads drivers to rely more on the mirror system than non-commercial drivers as well as surveying their surroundings before entering the vehicle to back up. The drivers are trained to watch the mirror system while backing, and if any object appears in the mirror to stop and get out to check the area behind the vehicle. The images in a rear convex corner mirror are always distorted, but anything short of a clear view warrants further examination.

We agree that not all light-duty vehicles should be required to have an enhanced rear visibility device and that if there is a mandate it should be directed at the vehicles that are over represented in back over incidents. The agency states that it has already established a correlation between direct view blind zone areas and backing crash risks. With this information, an approach in which the agency would establish a maximum allowable blind zone area would put the rear visibility counter measures where they are most needed. However, the research reported that drivers only glanced at the screen of a rear video system 65% of the time they were performing backing maneuvers, leading to the need to maximize the direct viewing area even when enhancement systems are added. The back over incident data from a number of States the agency has studied should point to the areas where enhancing rear visibility via direct vision could be practical for future vehicle designs and thus provide a safety benefit.

The agency has also proposed an experimental technique to define the blind zone areas. The technique, using lasers and laser detector targets moved about a one foot grid pattern on a test field that is located 50 feet aft of the rear bumper and 25 feet to each side of the vehicle centerline, appears to be a repeatable means to define the blind zone areas to the rear of the vehicle, although, further definition of the laser's location at the driver's eye point would be helpful as well as photographs or sketches of the test set and the laser movement. This technique could also be expanded to three dimensional computer models to enhance future vehicle designs for rear visibility. To the question of the 50th percentile male, this seems to be a reasonable point of reference to cover the cross section to drivers.

The countermeasure test procedure and the expected level of performance need better definition. We represent the end user who will be purchasing the countermeasure as part of a vehicle and the test should define how effective the device is in reducing the blind zone areas.

The area behind the vehicle in Figure 14 seems reasonable since it covers most of the blind zones defined in the directed visibility measurements. A system must be defined that would allow the buyer to evaluate how well the area is covered as part of the performance criteria. It should be easy to understand such as the star system for crash test performance.

ATA agrees that the performance criteria for all rear visibility enhancement countermeasure displays must be defined first before any ranking system can be developed. Establishing such a ranking system would be useful for evaluating rear visibility enhancement systems that are sold as options, when making product comparisons.

Conclusion

ATA commends the agency's efforts which have defined the types of vehicles that are most likely to be involved in a back over incident as well as quantifying height and age of the people that are most likely to become fatalities. Targeting the standard to these vehicles and improving their rear visibility to reduce blind zones using the test target height should be the correct starting point since this also appears to be the beginning of an objective technique to define the blind zone areas of a vehicle and how these blind zone areas correlate to the back over incidents. The design requirements that will evolve from this type of standard will improve future vehicle designs.

Even though this standard change may only affect a small number of vehicles that ATA members operate, we will continue to monitor this issue as the techniques developed for the light-duty vehicles could carry over to medium and heavy-duty vehicles in the future.

Respectfully submitted,

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