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BEFORE THE  
SUBCOMMITTEE ON WATER RESOURCES, TRANSPORTATION AND INFRASTRUCTURE  
SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

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Mr. Chairman and Members of the Subcommittee:

I appreciate the opportunity to appear before you today. You have asked us to address the subject of heavy truck safety. I am pleased to be able to describe the National Highway Traffic Safety Administration's (NHTSA) research and rulemaking activities on this subject.

First, let me begin by mentioning some pertinent safety data. From 1977 through 1988, we saw substantial improvements in heavy truck safety. In 1988, the last year for which we have complete comparisons, the fatal crash involvement rate for medium and heavy trucks reached an all-time low. Between 1977 and 1988, the fatal crash involvement rate of single-unit trucks decreased by 40 percent, and the rate of combination-unit trucks decreased by close to one-third.

Media attention given to heavy truck safety frequently overlooks the fact that heavy trucks are involved in fewer crashes per mile of travel than are many other types of vehicles, including passenger cars. While medium and heavy trucks make up about 3.2 percent of the total population of all

vehicles on our roads, they are involved in less than 3 percent of all motor vehicle crashes.

Still, because of their larger size, crashes involving these vehicles tend to have more serious consequences. For example, 8.4 percent of all vehicles in fatal crashes in 1988 were medium and heavy trucks, which resulted in 12 percent of the total highway fatalities for that year.

For this reason, NHTSA has always given heavy truck safety a high priority in its research and rulemaking. Currently, we are in the midst of an extensive series of performance tests and in-service field evaluations of antilock braking systems for heavy trucks. Our plans in this area call for making regulatory decisions within one year on stopping performance and stability requirements during braking. NHTSA is working cooperatively with the Society of Automotive Engineers to make further improvements in truck brake system compatibility through requirements for replacement brake linings and pneumatic valves.

Other heavy truck brake issues are also being addressed in rulemaking. The agency's final rule on improving the air brake timing of combination vehicles became effective on May 3rd. On the same day, we issued a notice of proposed rulemaking to require automatic brake adjustment systems and brake adjustment indicators on heavy trucks. When issued as a final rule, this rulemaking should help reduce the number of heavy trucks with brakes that are out of adjustment.

In the area of heavy truck handling and stability, we are building on an extensive amount of past research and are close to completing the development of test procedures for rollover stability and rearward amplification in combination vehicles.

Another area of particular concern is car-truck collisions. In situations involving collisions of cars into trucks, we are working to develop upgraded requirements for protective devices installed on the rear of trailers which may help to reduce fatalities in cases where cars crash into trailers. Also on this subject, we are working on a proposal for reflective marking systems to enhance trailer conspicuity.

On a related matter, we are concerned about the feasibility of designing practical truck front-end structures that are less "aggressive" in car-truck collisions. We are beginning a program on this subject that could, if successful, lead to a significant reduction in the approximately 3,500 car and light truck occupant fatalities each year resulting from such collisions.

On truck occupant protection and crashworthiness, NHTSA recently issued comfort and convenience requirements for seat belts in heavy trucks, and we are considering a requirement that all heavy trucks be equipped with 3-point seat belts. We also are working cooperatively with the Society of Automotive Engineers to develop criteria for further improvements in the areas of collapsible steering wheels, cab interior surfaces, cab structural integrity, and fuel system integrity.

Our efforts in advanced technology are also making good progress. NHTSA has a key role in the Department's Intelligent Vehicle-Highway System (IVHS) program. In IVHS matters that relate to heavy trucks, we are beginning assessments of driver workload, looking into ways to augment current mirror systems, developing strategies for presenting multiple warning signals and related information to drivers, and considering various vehicle-based methods of determining the status of driver alertness.

We believe this broad range of research and rulemaking activities addresses the many concerns expressed relative to heavy truck safety.

This concludes my prepared remarks. I will be glad to answer any questions you might have.