

*Statement of Mr. David Kelly
Acting Administrator
National Highway Traffic Safety Administration
before the
Subcommittee on Surface Transportation and Merchant Marine
Infrastructure, Safety, and Security
Committee on Commerce, Science, and Transportation
United States Senate
Oversight Hearing on Bus Safety*

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Mr. Chairman, I am David Kelly, Acting Administrator for the National Highway Traffic Safety Administration. I appreciate the opportunity to appear before the subcommittee to discuss the important issue of bus safety, and particularly motorcoach safety.

Every death and serious injury that occurs on our roads is a tragedy. I share the same feelings of concern and empathy for the individuals and families who have been tragically affected by these crashes, especially when our most valuable resource, children, are involved. I extend my deepest condolences to each of them.

Over the past several years, NHTSA has been very focused in our efforts to improve motorcoach occupant protection. In April 2002, NHTSA sponsored a joint public meeting with Transport Canada to hear the views and comments from motorcoach manufacturers, operators, users, and the public at large in order to be better informed of their specific needs, and to help us determine what improvements in motorcoach passenger crash protection standards were most warranted. With input from that meeting, NHTSA and Transport Canada entered into a joint program in April 2003 that was completed in September 2006.

The joint program with Transport Canada focused on improving glazing and structural integrity on motorcoaches to prevent ejections through the use of modified window glazing materials and bonding techniques. There were several reasons the program was focused in this way:

1. Both Transport Canada and NHTSA had observed ejections through windows in motorcoach crashes.
2. Several NTSB safety recommendations have been concerned with glazing, window exits, structural integrity, roof strength, and survival space.
3. Focusing the joint program on this area seemed the best way to address a broad array of the issues that had been raised by NTSB, and improve occupant protection for all crash conditions.

The joint study concluded that considerably more effort would be needed to develop performance requirements that would have a reasonable possibility of being effective.

Completion of the joint study with Transport Canada coincided with completion of an internal NHTSA review of emergency egress and flammability requirements that are applicable to motorcoaches, as well as the NTSB hearing on the tragic motorcoach fire that occurred in Wilmer, TX during the evacuation for Hurricane Rita. The testimony from the Wilmer NTSB hearing, in addition to the Transport Canada and internal agency reviews, caused NHTSA to re-examine our priorities for improving motorcoach safety. After completing a comprehensive review, we developed NHTSA's Approach to Motorcoach Safety, which was made public in August 2007. Our objectives in developing the safety plan were to review motorcoach safety issues and develop approaches directed to the areas that have the greatest potential for achieving improved motorcoach safety most quickly. NHTSA is making significant progress in our major research effort into passenger protection for motorcoaches in crashes. Four strategies the agency is pursuing on a priority basis are seat belts, roof strength, emergency evacuation, and fire safety protection.

We have been conducting various crash and related tests to determine the best strategies for enhancing passenger safety, especially ways to prevent passenger ejections in crashes, such as through the use of seat belts. In December 2007, the first motorcoach crash test ever conducted by the agency was completed. The test was a full frontal barrier crash at 30 miles per hour with 22 crash test dummies aboard in a variety of seat designs, seating configurations, and restraint usage. Using the crash information from this test, additional sled tests were conducted during this past summer to determine the forces transmitted through the seat and seat anchorages under this full frontal crash condition, as well as experienced under different crash velocities, impact angles, and restraint conditions. Component tests are now underway to assess the feasibility of developing a performance procedure. Once those tests are completed this fall, and if the test data indicate feasibility, initiation of rulemaking proceedings could then occur.

In the area of roof strength, we conducted tests on four motorcoaches in February. Those tests were designed to bracket motorcoach body styles (i.e., short vs. long window spacing) for a comparison of U.S. school bus and European roof strength procedures to determine the relative stringency and practicability of those differing requirements in applicability to motorcoaches. We are now assessing those results to determine our next steps.

Emergency evacuation studies are underway to identify studies from other transportation modes and countries and then determine applicability to motorcoaches. This involves conducting human evacuation studies and simulations under various emergency exit scenarios. Another aspect of this effort is to examine the minimum strength requirements necessary to open emergency exits, with special consideration for young and elderly occupants and the need to balance rapid emergency egress with containment requirements to prevent ejection.

Finally, NHTSA has contracted with the National Institutes for Standards and Technology to conduct the fire safety aspects of our motorcoach safety effort. This study is designed to review existing flammability standards and procedures and determine which might be most applicable to improve motorcoach safety. Research on motorcoach fire propagation properties will examine the U.S. vs. European procedures for vehicle interior materials. Wheel well mockup studies will be conducted on the tires, fuel and HVAC lines, external body panels, insulation, and wiring. Those tests will measure flame temperatures, heat release, fire resistance

of components, and propagation to the passenger compartment. Countermeasure assessments will also be examined for fire hardening, fire detection, and fire suppression strategies.

Mr. Chairman, thank you for your consideration and this subcommittee's ongoing efforts to improve highway safety. I would be pleased to answer any questions.

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