

*Statement of Mr. Ronald Medford
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National Highway Traffic Safety Administration
before the
Subcommittee on Commerce, Trade, and Consumer Protection
Committee on Energy and Commerce
United States House of Representatives
on
Auto Safety: Existing Mandates and Emerging Issues*

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Chairman Rush and Ranking Member Radanovich, my name is Ron Medford, and I am the Acting Deputy Administrator of the National Highway Traffic Safety Administration (NHTSA). I appreciate the opportunity to appear before this subcommittee to discuss the important issue of improving vehicle safety.

This subject is one of the critical missions of our agency, and it is one of the most important safety issues confronting the country today. According to NHTSA's analysis of the Centers for Disease Control and Prevention data, motor vehicle crashes are the leading cause of death for every age from 3 through 6 and 8 through 34. More young Americans die from motor vehicle crashes than die from any disease, infection, crime, suicide, war, drug and alcohol abuse, drowning, or fire. In 2007, 41,059 people died in the United States as a result of vehicle crashes. This is a major public health and safety challenge for the Nation.

We are encouraged by the positive strides we have made recently. For instance, the 41,059 deaths in 2007 represent a 4 percent decrease in fatalities from 2006. Moreover, our early estimate for 2008 is that 37,313 traffic deaths occurred. If this projection is realized, it will represent a 9.1 percent decrease from 2007 and the lowest number of traffic deaths in the United States since 1961. While some of this decrease is due to the recession, it also represents the lowest fatality rate ever recorded at 1.28 fatalities per 100 million vehicle miles traveled, down from 1.36 in 2007.

Recent NHTSA vehicle regulatory actions that take effect in the next few model years will help us continue the positive traffic safety trend we are now experiencing. First, Electronic Stability Control, or ESC, is a technology that uses sensors and computer control to brake individual wheels so that the vehicle will follow the path the driver is steering the car, instead of spinning out of control. NHTSA estimates this technology can save nearly 10,000 lives a year when it is on the entire light vehicle fleet, which makes it the most important safety device since the seat belt. While ESC is estimated to be currently on about 81% of the 2009 fleet, it will be required on every new 2012 model year car and light truck sold in the United States.

Second, we used our data and our experience on side crash protection to guide our work when we upgraded the standard in 2007, where the United States now requires head

protection in side crashes and is the first country in the world to assess protection using a small stature female dummy, in addition to the male crash dummy. These enhanced side crash protection measures are estimated to save about 1,000 lives a year when deployed on the entire light vehicle fleet. The upgraded side crash protection requirements will be phased in beginning in the 2011 model year and will be required on all 2015 model year cars and light trucks sold in the United States.

Third, our 5-star consumer information program called the New Car Assessment Program (NCAP) has been duplicated around the world – Europe, Japan, Australia, Korea, and China now have consumer information programs in place with which consumers can easily compare the safety performance of different vehicles they are considering purchasing. After conducting a comprehensive review of our NCAP, we have announced major changes beginning with the 2011 model year. NHTSA will assign star ratings based on more stringent criteria and additional testing, resulting in a more challenging grading curve, and an overall rating for the vehicle, based on combining the vehicle's ratings for front, side, and rollover testing. In addition to the occupant protection information, NCAP will now incorporate a consumer information program on advanced crash avoidance technologies such as Lane Departure Warning systems and Forward Collision Warning systems which can help drivers prevent crashes from occurring. Consumers will be able to more easily determine the comparative safety afforded by the different vehicles they are considering for purchase, and vehicle manufacturers will have stronger incentives to focus on safety beyond what is required by regulations when designing their new vehicle models.

Fourth, just last week we published an upgrade of our roof strength standard. This new rule more than doubles the required roof strength of those vehicles that were already subject to the standard, and for the first time extends the standard to all light duty vehicles. This will save 135 lives each year and prevent more than 1,000 injuries in rollover crashes.

It is not by luck or chance that we are making progress in the area of traffic safety. There are far more potential projects that NHTSA could undertake than we have staff and money to actually undertake. Like any organization, NHTSA must make difficult choices in allocating resources entrusted to us by Congress. NHTSA is very aware that any skewed or misplaced priorities can have immediate and significant impacts on our roadways and the Nation. Consequently, the professional staff and leadership at NHTSA work very hard, on a daily basis, to make decisions based on data and maximizing the safety benefit of our actions.

We try to undertake those research efforts that deliver the greatest safety benefits at reasonable cost for the American public. To identify those projects with the greatest benefits, NHTSA uses a systematic process. We begin by analyzing our safety data, which is recognized internationally for its depth and quality. These analyses allow us to focus on, and probe deeply into, areas of highest risk. For instance, frontal crashes continue to be the crash mode in which the greatest number of people die, in spite of the enormous number of lives already saved due to record high seat belt use, improved crash

worthiness and significant advances in frontal airbags. We have recently completed a team study of the available data to identify characteristics of frontal crashes that are not being fully addressed by our current requirements. NHTSA will use this team's work to evaluate the projects that could be undertaken to offer the biggest safest impacts, and then develop project plans that make the best use of our available resources to deliver cost-effective solutions in the identified areas.

Another effort currently underway with the potential to yield significant safety benefits is our vehicle-based alcohol impairment detection effort. In 2007, 12,998 people were killed in crashes in which a driver had a blood alcohol concentration of .08 or higher. For the past 25 years, NHTSA has concentrated substantial resources through programs aimed at modifying driver behavior. Recently the agency has sought to supplement the behavioral approach by exploring the use of technology to detect and prevent impaired driving. Today we are conducting joint research with the auto industry to develop technologies that have the potential to detect and prevent an impaired driver from operating a vehicle without being intrusive to the sober driver. This is a significant technical challenge, but we are very excited to have a chance to save a significant number of lives.

Another important effort we have underway because of the enormous safety potential is advanced safety technologies for crash avoidance. As more electronic sensors and computing capability are incorporated into modern vehicles, the vehicle manufacturers now have the technological capability to enhance safety in a way that was impossible a decade ago. We believe that many other technologies can detect and compensate for driver errors such as inattention, drowsiness, or driver misjudgment. An especially promising technology is crash-imminent braking. This new type of braking employs sensors to detect that a crash is apparently unavoidable and then automatically applies maximum braking to slow the vehicle as much as possible. We know from 40 years of crash data that reducing the velocity of a vehicle in a collision significantly reduces the risk to all vehicle occupants, including those in the vehicle that is struck. In this case, if we can reliably reduce the velocity of the striking vehicle, we can significantly decrease the safety risks on America's roads.

We have identified future technologies that will be even more effective at preventing crashes. We are currently underway with a significant research program on vehicle-to-vehicle communications, where short wave communications will enable vehicles to identify, broadcast, and actively avoid crash risks

While the size of potential safety benefits is our first consideration, it is not the only criterion we use when deciding upon vehicle safety projects. Another consideration is emerging technologies that are likely to appear in growing numbers, and which present potential new safety risks that are not addressed by current safety standards. An example of this is alternative energy sources. Our standards currently address safety-related issues arising from crashes for both hydrogen fuel cells and lithium ion batteries. However, both of those alternative energy systems can pose potential hazards outside of a crash. We are currently working to ensure that we will adequately understand these

potential risks and address them where needed. Another rapidly growing problem is motorcycle safety. The agency is promulgating several vehicle and equipment rulemakings, including a Global Technical Regulation on motorcycle braking systems and a new helmet labeling standard that will help ensure that riders wear helmets that provide adequate crash protection.

Another criterion we consider is to improve occupant protection of high-occupancy vehicles. We have already addressed 15-passenger vans, by extending our existing standards to cover these vehicles and ensuring that our new or amended safety standards apply to 15-passenger vans as well. NHTSA is now focused on motorcoach safety. We published a motorcoach safety plan in September 2007 that identified four priority areas: seat belts for occupants, increased roof strength, emergency egress, and fire safety. The 2007 plan identified the steps we would take and the timeline for us to make decisions. For seat belts, in December 2007, NHTSA conducted the first crash test of a motorcoach ever conducted by the U.S. Government. That test has given us the needed information to propose a requirement for seat belts on motorcoaches in 2009. NHTSA will also conduct a roof crush test this summer to allow us to determine whether roof strength standards for motorcoaches are necessary. In addition, our Secretary has asked all parts of the Department involved in motorcoach safety issues to develop a Departmental Motorcoach Safety Action Plan that coordinates and integrates the activities. We will deliver that Plan to him by July 15, 2009.

The final criterion we use in deciding upon vehicle safety projects is the protection of children and other vulnerable populations. Under the leadership of Secretary LaHood, the agency has recently conducted a top to bottom review of our child restraint standard. Based on that review, we have expedited a project to afford better side impact crash protection to children. The data show that more restrained children are killed in side impact crashes than in frontal crashes. We expect to make a decision on future action in 2010. In addition, this criterion explains our focus on school bus safety. School buses are the safest form of highway travel. In 2008, we issued a rule that raised the minimum seat back height, required the same lap/shoulder belts in small school buses that are required in cars and light trucks, and provided requirements for seat belts and anchorages if communities should opt to equip larger school buses with seat belts. This rule becomes effective October 21, 2009 and will further raise the bar on safety protection for our children when they are traveling to and from school.

NHTSA's risk-based vehicle safety enforcement program supports application of these criteria in our vehicle rulemaking and research programs. Compliance testing helps ensure that vehicles and equipment, including the increasing volume of products imported to this country, meet the U.S. Government standards. Our defects investigation program helps ensure that once vehicles and equipment are in use, consumers are protected from safety problems that might develop.

By applying these data-based risk reduction criteria, we believe the agency has developed a systematic way to evaluate and compare potential safety projects we could undertake. We strive to ensure our choices are based on a consistent and reasoned

evaluation. Of course these vehicle safety initiatives are complemented by NHTSA's highway safety programs that are driving progress with seat belt use, impaired driving and other priority behavioral risks. Just last week Secretary LaHood kicked-off our *Click It or Ticket* seat belt campaign with new national advertising and the participation of more than 10,000 police agencies across the Nation. The American public deserves no less when we are addressing a threat to public health that results in more than 35,000 deaths every year.

I would like to turn briefly to our fuel economy standards as they are part of the Department's efforts to achieve vital national goals relating to energy and the environment. On March 23, 2009, we issued a final rule establishing fuel economy standards for model year 2011. We are now working with the Environmental Protection Agency in developing fuel economy standards for model years 2012-2016. Pursuant to the President's January 26 memorandum, we are reviewing our approach to standard setting, including our methodologies, economic and technological inputs, and decision making criteria. We will craft our program so as create the maximum incentives for innovation, provide flexibility to the regulated parties, and meet the goal of making substantial and continuing improvements in fuel efficiency. To that end, we are committed to ensuring that the future fuel economy program is based on the best scientific, technical, and economic information available, and that such information is developed in close coordination with other federal agencies and our stakeholders.

Thank you for your consideration, and for this Subcommittee's leadership in improving traffic safety. I would be pleased to try and answer any questions.