

**Statement before the National Highway  
Traffic Safety Administration**

**“The New Car Assessment Program  
Suggested Approaches for Future  
Program Enhancements”**

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Good morning. My name is Adrian Lund, and I am president of the Insurance Institute for Highway Safety. I would like to thank the National Highway Traffic Safety Administration for this opportunity to comment on the agency's plans for U.S. NCAP. It is high time to review the status of this important program.

When NHTSA began NCAP in 1978, it was the first program in the world to provide consumers with information about how well a vehicle would protect them in a crash, based entirely on objective information from a frontal crash test. NCAP started a safety marketplace that now is producing rapid improvements in vehicle safety designs. NCAP probably is one of the most important programs NHTSA ever adopted, and I commend my co-panelist, Joan Claybrook, for her vision in starting this program when she was NHTSA administrator. However, I doubt that even Joan foresaw just how powerful consumer information would become, often driving safety innovation much faster than ever was possible through vehicle regulation.

Now this 30-year-old success story has lost much of its luster, and it needs drastic revision if it is to maintain its pivotal role in vehicle safety improvements. In the case of the frontal test, revision is long overdue. The fact that frontal crash test ratings no longer identify important safety differences for consumers is not a new problem — in fact, I first made this observation to the agency in 1994, at a previous hearing on NCAP. Increasingly, the same situation exists for NCAP's side impact test program and for its rollover ratings which, in fact, never did much except to identify traditional SUVs with high ground clearance as being more rollover prone than lower-to-the-ground cars.

NHTSA's January 2007 report on NCAP is a comprehensive review of the role the agency thinks it can play in the future to provide consumers with valid safety information. Unfortunately, the proposals are disappointing. There is much to like about NHTSA's vision, but in the end the proposals will not do much to restore the sparkle to the diamond that was NCAP.

What is good about the proposals is that NHTSA recognizes the need for NCAP to continue to evolve and update the kinds of consumer information it provides. IIHS strongly supports the agency's intention to expand NCAP to include information about electronic stability control and other crash avoidance features when the data justify it. IIHS also supports the agency's suggestion that it might include our head restraint evaluations in its consumer information programs. IIHS believes these evaluations, developed by insurer-supported organizations around the world over the past several years, represent the current state of knowledge, and the agency's use of them would widen their availability to consumers.

What is disappointing is that these and other agency proposals are unlikely to have the same effect on vehicle designs as the first NCAP crash tests. These actions will not drive safety innovations — they simply recognize the new technology that is increasingly available in new cars. ESC will be standard equipment in a few short years, with or without NHTSA's inclusion of this information in its consumer information systems. Meanwhile, the agency is not conducting consumer tests that challenge vehicle designs in the way the original front and side tests did. In fact, the proposals to improve vehicle crashworthiness fall far short of what the agency could and should achieve.

This failure to drive future vehicle designs in significant ways is particularly apparent in the agency's proposal to enhance frontal crash protection. For the frontal NCAP test, the agency proposes in the short term to add new injury criteria to address knee, thigh, and hip injuries. In the longer term, NHTSA says it could evaluate the feasibility of assessing the risk of injury to the leg below the knee and explore the meaningfulness of moderate speed impacts. Although these changes would improve safety information for consumers, they would not drive

dramatically different designs to address the more than 15,000 occupant deaths that occurred in frontal crashes in 2005.

In this regard, NHTSA and IIHS are in similar situations. The offset frontal crash test, started by IIHS more than 15 years after NCAP's first frontal crash tests, has also achieved much of its benefit. All recent vehicles tested by IIHS achieve at least acceptable ratings. It is time for both organizations to move on, but how do we decide the next step? At IIHS we believe that the continued presence of 15,000 deaths in frontal crashes — 11,567 to front-seat occupants in 2005 — compels us to focus on these deaths. It is not that we think the leg injury issues addressed by the agency are unimportant, but the deaths are more important, and it is likely that, as the causes of these deaths are addressed, leg injuries also will be reduced.

We agree with the agency that there is no evidence to support more severe full frontal or offset frontal crash tests. Most serious and fatal injuries are occurring in crashes at speeds at or below those at which we currently test. This means the deaths must be happening in other kinds of frontal crashes, and we need to identify what the next frontal crash test paradigm is. For example, IIHS is looking at crashes into narrow objects like trees and poles. These crashes account for about 25 percent of the serious and fatal injuries in frontal crashes, and we are looking to see if a pole test would encourage different countermeasures and, hence, newer and more protective vehicle designs. We also know that large truck crashes and crashes with very narrow overlap are a problem for vehicles that already perform well in NCAP and IIHS tests. We will keep the agency apprised of our research, but the relevant point is that the resources devoted to NCAP would be better spent on developing a new frontal test paradigm rather than tweaking the injury measures in an old paradigm.

The agency's proposal for side impact, although logical, also is disappointing. Including the pole test proposed in FMVSS 214 is thought by the agency to encourage manufacturers to fit new vehicles with side airbags with head protection more quickly. In reality, however, side airbags with head protection already are standard equipment in 49 percent of 2007 model year passenger vehicles, in part in response to IIHS's side impact test program and in part due to automakers' voluntary agreement with NHTSA to improve vehicle compatibility in side impacts involving SUVs and pickups. Thus, by the time the agency could implement a pole test in NCAP, say for 2008 models, the vast majority of vehicles already will have side airbags with head protection. We wonder why the agency did not give greater priority to adopting or modifying the IIHS side impact barrier, which was developed to better represent the threat of side impacts by SUVs and pickups. As the agency notes, these crashes account for much of the risk in side impacts, and the agency's pole test does not address many aspects of this risk.

IIHS believes NHTSA also has missed an opportunity with regard to rollover crashworthiness. In the discussion of future rollover NCAP enhancements, NHTSA has fallen into the trap of assuming that crash avoidance improvements are necessary and sufficient solutions to reduce deaths from rollover crashes. But such deaths will continue in a vehicle fleet equipped with ESC. Rollover was the most harmful event in the deaths of 7,798 occupants of cars, SUVs, and pickups in 2005, and even if ESC could have prevented half of those fatalities almost 4,000 deaths would have remained. Last year NHTSA proposed an increase in the performance requirements of the existing roof crush standard. The regulatory analysis for the proposal suggested relatively small benefits for increased strength. However, that analysis was conservative in the extreme. It assumed that increased roof strength would have zero benefit for unbelted occupants or for occupants with multiple harmful events. That assumption is far too conservative, and there is no physical reason for it. As IIHS suggested in 2001, NHTSA needs to do additional research on the issue of roof crush, and we believe that research would justify the addition of a roof crush metric to NCAP.

## Summary

In its initial years, NHTSA's NCAP test drove improved crashworthiness in vehicles and created the safety marketplace for such improvements. Now the safety marketplace is moving faster than NCAP. This is not a bad thing — it is a good thing. Automakers are competing to add safety content to their vehicles. This outcome could scarcely have been foreseen in the early years of NHTSA, when safety advocates and automakers were nearly always in confrontational mode, and the automaker mantra was, "safety doesn't sell." The current marketplace competition is exactly what we in the public health sector have been fighting for.

However, this success has complicated NHTSA's role in consumer information programs. NHTSA has now described its plan for dealing with these complications, and it is comprehensive — from upgrading front and side crash tests to including crash avoidance features to deriving combined scores. IIHS endorses the agency's efforts to include crash avoidance metrics, especially ESC, in its NCAP assessments. NHTSA's plan is disappointing, however, in that it contains no proposals that are likely to greatly affect car crashworthiness designs in the near future. Unfortunately, the relatively timid proposals from NHTSA may be the best that can be done for the moment.

While the NCAP report is comprehensive, it is also an indictment of agency research efforts in recent years. Such research has not been directed at answering the challenging questions related to improving front, side, or rollover crashworthiness. Or the research has been misled by faulty assumptions, such as the assumption that a pole test is necessary to drive effective head protection in side impacts or that increased roof crush strength is effective for only a small number of rollover occupant fatalities. It is likely that both assumptions are wrong.

NHTSA needs to reinvigorate its research on crashworthiness features. The agency needs to understand how people are dying in crashes in vehicles designed to do well in current tests and whether other tests would encourage new vehicle designs that prevent these deaths.

The agency must not become complacent about crashworthiness issues just because crash avoidance features like ESC, and perhaps lane departure warnings, are beginning to show promise. Until we actually know that vehicles will not crash, we must continue to improve their designs to protect occupants when they do crash.