

Closing Remarks by
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For the
NHTSA Workshop on Vehicle Mass-Size-Safety
Washington, D.C.

February 25, 2011

On behalf of NHTSA, we would like to thank everyone who has participated in today's workshop. In particular we would like to thank the panelists for their preparation, presentations and comments in the discussions. We would like to thank the audience and those participating on the web for their questions and comments. We believe this has been a highly productive workshop.

As mentioned earlier in the workshop, NHTSA has opened a public docket for comments. The docket number is NHTSA-2010-0152. Information on how to find the docket is located on the NHTSA website. We welcome and encourage comments to the docket. We intend to review and carefully consider all comments, whether made in the workshop or submitted to the docket. We strongly encourage comments to be submitted in the next 30 days to maximize the time we have to consider the comments and to potentially reflect the comments in our work plans. While we encourage comments to be submitted within the next 30 days, the docket will remain open beyond that time. Presentations and transcripts from today's workshop will be posted on NHTSA's website and in the docket.

Today's workshop opened with comments from NHTSA Deputy Administrator Ron Medford. Ron discussed some of the important questions related to vehicle mass, size and safety that NHTSA must address in CAFE rulemaking. He also discussed some of the complexities, and the current research and analysis plans. The research and analysis plans have been established through the coordinated efforts of NHTSA, and our partner agencies DOE, EPA and CARB. The plans have been influenced by inputs and comments that we received from experts, stakeholders and the public in previous rulemakings and in connection with the model year 2017-2025 Fuel Economy and GHG Emissions NOI and Supplemental NOI.

Highway Safety is the core mission of NHTSA, and we believe it is important to carefully assess the projected effects of the 2017-2025 CAFE and GHG Emissions rulemaking on safety. We believe the assessment of safety should be data driven, and should be comprehensive and based on thorough research and analysis.

As has been highlighted in today's workshop, assessing the effects of vehicle mass reduction and size on societal safety is a complex issue. Today's presentations, audience questions and comments, and panel discussions have highlighted those complexities. The presentations have covered approaches and considerations for safety effects research and analysis. We heard differing views of how some of the work should be conducted.

While we believe the current research and analysis plan will provide a strong basis for estimating the effects of vehicle mass and size on safety for the model year 2017-2025 CAFE rulemaking, we also believe that plan will be strengthened by carefully considering all of the information and inputs from today's workshop.

As a recap, the current research and analysis plan is as follows.

Related to using statistical analysis of historical crash data to project the effects of vehicle mass reduction and size on safety:

- Peer review of the 2010 NHTSA study by Dr. Kahane has been completed. The peer reviews are posted in the NHTSA docket.
- As presented by Dr. Green of UMTRI, a peer review is being conducted of over 20 studies that use historical data to project the effects of vehicle mass reduction and other vehicle attributes on safety.

- As presented by Dr. Kahane, NHTSA and DOE, with assistance from EPA, are developing an updated crash database for use in future statistical studies. We estimate the database will be available for public release in approximately April 2011.
- Also as presented by Dr. Kahane, NHTSA has initiated a new study of the effects of vehicle mass reduction and size on safety using fatality data. The methods used in the new work will be informed by the peer review of the 2010 NHTSA study as well as the UMTRI peer review of the 21 studies.
- As presented by Mr. Wenzel, a study of the effects of vehicle mass reduction and size will be conducted using casualty data, and an additional study will be conducted duplicating the 2011 Dr. Kahane study using fatality data.

Steve Summers, of NHTSA, presented the current research and analysis plans related to assessing the effects of future vehicle designs on safety.

- NHTSA initiated a project with Electricore (with EDAG and George Washington University as subcontractors) to study the maximum feasible mass reduction for a mid-size car.
 - The target is to maintain cost within 10% of the baseline vehicle, and either maintain or improve vehicle functionality.
 - As part of the project, the contractor will build a CAE model and demonstrate the vehicle's performance in NHTSA's NCAP and roof crush tests, and also in IIHS offset and side impact test programs.
- NHTSA will also use the model developed by EDAG to perform a variety of vehicle-to-vehicle crash simulations to study the effect of vehicle mass reduction on safety, and to investigate safety counter measures for significantly lighter designs.
- In addition, the agencies are working on the next phase of the Lotus light-weight vehicle study for CARB that came out last year.
 - As mentioned earlier, the 1st phase of the Lotus study produced 2 designs for light-weighted vehicles, a "high development scenario" and a "low development scenario".
 - In the 2nd phase of the study, Lotus is validating the high development design by creating a CAE model and performing crash simulations.
 - NHTSA is actively involved in the 2nd phase of the study -- performing crash simulations and helping to validate the model.
 - NHTSA hopes to incorporate the Lotus high development vehicle model into the fleet safety simulation study to assess a broader range of vehicle designs.
 - EPA has also contracted with FEV to further validate the Lotus low development design and estimate cost. EDAG has been sub-contracted and will create a CAE model and perform crash simulation. NHTSA expects to help validate the model.
 - NHTSA also hopes to incorporate the Lotus low development vehicle model into the fleet safety simulation study to assess a broader range of vehicle designs.

Other panelists presented their previous work, planned work and professional views. NHTSA intends to further review all of the presentations and discussion from the workshop as well as

comments received in the docket. We will carefully consider these inputs and discuss them with DOE, EPA and CARB and modify our work plans and analyses, as appropriate.

In addition, for our rulemaking, we will review and carefully consider all available studies and comments.

As Ron mentioned in his opening remarks, we expect to schedule a follow-up workshop. While a date has not yet been selected, we expect the next workshop will be scheduled in several months after some of the planned studies have been completed.

With that, I'll open for any questions or comments related to NHTSA's action plan going forward.

Again we thank all of our panelist and those who have participating in the workshop. We have people at the back of the conference room who will escort you to the building exit.

Please drive safely. Use your seat belts. Don't drink and drive. And don't drive distracted.