

IMPROVING US NCAP CONSUMER INFORMATION

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ABSTRACT

This paper provides an overview of the National Highway Traffic Safety Administration's (NHTSA) recent and planned future activities to improve the content and delivery of the consumer information it provides as part of the New Car Assessment Program (NCAP). Many of NHTSA's activities respond to the recommendations of the National Academy of Sciences' study "Shopping For Safety: Providing Consumer Automotive Safety Information." The activities discussed in this paper are organized under four categories: Better Understand Customers' Needs; Improve Existing NCAP Information; Develop New NCAP Information of Value; and Improve Awareness and Use of NCAP Information.

INTRODUCTION

Does safety sell? The results of a 1995 Customer Satisfaction Survey conducted by the National Highway Traffic Safety Administration suggests that safety does sell. Seventy-five percent of the survey respondents consider safety a "very important" consideration in their purchase decision. Another 20 percent consider safety "somewhat important."¹

Given this level of consumer interest in vehicle safety, it's no surprise that ads touting "Highest Government Rating In Class," "The Crash Test that Made the Stars Come Out," are being used to market today's vehicles.

To respond to the public's growing

¹The Customer Satisfaction Survey was repeated in late 1997. Preliminary results of the survey are similar to these results - 74% consider safety "very important" while 21% consider safety "somewhat important."

interest in motor vehicle safety, NHTSA has created a new division, the Consumer Automotive Safety Information Division, to increase its focus on vehicle safety consumer information complementing the traditional engineering focus of the agency's rulemaking function. This new division is responsible for the effective development and delivery of NCAP and other vehicle safety consumer information. Prior to the formation of this division, the NCAP engineering staff had this responsibility along with the responsibility for technical aspects of NCAP. NHTSA has requested a separate line item in its 1999 budget to fund this division, which has been operating with funds from the NCAP program and other offices. In crafting its motor vehicle safety consumer information agenda, NHTSA is using the recommendations of a 1996 National Academy of Sciences study as a guide.

BACKGROUND

Historically, NCAP information has been distributed through the use of press releases and video news releases. Consumers could obtain a copy of the results by calling NHTSA's Hotline. Beginning in 1995, NHTSA also began publishing the "Buying a Safer Car" brochure which included the NCAP results and other information on vehicle safety features for purchasers of new vehicles.

As part of the Department of Transportation and Related Agencies Appropriations Act, 1995 (P.L. 103-331; September 30, 1994), Congress provided NHTSA funds "for a study to be conducted by the National Academy of Sciences (NAS) of motor vehicle safety consumer information needs and the most cost effective methods of communicating this information." The NAS study was completed and released to the public on March 26, 1996. It is titled "Shopping for Safety - Providing Consumer Automotive Safety Information," TRB Special Report 248. Based on its findings, the study makes recommendations to NHTSA on ways to improve automobile safety information for consumers. Many of these recommendations pertain to the NCAP program.

On May 20, 1997 NHTSA published a notice summarizing the NAS study and requesting comments on NHTSA's response to the recommendations of this study and on programs

NHTSA has begun or is considering to address these recommendations. NHTSA requested comments because it wishes to develop these programs in cooperation with other interested parties.

Comments were received from 12 individuals and organizations. Commenters included the three American automobile manufacturers, the American Automobile Manufacturers Association (AAMA), the Association of International Automobile Manufacturers (AIAM), Advocates for Highway and Traffic Safety, Volvo, and the Insurance Institute for Highway Safety. In general, commenters supported NHTSA's efforts in response to the NAS study.

INITIATIVES ORGANIZED UNDER 4 CATEGORIES

The Consumer Automotive Safety Information Division has organized its NCAP activities into four categories: Better Understand Customers' Needs; Improve Existing NCAP Information; Develop New NCAP Information of Value; and Improve Awareness and Use of NCAP Information.

Better Understand Customers Needs

In the past, NHTSA has conducted research for specific projects, such as the development of the star rating system for NCAP, air bag labels, or utility vehicle warning labels.

The NAS study recommended that NHTSA conduct research into consumer decision making and safety information requirements. The research would examine how consumers conceptualize auto safety, how consumers use safety information in choosing a vehicle, and how safety information can best be communicated and disseminated.

All commenters on NHTSA's notice concerning the NAS study encouraged NHTSA to do fundamental research to better understand the needs and motivations of consumers. Commenters did differ in their opinions as to whether this research needed to be conducted before any further activity is undertaken or whether this research could be conducted simultaneously with other activities.

On June 12, 1997 NHTSA awarded a contract to a marketing and research firm to conduct general research on what consumers know about vehicle safety and how they go about obtaining and using information in making automobile purchasing decisions. The first activity conducted consisted of a literature search to determine the scope of knowledge regarding these issues and identify gaps that may be addressed by future research. The literature search was completed on November 6, 1997.

The second activity was a series of fifteen focus groups among consumers and auto salespeople in Tampa, Northern New Jersey, and Kansas City. The focus groups with consumers sought to explore the perceptions of and predispositions to consult vehicle safety information among different consumer segments; the priority consumers place on safety when purchasing a vehicle and how safety information affects or influences purchase decisions; ways to increase the urgency consumers associate with vehicle safety performance. Focus groups were also conducted with new and used vehicle salespeople to gather feedback about consumer use of vehicle safety data. The final report on the focus groups was completed on March 5, 1998.

The final activity under this contract, currently being conducted, is the development of a general marketing plan that will identify target audiences, recommend strategies to improve the dissemination of consumer information, recommend marketing activities to motivate consumers to seek information, and methods to evaluate the effectiveness of the marketing plan. The marketing plan should be completed soon.

Some general findings to date from this research are:

- vehicle safety concerns vary from person to person, but are most influenced by the presence of children in a household;
- for most, vehicle safety considerations are confined to a few specific factors (air bags, anti-lock brakes, etc.); and
- consumers are misinformed about the source of crash tests, although they are interested in the results.

In 1995, NHTSA conducted a telephone survey to determine the public's attitudes toward the federal role in promoting vehicle safety. This survey was repeated in late 1997. Final results of the second survey are not yet available, however, additional questions were asked concerning the use of safety information in purchasing new vehicles. These results should also add to the knowledge in this area, and future follow-up surveys could be one means of determining the effectiveness of new efforts.

Once the current general research program is completed, NHTSA will examine the results of all research conducted over the last few years to determine the need for further research. Along with the NAS study, the results of this research will be used to guide future improvements to the NCAP consumer information. NHTSA also intends to continually monitor research needs and conduct further research as needed.

Improve Existing NCAP Information

Since its beginnings for Model Year 1979 vehicles, the only changes that has been made to enhance the program for consumers was the presentation of results in the form of a "star rating," rather than the numerical presentation of the data and the addition of side impact crash test information.

The NAS study recommends that NHTSA provide consumers with more explicit information on: the importance of vehicle size and weight; the benefits of (and proper use of) safety features such as seat belts and anti-lock brakes; the frequency of crash types for which test results are available; and the uncertainties associated with crash test results.

Commenters to the NHTSA notice were divided on whether additional information on the importance of vehicle size and weight should be provided to consumers. Some commenters supported this recommendation, while others believe it is premature to provide such information or believe that such information must also include information on the effect that larger/heavier vehicles have on occupants of smaller/lighter vehicles in a crash.

NHTSA intends to ensure that current

statements on size/weight are highlighted in all appropriate materials and will consider adding statements concerning the disbenefits to occupants of other vehicles. NHTSA will also explore other means to inform consumers about the effects of size and weight in the future.

NHTSA agrees with the NAS recommendation to provide consumers with more information on the benefits and proper use of safety features. The agency typically couples safety feature information with NCAP materials. For example, the "Buying A Safer Car" brochure includes information on air bags, advanced safety belt features, traction control, and anti-lock brakes. The agency will continue this practice as well as develop consumer information materials and campaigns dedicated to specific safety features.

Some commenters to the NHTSA notice believed that NHTSA was not doing enough to provide consumers with information on the reliability of crash test results and the real-world frequency of crash types. In response, NHTSA intends to quantify the actual number of real-world crashes that occur for each crash test mode in appropriate materials. In addition, NHTSA will include a statement with information on crash test results advising consumers only one test per vehicle is conducted and that it is not possible to assess how well a vehicle provides protection in all circumstances using a single test which cannot reflect all crash situations. In addition, materials will explain that while the test procedures and environment are tightly controlled, the ratings assigned to the vehicle for that specific set of circumstances may not always be exactly reproduced in subsequent tests. The first materials to include these new statements was the 1998 issue of the "Buying a Safer Car" brochure.

Develop New NCAP Information of Value

The NAS study recommended that NHTSA expand the types of comparative information that was available to consumers, develop a summary safety rating for new vehicles, and recommended that such information be provided in the form of a safety label, with additional more detailed information in other forms.

Beginning with Model Year 1997 vehicles, NHTSA has begun testing vehicles for side impact crash protection as part of the NCAP program. Accordingly, side impact crash test ratings are now provided to consumers along with the frontal ratings. As an outgrowth of the NCAP program, NHTSA has recently published a new companion brochure to the "Buying a Safer Car" brochure titled "Buying a Safer Car for Child Passengers." This brochure includes information on vehicle safety features and designs of particular importance to families with children, and is designed to help them make an informed decision when purchasing a vehicle for their family. This information responds to the research finding that it is consumers with children who are most interested in safety when purchasing a vehicle.

In the area of comparative rollover information, NHTSA is testing 12 vehicles to see if selected driving maneuvers accurately identify rollover propensity. NHTSA is also analyzing the data on the rollover experience of each of these 12 vehicles to allow NHTSA to compare the real-world experience with the experience predicted from the testing. This evaluation will be completed in the fall. After completion of the research, an agency decision will be made about possible use of the information, including possible labeling requirements on the propensity of vehicles to roll over. As recommended by the NAS study, such a label could also be expanded to include existing NCAP information or a recommended summary safety rating.

Another area of possible new information for the NCAP program is braking. NHTSA is conducting research on braking performance, and again, the results of that research are expected in the fall. If the research is promising, the NCAP vehicles could be tested for braking performance prior to the crash test, providing additional information to the public. Such a program has already been implemented by Japan's National Organization for Automotive Safety and Victim's Aid.

Finally, the new information program with the greatest potential to impact the NCAP program is in response to the NAS study recommendation to develop one overall measure that combines relative importance of

crashworthiness² and crash avoidance³ features for a vehicle. The study recognizes however, that, for the foreseeable future, summary measures of crashworthiness and crash avoidance must be presented separately due to differences in current level of knowledge, and differences in the roles of vehicle and driver in the two areas. For now, the NAS study recommends that the agency develop a summary measure of a vehicle's crashworthiness which incorporates quantitative information supplemented with the professional judgment of automotive experts, statisticians, and decision analysts. NHTSA should provide information with this measure to reflect the range of uncertainty in those judgments. For crash avoidance, the study recommends the development of a checklist of features for the near future.

Development of a summary crashworthiness measure was the major interest of commenters on the NHTSA notice. All commenters expressed a willingness to work collaboratively with NHTSA toward the goal of a summary crashworthiness rating, although some expressed concerns about the complexity of this endeavor. Two commenters outlined possible approaches to a summary crashworthiness rating. General Motors suggested an approach that combines information on vehicle mass, motor vehicle safety standard certification data, and a measure of the margin of compliance with the motor vehicle safety standards. Volvo suggested that a rating should combine laboratory test results, expert judgments, and real life crash data. Little support was expressed for combining the current front and side NCAP scores. Support was also expressed for other comparative safety information in the areas of rollover and crash avoidance. Commenters also expressed an interest in working with other countries with consumer information programs to harmonize any vehicle rating scheme.

In September, 1997, NHTSA conducted

²Crashworthiness refers to a vehicle's ability to protect occupants from serious injury or death when a crash occurs.

³Crash avoidance refers to a vehicle's ability to prevent a crash from occurring.

a series of seven focus groups in Washington DC, Boise, Idaho, Dallas, Texas, and Frederick, Maryland to explore consumers' need for information about motor vehicle safety, specifically their need for crash and braking test data. Participants in these focus groups showed an interest in crash test data. Most participants, however, felt most vehicle brakes behave similarly and therefore did not believe that comparative braking information would be meaningful. However, participants did express an interest in such information if there were appreciable differences in braking performance between vehicles.

Based on the comments to the NHTSA notice and the results of focus group research, NHTSA does not, at this time, intend to pursue combining the existing front and side NCAP scores into a single rating. Instead, NHTSA is considering examining the development of a summary crashworthiness rating, which would likely combine front and side crash protection information as well as information on the crash protection offered in other crash modes. If this effort is undertaken, NHTSA intends to work with interested parties on the development of this rating, perhaps under the auspices of the existing Motor Vehicle Safety Research Advisory Committee as suggested by some commenters.

Improve Awareness and Use of NCAP Information

The NAS study recommends that NHTSA present a summary crashworthiness rating in a hierarchically organized approach. Such an approach would have the most highly summarized information on a vehicle label with a graphical display or on a checklist. This could be part of the current labels on new vehicles, or, preferably, a separate label focusing on safety information. The next level of information would be an accompanying brochure with more detailed explanations of the summary measures, information on the assumptions used in those calculations, etc. The most detailed level would be a handbook with complete comparisons of all vehicles.

The September focus groups conducted by NHTSA support the concept of presenting consumer information in different hierarchical levels of detail, as results indicate that consumers vary in the amount of detail they want. NHTSA

intends to use this concept whenever appropriate in its consumer information programs.

Finally, the NAS study recommends the development of a multichannel approach to the dissemination of information, including NHTSA's Auto Safety Hotline, the Internet, asking the insurance industry and automobile clubs to include information in their mailings, having NHTSA information printed in consumer journals, having safety information included in driver education courses, and public service announcements.

NHTSA has been working to expand the dissemination of NCAP and other vehicle safety consumer information materials, by improving its Internet site; by using video news releases, radio public service announcements and print articles; and by working in partnership with dealerships, special interest groups, and states. The new Consumer Automotive Safety Information Division hopes to emulate some of the communication strategies that have been successfully used by NHTSA's Office of Traffic Safety Programs in addressing safety belt usage and impaired driving.

As mentioned previously, the third portion of the current research program is the development of a general consumer information marketing plan to recommend additional ways to disseminate consumer information. NHTSA has already developed individual marketing plans for the "Buying a Safer Car for Child Passengers" brochure and the NCAP program. Some of the new promotional activities being pursued under those plans are distributing media packages to print publications, and securing partnerships to distribute and/or reprint the brochure.

SUMMARY

In summary, NHTSA has reorganized to focus on the improvement of its vehicle safety consumer information programs. NHTSA supports the general thrust of the recommendations of the NAS study, and is pursuing an agenda to implement those recommendations. NHTSA is using consumer research (surveys, focus groups, and systematic field studies) to guide the development and delivery of consumer information products. NHTSA is taking steps to improve existing

consumer information, as well as developing new consumer information. Finally, NHTSA is expanding the distribution of its consumer information through the use of comprehensive marketing plans.

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