Dr. Jeffrey Runge
Administrator
National Highway Traffic Safety Administration (NHTSA)
U.S. Department of Transportation
400 Seventh Street, SW
Washington, DC 20590

Re: 49 CFR Parts 575: Docket No. NHTSA-2001-9663; Notice 2: "Consumer Information Regulations; Federal Motor Vehicle Safety Standards; Rollover Resistance"

Dear Dr. Runge,

Public Citizen greatly appreciates NHTSA's request to provide comments on the agency's proposal for a rollover resistance rating for consumer information published October 7, 2002. We applaud the agency's work thus far in preparing this rulemaking to carry out the mandate of Congress in its passage of the Transportation Recall Enhancement, Accountability, and Documentation (TREAD) Act, signed into law November 1, 2000.

In these comments, Public Citizen argues that NHTSA should present consumers with one combined statistic for rollover risk instead of two separate rollover risk numbers. We suggest that the agency expand the dynamic tests to include a suite of tests, including tests that assess tripped rollover. We also urge inclusion of 15-passenger vans in NHTSA's pool of tested vehicles. Furthermore, we argue that NHTSA reconsider its five-tier star ranking system. Manufacturers should be required to perform these dynamic tests on each of their vehicles and all rollover propensity numbers should be available to consumers at the point of sale. To truly allow a consumer information program to affect the market, and manufacturers, so that safer vehicles are produced, NHTSA must present all consumers with the most informative and easily understandable data at the time of maximum relevance.

However, while the inclusion of a dynamic measure of rollover propensity in NCAP testing is a step in the right direction, the consumer information program is clearly insufficient to truly protect the public from the risk of dangerous, and often lethal,

rollovers. NHTSA must use its statutory authority to adopt a regulation that would establish minimum safety standards for rollover risk. The agency began looking into creating a minimum standard in the late 1980's[1] and a Congressional mandate for a regulation was part of the 1991 Intermodal Surface Transportation and Efficiency Act. In response to this Act, the agency issued an early draft of a proposed rule, but despite this Congressional direction, in 1994 NHTSA abandoned its rulemaking, opting instead to develop a consumer information rule. This is an unacceptable response to such an increasingly more deadly safety hazard. Every year, almost 10,000 people are killed in rollover crashes. Nearly a third of all automotive occupant deaths are caused in these crashes. NHTSA must set a minimum rollover prevention standard.

Consumers should be presented with one combined figure for rollover risk

In its recent rulemaking,[2] NHTSA writes "The ideal rollover resistance rating system would give consumers information on the risk of rollover in a single vehicle crash taking into account both the static properties of a vehicle and its performance in dynamic maneuver tests." Public Citizen supports NHTSA's efforts to create a combined statistical model of rollover risk. This model has the potential to present information to consumers that is both easy to digest and predictive of real world crash potential.

The agency's proposal for combining the current static measure of rollover risk (the Static Stability Factor or SSF) and a dynamic test, in a statistical model weighted by real-world rollover crash statistics, will provide consumers with a nearly ideal model of rollover risk. As NHTSA states in the rule, "[t]he predictive power of both SSF and road maneuver tests determined by real-world data will be reflected in the risk model."[3] Combining the already predictive qualities of the SSF measurement with results from a suite of dynamic tests in a way that most accurately corresponds with real-world crash data will be the closest approximation of rollover crash risk.

NHTSA gathered information on consumer's views on rollover resistance information through a series of focus groups and published a report compiling input from these meetings in May 2002.[4] One of the findings of this survey was that consumers appreciated the simplicity of the single value combined risk rating and found the separate dynamic and static rating to be confusing. [5] The agency must develop a way to present rollover risk information in a way that consumers can easily understand; otherwise consumers will not be aware of the potential risks of their vehicle to rollover and the congressional intent of TREAD will go unrealized.

One of the reasons the combined statistic will be less confusing to consumers is that without the necessary distinction between static and dynamic testing for rollover,

---

[1] *See* Bradsher, Keith High and Mighty: SUVs – The World's Most Dangerous Vehicles and How They Got That Way, New York: PublicAffairs, 2002, p 56
[2] *See* 49 CFR Part 575.
[3] *See* 49 FR 62528 at 62540.
[4] *See* NHTSA "Final Report: Findings of 21 In-Depth Interviews and 12 Focus Group Discussions Regarding Vehicle Rollover," Docket No. 2001-9663-37.
[5] *Id.* at p 16.

there will be no need for the consumer to make safety decisions based on nuanced, often confusing, definitions. Consumers will not have to worry about the meaning of terms such as "center of gravity height," "track width" or "highly loaded" that are integral to the understanding the nuances of the separate figures. Each of these terms, as well as the basic concepts of "static" and "dynamic," was flagged by consumers in the focus groups as being confusing or likely to be misinterpreted by others.[6]

Another level of confusion that will be allayed through the use of a combined metric is the need for consumers to differentiate between tripped and untripped rollover. If given two statistics - one that is a dynamic rating currently linked to untripped rollover and one that is a static rating predictive of tripped rollover - consumers will at times have to weigh these two types of rollover in order to chose among them. It is possible that a vehicle will have a medium-to-high (somewhat safe) dynamic rating and a low (very unsafe) static rating. Consumers may assume that the dynamic rating was more valuable to their decision because it represents what they might see as an approximation of a real-world event. Yet, as NHTSA has stated repeatedly, 95% of rollovers are tripped,[7] and tripped rollovers are most accurately predicted by the factors used to formulate the SSF. Therefore, it would seem to be disadvantageous to provide the consumer with such potentially misleading information.

Furthermore, NHTSA's separate metric proposal suggests the presentation of the dynamic test on an "A" through "C" scale and the presentation of the SSF on a 1 through 5 star scale. Giving information to consumers in these two different formats will undoubtedly be confusing, a sentiment expressed by consumers in NHTSA's study.[8] The agency explains that this three-letter scale will be used because the dynamic resistance ratings will have to be based "simply on the principal of directional correctness."[9] This means that a vehicle will be rated with "A" representing no tip-up in any maneuver, a "B" representing tip-up only when a vehicle is fully loaded, or a "C" representing tip-up in a lightly loaded position. Consumers surveyed by NHTSA did not favor the letter rating and many did not find "C" to be an inherently poor rating.[10] Thus, using an "A" through "C" is potentially misleading and undoubtedly confusing, particularly when coupled with a five-star scale.

NHTSA should also develop the use of a statistic model combining dynamic and static rollover risk predictions because this model has the potential to integrate real world crash data into the formula. We agree with the agency's statement that: "combination of the static and dynamic information in a statistical model of rollover risk is an objective way to let real-world crash data determine the weighting that best represents the outcomes of crashes."[11] The potential to predict rollover risk and to calculate it based on

[6] *Id.* at p. 28-29.
[7] NASS CDS data from 1992-96 shows that about 95 percent of rollovers in single-vehicle crashes were tripped by mechanisms such as curbs, soft soil, pot holes, guard rails, and wheel rims digging into the pavement, rather than by tire/road interface friction as in the case of untripped rollover events.
[8] *Id.* at p. 6.
[9] *See* 49 FR 62528 at 62542.
[10] *Id.* at p. 33.
[11] *See* 49 FR 62528 at 62541.

real-world crash data provides the validity of the combined model, assuring accurate information for the consumer.

In the Notice of Public Rulemaking (NPRM), the agency raises a possible concern with the combined metric in that it is difficult to assure up-to-date correlation because it usually takes a year or more after a model is first offered for sale before crash statistics are gathered and released. Insisting on a tight correlation, therefore, is problematic, particularly at the make/model level. It is important to keep in mind that the combined metric, even though the correlation initially may not be documented with real world statistics on the specific make/model level, remains a very helpful predictive model overall.

NHTSA should expand the dynamic test regime to include an assessment of simulated tripped rollover

Public Citizen applauds NHTSA for its development of the J-Turn and Fishhook tests – tests with high objectivity, repeatability, performability, and discriminatory capability. Public Citizen strongly supports NHTSA's decision to use these tests to assess the potential response of vehicles to untripped rollover. And, we are disappointed that industry respondents, such as Nissan, have rescinded their support of these tests after other industry respondents opposed it in the record.

The proposed tests, however, do not test tripped rollover, thus missing the opportunity to assess the ways vehicles react in approximately 95 percent of all rollover crashes. The agency recognizes this shortcoming[12] and offers the combined, weighted metric as a partial solution for the potential problem at hand. The agency could go further, however. Public Citizen suggests that NHTSA continue to develop the combined metric as well as examining the possibility of conducting a suite of tests that include tests that would assess tripped rollover in the future development of this rule.

One possible simulated "tripped" rollover test could test a vehicle's reaction to a tire "blowout." Over 23,000 passenger vehicles are towed, annually, from crashes resulting from tire blowouts or flats. Nearly half of these blowout-induced crashes result in rollovers.[13] The agency could assess a vehicle's response to this sort of worst-case-scenario tripped rollover by conducting a test that monitors a vehicle's response to the mechanized blow out of one or more of its tires. This test would be objective and repeatable, and has the advantage of modeling a predictable real-world scenario.

[12] *See* 49 FR 62528 at 62540. "Using dynamic maneuver tests to supplement the information on rollover resistance obtained from static measurements represents a potential improvement in consumer information, but the use of dynamic maneuver tests alone would result in rollover resistance ratings that may not apply to the most common type of real-world rollover crash in which the vehicle strikes a tripping mechanism. That would significantly reduce the correlation of rollover resistance ratings to real-world rollover crashes."
[13] *See* 1995-1998 NASS estimates. 13,294 of these crashes, annually, involve light trucks. Blowouts account for nearly 7 percent of rollovers in the light truck category.

The centrifuge test should be studied for potential future use in a suite of rollover assessment tests

Public Citizen, in our comments to the agency's July 2001 request for comments on this rule, suggested that the agency consider the use a centrifuge test to measure a vehicle's response to both tripped and untripped simulated rollover. This test, as noted by the agency, can be performed accurately and economically with a high level of repeatability and may be more accurate than SSF in predicting a vehicle's likely response to tripped rollover.[14]

Public Citizen does not suggest that the centrifuge test replace the agency's developed set of dynamic tests. NHTSA should study the inclusion of results from the centrifuge test with SSF and dynamic tests in one combined metric, and consider the centrifuge test an augmentation to the SSF. The potential for added value, however, must also be weighted against factors which recommend the use of a pure SSF; namely: 1) the complexity and expense of a centrifuge test in comparison to SSF; 2) the lack of experience in applying a centrifuge test; 3) the potential for delay in issuing this rule. While we believe that the agency should pursue its analytical work, we would recommend that this consumer information rule not be delayed if centrifuge test results are not yet fully evaluated to preserve the expediency of the agency's critical rulemaking on rollover testing.

NHTSA originally rejected the University of Michigan Transportation Research Institute (UMTRI) centrifuge because it may be possible for manufacturers to game the centrifuge test by altering the suspension of a vehicle so that it would pass the test, regardless of the safety risks involved with jettisoning important handling characteristics. As discussed in NHTSA's October 2002 request for comments, and supported by Public Citizen below, integrating a set of handling tests into the rollover propensity assessment will help to assure that these trade-offs do not occur.

Furthermore, the agency argues that TREAD was mandated to present the public with information about driving maneuvers that would evaluate Electronic Stability Controls (ESCs). Industry opponents of the centrifuge test argue that using this test will undermine the assessment of new technologies such as the ESC. True, using the centrifuge tests alone would not allow for evaluation of ESCs. Yet, using results of the J-Turn and Fishhook tests, along with the results from the centrifuge test, would assure that ESCs and other new technologies would be tested by rollover risk assessments.

NHTSA should include 15-passenger vans in its new rollover risk assessment program

While 15-passenger vans comprise only about one quarter of one percent of the passenger vehicle fleet produced in the United States, they are used every to transport college sports teams, commuters, church groups, and those who cannot drive themselves, including the elderly and some physically disabled people. These vans, particularly when

[14] *See* 49 FR 62528 at 62544.

fully loaded with passengers, are highly prone to roll over in single vehicle accidents. Recent Fatal Analysis Reporting System (FARS) data indicates that nearly 52 percent of 15-passenger vans involved in fatal single vehicle accidents involve rollover. Other passenger automobiles are only involved in a rollover crash 33 percent of the time in single vehicle accidents.[15]

The agency does not currently include a study of 15-passenger vans in its dynamic rollover rulemaking or in its NCAP rollover ratings. The National Transportation Safety Board (NTSB) recently sent a safety recommendation to the Chief Executive Officer's of Ford and General Motors on November 1, 2002, requesting they take a closer look at the rollover propensity of 15-passenger vans. The NTSB recommendation states:

> "Given their high rate of rollover involvement in single-vehicle accidents, particularly under fully loaded conditions for which they are designed and are being used, the Safety Board believes that 15-passenger vans should be included in dynamic testing and proposed rollover resistance ratings for this class of vehicle."[16]

They have also recommended this directly to NHTSA. Public Citizen supports the NTSB recommendation and suggests that the agency develop a dynamic testing protocol that includes 15-passenger vans. We have also published a report, "Stopping Rollovers: The Dual-Wheel Solution for 15-Passenger Vans" (See Appendix 1) that highlights the incredibly high rate of rollover related hazards specific to these vehicles.

The star rating system is misleading and ambiguous and must be clarified or changed

NHTSA is obliged to make it clear to the public that the current design of some classes of vehicles presents an extraordinarily high risk of catastrophic rollover accidents. Unfortunately, the NCAP star rating system currently under proposal misleadingly conveys an inherently positive message about all vehicles, even the worst ones, by using stars to illustrate vehicle performance on a rollover propensity test. While such a rating system *may* be appropriate for non-life-threatening aspects of vehicle performance, such as the rate of mechanical failure, it is patently misleading where consumer safety is at stake. Under the rule, all vehicles receive at least one star, irrespective of how poorly they perform on the test and how likely they are to roll over.[17]

---

[15] 1991-2000 Fatal Analysis Reporting System (FARS) of the National Highway Traffic Safety Administration Report.

[16] The National Transportation Safety Board *Safety Recommendation* November 1, 2002.

[17] When NCAP was originally established, standard 208 had been issued and NHTSA tested the vehicles at levels slightly higher than those of the standard (35 vs. 30 mph.) Vehicles were given a passing or failing grade and the exact numbers were made available to consumers. Later vehicles received stars according to how well they perform beyond the requirements of the standard. However, in the case of rollover, there is currently no minimum standard, thus, despite the high risks posed by some low performers, every vehicle receives at least one star.

Even more importantly, the star system fails to account for the variability of vehicles within each category. Because the rating system is so limited, and NHTSA has decided upon a one through five rating system, the consumer cannot distinguish among vehicles at the high or low end of the scale. Any vehicles with greater than a 40 percent chance of rollover will receive one star, regardless of whether that risk is a 41 percent risk of rollover or a 75 percent risk. This leaves little incentive for manufacturers to heighten the safety rating of these most dangerous vehicles.

Also, while consumers may assume that vehicles with five stars have premium engineering, the rollover risk for vehicles in that category may be as high as 10 percent or as low as 0. Consumers surveyed by NHTSA were given the alternative to see each vehicle's rating as it related to others on a line graph website, which could possibly allay some of these problems. Public Citizen urges NHTSA to be more specific in their ranking of automobiles and to make information available to consumers that would allow them to determine a more precise ranking of each vehicle.

It is possible that there will one day only be automobiles with a three, four, or five star rating, under NHTSA's current rubric. There should be a mechanism in place to redefine the categories that are used to determine the ranking of a vehicle's safety. Public Citizen suggests that NHTSA include, in its final rulemaking, a strategy to establish a malleable scale or bell-curve to allow the ratings to change over time to reflect the relevant variations between vehicles as safety levels change.

NHTSA's description of the meaning of the categories is vague and confusing. It is far from clear what "risk" means to drivers in this context. As NHTSA does explain, "[t]he lowest-rated vehicles (one star) are at least four times more likely to roll over than the highest-rated vehicles (five stars)."[18] While it makes some sense that more stars would be better, this definition of the *meaning* of the ratings is actually counter-intuitive— the vehicles with *more* stars are in fact *less likely* to roll over. Consumers unacquainted with the NCAP system and engineering doublespeak will struggle to translate the stars into terms that they can use to make purchasing or safety decisions.

A good alternative to the star rating system is an A through F scale, like the one used in school grading systems. This would obviously avoid the confusion of meaning inherent in the star system. NHTSA's recent consumer survey concluded that consumers did not prefer an A through C scale over a five point star scale. However, consumers were not given a comparable five-point (A through F) letter scale. One reason that the survey participants did not favor the letter ranking was that they did not see "C" as an inherently poor rating. The survey concluded: "… many indicated that while a grade of C was the lowest grade, if something received that grade it would be considered average or fair. Some participants remarked that they did not like this rating because they felt that three levels of rating were not sufficient."[19] There would be no confusion with the

[18] *See U.S. Transportation Secretary Slater Announces First Rollover Resistance Ratings*, Press release January 9, 2000, <www.nhtsa.dot.gov>.
[19] *Id*. at p. 14.

measure if the letters "D" and "F" were included as well because they clearly communicate a failing grade and they expand the scale to a five-point measure.

In order to ascertain whether or not consumers would favor this scale, NHTSA should test a five level letter grading system. Following testing, NHTSA should expand the letter grade method to a more standard A through F scale because it would allow information to be presented in a familiar way without conveying an inherently positive message about inferior vehicles.

NHTSA should conduct handling tests to assure handling quality is not traded for successful results on the rollover tests

Public Citizen greatly supports the agency's effort to develop a system of handling tests to be used in tandem with the rollover tests. As noted by the agency, it would be possible for vehicle designers to create a vehicle with maximized performance in the rollover tests and decreased overall safety. [20] These types of sacrifices are unacceptable, and we commend NHTSA for working to fulfill the intent of TREAD in creating a test that will produce safer vehicles, and not merely those adjusted to pass specific tests.

A separate handling score should be developed and applied by the agency to assure that manufacturers are not designing less safe vehicles in order to pass the rollover tests. These handling tests have been presented by the agency in part as a response to concerns about "gaming" of the rollover tests that would trade off negative handling characteristics for "improvements" in rollover dynamic tests. The agency, therefore, must create a system that provides a strong disincentive to manufacturers who would potentially exchange quality for higher ratings on the rollover tests.

The agency has proposed an A, B, C rating system to reflect the results of these handling tests. Public Citizen once again must assert our criticism of this system. Again, consumers do not see a "C" rating as inherently "bad." It is vitally important that the agency establish a mechanism for rating vehicles in a meaningful way. Warning consumers of safety hazards includes a mandate to recognize a failing grade for vehicles that drop below a specific safety hazard threshold and hold manufacturers accountable for the safe handling of their vehicles. Public Citizen suggests NHTSA include a failing grade (or grades) in its current directional rating system.

The agency notes that that they "do not believe that any current production vehicle has handling we would characterize as bad."[21] These tests, one would assume, are being established to assure that there are no *future* production vehicles that could be characterized as "bad." Establishing a threshold of satisfactory handling results and failing vehicles that fall beneath it is a necessary step towards ensuring that no hazardous trade-offs occur as a result of this rule.

[20] *See* 49 FR 62528 at 62544.
[21] *See* 49 FR 62528 at 62546.

Furthermore, as this rule pertains to a consumer education program, NHTSA must develop a mechanism for presenting information about handling test results to consumers in such a way that they will be able to hold manufacturers accountable for decreases in safety. Public Citizen supports NHTSA's proposal of presenting this grade on their NCAP Website and argues that NHTSA should also require this grading for point-of-sale labeling.

Consumers should also be made aware of trends that occur over time. If, for example, NHTSA determines that a vehicle has a steadily decreasing rollover rate but also a steadily decreasing handling rate, this information should be made public and be easily accessible. The agency should closely monitor these trends and publish reports if they find patterns that might show that maximized performance in rollover resistance tests has caused the degradation of other safety features.

Manufacturers should be asked to publish rollover resistance and handling testing information on all of their vehicles

The budget for the New Car Assessment Program permits only limited testing. On average, NCAP procures only 40-odd models to test each year, only some of which we assume will also be used for rollover testing. The vehicles tested by the agency thus far are only a mere sampling of the number of makes and models on the market. Given the large number of new vehicle models each year and the gravity of the risk to the consumer posed by rollover, the number of cars included in the NCAP program is clearly inadequate to protect consumers or to produce the widespread awareness of the facts that would be necessary to move the market toward safety.

Manufacturers should be required under NHTSA's basic statutory authority to provide sufficient information on the products they produce and sell to the public, and to test and label their own vehicles, as was proposed in 1994. Allocating this responsibility where it belongs will disburse the overall costs, remove this burden from NCAP's limited budget, and enable manufacturers to better fulfill their safety obligation to consumers.

If, alternatively, the manufacturers are not required to provide rollover information by NHTSA, the agency should collect rollover resistance data on every car in the marketplace and publish it so that consumers may do comparisons.

Information on rollover propensity should be placed on vehicle labels at the point of sale

The NCAP's rollover ratings gained initial attention due to the Ford/Firestone tragedy. The clamor has died down, and consumers now are having difficulty finding them or may not be aware that they exist. While we commend the agency's efforts thus far in making consumer information available on the Internet, we must argue strenuously that limiting the dissemination of crucial safety information to the Internet is not sound policy. Many consumers have no access to the Internet. Even NHTSA's own research shows that only about 1.5 percent of consumers would consider researching auto safety

issues by contacting a federal agency and only about half would request safety information from auto dealers.[22]

This is a terrible flaw in the rule because without minimum rollover prevention safety standards, NHTSA's rule rests completely upon the effectiveness of consumer information in altering the safety level of vehicles in the market. Certainly, there will not be any market incentives to correct egregiously unsafe vehicle design unless and until the public is actually armed with this critical information at the point where purchase decisions are actually made.

Rollover propensity information should be readily available in a visible location at the time of purchase. This can be done at a minimal cost by supplementing the already existing labels with rollover information or by adding an additional label. Following the implementation of fuel economy regulations in the 1970's, manufacturers have been required to affix a label to cars they sell stating the car's annual fuel economy value (miles per gallon). This requirement, regulated by 40 CFR 600.301, provides consumers with easily digestible information about an important feature of the car that they are considering purchasing.

NHTSA should follow this model, as it is a more accessible way to disseminate the rollover risk information to the public than merely publishing a star rating on NHTSA's website. Under 49 U.S.C. § 30117, NHTSA has the authority to require auto manufacturers to provide technical information, based on a test that NHTSA designs, to consumers at the point of sale. We urge NHTSA to refer to this section in existing law, and to assure that rollover information is widely available to consumers at the point of sale, in the same way that fuel economy values are available.

The specific notation of rollover test results is clearly a warning to the consumer of an important hazard. In 1994, NHTSA expressed agreement with this position, finding that no confusion would result from its suggestion that rollover information be placed on a label at the point of purchase. However, if this does concern the agency, it could also require that frontal, side and rear crashworthiness ratings be listed as well. Four ratings are certainly not too much to ask consumers to comprehend, and are no more than will now be available over the Internet from NHTSA.

Consumers need effective, readily available information at the point of sale in a clear, easy-to-understand format. The current system is elitist because the many consumers without Internet access may never benefit from the agency's consumer information program. Widespread dissemination of the information on rollover propensity is an absolute prerequisite before auto manufacturers will be affected in their design and marketing decisions by an informed consumer demand for less rollover prone

[22] *See* NHTSA, Status Report for Rollover Prevention and Injury Mitigation, Docket No. 91-68, 11 (May 1996). The report indicates that a 1995 Customer Satisfaction Survey reflected that less than 50 percent of the people surveyed would go to the auto dealer for information. Seventy-six percent of the people polled considered safety to be an important factor. However, less than 50 percent of the total population polled said they would request information from the dealer. Only 60 out of 4,000 people said they would contact a federal agency for auto safety information.

vehicles. Thus, no consumer information program is complete without the information available at the point of sale, prominently displayed on a window sticker and in the owners' manual.

A rollover propensity minimum standard is needed to protect consumers

While Public Citizen applauds NHTSA's work thus far on creating a rating system for rollover resistance, fundamentally we believe that a web-based consumer information program continues to be a poor substitute for a minimum standard. As a matter of both ethics and policy, market mechanisms triggered by consumer awareness cannot be the sole incentive for change in the design and manufacture of automobiles where human lives are at stake. Indeed, the primary focus of the NHTSA Motor Vehicle Safety Act is for NHTSA to insure minimum motor vehicle safety standards. Consumer information data are a supplement, not a substitute, for standards

In the amount of time that it takes for manufacturers to react to market incentives[23] and to initiate safety improvements in their vehicles, lives will be needlessly lost, and injuries caused, by rollover accidents. And some manufacturers will not upgrade their vehicles immediately or at all to save costs. Under the proposed rule, which provides for posting data only on NHTSA's Web site and not at the point-of-sale, the manufacturers will remain at liberty to do nothing to address the problem due to consumer ignorance of the agency's testing program.

A Web-based resource is simply no substitute for direct information to consumers on a vehicle label, because the vast majority of consumers are unaware that the NCAP makes information available over the Web.[24] Therefore, this strategy alone, without development of a minimum safety standard, is an unconscionable approach for a federal regulatory agency to follow, as it essentially abdicates the agency's statutory responsibility to protect the public from harm.

The number of fatalities and injuries caused by vehicle rollover warrants the development of a federal minimum standard, in addition to an information program. In 2000, 9,882 people were killed in light vehicle rollover crashes, representing 31 percent of all occupants killed in crashes that year. Eight thousand, one hundred forty-six of these fatalities were caused by single-vehicle crashes. And 53 percent of light vehicle occupant deaths that year were the result of single-vehicle crashes that included a rollover.[25] In 1997, the average annual fatality level for light vehicle rollovers was just

---

[23] 65 FR 34998 at 34999 (asserting that due to information provided to consumers, manufacturers will change their models to meet the safety needs of the public).

[24] SAE Government/Industry Meeting, Mary Versailles, Findings and Implications for Future Marketing Strategies, June 20, 2000. During the presentation, Mary Versailles referred to focus groups run by NHTSA, and stated that in a group of 30 to 40 people no one had heard of NHTSA's information and that "was only 30 to 40 people but very shocking to us." Also, the consumer survey, NHTSA's "Final Report: Findings of 21 In-Depth Interviews and 12 Focus Group Discussions Regarding Vehicle Rollover," concluded that "[v]irtually none of the respondents were aware that the Rollover Resistance Rating existed."

[25] *See* 2000 Fatality Analysis Reporting System ("FARS").

over 9,500 people - this number, as can be seen above, is growing.[26] The proportion of fatalities in single-vehicle rollover crashes differs greatly by vehicle type - 78 percent of SUV occupant fatalities in single-vehicle crashes involved a rollover compared to 63 percent of pickup truck occupants, 60 percent of vans/minivan occupants, and 46 percent of passenger car occupants.[27] Under the National Traffic and Motor Vehicle Safety Act, the agency is instructed to focus upon protecting lives, and for most of its history this has meant tackling problems that would save the most number of lives. NHTSA should have the foresight to establish a minimum standard before the death toll from rollover crashes needlessly grows.

In the past, opponents of a rollover standard argued that any standard, even a minimally effective one, could result in the elimination of an entire class of vehicles or require manufacturers to make changes in vehicle design. Because some vehicles, including most within the SUV class, could not pass any standard high enough to be effective, the agency has in the past argued that no standard should be created. In this context, NHTSA would rather expect consumers to protect themselves through a consumer information rule currently riddled with problems, than require any kind of redesign upon potentially unwilling manufacturers. One wonders, though, if redesign is actually so difficult to achieve, how the market mechanisms relied upon in the rule could ever function to correct the safety concerns of customers and the public. By the agency's own reasoning, any consumer information program dedicated to improving safety would need to surmount the same institutional barriers that a standard would in order to be effective.

If an effective standard was developed, the public may initially pay small increases in price for certain vehicles, but those costs would be directly offset for consumers by decreases in insurance premiums, medical bills, and diminished loss of life and public suffering. Additionally, when government works to protect the interests of the public and can provide assurances that the vehicles on the road are safe for consumers as well as for other drivers, the diffuse benefits can be both incalculable, measured by an increased peace of mind, and tangible, *i.e.*, lower insurance premiums for everyone.

The agency's determination that a standard on rollover risk is inappropriate is based on tragically out-of-date data. The agency's provisional determination in 1994 that a standard was not warranted utilized data on the number of SUVs and light trucks on the highways in 1991 and the late 1980s. Because there were "many more small cars than pickup trucks and sports utility vehicles on the road" at that time, the agency calculated that SUV safety adjustments in would save only a small number of people from death or injury.[28]

---

[26] *See* 1997 Fatality Analysis Reporting System ("FARS").

[27] *See* 2000 Fatality Analysis Reporting System ("FARS").

[28] *See* 59 Fed. Reg. 33254, subsections IV. A. and VI.A. (decision not to propose a standard dependent upon assumptions that 1) the number of 1991 rollover deaths and injuries that occurred in passenger cars (because those were a larger percentage of cars on the road) is predictive of the cost-benefit analysis and 2) the number of fatalities and injuries in rollovers will stay constant to late-1980s levels). These assumptions, and others made in 1994, about the vehicle mix vastly understate the risk to consumers today, when the ratio of passenger cars to SUVs and light trucks on the highway has changed considerably.

There are far more SUVs and light trucks in circulation today than in the late 1980s. Indeed, these vehicles are the fastest-growing sector of the automotive marketplace.[29] Between 1995 and 1999 the number of registered SUVs has risen 60.1 percent – from 10,629,607 to 17,022,531 or from 5.8 percent of the total passenger vehicles registered in 1995 to 8.5 percent in 1999.[30] Tragically, the rate of passenger vehicles that rolled over in fatal traffic crashes per 100,000 registered, is drastically higher for SUVs than it is for passenger cars – 11.06 for SUVs compared to 3.48 for passenger cars (in 1999.) And, while the number of passenger cars involved in fatal rollover crashes has decreased since 1995 (from 4,689 to 4,411 in 1999), the number of SUVs involved has risen 56.2 percent (from 1,205 to 1,882.) [31] Rollover related occupant fatalities also drastically differ by vehicle body type. In 2000, 61.7 percent of SUV occupant fatalities resulted from a rollover crash while only 22 percent of passenger car occupant fatalities did.[32]The fatality figures used by the agency in 1994 vastly understate the current rollover fatality risk to consumers, and the potential savings of a redesign in terms of human lives and other costs.

In addition, because of the greater marketing emphasis on these types of vehicles, it is safe to assume that design technology has experienced considerable advances since 1991, thus potentially lowering the costs of a redesign. Manufacturers redesign vehicles every three to five years and could implement the changes necessary to provide customers with safer vehicles. Ford's public relations nightmare with the Explorer caused Ford to re-design the Model Year 2002 four-door Explorer to be far less rollover–prone, in less than six months, by widening the wheelbase to provide a greater margin of safety. The Ford Explorer 4x4 2001 model had an SSF of 1.06, rated at two stars under NHTSA's current NCAP rating system. The 2002 model is ranked with three stars and an SSF of 1.14.[33]

This shows that design changes can be made that lower the rollover risk of an automobile. As shown during the Ford/Firestone debacle, a significant safety failure can be extremely expensive for auto manufacturers, in terms of both the company's legal liability for the suffering of consumers and the devastating damage to a manufacturer's reputation. Undoubtedly, the redesign of the 2001 Explorer was more cost effective than another fiasco.

---

[29] *See* 1999 U.S. Car and Light-Truck Sales Ranked by Market Class, Automotive News: Market Data Book 51 (2000); 1997 U.S. Car and Light-Truck Sales Ranked by Market Class, Automotive News: Market Data Book 64-65 (1998); Bradsher, Keith High and Mighty 2002 p. xvi. These sources demonstrate that SUV sales are on the rise. Between 1996 and 1999, compact SUV sales increased 31.8 percent, full size SUV sales increased 77.56 percent, and small sport utility vehicle sales increase 116.2 percent. These data clearly indicate that the popularity of the SUV is on the rise. With the exception of specialty vehicles (69.28), "Near Luxury" cars (16.11), and Luxury cars (13.31), car sales experienced negative sales over the three-year period. SUVs have also risen from less than 5 percent of the luxury market in 1990 to nearly 50 percent of the market in 1996.

[30] *See* NCSA's Characteristics of Fatal Rollover Crashes DOT HS 809 438. April 2002. p. 20.

[31] *See* NCSA's Characteristics of Fatal Rollover Crashes DOT HS 809 438. April 2002. p. 21.

[32] *See* NCSA's Characteristics of Fatal Rollover Crashes DOT HS 809 438. April 2002. p. 14.

[33] NHTSA's NCAP website, http://www.nhtsa.dot.gov/cars/testing/ncap/ visited 11-4-2002.

In short, the cost-benefit calculation for a rollover standard has significantly changed since 1991.[34] It is simply disingenuous for the agency to rely so heavily upon outdated data, based upon conservative assumptions that have proven not to predict our current situation, in concluding that a minimum standard is unnecessary.

Current data demonstrate that there is significant variation even within vehicle categories— for example, the worst performers, sport utility vehicles, generally range from one to three stars in their rollover propensity ratings.[35] This covers a range of rollover "risk" that is from any amount greater than 40 percent down to a still-unreasonable 20 percent. If some manufacturers within the SUV class can build relatively safer vehicles, it is not clear that a minimum standard would wipe out the whole class and it is clear that safer vehicles are possible.

In sum, throughout NHTSA's long history of backpedaling on this issue, the agency has resisted requiring improved performance that may require manufacturers to make design changes because of its stated concerns for a set of presumptively immutable customer preferences, thereby assuming that consumers would rather drive patently unsafe SUVs than fewer types of SUVs. NHTSA has not presented any evidence that this is valid, but what does seem apparent is that consumer preference in this case is founded upon deep ignorance of the risks, and thus should be treated by rule-makers at the agency as far from immutable. Why NHTSA believes it is necessary to protect uneducated consumer preference over demonstrated consumer safety is a puzzle indeed, and is certainly not consonant with the agency's statutory mission.

Conclusion

In conclusion, Public Citizen would like to once again commend the agency on its work on developing a dynamic rollover test. Including "tripped" tests and centrifuge tests with the agency's proposed tests will provide a metric that, when combined with

[34] It is clear from the agency's discussion in 1994 that the cost-benefit analysis done at that time formed the basis for NHTSA's decision not to pursue a standard. The agency several times called attention to the provisional nature of the decision, and emphasized that its decision relied only upon the cost effectiveness data that were relatively current at that time. Moreover, the agency stated that the first two preconditions for the creation of a standard had been met: 1) the identified vehicle metric has a causal relationship with rollover propensity and 2) the metric has a statistical relationship with incidents of vehicle rollover. The agency therefore terminated rulemaking on the standard based upon a failure in the third articulated criterion alone. The third criterion specified that "improvement in the metric should result in significant safety benefits at a reasonable cost without having the effect of necessitating the radical redesign of one or more types of vehicles." This third criterion is deeply biased against safety considerations (for example: Why does the agency assume that a vehicle's current design should be privileged over consumer safety considerations? Do consumers or manufacturers decide what is a "significant" safety benefit? Who bears the cost and decides the reasonableness of that cost and do we consider costs to manufacturers as potentially recoverable through consumers, as we should?). Even more critically, however, the agency's 1999 conclusion that the third criterion was unmet was entirely grounded in now-obsolete cost-benefit data. For these reasons, we believe that the 1994 decision provides a poor basis for deciding against the creation of a rollover standard today.

[35] Two SUVs ranked in 2002 were given four-star ratings, the Acura MDX 4-DR. 4x4 and the Pontiac Aztek 4-DR. 4x4. This proves, even more conclusively, that SUVs can be built to be less rollover prone.

SSF, will undoubtedly give a predictive rollover risk assessment for vehicles. In addition, the agency must include 15-passenger vans under this rule.

The agency, however, is far from done with the work that must be done in order to make meaningful changes in rollover risk. Creating a system of testing and issuing a consumer information campaign is only the first step towards reducing the number of needless deaths and injuries in rollover crashes. The agency must also greatly amplify its efforts to inform the public about the availability and content of the rollover information that will now become available. NHTSA should work to obtain rollover risk data for *all* vehicles or get them from the manufacturer and require them to be publicized at the point-of-sale. NHTSA should develop a less biased manner of conveying safety information, without concealing the danger for consumers through its use of a misleading and unnecessarily vague star rating system. And, most importantly, the agency should return to the work it cast aside nearly a decade ago and develop a rollover-risk minimum standard.

Questions for NHTSA:

1. Has the agency considered the possibility of a dynamic test that would assess a simulated "tripped" rollover, such as tire blowout?
2. Will the agency develop a suite of dynamic tests that include the J-Turn and Fishhook tests as well as tests that would assess "tripped" rollover and centrifuge tests?
3. Will 15-passenger vans be integrated into the testing currently done by NHTSA for the NCAP program?
4. What will be done with the agency's current five star rating system to assure it is the clearest metric for communicating with consumers? What will be done so that the system continues to hold manufacturers accountable as auto safety standards are increased across the board?
5. How does NHTSA plan on using results from handling tests to assure manufactures are not making safety trade-offs in order to raise their scores on rollover tests?
6. How will the agency make the results of these tests available for consumers in such a way that they are warned of potentially hazardous trends?
7. Will NHTSA require that manufacturers provide rollover information on all of their vehicles? Until then, how does NHTSA plan to address the numerous vehicles that it is unable to test under the NCAP program?
8. How does the agency respond to the fact that many consumers will not have access or impetus to view the NCAP website before purchasing their vehicles? Are there other ways that NHTSA plans on disseminating the information to consumers (*e.g.* at the point-of-sale) so that there will be competition on safety and the market-based safety assurance mechanism can work?
9. Given the dramatic increase of SUVs and other rollover-prone vehicles on U.S. highways, how does NHTSA explain their nearly decade-long delay in the creation of a rollover regulation?