January 9, 2001

National Highway Traffic Safety Administration
Department of Transportation
400 Seventh Street, SW
Washington, DC 20590

Re: New Consumer Information Rollover Rating System

Public Citizen wishes to comment for the record on the National Highway Traffic Safety Administration's (NHTSA's) rule, issued January 9, 2001, that will include rollover risk star ratings in the agency's New Car Assessment Program (NCAP).[1] While the inclusion of any measure of rollover propensity in NCAP testing is a step in the right direction, we believe that the consumer information rule is clearly insufficient to protect the public from the risk of dangerous, and sometimes lethal, rollovers. As it stands, the newly issued rule is actually a marked retreat from earlier proposals, such as the agency's 1994 proposed rule requiring the labeling of vehicle rollover information at the point of sale.

Fundamentally, we believe that a consumer information program is a very poor substitute for a standard. As a matter of both ethics and policy, market mechanisms triggered by consumer awareness should not be the sole incentive for change in the design and manufacture of automobiles where human lives are at stake. In the amount of time that it takes for manufacturers to react to market incentives[2] and to initiate safety improvements in their vehicles, lives will be needlessly lost, and injuries caused, by rollover accidents. 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.

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[1] As of the date of this report, the agency's final rule was not yet available. Therefore, we assume that where the program described in NHTSA's announcement of January 9th appears to be the same as the proposed rule, *see* Consumer Information Regulations; Federal Motor Vehicle Safety Standards; Rollover Prevention, 65 Fed. Reg. 34998 et seq, (June 1, 2000), the agency has relied upon the reasoning contained in its proposed rule. We thus analyze the recent announcement of NHTSA's program through the lens of the agency's proposed rule.

[2] *Id.* at 34999 (asserting that due to information provided to consumers, manufacturers will change their models to meet the safety needs of the public).

Instead, the agency should develop a standard that works in conjunction with a consumer information program to reward performance over and above the standard, as has occurred with air bag standards and the agency's testing program.[3] A minimum dynamic standard for rollover prevention is sorely needed. The agency should also require the labeling of vehicles with rollover propensity information at the point of sale as it proposed in 1994, and upgrade rollover crashworthiness with new standards.

Because rollovers are the most catastrophic type of crash, and because of the Congressional mandate to develop a dynamic rollover testing program that is contained in the recently passed Tread Act, the agency should quickly move to adopt requirements that will actually protect occupants from death or serious injury, rather than awaiting a paradigm shift that may only come after more lives are needlessly lost in crashes.

I. A Standard is Needed to Protect Consumers

The number of fatalities and injuries caused by vehicle rollover warrants the development of a federal minimum standard, not just an information program. Over 9,500 people are killed each year as a result of light vehicle rollover.[4] Approximately 62 percent of all Sport Utility Vehicle ("SUV") fatalities result from rollover. Under the National Traffic and Motor Vehicle Safety Act, the agency is instructed to focus upon protecting the most number of lives. NHTSA should have the foresight to establish a minimum standard before the death toll from rollover needlessly grows.

NHTSA's consumer information program tragically fails to address the crucial *cause* of rollover — the high center of gravity designed into most passenger trucks and sports utility vehicles (SUVs) that are currently on the market.[5] In fact, the agency's consumer information approach lacks logic given the

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[3] For another example, when the 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.

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

[5] As the agency acknowledged in 1994, good science for a rollover standard exists. Though it is not the only cause of rollover, the height of a vehicle's center of gravity plays a key part in rollover propensity, and there is a demonstrated causal connection between a low static stability factor ("SSF") measurements and rollover. Because the agency has chosen to use SSF in its final rule, it must concur that SSF accurately measures rollover propensity. Such measurements could easily be made the subject of a standard. *See, e.g.,* 65 Fed. Reg. at 35007; *See also* Leon S. Robertson and Angela Maloney, Motor Vehicle Rollover and Static Stability: an Exposure Study, 87 American Journal of Public Health 839, 839 (May 1997) (establishing that rollover is more frequent in vehicles with low stability measurements). Robertson explains that as the SSF value increases to 1.2, the probability of vehicle rollover declines. According to studies conducted on the causal relationship between SSF values and rollover, vehicle

nature and severity of the problem.

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. In its June proposed rule, the agency took this assertion as true,[6] and essentially concluded that development of any effective rollover standard would require the redesign of SUVs, thus potentially threatening an area of the motor vehicle market which consumer preference now favors.

Because the current vehicles manufactured in this class could not pass any standard high enough to be effective, the agency appears to have concluded that no standard should be created. In this context, NHTSA would rather ask consumers to protect themselves than force 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 will 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.

Alternatively, the text of the agency's proposed rule suggests that were a standard to be created, only a "bare minimum" standard could be implemented because of the need to preserve distinctions among the categories of vehicles currently on the market. The value of preserving current vehicle categories, *i.e.*, the differences between a standard and compact SUV, is assumed but never fully explained. NHTSA calculates, predictably, that such a minimal standard would produce only minimal benefits, and concludes, based on that equation, that the benefits in the actual number of lives saved are not worth the cost of a redesign.

The problems with this calculation are enormous. We do not agree that distinctions among vehicles should be maintained at the peril of uninformed consumers. One problem with the method of analysis is that it is cynical about the costs of loss of human life and careless about the equitable distribution of costs— while auto manufacturers may benefit from not having to design safer cars, the public will pay dearly with suffering caused by terrible crashes.

If an effective standard was developed, in this demand-driven market the public may initially

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stability is the primary factor in rollover. *See generally* Leon S. Robertson, Ph.D., Risk of Fatal Rollover in Utility Vehicles Relative to Static Stability, 79 AJPH 300, 301 (March 1989); *See also* 65 FR 35010 (stating that SSF values explain a large portion of "variability among vehicles in real-world crash experiences . . ."). We recognize that in drawing that conclusion, the agency disagreed with the comments of many auto manufacturers that were submitted to the docket, in which companies such as Ford argued that no reliable measure of rollover propensity exists.

[6] *See* 65 Fed. Reg. at 35011.

pay increased prices 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.

Another problem with the calculation is the assumption that most purchasers of SUVs need or use attributes such as a narrow body and high wheel base that would likely be the subject of a redesign. This is contradicted by the agency's own research, which has found that most SUVs are driven in errands and around the home.

In this latest rule, the agency relies heavily upon prior determinations that a standard is inappropriate. However, the agency's data regarding the risk to the public are tragically out of date. 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.[7]

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.[8] Therefore, the fatality figures used by the agency in 1994 vastly understate the current risks to consumers, and the potential savings of a redesign in terms of human lives and other costs.

In addition, because of the greater market emphasis on these types of vehicles, it is safe to

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[7] *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.

[8] *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). 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. This 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. Not only is the popularity of these vehicles on the rise, but General Motors recently announced its plans to shift its emphasis to trucks and sport utility vehicles. *Cf.* Warren Brown, GM to Shift Emphasis to Trucks, Sport-Utilities, Wash. Post, E03 (June 22, 2000).

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. For just one example, on August 4, 2000, the Milwaukee Sentinel reported that Ford has altered the design of the Explorer for Model Year 2001, including lowering the frame of the vehicle to reduce the risk of rollover.[9] Ford has also indicated that the 2002 Explorer model will have a wider track width and lower center of gravity. As the Ford/Firestone fiasco demonstrates, 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— and far more costly than the type of redesign that a minimum safety standard would require.

In short, the cost-benefit calculation for a rollover standard has significantly changed since 1991.[10] 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.

In the text of its year 2000 proposed rule, the agency also repeatedly references what it considers demonstrated consumer preference for SUVs and light trucks in concluding that a standard requiring vehicle redesign is not desirable. This is a chicken-and-egg argument. Consumer preference, in this case, is uneducated about the rollover risks posed by SUVs and light passenger trucks. Because the agency has just today begun a consumer information program, and has never articulated a minimum standard, consumers are largely unaware of the specific risks posed by the high center of gravity of most if not all SUVs, when they are compared to other vehicles. Indeed, much of the advertising and other information on SUVs and other light trucks has led consumers to think that these vehicles are a

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[9] *See* Keith Bradsher, Ford Plays it Safe With Adjustments to Explorer, Milwaukee Journal Sentinel, 15D (Aug. 4, 2000).

[10] 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.

safer family car than passenger cars. However, the agency's data show otherwise.[11]

Indeed, the data released today demonstrate that there is significant variation even within vehicle categories— for example, the worst performers, sport utility vehicles, range from one to three stars in their rollover propensity ratings. This covers a range of rollover "risk" that is from any amount greater than 40 percent down to a still-unreasonable 20 percent. One reason for this may be that SUVs built upon a light truck, rather than passenger car, chassis, are less prone to rollover. Regardless of the reason, though, 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.

In sum, throughout NHTSA's long history of backpedaling on this issue, the agency has resisted requiring 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. Whether this is true is anyone's guess, 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 rulemakers 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.

II. The Star Rating System is Misleading and Ambiguous

NHTSA is under an obligation 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. If NHTSA in its rule does not speak clearly about this problem, then no one will.

Unfortunately, the NCAP star rating system 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 will receive at least one star, irrespective of how poorly they perform on the test and how likely they are to rollover.[12]

More importantly, the star system also fails to account for the variability of vehicles within each

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[11] *See* 49 CFR Part 575 (" . . . pickup trucks and sport utility vehicles have fatality rates per million registered vehicles between two and three times as great as that of passenger cars")

[12] 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.

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 system. Whether a vehicle has a 40 percent "risk" of rollover or a 75 percent "risk" of rollover, both vehicles receive one star. While consumers may assume that vehicles with five stars possess premium engineering, the rollover risk for vehicles in that category may be as high as 10 percent or as low as 0.

Furthermore, NHTSA's description of the meaning of the categories is vague and confusing. They have not published the precise measurements underlying the star ratings, and it is far from clear what "risk" means to drivers in this context. As NHTSA does, unhelpfully, 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)."[13] While it makes some sense that more stars would 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.

One alternative to the star rating system is a spectrum or bar graph.[14] The use of a spectrum or bar graph along the lines of the proposed rule for vehicle labeling in 1994 would allow the classification of each vehicle individually, so that the public can compare the results of each make and model individually. Another alternative is to use an A through F scale as in school grading systems. This approach would not convey the inherently positive message of the star system, and would be clear to everyone who has ever been in a classroom.[15] In addition, the individual numerical values of the test results should accompany the ratings systems or be evident from the line graph, thus providing consumers with a more thorough idea of the differences between vehicles.

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[13] *See U.S. Transportation Secretary Slater Announces First Rollover Resistance Ratings*, Press release January 9, 2000, <www.nhtsa.dot.gov>.

[14] A spectrum or line graph along the lines proposed for vehicle labels in 1994 would provide consumers with more detailed information about the particular vehicle they wish to purchase, instead of a whole grouping of vehicles that may have different measurements. *See, e.g.*, Transportation Research Board, National Research Council, Shopping for Safety: Providing Consumer Automotive Safety Information, 121 (National Academy Press 1996) (proposing a line graph for safety labels on cars). The line graph NHTSA presented to focus groups in the concept testing stage could be simplified in a way that it maintains the information and the ability to rate individual vehicles. *See* Equals Three Communications, Results of Focus Groups in Dallas, Texas, Overland Park, Kansas and Richmond, Virginia Regarding Rollover Labeling and Information, NHTSA-00-6859-2, 10 (May 13, 1999) (indicating that the focus group participants found the graph highly informative and precise but a little confusing as well).

[15] NHTSA did consider the use of letter grades in its focus group study. *See* Transportation Research Board, National Research Council, *supra* note 7 at 12 (asserting that the focus groups disfavored the use of letter grades). In its studies, NHTSA used only the three grades of A, B, and C. Participants believed that the 3 grades were insufficient to express the necessary information, and were confused by the fact that "C" represented the worst grade. *See id.* Expanding the letter grade method to a more standard A through F scale would allow more information to be presented in a familiar way without conveying a positive message about inferior vehicles.

III. Manufacturers Should Be Asked to Publish the Static Stability Factor of All Their Vehicles

The budget for the New Car Assessment Program permits only limited testing.[16] On average, NCAP procures only 40 models to test each year, which we assume will also be used for rollover testing.[17] The vehicles covered by the agency's January 9th press release are only a partial list of vehicles in the program, and 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 widespread awareness that would be necessary to move the market toward safety. Because the agency has decided to use static stability factor, or SSF, as a yardstick for rollover propensity, rather than an actual test, however, the simplicity of such a measurement should not provide a cost challenge to determine propensity for all vehicles in a given year.

For the same reason, if NHTSA were unable to do this, auto manufacturers would incur no or little expense in publicizing that information so that consumers may compare every vehicle with the NCAP program ratings. The manufacturer should be required 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 fulfill their safety obligation to consumers.

If the manufacturers are not required to do this by NHTSA, however, then the agency should collect SSF data on every car in the marketplace and publish it so that consumers may do comparisons. Only then would the public truly derive any benefit from the agency's choice to use a simple, static test such as SSF for determining rollover propensity.

IV. Information on Rollover Propensity Should be Placed on Vehicle Labels at the Point of Sale

The rule is also deficient because rollover propensity information will not be available to the public at the point of purchase, as was proposed by the agency in 1994. The current rule, which

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[16] NHTSA's NCAP 1999 budget was $2,830,000 and the requested amount for 2000 was $5,256,000. *See* National Highway Traffic Safety Administration: FY 2000 Budget in Brief, (visited 7/6/00) *<http://www.nhtsa.dot.gov/NHTSA/whatis/bb/2000/budget2000.htm>*.

[17] SSF testing is both nondestructive and less expensive than other testing procedures.

provides for posting data on NHTSA's Web site, simply cannot substitute for direct information to consumers on a vehicle label, because the majority of consumers are unaware that the NCAP makes information available over the web.[18]

While we commend the agency's efforts to make 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 most consumers research auto safety issues without consulting NHTSA and many are disinclined to request safety information from auto dealers.[19]

This is a terrible flaw in the rule because NHTSA's rule rests so heavily 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. Again, because SSF is such a readily available measure of rollover propensity, consisting of a simple triangulation of the vehicle's width and the height of its center of gravity, we believe that the agency should absolutely require the auto manufacturers to provide the SSF of every model car in the marketplace. NHTSA's rule makes it clear that this is, at the least, basic consumer safety information.

Furthermore, to make any consumer information program effective, NHTSA should ensure that consumers do not have to request this safety information from the dealer. 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.

NHTSA asserts in the text for its June proposed rule that labeling vehicles with information about one safety attribute could mislead consumers.[20] We strongly disagree. Consumers are capable of understanding that not all information may be included on a label, and we believe that the fact that rollover information is isolated for such treatment would do much, in itself, to call attention to the risks. The specific notation of rollover test results is clearly a warning to the consumer of an important hazard.

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[18] 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."

[19] *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. 76 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.

[20] *See* 65 Fed. Reg. at 35014.

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.

The agency also suggested, in its June 2000 proposed rule, that the information program should await development of an "overall measure of vehicle safety."[21] The notion that any advance in auto safety information and capacity should be put on hold until an overall measure is finished is unacceptable, particularly given the more than 15-year delay in the development of any rollover program to date. Moreover, there is no evidence that this future "overall measure" would trigger consumer responses precise enough to create the market incentives for companies to fix vehicles that are prone to roll over. Thus, delaying implementation of a clear information program for consumers until an overall measure is completed may defeat the only incentives for change that are written into the current rollover rule.

V. Dynamic Rollover Crashworthiness Improvements are Needed

As NHTSA has acknowledged, crashworthiness improvements would result in significant benefits to consumers, and rollover crash testing is sorely needed.[22] In order for market incentives to work to reduce rollover, NHTSA should, in addition to developing a dynamic rollover standard and upgrading the consumer information program based on the requirements of that standard also: 1) create a dynamic standard for roof crush; 2) update the standards on window glazing to prevent ejection during a crash; 3) improve door latch testing; and 4) track new safety developments through a dynamic testing program.

A. A Dynamic Standard for Rollover is Needed

Under the recently enacted Tread Act, the agency must develop a dynamic testing program for rollover propensity. For the reasons noted above, the agency should develop a standard as well. That standard should follow the lead of the Congressional mandate and be dynamic rather than static.

Dynamic tests are superior because they are designed to assess the overall performance of a vehicle, thus enabling engineers to evaluate aspects of vehicle performance that static metrics exclude from the analysis. For example, a dynamic test will produce information regarding the electronic

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[21] *Id.* (discussing the recommendations of the National Academy of Science to develop an overall measure of vehicle safety).

[22] A recent report published by NHTSA indicated that "[f]ull vehicle testing should be conducted for rollover . . . crash scenarios." *See* Donald Willke, et. al., Ejection Mitigation Using Advanced Glazing: Status Report II, ix (Aug. 1999).

systems that control yaw, the subtler aspects of suspension systems, and how quickly a vehicle responds to steering adjustments. Utilizing dynamic tests ensures that manufacturers will not sacrifice vehicle steering dynamics and suspension in order to meet the standard.

In its proposed rule in June, NHTSA asserted that the dynamic test results from Phase II of its dynamic track testing "did not provide greater capability to indicate the rollover resistance, either untripped or tripped, of light vehicles[,]" than the SSF values could predict.[23] This assertion is partially based on the fact that the agency could not determine if minor two-wheel lift on a vehicle would become major two-wheel lift at higher speeds due to driver safety issues. The agency's thus concluded that dynamic tests are not superior to static metrics.

However, the issue of driver safety can be easily circumvented by conducting dynamic testing with mechanical braking and steering devices, which allow testing at much higher speeds. Furthermore, these testing devices are programmable and the testing process would thereafter become both objective and repeatable.[24]

B. A Dynamic Roof Crush Resistence Standard is Needed

The impact of a rollover crash on a vehicle's roof can be devastating to the occupants and cause significant injuries, including severe head injury and death. While the current standard FMVSS 216 requires passenger vehicles to withstand a static crush test, it does not test for roof crush in a rollover crash, where the energy from the vehicle's motion is part of the impact.[25]

The static test called for in FMVSS 216 requires that the device applying the force move "without rotation, in a straight line."[26] This test clearly does not replicate the forces that act on a vehicle's roof in a real world rollover. For this reason, dynamic tests are essential to establish the extent of the damage resulting from rollover.

C. A Test and Requirement for the Use of Advanced Window Glazing is Needed

Evaluation of the effect of advanced window glazing should be included in the rollover crashworthiness testing. The studies conducted by NHTSA estimate that each year 7,300 people are killed and 7,800 people are seriously injured because of partial or complete ejection through window

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[23] *See* 65 FR at 35006.

[24] Discussion with Carl Nash, *supra* n. 6. Mr Nash stated that the additional cost of the testing would be more than outweighed by safety improvements and the objective and repeatable nature of testing using the devices.

[25] *See* Federal Motor Vehicle Safety Standards, 49 C.F.R. 571.216 (Oct. 1, 1999).

[26] *See* Standard No. 216; Roof Crush Resistance, 49 C.F.R. 571.216.

glazing.[27] 4,400 of these fatalities are the result of rollover accidents.[28] Requiring the use of advanced window glazing could save between 500 and 1,300 lives per year at a minimum cost per vehicle.[29]

D. Testing of Door Latch Integrity in a Rollover Crash is Needed

Door latch integrity should form part of an overall crashworthiness assessment of a vehicle. Each year there is an average of 2,513 fatal ejections through door openings. Door latch activation caused half of these fatal ejections.[30]

E. Dynamic Testing Incorporating Additional Innovations is Needed

In evaluating the overall crashworthiness of vehicles through dynamic testing, new advancements in safety technology such as side air bags and window curtains would be taken into account in performance assessments, thus rendering far more accurate and nuanced safety data for the public's consumption choices.[31] This approach would be particularly valuable because it would move as the market moves, incorporating safety innovations where no rule yet exists, as in the case of side air bags.

V. Conclusion: The Agency's Consumer Information Approach Will Not Protect the Public from Serious Injury or Death

The text for NHTSA's June 2000 proposed rule posited that use of the NCAP star rating system on NHTSA's web site will produce significant shifts in consumer demand and force auto manufacturers to produce safer vehicles. That analysis has come to fruition in the rule announced today, but NHTSA has overstated the probable impact. Although there may be some minimal effect from the program, a major change in the market due to the rule is, in our view, highly unlikely.

If it happens at all, any change in SUV rollover safety levels will be many years from now and countless lives will be lost due to the agency's failure to set a safety standard in the meantime. We

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[27] *See* Donald Willke, et. al., Ejection Mitigation Using Advanced Glazing: Status Report II, vii (Aug. 1999). The study further explains that advanced glazing systems could save between 500 and 1,300 lives per year. *See id.*

[28] *See id.*

[29] *See id.* at vii (estimating these statistics on a national safety belt use rate of 66 percent).

[30] *See* Door Latch Integrity (last modified 01/06/00) <*http://www.nhtsa.dot.gov/search97cgi/s97_cgi.exe*>.

[31] *See* K. Balavich, Ford Motor Company, Rollover Protection System, SAE Government/ Industry Meeting (June 2000) (discussing the use of side curtains, bag inflation, to protect occupants from contact with side windows in the event that a rollover occurs).

strongly urge the agency to promulgate dynamic standards for rollover propensity and roof crush; to include the agency's and manufacturers' rollover propensity ratings in consumer information provided in vehicle labels at the point of sale; and to create a more inclusive rollover crashworthiness testing program.

As NHTSA has decided to continue the retreat from meaningful rollover safety initiatives that was begun in 1994 and to issue only a consumer information rule in lieu of a dynamic standard, the agency must now act decisively to ensure that the addition of this rollover information to the NCAP will have any effect on number and severity of rollover accidents.

We recommend, at a minimum, the following three immediate steps. First, NHTSA must greatly amplify its efforts to inform the public about the availability and content of the rollover information that will now become available. Second, the agency should obtain the metric data itself for *all* vehicles or get them from the manufacturer and publicize them widely, thus allowing development of a static rollover rating for vehicles not selected by NHTSA for NCAP testing, or at a minimum, for consumer comparison with the vehicles included in the NCAP. Third, 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.