

ORAL ARGUMENT DATE TO BE SCHEDULED

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Docket No. 03-1304

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IN THE UNITED STATES COURT OF APPEALS  
FOR THE DISTRICT OF COLUMBIA CIRCUIT

PUBLIC CITIZEN, INC., ET AL.,  
Petitioners,

v.

THE NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION and  
NORMAN Y. MINETA,  
Secretary of Transportation,

Respondents.

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On Petition for Review of Order of the National Highway  
Traffic Safety Administration

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**BRIEF FOR PETITIONERS**

Scott L. Nelson  
David C. Vladeck  
Public Citizen Litigation Group  
1600 20th St., NW  
Washington, D.C. 20009  
(202) 588-1000

Counsel for Petitioners

January 20, 2004

**CERTIFICATE OF PARTIES, RULINGS AND RELATED  
CASES PURSUANT TO LOCAL RULE 28(a)(1)  
(INCLUDING RULE 26.1 DISCLOSURE)**

**A. Parties and Amici.**

This action involves a petition for judicial review of agency orders originally filed by Public Citizen, Inc., the Center for Auto Safety, the Trauma Foundation, Andrew McGuire, Jane Kelly, and Ralf Hotchkiss. The Court of Appeals for the Ninth Circuit concluded that the petition is timely only with respect to petitioners Public Citizen and the Center for Auto Safety, and transferred the petition to this Court, where venue is proper as to those parties. Public Citizen Inc. v. Mineta, 343 F.3d 1159 (2003). On December 24, 2003, this Court entered an order terminating the Trauma Foundation, Andrew McGuire, Jane Kelly, and Ralf Hotchkiss as petitioners.

Pursuant to Federal Rule of Appellate Procedure 26.1 and Circuit Rule 26.1, counsel for petitioners certifies that the remaining petitioners, Public Citizen, Inc., and the Center for Auto Safety, are non-profit corporations engaged in advocacy efforts. Petitioners have no parent corporations and no publicly held company owns 10% or more of their stock.

Respondents are Norman Y. Mineta, the Secretary of Transportation, and the National Highway Safety and Traffic Administration (“NHTSA”). Respondent

Mineta is responsible for motor vehicle safety standards issued by respondent NHTSA.

The Alliance of Automobile Manufacturers and the Automotive Occupant Restraints Council have intervened and have filed a brief in support of respondent.

The Insurance Institute for Highway Safety has filed a brief as amicus curiae. The Association of International Automobile Manufacturers moved for leave to file an amicus brief, but its motion was denied by the Court of Appeals for the Ninth Circuit.

#### **B. Rulings Under Review.**

Petitioners seek judicial review of NHTSA orders amending Federal Motor Vehicle Safety Standard 208. The regulations at issue were amended by agency orders published on May 12, 2000, 65 Fed. Reg. 30679, and December 18, 2001, 66 Fed. Reg. 65375. 49 U.S.C. § 30161(a) provides for review of these orders by filing a petition for review in the court of appeals.

#### **C. Related Cases.**

This petition for review was filed with the Court of Appeals for the Ninth Circuit on February 12, 2002, and identified as Case No. 02-70303. On September 15, 2003, the Ninth Circuit concluded that the petition was filed within the statutory time period for seeking review of the agency's order of December 18, 2001, but that

the petition should be transferred to this Court for resolution of the merits because the petition is timely only with respect to the two petitioners that had sought administrative reconsideration, Public Citizen and the Center for Auto Safety. Public Citizen Inc. v. Mineta, 343 F.3d 1159. Both of these petitioners reside in this Circuit.

Counsel is not aware of any other related cases.



Scott L. Nelson  
Counsel for Petitioners

January 20, 2004

## TABLE OF CONTENTS

CERTIFICATE OF PARTIES, RULINGS AND RELATED CASES PURSUANT TO LOCAL RULE 28(a)(1) (INCLUDING RULE 26.1 DISCLOSURE)	i
TABLE OF CONTENTS	iv
TABLE OF AUTHORITIES	vi
GLOSSARY	viii
JURISDICTIONAL STATEMENT	1
ISSUES PRESENTED FOR REVIEW	2
STATEMENT OF THE CASE	3
STATEMENT OF FACTS	4
I. CONGRESS' 1998 MANDATE TO IMPROVE OCCUPANT PROTECTION.	5
A. Initial Efforts to Erode Standard 208's 30 mph Crash Test.	5
B. NHTSA's Plan and Congress' Response.	10
II. NHTSA'S REVISED STANDARD 208.	13
A. Notice of Proposed Rulemaking.	13
B. Supplemental Notice of Proposed Rulemaking.	15
C. The Draft Rule.	17
D. The Interim and Final Rules.	19
SUMMARY OF ARGUMENT	23

STANDARD OF REVIEW ..... 26

ARGUMENT ..... 27

I. NHTSA’S DECISION TO REDUCE THE MAXIMUM TEST SPEED  
IN UNBELTED CRASH TESTS IS CONTRARY TO LAW BECAUSE  
IT DEGRADES OCCUPANT PROTECTION. .... 27

II. NHTSA’S DECISION TO REDUCE THE MAXIMUM TEST SPEED  
IN UNBELTED CRASH TESTS IS ARBITRARY AND CAPRICIOUS.  
..... 32

A. NHTSA’s Assertion That Reducing the Maximum Crash Test Speed  
Serves the “Best Overall Interest of Safety” Is Contrary to the Evidence.  
..... 34

B. NHTSA’s Reliance on Voluntary Action by Manufacturers to Maintain  
or Improve Air Bag Performance Is Improper. .... 41

C. NHTSA’s Decision to Reduce the 30 mph Crash Test Based on  
Unsubstantiated Uncertainties Is Arbitrary and Capricious. .... 43

D. NHTSA’s Decision Not to Restore the Maximum Test Speed to 30 mph  
After the Phase-in Period Is Arbitrary and Capricious. .... 47

CONCLUSION ..... 49

CERTIFICATE PURSUANT TO FED. R. APP. P. 32(A)(7)(C) ..... 51

CERTIFICATE OF SERVICE ..... 52

STATUTORY ADDENDUM ..... A-1

## TABLE OF AUTHORITIES

### CASES

<i>Chrysler Corp. v. Department of Transportation</i> , 472 F.2d 659 (6th Cir. 1972) .....	26, 46
* <i>Motor Vehicle Manufacturers Association v. State Farm Mutual Ins. Co.</i> , 463 U.S. 29 (1983) .....	<i>passim</i>
<i>Paccar, Inc. v. NHTSA</i> , 573 F.2d 632 (9th Cir. 1978) .....	42, 46
<i>Public Citizen Inc. v. Mineta</i> , 343 F.3d 1155 (9th Cir. 2003) .....	2
<i>Public Citizen v. Steed</i> , 733 F.2d 93 (D.C. Cir. 1984) .....	43, 44, 45, 47-48

### STATUTES

49 USC § 30101 .....	43
49 USC § 30111(b)(4) .....	1, 43
49 USC § 30127 .....	7
49 USC § 30161(a) .....	1
* Pub. L. 105-178, title VII, § 7103, June 9, 1998, 112 Stat. 465 .....	<i>passim</i>

### LEGISLATIVE MATERIALS

143 Cong. Rec. S10973-74 (daily ed. Oct. 22, 1997) .....	29
H. Conf. Rep. 550, 105th Cong., 2d Sess. 521, <i>reprinted in</i> 1998 U.S.C.C.A.N. 196 (1998). .....	29

\* Authorities upon which we chiefly rely are marked with asterisks.

**REGULATIONS**

49 CFR § 571.208 (1994) ..... 8  
49 CFR § 571.208 (2002) ..... 1

**REGULATORY NOTICES**

35 Fed. Reg. 16,927 (1970) ..... 5, 6  
36 Fed. Reg. 1600 (1971) ..... 5-6  
42 Fed. Reg. 34,289 (1977) ..... 9  
49 Fed. Reg. 28,962 (1984) ..... 6  
56 Fed. Reg. 26,036 (1991) ..... 9  
58 Fed. Reg. 46,551 (1993) ..... 7  
60 Fed. Reg. 56,554 (1995) ..... 9  
62 Fed. Reg. 807 (1997) ..... 10, 12



## GLOSSARY

- NHTSA:** The National Highway Traffic Safety Administration, an entity within the Department of Transportation that is responsible for the issuance of Federal Motor Vehicle Safety Standards.
- STANDARD 208:** Federal Motor Vehicle Safety Standard 208, 49 CFR § 571.208, which sets forth occupant protection standards requiring the use of air bags in passenger cars and light trucks.

## JURISDICTIONAL STATEMENT

Petitioners seek review of the National Highway Traffic Safety Administration's amendments to Federal Motor Vehicle Safety Standard No. 208. 49 CFR § 571.208. The Department of Transportation is responsible for issuing motor vehicle safety standards under 49 USC § 30111. This Court has jurisdiction under 49 USC § 30161(a). The Department of Transportation published an order in the Federal Register on December 18, 2001, adopting amendments to Standard 208 as a final rule and denying relevant petitions for reconsideration of the interim rule. See Joint Appendix ("JA") 147 (65 Fed. Reg. 30,680) and 100 (66 Fed. Reg. 65,376). Petitioners filed their petition for review in the United States Court of Appeals for the Ninth Circuit on February 15, 2002.

On September 15, 2003, following briefing on the merits and oral argument, the Ninth Circuit held that venue was not proper in that Circuit because the petitioners who resided there were not parties to the petitions for reconsideration that resulted in the December 18, 2001, order, and thus, as to those petitioners only, the petition for review was untimely. The court held, however, that the petition for review was timely as to two of the organizational petitioners, Public Citizen, Inc., and the Center for Auto Safety, which had been parties to petitions for reconsideration, and so it transferred the petition for review to this Court,

where venue is proper based on the location of the petitioners. See Public Citizen Inc. v. Mineta, 343 F.3d 1159.<sup>1</sup>

### **ISSUES PRESENTED FOR REVIEW**

Since the 1970s, the National Highway Safety and Traffic Administration (“NHTSA”) has evaluated the protection afforded by air bags by using a crash dummy to simulate the injuries that would be sustained by a median-sized adult male when a vehicle is crashed into a rigid barrier at 30 mph. In 1998, Congress directed the Secretary of Transportation to revise the safety standard that includes this crash test to “improve occupant protection for occupants of different sizes . . . while minimizing the risk to infants, children, and other occupants from injuries and deaths caused by air bags, by means that include advanced air bags.” Pub. L. 105-178, title VII, § 7103(a), 112 Stat. 465-66 (1998), Statutory Addendum A-1.

This case presents the following issues:

1. Did NHTSA violate the statutory mandate to “improve occupant protection” when it reduced the maximum test speed for unbelted barrier crash tests from 30 mph to 25 mph, thereby allowing manufacturers to degrade the

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<sup>1</sup> Pursuant to this Court’s order of December 24, 2003, petitioners are now refiling their briefs with those changes necessary to conform to this Court’s rules, but otherwise without substantive alteration except for the omission of argument on the jurisdictional and venue issues already decided by the Ninth Circuit.

protection that vehicles currently provide to unbelted adults and teenagers in crashes that are similar to a frontal crash into a barrier or oncoming vehicle?

2. Are NHTSA's stated reasons for allowing manufacturers to reduce the protection provided to adults in frontal crashes arbitrary and capricious because NHTSA's explanation runs counter to the evidence, because NHTSA assumed that manufacturers will voluntarily maintain or improve air bag performance despite the less stringent crash test, or because the agency relied on unsubstantiated "uncertainties" concerning future implementation of the standard?

### **STATEMENT OF THE CASE**

Petitioners seek review of amendments to Federal Motor Vehicle Safety Standard No. 208, promulgated through notice and comment rulemaking pursuant to a 1998 statute. See Statutory Addendum A-1, Pub. L. 105-178, title VII, § 7103, 112 Stat. 465, June 9, 1998 (set forth as a note to 49 USC § 30127). Respondent published a Notice of Proposed Rulemaking in 1998, JA 308, 63 Fed. Reg. 49,958, and a supplemental notice in 1999, JA 380, 64 Fed. Reg. 60,556, before issuing amendments identified as final and "interim" rules in May 2000. JA 148, 65 Fed. Reg. 30,680. In June 2000, auto manufacturers and others, including petitioners Public Citizen and the Center for Auto Safety, petitioned for reconsideration and the agency reopened the administrative record. JA 102-04, 66 Fed. Reg. at

65,377-79; JA 83, Docket Entries. In December 2001, NHTSA granted portions of some of the petitions for reconsideration and modified some of the May 2000 regulations. JA 101, 66 Fed. Reg. at 65,376.

### **STATEMENT OF FACTS**

By mid-1998, the Department of Transportation's statistics showed that air bags had saved about 3,000 lives since 1987. See Docket No. 1998-4405-2, Preliminary Economic Assessment, at II-2. NHTSA projected that, if air bags were installed in all vehicles, they would save over 3,200 lives every year. Id. II-2, 3. However, NHTSA had also identified 105 cases since 1990 in which the deployment of an air bag had caused a fatal injury. JA 311, 63 Fed. Reg. 49,961.

Congress responded in 1998 by directing NHTSA to amend its rules by March 2000 so that new vehicles would "improve" protection for occupants of different sizes and minimize the risk of injury to the groups most at risk from air bag deployment. During the course of NHTSA's rulemaking to fulfill this mandate, the agency found that the auto manufacturers' arguments against the longstanding crash test used to measure the protection of unbelted occupants in 30 mph collisions with a rigid barrier were contradicted by the agency's data. In particular, the agency found that (i) current vehicles, designed to meet a 30 mph crash test, provide significantly more protection for occupants than would be

provided if vehicles were designed to meet a lesser standard; and (ii) the manufacturers' claim that relaxing the 30 mph crash test was necessary to prevent injuries from air bag deployment was erroneous. In March 2000, NHTSA drafted a final decision that emphasized the importance of retaining the 30 mph maximum test speed to maintain safety. Two months later, however, the agency rewrote the draft to announce a different conclusion. Rather than improve or even maintain the performance of current air bags in the crash test that measures injuries to median-sized adult males, NHTSA has allowed manufacturers to lower the level of protection measured in crash tests by reducing the maximum crash test speed to 25 mph — a change that could result in hundreds of additional fatalities from automotive collisions.

**I. CONGRESS' 1998 MANDATE TO IMPROVE OCCUPANT PROTECTION.**

**A. Initial Efforts to Erode Standard 208's 30 mph Crash Test.**

The Department of Transportation first issued standards for air bag performance in 1970 when it amended Standard 208 to require manufacturers to install air bags or other “passive” protection devices that would protect occupants from death or serious injury in a 30 mph crash into a rigid barrier, a crash that is “equivalent to a head-on collision with an identical vehicle with both vehicles traveling 30 miles per hour.” 35 Fed. Reg. 16927 (1970); see also 36 Fed. Reg.

1600 (1971). Approximately half of all fatalities in frontal crashes occur in crashes in which the change in velocity is below 30 mph, and about half occur in crashes in which the change in velocity is above 30 mph. See JA 395-400, 64 Fed. Reg. at 60,571-76. The Department's 1970 notice adopting the 30 mph standard noted that "[i]t is anticipated that as crash protection technology advances, the test speeds at which protection must be offered will be raised by future amendments to 40 miles per hour." 35 Fed. Reg. 16,927.

For the next thirteen years, Standard 208 was besieged as the "automobile industry waged the regulatory equivalent of war against the airbag." Motor Vehicle Mfrs. Ass'n v. State Farm Mutual Ins. Co., 463 U.S. 29, 49 (1983). The industry's assault on Standard 208 eventually led to the State Farm decision, in which the Supreme Court found that NHTSA had acted arbitrarily in rescinding a passive restraint requirement based on the 30 mph crash test when manufacturers opted to install detachable automatic seat belt technologies that were less effective than air bags. Id. at 46. On remand, NHTSA did not mandate air bags but, instead, required manufacturers to install some type of passive restraint (air bags or automatic seat belts) that would meet specified performance requirements in a 30 mph crash test. 49 Fed. Reg. 28,962 (1984). NHTSA expressly rejected

General Motor's proposal to reduce the test speed from 30 to 25 mph. Id. at 28,995.

In 1991, Congress directed NHTSA to amend Standard 208 to require that all passenger cars and light trucks meet occupant protection requirements through air bags. 49 USC § 30127(b). NHTSA implemented this directive in 1993 with regulations that required that every passenger car manufactured after September 1, 1997, have an air bag and satisfy the occupant protection requirements of the 30 mph barrier crash test. 58 Fed. Reg. 46,551 (1993).

Standard 208 sets forth injury criteria measured on test dummies that are designed to simulate injuries to an adult male of median size ("50th percentile male"). See JA 310, 63 Fed. Reg. at 49,960. A vehicle's ability to satisfy Standard 208 does not depend on the performance of the air bag alone, but on whether the vehicle as a whole, when crashed into a barrier, adequately limits the injuries to the crash dummy. JA 314, 63 Fed. Reg. at 49,964. Thus, the manner in which the vehicle absorbs the impact of a crash, the cushioning provided by the vehicle interior, and the presence of other protective features are factors in whether a vehicle meets the Standard. For example, a front end that absorbs the energy of the crash enhances a vehicle's ability to meet Standard 208, but if a vehicle is "stiff," the air bag must play a larger role in protecting occupants from



the injuries measured by Standard 208. The 1993 Standard requires that manufacturers certify that, when tested with both belted and unbelted test dummies, the vehicle satisfies injury criteria during rigid barrier crashes at any speed up to and including 30 mph and at any angle up to  $\pm 30$  degrees from the perpendicular. 49 CFR § 571.208 S5 (1994).

An air bag must inflate quickly enough to prevent a passenger from striking the interior of the vehicle, an interval that is faster than the blink of an eye. The force of the air bag inflating in such a short time can injure occupants who are in close proximity to the air bag. The risk of such injuries can be reduced by moderating the inflation power and/or by making host of other design changes that reduce air bag injuries, such as modifying fold patterns, adding venting or tethers, or changing the crash speed at which air bags deploy. See JA 314, 63 Fed. Reg. at 49,964; JA 546-52, Air Bag Technology, pp. 3-9. Because Standard 208 is a performance standard, these design characteristics are determined by manufacturers and some designs ignore or exacerbate the risk of air bag deployment. For example, an air bag that deploys “horizontally,” directly into the passenger, is more likely to deliver a punch that can seriously injure a passenger than an air bag that initially deploys at a vertical angle, up from the dashboard. An air bag that is installed on the surface of the steering wheel is more likely to injure

the driver when it deploys than one that is recessed into the steering column. Air bags designed to deploy in a “single stage,” delivering all of the force of the inflation at once, present higher risks to occupants than “multi-stage” air bags in which the force of deployment is graduated. Multi-stage bags can be designed so that the timing and/or force of deployment depends on the severity of the crash, the seat’s position, the size of the passenger, or whether the passenger is wearing a safety belt. See JA 211-12, 65 Fed. Reg. at 30743-44 (describing sensor and other technologies). The risks presented by poor air bag designs are particularly significant for children and occupants of small stature who are leaning forward at the instant of the crash (referred to as “out-of-position”).<sup>2</sup>

The automotive industry seized on reports of fatalities and injuries from air bags to argue that the 30 mph crash test should be replaced with a less stringent test. In 1995, Ford urged NHTSA to lower the crash test speed from 30 to 25 mph for unbelted dummies, and to raise the speed for belted dummies to 35 mph, arguing that this modification would allow manufacturers to reduce injuries. 60 Fed. Reg. 56,554, 56,556 (1995). NHTSA requested comments on the Ford proposal and, more generally, steps that could be taken to reduce air bag injuries

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<sup>2</sup> The industry has long been aware of these design issues and NHTSA identified a variety of them in its notices concerning air bags. See 42 Fed. Reg. 34,289, 34,293-94 (1977); 56 Fed. Reg. 26,036 (1991).

by modifying folding patterns, deployment distances, crash sensors and other aspects of air bag designs. Id. The following year, the American Automobile Manufacturers Association (AAMA) petitioned NHTSA to replace the 30 mph crash test with a “sled test” in which a vehicle is mounted on a sled and stopped quickly, but not actually crashed. 62 Fed. Reg. 807, 821 (1997). NHTSA estimates that a sled test at 30 mph is roughly equivalent to a barrier crash test at 22 to 25 mph. JA 492, 64 Fed. Reg. at 60,598. Because the sled test does not measure a vehicle’s performance in an actual crash, it is not a reliable method of measuring the protection actually afforded in a crash. See JA 394, 64 Fed. Reg. at 60,570; JA 321, 334, 63 Fed. Reg. at 49,971, 49,984.

**B. NHTSA’s Plan and Congress’ Response.**

In November 1996, NHTSA announced its plan to address injuries caused by air bags. See JA 151, 65 Fed. Reg. at 30,683. To provide a long-term solution, NHTSA planned to amend Standard 208 to phase in advanced air bag technologies and establish new performance requirements to minimize risks. See JA 258b-c, 62 Fed. Reg. at 12,961-62. The agency concluded that it was realistic to expect manufacturers to implement more advanced air bag designs throughout their fleets by September 1, 2001. JA 258j, 62 Fed. Reg. at 12,969. To address air bag risks in the interim, NHTSA announced a series of measures that included warnings,

public education, enforcement actions and temporary rule amendments. JA 258b-c, 62 Fed. Reg. at 12,961-62. The temporary amendments included adding a new section in Standard 208 to permit manufacturers to use a 30 mph sled test as an alternative to the 30 mph crash test for vehicles manufactured between the date of the temporary amendment and September 1, 2001. JA 258o, 62 Fed. Reg. at 12,974.

In adopting the temporary alternative, NHTSA rejected the manufacturers' argument that the sled test should be made permanent. JA 258h-i, 62 Fed. Reg. at 12967-68. The sled test was "a temporary measure" designed to facilitate depowering "to respond rapidly to the risk posed by air bag activation in low speed crashes," while equal or superior alternatives that did not have the "adverse safety tradeoffs" of depowering were being implemented. JA 258g-h, 62 Fed. Reg. at 12,966-67. NHTSA acknowledged that depowering could result in less protection for occupants in higher speed crashes, especially passengers of above average size and weight. JA 258e, 62 Fed. Reg. at 12,964. The agency emphasized that this temporary alternative was not based on the conclusion that the potential increase of injuries high-speed collisions would be balanced by decreased injuries from air bag deployment, but was motivated by its belief that immediate steps were needed to "maintain the public acceptability of air bags" in

the long term. JA 258k, 62 Fed. Reg. at 12,970. The sled test was acceptable on a temporary basis because it “reduces the time and cost of doing certification testing” and would allow manufacturers to make changes in air bags immediately. JA 258f, 62 Fed. Reg. at 12,965. NHTSA refused to allow manufacturers to design new air bags with the expectation that the sled test would apply indefinitely because “there is no need to permanently reduce Standard No. 208’s performance requirements to enable manufacturers to fully address the adverse effects of air bags.” JA 258f, 62 Fed. Reg. at 12,965.

Although NHTSA had announced that it would issue its proposal for permanent changes to Standard 208 in early 1997, see 62 Fed. Reg. 807, 814 (1997), it did not do so. In June 1998, Congress intervened by imposing both a standard and a schedule for this rulemaking. Congress directed NHTSA to conduct a rulemaking “to improve occupant protection for occupants of different sizes, belted and unbelted . . . while minimizing the risk to infants, children, and other occupants from injuries and deaths caused by air bags, by means that include advanced air bags.” Pub. L. 105-178, title VII, § 7103(a), 112 Stat. 465-66 (1998). The statute required NHTSA to issue a proposed rule by September 1, 1998, and a final rule by September 1, 1999, but permitted the Secretary to extend the date for the final rule until March 1, 2000. Id. § (a)(2). The final rule must implement the

improved Standard 208 “in phases as rapidly as practicable,” with the first phase beginning between September 1, 2002 and September 1, 2003. *Id.* § (a)(3). If the phase-in does not begin until September 1, 2003, the final rule must still be “fully effective” by September 1, 2006, so that all vehicles manufactured after that date meet the improved standard. *Id.* § (a)(3). Congress also provided that the temporary sled test alternative “shall remain in effect unless and until changed by” the rulemaking to improve air bags. *Id.* § (a)(4).

## **II. NHTSA’S REVISED STANDARD 208.**

### **A. Notice of Proposed Rulemaking.**

NHTSA’s proposed rules reaffirmed its commitment to Standard 208’s “longstanding” 30 mph barrier crash test, observing that these “test requirements have been an integral part of the standard’s automatic crash protection requirements and have resulted in enormous savings of lives.” JA 320, 63 Fed. Reg. at 49,970. The agency concluded that “the current requirements of Standard No. 208 are under-inclusive and need to be upgraded.” JA 367, 63 Fed. Reg. at 50,017. To accomplish this goal, NHTSA proposed to require that manufactures “show that the air bags in their vehicles provide protection to small stature occupants as well as to average size males,” by passing the 30 mph barrier crash test with unbelted and belted dummies modeled on 50th percentile males, and

passing the same 30 mph crash tests with dummies modeled on 5th percentile adult females. JA 318, 320, 63 Fed. Reg. at 49,968, 49,970. The proposed rule also introduced an additional crash test using 5th percentile adult female dummies in a 25 mph “offset deformable barrier crash” in which one side of the vehicle’s front-end is crashed into a barrier that absorbs some of the crash energy. JA 322, 63 Fed. Reg. at 49,972; JA 206-07, 65 Fed. Reg. at 30,738-39 (defining and illustrating terms). In addition to these crash tests, manufacturers would be required to adopt one or more of a number of design features to minimize the risk caused by air bags to infants, out-of-position children, or other out-of-position occupants in low speed crashes. These risk minimization requirements could be satisfied by, for example, installing sensors that prevent air bag deployment if a seat is occupied by a child or by an infant safety seat. JA 319-20, 323-36, 63 Fed. Reg. at 49,969-70, 49,973-76. New injury criteria and performance limits were also proposed. JA 326, 63 Fed. Reg. at 49,976. The temporary sled test would be eliminated as the new tests were phased in.

NHTSA, once again, rejected the manufacturers’ plea that the 30 mph crash test be replaced with a sled test. JA 368, 63 Fed. Reg. at 50,018. The agency found that the industry’s argument that retention of the sled test was necessary to obtain the “benefits of depowered bags,” was unfounded because other

technologies provide the “benefits” of depowering without undermining the protection of occupants in high-speed crashes. JA 369, 63 Fed. Reg. at 50,019. In addition, the limited data available indicated that the 30 mph test was not a barrier to depowering because “many, perhaps most, vehicles with depowered air bags continue to meet Standard No. 208’s unbelted barrier test requirements by wide margins.” JA 369-70, 63 Fed. Reg. at 50,019-20.

**B. Supplemental Notice of Proposed Rulemaking.**

In October 1999, NHTSA disclosed that the manufacturers had met with the agency in August to lobby for a new proposal. See Docket No. 1998-4405-158. In place of their unsuccessful proposal for a permanent sled test, the manufacturers urged that NHTSA reduce the test speed for the unbelted rigid barrier crash tests for 50th percentile adult male dummies and 5th percentile female dummies from 30 mph to 25 mph. JA 384, 393-93, 64 Fed. Reg. at 60,560, 60,568-69. A few months later NHTSA issued a “Supplemental” Notice of Proposed Rulemaking requesting comments on several alternative combinations of crash test requirements, including an alternative in which the speed for the unbelted rigid barrier crash tests would be established at a speed “within the range of” 25 to 30 mph. JA 401, 64 Fed. Reg. at 60,577. The notice specifically requested comment on the possibility that NHTSA would “reduce temporarily the severity” of the 30



mph rigid barrier test by initially adopting a maximum speed of 25 mph, and increasing the test speed to 30 mph at a later date. JA 405-06, 64 Fed. Reg. at 60,581-82.

The supplemental notice also rebutted the comments opposing the 30 mph unbelted barrier test. First, NHTSA disputed the contention that this test is “not representative of typical crashes,” with statistics showing that about half of fatalities in frontal crashes occur in crashes that are more severe than a 30 mph rigid barrier crash. JA 395-99, 64 Fed. Reg. at 60,571-75. “Given that Standard No. 208’s unbelted crash test requirements are intended to save lives, we disagree that 48 km/h (30 mph) rigid barrier crashes are unrepresentative of the kinds of crashes in which we are seeking to ensure protection.” JA 399, 64 Fed. Reg. at 60,575. NHTSA’s assessment of the effect of adopting a 25 mph rigid barrier test (coupled with a 35 mph belted test) indicated “that 214 to 397 lives saved by pre-[model year] 1998 air bags would not be saved” under the less-stringent 25 mph test. JA 421, 64 Fed. Reg. at 60,597.

Second, in response to the argument that the 30 mph test would require the manufacturers to return to using “overly aggressive” air bags, the Supplemental Notice observed that “the proposed test requirements are achievable by a number of vehicles even though they were not designed to comply with those

requirements.” JA 404, 64 Fed. Reg. at 60,580. In particular, NHTSA had tested 13 vehicles placed on the market after Standard 208 was modified to facilitate depowering and found that 12 passed all the proposed injury criteria for a 50th percentile male, even at an unbelted rigid barrier test speed of 30 mph. JA 400, 64 Fed. Reg. at 60,576. These vehicles represented a range of sizes and types and included sport utility vehicles. *Id.* Many passed the crash test “by wide margins,” even though they were not designed to meet the new injury criteria proposed by NHTSA. *Id.* NHTSA also found that three of four vehicles that it tested passed its proposed unbelted crash test using 5th percentile female dummies, even though these vehicles were not designed to meet these requirements. JA 404, 64 Fed. Reg. at 60,580. NHTSA challenged opponents of the 30 mph standard to explain, with test data and analysis, why vehicles could not be designed to comply with the 30 mph crash test injury criteria for 50th percentile males within the regulatory phase-in period, “[g]iven that available test data indicate that some vehicles already meet or exceed the injury criteria.” JA 406, 64 Fed. Reg. at 60,582.

### **C. The Draft Rule.**

On March 1, 2000, NHTSA delivered a draft of its final rule to the Office of Management and Budget pursuant to the regulatory review provisions of Executive Order 12,866, § 6(a)(3)(E). *See* JA 821-911 (“Draft Rule”). The Draft

Rule rejected the manufacturers' argument that 25 mph should replace 30 mph as the maximum test speed for the barrier crash test for 50th percentile males.

Instead, it endorsed a two stage rule in which 25 mph would be the maximum test speed for the first three years following the initial effective date, and the test speed would increase to 30 mph during the second stage, which would last until 2010.

NHTSA's reasons for rejecting 25 mph as a long-term standard echoed its statements in the 1998 and 1999 notices. First, the Draft Rule concluded that a 25 mph test speed would not improve occupant protection, but would degrade Standard 208 and cost lives. Because "50 percent of vehicle occupant fatalities occur in crashes over" 30 mph, "many occupants, particularly larger occupants, would not be adequately protected in higher speed crashes" if air bags were designed to meet 25 mph crash test. JA 845. NHTSA estimated that 248 to 413 lives could be lost annually if the air bags were designed to a 25 mph unbelted barrier crash test standard. Id. The data in the rulemaking record "indicate that the vast majority of vehicles" with air bags redesigned after the test sled alternative was introduced still provide protection that satisfies the 30 mph barrier test. JA 872. To ensure that future air bags perform as current ones, Standard 208 should require compliance with the 30 mph barrier test because "[a] lower standard would allow a degradation of performance." Id.

Second, the data also show that vehicles can be designed to meet the 30 mph rigid barrier test for both 50th percentile adult male dummies and 5th percentile adult female dummies while also meeting the rule's requirements for injury minimization. JA 892. "In fact, all of the requirements of today's final rule can be met using technologies that are already on the road or are soon to be on the road; no major technological breakthroughs are needed." JA 905.

**D. The Interim and Final Rules.**

On May 5, 2000, two months after submitting the Draft Rule to OMB, NHTSA announced that it had reversed field and decided to allow manufacturers to degrade the occupant protection measured by the unbelted barrier crash test. For the phase-in period covered by the statutory mandate to improve occupant protection (September 1, 2003-September 1, 2006), NHTSA's final rule reduces the maximum speed in the rigid barrier crash test for unbelted 50th percentile adult male and 5th percentile female dummies to 25 mph. JA 153, 65 Fed. Reg. at 30,685. During this period, the protection of belted occupants is measured by belted crash tests for these same two dummies at 30 mph. *Id.* The rule also provides for a second phase-in period that begins after the period covered by the statute. During this period the speed for belted tests is increased to 35 mph. JA 187, 65 Fed. Reg. at 30,719. However, NHTSA declined to increase the 25 mph

unbelted test speed during the second phase-in period and, instead, labeled this part of the rule an “interim rule” that might be changed after a “multi-year” effort to collect data and another notice and comment rulemaking. JA 148, 153, 65 Fed. Reg. at 30,680, 30,685. NHTSA abandoned many of the additional tests and criteria that it had proposed in 1998, but the final rule includes a deformable barrier test for the 5th percentile female dummies and design requirements to minimize risks to infants, children and small occupants that are similar to the 1998 proposals. JA 158-59, 164, 65 Fed. Reg. at 30,690-91, 30,696.

NHTSA did not rely on new data to justify its decision to lower the maximum speed for unbelted tests from 30 to 25 mph. Statistics on injuries and fatalities included in NHTSA’s final assessment of the rule show that the population affected by changes in the 30 mph crash tests is so large that achieving the greatest safety benefits requires “the strictest test regime for the high speed tests.” Docket No. 00-703-2, Final Economic Assessment at V-19, 20. 78% of crash fatalities and injuries involve persons for whom the 50th percentile adult male dummy (rather than the 5th percentile female dummy) is assumed to be best measure of occupant protection. *Id.* at VI-9. The number of projected fatalities for which the 30 mph barrier crash tests with a 50th percentile male provides the best measure of protection is more than sixty times the number of projected

fatalities associated with injuries to infants, children and out-of-position adults. Id. at VI-12 (target population for fatalities for 50th percentile male crash test is 12,116 compared to 187 for all risk minimization tests). Moreover, if the test speed is lowered to 25 mph, the percentage of fatal crashes that occur at speeds higher than the maximum test speed jumps from 50% to 70%. JA at 880-81. The unbelted crash test is critical to providing protection in these accidents because nearly half of all occupants in fatal crashes are unbelted adults or teenagers. JA 208, 65 Fed. Reg. at 30,740. NHTSA also reaffirmed its earlier conclusions that most current vehicles satisfy the 30 mph test standard and that the air bags designed to just meet the less stringent, 25 mph test would significantly reduce the protection provided to unbelted teenage and adult occupants in high speed crashes. JA 155, 168, 203, 65 Fed. Reg. at 30,687, 30,700, 30,735.

Nonetheless, NHTSA observed that there may be “trade-offs” involved in satisfying the test requirements for 50th percentile adult males while simultaneously satisfying the new tests for 5th percentile adult female dummies, and the risk minimization requirements for infants, children and other occupants. JA 155-56, 65 Fed. Reg. at 30,687-88. Because NHTSA was uncertain how manufacturers would address these trade-offs, it concluded that it was preferable to permit manufacturers to reduce the protection for median-sized occupants and

allow them to “focus their resources and compliance efforts” on meeting the risk minimization requirements. JA 155, 65 Fed. Reg. at 30,687. NHTSA said it chose this approach because it would minimize the “uncertainty for the occupants who have been the most at risk.” Id.

NHTSA said that it was “unlikely” that manufacturers would take advantage of the 25 mph test to “significantly” depower air bags to minimally comply with this standard -- but the agency acknowledged that the rule permitted manufacturers to do so and that hundreds of additional lives would be lost in fatal crashes if this occurred. JA 157, 65 Fed. Reg. at 30,689. To justify the reduced test speed, NHTSA assumed that manufacturers would voluntarily improve the overall performance of current air bags and that they would even improve crash performance in situations that are not addressed by Standard 208. JA 156-67, 65 Fed. Reg. at 30,688-89. Finally, the agency stated that its estimates showed that, although the 25 mph crash test will provide less protection than the 30 mph crash test, air bags designed for the 25 mph crash tests would provide a higher level of safety than bags designed to minimally comply with a 30 mph sled test. JA 157, 65 Fed. Reg. at 30,689.

During the next eighteen months, NHTSA considered petitions for reconsideration. In a December 2001 order, captioned “Final rule; response to

petitions for reconsideration,” the agency granted portions of some of the petitions for reconsideration and revised the regulations, but rejected arguments that it should change the maximum unbelted crash test barrier test speed back to 30 mph. JA 101, 66 Fed. Reg. 65,376. Of particular relevance here, NHTSA rejected the suggestion that it carve out the vehicles that it had identified as presenting uncertainties regarding compliance (e.g., SUVs and light trucks) for special treatment and restore the 30 mph test for other vehicles. JA 104-05, 66 Fed. Reg. at 65,379-80. NHTSA responded that the challenges posed by these vehicles were just one of several considerations identified in its decision. JA 105, 65 Fed. Reg. at 65,380.

## **SUMMARY OF ARGUMENT**

### **I.**

NHTSA’s decision to reduce the maximum test speed for the rigid barrier crash test to 25 mph is contrary to the Act’s statutory mandate to “improve” occupant protection. As NHTSA acknowledges, the new standard permits manufacturers to degrade the performance of current air bags in a manner that could result in hundreds of fatalities and an untold number of injuries each year. Congress recognized that it was possible to both improve occupant protection under Standard 208 and minimize risk to children and other groups by correcting



design flaws and using advanced air bags. The statutory mandate does not permit the agency to sacrifice the protection afforded by Standard 208 to make it easier for manufacturers to meet the statute's risk minimization requirements. NHTSA's observation that the standard it adopted requires better performance than that which would be required if vehicles were minimally designed to meet a 30 mph sled test is irrelevant because NHTSA itself refused to lower Standard 208 to that level when it rejected the manufacturers' requests that the sled test be made permanent.

## II.

NHTSA's decision is also arbitrary and capricious under Motor Vehicle Mfrs. Assn. v. State Farm Mutual Ins. Co., 463 U.S. 29 (1983). First, NHTSA's own findings refute its contention that allowing manufacturers to degrade the protection that air bags provide in 30 mph crashes into a rigid barrier serves the best overall interests of safety. The 30 mph barrier crash test for 50th percentile males is the test that best measures the protection a vehicle affords for a significant portion of accidents that result in fatal and serious injuries. Consequently, allowing vehicle manufacturers to degrade the current performance of air bags in these accidents could significantly increase fatalities in high-speed crashes. Overall safety is not served by *increasing* the risk of fatalities in high-

speed crashes unless failing to lower the test speed to 25 mph could result in injuries of equal or greater severity and numbers. NHTSA found no evidence of a risk that would offset the increased risk from degrading the unbelted barrier crash test, and its findings confirm that technologies that are already available allow manufacturers to minimize risks without sacrificing the protection that vehicles currently provide in high-speed crashes.

Second, the decision is tainted by consideration of impermissible factors. NHTSA assumed that manufacturers will voluntarily maintain or improve occupant protection and this assumption is critical to its decision. The statute, however, directs NHTSA to improve occupant protection by rulemaking, not by hoping that the industry will improve protection on its own volition. This statute is not satisfied by relying on the regulated parties to maintain safety particularly where, as NHTSA acknowledges, economic incentives favor reducing occupant protection.

Third, NHTSA has acted unreasonably by reducing the maximum test speed based on “uncertainties” about how air bag improvements will be implemented even though it has no evidence that these uncertainties warrant such an action. Uncertainty about how regulatory requirements will be implemented is inherent in prospective regulation and performance standards. An agency may not invoke

uncertainty as a basis for rescinding standards without concrete evidence to show that the uncertainties are substantial enough to justify such action. See State Farm, 463 U.S. at 51-52. NHTSA's own findings show that the "uncertainties" that it has identified are not significant because the technology to improve air bags so that they satisfy the rule's new requirements, without reducing current protection, is already available.

Finally, because the final rule does not restore the 30 mph maximum text speed, even in the second-phase of the requirements covered by this rule, the rule is equivalent to permanent degradation of Standard 208's 30 mph unbelted barrier crash test. There is no justification for this such an action because manufacturers are required to have made the design changes necessary to minimize risk and pass the additional crash tests for unbelted crashes before the second-phase even begins.

### **STANDARD OF REVIEW**

Motor Vehicle Safety Standards are subject to review under the standards set forth in the Administrative Procedure Act, including review for compliance with statutory mandates and arbitrary and capricious review. State Farm, 463 U.S. at 41; Chrysler Corp. v. Department of Transportation, 472 F.2d 659, 669-70 (6th Cir. 1972).

## ARGUMENT

### **I. NHTSA'S DECISION TO REDUCE THE MAXIMUM TEST SPEED IN UNBELTED CRASH TESTS IS CONTRARY TO LAW BECAUSE IT DEGRADES OCCUPANT PROTECTION.**

The first requirement of the statute directing NHTSA to conduct a rulemaking "To Improve Air Bags," is that the rule "improve occupant protection for occupants of different sizes, belted and unbelted." Statutory Addendum, A-1. The rule NHTSA adopted does not meet this test. To the contrary, NHTSA made a conscious decision to permit manufacturers to *reduce* the protection afforded to a large number of accidents in which the long-standing 30 mph barrier crash test provides the measure of occupant protection. The statute's mandate that the rule improve occupant protection and minimize the risk of injuries is not satisfied by a rule that, in the interest of making it easier for manufacturers to meet the risk-minimization mandate, sacrifices the lives and well-being of occupants who would be protected if manufacturers were not permitted to degrade air bag performance.

NHTSA's departure from the statutory mandate to improve occupant protection is evident from NHTSA's acknowledgment that, between now and the end of model year 2006 (and potentially beyond), manufacturers may introduce air bags that provide less protection than those in use before NHTSA announced the amendments to Standard 208. Throughout the rulemaking proceeding, NHTSA

found that “the vast majority of the current vehicles” can meet the new injury criteria for 50th percentile unbelted male dummies in a barrier test at 30 mph. JA 155, 65 Fed. Reg. at 30,687. These tests involved model year 1998 and 1999 vehicles, and NHTSA found that these test results “were not rebutted by any significant test data provided by the motor vehicle manufacturers or others.” Id. Thus, as the draft rule that NHTSA submitted to OMB succinctly observed, a standard lower than the 30 mph barrier test allows “a degradation of performance.” JA at 872.

NHTSA’s final decision stated that it considered it “unlikely” that this degradation in performance would be “significant,” but acknowledged that, by not adopting the 30 mph maximum test speed, the agency was allowing manufacturers to reduce the protection of current air bags by depowering or making other changes so that new air bags were only minimally able to satisfy the 25 mph test. JA 153, 65 Fed. Reg. at 30,685; JA 102, 66 Fed. Reg. at 65,377. NHTSA’s studies quantified the potential impact of eroding Standard 208 in this manner. The difference between a 25 mph and a 30 mph crash is not measured by the 20 percent increase in speed, but by the increase in crash energy, which is 44 percent. JA 155, 65 Fed. Reg. at 30,687 n. 15. The 44 percent difference in crash energy results in a significantly higher risk of serious or fatal injury in crashes where the

deceleration is 30 mph. Id. Moreover, the 30 mph crash speed is representative of a much higher percentage of real-world crashes that result in serious or fatal injuries than a 25 mph test speed. Id. NHTSA estimated that, if manufacturers designed air bags minimally to meet the new 25 mph crash test, the degradation in air bag performance compared to bags in use in 1998 and 1999 would cost 248 to 413 lives each year. Id.; see also JA 168, 203, 65 Fed. Reg. at 30,700, 30,735.

The statute's command that NHTSA *improve* occupant protection precludes NHTSA from opting for a rule that compromises occupant protection in this manner. Indeed, NHTSA's approach is inconsistent with Congress' decision to reject alternative formulations of the legislation on advanced air bags that would have ranked the priorities for the rulemaking, requiring NHTSA to give minimizing "the risk of harm to children from air bags" a higher priority than the protection of unbelted occupants. See 143 Cong. Rec. S10973-74 (daily ed. Oct. 22, 1997). The language Congress finally adopted contains no authorization to subordinate occupant protection to risk minimization. See H. Conf. Rep. 550, 105th Cong., 2d Sess. 521, reprinted in 1998 U.S.C.C.A.N. 196 (1998).

NHTSA's Office of Research and Development also dismissed this approach when it analyzed the manufacturers' comments. In response to the manufacturers' argument for a 25 mph test, the Office observed that it would not

serve the best interest of overall occupant protection to design air bags based on the smallest 5th percentile of the population because of the increased risk to the remainder of the population. JA 814, Analysis Of Issues Raised By Public Comments (“Comments Analysis”) at 4.3. Nonetheless, this distorted approach of using the characteristics of a narrower group to drive air bag design at the expense of the protection afforded other, larger groups is the basis for NHTSA’s decision to reduce the maximum test speed to 25 mph.

NHTSA appears to contend that the 25 mph crash test “improves” occupant protection because this test is superior to the sled test. JA 157, 65 Fed. Reg. at 30,689. NHTSA’s own statements, however, show that an air bag minimally designed to satisfy the sled test has never been the standard of performance. In adopting the sled test as an temporary solution in 1997, NHTSA emphasized that it adopted this “interim” alternative to allow manufacturers to test depowered air bags quickly and that this alternative would soon expire so that it would not create a substitute for the 30 mph crash test. JA 258i, 62 Fed. Reg. at 12,968. In both the 1997 rulemaking and NHTSA’s subsequent rejection of petitions requesting that the sled test be made permanent, NHTSA found that it could not justify displacing the 30 mph barrier test with the sled test precisely because doing so would degrade the protection afforded by Standard 208. *Id.* NHTSA’s claim that

minimal compliance with the sled test should now be considered the standard it created in 1997 cannot be reconciled with its own description of this temporary regulation.

Moreover, in the rulemaking on advanced air bags, NHTSA repeatedly observed that, from both a legal and practical perspective, the temporary alternative did not lower the standard to the level that NHTSA has used to measure improvement, namely “an air bag designed to just meet the performance requirements associated with a 48 km/h (30 mph) generic sled test.” JA 157, 65 Fed. Reg. at 30,689. When several manufacturers argued that the performance of 1998 and 1999 air bags should be taken as evidence of how much protection would be afforded if the sled test were made permanent in this rulemaking, NHTSA rejected this argument because the temporary sled test did not permit manufacturers to re-design air bags with the expectation that the sled test would apply long term. Instead, the sled test alternative still required manufacturers to market vehicles and air bags “designed to the unbelted [30 mph] barrier test,” with “quick, partial redesigns” that left the air bags’ performance “highly reflective of the unbelted test.” JA 393, 64 Fed. Reg. at 60,570. Thus, the vehicles marketed under the temporary alternative do not have the design changes that would result if



manufacturers were permitted to design equipment to minimally satisfy the sled test. *Id.*; JA 370, 63 Fed. Reg. at 50,020; JA at 885.

The rule that NHTSA initially proposed in 1998 was faithful to the statutory requirements. That proposal included the risk minimization requirements of the final rule and expanded the crash tests to include tests involving 5th percentile female adult dummies. JA 317-19, 63 Fed. Reg. at 49,967-69. The proposal also improved the protection afforded by Standard 208's longstanding 30 mph unbelted barrier crash test by adding additional injury criteria. JA 322, 326, 63 Fed. Reg. at 49,972, 49,976. NHTSA's decision to abandon this approach in favor of allowing manufacturers to degrade air bag performance, and potentially allow hundreds of avoidable fatalities each year, cannot be reconciled with the statute's mandate that NHTSA's rule must both improve occupant protection and minimize risks.

## **II. NHTSA'S DECISION TO REDUCE THE MAXIMUM TEST SPEED IN UNBELTED CRASH TESTS IS ARBITRARY AND CAPRICIOUS.**

In addition to violating the statutory mandate, NHTSA's decision to reduce the maximum speed for unbelted barrier tests to 25 mph is arbitrary and capricious. The seminal case on evaluating agency decisions under the arbitrary and capricious standard, *State Farm*, also involves a NHTSA decision to reduce the requirements of Standard 208 in response to the manufacturers' fierce opposition to air bags. NHTSA's retreat from the 30 mph test here parallels the

rule rescission in State Farm in several respects and cannot withstand scrutiny under the standard established in that decision.

In evaluating NHTSA's decision under the arbitrary and capricious standard, this Court must look to the agency's stated explanation. State Farm, 463 U.S. at 50. The history of this rulemaking shows that NHTSA's final decision is inconsistent with the factual findings that preceded it. Each time NHTSA analyzed the implications of permanently degrading the 30 barrier mph test speed, it concluded that such an action would significantly jeopardize safety in a wide range of crash situations. See, e.g., JA 320, 63 Fed. Reg. at 49,970; JA 871. Each time NHTSA considered manufacturers' arguments against the 30 mph test speed, it rejected them as contrary to the evidence. See above at 15. When NHTSA changed course and adopted its final rule, it did not identify any new data that justified reversing these findings or any statutory directives that it had overlooked. Instead, NHTSA stated that it had concluded that maintaining the 30 mph test speed "would not be in the best overall interest of safety." JA 155, 65 Fed. Reg. at 30,687. As the basis for this conclusion, the agency stated that the 25 mph unbelted crash test required more safety than the sled test. JA 157, 65 Fed. Reg. at 30,689. NHTSA also listed five other factors in which it relied heavily on

“uncertainty about simultaneously improving protection and minimizing risk.” JA 155-57, 65 Fed. Reg. at 30,687-89.

NHTSA’s explanation shows that its decision to allow manufacturers to degrade air bag performance through 2006 should be set aside under State Farm for three independent reasons: (A) NHTSA’s statement that reducing the 30 mph test speed would serve “the best overall interests of safety” is contrary to the evidence; (B) its reliance on the assumption that manufacturers would voluntarily surpass the 25 mph crash test standard shows that the agency relied “on factors which Congress has not intended it to consider,” State Farm, 463 U.S. at 43; and (C) its decision to reduce the test speed to 25 mph test while the agency collected data on “uncertainties” is directly analogous to the action that the Supreme Court overturned in State Farm. In addition, NHTSA did not justify its failure to require manufacturers to meet the 30 mph test after the initial phase-in period ends in 2006.

**A. NHTSA’s Assertion That Reducing The Maximum Crash Test Speed Serves The “Best Overall Interest Of Safety” Is Contrary To The Evidence.**

NHTSA’s stated reason for rejecting the 30 mph test speed is that lowering the speed to 25 mph would be “in the best overall interests of safety.” JA 155, 65 Fed. Reg. at 30687. This explanation is inconsistent with NHTSA’s own reading

of the evidence, which shows that the risks to adult occupants from abandoning the 30 mph standard exceeds any risks associated with retaining this standard.

Insofar as there are uncertainties or trade-offs under this rule, the interest of overall safety favors retaining the 30 mph maximum test speed, not eroding its protection. As discussed above, NHTSA's statistics on crash injuries and fatalities show that the 30 mph crash test measures the performance of a vehicle in far more crash situations than the crash test for small females or the risk minimization requirements. See above at 20. NHTSA also found that the overwhelming majority of the 1998 and 1999 vehicles that had been tested provided air bag protection that satisfied the 30 mph crash test for 50th percentile adult male dummies, and relaxing the speed to 25 mph could increase air bag fatalities by 248 to 413 lives per year. See above at 17, 18. This projected number of annual fatalities exceeds all the fatalities attributed to air bag deployment from 1990 to 2000. JA 149, 65 Fed. Reg. at 30,681 (158 confirmed fatalities). Consequently, unless NHTSA found that the evidence demonstrated that retaining the 30 mph test speed could result in a new risk of substantial fatalities or serious injuries that would outweigh the hundreds of fatalities among teenagers and adults in high speed crashes that might flow from reducing the 30 mph test to 25 mph standard,

NHTSA could not rationally conclude that a standard that risks such fatalities best serves the overall interests in safety.

NHTSA identified no such evidence. To the contrary, during the course of the rulemaking, it found that it was not necessary to “trade” high-speed protection to accomplish risk minimization because technologies already in use demonstrated that air bags can achieve both when properly designed. The agency examined the manufacturers’ claims that retaining 30 mph standard would undermine overall safety and found that each is contrary to the evidence:

- Fatalities due to air bag deployment declined substantially after 1995 due, in part, to changes in air bag design that did not involve depowering (e.g. changes in inflator characteristics, air bag volumes and improved mounting locations). JA 150, 65 Fed. Reg. at 30,682; JA 541, 546, 564-66. NHTSA concluded that it was not necessary to develop new technologies to meet the statute’s goals by 2006 because designs that were already in production enabled manufacturers to meet the new risk minimization standards and eliminate most of the known causes of fatalities from air bags. JA 842, 905-908.
- NHTSA rejected the argument that a 30 mph maximum test speed would risk additional injuries by requiring increases in air bag volume or power

because the overwhelming majority of recently produced vehicles that had been tested could meet the new tests at this speed without any additional power. See JA 807, 809, 813, Comments Analysis at 2.2, 2.4, 4.2.

- NHTSA found that manufacturers could design air bags to meet the 30 mph test for both 50th percentile males and 5th percentile adult females *without* increasing the risks to out-of-position occupants. JA 155, 65 Fed. Reg. at 30,687; JA 892-896. Indeed, some vehicles already met the new crash test requirements even though they were not designed for these tests. JA 404, 64 Fed. Reg. 60580; JA 847-849, 794. The available test information concerning light trucks and vans (“LTVs”) also refuted the manufacturers’ claim that a 30 mph maximum test speed would require changes that would increase the risk of injury. JA 820, Comments Analysis at 5.6.

NHTSA’s explanation for its final decision provides no basis for ignoring these findings, and it identifies no risk that outweighs the risk of increased fatalities associated with a 25 mph standard. Among the list of six factors that NHTSA listed as the basis for its decision, only the first four suggest that setting the maximum test speed for unbelted crash tests at 30, rather than 25, mph may cause manufacturers to introduce air bags that fail other tests or cause injuries not

measured by these tests. JA 155-57, 65 Fed. Reg. at 30,687-89.<sup>3</sup> NHTSA's most concrete explanation of its concern is a statement that setting the standard 5 mph lower "presents less chance of inadvertently increasing risks to out-of-position occupants," JA 156, 65 Fed. Reg. at 30,688 — but even NHTSA does not argue that the 5 mph difference significantly reduces the chance of injury to out-of-position occupants. Although NHTSA says that it is "uncertain" or is concerned about "unresolved" issues related to what modifications will be made to current air bag designs, it does not state, or point to any evidence, that any of the design changes identified during the rulemaking present a safety risk that is significant enough to overshadow the risk of increased fatalities associated with reducing the maximum test speed to 25 mph.<sup>4</sup>

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<sup>3</sup> The four factors are, (1) "it is very important that advanced air bags be properly designed from the very beginning"; (2) "while we believe that it should eventually be possible for vehicles to provide protection for both small females and mid-sized males in a 48 km/h (30 mph) unbelted test without compromising efforts to minimize the risks of serious air bag-induced injuries, there are unresolved issues"; (3) "we are also aware that the vehicle manufacturers need design flexibility to address issues regarding performance in real world crashes not directly replicated by Standard No. 208's tests"; and (4) "a 40 km/h (25 mph) maximum test speed gives vehicle manufacturers more flexibility to address the greater compliance problems associated with vehicles, e.g., SUVs, with particularly stiff crash pulses." Id.

<sup>4</sup> NHTSA's final assessment includes an estimate that vehicles designed to meet the 30 mph test speed could result in an additional 1,345 serious, but not fatal, injuries compared to vehicles designed to meet the 25 mph standard. JA 203, 65 Fed. Reg. at 30,735. This estimate that non-fatal injuries might be higher

Consequently, NHTSA's claim that the 25 mph test promotes "overall safety" is not supported by its explanation or its conclusions from the data. Instead, NHTSA's discussion of these four factors suggests that, because manufacturers have generally moved slowly in correcting air bag designs that increase the risk to infants, children, and small adults, NHTSA tailored its rule so that manufacturers would be required to make no changes or, at most, minimal design changes in response to the advanced air bag mandate. See, e.g., JA 155, 65 Fed. Reg. at 30,687 (noting concern that manufacturers only be required "to initially introduce relatively simple advanced systems"). Because NHTSA's testing showed that the vast majority of current vehicles could satisfy a 30 mph crash test, lowering the crash speed to 25 mph may permit manufacturers to satisfy the risk minimization and other new requirements by simply lowering the power of the air bags in these vehicles. See JA 844. Thus, by degrading the standard, NHTSA thwarted Congress' mandate that Standard 208 should require improvements "by means that include advanced air bags." Pub. L. 105-178, Title VII, § 7013(a)(1).

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is subject to numerous qualifications, the most significant of which is that it assumes that manufacturers would only install single-stage air bags. JA 203, 65 Fed. Reg. at 30,735 n.33. If multi-stage air bags are used, the difference in injuries for the 30 mph and 25 mph test speeds disappears. Id.; see also Docket No. 00-7013-2, Final Economic Assessment at VI-71-74.



Moreover, as NHTSA itself acknowledged in 1998, “justifying the elimination of the [30 mph] unbelted barrier test based on the shortcomings of current (or pre-depowered) air bag designs has parallels to the rationale” that the Supreme Court rejected in State Farm. JA 369, 63 Fed. Reg. at 50,019. In State Farm, the Court found that NHTSA had improperly based its decision to rescind the passive restraint requirement on the manufacturers’ installation of ineffective and undesirable automatic restraint systems. 463 U.S. at 49. Similarly, the manufacturers’ resistance to using effective advanced air bag designs does not justify degrading occupant protection to minimize the burden to manufacturers in the future:

The reasoning underlying [the State Farm] decision suggests that the fact that the air bag designs chosen to date do not meet all safety considerations is not a sufficient reason, by itself, to undercut or negate the broad, longstanding performance requirements for air bags, given that there are other, superior alternative designs from which to choose. Instead, the appropriate long-term solution is to amend the requirements to ensure that the manufacturers select and install better air bag designs in the future.

JA 369, 63 Fed. Reg. at 50,019. Just as State Farm concluded that manufacturers’ ineffective designs could not justify rescinding the safety mandate at issue in that case, NHTSA cannot justify its action here by claiming that lowering Standard 208’s test speed serves the “overall” interest of safety because manufacturers

should be permitted to move slowly in replacing flawed air bag designs with advanced air bag systems.

**B. NHTSA's Reliance On Voluntary Action By Manufacturers To Maintain Or Improve Air Bag Performance Is Improper.**

The third and fifth factors listed by NHTSA to support its action rely on voluntary action by manufacturers to maintain or improve air bag performance even though the 25 mph test permits them to degrade the protection for the vast majority of adults and teenagers. In the third factor, NHTSA states that lowering the test speed gives vehicle manufacturers more "design flexibility" to improve performance in crash situations that are "not directly replicated by Standard No. 208's tests," such as crashes into poles. JA 157, 65 Fed. Reg. at 30,689; JA 106, 66 Fed. Reg. at 65,381. The fifth factor states that NHTSA believes "that it is unlikely" that vehicle manufacturers will significantly lower the performance of current air bags to minimally comply with the lower test speed. JA 157, 65 Fed. Reg. at 30,689.<sup>5</sup>

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<sup>5</sup> NHTSA's assertion that it is unlikely that vehicle manufacturers will significantly lower performance is, to say the least, of questionable rationality in light of manufacturers' failure history of dogged opposition to air bag requirements, NHTSA's own conclusion that manufacturers would be likely to lower air bag performance if the sled test were made permanent, the manufacturers concerted campaign to replace the 30 mph unbelted barrier test with a sled test or reduced test speed, and the economic incentives for manufacturers to meet their risk-minimization obligations by reducing protection in high-speed crashes. See JA 396, 64 Fed. Reg. at 60,572. In the draft rule submitted to OMB, NHTSA

Such wishful thinking is not a substitute for regulation. These factors are impermissible considerations in light of Congress' directive that NHTSA improve occupant protection and minimize risks through rulemaking. The statute's directive does not permit NHTSA to degrade the regulatory requirements based on the hope that manufacturers will voluntarily make up the difference between the degraded regulatory requirements and current occupant protection. Indeed, when NHTSA rejected arguments that the sled test should be made permanent, it observed that it would be inappropriate to base its selection of regulatory standards on the safety protection "that is currently provided, or may in the future be provided, voluntarily by the manufacturers." JA 370, 63 Fed. Reg. at 50,020.

Moreover, Congress' 1998 mandate to improve occupant protection also requires that the final rule that NHTSA adopts fulfill the requirements of Section 30111 of the National Highway Safety Act. Pub. L. 105-178, title VII, § 7103(a)(2), 112 Stat. 465. That statute contemplates that NHTSA's standards may be "technology-forcing" in the sense of inducing the development of superior safety design." State Farm, 463 U.S. at 49 (quoting Chrysler Corp. v. Department of Transportation, 472 F.2d, at 672-673); accord Paccar, Inc. v. NHTSA, 573 F.2d 632, 635 (9th Cir. 1978). Moreover, the statute requires that Standards be

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concluded that it would be unreasonable to rely on manufacturers to maintain current performance if the 30 mph crash test was made less stringent. JA at 885.

evaluated based on whether they reduce deaths and injuries from traffic accidents. 49 USC § 30111(b)(4) and 30101. Under this mandate, it is improper for NHTSA to adopt a standards that does not maintain the protection against fatalities and injuries afforded by existing technology, but relies on voluntary action to maintain safety.

**C. NHTSA's Decision to Reduce the 30 mph Crash Test Based on Unsubstantiated Uncertainties Is Arbitrary and Capricious.**

NHTSA rejected adoption of the 30 mph maximum speed on the basis that “the uncertainty associated with simultaneously achieving the twin goals” of the statute justified selecting the 25 mph test while NHTSA conducted a multi-year effort to collect data to resolve this “uncertainty.” JA 148, 65 Fed. Reg. at 30,680.

NHTSA's reliance on uncertainty about how regulatory changes will be implemented cannot be distinguished from similar explanations that the reviewing courts in State Farm and Public Citizen v. Steed, 733 F.2d 93 (D.C. Cir. 1984) found to be arbitrary and capricious.

NHTSA and other agencies that promulgate technology-forcing standards always face uncertainty when issuing regulations, particularly performance standards that leave design decisions to the regulated entities. In State Farm, the Court made clear that there are limits on NHTSA's ability to invoke such uncertainties to justify a decision. “[S]erious uncertainties,” the Court observed,

can justify an agency's decision to revoke a safety standard "*if supported by the record and reasonably explained.*" State Farm, 463 U.S. at 53 (italics added).

However, an agency is required to do more than "merely recite the terms 'substantial uncertainty' as a justification for its actions," and a valid reason generally requires "a justification for rescinding the regulation before engaging in a search for further evidence." Id. Because NHTSA's justification for rescinding its passive restraint rule was not based on evidence but on the *absence* of "reliable real-world experience that usage rates will substantially increase" under the regulation, the Supreme Court found that NHTSA's invocation of uncertainty did not justify its action. Id. at 52.

In Steed, this Court reached a similar conclusion in rejecting NHTSA's decision to suspend a treadwear regulation based on "considerable uncertainty concerning the extent to which" there were significant inaccuracies in test results underlying the rule. Steed, 733 F.2d at 99-100. Because NHTSA could not show that "the magnitude and variability of the problem" justified suspending the rule, the Court held that its action was arbitrary and capricious. Id.

NHTSA's explanation here is based on equally unsubstantiated uncertainties. NHTSA points to general uncertainties about how vehicles may perform if the maximum test speed is retained at 30 mph. However, careful

examination of NHTSA's discussion of the uncertainties that it perceives reveals that those uncertainties involve details, not major threats to overall safety that would justify its action. The uncertainty is minimal because the technology to meet the dual goals of improving occupant protection and minimizing risk already exists, and NHTSA's tests show that vehicles can satisfy the 30 mph crash test without increasing the risk to children or out-of-position occupants. See above at 37. Indeed, NHTSA points to no concrete data showing that there are significant reasons to doubt that application of designs *already in production* will allow vehicles to meet or exceed the requirements that its tests showed were already met by most of the 1998 and 1999 vehicles that NHTSA tested. See JA at 900-901 (concluding that the relatively few vehicles that do not currently meet the 30 mph standard can be refined to comply using available advanced technologies). The agency's announcement that it plans to collect data only underscores that – as in State Farm and Steed – the problems that NHTSA identifies are based on speculation that is not substantiated by the record.

Moreover, State Farm and other cases show that when NHTSA relies on uncertainty it must demonstrate that it considered alternatives and had a reasonable basis for rejecting them. Two alternative approaches are readily apparent here, but NHTSA has not provided a rational basis for rejecting them.

First, NHTSA can retain the 30 mph standard, collect data on its implementation, and make modifications if serious implementation issues do, in fact, arise. As the Ninth Circuit has observed, NHTSA can make temporary adjustments in implementation deadlines if presented with evidence that devices require further testing or development. Paccar, Inc. v. NHTSA, 573 F.2d at 642; accord Chrysler Corp. v. Department of Transportation, 472 F.2d at 673.

NHTSA's decision to reduce the 30 mph test speed *before* there is concrete evidence that such adjustments are necessary, rather than after such evidence is presented, is irrational.

Second, rather than degrading the safety standard for *all* vehicles based on "uncertainties" that arise for *some* vehicles, NHTSA can provide special treatment for those vehicles that raise extraordinary concerns. NHTSA identified the "compliance problems" associated with SUVs and other vehicles with "stiff crash pulses" as one of the six factors that justified its decision. JA 157, 65 Fed. Reg. at 30,689. This "uncertainty" is not substantiated because NHTSA's testing found that the manufacturers' argument that these vehicles would require more aggressive air bags to satisfy a 30 mph crash test speed was not supported by the test results. JA 816, Comments Analysis at 5.2. But even if data supported the manufacturers' claim that these vehicles raise a special concern, this factor would

not justify reduction of the occupancy protection standard for vehicles that do not have a stiff crash test pulse.

On reconsideration, NHTSA was specifically challenged on this issue, but it did not explain why the characteristics of SUVs should justify reduction of the test standards for all passenger cars. JA 105-06, 66 Fed. Reg. at 65,380-81. NHTSA states only that “the uncertainties” associated with meeting both the occupant protection and risk minimization standards are “formidable for all light vehicles.” Id. As discussed above, such a general reference to “uncertainties” cannot justify reducing the standard for protection of occupants that is designed to prevent crash fatalities.

**D. NHTSA’s Decision Not to Restore the Maximum Test Speed to 30 mph After the Phase-in Period Is Arbitrary and Capricious.**

NHTSA not only lowered the maximum test speed to 25 mph for the initial phase-in period (2003-06), but it also declined to restore the test speed to 30 mph during the succeeding phase (2007-10). That NHTSA labeled this decision an “interim rule” does not make it any less permanent for the purpose of judicial review. NHTSA’s statement that it may, at some time in the indefinite future, revisit the issue in another notice and comment rulemaking does not distinguish this rule from a final rule rescinding the 30 mph test speed. Cf. Public Citizen v.



Steed, 733 F.2d at 98-99 (indefinite suspension of rule is the same as revocation where full notice and comment is required to restate the rule).

NHTSA's decision to permanently or indefinitely reduce the 30 mph crash test speed must be set aside because it is not supported by any cogent explanation. See State Farm, 463 U.S. at 48-49. The foundation for NHTSA's argument that reducing the 30 mph test speed is appropriate is its claim that manufacturers need flexibility while they are being required to make the design changes necessary to meet the new requirements that become effective from 2003-06. Once these requirements are fully implemented in 2006, this justification for reducing the protection afforded in high speed crashes evaporates. The only additional requirement that manufacturers must meet after 2006 is that the maximum speed for the crash test involving a belted 50th percentile male dummy will increase from 30 to 35 mph. JA 153-54, 158, 65 Fed. Reg. at 30,685-66, 30,690. The only reason that NHTSA gives for not restoring the unbelted crash test to 30 mph during this same period is a statement that "we cannot assess whether the uncertainty about the manufacturers' ability to improve protection further and minimize risk will persist beyond" the first phase-in period. JA 153, 65 Fed. Reg. at 30,685. The agency's statement that it cannot "assess" the possibility that manufacturers will fail to comply with the new requirements on schedule does not

provide a justification for setting the crash test speed on the assumption that they will not comply.

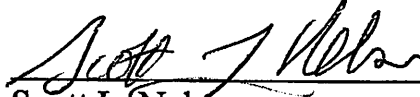
By failing to restore the maximum test speed to 30 mph, even by 2010, NHTSA ensured that its amendments to Standard 208 would undermine the very safety concerns that are supposed to be paramount in setting these standards. In rejecting the manufacturers' pleas that the 30 mph crash test be replaced with a permanent sled test, NHTSA itself observed that a permanent change would compromise safety in a way that a temporary change does not. See JA 258i-j, 62 Fed. Reg. at 12,968-69. The same problem exists in permanently degrading the 30 mph maximum test speed to 25 mph. Manufacturers have an economic incentive to choose to comply with the risk minimization requirements by relying primarily on lowering power or air bag size, instead of using design changes that serve *both* occupant protection and risk minimization. JA 395, 64 Fed. Reg. at 60,571. Because such changes achieve compliance at the expense of the protection in the crashes that are most likely to be fatal, the result will be an overall increase in injuries and fatalities. JA at 844.

### CONCLUSION

For the reasons stated above, the Court should declare that NHTSA's decision to reduce the maximum crash test speed for unbelted barrier crashes is

contrary to law or, in the alternative, declare that the agency's stated explanation for this action is arbitrary and capricious.

Respectfully submitted,



Scott L. Nelson

David C. Vladeck

Public Citizen Litigation Group

1600 20th St., NW

Washington, D.C. 20009

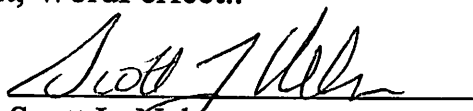
(202) 588-1000

Counsel for Petitioners

January 20, 2004

**CERTIFICATE PURSUANT TO FED. R. APP. P. 32(A)(7)(C)**

Pursuant to Fed. R. App. P. 32 (a)(7)(C), the foregoing petitioners' brief is proportionately spaced, has a typeface of 14 points or more and contains 11,470 words (exclusive of tables, certificates, and other material not counted), as computed by the software used to compose it, WordPerfect..

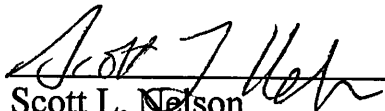
  
Scott L. Nelson

**CERTIFICATE OF SERVICE**

I hereby certify that on January 20, 2004, I served copies of the foregoing Brief for Petitioners by first class mail, postage pre-paid, addressed to counsel for Respondent and the Intervenors at the addresses below:

H. Thomas Byron III  
Douglas N. Letter  
U.S. Department of Justice  
Civil Division, Appellate Staff  
601 D Street, NW  
Washington, DC 20530-0001

Adam C. Sloane  
Erika Z. Jones  
MAYER, BROWN, ROWE AND MAW  
1909 K Street, NW  
Washington, DC 20006-1101

  
\_\_\_\_\_  
Scott L. Nelson  
Public Citizen Litigation Group  
1600 20th Street, NW  
Washington, DC 20009  
(202) 588-1000

## STATUTORY ADDENDUM

Pub. L. 105-178, title VII, Sec. 7103, June 9, 1998, 112 Stat. 465, provided that:

(a) Rulemaking To Improve Air Bags. -

(1) Notice of proposed rulemaking. - Not later than September 1, 1998, the Secretary of Transportation shall issue a notice of proposed rulemaking to improve occupant protection for occupants of different sizes, belted and unbelted, under Federal Motor Vehicle Safety Standard No. 208, while minimizing the risk to infants, children, and other occupants from injuries and deaths caused by air bags, by means that include advanced air bags.

(2) Final rule. - Notwithstanding any other provision of law, the Secretary shall complete the rulemaking required by this subsection by issuing, not later than September 1, 1999, a final rule with any provision the Secretary deems appropriate, consistent with paragraph (1) and the requirements of section 30111, title 49, United States Code. If the Secretary determines that the final rule cannot be completed by that date to meet the purposes of paragraph (1), the Secretary may extend the date for issuing the final rule to not later than March 1, 2000.

(3) Effective date. - The final rule issued under this subsection shall become effective in phases as rapidly as practicable, beginning not earlier than September 1, 2002, and no sooner than 30 months after the date of the issuance of the final rule, but not later than September 1, 2003. The final rule shall become fully effective for all vehicles identified in section 30127(b), title 49, United States Code, that are manufactured on and after September 1, 2005. Should the phase-in of the final rule required by this paragraph commence on September 1, 2003, then in that event, and only in that event, the Secretary is authorized to make the final rule fully effective on September 1, 2006, for all vehicles that are manufactured on and after that date.

(4) Coordination of effective dates. - The requirements of S13 of Standard No. 208 shall remain in effect unless and until changed by the rule required by this subsection.

\* \* \* \*

**49 USC § 30161. Judicial review of standards**

**(a) Filing and Venue.**

A person adversely affected by an order prescribing a motor vehicle safety standard under this chapter may apply for review of the order by filing a petition for review in the court of appeals of the United States for the circuit in which the person resides or has its principal place of business. The petition must be filed not later than 59 days after the order is issued.

\* \* \* \*