

local organizations that wish to establish child safety seat fitting stations (locations within a community where parents and caregivers can learn how to install and properly use child restraints), and works with partners to train educators that can teach the public about using child restraints. If more child restraints were used, children's lives would certainly be saved in significant numbers.

If child restraints were made more effective, some lives could also possibly be saved. However, in making regulatory decisions on possible enhancements, the agency must bear in mind the consumer acceptance of cost increases to an already highly-effective item of safety equipment. Any enhancement that would significantly raise the price of the restraints could potentially have an adverse effect on the sales of this voluntarily-purchased equipment. The net effect on safety could be negative if the effect of sales losses exceeds the benefit of the improved performance of the restraints that are purchased. Thus, to maximize the total safety benefits of its efforts to extend and upgrade its restraint requirements, the agency must balance those improvements against impacts on the price of restraints. The agency must also consider the effects of improved performance on the ease of using child restraints. If the use of child restraints becomes overly complex, the twin problems of misuse and nonuse of child restraints could be exacerbated.

(b) Estimating the net effect on safety of this rulemaking, consistent with the principles for regulatory decisionmaking set forth in Executive Order 12866, Regulatory Planning and Review, was limited by several factors. One was the lack of specific accident data on children in motor vehicle crashes generally. Second, the limited time allowed by the schedule specified in the TREAD Act for initiating and completing this rulemaking limited the amount and variety of information that the agency could obtain and testing that the agency could conduct to examine the efficacy of possible countermeasures and the effects of various proposed amendments on child restraint performance. Together, these limitations made it difficult to assess and compare the benefits and costs of this rulemaking.

(c) The rulemaking schedule imposed by the TREAD Act also limited the rulemaking to elements that could be completed within the statutory schedule. The development of an anthropomorphic test device representing a 10-year-old child could not be completed within the timeframe

of the TREAD Act and so was not part of the rulemaking, notwithstanding its inclusion as an element for consideration in NHTSA's Planning Document and in Section 14 of the TREAD Act. Development of a seat cushion with different stiffness characteristics for the test seat assembly could not be completed and analyzed in time to be included in this rulemaking. Development of a side impact test procedure, injury criteria, and cost-effective countermeasures also could not be completed within the TREAD Act rulemaking schedule. Work is continuing in some of these areas. While ideally the agency would have wanted to address all related aspects of the standard, what could be accomplished in the near term was addressed and what could not but should will be pursued in the future.

## V. Response to the TREAD Act

Bearing in mind the principles and considerations discussed in the previous section, the agency initiated several actions following enactment of the TREAD Act. These are summarized below.

### *a. NPRM for This Final Rule*

On May 1, 2002 (67 FR 21806, docket 11707), the agency published a notice of proposed rulemaking (NPRM) proposing to incorporate five elements into the standard: (a) An updated bench seat used to dynamically test add-on child restraint systems; (b) a sled pulse that provides a wider test corridor; (c) improved child test dummies; (d) expanded applicability to child restraint systems recommended for use by children weighing up to 65 pounds; and (e) new or revised injury criteria to assess the dynamic performance of child restraints. The 60-day comment period provided by the NPRM on the proposals was extended an additional 30 days in response to petitions from the Juvenile Products Manufacturers Association and ARCCA, Inc. 67 FR 44416; July 2, 2002.

The proposed updates to the seat assembly were based on studies that NHTSA contracted to have done in response to the TREAD Act. The NPRM proposed the following changes: the seat bottom cushion angle would be increased from 8 degrees off horizontal to 15 degrees; the seat back cushion angle would be increased from 15 degrees off the vertical to 22 degrees; the spacing between the anchors of the lap belt would be increased from 222 millimeters (mm) to 392 mm in the center seating position and from 356 mm to 472 mm in the outboard seating positions; and the seat back of the seat assembly would be changed, from a

flexible seat back to one that is fixed, to represent a typical rear seat in a passenger car.

The agency also proposed to widen the corridor of the sled pulse to make it easier for more test facilities to reproduce. The wider corridor extends the pulse from 80 milliseconds (ms) to approximately 90 ms in duration. The agency believed that the expanded corridor would not reduce the stringency of the test, and would also make it easier to conduct compliance tests at speeds closer to 30 mph.

The NPRM proposed two initiatives toward enhancing the use of test dummies in the evaluation of child restraints under Standard No. 213. NHTSA proposed to replace some of the existing dummies with the new 12-month-old Child Restraint Air Bag Interaction (CRABI) dummy, and the state-of-the art Hybrid III 3- and 6-year-old dummies. NHTSA also proposed testing child restraints for older children with a weighted 6-year-old dummy (*i.e.*, a Hybrid III 6-year-old dummy to which weights have been added). The total weight of the dummy would be 62 lb. The agency sought to use the weighted dummy as an interim measure to test child restraints that are recommended for children weighing 50 to 65 lb, until such time as a Hybrid III 10-year-old dummy now in development becomes available.

The NPRM proposed to extend Standard No. 213 to apply to child restraint systems for children who weigh 65 lb or less. Restraints recommended for children weighing 50 to 65 lb would be tested with the weighted 6-year-old dummy.

The proposal to use the new and scaled injury criteria of Standard No. 208 was based on research that the agency had done in support of the agency's May 2000 final rule on advanced air bag technology, which amended Standard No. 208 by, among other things, adjusting the criteria and performance limits to account for motor vehicle injury risks faced by different size occupants (65 FR 30680; May 12, 2000), as well as on NCAP and sled testing done in response to the TREAD Act. The NPRM proposed to adopt the scaled Head Injury Criterion (HIC) limits from the Standard No. 208 rulemaking into Standard No. 213, as well as the chest deflection and acceleration limits. The Nij neck criterion was also proposed to be added to Standard No. 213, but without the limits on axial force.

NHTSA estimated that the proposal to use the new and scaled injury criteria of Standard No. 208 would prevent an estimated 3–5 fatalities and 5 MAIS 2–