

spacing but at the maximum anchorage spacing "now allowed" for vehicle manufacturers in any seat position.

This final rule adopts the proposals, except the spacing between the anchors of the lap belt in the center seating position will be 400 mm, rather than 392 mm as proposed. The agency believes that the 8 mm difference between 400 and 392 mm is negligible, yet the 400 mm specification will make the spacing identical to that of the test seat assembly of ECE Regulation 44, so it is adopted. The lap belt anchorage spacing in the outboard seating position is revised to 472 mm, as proposed. (The ECE regulation specifies a spacing of 400 mm for both lap only tests and lap/shoulder tests. The agency cannot conclude that the difference between 472 mm and 400 mm is insignificant, so the agency is not adopting the ECE specification.) In response to Ms. Bidez, the Federal motor vehicle safety standards specify a minimum spacing for the anchorages, not a maximum. As to setting the anchorages at the maximum spacing that the agency has measured in its test program, the agency declines this suggestion. The agency does not have sufficient information to form the basis for a conclusion that a safety need exists to set the anchorages at the widest spacing observed on a vehicle seat. Further, setting the anchorages at the maximum spacing was not proposed in the NPRM or evaluated in the agency's test program at PAX River.

A few commenters expressed some concerns about certain aspects of the test seat assembly's seat belts that were not addressed by the NPRM. GM, the Alliance, and ARCCA, Incorporated (ARCCA), stated that the seat belt lower anchors for both the center and outboard seating configurations do not represent typical anchorage locations found on new vehicles. As stated by the Alliance, "The lap belt anchorages are too far back and too low and the lower anchors for the outboard seat are too high to represent a typical rear seat." GM and the Alliance also believed that the current two-piece lap and shoulder belt should be replaced with a three-point continuous loop shoulder/lap belt with a simulated retractor. Ford suggested that, to improve reproducibility of test results, the standard should specify a "reasonably tight" tolerance of $8\% \pm 1\%$ elongation at 10,000 N for the belt webbing used on the standard test bench.

The agency did not pursue revising the fore-and-aft and vertical placement of the seat belt anchorages in response to the TREAD Act. This was due in part to the short deadlines of the TREAD

Act. In addition, information from a 1994 test program indicated an absence of a need to change those anchorage locations. In 1994, the agency explored locating lap and shoulder belt anchorages on the standard seat assembly in a test program supporting rulemaking amending FMVSS No. 213 to facilitate the production of belt-positioning booster seats. The agency found that the fore-aft and vertical placement of the lap belt had a negligible effect on the performance of the child restraints evaluated in the program. 59 FR 37167, 37171; July 21, 1994. Nonetheless, in that rulemaking the agency placed the inboard anchor to reflect the location of the average condition identified by the research. The agency believes that those fore-aft and vertical locations are still sufficiently representative of current vehicles so as to provide a true and thorough evaluation of a child restraint's performance in a crash.

Given agency resources and rulemaking priorities, NHTSA does not anticipate exploring in the near future whether the fore-aft and vertical placement of the lap belt anchorages should be changed, or whether the current two-piece lap and shoulder belt should be replaced with a three-point continuous loop lap/shoulder belt with a simulated retractor. Our assessment of the safety need for such a rulemaking could change, if new information arises that indicates that these issues should be explored.

In response to the issue raised by Ford, the elongation of the standard belt webbing used in FMVSS No. 213's compliance test was not discussed in the NPRM. It should be noted that specifying elongation of the webbing was addressed by NHTSA in the July 21, 1994 final rule on belt-positioning boosters (59 FR at 37171). Under current FMVSS No. 213 test procedures, NHTSA tests child restraint systems using webbing that is typical of that installed in vehicles. NHTSA obtains webbing material from seat belt suppliers. These suppliers also furnish vehicle manufacturers with the webbing used in motor vehicles. This aspect of the compliance test increases the likelihood that the belts used to attach child restraints to the standard seat assembly are those that will actually be used by consumers to attach the restraints to their vehicle seats.

The belt webbing is required by FMVSS No. 209 (S4.2(c)) to meet elongation requirements. Ford believed that the elongation allowed by that standard is too varied ("from zero to twenty percent for a lap belt, * * * up to 30 percent for the pelvic portion of

a lap/shoulder belt, and * * * up to 40 percent for the upper torso portion of a lap/shoulder belt. Such a large permitted variation in choice of belt webbing elongation could markedly affect FMVSS 213 dynamic test results.") Ford did not provide data substantiating that differences in test results were obtained that were attributed to the use of webbing with different elongation characteristics. The agency also cannot conclude that testing with webbing with a "tight tolerance" of 8 percent, as Ford suggested, is preferable over testing with webbing with a larger tolerance, e.g., closer to the 30 or 40 percent limit. Given agency resources and priorities, the agency can not conclude that a need exists to initiate rulemaking on this aspect of FMVSS No. 213 in the near future.

iii. Fixed Seat Back. Commenters did not see eye-to-eye on the proposal to change the seat back to represent a fixed vehicle seat. Graco, TraumaLink, the Alliance, Safekids, Evenflo, JPMA and Xportation supported the proposal. JPMA stated that a fixed seat back replicates today's motor vehicle seat back and harmonizes with the test bench setups for ECE, Canadian and Australian regulations. Xportation said that it did not believe that motion of seat backs in vans is significant to the performance of child restraints. On the other hand, General Motors agreed with the proposal that a fixed seat back would be more representative of the rear seat of today's passenger cars, but expressed concern that a fixed back would not be representative of free-standing seats in vans and other multipurpose passenger vehicles. GM believed that it was unclear how fixing the seat back would affect child restraint system performance and suggested that NHTSA should study the issue. Advocates and Ms. Bidez expressed concern that changing to a rigid seat back may result in a less rigorous test condition, even though, the commenter believed, "many children will be seated in seats with flexible seat backs." ARCCA believed that the configuration that results in the more severe test of a child restraint should be selected.

In an effort to assure that the proposed fixed seatback configuration does not pose a less stringent test condition for dynamic tests of child restraints than the existing flexible seatback, NHTSA conducted a series of rigid versus flexible seatback tests at the agency's Vehicle Research and Test Center (VRTC) on September 23–27, 2002. The proposed seatback and seat base angles were used.

Six pairs of tests using rigid and flexible seatbacks were conducted using