

it did not believe that any incomplete vehicle manufacturer would, as a practical matter, establish unreasonably stringent limitations for its incomplete vehicles. If any incomplete vehicle manufacturer were to do so, final stage manufacturers would purchase their incomplete vehicles from other manufacturers that had established more realistic limitations.

The agency's belief that market forces will prevent incomplete vehicle manufacturers from establishing unreasonably stringent limitations seems to have been correct. No manufacturer has provided NHTSA with any evidence that overly stringent limitations have been or will be imposed on incomplete vehicles subject to any of the existing crash testing requirements. Thus, NHTSA does not find persuasive NTEA's suggestion that unreasonably stringent limitations will be imposed on the completion of incomplete vehicles as a result of extending Standard 214's dynamic test requirements to LTVs.

In any event, NHTSA believes the 6,000 pound GVWR threshold for this rule excludes most, if not all, LTVs produced by final-stage manufacturers and thus alleviates many of NTEA's concerns about the impacts of this rule. Moreover, this rule addresses some of NTEA's concerns by excluding walk-in vans, motor homes, tow trucks, dump trucks, ambulances and other emergency rescue/medical vehicles (including vehicles with fire-fighting equipment), and vehicles equipped with wheelchair lifts. These categories of vehicles are excluded because many vehicles within these categories tend to have unusual side structures that are not suitable for MDB testing (for example, since some of these excluded vehicles have a body much wider than their cabs, the MDB cannot hit the driver's door without first striking the body. The rule differs from the NPRM in adding "other emergency rescue/medical vehicles" and vehicles equipped with a wheelchair lift, to the list of excluded vehicles. Emergency rescue/medical vehicles typically have unusual side structures and are thus excluded for the same reason that the other vehicles are excluded. Vehicles equipped with a wheelchair lift are excluded because such vehicles typically have features such as a lowered floor (some are lowered as much as 10 inches), raised roof, movable seat bases and/or specially designed removable seats, in addition to the lift itself, that could raise practicability problems with regard to the ability of the vehicle to meet the dynamic side impact requirements. While NHTSA believes that all

individuals are entitled to an equivalent level of occupant crash protection, the agency also believes that the goal of providing equivalent crash protection should not be achieved at the expense of the goal of providing mobility to the physically challenged. This rule excludes vehicles equipped with wheelchair lifts because those vehicles have unique features which, while improving accessibility, make it difficult for the vehicle to meet these requirements. Without the exclusion, these vehicles might not be produced.

As to LTVs that have not been excluded, if a final-stage manufacturer or alterer does not stay within the incomplete vehicle manufacturer's limits or alters the vehicle in a way that could affect its conformance to side impact protection requirements, the manufacturer or alterer will have the responsibility of determining what must be done to certify that the vehicle provides the requisite safety performance. Those manufacturers already certify to the dynamic crash test requirements of Standards 208 ("Occupant Crash Protection"), 212 ("Windshield Mounting"), 219 ("Windshield Zone Intrusion") and 301 ("Fuel System Integrity"), and the quasi-static requirements of Standard 214 and 216, among others. Under the statute, each manufacturer must certify its vehicles, but the statute does not require any manufacturer to crash test or undertake any particular evaluation of its vehicles to make its certification. If crash testing its vehicles is too burdensome for a final-stage manufacturer, it could certify its vehicles using similar means to those it now uses to certify to other standards with dynamic testing requirements, including appropriate engineering analyses.

The NPRM stated that, if a final-stage manufacturer does not stay within the incomplete vehicle manufacturer's limits or if an alterer alters the vehicle in a way that could affect the LTV's conformance to side impact protection requirements, the final-stage manufacturer or alterer can band together with other manufacturers and alterers to sponsor testing and/or engineering analysis to show that a vehicle type common to all complies with the dynamic side impact requirements. This is similar to what is done to enable multistage manufacturers and alterers to certify to the dynamic testing requirements of FMVSS 208, "Occupant Crash Protection." In response, RVIA said that while most manufacturers engaged in vehicle conversions certify to the automatic crash protection requirements of

Standard 208 by means of "engineering analysis," using data from seating component suppliers and incomplete vehicle manufacturers, RVIA argued that engineering analysis would not be an alternative to full scale crash testing in the case of Standard 214. RVIA stated this is because

[a]dequate simulation of dummy accelerations resulting from side intrusion contact with interior components, padding and/or seating components cannot be performed. Full scale impact testing would therefore be required to be performed on each side of each different vehicle/seating system configuration.

Similarly, Flexsteel Industries said that * * * the dynamic side impact requirements of FMVSS 214 on vans and pickups could well create a larger problem to verify continued vehicle compliance than that experienced for FMVSS 208. Unlike the FMVSS 208 requirement where sled testing could be used to make comparative tests of Flexsteel seating to factory seating, the proposed side impact test is an intrusive test and both sides of new vans and pickups may have to be tested.

NHTSA does not agree that engineering analysis is not useful in assessing a vehicle's compliance with Standard 214. Manufacturers have computer simulations, component and sled tests using body shells, and analyses at their disposal to aid in assessing the capability of a vehicle to meet the requirements under Standard 214. These methods are considerably less expensive than crash testing. With respect to the opportunity to use these alternative methods for assessing compliance, Standard 214 is not any different from Standard 208. Sled tests simulating side crash tests can be performed in the same manner as in FMVSS 208. Similarly, component test data from crushing vehicle doors, seat structures, and other lateral components along with dummy body block data could be used in developing mathematical models and computer simulations to analyze safety performance of vehicle designs. This would enable RVIA, Flexsteel and other companies to determine the capability of their vehicle designs in meeting the requirements in FMVSS 214. Further, NHTSA believes that alterers should assure that they are producing vehicles that are equal to their original counterparts. Therefore, alterers must certify their vehicles to the requirements in FMVSS 214 by any available means.

Other Issues

Vehicles with work-performing equipment. NTEA suggested that NHTSA should exclude vehicles outfitted with a cargo or property carrying body, or work performing