

The vehicle manufacturers were unanimously opposed to the NPRM, and wanted the rulemaking either terminated or limited to a straight extension of the passenger car side impact protection requirements. The American Automobile Manufacturers Association (AAMA), representing GM, Ford and Chrysler, strongly believed the rulemaking should be terminated. Toyota, Isuzu, and Mazda also believed the rulemaking should be terminated. In the alternative, these commenters, together with Volkswagen and Nissan, said that if NHTSA decided to proceed with a final rule, it should adopt no more than the passenger car test procedures and injury criteria.

The commenters opposing the NPRM raised several main objections:

1. *Equity.* Each raised an equity argument, contending that it is unfair for NHTSA to adopt LTV side impact protection requirements based on test conditions more severe than those used for passenger cars, when LTV occupants currently face a smaller risk of thoracic injury in side impacts as compared to passenger car occupants. AAMA said that NHTSA understated the degree to which LTVs present a smaller risk of injury when the NPRM stated that the side impact fatality rate for occupants of LTVs in side impact crashes is slightly less than half of that for occupants of passenger cars. NHTSA estimated that the LTV occupant side impact fatality rate per million registered vehicles is 25.7, as compared to 53.3 for passenger cars. AAMA stated that these rates were based on all injuries in side impacts, while only thoracic injuries—"the principal focus of this rulemaking"—should be calculated. AAMA said that NHTSA estimated in the NPRM that 245³ of 1,763 LTV occupant fatalities, or 13.9 percent for LTVs and 37 percent for passenger cars, will be due to thorax injuries. According to AAMA,

Applying these percentages to the aforementioned fatality rates yields side impact fatality rates due to thoracic injuries per million registered vehicles. For LTVs, this rate is approximately 3.6. For passenger cars, it is approximately 19.7. LTV occupants, therefore, presently face less than one-fifth the risk of receiving a fatal thoracic injury in a side impact compared to passenger car occupants.

³ In its comment, AAMA later also argues that the NPRM's estimate of 245 annual fatalities is overstated. AAMA believed those fatalities include accident conditions that do not relate to the proposed test procedures, such as single vehicle accidents, medium and heavy trucks as striking vehicles, and ejections. By excluding these, AAMA estimates there are only 52 fatalities remaining. AAMA also argued that NHTSA did not take into account the 58 to 82 fatalities that would be reduced from implementing Standard 214's quasi-static test requirement for LTVs.

The vehicle manufacturers argued these data demonstrate that LTVs are already safer than passenger cars in side impacts. Thus, these commenters concluded, it would be unreasonable to adopt more severe requirements for LTVs than what is required for passenger cars. AAMA suggested that rather than promulgate a dynamic side impact requirement for LTVs, NHTSA could utilize its resources more effectively by working to increase seat belt usage and reduce impaired driving by LTV users.

Some commenters compared LTV occupant injuries in side impacts to injuries in other types of crashes and questioned whether the side impact protection of LTVs constitutes a safety problem of a magnitude severe enough to justify the proposed rulemaking. Nissan commented that NHTSA presented data at the 1991 Enhanced Safety Vehicle Conference which indicated that the portion of fatalities for occupants in LTV side impact crashes amounted to only 0.92 percent of the total LTV occupant fatalities.

2. *Unrepresentative barrier.* Most of the commenters opposed to the NPRM objected to what they regarded as the unrepresentativeness of the proposed dynamic side impact test procedure for LTVs. Many opposed using a barrier representing an LTV to strike vehicles being tested, on the grounds that such a test would not be representative of a typical real-world LTV side impact. According to several commenters, an LTV is more likely to be struck in the side by a passenger car than by another LTV. Nissan said that data from the National Accident Sampling System (NASS) for 1988 through 1992 indicate that in side impacts, passenger vehicles collide with the side of an LTV more than three times as often as LTVs collide with other LTVs. Volkswagen (VW) and Isuzu believed that LTVs are exposed to the same traffic environment as passenger cars, and therefore, their exposure to side impact accidents from other vehicles would be similar to that of passenger cars. VW stated, "The side impact test barrier should be representative of the accident exposure of the target vehicle and therefore a common barrier should be used for passenger cars as well as LTVs." AAMA said that NHTSA has not provided data justifying a departure from the "most likely striking vehicle" approach used in the passenger car side impact protection requirements.

The view that a dynamic side impact test for LTVs should represent a common real-world event was also shared by the Insurance Institute for Highway Safety (IIHS). This commenter

supported subjecting LTVs to the same dynamic side impact test as cars. IIHS took issue with the agency's position in the NPRM that the test procedure for LTVs should be modified to better represent those crashes most likely to cause serious and fatal thorax and pelvis injuries among LTV occupants. The commenter believed NHTSA failed to indicate whether those crash conditions represent a common real-world event.

Many commenters objected that a modified LTV test procedure would not be representative of the type of crash most likely to result in serious injuries and fatalities to LTV occupants. This view is contrary to the one stated by NHTSA in the NPRM. There the agency had tentatively concluded that, in order to address the safety problem in side crashes of LTVs, the barrier used to simulate a striking vehicle should be increased in height and weight to better represent striking vehicles that are most likely to cause severe chest injuries in side impacts, i.e., standard pickups and compact pickups. (The NPRM said that accident data indicate that 78 percent of LTV side impact fatalities resulting from a "torso" injury involved a LTV or a heavier vehicle as the striking vehicle in vehicle-to-vehicle crashes.) Those commenters believed that passenger cars more often cause serious injuries and fatalities than LTVs as the striking vehicle. Nissan stated that NHTSA presented data⁴ at the 1991 Enhanced Safety Vehicle Conference which indicated that "serious injuries and fatalities in cases where passenger cars strike LTV class vehicles in a side impact scenario is on the order of six times that of LTV vehicles impacting another LTV." AAMA also refers to the report mentioned in Nissan's comment. AAMA said that the report shows that 1982–1989 NASS files indicate there were "only 13 cases relevant to the test requirements proposed in the NPRM." ("Relevant" means that these cases involved side crashes to the near side, and torso injuries only.) The commenter said that in nine of those 13 cases, a passenger car was the striking vehicle. AAMA said it conducted a similar study of 1991–1992 NASS files and found nine cases relevant to the NPRM. In 5 of the 9 cases, a passenger car was the striking vehicle. AAMA stated, "If LTV occupants typically suffer serious thoracic injuries when struck in side impacts by vehicles other than passenger cars, then surely nine years of NASS data would not show that passenger cars are the most common

⁴ Partyka, S.C., "Light Truck Side Impacts with Serious Occupant Injury," ESV Report No. 91–S5–0–27.