

occupant crash protection standard. The requirements of the final rule will be phased-in by increasing percentages during MYs 2005–2007. While only portions of the MY 2005 and MY 2006 fleets will be required to comply, all of the MY 2007 fleet will be required to comply. To comply, manufacturers will have to install air bag sensors, switches, status indicators, and associated electrical equipment. We estimate the average weight gain will be 3.4 pounds (1.54 kilograms).

In Ford's view, significant additional weight would be required to meet the occupant protection requirements. Ford attributed some of this weight to air bag sensors and other equipment. Ford also anticipates additional weight increases as a result of efforts to comply with the planned rulemaking to establish frontal offset crash requirements. Ford did not, however, indicate which portion of the weight penalty it claimed was attributable to the May 2000 final rule, and which might be attributable to the frontal offset crash requirements. Based on our knowledge of the weight of items that would have to be installed to meet the May 2000 final rule, we believe that bulk of the claimed weight penalties for FMVSS 208 are related to the frontal offset crash requirements currently under study. The agency has not yet issued a frontal offset proposal, nor considered the model years to which any new requirements would apply.

6. FMVSS 225, Child Restraint Anchorage Systems

On March 5, 1999, NHTSA published a final rule establishing FMVSS 225, Child Restraint Anchorage Systems, requiring vehicle manufacturers to install child restraint anchorage systems that are standardized and independent of the vehicle seat belts (64 FR 10786). The FEA (February 1999) for FMVSS 225 estimates the additional weight for improved anchorages will be less than 1 pound (0.45 kilogram). Ford believes that, in addition, some of its vehicles will require structural reinforcement to meet anchorage strength requirements in FMVSS 225. Ford alleges that NHTSA significantly underestimated the weight penalties imposed by these child restraint anchorage requirements and claimed that its CAFE efforts would be hampered by this added weight.

We do not believe this FMVSS will adversely affect CAFE performance. Ford's claimed weight penalties appear to assume that all light trucks will require significant additional structure. However, we believe that any need for additional structure will be much more limited than Ford claims. Our estimate is that some additional weight will be

necessary, but we do not believe that Ford provided compelling evidence to alter our assessment that the impact of the FMVSS 225 requirements, will impose an inconsequential weight penalty with no adverse CAFE effect.

7. FMVSS 301, Fuel System Integrity

On November 12, 2000, NHTSA published a proposal (65 FR 67693) to amend the fuel system integrity requirements for rear-end and side crashes and resulting fuel leaks. Although a few models (generally in the middle of their production lives) might require heavy additions such as a polymer guard for the bottom of the fuel tank, most would not. Many of the vehicles to be produced for MYs 2005–2007 have anticipated the new requirements and have been designed to comply with them. We believe manufacturers will be able to meet the new requirements through the addition of lightweight items such as flexible filler necks. We estimate the average weight gain for light trucks not currently built to the new requirements to be 0.24 pounds (0.11 kilograms) per vehicle.

8. Cumulative Weight Impacts of the FMVSSs

In total, NHTSA estimates that weight additions necessitated by the FMVSS requirements that will become effective between the MY 2001 fleet and MY 2007 fleet will average about 9.5 pounds per vehicle.

NHTSA examined the changes in safety-related weight, regardless of whether mandatory or voluntary, from the plans submitted in response to the RFC and the NPRM to see if there were changes affecting their fuel economy levels. Only Ford took issue with our estimates of weight penalties and provided enough data for a complete analysis. Taken together, Ford's submissions in response to the RFC and the NPRM estimated weight impacts for complying with FMVSSs ranging from approximately 100 to 200 pounds per vehicle. Ford indicated that these weight impacts could reduce its fuel economy by approximately 0.20 mpg to 0.30 mpg. Our reading of Ford's comments indicates that the bulk of this weight increase is attributable to that company's belief that the agency will require light trucks to meet a frontal offset crash test requirement for FMVSS 208. Ford also attributes a significant weight increase to child restraint anchorage requirements and our current proposal to upgrade tire performance.

The agency agrees that we must consider all of our regulatory programs, as well as those of other agencies, when establishing CAFE standards. We also

agree that we should consider anticipated requirements as well as those that have been finalized. Having done so, however, we do not believe that new safety requirements likely to be applied to MYs 2005–2007 necessitate any reduction in the proposed standards. It appears that there is a small increase in safety related weight for FMVSS 225 for MYs 2005 and 2006 and a somewhat larger increase in safety related weight if a final rule incorporating the proposed requirements for FMVSS 202 is promulgated and applies to MY 2007 light trucks. The CAFE penalties for these weight increases are too small to alter the agency's estimates of Ford's capabilities in these years. Further, the rulemaking process will allow for ample opportunities for manufacturers to comment and the agency to consider whether any future rulemakings will in fact be inconsistent with this final rule.

B. Federal Motor Vehicle Emissions Standards

With input from EPA, NHTSA has evaluated the impact of a number of vehicle related emissions standards on fuel economy. In addition, NHTSA's Environmental Assessment examines how the CAFE standards impact air quality by affecting emissions of criteria pollutants. Many of these standards and regulations are currently being implemented through a multi-year phase-in. NHTSA believes there will not be any significant fuel economy impact between the MY 2001 baseline and MY 2007 resulting from federal or state emissions standards or regulations.

The agency's position with regard to the relationship between state laws and our federal fuel economy responsibility was set forth in the NPRM and has not changed. The EPCA statute contains a preemption provision intended to ensure a unified federal program to address motor vehicle fuel economy. As a result of that statute, no state may adopt or enforce any law or regulation relating to fuel economy.

1. Tier 2 Requirements

On February 10, 2000, EPA published a final rule (65 FR 6698) establishing new federal emissions standards for vehicles classified by EPA as passenger cars, light trucks and medium duty vehicles. These new emissions standards are known as Tier 2 standards. The Tier 2 standards marks the first time that the same set of federal emissions standards have been applied to all passenger cars, light trucks, and medium-duty passenger vehicles. Under the Tier 2 standards, light trucks include "light light-duty trucks" (or