

economy differences—at least when projected fuel prices are relatively low. The agency does not know whether this demand-side argument is true and did not receive much comment that supports or refutes it. The agency believes the plausibility of this argument is less remote than the supply-side argument but still quite speculative. Regardless of how consumers perceive fuel economy benefits when they make purchasing decisions, it is clear that consumers will experience the benefits of cost-saving technologies when they operate their vehicles—assuming the engineering-economics information underlying the NAS Report is accurate.

#### b. EIA Analysis and Employment

As part of the interagency review process, the EIA provided NHTSA with a preliminary analysis of the energy and economic impacts of an increase in light truck CAFE standards comparable to the proposed rule. NHTSA discussed this analysis in the NPRM and included a copy of it in the docket for the rulemaking. Specifically, EIA analyzed standards of 21.2, 21.7, and 22.2 mpg for MYs 2005–2007, respectively. Using its NEMS, EIA's analysis indicated that the actual average fuel economy of new light trucks would increase to 21.7 mpg in MY 2005—well beyond the 21.2 mpg required during that year—but would fall slightly short of the 22.2 mpg standard by MY 2007. The EIA analysis also projected that NHTSA's proposed rule would cause a greater increase in the cost of light trucks than estimated by NHTSA and a slight reduction in the average weight of light trucks. NHTSA estimated no weight reduction. EIA's estimates of fuel savings resulting from stricter CAFE standards for light trucks also appear to be larger than those calculated in NHTSA's analysis. Finally, EIA's projected effects on employment and real GDP are slightly negative through 2010, but become positive during 2011 to 2020.

The automobile industry commented that EIA's analysis differed from NHTSA's in that its projected effects on employment and real GDP are slightly negative through 2010, but become positive during 2011 to 2020. Additionally, commenters noted that recent studies by the Congressional Budget Office and Professor Kleit concluded that CAFE standards are not cost-effective.

As discussed in the NPRM, the differences in results of the two analyses of the proposed light truck standards stem primarily from differences in the underlying approaches of models. For example, the NEMS model effectively

treats all manufacturers identically, while NHTSA's approach relies heavily on detailed manufacturer-specific data. As a result of these differences, NHTSA's approach has advantages for analyzing the effects of near-term modest increases, while the NEMS approach is more useful for analyzing longer-term industry-wide effects of larger increases in the standards. For shorter-term analysis of modest increases in required fuel economy levels, confidential information about the differences in the relative fuel economy capabilities of the individual manufacturers at the model-specific level is essential. This is because the technology application burdens and cost impacts imposed on individual manufacturers by the stricter standards will differ significantly. Where longer-term, industry-wide analysis of significant increases in CAFE standards is required, current differences in manufacturer capabilities become much less relevant. In addition, NEMS' ability to estimate macroeconomic “feedbacks” from stricter CAFE standards is very useful.

20/20 Vision also commented on employment by stating that their study, “Fuel Standards and Jobs,” shows that raising CAFE standards by 20 percent in 2010 would net 70,000 jobs by 2010 and 30,000 jobs by 2020. This study used a large-scale econometric 80-order interindustry model of the U.S. economy using the Management Information Services, Inc. (MISI) model. This model assumes no major market penetration of hybrid, fuel cell, or alternative fuel vehicles. Public Citizen cited “Drilling in Detroit,” a report by the Union of Concerned Scientists, in support of the proposition that increased CAFE standards would lead to increased employment.

Based on our analysis of the MISI assumptions, the actual employment effects of this rulemaking would be much less than that asserted by 20/20 Vision for a number of reasons.

First, because 20/20 Vision's model assumed a 20 percent increase in CAFE for passenger cars and light trucks, and light trucks are about 50 percent of the market, its estimates should be multiplied by 0.5 for this light truck rulemaking. Second, since the proposed CAFE standard increase by NHTSA is about 7 percent (22.2/20.7 mpg) rather than 20 percent, if the model were linear, the estimate might be multiplied by 0.35 (7/20).

Third, the assumed cost impact (\$700 per vehicle, which is related to the 20 percent increase in fuel economy) is disproportionately high compared to our estimate for this rule. Fourth, the

MISI model translates increased expenditures for reconfigured motor vehicles into per unit outputs for that industry and support industries. This assumption is not appropriate. Many of the technology improvements would not increase the number of jobs. For example, moving from a 4-speed to a 5-speed or 6-speed automatic transmission would result in very few additional jobs and changing tires would result in very few additional jobs. It appears that the MISI model assumes that these are increases rather than substitutions of technologies.

Fifth, 20/20 Vision's analysis of a 30 percent increase in CAFE estimates an increase in the Motor Vehicle and Equipment Industry of about 155,000 jobs. This number seems implausible to the agency because there are currently only 900,000 jobs in the industry. Finally, the MISI model does not seem to take into account that higher prices potentially reduce sales and thus employment levels.

#### VIII. The Effect of Other Federal Vehicle Standards on Fuel Economy

The statute specifically directs us to consider the impact of other Federal vehicle standards on fuel economy. This statutory factor constitutes an express recognition that fuel economy standards should not be set without due consideration given to the effects of efforts to address other regulatory concerns, such as motor vehicle safety and emissions. The primary influence of many of these regulations is the addition of weight to the vehicle, with the commensurate reduction in fuel economy.

##### A. Federal Motor Vehicle Safety Standards

The agency has evaluated the impact of the Federal Motor Vehicle Safety Standards (FMVSS) using MY 2001 vehicles as a baseline. We have issued or proposed to issue a number of FMVSSs that become effective between the MY 2001 baseline and MY 2007. The fuel economy impact, if any, of these new requirements will take the form of increased vehicle weight resulting from the design changes needed to meet new FMVSSs.

The average test weight (roughly equal to curb weight plus 300 pounds) of the light truck fleet in MY 2001 was 4,501 pounds. The average test weight for General Motors, Ford, and DaimlerChrysler light trucks subject to the CAFE standard for MY 2001 was 4,627 pounds. The average test weight for light trucks of these three manufacturers is expected to increase slightly between MY 2001 and MY