

CAFE standards should be for future years.

The NAS found that to minimize financial impacts on manufacturers, their suppliers, their employees and consumers, sufficient lead-time (consistent with normal product life cycles) should be given when considering increases in CAFE standards. The report stated that there are advanced technologies that could be employed, without negatively affecting the automobile industry, if sufficient lead-time were provided to manufacturers. In the NAS' view, the selection of future fuel economy standards will require uncertain and difficult trade-offs among environmental benefits, vehicle safety, cost, energy independence, and consumer preferences.

All but two members of the NAS committee concluded: "the downweighting and downsizing that occurred in the late 1970s and early 1980s, some of which was due to CAFE standards, probably resulted in an additional 1300 to 2600 traffic fatalities in 1993." (NAS, pp. 3, 111.) Specifically, the Committee concluded, "to the extent that the size and weight of the fleet have been constrained by CAFE requirements' those requirements have caused more injuries and fatalities on the road than would otherwise have occurred." (NAS, p. 29). The NAS also suggested that changing the CAFE regulatory program to one based on vehicle attributes, such as weight, could eliminate the current CAFE program's encouragement of "downweighting" or the production and sale of more small cars. In addition, "credit trading" would also reduce costs. (NAS, pp. 5, 113)

In a letter dated July 10, 2001, Secretary of Transportation Norman Y. Mineta asked the House and Senate Appropriations Committees to lift the restriction prohibiting agency expenditures for the purposes of considering CAFE standards. The Department of Transportation and Related Agencies Appropriations Act for FY 2002 (Pub. L. 107-87), which was enacted on December 18, 2001, contained no provision restricting the Secretary's authority to prescribe fuel economy standards. NHTSA began work towards the establishment of light truck CAFE standards, and has since set standards applicable to light trucks for MYs 2004 through 2007 (68 FR 16868).

The Department has also focused on improvements to the fuel economy program. In February 2002, Secretary Mineta asked Congress "to provide the Department of Transportation with the necessary authority to reform the CAFE program, guided by the NAS report's

suggestions." On February 7, 2002, the agency issued a Request for Comments (67 FR 5767) seeking, in addition to data on which to base an analysis of appropriate CAFE standards for light trucks for upcoming model years, comments on possible reforms to the CAFE program. In particular, the agency sought input on possible reforms that could enhance fuel economy, protect occupant safety, advance fuel-efficient technologies, and obtain the benefits of market-based approaches. In the rulemaking establishing light truck CAFE standards for MYs 2005-2007, the agency restated its intention to pursue the potential for such reforms.

The agency is also issuing, along with this notice, a request for comments seeking information on future product plans and other matters to assist in assessing the potential impacts of any changes to the CAFE program.

II. Why CAFE Reform?

There are four prominent criticisms of the light truck CAFE program. They relate to energy security, traffic safety, economic practicability, and modernization of the definition and classification of light trucks.

First, concern has been raised that the energy-saving potential of the CAFE program is hampered by the current regulatory structure. The difference between the fuel economy standards for passenger cars and light trucks (27.5 mpg and 20.7 mpg, respectively in 2004) encourages vehicle manufacturers to offer vehicles classified as light trucks for purposes of CAFE. In addition, the CAFE program currently applies to vehicles with a gross vehicle weight rating (GVWR) of less than 8,500 lbs, encouraging manufacturers to offer products with a GVWR larger than this limit. Reconsideration of these classification rules may encourage the development of a relatively more fuel efficient fleet of vehicles.

CAFE reform may also encourage more companies to pursue strategies to comply with established CAFE standards instead of paying fines for non-compliance. Some manufacturers regularly pay penalties rather than comply with the standards. To date, the U.S. Treasury has collected over \$600 million in CAFE penalties, averaging more than \$33 million in the past ten years. A different CAFE system might induce more vehicle manufacturers to innovate with fuel-saving technologies rather than pay fines for noncompliance.

Second, concern has been raised that the current light truck CAFE standards could create safety risks by encouraging vehicle manufacturers to achieve greater

fuel economy by downweighting their light truck offerings. As the NAS report and a more recent NHTSA study have found, downweighting of the light truck fleet, especially those trucks in the low and medium weight ranges, creates more safety risk for occupants of light trucks and all motorists combined. However, both studies also suggest that if downweighting is concentrated on the heaviest light trucks in the fleet there could be a small fleetwide safety benefit. An alternative CAFE system may allow more energy savings while protecting and enhancing the safety of the motoring public.

As recommended by the NAS Report, NHTSA has updated its 1997 size and safety study and placed this updated report in the docket for technical comment. The NHTSA study considered the historical fatality statistics of model year 1991-1999 vehicles to find the average fatality increase per 100-pound reduction. This "fatality increase per 100-pound reduction" does not mean the effect of literally removing 100 pounds from a specific vehicle. It is the average increase in the fatality rates of 1991-99 models weighing W-100 pounds curb weight relative to other 1991-99 models weighing W pounds curb weight, given drivers of the same age/gender, and accounting for a variety of other factors.

In cars weighing ³ 2,950 pounds or more, overall fatality rates increased by an average of 1.98 percent per 100-pound weight reduction. If this percentage effect were applied to the baseline of all calendar year 1999 crash fatalities in the U.S. it would be equivalent to an increase of 216 fatalities per year. In cars weighing less than 2,950 pounds, the average increase in the fatality rate per 100-pound weight reduction was 4.39 percent, equivalent to 597 fatalities per year.

The findings were similar for light trucks. In light trucks weighing less than 3,870 pounds, the average increase in the fatality rate per 100-pound weight reduction was 2.90 percent, equivalent to 234 fatalities per year. In light trucks weighing 3,870 pounds or more, the average increase in the fatality rate per 100-pound reduction was 0.48 percent, equivalent to 71 fatalities per year.⁴

The study also found that trucks, starting with those weighing around 5,000 pounds (this number is an approximate arithmetic mean of the possible safety break points identified in

³ The weights in the size and weight study are curb weights, whereas those in the context of CAFE standards are gross vehicle weights.

⁴ The increase is not statistically significant, since the study provides an interval estimate from -1.06 to +1.64 percent.