

Finally, Public Citizen argued that any safety concerns associated with downweighting are irrelevant when the focus is exclusively on CAFE standards for light trucks instead of those for both passenger cars and light trucks.

We note that these comments reflect diverging views on the relationship between size and safety. Some commenters, such as CEI, embraced the proposition that increasing vehicle size always results in safety benefits. Others, such as Honda and Public Citizen, stated that they believe that other vehicle characteristics besides size have an impact on safety. For its part, Honda emphasized that vehicles can become lighter and still retain their size and ability to protect occupants. Public Citizen took the view that there are number of design characteristics that may impact the safety of light truck occupants and persons in other vehicles, including height and stability. Moreover, the organization indicated that fuel economy regulations having a potential to reduce or restrain the size of light trucks would have different safety impacts than those that might force changes in size to both cars and trucks.

As discussed below, while manufacturers point out that weight reduction is a compliance option, the CAFE standards established by this final rule can be met without the need to reduce vehicle weight and we do not believe that manufacturers will employ weight reduction to meet the standards.

#### 6. NHTSA's Proposed Standards and Projected Manufacturer Capabilities

DaimlerChrysler, Ford, and General Motors commented that it would be difficult to comply with the proposed standards. Toyota agreed that it would be difficult for other companies to meet the standard. General Motors detailed what it views as flaws in the agency's analysis of its potential capability and also provided revised product plans exhibiting different CAFE values (higher for MYs 2005–2006 and lower for MY 2007) than those it previously submitted. Ford presented revised fleet projections that are lower than those contained in its response to the RFC and discussed technologies that the agency added to Ford's fleet which are not feasible.

Public interest groups, based on public announcements by Ford and General Motors about improving fuel economy of SUVs and introduction of hybrids, supported higher standards than those proposed. Environmental Defense, Union of Concerned Scientists and Public Citizen presented analyses arguing that technology permits NHTSA

to set a higher standard. The American Council for an Energy-Efficient Economy and Cummins argued that NHTSA should take diesel technologies into account in this rulemaking. Toyota asserted that it has applied more fuel-efficient technologies, such as variable valve timing (VVT) and multi-valve cylinder heads, than most other manufacturers. It suggested that the proposed standards would encourage the entire industry to similarly apply the best available technologies.

We believe the standards established today are challenging enough to encourage the further development and implementation of fuel efficient technologies while also available enough within the applicable time frame to be economically practicable and feasible for the industry. As noted above, we have concluded that the standards set through this final rule represent the best overall balance of the statutory factors, and in addition are consistent with the protection of motor vehicle safety and American jobs.

#### 7. Estimated Fuel Savings of Technologies

Environmental Defense, American Council for an Energy-Efficient Economy, and Union of Concerned Scientists stated that NHTSA underestimated the fuel savings of the technologies it considered. Environmental Defense argued that some technologies can be optimized for increasing fuel economy, performance or other features and that NHTSA's analysis should use higher values more reflective of optimization for fuel economy purposes. In related comments, Environmental Defense and Union of Concerned Scientists argued also that the agency should hold vehicle weight and performance constant in determining future fuel economy capability instead of assuming continued increases in both.

American Council for an Energy-Efficient Economy and Union of Concerned Scientists stated that the National Research Council (NRC/NAS) values should have been used without reduction. More specifically, Environmental Defense disagreed with the agency's estimated 1–2 percent fuel economy benefit for VVT and variable valve lift and timing (VVLVT) technologies and claimed that published estimates show that optimal application of VVLVT technology provides a 10–12 percent fuel economy benefit. Environmental Defense also disagreed with the agency's 0.5 percent estimated benefit for automatic transmissions using aggressive shift logic, which, they state, shows fuel economy

improvements of 9–12 percent using 6-speed transmissions. American Council for an Energy Efficient Economy argued that NHTSA's limited consideration of only the technologies available to the Big 3 undercuts its estimates of achievable fuel economy and that NHTSA should have used the cost and benefit numbers from the NAS report.

In the NPRM, the agency indicated that it did not expect manufacturers to deviate from existing plans for vehicle weight and performance in their efforts to comply with our proposal. At the same time, our NPRM contained, as Stage III of the Stage analysis, a projection that manufacturers could replace 6.0L and larger displacement engines with smaller displacement engines of similar design. Perhaps focusing more on the statement that NHTSA did not anticipate changes in weight and performance than on an analysis containing a cutback in engine sizes, some commenters stated that we failed to realize the fuel saving benefits that would have been realizable if determinations of future fuel economy capability had been premised upon limiting further increases in light truck mass and performance.

CAFE standards must be economically practicable and, as we have observed before, consumers will not buy what they do not want. Forcing through regulation substantial deviation from product offerings based on projected consumer demand incurs a risk of running afoul of economical practicability. At the same time, maximum feasible fuel economy standards should encourage the continuing development and use of more fuel-efficient technology. Current projections of consumer demand may not fully account for potential changes in consumer preferences that may accompany new entrants in the market, fluctuating fuel prices, and other factors that can affect actual CAFE performance. The agency therefore intends to monitor the compliance efforts of the manufacturers and to examine the manufacturers' pre and mid-model year fuel economy reports filed with NHTSA through December 2004 and current market information before the onset of MY 2007.

As indicated below, our analysis and projection of manufacturer capabilities now relies on more optimistic fuel economy gains for some technologies, including low viscosity lubricants and low rolling resistance tires, than those contained in the NPRM. These revised values place the estimated fuel saving benefits of these technologies in line with the estimates contained in the NAS report.