

The EPCA expressly permits the implementation of different CAFE standards for differing classes of non-passenger automobiles (light trucks), but contains no evident corollary provision for passenger automobiles. Instead, embedded throughout the statute's terminology are references to a unified standard for passenger cars. The passenger car standard is established by statute. For non-passenger automobiles, Section 32902(a) directs the Secretary to establish average fuel economy standards and authorizes the establishment of different standards for different classes of these vehicles.

In light of these statutory constraints, the following sections present alternatives in three major areas for which the agency believes it clearly has the authority to implement reforms to the CAFE system: (1) Revising the structure of light truck standards to create differing classes of light truck CAFE requirements; (2) revising the vehicle classification definitions for determining whether a vehicle is a light truck or passenger car for CAFE purposes; and (3) increasing the weight limit for vehicles covered by CAFE standards from 8,500 lbs. GVWR to 10,000 lbs. GVWR. Although each option is presented separately on its own merits, the agency could consider combinations of various reforms. The impacts of various combinations have not been analyzed at this time. However, the agency welcomes comments regarding combinations of reforms.

V. The Structure of Light Truck Standards

In this section, two structural reforms for light truck standards are discussed. The first divides light trucks into two or more classes based on vehicle attributes. The second is an attribute-based "continuous-function" system, such as that discussed in the NAS report. In the discussion below, we have chosen measures of vehicle weight and/or size to illustrate the possible design of an attribute-based system. However, we also seek comment as to the merits of other vehicle attributes as the basis of an attribute-based system.

An attribute-based standard for light trucks based on vehicle weight is worthy of serious consideration for several reasons. First, a weight-based standard, by applying more stringent standards to lighter trucks, would reduce or eliminate the incentive for manufacturers to comply through downsizing, downweighting, or through offering for sale more products at the lighter end of the weight spectrum. These CAFE compliance strategies can

increase safety risks and, depending on their application, could have safety implications if used with light trucks in the future. Second, a weight-based standard would provide a level playing field for manufacturers who choose a product mix tilted toward the low, middle, or heavy end of the light truck spectrum. Finally, a weight-based standard would provide an alternative basis for establishing "maximum feasible levels" of fuel economy, since the top performing vehicles within each weight class could, subject to mitigating factors (e.g., acceleration capability and towing capacity), serve as a starting point for an analysis of the "maximum feasible level" of average fuel economy achievable by manufacturers competing in each weight class. Without the structure provided by weight classes, the determination of a "maximum feasible level" must be geared to the overall fleet.

The Japanese government is already using a simple weight-based standard to reduce fuel consumption in the transportation sector of the Japanese economy. There are eight weight classes in the Japanese system, which encompasses both cars and light trucks. Average fuel economy targets are set within each weight class, and the targets are more stringent for the lighter weight classes and less stringent for the heavier weight classes. The targets for gasoline-powered passenger vehicles were set for 2010 and represent about a 23% improvement in fuel economy compared to the 1995 baseline. Fuel economy targets are selected by a "top runner" method, whereby the targets for each weight class are established in part based on the best performing vehicle in that weight class. The original system was established without any opportunity for a multi-class manufacturer to average compliance across classes, as is the case in the present U.S. system (where manufacturers can "offset" under-compliance in one vehicle class on a one-for-one basis with over-compliance in the other). However, more recently the Japanese system was modified to allow "offsets" on a two-for-one basis: credits earned by a better-than-required fuel economy performance in one weight class are discounted by 50% when applied to compensate for worse-than-required performance in another weight class.

There are two basic objections to a weight-based system. The first objection is that such a system will increase the cost of compliance to manufacturers and consumers by removing the substitution of lightweight materials as a compliance strategy. Although this objection is

theoretically valid, the NAS—after examining a wide range of CAFE compliance strategies—did not find the substitution of lightweight materials to be one of the more cost-effective strategies. Thus, it is not clear how important this objection will be for near-term regulatory policy.

The second objection is that a weight-based standard might not reduce fuel consumption because it will permit or cause light trucks to become larger and heavier over time. Consumers may demand larger light trucks and/or manufacturers may offer heavier light trucks if they are regulated less stringently. If more light trucks are offered in the heavier weight classes, it is theoretically possible that the overall fuel economy of the fleet would not increase significantly or might even decline under a weight-based standard. In order to prevent such an outcome, some have suggested that a weight-based standard must be accompanied by an overall fuel economy target for the entire light-truck fleet.

Although some of the fuel savings under a weight-based standard may be offset by "upsizing" or "weight creep," it would not be wise to reject a weight-based standard on the basis of this argument alone. First, over time, the relative stringency of the standards for different weight classes can be adjusted or new weight classes created in order to dampen or eliminate any incentives to "upsize" into the less stringent class. Second, it is instructive to note that the Japanese government did not accompany their weight-based standards with a binding target for the entire fleet of new vehicles. It is too early to draw firm conclusions from the Japanese experience, but the early evidence suggests that the overall fuel economy of the Japanese fleet improved about 5% from 1995 to 2000, despite some upsizing trends in that fleet. Third, while vehicle manufacturers can be expected to make small, strategic adjustments in the weights of products that happen to be on the border between two weight classes, it is doubtful that they would make a vehicle significantly heavier (and possibly more expensive)—beyond what consumers demand—simply to be classified in a slightly more permissive weight class. Light truck manufacturers know that product design decisions must be made on the assumption that a particular design will be produced for at least 4 to 8 years and they know that fuel economy standards—and definitions of weight classes—could be changed during the life of a product. Finally, any strategic behavior by vehicle manufacturers would be much greater under the