

BRIEF ANALYSIS

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Will Minivans Become an Endangered Species?

A casual glance at the nation's highways shows that much has changed in the last 25 years. The changes include fewer large family cars on the road, a dramatic increase in the number of light trucks and sport utility vehicles (SUVs) and the introduction of minivans.

By contrast, station wagons, which were large, powerful and able to carry seven people and haul a boat, have almost disappeared. If federal regulators have their way, minivans and SUVs will go the way of the station wagon. In the process, American lives, especially those of children, will be put at risk and gas will be wasted.

Birth of CAFE. The near extinction of station wagons and corresponding ascendance of minivans can be traced to the same source: the federal Corporate Average Fuel Economy (CAFE) standard. CAFE, enacted during the 1975 "energy crisis," required auto manufacturers to meet certain mileage standards in order to reduce America's reliance on foreign oil.

- Original CAFE standards were 18 miles per gallon (mpg) for cars and 15.8 mpg for light trucks up to 6,000 pounds.

- Current CAFE standards are 27.5 mpg for cars and 20.7 mpg for light trucks.

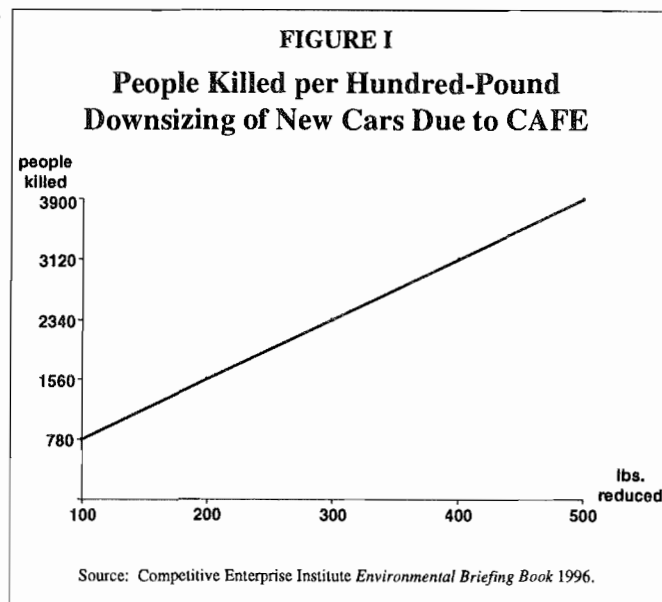
Since 1974, domestic new car fuel economy has increased 114 percent from 13.2 mpg to 28.3 mpg, and light truck fuel economy has increased 56 percent from 13.1 mpg to 20.5 mpg. All of this improvement occurred while the use of foreign oil increased. Oil imports have risen from 35 percent in 1974 to more than 50 percent in 1995, indicating that when cars become less expensive to drive, people drive more.

Decline of the Large Car, Rise of the Minivan. Under CAFE, efficiency is based on the average number of miles each of an automaker's cars can travel on a gallon of gas. After CAFE, the presence of gas guzzlers

in a product lineup could sink the maker's overall fuel economy number. This is why, over time, makers built fewer large, rear-wheel-drive cars with V-8 engines.

However, CAFE treated pickup trucks and vans differently. In the 1970s trucks and vans were concentrated in rural areas and made up only a small fraction of the vehicles in the United States. They were listed in the category "light trucks" and given lower fuel economy standards to meet. This opened the door for SUVs and minivans, now the fastest growing segment of the American vehicle fleet — accounting for more than 40 percent of new purchases.

How CAFE Standards Kill. At the time CAFE became law, manufacturers pointed out that the proposed standards would require transforming the nation's auto fleet from large cars with powerful engines to cars smaller in size and engine power, since the most efficient way to improve fuel economy is to reduce the size and power of vehicles. Compact cars would be more efficient based on miles per gallon of gas they consumed. Unfortunately, they also would be less safe. As far back as 1989, consumer advocate Ralph Nader admitted that "larger cars are safer — there is more bulk to protect the occupant," and numerous studies have proved the



point. For example:

- Researchers at Harvard University and the Brookings Institution found that, on average, for every 100 pounds shaved off new cars to meet CAFE standards, between 440 and 780 additional people were killed in auto accidents — for a total of 2,200 to 3,900 lives lost per model year. [See Figure I.]

- National Highway Traffic Safety Administration (NHTSA) data indicate that 322 additional deaths per year occur as a direct result of shaving just 100 pounds from already downsized small cars, with half of the deaths attributed to small car collisions with light trucks/sport utility vehicles.

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Expanding CAFE. Since small cars are usually the losers in collisions with SUVs and minivans, the consumer-oriented Center for Auto Safety argues that it's unfair to put them on the same roads and wants to force manufacturers to make minivans and SUVs lighter and smaller. Accordingly, advocates of CAFE want to tighten the rules. They want to raise the passenger car CAFE standard to 40 mpg or higher and eliminate the lower standards for minivans and SUVs. If they get their way, more people will drive more dangerous vehicles.

Requiring all vehicles to be smaller would increase people's overall risk of death or injury in accidents. Worse, since the overwhelming majority of minivan and SUV owners are families — soccer moms, not young singles, use minivans — many of the additional casualties would be children.

The Inefficiency of Increasing CAFE Standards. Ironically, new CAFE standards may actually decrease vehicle-use efficiency and increase the overall amount of fuel used and miles traveled. While almost all subcompact cars may meet or exceed the current CAFE standard of 27.5 mpg, these cars are able to seat only four adults, and most can seat only two adults comfortably. By contrast, most full-sized cars can seat five adults comfortably, minivans and most SUVs can seat seven adults, and larger SUVs like the Chevrolet Suburban can seat up to nine people and haul a trailer or boat — which no subcompact can do safely.

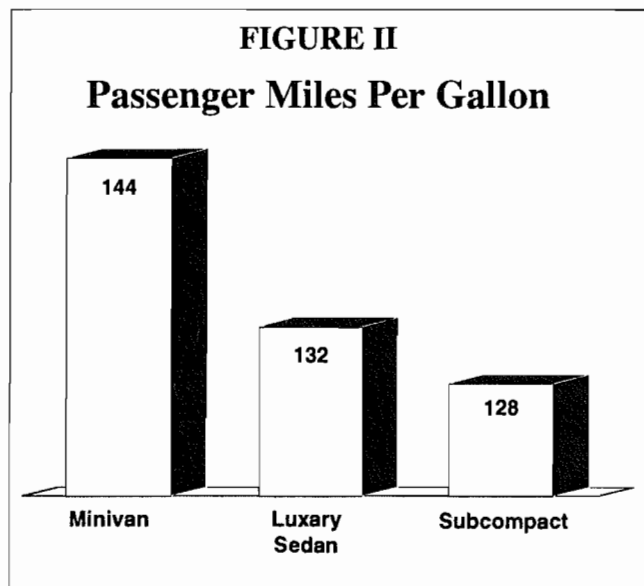
While EPA ratings suggest that minivans and SUVs may use slightly more fuel (18 mpg to 23 mpg on the highway is typical), they actually do better than compacts, based on the passenger miles traveled on a gallon of gas (PMPG). When filled to capacity on one gallon of gas:

- Minivans get 144 passenger miles per gallon of gas.
- Luxury sedans or SUVs get 132 passenger miles.

- Subcompacts get 128 passenger miles.[See Figure II.]

Consumer Choice Is the Issue. Families, especially those with children, want large, safe vehicles. According to demographic data from Chrysler, Ford and General Motors:

- Minivans are typically found in households of 3.5 or more people.
- SUVs are found in households of 3 or more people.
- Subcompacts are typically purchased by singles with no children — households of less than two people on average.



These figures indicate that families are also efficient shoppers based on PMPG. Carrying the average number of people in the household per gallon of gas:

- Minivans get 64.8 passenger miles.
- Luxury sedans and SUVs get 70.2 passenger miles.
- Subcompacts get 60.8 passenger miles.

If the government increases the CAFE standards, automakers will be unable to produce minivans and sport utility vehicles large enough

to meet families needs. As a result, families will pack more people into smaller cars or make more trips. Either will be less safe and less efficient.

Conclusion. Due to safety concerns, Congress has frozen CAFE standards since 1985. The efficiency gains already achieved should encourage lawmakers to stay the course. Congress should encourage people's right to choose the vehicle that meets their needs. This will produce a mix of vehicles that are both safer and more efficient.

This Brief Analysis was prepared by Eric Peters, who writes on automotive issues for The Washington Times and H. Sterling Burnett, NCPA environmental policy analyst.