# Government-Mandated Fuel-Efficiency Standards

BY MICHAEL HEBERLING

Government mistakes have long lives. In response to the energy crisis of the 1970s, Congress passed the Energy Policy and Conservation Act. This legislation had two major objectives: 1) Reduce our overall consumption of petroleum and 2) reduce our dependence on foreign oil (meaning OPEC). The means to accomplish this was CAFE, Corporate Average Fuel Economy. Under CAFE automobile manufacturers were required to produce cars that averaged 18 miles per gallon. For light trucks the standard was 15.8 MPG. There was some flexibility. Every car (or truck) did not have to meet the standard. However, the average of all models (small, medium, and large) had to meet or exceed the standard. Failure to do so would result in a fine of $55 per car for every MPG shortfall. CAFE initially took effect with the 1978 models. The standard was increased in 1985 to 27.5 MPG for cars and to 20.7 MPG for light trucks. The light-truck standard will increase to 22.2 MPG in 2007.

As happens so often, the results of the fuel-efficiency program were opposite of the stated objectives. By reducing the per-mile cost of driving, it became economical to drive more. Forget carpooling and public transportation. The significant savings in MPG (114 percent improvement for cars and 56 percent improvement for light trucks) were more than offset by an increase in the per capita miles driven (through more leisure driving and living farther away from the workplace). So instead of seeing a drop in oil consumption, there was *a significant increase*. In 1975 U.S. consumption of oil was 14.4 million barrels per day. Today, we consume 18.7 million barrels per day. Given this revelation, it should not come as a surprise that oil imports did not decrease as predicted but *increased*. In 1975, before CAFE, we imported 37 percent of our petroleum requirements. According to the government's *Monthly Energy Review* of July 2005, with CAFE we now import 64 percent. CAFE neither reduced America's use of foreign oil nor lowered our consumption of gasoline.

Even if the masses had done what the elite class wanted (that is, drive less), it is unlikely the results would have been much better. Conventional wisdom assumes that most of a barrel of petroleum becomes gasoline for automobiles. Actually, gasoline accounts for less than half (44 percent) of the petroleum end-products. Some of the other end-products include: petrochemicals (such as plastics), jet fuel, diesel fuel, kerosene, propane, and home heating oil.

When the CAFE standards took effect in 1978, the initial impact was benign. Because of the high gas prices, consumers already strongly preferred high-mileage cars. There was no need for a mandate because consumers and the auto industry were responding to market conditions. In 1981 prices peaked at an inflation-adjusted $3.07 a gallon. After that, real gas prices started to plummet. By 1986 they had fallen to the lowest levels in 30 years. As a result, American consumers were abandoning the small cars for their true love: Big Cars. Unfortunately, Phase II of CAFE was just kicking in. The federal government was now pulling the auto industry and the consumer in opposite directions. By law the auto industry would be punished if it provided products that the consumer wanted. The industry had no choice but to pursue the following suicidal strategy: Overcharge for the big cars consumers demanded in order to restrict

*Michael Heberling (mheber01@baker.edu) is president of the Baker College Center for Graduate Studies in Flint, Michigan.*

sales, and give away the small cars that consumers didn't want in order to encourage sales.

Unfortunately, consumers responded to this shell game in a way that neither the government nor the auto industry wanted. They stopped buying cars. The large-car market has effectively been replaced by pickup trucks, SUVs, and minivans. The light-truck market, which is not subject to the same CAFE restrictions as cars, has gone from 28 percent of the market in 1987 to over 55 percent today. This consumer rebellion also resulted in the following CAFE irony: The fuel-economy average for all vehicles dropped from 26.2 MPG in 1987 to the 24.4 MPG today.

It would be hard to find a more anti-consumer, anti-business, anti-jobs, or anti-American piece of legislation. The CAFE laws forced the Big Three auto industry to unilaterally surrender its strong suit, the large-car market, and go head to head against the small-car strong suit of the Japanese manufacturers. This was no contest. In 2004 the top four selling cars were are all Japanese: Toyota Camry, Honda Accord, Toyota Corolla, and Honda Civic.

To make compliance even more difficult, each of the Big Three American automobile companies actually have to meet two sets of CAFE standards, one for domestically produced cars and one for foreign-made cars. In other words, the U.S. companies could not use their high-MPG foreign-produced cars to offset low-MPG domestic cars. Since the large cars were more likely to be produced in the United States, the domestic-fleet target of 27.5 MPG was all but unreachable. To avoid fines for producing cars that the consumer wanted, the auto industry had four options: 1) downsize the large cars, 2) stop production of large cars, 3) move large-car production overseas, or 4) make the domestic large cars "foreign" by outsourcing at least 25 percent of the parts. If all this seems insane, that's because it is.

Besides being ignorant of economics, our elite class does not know much about engineering. They assume that the auto manufacturers are deliberately hiding the technological silver bullet that will enable cars to get phenomenal gas mileage. While a few known engineering changes could make marginal improvements, the only proven way to make substantial gains in miles-per-gallon efficiency is to reduce the weight of cars. This is accomplished by both making the cars smaller and by replacing steel parts with plastic parts. The average weight of new cars has dropped by an average of 1,000 pounds since CAFE became law. While lighter cars get significantly better gas mileage than heavier cars do, this comes with a price. There is an unavoidable tradeoff between better mileage and safety. The following is not rocket science, just Physics 101: Lightweight cars are less able than heavyweight cars to absorb the impact associated with a crash. In the late '90s the Geo Metro was able to get 44 MPG. According to the EPA, this was one of the most fuel-efficient cars in America. The Geo Metro was also ranked by the Insurance Institute for Highway Safety as one of the most dangerous cars in America. It had a death rate double that of the overall car average.

## Deadly Standards

As Robert Crandall of the Brookings Institution and John Graham of the Harvard School of Public Health wrote in the *Journal of Law and Economics* in 1989: "CAFE will be responsible for several thousand additional fatalities over the life of each model-year's cars. We conclude that the real social cost of government-mandated fuel economy is much greater than is commonly believed." They went on to state: "We estimate that these 1989 model year cars will be responsible for 2,200-3,900 additional fatalities over the next ten years because of CAFE." While Crandall and Graham looked only at the 1989 model cars, CAFE-induced fatalities apply to every model year car since 1978.

Echoing a similar conclusion, in 2002 the National Academy of Science estimated that CAFE was responsible for between 1,300 and 2,600 fatalities and 13,000 to 26,000 incapacitating injuries in 1993. Based on data from the National Highway Traffic Safety Administration and the Insurance Institute for Highway Safety (IIHS), *USA Today* reported on July 2, 1999 (based on data through 1998) that 46,000 people had died needlessly since the CAFE legislation became law. The article also stated: "Small cars comprise 18 percent of the vehicles on the road. . . . Yet they accounted for 37 percent of the vehicle deaths in 1997." Given that the congressionally mandated killing and maiming has been going on another seven years, it is probably time to revise the total carnage figure to around 60,000 fatalities.

It has been 28 years since CAFE became law. A case could be made that this was (and continues to be) the worst piece of legislation ever passed by Congress. Contrary to grandiose predictions, it did not reduce oil consumption and it did not decrease our dependency on uncertain foreign sources of oil. It did, however, result in 60,000 deaths and hundreds of thousands of serious injuries. And it has all but destroyed America's Big Three auto companies. Given the damage done, CAFE should be scrapped. Any pending CAFE legislation should be permanently tabled as well.

Micromanaging the automobile industry through government centralized planning has been a colossal failure. It is time to let the marketplace create jobs, save lives, and efficiently allocate resources. The automakers should no longer be punished for producing products that consumers want. Consumers are fully capable of making rational decisions about cost, safety, fuel efficiency (hybrid and non-hybrid), comfort, appearance, and size without government mandates. They need no help from politicians, bureaucrats, consumer advocates, environmentalists, or media pundits. If a family wants to buy a safe vehicle big enough to transport grandma and all the kids, why is this controversial? It is time to restore freedom of choice in the automobile market.