

Highlights of GAO-07-921, a report to the Chairman, Committee on Commerce Science, and Transportation, U.S. Senate

August 2007

## VEHICLE FUEL ECONOMY

# Reforming Fuel Economy Standards Could Help Reduce Oil Consumption by Cars and Light Trucks, and Other Options Could Complement These Standards

### Why GAO Did This Study

Concerns over national security, environmental stresses, and high fuel prices have raised interest in reducing oil consumption. Through the Corporate Average Fuel Economy (CAFE) program, the National Highway Traffic Safety Administration (NHTSA) requires cars and light trucks to meet certain fuel economy standards. As requested, GAO discusses (1) how CAFE standards are designed to reduce fuel consumption, (2) strengths and weaknesses of the CAFE program and NHTSA's capabilities, and (3) market-based policies that could complement or replace CAFE. To do this work, GAO reviewed recent studies and interviewed leading experts and agency officials.

### What GAO Recommends

Congress should consider giving NHTSA the (1) authority to reform the car CAFE program as it did the light truck program, (2) resources to update information on new fuel-efficient technologies, and (3) flexibility to adjust the program in the future.

GAO recommends NHTSA analyze the need for enhancements to the CAFE program, and, in conjunction with the appropriate agencies, evaluate policies meant to reduce fuel consumption to ensure they are achieving stated goals. DOT agreed to consider the recommendations; EPA agreed with the recommendations; and DOE did not comment on GAO's recommendations.

[www.gao.gov/cgi-bin/getrpt?GAO-07-921](http://www.gao.gov/cgi-bin/getrpt?GAO-07-921).

To view the full product, including the scope and methodology, click on the link above. For more information, contact Katherine A. Siggerud at (202) 512-2834 or [siggerudk@gao.gov](mailto:siggerudk@gao.gov).

### What GAO Found

NHTSA, an administration within the Department of Transportation (DOT), is primarily responsible for setting and enforcing CAFE standards for cars and light trucks, although the Environmental Protection Agency (EPA) and the Department of Energy (DOE) are also involved. NHTSA raised the light truck CAFE standards from 20.7 miles per gallon (mpg) in 2004 to 22.2 mpg in 2007. Subsequently, NHTSA, which has authority to restructure the light truck program, set different standards for light trucks of different sizes. The new approach takes full effect in 2011. However, NHTSA has not raised the CAFE standard for cars above 27.5 mpg since 1990 due, in part, to provisions in DOT's annual appropriations acts for fiscal years 1996 through 2001 and, more recently, to NHTSA's desire to restructure the car CAFE program before raising the standard to avoid potential negative safety impacts.

Many experts believe CAFE has helped save oil—for example, a study by the National Academy of Sciences estimated that in 2002 CAFE contributed to saving 2.8 million barrels of fuel a day in passenger vehicles, or 14 percent of consumption in that year. CAFE would help the nation work toward fuel-saving goals if standards are increased, and GAO's evaluation of NHTSA's capabilities suggests the agency could act quickly to implement new standards and restructure the program. However, GAO identified several characteristics that limit CAFE's potential to save fuel. Several refinements to the CAFE program could improve its effectiveness and reduce costs, such as setting different standards for cars of different sizes as the restructured light truck program does and instituting a broader CAFE credit trading program. The Senate recently passed a bill modifying the CAFE program that includes these refinements.

Meeting the nation's goals to reduce oil consumption over time will require more than CAFE alone, and GAO identified several market-based incentives involving passenger vehicles that could complement and strengthen CAFE's fuel-saving effects or that potentially could serve as alternatives to CAFE. Some market incentives, such as a tax credit for hybrid vehicles and the Gas Guzzler Tax on fuel-inefficient cars, currently exist to encourage consumers to buy fuel-efficient vehicles. However, GAO identified other vehicle purchasing incentives that may work at cross purposes to those intended to reduce fuel consumption. For example, market incentives have been used to increase the availability and use of alternative fuels; however, GAO's recent report on one of these efforts identified several limitations. Several additional policy options, including a tax on fuel or a carbon cap-and-trade program, would affect a broader range of fuel-saving behaviors among consumers and would likely be more cost-effective than CAFE. Such options could help the nation reach larger, long-term fuel-saving goals at a lower cost than CAFE, but time would be needed to design and garner support for each before it was implemented. However, increasing the CAFE standards and considering options to improve the program would contribute to fuel-saving goals in the immediate future.