

**Consumer Federation of America** 

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#### RURAL HOUSEHOLDS BENEFIT MORE FROM INCREASES IN FUEL ECONOMY

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One of the great myths in the fuel economy debate is the claim that increasing the fuel standards will hurt rural households. The auto industry is more than willing to propagate this myth because inefficient pick-up trucks are among their highest profit models<sup>1</sup>. However, a little bit of common sense and research from the National Academy of Sciences<sup>2</sup> shatters the myth and shows that **the auto company campaign against higher CAFE standards is hurting rural America.** 

### Compared to households in metropolitan areas, households living outside of metropolitan areas use much more gasoline than those in metropolitan areas:

- They are more likely to have a vehicle.<sup>3</sup>
- They drive 15% more miles (28,397 v. 24,674)<sup>4</sup>
- They get 6% fewer miles per gallon (19.70 v. 20.91)<sup>s</sup>
- They consume 21% more gasoline per year ((1,437 v. 1,180)<sup>6</sup>
- They spend 20% more on gasoline (\$2683 v. \$2239)<sup>7</sup>
- Trucks get 30% fewer miles per gallon (16.2 v. 22)<sup>8</sup>
- Trucks are kept on the road 11% longer (10.1 years v. 9 years)<sup>9</sup>

<sup>&</sup>lt;sup>1</sup> Michael Maynard, "Caution: Lower Truck Sales Ahead," *New York Times*, June 9, 2007, B1.

<sup>&</sup>lt;sup>2</sup> National Research Council, *Effectiveness and Impact of Corporate Average Fuel Economy (CAFÉ) Standards* (Washington, DC: National Academy Press, 2002).

<sup>&</sup>lt;sup>3</sup> Summary of Travel Trends: 2001 National Household Travel Survey, December 2004, p. 36.

<sup>&</sup>lt;sup>4</sup> Economic Research Service, U.S. Department of Agriculture, Amber Waves of Grain, April 2006.

<sup>&</sup>lt;sup>5</sup> Id. <sup>6</sup> Id.

<sup>&</sup>lt;sup>7</sup> U.S. Bureau of Labor Statistics, Consumer *Expenditure Survey*, various years, 2005 adjusted to 2006 with Energy Information Administration, Gasoline Price database.

<sup>&</sup>lt;sup>8</sup> Energy Information Administration, *Monthly Energy Review, April 2007.* 

<sup>&</sup>lt;sup>9</sup> Office of Highway Policy Information, U.S. Department of Transportation, Attributes of the U.S. Vehicle Fleet.

## As a result of these differences, the burden of recent increases in gasoline prices falls heavier on rural households than non-rural households



Exhibit 1: The Mounting Burden of Rising Gasoline Prices on Household Budgets

Source: Bureau of Labor Statistics, Consumer Expenditure Survey 1999-2005. 2006 projected based on increase in gasoline prices from the Energy Information Administration and increases in personal income from the Joint Economic Committee, *Economic Indicators: April 2007*.

- Rural households have suffered an increase in their gasoline bills of almost \$1,300 in the past five years, compared to urban households who have experienced an increase of about \$1,000.
- Because rural households have lower incomes in addition to higher gasoline expenditures, the burden of rising gasoline prices is heightened. While urban households have seen gasoline expenditures increase from about 2.4% of income to about 3.5%; for rural households the increase has been from about 3.3% to about 5.4%.

We have calculated a direct consumer pocketbook test for vehicles getting 35 miles per gallon. Since most households take out auto loans to finance their purchase of new vehicles, we estimate the net monthly bill for loan payments plus the cost of gasoline (see Exhibit 2).

Exhibit 2: Consumer Analysis of 35 mpg vehicles: Rural Households save Twice as Much		
	All Households	<b>Rural Households</b>
Loan Payment increase	\$1909	\$1909
Life of Loan (5 years)		
<b>Fuel Cost Savings</b>	\$2487	\$2984
Net savings	\$ 578	\$1075
Life of vehicle (10 years)		
<b>Fuel Cost Savings</b>	\$3480	\$4176
Net Savings	\$991	\$2267
Assumptions \$3 per gallon, constant real dollars; 5-year, 7% loan, an average \$1600 per vehicle to achieve 35 mpg. Rural household gasoline expenditures exceed urban households by 20%.		

- We find that fuel efficiency pays for itself, since the reduction in gasoline expenditures is greater than the increase in monthly loan payments.
- Savings for rural households are likely to be twice as large as those for urban households and the longer the household holds onto the car, the greater the savings, another factor that is likely to benefit rural households more.

The National Highway Traffic Safety Administration (NHTSA) used the National Research Council estimates of the cost of fuel efficiency to conduct a national cost-benefit analysis of increasing CAFE. In spite of unrealistic and irresponsible assumptions biased against fuel economy,<sup>10</sup> its analysis shows that increasing fuel economy for the new vehicle fleet by about 4% per year, or about 10 miles per gallon, in ten years is cost justified.

### The net national economic benefits of increasing fuel efficiency for trucks are three times as great as the net national benefit for cars.

To examine cars and trucks, we used the NHTSA data on 4% per year improvements and compared the cost of fuel efficiency to the value of energy savings (see Exhibit 3). We used gasoline prices of \$3 per gallon (whereas NHTSA used only \$1.50 per gallon).

• Both the costs and benefits for trucks are higher and the benefit of increasing fuel efficiency for trucks is about two and a half times as large.

# All of these analyses show that it is time for the Senate, which is uniquely designed to represent the interest of rural areas, to act on the facts and raise the CAFE standard for all vehicles.

<sup>&</sup>lt;sup>10</sup> A Consumer Pocketbook And National Cost-Benefit Analysis Of "10 in 10" Increasing Cafe Standards 10 Miles Per Gallon Over Ten Years Will Save Consumers Money and Help Cure the National Oil Addiction, June 2007 available at http://www.consumerfed.org/pdfs/CFA\_Cost-Benefit Analysis of 10 in 10, June 07.pdf



Exhibit 3: Cost-Benefit of 4% per Year CAFE Increase.

Sources: National Highway Traffic Safety Administration, Cafe Compliance and Effects Modeling System, Documentation (Draft, 5/.26/06). Calculated as the number of gallons saved time \$3/gallon. The number of gallons saved includes NHTSA's excessively large rebound effect, which assumes 20 percent of the simple savings are consumed by increased driving.