



Consumer Federation of America

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GASOLINE PRICES AND EXPENDITURES IN 2011

RECORD HIGH LEVELS DRIVE CONSUMER CONCERNS AND INCREASED SUPPORT FOR A 60 MILES PER GALLON FUEL ECONOMY STANDARD

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INTRODUCTION

Over the past decade, the Consumer Federation of America (CFA) has examined the issue of fuel economy and mileage standards (Corporate Average Fuel Economy or CAFE standards) of cars and light trucks as well as the price of gasoline from the point of view of economics, technology and public opinion.¹ In this report, we find that concern about gasoline prices is higher than in any of the previous 11 surveys we conducted. This is not surprising, given the headlines of the past two weeks. Looking past the headlines, we find important shifts in the economics and in public opinion about gasoline consumption that have changed the environment for auto makers and policy makers. The problem that President George W. Bush, an oil man from Texas, declared to be a national “oil addiction” has become a middle class problem.

Over the past six years, Congress and the executive branch have begun to respond, putting in place the tools to do what Presidents and Congresses have all recognized needs to be done since the first oil price spike nearly 40 years ago – dramatically change the trajectory of United States gasoline consumption.

This report reviews the harsh reality that American gasoline consumers face today, a reality that sets the stage for critically important policy decisions that have already been teed up for later this year.

OUTLINE

Section I begins with a discussion about the findings of the public opinion poll, describing the public’s concern about gasoline prices for two reasons. First, this is where we see clear evidence of the emergence of a middle class issue. Second, policy makers are attuned to consumer concerns.

Section II examines the economic impact we believe is driving concern and the changing terrain of policy making, looking at the cost of gasoline and its impact on household expenditures.

Section III briefly reviews the policy developments over the past few years in the fuel economy space.

PUBLIC OPINION ABOUT GASOLINE AND FUEL ECONOMY STANDARDS

Methodology

A national random-sample survey conducted March 3-6, 2011, asked respondents about their concerns with regard to gasoline. We used a standard set of questions that we have used for six years:

Now I would like to ask you several questions about energy, oil and automobile fuel economy.

¹ Appendix A provides a list of those analyses.

Thinking about the NEXT FIVE YEARS, how concerned, personally, are you about the following issues? Please use a scale of 1 to 5, where 1 means no concern and 5 means great concern.
[ROTATE ITEMS]

- No concern (1)*
- (2)*
- (3)*
- (4)*
- Great concern (5)*
- DON'T KNOW*

Gasoline prices
U.S. dependency on Mid-Eastern oil
OMITTED

For the past two years, we have targeted a high level for the fuel economy standard in the long term with the following question:

The federal government has recently required automobile manufacturers to increase the fuel economy of their motor vehicle fleets from an average of 25 miles per gallon today to 35 miles per gallon by 2016.

Do you think the government should increase this standard to an average of 60 miles per gallon by 2025?

- YES*
- NO*
- DON'T KNOW*

Similar questions were used in earlier years, but lower targets for the standard were used.

For purposes of discussion, we identify five groups within the population. As shown in Table 1, the categories used in the survey and those used in the Consumer Expenditure Survey to analyze household expenditures are similar.

TABLE 1: INCOME GROUPS

Category		Survey Boundary	2009 Consumer Expenditure Survey Boundary	Average
Lower Income	Lower	Less than \$25,000	Less than \$19,176	\$9,846
Lower Middle	} Middle	\$25,000 to \$49,999	\$19,176 to 35,598	\$27,227
Middle		\$50,000 to \$74,999	\$35,599 to \$57,925	\$46,016
Upper Middle	} Upper	\$75,000 to \$100,000	\$5,7926 to \$93,784	\$74,417
Upper		\$100,000 or more	\$93785 or more	\$157,613

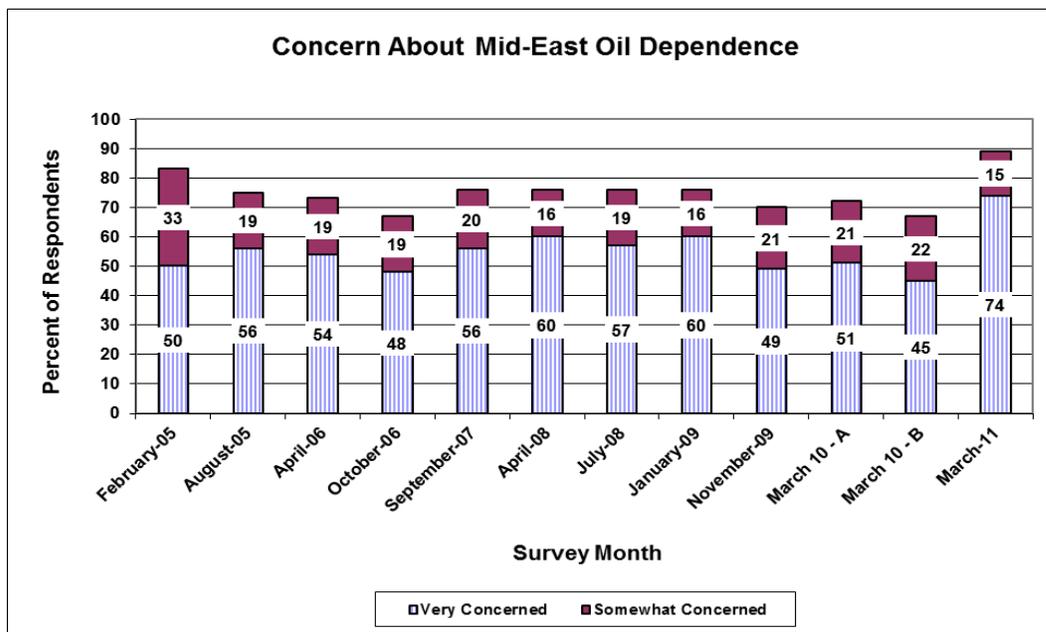
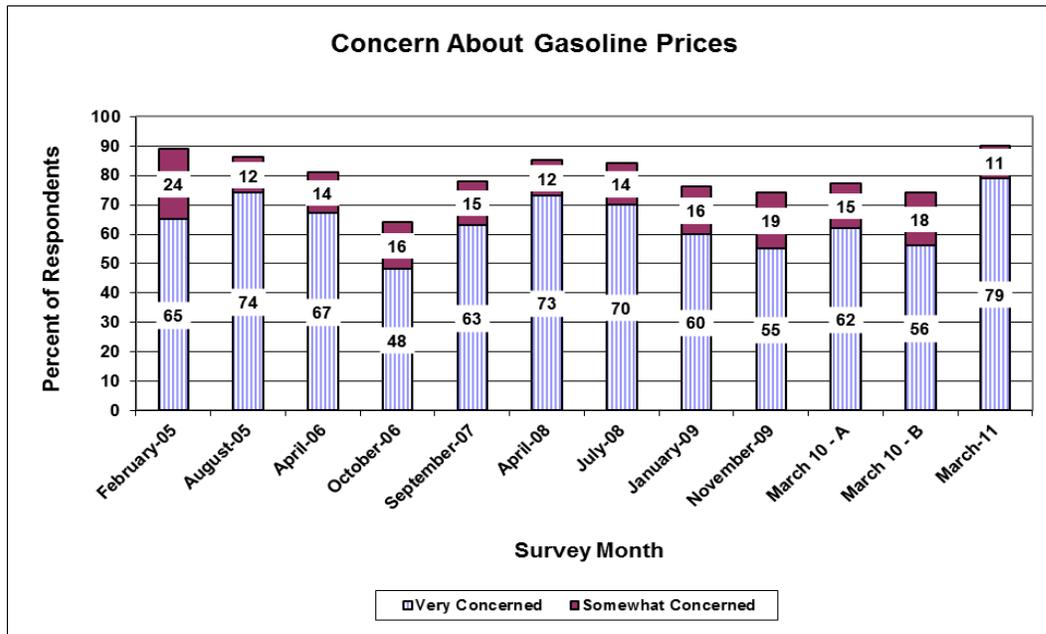
Sources: ORC Methodology, Bureau of Labor Statistics, Consumer Expenditure Survey, 2009.

For the purpose of the discussion, we will combine the lower-middle and middle into a broad category of middle class. The labels and cut points are arbitrary, dictated in part by the availability of the data. However, the underlying differences are quite clear.

Concern About Gasoline

Figure 1 shows the responses to the question about concern over gasoline prices in all 11 surveys we have conducted in the past six years. In responses to a national random-sample public opinion poll conducted from March 4-6, 90% of respondents said they are concerned about gasoline prices, 79% said they are greatly concerned. This is

FIGURE 1: CONCERNS ABOUT GASOLINE

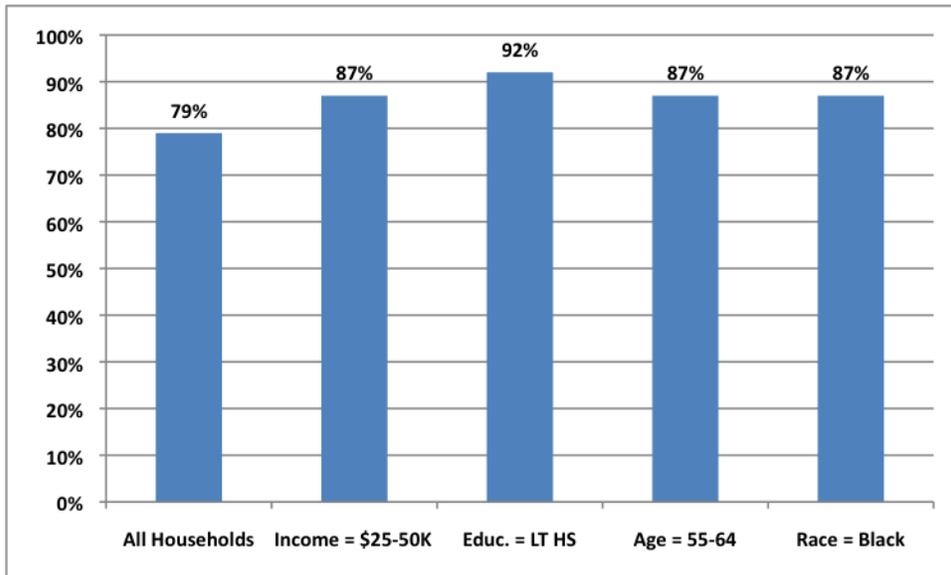


the highest level of concern we have found since we started polling on this question six years ago, especially with respect to the question of great concern. In contrast to the 79% greatly concerned about prices today, great concern in past surveys has been in the range of 47% to 74%. The increase from the last survey of more than 20 percentage points is the largest we have observed.

It is not only price that concerns the survey respondents. Almost as many, 89%, said they are concerned about our dependence on Mid-East oil, 74% said they are greatly concerned. Here, too, this is the highest level ever. In fact, the jump in concern about Mid-East dependence is even larger than the increase in concern about price. The percentage that is greatly concerned, 74%, is much higher than in the past, where the greatly concerned percentage never exceeded 60. One need only listen to the lead story on the nightly news to understand why.

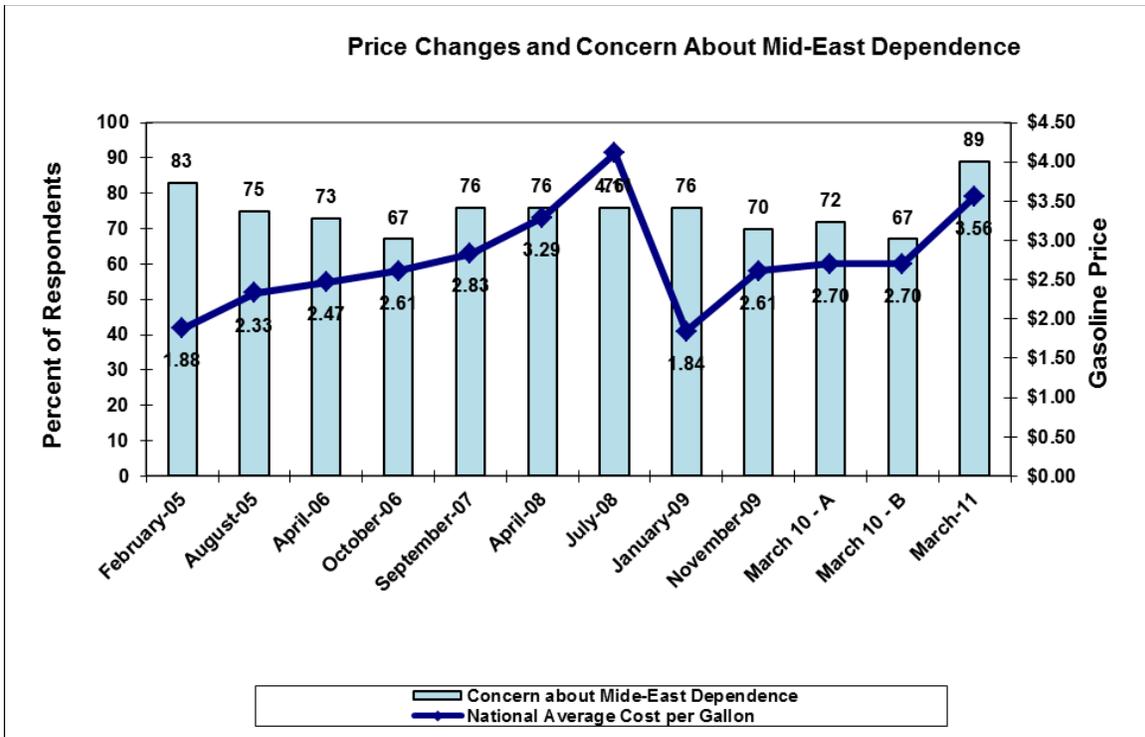
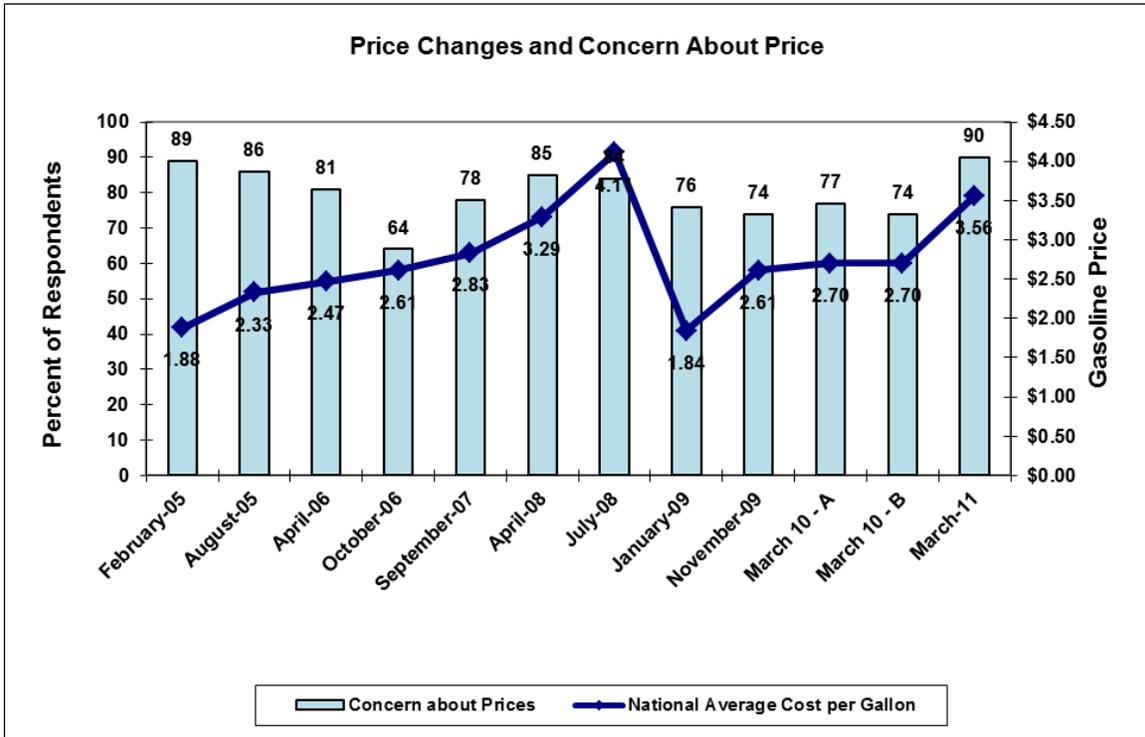
Specific demographic groups express great concern about price (see Figure 2). For the following groups, the percentage of respondents who express greater concern is higher: households with incomes between \$25,000 and \$50,000 per year; less than a high school degree; respondents in the 55-65 age group; and black, non-Hispanic respondents.

**FIGURE 2:
DEMOGRAPHIC CHARACTERISTICS AND GREAT CONCERN ABOUT PRICE**



While concern is currently at extremely high levels, over the past six years we found consumers have consistently expressed high concerns, as shown in Figure 3. The following exhibit shows that prices at the pump in the month when the questions were asked have varied from a low of \$1.84 per gallon to a high of more than \$4.00 per gallon, yet concern about gasoline prices has been more constant. A similar pattern is visible with respect to concern about Mid-East oil dependence. Concern varies much less than prices have.

**FIGURE 3:
PRICE AND ATTITUDES**

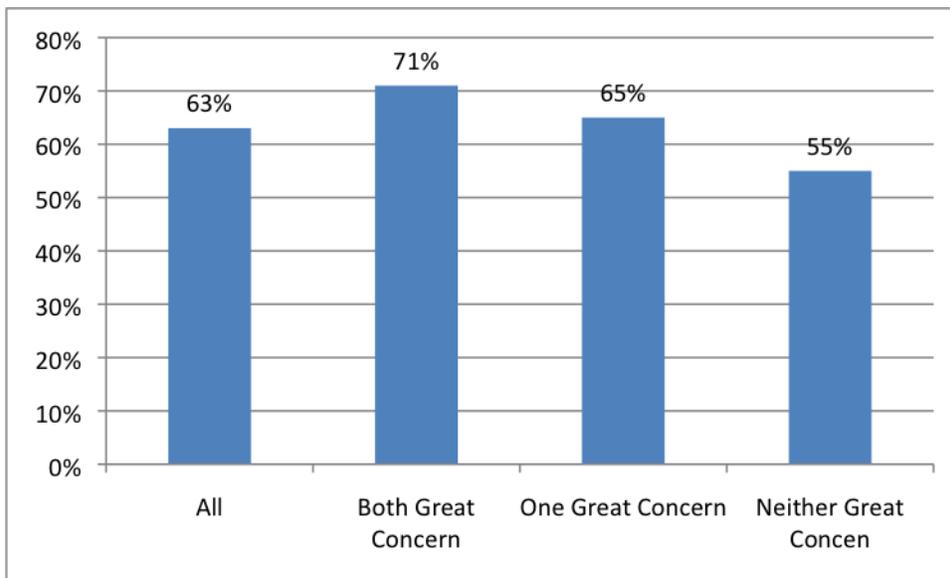


Support for Fuel Economy

This high level of concern is reflected in another important attitude about cars: support for higher fuel economy standards. Sixty-three percent say they support a fuel economy standard of 60 miles per gallon, which is a level twice as high as the current standard.

Support for higher standards is correlated with the level of concern about gasoline. Seventy-one percent of the respondents who say *both* gasoline prices and Mid-East dependence are a great concern support a 60 mpg standard. Sixty-five percent of respondents who think *either* prices or Mid-East dependence are a great concern support a 60 mpg standard. Fifty-five percent of respondents who say *neither* prices nor Mid-East dependence are a great concern support 60 mpg standard. Several of the demographic groups that expressed greater concern about price also expressed greater support for the 60 mpg standard, including lower-middle incomes households (72%) and black, non-Hispanics (75%).

FIGURE 4: CONCERN AND SUPPORT FOR A 60 MPG FUEL ECONOMY STANDARD



Support for the program that sets fuel economy standards has also been solid throughout time, although we have not asked a standard question. The 63% who support a 60 mpg standard is up four percentage points from this time last year (see Table 2). In past years, we have asked about the level of standards that were being considered by policymakers at the time. The standards varied, but support for them remained strong.

TABLE 2: SUPPORT FOR FUEL ECONOMY STANDARDS ACROSS TIME

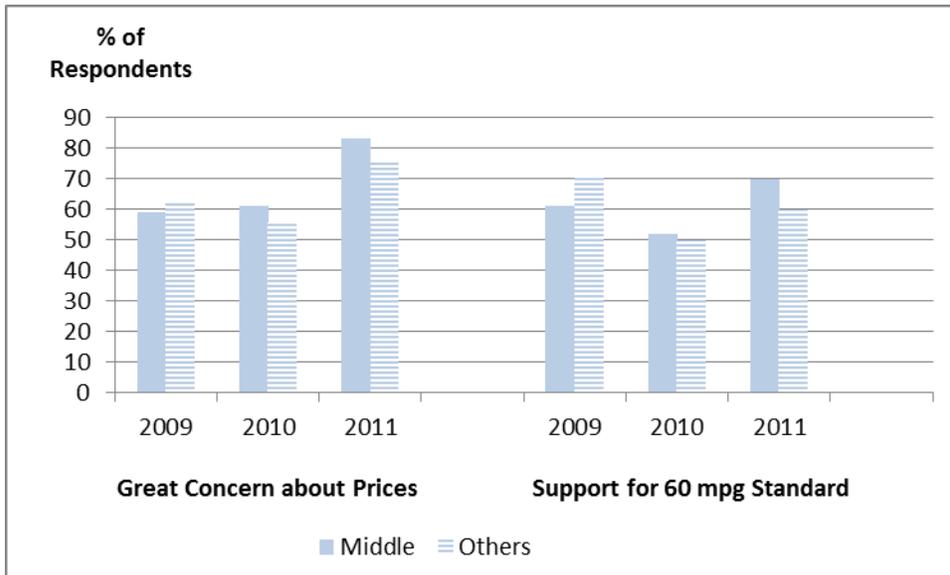
Survey Date	Policy goal	% Supporting
Apr -'07	One Gallon per year for 10 years	81
Nov - '09	Increase from 27 to 35 in 2016	78
Mar -'10	50 by 2025	65
Sep- '10	60 by 2025	59
Mar - '11	60 by 2025	63

The Emergence of a Middle Class Issue

The high levels of concern about gasoline and support for a 60 mpg standard alone provide a strong basis for implementing this policy. That impression is reinforced when we look at the attitudes across various income groups. We find that middle-income respondents express greater concern and greater support for a high standard (see Figure 5).

- Middle-income respondents (income between \$25,000 and \$75,000) have very high levels of concern about price (83%) compared to 74% for other households
- Middle-income respondents express more support for a 60 mpg standard (70%) than other households (60%).
- The middle class attitudes compared to other groups are a shift from the past.

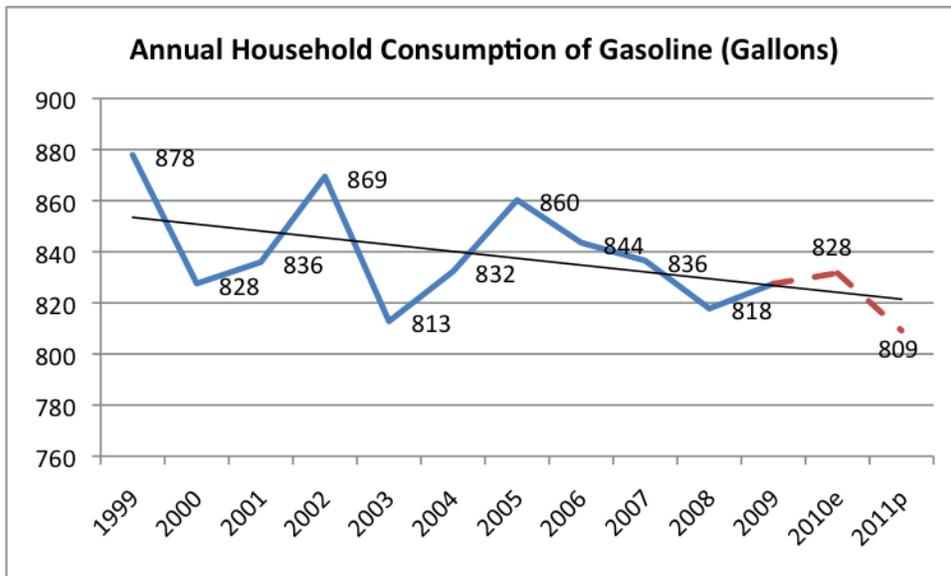
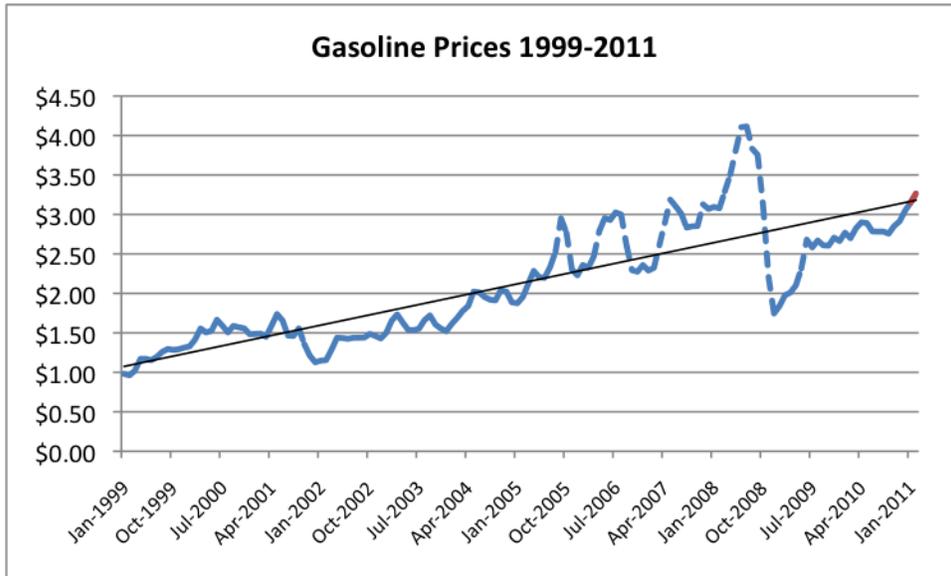
**FIGURE 5:
MIDDLE CLASS CONCERNS AND SUPPORT FOR STANDARDS**



II. GASOLINE PRICE, CONSUMPTION AND EXPENDITURES

Underlying these attitudes is an economic reality that has become quite burdensome for U.S. consumers. Figure 6 shows the fundamental factors that affect household spending on gasoline – the price paid and the quantity consumed. Gasoline prices are shown through the beginning of March 2011. In later analyses, we use the Energy Information Administration’s (EIA) March 8, 2011, projection of gasoline prices for this year, which is \$3.56. If the EIA is correct, U.S. gasoline prices will be higher this year than ever measured in either current (nominal) or inflation-adjusted (real) dollars.

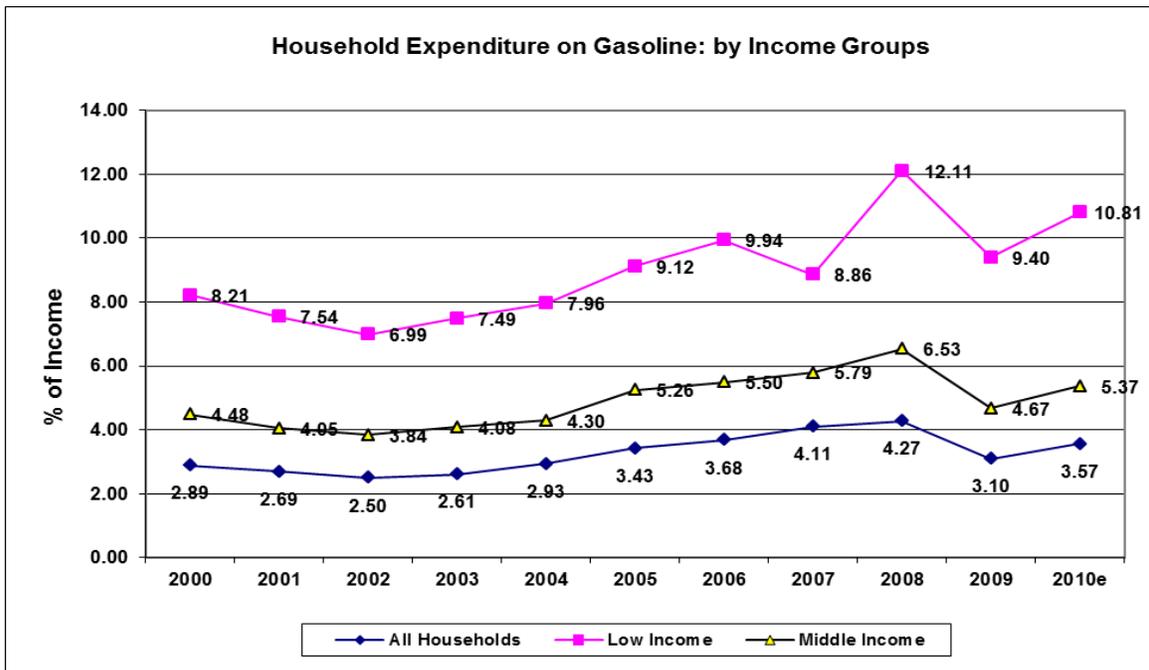
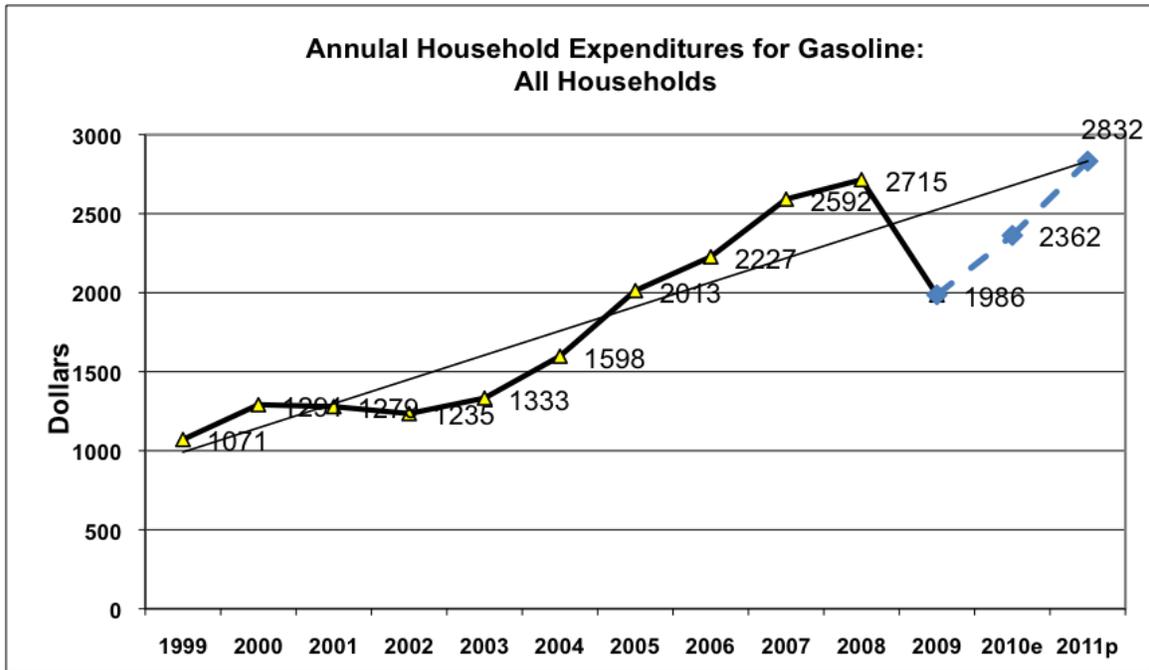
FIGURE 6:
FUNDAMENTALS OF HOUSEHOLD GASOLINE CONSUMPTION – PRICE AND QUANTITY



Sources: Energy Information Administration database for gasoline, Bureau of Labor Statistics, Consumer Expenditure Survey, 2009 for expenditures

Faced with rising gasoline prices, consumers will likely cut back somewhat on their driving. However, their ability to do so is limited because driving is built into our daily lives by the way we have built our society -- homes are far from work, shopping is zoned out of residential areas, and mass transit is restricted (see Figure 7). Economists say the short term

**FIGURE 7:
HOUSEHOLD EXPENDITURES ON GASOLINE**



Sources: Bureau of Labor Statistics, Consumer Expenditure Survey, 2009 for expenditures

price elasticity of demand for gasoline is limited. Household consumption will likely remain above 800 gallons per year. We base this projection on a very low, short run elasticity of demand (-.1) which is consistent with recent experience and the literature on gasoline markets. The combination of high prices and low elasticity of demand means consumers are likely to spend more on gasoline this year than ever in U.S. history. The average annual household spending on gasoline is likely to exceed \$2800 – the highest amount ever spent households in a year. Measured as a percentage of income, gasoline expenditures will likely take about 3.5% of the annual income of all households. For low income households, it would likely equal 10% of their income. For lower middle-income households, the figure will be about 6%. For middle-income households it will be about 5%.

Gasoline Price Increases Swings Affect the Cost of Driving

Even before the recent run up in gasoline prices, household expenditures on gasoline had been on a turbulent roller coaster in the global oil market and the domestic gasoline market, and this has already transformed the role of gasoline in U. S. household budgets.

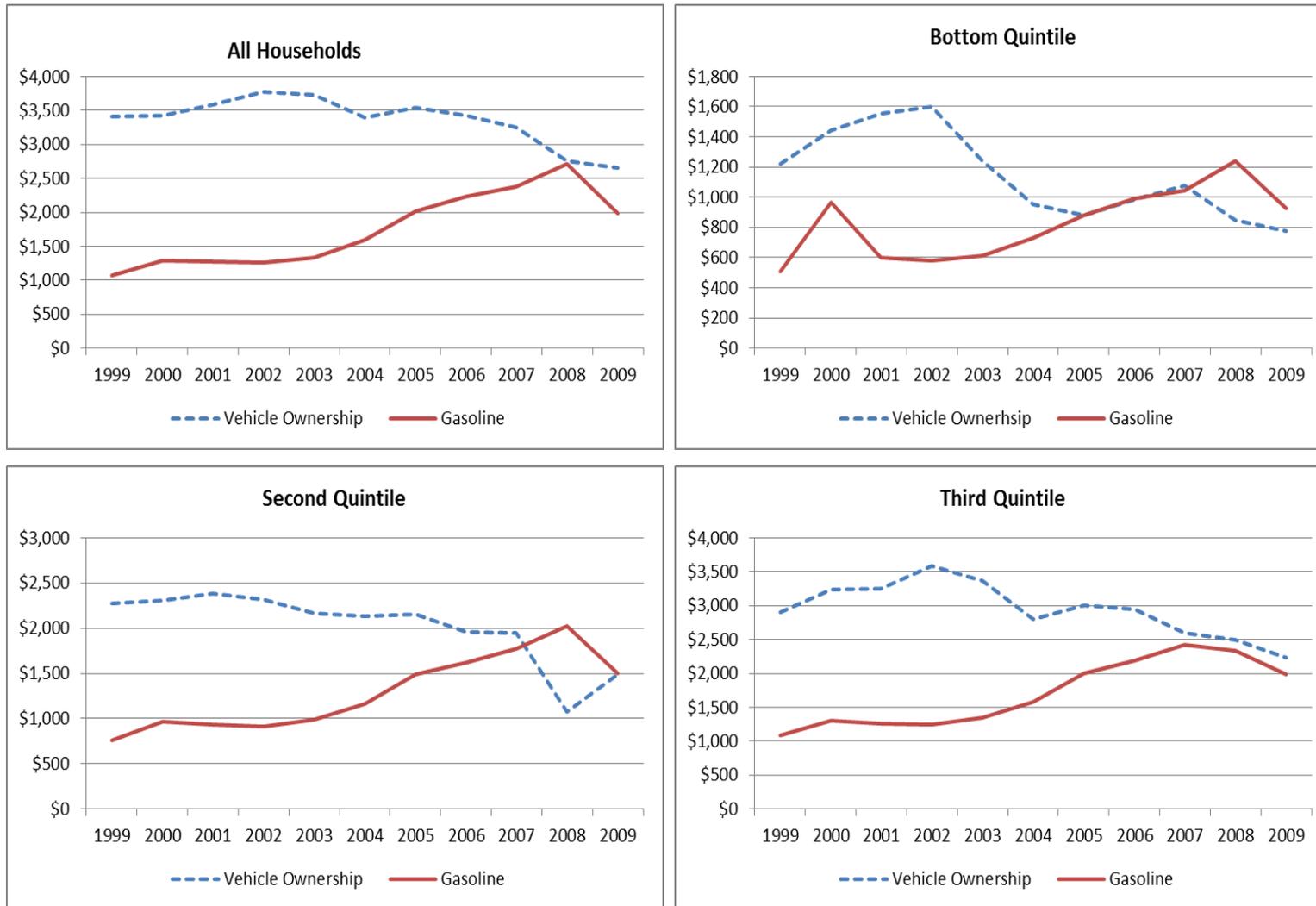
When we look at the factors that add up to the cost of driving, the cost of owning the vehicle and the cost of gasoline have long been the two most important items. The cost of owning the vehicle has historically been far more important the gasoline, but that has changed in recent years. For the past couple of years for low- and middle-income households, average annual gasoline expenditures have equaled ownership costs. While we do not yet have the data for 2010 and automobile purchases have picked up, on the current price trajectory, gasoline costs will likely exceed ownership costs again in 2011.

Regardless of the precise percentages, the rise in gasoline costs is changing the way people think about vehicle purchases. Our earlier analysis shows that after the first price spike in the early 2000s, people began to shift their buying patterns. Indeed, U.S. auto makers did not react quickly to this shift, which was a factor in the demise of two of the big three U.S. automakers. The two automakers that went bankrupt in the recession of 2008-2009 had the lowest average fuel economy of the major firms that produce a full line of vehicles for the U.S. market.

IV. POLICY IMPLICATIONS

Rising oil prices and increased consumer concern have led to a wide-ranging discussion of what can be done on both the demand and supply side of the market. But calls for immediate relief frequently detract from two key underlying trends. The fickleness of the oil market cannot hide the underlying trend of rising prices. Nor should it be allowed to obscure the sustained level of concern about gasoline and support for fuel economy standards. In fact, we believe the most important short-term measure is for the nation to make a long-term commitment to reduce gasoline consumption. Higher standards are a key part of that push.

FIGURE 8: THE COST OF DRIVING



Sources: Bureau of Labor Statistics, Consumer Expenditure Survey, annual issues.

The prospects for a fundamental change in the trajectory of U.S. gasoline consumption are better today than they have ever been, and not only because gas prices are so high. Consider:

In 2007, Congress passed the Energy Independence and Security Act, breather life back into the Corporate Average Fuel Economy Standards (CAFE) program administered by the National Highway Traffic Safety Administration (NHTSA) in two ways.

- By setting different standards for cars and trucks (based on the attributes of the vehicle) the standards are technology-neutral, precompetitive, ensuring that consumers have the full range of choice of vehicle they have always enjoyed and giving automakers the incentive to compete on fuel economy for a specific vehicle types.
- By establishing a minimum target for 2020 of 35 miles per gallon, the legislation ensured that progress would be made after decades of stagnation.

Fifteen states and the District of Columbia, representing almost one third of the U.S. population, adopted the Clean Cars programs that had stimulated the development of electric vehicles and greater improvement in fuel economy.

The Administration accelerated the rate of progress substantially in several ways

- It coordinated action by federal and state agencies to come out with new rules.

Adopted a standard of 35 miles per gallon for 2016.

- NHTSA and EPA have published an economic and technical analysis showing that 62 mpg is a technologically achievable and economically beneficial target for 2025, and both Toyota and General Motors have said they can achieve the standard.

Ever since the first Arab oil embargo of 1973, it has been clear that the U.S. must reduce its consumption of oil for economic, national security, and environmental reasons. Seven Presidents have talked about this urgent need. Indeed, the need is so compelling that even President Bush, an oil man from Texas, declared that we must end our oil addiction in his 2006 State of the Union address. An urgent need, public support, positive economics and technology, and improved public policy tools add up to the best chance we have had in decades to change trajectory of U.S. gasoline consumption, lowering consumption, households spending on gasoline and our dependence on Mid-East oil

APPENDIX:
CFA ANALYSIS OF FUEL ECONOMY AND GASOLINE PRICES
(available at www.consumerfed.org)

Studies, Comments and Testimony

CFA's Comments on Fuel Economy Labels to NHTSA, 11/22/10.

CFA Comments Submitted to NHTSA and EPA on their Notice of Upcoming Joint Rulemaking to Establish 2017 and Later Model Year Light Duty Vehicle GHG Emissions and CAFE Standards, 10/29/10.

Testimony of Jack Gillis to the EPA and NHTSA on Revisions and Additions to Motor Vehicle Fuel Economy Label, 10/21/10.

Public Support for a 60 Miles Per Gallon Fuel Economy Standard, 09/28/10.

Setting the Next Round of Fuel Economy Standards: Consumers Benefit at 60 Miles Per Gallon, 09/02/10.

U.S. Oil Market Fundamentals and Public Opinion Report, 05/18/10.

Shifting Fuel Economy into High Gear, 11/24/09.

CFA Comments on NHTSA's Proposed Rule Establishing Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards, 11/30/09.

Testimony of Dr. Mark Cooper to the EPA on Establishing Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards, 10/21/09.

Consumer Groups' Comments on Tire Efficiency Consumer Information Rulemaking, 8/21/09.

Consumer Groups' Comments to FTC Regarding Fuel Economy Advertising Guidelines, 06/26/09. ([PDF](#))

A Boom for Big Oil – A Bust for Consumers: An Analysis of Policies to Meet American Energy Needs, 09/16/08.

Comments on NHTSA's Draft Environmental Impact Statement; Re: Average Fuel Economy Standards, 08/18/08.

Fuel Economy and Auto Sales: Automakers and the National Highway Traffic Safety Administration Ignore Market Signals, 08/04/08.

CFA Comments on National Highway Traffic Safety Administration Notice of Proposed Rulemaking Re: Average Fuel Economy Standards, Passenger Cars and Light Trucks, Model Years 2011-2015, 07/01/08. Rising Gasoline Prices: Why Can't Consumers Catch a Break?, 03/26/08.

Ending America's Oil Addiction: A Quarterly Report on Consumption, Prices and Imports First Quarter, 2008, 04/21/08.

A Consumer Analysis of the Adoption of the California Clean Cars Program in Other States: Arizona, 03/12/08.

A Step Toward a Brighter Energy Future: Policymakers Break the Logjam, But Vigorous Implementation Is Crucial, 12/18/07.

Letter to New Mexico Environmental Health Department Regarding Clean Cars Program, 11/26/07

A Consumer Analysis of the Adoption of the California Clean Cars Program in Other States: New Mexico, 11/21/07.

No Time to Waste: America's Energy Situation is Dangerous, But Congress Can Adopt New Policies to Secure Our Future, 10/30/07.

Technology, Cost and Timing: An Analysis of Competing Congressional Proposals to Raise Fuel Economy Standards, 07/26/07.

Florida's Stake in the Fuel Economy Battle: An Analysis of the Economic, National Security and Environmental Impacts of Florida's Fuel Consumption and Increasing Federal Fuel Economy Standards, 07/25/07.

Big Oil v. Ethanol: The Consumer Stake in Expanding the Production of Liquid Fuels, 07/23/07.

Still Stuck in Neutral: America's Continued Failure to Improve Motor Vehicle Fuel Economy, 07/17/07.

Too Little, Too Late: Why the Auto Industry Proposal to Go Low and Slow on Fuel Economy Improvements is Not in the Consumer or National Interest, 07/12/07.

Greater Fuel Economy Gains in Senate Commerce Bill than Auto Industry Proposal, 06/18/07.

Rural Households Benefit More from Increases in Fuel Economy, 06/13/07.

National Cost-Benefit Analysis of Increasing Fuel Economy by 10mpg Over 10 Years, 06/04/07.

Stuck In Neutral: America's Failure to Improve Motor Vehicle Fuel Efficiency 1996-2005, 11/13/06.

Time to Change the Record on Oil Policy, 08/08/06.

A Blueprint for Energy Security: Addressing Consumer Concerns about Gasoline Prices and Supplies by Reducing Consumption and Imports, 05/25/06.

50 by 2030: Why \$3.00 Gasoline Makes the 50 Mile per Gallon Car Feasible, Affordable and Economic, 05/08/06.

2006 Best and Worst Fuel Economy Ratings, 02/27/06.

The Impact of Rising Prices on Household Gasoline Expenditures, 09/01/05.

Responding To Turmoil In Natural Gas Markets: The Consumer Case For Aggressive Policies To Balance Supply And Demand, 12/15/04.

Fueling Profits: Industry Consolidation, Excess Profits & Federal Neglect, 05/11/04.

Spring Break in the U.S. Oil Industry: Price Spikes, Excess Profits and Excuses, 10/01/03.

Surveys

National Survey Shows that Most Consumers Support 60 MPG Fuel Economy Standards by 2025, 09/28/10.

New CFA Report: 60MPG or More Standard is Economically Achievable and Truly Responsive to Consumer Needs, 09/02/10.

Americans Strongly Support Cutting Oil Consumption, Increasing Fuel Economy Standards to 50 MPG, 05/18/10.

Large Majority of Americans Remain Concerned About Gas Prices and Oil Imports, 11/24/09

Despite \$1.90 Pump Price, a Large Majority of Americans Remain Concerned About Gas Prices and Oil Import Dependence, 02/03/09.

Consumers Want Fuel Economy They Can't Find, 04/21/08.

New CFA Report: Consumer Energy Costs Skyrocket; Strong Support for Congressional Action, Poll Shows, 10/30/07.

Americans Alarmed About Dependence on Oil Imports and Resulting High Gas Prices and Funding Terrorism, 05/21/07.

Consumers Still Greatly Concerned About Better Gas Mileage and Oil Imports Despite Falling Gas Prices, 11/13/06.

New Report Shows Nearly Three-Quarters of Americans Concerned About Future Gas Prices, 09/01/05.