



**Consumer Federation of America**

**Statement of Dr. Mark Cooper  
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**to the**

**Environmental Protection Agency**

**on**

**Proposed Rulemaking to Establish Light-Duty Vehicle Greenhouse Gas  
Emission Standards and Corporate Average Fuel Economy Standards**

**Detroit Michigan,**

**October 21, 2009**

## **THE IMPORTANCE OF THIS GROUNDBREAKING RULEMAKING**

It is highly symbolic and more than appropriate that the first hearing for the 2009 rulemaking to set fuel economy standards for 2012 -2016 is being held in Detroit. In many ways, this is the most important change in the CAFE program since its inception three and a half decades ago and a key moment for the transformation of the auto industry.

- This rulemaking unifies the regulation of the energy and environmental impacts of automobiles in the U.S.
- It embodies the largest increases in fuel economy over a four-year period in over a quarter of a century.
- It resolves a major dispute over federal and state shared authority to order improvements in the environmental impact of automobiles, preserving the most important dynamic characteristics of federalism.
- It is based on a consensus agreement that includes the automakers.

At the same time, this rulemaking reflects the fact that it is a transition that aspires to a more dynamic and innovative automobile manufacturing sector and a more effective process for setting fuel economy standards in the future.

- The transition requires the Environmental Protection Agency (EPA) and the National Highway Traffic Safety Administration (NHTSA) to harmonize and reconcile their statutes.
- The rulemaking recognizes the dire circumstances of the auto industry and allows it some breathing space to redefine and retool itself before it faces a more rigorous and demanding regime of fuel economy improvement.

Thus, the ultimate success of this landmark rulemaking will be in the framework of standard setting that it creates for the future.

## **MAXIMIZING ECONOMIC AND ENVIRONMENTAL BENEFITS AFTER THE TRANSITION**

There are many critical issues that will have to be resolved in order to ensure that the standard setting process achieves the maximum feasible level of energy efficiency that complies with NHTSA's mandate under the Energy Policy Act and environmental improvement that complies with EPA's mandate under the Clean Air Act.

The transitional nature of this proceeding has led EPA/NHTSA to leave a large quantity of consumer economic, national security and environmental gains unrealized. However, as the following table shows, the standard has been set to meet the level agreed upon by the federal and state officials, but it falls far short of the level that would be justified by the economic, energy and environmental benefits that consumers would reap if the standards were set at the level that maximizes economic efficiency or environmental benefits. Setting the standard at the level of maximum economic or maximum environmental benefit would have the following beneficial effects.

- Gasoline consumption would be 28 to 34 billion gallons less than the proposed standard, pushing the savings to about 90 billion gallons.
- The net present value of societal savings would be \$20 to \$25 billion higher, a total of over \$120 billion.

**Economic, National Security and Environmental Benefits of Various Alternative Standard Levels**

	MPG. Standard	Economic Benefit (Billion \$, Net NPV)		National Security Reduced Gasoline Consumption (Billion Gallons)	Greenhouse Gas Emissions (Billion Tons CO <sub>2</sub> )
		Societal	Consumer Pocketbook		
Proposed	34.1	99.7	71.6	61.6	29
Maximum Economic Benefit (Marginal Cost = marginal Benefit)	36.8	120.5	80.2	89.5	39.1
Maximum Environmental Benefit (Total Cost = Total Benefit)	38.1	125.3	82.2	95.4	42.1

**Sources and notes: *Preliminary Regulatory Impact Analysis*, Tables 1 and 10. The 7 percent discount rate scenario is used. The consumer pocketbook calculation subtracts the cost of meeting the standard (technology cost) from the fuel savings (lifetime fuel expenditures) and adds in the reduction in the price of gasoline (the petroleum market externality). These are the direct, monetary impacts that will affect the consumer pocketbook. The analysis assumes that the fuel savings and market externalities scale with the quantity of gasoline consumption reduction.**

- The consumer pocketbook savings would be about \$80 billion, \$10 billion more than the proposed standard.
- The average cost of conserved energy is less than \$1.30 per gallon and the marginal cost is less than \$1.80 per gallon, compared to an average cost of gasoline over the life of the vehicles of over \$3.00 per gallon.
- At an estimated \$3.00 per gallon for gasoline in 2016, the rule will actually put money back in consumer pocketbooks. The rules are expected to add only \$22 to the monthly cost of the average car loan, about half the monthly fuel savings of nearly \$42, resulting in a net savings of \$240 per year.

Setting the standards to maximize economic benefit or maximum practicable environmental benefit, which we believe are entirely consistent with the mandate of NHTSA under the Energy Policy Act and EPA under the Clear Air Act, is a win-win-win for consumers, the nation and the environment. That is why EPA and NHTSA must not let the transition extend past the 2016 model year. Each year of delay in moving to setting standards at the more appropriate levels imposes severe harm on consumers and the nation. After the transition, policy makers can no longer allow the public to be shortchanged in this manner. EPA and NHTSA must act in this proceeding to ensure a sound framework for future standard setting.

## **STEPS TO ENSURE THAT FUTURE RULEMAKINGS DELIVER MAXIMUM BENEFITS**

The Consumer Federation of America's comments in the 2008 proceeding urged NHTSA to take a number of steps that ensure that future standards will strike the proper balance between the various goals of the governing statutes and deliver the maximum feasible benefit to consumers. We have similar recommendations in this joint rulemaking. EPA and NHTSA should:

- balance the three goals in the underlying statutes – technical feasibility, economic practicability and the need to conserve energy – by setting the standard at the midpoint of the range between maximum economic benefit and maximum environmental benefit (i.e. the 50/50 approach we advocated in the previous proceeding);
- recognize the higher resale value of more fuel efficient vehicles;
- recognize the consumer willingness to change their demand for vehicle attributes;
- assign a significant national security value to reduced oil consumption;
- properly value fuel savings by removing the rebound effect from the consumer (private) welfare analysis and setting it at a lower level in the societal analysis; and
- establish an objective standard for evaluating the capacity of the industry to meet future standards based on the principle that if at least half of the automakers can be expected to meet the standard, it is economically practicable.

## **CONSUMER WELFARE GAINS ARE CENTRAL TO SETTING STANDARDS IN THE PUBLIC INTEREST**

In today's statement I want to focus on a fundamental issue that is of paramount importance to ensure that future rules are in the public interest. The agencies must adopt and affirm an analytic framework that recognizes that fuel economy standards enhance consumer welfare. The billions of dollars of consumer welfare gains estimated by the agencies are real and substantial. The final rule should clearly acknowledge not only the empirical estimates of these gains; it should also conclude that the theoretical justification for incorporating these consumer welfare gains into the rulemaking is clear and solid.

In the proposed rule, the agencies do a cursory review of the theoretical literature and then decide that the models that might lead to a rejection of the consumer welfare gains are too imprecise to rely on. The rejection of the theory on these empirical grounds is correct, but far too weak. In order to conclude that consumers do not enjoy increased welfare as a result of fuel economy standards, one must assume that consumers have full information and perfect foresight in their vehicle purchase decisions and that the supply side of the market gives them a full, balanced and unbiased range of choices to meet their needs. None of these assumptions is correct.

In fact, there is a broad range of theoretical and empirical reasons to conclude that fuel economy standards enhance consumer welfare that the NPRM does not mention. The NPRM

cites principles from behavioral economics, but there are also transaction cost issues and market structural problems that plague energy markets. The Following Figure presents a summary of the causes of market failure based on a thorough review of the theoretical and empirical literature on the market imperfections in the energy sector that we will submit for the record in our comments.

Our research shows that the market failure on the supply-side is particularly acute. Consumer preferences for fuel economy have been well ahead of the automakers' willingness to supply fuel economy.

- Survey evidence shows that there is a huge mismatch between consumer demand and models offered by automakers in 2008; consumer preferences for fuel economy have been well ahead of the automakers' willingness to supply it. Whereas well over half the respondents say they want to get more than 30 miles per gallon (mpg) in their next vehicle, only 2 percent of the models offered by automakers achieve that mileage.
- Our econometric analysis shows that consumers began shifting their consumption patterns five years ago, but the automakers were unwilling or unable to respond. They were left with growing inventories of vehicles they could not sell.
- The Cash For Clunkers program is a further example. Consumers could have swapped new vehicles that only get 21 mpg for vehicles that get 18 mpg, a net gain of 3 mpg. Instead, they choose to buy far more efficiency than that. The average vehicle trade-in got only 15.8 mpg, while the average vehicle purchased gets 24.9 mpg – a 9 mpg (58 percent) improvement, three times the minimum. The top 10 models purchased in the clunkers program get almost 30 mpg. If dealers had not run out of the most fuel-efficient vehicles, the numbers would have been even better.
- Thus, fuel economy standards correct severe market imperfections on both the demand and supply sides of the market. They are essential to setting the auto industry on a sound footing.

### CAUSES OF THE FAILURE OF MARKETS TO PRODUCE EFFICIENT OUTCOMES IN ENERGY CONSUMPTION

<b><u>TRANSACTION COSTS</u></b>
<b><u>Friction</u></b>
Sunk costs
Lifetime
<b><u>Risk &amp; Uncertainty</u></b>
Technology
<u>Marketplace</u>
Policy
<u>Financial</u>
Liability
<b><u>Imperfect Info.</u></b>
Availability
Accuracy
Search Cost

## **STRUCTURAL FLAWS**

### **Endemic**

- Ownership
  - Agency
  - Transfer
    - Limited payback
    - Lack of premium
- Capital
  - Illiquidity
- Asymmetric Information
- Perverse Incentives
- Imperfect Competition
  - Concentration
  - Barriers to Entry
  - Scale
  - Vertical Leverage
  - Collusion

### **Sector Specific**

- Marketing
  - Bundling: Multi-attribute
  - Gold Plating
  - Inseparability
  - Purchase Method
  - Advertising
- Regulation & Policy
  - Price Distortion Average-cost pricing
  - Permitting
  - Other Distortions
- Cost Structure
- Chain of Barriers
  - Disaggregated, fragmented Mkt.
- Availability
  - Lack
  - Emergency replacement
- Quality
  - Improper installation,  
lack of enforcement
  - Improper use and maintenance

## **BEHAVIORAL FACTORS**

### **Motivation**

- Preference
- Custom
- Values & Commitment
- Social group & status

### **Perception**

- Prospect
- Framing
  - Loss Avoidance
  - Status Quo
  - Saliency
  - Social Influence
- Awareness
- Attention
- Low priority

### **Calculation**

- Bounded rationality
  - Ability to process info
  - Limited understanding
- Heuristic Decision Making
  - Rules of thumb
  - Information
  - Discounting
  - Low Probability Events
  - Long-Term
  - Small Outcomes

## **SOCIETAL FAILURES**

### **Externalities: Mis-pricing**

- Environmental
- Energy Security

### **Public Goods**

- Basic research
- Information
  - Learning by doing
  - Learning-by-using
- Other

## **CONCLUSION**

EPA and NHTSA have the opportunity in the current rulemaking to establish a platform on which a dynamic, innovative automobile manufacturing sector can be rebuilt in America, one which meets the needs for transportation in our continental economy in a manner that saves consumers money, enhances national security through reduced oil imports, and ensures that the transportation sector makes its full contribution to meeting the challenge of global warming. To

build that platform, it is critically important to recognize the vital role that fuel economy standards play in correcting market failures and set standards at a level that captures the full measure of the value of increased efficiency. In so doing, it will orient the market toward actions that increase consumer welfare, while promoting social goals. Establishing a firm theoretical and empirical basis for calculating and including consumer welfare gains in the analytic framework is one of the pillars on which a sound rulemaking process must be based. We look forward to working with the agencies to build that platform.