# Congress of the United States Washington, DC 20515

October 19, 2011

The Honorable Harold Rogers Chairman Committee on Appropriations H-307, the Capitol Washington, D.C. 20515 The Honorable Michael Simpson Chairman Subcommittee on Interior, Environment, and Related Agencies B-308 Rayburn HOB Washington, D.C. 20515

# Dear Chairman Rogers and Chairman Simpson:

We are writing regarding our strong support for the Austria/Carter language included in H.R. 2584 (FY 2012 Interior/Environment Appropriations bill). This provision would return the regulation of fuel economy to a single regulator (NHTSA), an agency that must consider market demand and job loss when setting a fuel economy standard. While certain automakers have agreed "in principle" to raise the fuel economy standard to 54.5 mpg for model years 2017-25, under the House Appropriations Committee-passed language this dramatic increase in fuel economy could only be done according to the program (CAFE) Congress specifically designed to regulate fuel economy. Raising the fuel economy standard under CAFE ensures that jobs, consumer choice and market demand are considered. We urge this important provision be included in the FY 2012 omnibus appropriations bill.

Since 2009, fuel economy has been regulated under *three* different programs administered by *three* different agencies, (NHTSA, EPA, and the California Air Resources Board (CARB)) under *three* different sets of rules, pursuant to *three* different laws. Redundant EPA and CARB regulation is wasteful and threatens to increase job loss and price many consumers out of the new vehicle market.

A one year "time out" is necessary as EPA and CARB are setting national fuel economy standards without explicit authorization by Congress, under laws not designed to regulate fuel economy, and without considering such national factors as job loss, consumer choice, or market demand when setting a fuel economy standard. This language included in H.R. 2584 simply returns the regulation of fuel economy to its congressional design for one fiscal year. It is vital that Congress reassert its rightful role over setting national fuel economy policy, as EPA and CARB regulators are currently drafting new fuel economy vehicle mandates — *three years before they are due* — that according to the Administration, by 2025, will (1) raise the average price of a vehicle by over \$3,000<sup>[1]</sup>; and (2) regulate out of existence all new vehicles that cost less than \$15,000 today<sup>[2]</sup>. At a time when our economy and the auto industry continues to struggle, duplicative and unnecessary regulations will drive down consumer demand and further stifle economic recovery.

The Austria/Carter amendment does not impact California's authority to set vehicle emissions standards for smog and other criteria air pollutants. The amendment also in no way affects NHTSA's authority to raise fuel economy standards, which also reduces CO<sub>2</sub> emissions (the only way to reduce vehicle CO<sub>2</sub>

<sup>[1]</sup> EPA regulatory announcement: "EPA and NHTSA Finalize Historic National Program to Reduce Greenhouse Gases and Improve Fuel Economy for Cars and Trucks," (April, 2010); and NHTSA & EPA "2017-2025 Light-duty Vehicle GHG & Fuel Economy Joint Notice of Intent and Interim Technical Assessment Report," power point presentation, slide 15. (October 5, 2010) [2] U.S. Energy Information Administration, "Annual Energy Outlook 2011," figure 18, pg. 27 (April 2011).

emissions is to raise its fuel economy). CAFE increases are already set in law and must be complied with, making duplicative yet different EPA and CARB rules an unnecessary burden for businesses and consumers.

On a bipartisan basis, in 2007 Congress raised the CAFE standard to at least 35 mpg in 2020. Last year, the CAFE standard was raised to 34.1 mpg in 2016. The CAFE standard should only be raised with proper consideration of the effects on job loss, consumer demand, and highway safety as Congress mandated. We strongly urge the Austria/Carter language be included in any FY 2012 omnibus appropriations bill. Thank you for your consideration.

Sincerely,

Steve Austria

Member of Congress

**Steve Stivers** 

**Member of Congress** 

nn A. Westmoreland

Member of Congress

Bill Johnson

**Member of Congress** 

John Campbell

Member of Congress

Scott R. Tipton

**Member of Congress** 

John R. Carter

**Member of Congress** 

7. McCale

Michael T. McCaul

**Member of Congress** 

Cathy McMorris Rodgers

**Member of Congress** 

Richard L. Hanna

Member of Congress.

James B. Renacci

Member of Congress

Sean P. Duffy

🖟 James Sensenbrenner, Jr. Ron Paul Member of Congress Member of Congress Virginia Foxx Reid J. Ribble Member of Congress Member of Congress Collin C. Peterson Walter B. Jones Member of Congress **Member of Congress** Sam Johnson Mike Pompeo Member of Congress Member of Congress )6h Darrell E. Issa Robert E. Latta Member of Congress Member of Congress Patrick J. Tiberi Henry Cuellar Member of Congress Member of Congress M. Morgan Griffith Joe Barton Member of Congress Member of Congress

Frank C. Guinta

**Member of Congress** 

Robert Tachilling

Stephen Lee Fincher Ralph M. Hall Member of Congress Member of Congress Tom Marino **Bill Flores** Member of Congress Member of Congress And Marie Buerkle Joe Wilson Member of Congress Member of Congress **Howard Coble** Mike Rogers (AL) Member of Congress **Member of Congress** Christopher P. Gibson Mike Rogers (MI) Member of Congress **Member of Congress** Tim Walberg Tim Huelskamp Member of Congress Member of Congress Namie Herrera Beutler Randy Neugebauer Member of Congress **Member of Congress** Lynn Jenkins Steve C. LaTourette

Member of Congress

Nick J. Rahall Greg Walder **Member of Congress** Member of Congress Pete Olson Michael K. Conaway Member of Congress **Member of Congress** Mike Kelly **Bob Gibbs** Member of Congress **Member of Congress** James Lankford Jean Schmidt Member of Congress Member of Congress Scott DesJarlais Todd W. Akin Member of Congress Member of Congress **Pete Sessions** Dan Burton Member of Congress Member of Congress Marsha Blackburn Donald A. Manzullo

**Member of Congress** 

Blake Farenthold

**Member of Congress** 

Member of Congress

Member of Congress

John Sullivan

Nence G. Ellmers

Renee L. Ellmers Member of Congress

Roscoe G. Bartlett Member of Congress

E. Scott Rigell

Member of Congress

Olan Camula

Alan Nunnelee

Member of Congress

Andy Harris

Member of Congress

Diane Black



April 6, 2011

# Dear Representative:

On behalf of the nearly 17,000 new car and truck dealers represented by the National Automobile Dealers Association, including over 2,000 medium- and heavy-duty truck dealers, I am writing in support of H.R. 910, the Energy Tax Prevention Act of 2011. America's auto dealers support H.R. 910 because it would return regulation of fuel economy to a single national standard under the CAFE program. A single national fuel economy standard is vital to the long term health of the entire auto industry, as only the CAFE program can most effectively increase fuel economy, protect passenger safety, and meet consumer demand.

Today, as the result of actions by the judicial and executive branches, there are *three* different fuel economy programs administered by *three* different agencies – NHTSA, EPA, and the California Air Resources Board – under *three* different sets of rules, pursuant to *three* different laws. This tangle of fuel economy regulations was cobbled together in 2009 under the rubric of the "National Program." Although the National Program is often mistakenly referred to as a "single standard" or as being "harmonized and consistent," it is in fact a **set** of different fuel economy programs. Enactment of H.R. 910 would eventually return the regulation of fuel economy to a single regulator (NHTSA) under rules set by Congress, not unelected officials.

Before 2009, fuel economy had never been regulated by EPA or the states. H.R. 910 would restore the statutory clarity that was lost in 2009 when EPA allowed states to begin regulating fuel economy by granting California a waiver under the Clean Air Act for its fuel economy/greenhouse gas rules, and when EPA also elected to regulate fuel economy as part of its voluntary response to the remand in *Massachusetts v. EPA* by the Supreme Court. H.R. 910 would reestablish the statutory system of a single national fuel economy standard, but only after the triple regulation of fuel economy embodied in the National Program has run its course after model year 2016.

There are numerous advantages to returning to a single national fuel economy standard:

- The CAFE program was specifically written to regulate fuel economy, while the Clean Air Act, for all its virtues, was not. To be sure, California's regulation was written to regulate fuel economy but only in California. Its application in other states results in what EPA Administrator Lisa Jackson calls "a patchwork of state standards." California's "patchwork" regime does not consider job loss or consumer choice outside of California when setting a standard, which could put jobs in others states at risk.
- A single national fuel economy program under CAFE is by definition uniform and consistent, unlike the three different fuel economy programs that we have today. In fact, the U.S. Energy Information Administration's Annual 2010 Energy Outlook states that, "[a]lthough the two separate [NHTSA and EPA] standards were issued jointly, there are important differences between them."



# National Automobile Dealers Association



SUPPORT A BALANCED APPROACH TO NATIONAL FUEL ECONOMY STANDARDS Preserve the Austria Amendment to FY12 Interior and Environment Appropriations Bill

## Issue

The Administration's fuel economy regime is structurally flawed and does not balance consideration of job loss, consumer choice and vehicle affordability when setting a fuel economy standard. EPA and the California Air Resources Board (CARB) are drafting the next round of national fuel economy rules three years early without direct authorization from Congress. While certain automakers have agreed "in principle" to raise the fuel economy standard to 54.5 mpg, the actual rule has not been written, or even subject to public comment. Since the cumulative effect of the Administration's approach, on average, will cost consumers over \$3,000 per vehicle, more scrutiny is necessary. The Austria Amendment would ensure the impact of fuel economy rules on job loss, consumer choice, and increased vehicle costs are properly evaluated to protect jobs and consumers.

# **Background**

In 2007, Congress directed NHTSA to increase fuel economy by 40 percent under the CAFE program. However, under the guise of a "National Program", in 2009 the Obama Administration added two new regulators, EPA and CARB, to regulate fuel economy. Currently **three** regulators write three different fuel economy rules pursuant to three different laws. The Administration has already set a 35.5 mpg standard by MY 2016 that would reduce greenhouse gas emissions by 960 million metric tons and save 1.8 billion barrels of oil. *The auto industry has committed to meet this standard at a cost of \$51.7 billion.* 

EPA and California regulators are attempting to bypass Congress again and are expected to propose a 54.5 mpg fuel economy standard this fall for MY 2017-25 vehicles. If adopted, by 2025, the Obama Administration's fuel economy/global warming vehicle mandates will result in higher vehicle prices (over \$3,000 on average).

NADA supports the Austria Amendment for MY 2017 and later to: (1) allow NHTSA to continue to regulate fuel economy according to the program Congress established; (2) bar EPA from spending funds on new duplicative fuel economy rules; and (3) prevent California from dictating national fuel economy rules, while *not impacting any California emissions rules relating to criteria pollutants or smog*.

# **Key Points**

- Unless NHTSA is the sole fuel economy regulator, increased costs will hurt consumers, depress new car sales, and risk jobs. Because EPA and CARB do not balance job loss or consumer demand when setting a fuel economy standard, the new rules and their excessive costs will lower car sales, increase unemployment, and hurt some consumers' ability to qualify for a new vehicle loan.
- Since the rules for MY 2017 and later do not need to be written for three more years, this amendment provides a "time out" while keeping fuel economy standards already on the books (including California's) for MY 2012-2016. The auto industry is just starting to absorb last year's \$51.7 billion rule the most expensive auto regulation ever mandated.
- The Amendment prevents duplicative fuel economy rules. NHTSA can continue to write fuel economy rules, but EPA cannot continue to waste millions in taxpayer funds on redundant fuel economy rules.

## Status

In July, the House Appropriations Committee adopted the Austria Amendment to H.R. 2584 (FY12 Interior and Environment Appropriations bill, Sec. 453) by a vote of 27-20. In April, the House passed a permanent prohibition on EPA and California redundantly regulating fuel economy as part of H.R. 910 by a vote of 255-172.

September 2011

# NATIONAL AUTOMOBILE DEALERS ASSOCIATION 8400 Westpark Drive • McLean, Virginia • 22102 703 • 821 • 7000

November 2, 2011

Kevin Knobloch President Union of Concerned Scientists Two Brattle Sq. Cambridge, MA 02138

Dear Mr. Knobloch:

Phil Brady, President of the National Automobile Dealers Association, asked us to respond to your letter of October 19. We want to provide a better understanding of the Austria-Carter amendment and to underscore the essential role that consumer demand and affordability play in the success of any fuel economy program. As the Model Year (MY) 2017-2025 fuel economy rules move forward, we believe it is critical to focus on the consumer. Your letter stated that you would "welcome a dialogue" on this matter, and we would be pleased to host such a meeting.

To clarify our long-standing position, NADA supports fuel economy increases under the Corporate Average Fuel Economy (CAFE) program. We merely seek to have fuel economy regulation return to the one program – CAFE – that Congress specifically enacted for that purpose. As you know, due to the actions of the judicial and executive branches, today there are three different agencies that set fuel economy standards – the Department of Transportation (DOT), the Environmental Protection Agency (EPA), and the California Air Resources Board (CARB).

Our main concern is keeping vehicles affordable for consumers. Your letter restates the claimed benefits of the yet-to-be released proposed fuel economy rules for MYs 2017-2025 and yet, there is no mention of actual costs, which is a critical omission in the analysis. The global warming reductions being sought are dependent on consumers actually buying new vehicles, and virtually every consumer is price sensitive. Piecing together various and disparate Obama Administration documents, we have derived that the average price of a new vehicle in 2025 will increase by over \$3,100 due solely to new fuel economy vehicle mandates put forth by the Administration. The breakdown in price increases is as follows:

Model Year 2011 fuel economy rule	\$91 average vehicle price increase <sup>1</sup>
Model Years 2012-2016	\$948 average vehicle price increase <sup>2</sup>
Model Years 2017-2025	\$2,100 - \$2,600 average vehicle price increase <sup>3</sup>

Added together, the \$3,100-plus average surcharge is an upfront cost that every new car buyer would have to pay. In contrast, the fuel savings derived from this surcharge are dependent on (1) the price of fuel; and (2) how much and in what manner the consumer drives the vehicle. If fuel is cheaper in the future, or a motorist reduces driving, the payback time would be even longer.

Other likely impacts on consumers from the rule for MYs 2017-2025 include the following:

- Vehicles that currently cost \$15,000 and less effectively being regulated out of existence.<sup>4</sup>
- Vehicles that currently cost \$20,000 being limited to a very small percentage of available cars.
- Vehicle mass being reduced by 15% 25%,<sup>6</sup> which raises important safety concerns.
- 25% to 66% of the fleet needing to be hybrid or electric.

The Austria-Carter amendment is of a very limited nature. The amendment would merely bar, in fiscal year 2012, EPA from (1) working on new fuel economy regulations for MYs 2017 or later; and (2) granting California a waiver to implement its "patchwork" fuel economy regulation. As Congress never explicitly authorized EPA to regulate fuel economy, and explicitly preempted all states — including California — from regulating fuel economy, enactment of the Austria-Carter amendment would simply return regulation of fuel economy back to its congressional design for fiscal year 2012. Thus, the Austria-Carter amendment does no more than to give a one year "time-out" to two agencies that should not be setting fuel economy standards to begin with.

## It is equally important to note what the Austria-Carter amendment would not do:

- 1. The amendment would <u>not</u> delay the introduction or implementation of any fuel economy or auto pollution standards. Under the amendment, the fuel economy regulations for MYs 2012-2016 that were recently finalized by both DOT and EPA would remain in full force. In addition, DOT could continue <u>without delay</u> to propose additional fuel economy regulations under CAFE for later years. And because fuel economy rules for MY 2017 are not due until April 1, 2015 more than three and a half years from now a one-year "time out" would not result in any loss of oil savings or greenhouse gas reductions.<sup>8</sup>
- 2. The Austria-Carter amendment would also not affect (i) any auto emissions standards for criteria air pollutants previously adopted by EPA or CARB or (ii) the authority of those agencies to promulgate such regulations in the future.

There is broad congressional support for a single fuel economy regulator. Before 2009, fuel economy had always been regulated exclusively by the DOT under CAFE. This is why the House voted on April 7, 2011 to pass H.R. 910, which includes a provision that would prevent further duplicative EPA and California fuel economy regulations. Similar legislation offered by Senate Minority Leader Mitch McConnell (R-KY) garnered 50 votes. Last month, 66 House Members signed a bipartisan letter supporting inclusion of the Austria-Carter amendment in an omnibus appropriations bill.

Your assertion that "auto dealers across the country are selling vehicles that meet fuel efficiency and greenhouse gas standards for model years 2012 to 2016" is incorrect. MY 2013 to 2016 vehicles are not yet for sale. Whether and how compliance with the standards for these model years will be achieved cannot yet be known as fuel economy rules do not regulate individual cars, but an automaker's entire annual fleet.

NADA is acting constructively when it questions the anticipated rulemaking for MYs 2017-2025, since few details are available about the framework agreement. Only a few technical documents and a presidential press announcement are in the public domain. Essentially, you are asking NADA to support what is likely to be the most expensive regulation ever imposed on consumers and the auto industry without ever having seen the proposal or the technical data supporting it. For example, to date, the Administration has refused to directly state on the record how much the average price of a vehicle will increase under their MY 2017-25 fuel economy rules, or how much the rule will cost overall.

For America's auto dealers, meeting consumer demand every day is not an abstraction, but a reality. Our dealers support regulatory policies that leverage consumer demand, not frustrate it. We are concerned that the Administration expects consumers to embrace new vehicles that will cost thousands of dollars more but may not meet their needs. Consumers always have, and frequently exercise, the option of retaining their current vehicles or buying used vehicles rather than investing in new ones. If consumers fail to buy sufficient quantities of the vehicles automakers will be forced to build, fleet turnover will slow, thereby undermining the goal we share of increasing the overall fuel economy of vehicles in operation.

Thank you for your consideration of our views.

Sincerely,

Andrew D. Koblenz Vice President, Legal and Regulatory Affairs

David W. Regan
Vice President, Legislative Affairs

David W. Regan

cc: Members of Congress

<sup>&</sup>lt;sup>1</sup> 74 Fed. Reg. 14413 (Mar. 30, 2009)

<sup>&</sup>lt;sup>2</sup> 75 Fed. Reg 25463 (May 7, 2010)

<sup>&</sup>lt;sup>3</sup> NHTSA & EPA, "2017-2025 Light-duty Vehicle GHG & Fuel Economy Joint Notice of Intent and Interim Technical Assessment Report," slide 15, (Oct. 5, 2010). http://www.epa.gov/air/caaac/mstrs/oct2010/4\_charmley\_tamm.pdf <sup>4</sup> U.S. Energy Information Administration, "Annual Energy Outlook 2011," pg. 27 (April 2011).

<sup>&</sup>lt;sup>5</sup> Ibid.

<sup>&</sup>lt;sup>6</sup> NHTSA & EPA. "2017-2025 Light-duty Vehicle GHG & Fuel Economy Joint Notice of Intent and Interim Technical Assessment Report," slide 17, (Oct. 5, 2010).

<sup>&</sup>lt;sup>7</sup> Ibid. Note that only 2-3% of the fleet sold today are hybrids.

<sup>&</sup>lt;sup>8</sup> EPA and CARB not only want to finalize new fuel economy standards nearly three years early and before we are able to learn any lessons from the market's reaction to the MY 2012-2016 rules, but they also seek to set these standards for an unprecedentedly long period – through MY 2025, or fourteen years from now. This flies in the face of Congress' directive, set out in CAFE, that fuel economy rules not be established in more than five year increments.

# A Flawed Fuel Economy Structure Produces a Flawed Result

Consumers Will be Forced to Pay Much More for Smaller, Less Powerful Vehicles

Issue Area	Result	
Average Price	The average price of a new vehicle will increase by at least \$3,000 in 2025 due	
Increase for	solely to the new fuel economy/global warming vehicle mandates enacted by	
Consumers	the Obama Administration. (source: EPA & NHTSA)	
	MY 2011 rule \$91 price increase (source: NHTSA) <sup>1</sup>	
	MY 2012-2016 \$948 price increase (source: EPA & NHTSA) <sup>2</sup>	
	MY 2017-25 \$2,100 - \$2,600 price increase (source: EPA & NHTSA) <sup>3</sup>	
	Total Average Price Increase: \$3,139 - \$3,639	
Auto Loans	Some consumers will be unable to qualify for a loan because of the regulatory	
	cost and will be shut out of the new car market	
Affordable	Vehicles that currently cost \$15,000 and less will be regulated out of	
Vehicles	existence. (source: Energy Information Administration) <sup>4</sup>	
	Vehicles that currently cost \$15,001-\$20,000 will only be around 1% of the	
	market. (source: Energy Information Administration) <sup>5</sup>	
Size of the	"15% - 25% reduction" in mass (source: EPA & NHTSA) <sup>6</sup>	
vehicle		
Horsepower	Less horsepower overall	
Type of vehicle	25% to 66% will be hybrid or electric (source: EPA & NHTSA) <sup>7</sup>	
	Even with tax credits and other government incentives, only 2-3% of the fleet is hybrid today.	
Impact of Other	There are at least 14 new safety and vehicle emission rule changes being	
Auto Regulations	considered by NHTSA, EPA and CARB. All of these new regulations if adopted	
	will increase the price of the vehicle, and some will add weight to the vehicle,	
	making complying with new fuel economy standards more difficult.	
Overall Cost to	MY 2011 fuel economy rule \$1.46 billion (source: NHTSA) <sup>8</sup>	
the Auto	MY 2012-16 fuel economy rule \$51.7 billion (source: EPA & NHTSA)9	
Industry	MY 2017-25 fuel economy rule – not released by EPA & NHTSA	
Job Loss	220,000 auto industry jobs will be lost at a fuel economy standard slightly	
**************************************	above the 54.5 mpg standard (56.2 mpg) in 2025. 10	

<sup>&</sup>lt;sup>1</sup> 74 Fed. Reg. 14413 (Mar. 30, 2009)

<sup>&</sup>lt;sup>2</sup> 75 Fed. Reg 25515 (May 7, 2010)

<sup>&</sup>lt;sup>3</sup> NHTSA & EPA, "2017-2025 Light-duty Vehicle GHG & Fuel Economy Joint Notice of Intent and Interim Technical Assessment Report," slide 15, (Oct. 5, 2010). http://www.epa.gov/air/caaac/mstrs/oct2010/4\_charmley\_tamm.pdf

<sup>&</sup>lt;sup>4</sup> U.S. Energy Information Administration, "Annual Energy Outlook 2011," pg. 27 (April 2011).

<sup>5</sup> Ibid.

<sup>&</sup>lt;sup>6</sup> NHTSA & EPA. "2017-2025 Light-duty Vehicle GHG & Fuel Economy Joint Notice of Intent and Interim Technical Assessment Report," slide 17, (Oct. 5, 2010).
<sup>7</sup> Ibid.

<sup>&</sup>lt;sup>8</sup> 74 Fed. Reg. 14206 (Mar. 30, 2009)

<sup>&</sup>lt;sup>9</sup> 75 Fed. Reg. 25642 (May 7, 2010)

<sup>&</sup>lt;sup>10</sup> DeFour Group, "Calculating Employment Losses Due to Post-2016 Fuel Economy Standards Using Government Data and Methodology," pg. 2, (July 7, 2011). http://www.defourgroup.com/

Written Statement of John D. Graham, Ph.D., Dean, Indiana University School of Public and Environmental Affairs

Testimony Prepared for the OMB-OIRA Oversight Hearing, Committee on Oversight and Government Reform, House of Representatives, United States Congress

Date: September 14, 2011

# CASE STUDY OF CONCERN: FEDERAL MILEAGE STANDARDS FOR MOTOR VEHICLES

To verify my concern that OIRA's quality-control job is not being accomplished, I decided to review a large regulatory program where Congress gave the executive branch substantial discretion and the Obama administration has responded by issuing highly expensive rules. I also picked an issue where I have expertise as an academic and where I was involved with similar rulemakings at OIRA from 2001-2006.

I chose for review the Corporate Average Fuel Economy (CAFE) standards for light trucks and heavy trucks, rulemakings that are now handled jointly by the U.S. Department of Transportation and the U.S. Environmental Protection Agency (EPA). The CAFE standards are sometimes called federal mileage standards because they compel each vehicle manufacturer to raise the average mileage of their cars and trucks. Since both the George W. Bush and Obama administrations favored large increases in the CAFE (i.e., mileage) standards for new vehicles, I will not focus on an area of major policy disagreement. What I will focus on is the recent quality of the regulatory impact analyses and how the RIAs (and the subtle details of the rules) have changed over the two administrations. As a result of my review, I have identified six issues where I am concerned that DOT/EPA regulators have not engaged in careful regulatory analysis.

# Issue #1

Under the Obama administration, DOT/EPA regulators are now enlarging the estimated benefits of CAFE standards by using a 3% discount rate instead of a 7% discount rate (when calculating the present value of annual fuel savings over a vehicle's life).

While OMB guidance (Circular A-4) authorizes agencies to present analytic results using discount rates of both 3% and 7%, DOT has historically emphasized the results based on 7% in CAFE rulemakings. In the automotive industry, it is well known that consumers have stronger preferences for money received today than for money that is received over the 15-year life of the vehicle. Those consumer preferences are apparent in the structure of sales incentives offered by dealers, in the nature of financing arrangements for new cars, and in the way consumers evaluate

new technologies that are both more fuel-efficient and more expensive (e.g., a hybrid engine). The long-term average real interest rate on car loans is about 7%. (Today, average car loans apply interest rates of 5.5% to 6.5%, though these rates are expected to rise again as the economy recovers). To respect consumer preferences, DOT (with support from OMB) has historically emphasized results based on the 7% rate.

This seemingly arcane, technical matter has a powerful impact on the quantified benefits of a fuel-saving technology. For example, suppose a vehicle is driven 10,000 miles per year for 15 years and we compare the present value of fuel savings for a vehicle rated at 50 miles per gallon (MPG) to a vehicle rated at 25 MPG. We know that the 50 MPG vehicle will consume 200 fewer gallons of fuel each year than the 25 MPG vehicle (400 versus 200 gallons per year). At an average real fuel price of \$3.50 per gallon and assuming a 0% discount rate for 15 years, the 50 MPG vehicle will save consumers \$10,500 in fuel expenditures over the life of a vehicle (\$21,000 - \$10,500 = \$10,500).

However, the additional cost of fuel-saving technology (e.g., a hybrid engine) is typically embedded in the up-front cost of the vehicle. The consumer must either pay for the technology immediately upon purchase of the vehicle, or pay a somewhat larger amount over several years through a loan or other financing arrangement. Consumers have good reason for preferring money now, to an equivalent amount of money saved in the future.

To capture this consumer preference, analysts typically apply a real discount rate to the stream of fuel savings in order to compute their "present value". If the discount rate is assumed to be 3%, the present value of fuel savings is \$6741. At a discount rate of 7%, the present value of fuel savings is \$3801. In other words, the present value of fuel savings over the life of a vehicle is enlarged by about 77% when a discount rate of 7% is replaced with a discount rate of 3%. The choice of discount rate for use in regulatory analysis has historically been controlled by analysts at OMB-OIRA but it is not clear who in the Obama administration is responsible for this analytic change.

# Issue #2

DOT/EPA regulators are not considering the possibility that world oil prices might fall as well as rise between now and 2025.

One of the crucial (but most difficult) inputs to forecast is the future world price of oil and the corresponding price of gasoline at the pump in the United States. During the Bush administration, the forecasted average price of gasoline at the pump in 2030 was about \$2.16 per gallon (in 2003\$). At OMB, we believed that these forecasts, made by the independent Energy Information Administration, were too low. We encouraged DOT to consider some higher price

trajectories in regulatory analysis, which they did. But DOT regulators dutifully used the EIA forecasts in their main CAFE analyses. During the Obama administration, the forecast of future fuel prices has been upped by EIA to an average of \$3.68 per gallon (in 2008\$). Since savings of fuel are the primary economic benefit of DOT's tighter CAFE standards (or EPA's carbon standards), the large increase in the forecasted price of gasoline has caused a large increase in the estimated consumer benefit from more fuel-efficient cars.

Although policy makers are right to be concerned about rising oil prices and energy security, they also need to consider the possibility that world oil prices may not rise. In other words, it is not obvious that the future path of oil and fuel prices will be as pessimistic as EIA and the Obama administration are assuming. The recent developments in Libya and Iraq could contribute to a buttressing of long- term global oil supplies while the diminishing rates of growth in the economies of China and India may lessen the rate of growth in worldwide demand for oil. Meanwhile, U.S. and Canadian oil production are on the rise, and may rise sharply in the future due to technological innovations and the discovery of vast new reserves offshore and onshore. In light of the slowing growth rate in the global economy and other recent supply developments, a variety of private and international forecasters are already lowering their predictions for the path of future oil prices. In other words, the financial benefit of driving a 50 miles-per- gallon car may not prove to be as large – over the 15-year life of the vehicle – as the Obama administration projects it will be today.

DOT/EPA regulators should acknowledge this possibility in regulatory analysis.

# Issue #3

Under the Obama administration, DOT/EPA regulators are now deflating the size of the "rebound effect" (the extra miles driven in fuel-efficient vehicles), an analytic change that has the effect of enhancing the net fuel savings from CAFE standards and reducing the congestion and pollution impacts of additional vehicle miles of travel.

Consumers are likely to increase their annual miles of vehicle travel when their fuel-inefficient vehicle is replaced by a more fuel-efficient vehicle. This "rebound effect" in travel behavior is predicted because improved fuel economy reduces the marginal cost of an additional mile of travel. Although the direction of this effect is clear, there is technical disagreement among experts about how large the rebound effects is likely to be.

Prior to the Obama administration, DOT regulators typically used a 20% rebound effect in the main regulatory analysis, and then conducted sensitivity analyses with rebound effects as large as 25% and as low as 5%. During the Obama administration, the assumed rebound effect has been cut in half by regulators, from 20% to 10%. By reducing the rebound effect, the NET fuel

savings of higher mileage standards are enlarged while the adverse impacts of additional travel (e.g., increased congestion and pollution from tailpipes) are curtailed. (From an environmental perspective, more is assumed to be bad because it results in more greenhouse gas emissions, more smog and more soot in the air. On the other hand, there is also a mobility benefit from the additional travel). Since the rebound effect is expected to be larger when fuel prices are high than when fuel prices are low, and since the Obama administration is forecasting long-term rises in real gasoline prices, it is not clear why the rebound effect has been cut in half. For example, the key studies that support a rebound effect as low as 5-10% are based on fuel prices that are much lower than the average price of gasoline that the Obama administration is assuming. This is another example of an analytic issue that his historically been controlled by OMB but it is not clear who ordered this change in the Obama administration.

## Issue #4

Under the Obama administration, DOT/EPA regulators have added a new category of "social" benefit from tighter mileage standards, a savings of \$21-\$45 for each ton of carbon dioxide that is not emitted into the atmosphere due to higher-mileage vehicles.

When a vehicle burns less gasoline, the result is fewer emissions of greenhouse gases (especially carbon dioxide) into the atmosphere. DOT/EPA regulators are engaged in a well-intended effort to capture the global benefits of reducing carbon-dioxide emissions from new vehicles in the United States. The specific figures are based on a federal interagency study, which is in turn based on peer-reviewed estimates of the marginal damages worldwide from additional greenhouse gas emissions. Although this new benefit category does not have a large impact on the overall benefit estimates reported by DOT/EPA, it again enlarges the overall benefits of stricter CAFE standards. While I am comfortable with the determination that greenhouse gases are linked to global climate change, I think the impact of climate change on the economy, public health, and the environment entails far more uncertainty than is captured by this two-fold range of damage estimates. To their credit, DOT/EPA are reporting sensitivity analyses with even larger ranges of damage estimates, though even those ranges seem too small to me.

Another uncertainty is the assumption that reducing greenhouse gas emissions from the U.S. transport sector will have a meaningful effect on global climate change. Since global climate change arises from global sources, including those in China and India, it is difficult to see how US action alone can produce a meaningful reduction in the pace of global climate change. In fact, if reductions in US oil consumption from tighter CAFE standards cause global oil prices to rise less rapidly, the resulting rise in oil consumption in the developing world will cause a perverse, offsetting rise in their greenhouse gas emissions (an effect called "leakage" by climate-policy specialists). In other words, the analysis prepared by DOT/EPA regulators appears to be

making a naïve analytic assumption that the damages from global climate change can be addressed significantly by the United States, without unified global action.

#### Issue #5

Under the Obama administration, DOT/EPA regulators are planning large increases in vehicle mileage standards without careful consideration of engineering impacts on vehicle size, performance, and safety.

Conceptually, the "costs" of tighter mileage standards include the costs of fuel- saving technology plus the monetary value of any other losses in vehicle attributes (e.g., safety) that consumers value. But DOT/EPA regulators are focusing their cost estimates on the fuel-saving technologies, without giving adequate consideration to the other vehicle attributes.

Over the past 25 years, the improved fuel efficiency of motor vehicles has been offset significantly by the sustained improvement in the size, performance, and safety of motor vehicles. Larger vehicles with more seating capacity and leg/trunk space tend to consumer more gasoline due to their extra weight and aerodynamic factors. Engines that deliver more horsepower tend to consume more energy. Vehicle designs with more safety features tend to consume more fuel due to the added weight (e.g., a car with five airbag systems weighs more than a car with no airbag systems). A key analytic issue for DOT/EPA regulators is whether the quest for more energy savings will inadvertently hurt consumers by causing vehicle manufacturers to produce cars and trucls that do not satisfy customer preferences for vehicle size, performance and/or safety.

During the Bush administration, DOT/EPA regulators accepted the size, performance and safety characteristics embedded in the confidential production plans of vehicle manufacturers, since these production plans were assumed to be responsive to projected consumer preferences. As a result, it was reasonable for DOT regulators to assume that the cost of tighter mileage standards was simply the cost of the fuel-saving technologies necessary to meet the standards.

Under the Obama administration, however, the regulatory mandates are being set for model years (as late as 2025) that are beyond the production planning horizon of major vehicle manufacturers. It is therefore critical that a target such as 50 MPG in 2025 be accompanied by an analysis of consumer preferences for vehicle size, performance, and safety. As far as I can tell, the DOT/EPA regulators have not engaged in any such analysis and thus there is a risk that further improvements in vehicle size, performance and safety will be foregone by stringent federal mileage standards.

# Issue #6

Under the Obama administration, special compliance credits will be awarded by EPA for electric-vehicle technology, even though such credits have a questionable cost-benefit justification.

The Obama administration has already invested billions of taxpayer dollars (through production subsidies and loans awarded by the U.S. Department of Energy) to enhance the competitive position of the electric vehicle industry. For private investors in electric vehicles, government support is needed because automotive applications of lithium-ion battery technology are not yet economically competitive. According to the National Research Council, the incremental production cost of a battery-operated car (like the Nissan Leaf) is \$10,000-\$20,000 more than a gasoline-powered vehicle of similar size and performance. The fuel savings from use of low-cost electricity are not nearly large enough to pay the cost premium for large automotive battery packs.

The Obama administration recently announced that regulatory policy will also be used to favor electric cars (as well as fuel cells and other battery-related technologies), even though no benefit-cost analysis was published to support this policy change. While DOT is precluded by law from offering lucrative compliance credits for electric vehicles, the Obama administration is using EPA's more discretionary authority under the Clean Air Act to achieve the same result under its greenhouse-gas control program for motor vehicles. In effect, auto makers will be permitted to count an electric car as two vehicles instead of one when a manufacturer's compliance statistic for emissions is computed by regulators. This "incentive multiplier" declines gradually from 2.0 in model year 2017 to 1.5 in model year 2021. But the regulatory preference for electric cars does not end with the incentive multiplier. Fearing that government subsidies and incentive multipliers may not be sufficiently lucrative, the Obama administration also announced that electric vehicles will be assumed to cause zero pollution for model years 2017-2021, even though it is well known that use of electric vehicles cause air pollution indirectly at the powerplant (where electricity is produced). Special considerations are also to be offered for fuel cells, plug-in hybrids and conventional hybrids used for heavier trucks. The zero-pollution compliance figure will encourage vehicle manufacturers to offer electric cars instead of conventional hybrid engines, advanced diesels, or natural gas vehicles.

The case for "advanced vehicle" compliance incentives is weak because California regulators are already engaged in this activity. Since the Obama administration has been unwilling to restrain the ambitions of California regulators, vehicle manufacturers will be compelled to comply with California's "Zero Emission Vehicle" (ZEV) program for new vehicles sold in California (and other states that together comprise more than 25% of new vehicle sales in the U.S.). If one is to believe that federal incentives for advanced vehicles are necessary (e.g., to overcome barriers to introduction of new technologies), then the EPA compliance incentives should have used as a

baseline the impacts of the California ZEV program and the DOE grants and loan guarantees. What little analysis EPA has performed seems to suggest that greenhouse gas emissions will actually be enlarged by the compliance incentives for advanced vehicles (since the special credits allow vehicle manufacturers to offset the advanced vehicle sales by selling more vehicles with higher-than-average greenhouse gas emissions).

Interestingly, the European Commission considered and rejected similar compliance credits for electric-vehicle technology two years ago because the Commission determined that special credits would not reduce greenhouse gas emissions and they might actually exacerbate missions. The European Commission was also concerned that special considerations violate the principle of "technology neutrality". In other words, regulatory policy that favors battery- operated vehicles may have the inadvertent effect of hurting investments in other promising technologies such as natural gas vehicles, advanced diesel-powered vehicles, cellulosic ethanol, and other innovative ideas that DOT/EPA regulators cannot foresee today. In other words, the Obama administration appears to be entrusting less faith in competitive markets to choose the best technologies than is the European Commission in Brussels.

# **Summary of Case Study**

Based on the six issues that I have discussed in the case study, I am quite concerned that DOT/EPA regulators are not engaged in thoughtful regulatory analysis prior to making their regulatory determinations about the future of federal mileage and greenhouse gas standards. While I am not privy to the internal deliberations of the Obama administration, I find it hard to believe that these issues would have been handled the way they were if OMB-OIRA had been significantly involved in the deliberations. I encourage the Obama administration to harness the talents and expertise of OIRA in a concerted effort to improve the quality of regulatory analysis at federal agencies. Congress should make it very clear to the OMB Director and the OIRA administrator that Congress cares about the quality of cost-benefit analysis, that Congress expects poorly analyzed rules to be returned publicly to agencies for reconsideration, and that Congress is willing – through authorization or appropriations language – to give OIRA the tools that are necessary to do its job effectively.