Supporting Statement for Fuel Economy, GHG, Other Emissions, and Alternative Fuels Education Program Quantitative Research Plan

Section A

January 27, 2012

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A. Justification

The Energy Independence and Security Act of 2007 (EISA) was amended to include Consumer Information and Consumer Education programs to the Corporate Average Fuel Economy (CAFE) standards (49 USC § 32908[1]). Under EISA, National Highway Traffic Safety Administration (NHTSA), in consultation with Department of Energy (DOE) and Environmental Protection Agency (EPA), is required to implement and develop a program to label new automobiles with information on vehicle performance on the basis of fuel economy, greenhouse gas (GHG) emissions and other emissions over the useful life of a vehicle and to create a rating system for consumers to easily compare fuel economy, GHG and emissions at the point-of-sale. In addition, NHTSA, by rule, must provide direction to manufacturers regarding a permanent and prominent display labeled on automobiles capable of operating on alternative fuels and to ensure that the owner's manuals of vehicles capable of operating on these fuels include information describing capability and benefits of using alternative fuels. The rulemaking deadline is 42 months after the enactment of EISA, which is June 2011.

Concurrently, the EPA, exercising authority under 49 USC § 32908 (b), is revising the current Fuel Economy label in an effort to accommodate Electric Vehicles (EV), Extended Range Electric Vehicles (EREV) and Plug-in Hybrid Electric Vehicles (PHEV) entering the market in early 2011 as 2012 model year vehicles. NHTSA and EPA have, therefore, come to the agreement that the EPA will conduct all research in collaboration with NHTSA to implement the fuel economy labeling requirements set forth by EISA. As such, EPA is taking the lead conducting the necessary market research portion related to fuel economy label content and, in particular, content related to EV, EREV and PHEV, that will gather data upon which the labels will be created and the consumer education program will be developed. NHTSA will take the lead developing the necessary steps to meet the consumer education campaign requirements as defined in EISA regarding Fuel Economy, GHG and other emissions labeling leveraging the EPA lead research. However, NHTSA will also be independently leading the obligations associated with developing rules for a permanent and prominent display on automobiles capable of operating on alternative fuels, ensuring that owner manuals of vehicles capable of operating on alternative fuels include information describing capability and benefits of using alternative fuels and educating consumers about the benefits of thermal management technologies including energy efficient air conditioning systems and glass.

After the market research process, NHTSA will then take charge of creating the consumer education campaign with relevant content, consumer-facing messages and communication materials.

NHTSA has already conducted the first phase of this research program, which consisted of two focus groups (one male, one female) in each of four cities. Using the findings from this qualitative research as a guide, NHTSA is now submitting an information collection request to conduct quantitative research in support of the consumer education program.

[1] A full text copy of this code is included with this package as Appendix A. Also, included as a separate appendix is a copy of the relevant section of 49 U.S.C. § 32908 as Appendix B for easy reference.

This research will be guided by two broad objectives:

1) Test consumer comprehension of existing fuel economy-related content[2]. The research will explore:
    a. Among consumers, what is the existing level of knowledge regarding fuel economy and where did consumers obtain the information they already have?
    b. What knowledge gaps are important to address through NHTSA's consumer education program?
    c. In terms of fuel economy, GHG and other emissions, alternative fuels and thermal management technologies, what issues do consumers care most about?
    d. Does the existing fuel economy-related content already collected by NHTSA (Appendix C) add to their current levels of knowledge?
    e. Is the fuel economy-related content written in a way that is clear and comprehendible?

2) Test consumer-facing messages related to NHTSA's consumer education campaign. The research will explore:
    a. Do these marketing messages effectively encourage consumers to seek fuel-economy related content from NHTSA?
    b. What are the best methods (*i.e.,* channels of communication) for reaching consumers with these messages?

We recommend conducting an online survey with 1,500 respondents. For the purposes of this study, it is sufficient that the sample be a convenience sample as long as it is diverse in terms of drivers' gender, age and region. Respondents will be screened based on the following criteria:

- Respondents must be 18 years or older.
- Respondents must currently possess a valid driver's license.
- Respondents must currently own or lease a vehicle.
- Respondents must be the primary or a shared decision maker for vehicle purchases in their household.

We recommend providing the survey in English only as the graphical treatments that will be evaluated are only available in one language. By providing the survey in addition languages, we risk having messages evaluated by consumers who do not understand the language presented. A draft of this survey instrument is provided in this package as Appendix D.

The following sections describe the justification for this proposed consumer research plan in detail.

[2] Note that for the purposes of this information collection request the term "fuel economy-related content" encompasses information on the impact of driver behaviors and vehicle maintenance on fuel economy as well as the relationships between a vehicle's fuel economy and GHG and other emissions, alternative fuels and thermal management technologies. This content is included in the Messaging Audit document which can be found in Appendix C of this package.

A1. Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.

As required by 49 U.S.C. § 32908 (g), NHTSA, in consultation with EPA and DOE, must develop a consumer information and education program to improve consumer understanding of automobile fuel economy, GHG emissions and other pollutant emissions; of automobile use of alternative fuels; and of thermal management technologies used on automobiles to save fuel and reduce GHG emissions.

Consumer Information, Consumer Education, 49 U.S.C. § 32908 (g)(2):
EISA requires NHTSA to develop and implement through rulemaking a consumer education program to provide information about fuel economy, GHG emissions, other emissions, alternative fuels and thermal management technologies.

The specific objectives of the education program, as stated in EISA, are to:

- Improve understanding of automobile performance on the basis of fuel economy and greenhouse gas emissions and other pollutant emissions over the useful life of the vehicle;
- Inform consumers of the benefit of using alternative fuel in automobiles;
- Inform consumers about locations of stations with alternative fuel capacity; and,
- Educate consumers about fuel savings that would be recognized by purchasing a vehicle equipped with thermal management technologies (*e.g*., energy-efficient air conditioning systems and glass).

In order to effectively achieve the objectives of the consumer education program and fulfill its statutory obligations, NHTSA has conducted qualitative research and is now requesting to conduct follow-up quantitative research with consumers to assess current levels of knowledge surrounding these issues, explore currently available fuel economy-related content for clarity and understanding, evaluate potential consumer-facing messages and their potential to encourage consumers to seek more fuel economy-related information from NHTSA, and explore the communications channels in which these messages should be present. The research will allow NHTSA to refine messaging to enhance comprehension and usefulness of relevant content and will guide the development of an effective communications plan.

The National Traffic and Motor Vehicle Safety Act of 1966, Title 15 United States Code 1395, Section 106 (b), gives the Secretary authorization to conduct research, testing, development, and training as authorized to be carried out by subsections for this title. The Vehicle Safety Act was subsequently re-codified under Title 49 of the U.S. Code in Chapter 301, Motor Vehicle Safety. Section 30168 of Title 49, Chapter 301, gives the Secretary authorization to conduct research, testing, development, and training to carry out this chapter. The full text is included in this package as Appendix E.

A2. Indicate how, by whom, and for what purpose the information is to be used. Except for a new collection, indicate the actual use the agency has made of the information received from the current collection.

The purpose of this consumer research is to gather critical information that will allow NHTSA to fulfill its role in educating consumers about fuel economy, GHG emissions, other emissions, alternative fuels, and thermal management technologies pursuant to EISA. The findings from this proposed research will assist NHTSA in ensuring that the relevant content is comprehended by consumers and can help them in improving their vehicles' fuel economy and lowering emissions by making them aware of the behaviors that affect a vehicle's fuel economy and the available fuels and technologies.

The research will be used to inform the development of a campaign that aims to increase awareness and improve comprehension about vehicle fuel economy, GHG emissions and other vehicle emissions, as well as alternative fuels and thermal management technologies. This research plan leverages the findings from the recent EPA research about fuel economy labeling and the qualitative research that has been conducted for this program. NHTSA will take the necessary steps to avoid unnecessary duplication. The research may be used to guide and refine the fuel economy-related content and consumer-facing messaging that will be used throughout the consumer education campaign by identifying what relevant issues consumers care most about and what information they still need to make more informed purchases and driver behavior decisions.

A3. Describe whether, and to what extent the collection of information involves the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g. permitting the electronic submission of responses, and the basis for the decisions for adopting this means of collection. Also describe any consideration of using information technology to reduce burden.

This data collection will be completed using an online survey in order to facilitate the evaluation of graphical content in the message testing section, a functionality that is not possible for a telephone survey. In addition, the mock advertisements being tested in this study are designed for online viewing. As a result of this need to use an online survey methodology, this data collection will use a convenience sample: self-selected U.S. licensed vehicle owners or lessees who have some responsibility for vehicle purchase decisions in their household. For the purposes of this study, it is sufficient that the sample be a convenience sample as long as it is diverse in terms of drivers' gender, age and region and quotas will be implemented to ensure this diversity.

Because the study is not a probability-based sample, there is no statistical basis to derive unbiased estimates representative of the target population, U.S. passenger vehicle drivers, or to estimate sampling error. However, NHTSA believes that the benefits offered by an online survey, including the ability to present respondents with mock online advertisements, outweigh the disadvantage of potential respondent bias that rises from using a convenience sample.

Details on the recruitment of respondents for this online survey are available in Section B of this information collection request.

A4. Describe efforts to identify duplication. Show specifically why any similar information already available cannot be used or modified for use for the purposes described in Item 2 above.

NHTSA researchers have extensively reviewed recent studies pertaining to the Fuel Economy program. EPA, in collaboration with NHTSA, has conducted a multi-phased consumer research project in support of the agencies' joint rulemaking on fuel economy, as part of which NHTSA is implementing its § 32908(g)(1) responsibilities. EPA's research focused on the labeling piece of the rule. NHTSA will now look to build upon this research, utilizing key findings and conducting further consumer research that will be instrumental in guiding NHTSA's consumer education program. This new collection will provide insights into the current levels of awareness and comprehension of fuel economy issues, GHG and other emissions issues, alternative fuel benefits and capabilities, and thermal management technology benefits. For this campaign, NHTSA is already committed to leveraging content that currently exists; however, gaining an understanding of consumer engagement with and comprehension of this content will be essential to the success of the program.

The research will also help to identify the needs and motivations of the target audience, allowing NHTSA to understand what issues consumers care most about and what messages may affect behaviors. It will identify the most effective and relied-upon communications channels through which to reach consumers. This exploration will include both the current sources of information that consumers use for fuel economy-related issues, as well as new sources that could be created for consumers to access this information. NHTSA will look to build upon the research conducted by EPA and identify which sources may currently be underused and where consumers can benefit from seeing this information. Prior research shows that the majority of consumers research their vehicle purchase prior to visiting a dealership, so many sources considered will reflect this.

NHTSA is mindful of the information that has already been collected from consumers through EPA's efforts and has worked with parties within NHTSA and other agencies and third-party partners to ensure all questioning is relevant, useful and puts no undue burden on respondents.

A5. If the collection of information impacts small businesses or other small entities (Item 5 of OMB Form 83-I), describe any methods used to minimize burden.

The collection of information will not impact small businesses.

A6. Describe the consequence to Federal program or policy activities if the collection is not conducted or is conducted less frequently, as well as any technical or legal obstacles to reducing burden.

NHTSA and its contractors conducted a messaging audit (Appendix C), which identified existing content related to fuel economy, GHG and other emissions, alternative fuel and thermal management technology information. Through focus group testing, NHTSA began to explore consumer comprehension of and engagement with this content in order to assess what consumers already know, what they need to know, and what issues they care most about. Through quantitative testing, we can determine what content should be included in the program (*i.e.*, what content can be leveraged, what content must first be refined and what new information consumers need) and where this information is best placed.

Without exploring these themes with consumers, NHTSA risks developing a consumer education program that is neither relevant nor effective.

A7. Explain any special circumstances that would cause an information collection to be conducted in a manner that is not consistent with the guidelines in 5 CFR 1320.6.

No special circumstances require the collection to be conducted in a manner inconsistent with the guidelines in 5 CFR 1320.6.

A8. If applicable, provide a copy and identify the date and page number of publication in the Federal Register of the agency's notice, required by 5 CFR 1320.8(d), soliciting comments on the information collection prior to submission to OMB. Summarize public comments received in response to that notice and describe actions taken by the agency in response to these comments.

NHTSA published a notice for public comment for this information collection to the Federal Register on August 23, 2011. To date, no public comments have been submitted in response to this information collection request.

A9. Explain any decision to provide any payment or gift to respondents, other than remuneration of contractors or grantees.

Respondents for this survey will not be offered incentives provided directly by NHTSA. Research panel members are provided with non-monetary benefits, such as points to be used within the panel, access to forums and other panel-sponsored discussion opportunities, as a thank you for participating in various studies. This incentive management is included as one part of the cost per response figure noted in item A14. We would estimate the monetary equivalent of the points received for this particular study would be about 10-15% of the cost per response, or approximately $.60 per response.

Prior to survey launch, NHTSA plans to conduct cognitive testing of the survey instrument in the Baltimore/Washington metro area to ensure questioning is clear and understandable for respondents (See Part B, Section B4 for additional details). Those who participate in these 45-minute cognitive interviews of the survey instrument will be provided a cash honorarium as compensation for their time. This honorarium is provided as an incentive to encourage participants to take the time travel to a central location, take the survey and participation in the discussion (therefore minimizing participant out-of-pocket expenses), as well as a sign of appreciation for their thoughts and opinions on the survey language and content.

We will proceed with recruiting 12 participants with a goal of interviewing at least eight, offering a $40 incentive. All respondents who show up to the facility and participate in the research will receive the same incentive.

A10. Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation or agency policy.

The introductory text for this study will read as follows:

Thank you for agreeing to participate in this online study. The survey will take about 20 minutes to complete. All responses are anonymous and will only be viewed in aggregate.

Please note that an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a current valid OMB control number. The OMB control number for this study is TBD. This survey is voluntary. We will not collect any personal information that would allow anyone to identify you. Any information you do provide will be kept private to the fullest extent of the law.

A11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private.

This research will not include any questions of a sensitive or private nature.

A12. Provide estimates of the hour burden of the collection of information.

The online survey will take approximately 20 minutes for respondents to complete and will require 1,500 participants. NHTSA plans to administer this study one time.

For the cognitive test of the survey instrument, NHTSA anticipates needing 45 minutes to allow respondents to navigate the survey while also discussing their feedback on survey questions. Interviews will be conducted with one respondent at a time. For recruiting purposes, a total of 12 potential participants will be recruited via dialed telephone screening calls, which are estimated to take 10 minutes per response.

Based on experience, it is prudent to recruit up to 12 people in order to help achieve at least 8 participants showing up for the discussion. Thus, the total burden per participant is estimated to be 55 minutes (10 minutes for the screening/recruiting telephone call plus 45 minutes for the interview).

Therefore, the total annual estimated burden imposed by this collection of information is approximately

Table 1. Hour Burden Summary

	Participants	Minutes	Hours
Qualitative Cognitive Test of Survey Questions	12	x 55	= 11
Fuel Economy, GHG, Other Emissions and Alternative Fuels Education Program Online Survey Completes	1,500	x 20	= 500

The maximum total input cost, if all respondents were interviewed on the job, is estimated as follows:

$16.27 per hour[3] x 511 interviewing hours = $8,313.97

A13. Provide an estimate for the total annual cost burden to respondents or record keepers resulting from the collection of information.

There are no record keeping or reporting costs to respondents. Respondents who are member of an online panel of U.S. consumers will be contacted and asked to participate in the study. All responses are provided spontaneously. Each respondent only participates once in the data collection. Thus there is no preparation of data required or expected of respondents. Respondents do not incur: (a) capital and startup costs, or (b) operation, maintenance, and purchase costs as a result of participating in the survey.

The only cost burden any respondents will experience are the costs related to travel to and from a central location for participation in the cognitive testing. These costs are minimal and are often offset by the honorarium provided (detailed in A9).

Assuming cognitive testing participants travel a maximum of 60 miles round-trip to and from the facility, the total maximum travel costs would be:

City	**Maximum Participants**	**Maximum Miles Traveled**	**IRS Standard Mileage Rate[4]**	**Total Mileage Costs**
Cognitive Testing Interviews	12	60	$0.555/mile	$399.60

[3] From Bureau of Labor and Statistics' median hourly wage (all occupations) in the May 2010 National Occupational Employment and Wage Estimates, Last Modified April 2011
[4] From Internal Revenue Services' 2012 Standard Mileage Rate for business miles driven.

Participants generally travel less than 30 miles one-way to the central location and ultimately travel costs vary per person. This is meant to be an estimate of the maximum costs that respondents could be expected to incur.

A14. Provide estimates of annualized costs to the Federal government.

Direct Survey Costs

The following costs are associated with conducting an online survey as described in this justification document:

Table 2. Direct Costs

Item	Unit Rate	Units	Total
In-Person Cognitive Testing of Survey	$5,100	1	$5,100
Cost per Interview	$4.00	1,500	$6,000
Programming & Hosting	$8,000	1	$8,000
Data Processing	$5,000	1	$5,000
Total			**$24,100**

Research Partner Hours

Staff time for our research partners is calculated using negotiated per hour billing rates. The hours estimated here are based on hours needed for past quantitative projects of a similar scope. These hours include time needed for survey preparation and execution, data analysis and reporting, as well as meetings and conference calls with the NHTSA team upon approval of this ICR package.

Table 3. Partner Hours

Level	Labor Hour Rate	Estimated Hours	Estimated Total Costs
Vice President	$210	66	$13,860
Senior Account Supervisor	$150	10	$1,500
Account Supervisor (Senior Project Manager)	$155	104	$16,120
Assistant Account Executive (Research Assistant)	$100	100	$10,000
Total Partner Staff Time			**$41,480**

Travel costs incurred as a result of conducting cognitive testing at a central location will be billed to this project at cost and utilize government travel guidelines.

The total estimated cost for this quantitative research program is **$65,580**.

A15. Explain the reasons for any program changes or adjustments reported in Items 13 or 14 of the OMB Form 83-I.

This item is not applicable. This is a new information collection request.

A16. For collections of information whose results will be published, outline plans for tabulation and publication.

Through data processing, we will analyze the total data gathered from the sample of respondents. We will also use cross tabulations to analyze summary statistics and coded open-ended responses across demographic groups to explore any apparent differences; however, the intention of this survey is not to guide decisions on message targeting by demographics. This analysis will provide NHTSA with the ability to make informed decisions about messaging relevant to this initiative.

NHTSA expects to receive an interim report within one week of the completion of survey fielding. This will provide top line results of the survey along with findings gathered from an initial look at the data. After a more detailed analysis, a final report will be delivered two weeks after the survey has completed fielding.

The timeline in Table 4 was created with an assumed approval date of January 31, 2012. This table details the anticipated time needed for data collection. Actual deliverable dates will be dependent on the date of OMB approval.

Table 4. Research Timeline

ACTION	TARGET COMPLETION DATE	NOTES
OMB Review and Approve Quantitative ICR package	January 31, 2012	*OMB verbally agreed to shorter review period based on satisfactory informal review.
Program online survey	February 1, 2012	Includes online survey programming, internal testing and survey pre-testing the survey.
Cognitive Survey Evaluation	February 1-28, 2012	Includes time for recruitment, fielding and approval for any necessary questionnaire revisions.
Conduct online surveys	February 28- March 6, 2012	Target 1,500 responses Survey to be soft launched on February 28 to attain 5% of sample. Sample is reviewed prior to full survey launch.
Data processing & top-line analysis	March 7-14, 2012	Data processing, including tabulation and open ended coding.
Interim Top-Line Report	March 14, 2012	Summary report based on initial analysis of top-line data.
Final Report	March 23, 2012	Final report on survey results, including recommendations for consumer education program.

A17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons that display would be inappropriate.

We do not seek approval to not display the expiration date for OMB approval for this research plan.

A18. Explain each exception to the certification statement identified in Item 19, "Certification for Paperwork Reduction Act Submissions," of OMB Form 83-I.

No exceptions to the certification are required for this research plan.