SUPPORTING STATEMENT

FOR

INFORMATION COLLECTION REQUEST

Internet Survey Research for Improving Fuel Economy Label Design and Content

EPA ICR 2390.01

May, 2010

Compliance and Innovative Strategies Division
Office of Transportation and Air Quality
Office of Air and Radiation
U.S. Environmental Protection Agency

Part B of Supporting Statement

1) Introduction to Part B

For reasons explained in Part A, EPA will conduct an internet-based survey to test fuel economy label designs, developed and tested during focus group research, with a broader audience. Specifically, it will examine how understandable the new label designs are, and whether the new labels will improve consumers' abilities to select more fuel-efficient vehicles.

2) Sections 1 and 2: Survey Objectives, Key Variables, and Survey Design

The Internet survey has several fundamental objectives:

- Understand the vehicle buying process and the role of fuel economy information in that process
- Understand and identify the most understandable and useful overall label design for both conventionally fueled vehicles and advanced technology vehicles

The study uses an experimental design where effects of the labeling options are estimated by presenting random samples of participants to controlled information. The differences in information consist entirely of the different label design families; the same information is presented in different ways. Because individual differences are randomly distributed across conditions, it is possible to use standard statistical techniques such as analysis of variance and multivariate regression analysis to test observed effects between different designs.

The study uses an internet panel for data collection methods. This approach allows visual presentation of study materials and the random assignment of subjects to condition. This study will use a convenience sample drawn from two databases: one of people who have purchased a new vehicle in the last year (Focus USA[1] is the list owner for this database), and one of people who have expressed an intention to buy a new vehicle by requesting a price quote from a dealer (from Autobytel[2]). Participants will be randomly assigned to see one of three label design families. As existing members of the internet panel,

[1] http://www.focus-usa-1.com/company.html. The Auto Mega File that Focus USA uses is the largest, most comprehensive file of its kind on the market. It is the best choice for companies marketing insuranceand other auto related products. Not only does it contain vehicles by make, model and year butalso VIN. The file originates from multiple sources, including state records, insurance agencies, warranty companies, auto service centers and automobile clubs. This file is a must test for auto insurance companies, auto accessories, extended warranties, automotive parts, services and merchandise as well as for travel, financial offers and for companies looking to offer products and services to consumers who own specific makes and models of vehicles. This file is NCOA'd regularly and updated on a monthly basis.

[2] http://www.autobytel.com. Autobytel is a leading new vehicle buying and research network of websites with over 2 million average monthly user visitors. Their database is made up entirely of consumers who have submitted a request for vehicle price quote from the dealer. This provides precision targeted opportunities to connect with a large and diverse audience of motivated automotive shoppers.

participants are notified by e-mail about the availability of the survey. They are invited to go to a secure website to complete the survey.

The effects of possible policy options will be measured in terms of understanding – the ability of participants to make correct decisions for specified scenarios – and influence, the willingness of respondents to select the option that will best suit their typical driving patterns.

The survey has been reviewed by Dr. Clay Voorhees, Assistant Professor of Marketing, The Eli Broad College of Business, Michigan State University; and Dr. Randall Pozdena, Managing Director and head of the Portland office of ECONorthwest and former vice president of the Federal Reserve Bank of San Francisco.

Key Variables: The survey presents each respondent a series of pairs of labels and asks the respondent either (a) which of the pair is better for a specified driving distance, or (b) which of the pair the respondent would purchase, based on his/her own driving patterns. Differences in responses to these questions across label designs, once demographic information is controlled, will provide the key test results.

Survey Design: A draft of the internet survey is attached. A copy of EPA's recent federal register notice soliciting public comment on this Information Collection Request is also attached.

3) Sections 3 - 5:

Pretests:
Six representative respondents complete the survey while participating in a cognitive interview in order to identify areas of misunderstanding, improved question wording, and areas of potential length reduction.

Pilot Tests:
The survey will be pre-tested with a sample of respondents who are employees of the contractor to ensure that the survey programming functions as planned and that the data is stored in a way that allows for in-depth data analysis.

Collection Methods:
Internet Survey. Respondents will be contacted by email from vendors in whose databases the respondents have previously agreed to be entered (see above). Respondents will be either people who have purchased a new vehicle in the last year or people who have expressed their intention to buy a new vehicle by requesting a price quote. They will be informed that their participation is completely voluntary and that they may stop completing the survey at any point. The responses will be collected in a computerized database. Any identifying information will be removed from the responses to ensure anonymity to the respondents. To maximize completion rate, the survey will be tested to ensure that average time for completion is no more than 15 minutes.

Analyzing Survey Results:

As described in Part A, respondents will be divided into a number of separate groups. One version of the online survey will be developed for each group, identical in every way except that each of the groups will see only one of the label designs to be tested. Responses to survey questions will then be compared between these groups to determine whether there are statistically significant differences among the labels in respondents' answers to the questions. If responses to one label design are statistically different than responses to another label design, then there are treatment effects associated with the labels. If, on the other hand, the label designs do not elicit statistically significantly different results, then there are no treatment effects associated with the different labels.

Survey results will be analyzed as both summary statistics and in regression analysis (discrete choice methods). Regression results will initially be run separately for each understanding and each influence question. The dependent variable will be, for the understanding questions, whether the respondent answered correctly; independent variables will include dummy variables for the label designs and demographic information. For the influence questions, an individual's typical commute information and estimated city/highway driving patterns will be added independent variables. The key results will be whether the coefficients on the label design dummy variables are statistically different from each other.

Attachment I

Legal Authority & Regulatory Citations

Clean Air Act:
42 U.S.C. 7525. Motor Vehicle and Motor Vehicle Engine Compliance Testing and Certification; 42 U.S.C. 7542. Records and Reports

Energy Policy and Conservation Act:
49 U.S.C. 32908 Fuel Economy Information

Energy Independence and Security Act:
40 U.S.C. 32908(g)
Regulatory Citations:
40 CFR Part 600 Fuel Economy of Motor Vehicles.

Attachment II

Draft Internet Survey

See accompanying PDF file

Attachment III

Federal Register Notice soliciting public comment on this ICR (75 FR 26752)