

**Information Collection Supporting Statement A  
Nationally-Representative Public Opinion Survey on Advanced Alcohol Detection  
Technology**

**Submitted by**

**National Highway Traffic Safety Administration**

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## INFORMATION COLLECTION SUPPORTING STATEMENT

### **Nationally-Representative Public Opinion Survey on Advanced Alcohol Detection Technology**

Approval is requested to revise the information collection previously approved by OMB under 2127-0669. Approval had been received to conduct focus groups with drivers to gauge public perceptions regarding advanced, in-vehicle alcohol detection technology. The focus groups have been completed. NHTSA is requesting to add a nationally representative telephone survey to provide a more complete understanding of driver preferences.

#### **A. Justification**

**A.1. 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.**

***a. Circumstances necessitating the data collection.***

*1. National Highway Traffic Safety Administration (NHTSA) mission*

The NHTSA was established by the Highway Safety Act of 1970 (23 U.S.C. 101). Its Congressional mandate is to reduce the number of deaths, injuries, and economic losses resulting from motor vehicle crashes on our nation's highways. To accomplish this mission, NHTSA sets and enforces safety performance standards for motor vehicle equipment and provides funding to State and local governments for their use in supporting highway safety activities, including demonstration and evaluation programs. NHTSA also conducts research on driver behavior and traffic safety to develop efficient and effective means of bringing about safety improvements.

*2. Severity of the Alcohol-Impaired Driving Problem*

In 2011, 9,878 people were killed in alcohol-impaired-driving crashes. Drivers are considered to be alcohol-impaired when their blood alcohol concentration (BAC) is .08 grams per deciliter (g/dL) or higher. These alcohol-impaired-driving fatalities accounted for 31 percent of the total motor vehicle traffic fatalities in the United States.

*3. Data needed to address the problem*

In a continuing effort to reduce the adverse consequences of alcohol-impaired driving, NHTSA in conjunction with the Automotive Coalition for Traffic Safety (ACTS) is undertaking research and development to explore the feasibility of, and public policy challenges associated with, use of in-vehicle alcohol detection technology. The agency believes that use of vehicle-based, alcohol detection technologies could help to significantly reduce the number of alcohol-impaired driving crashes, deaths and injuries by preventing drivers from driving while their blood alcohol

concentration (BAC) is at or above the legal limit. In 2008, ACTS and NHTSA entered into a 5-Year Cooperative Agreement to “*explore the feasibility, the potential benefits of, and the public policy challenges associated with a more widespread use of unobtrusive technology to prevent drunk driving.*” The goal of the Driver Alcohol Detection System for Safety (DADSS) project is, through a step-by-step, data driven process, to develop and test prototypes that may be considered for vehicle integration thereafter.

The Automotive Coalition for Traffic Safety, or ACTS, is a nonprofit organization concerned with the advancement and improvement of highway safety, particularly vehicle safety technologies. The DADSS Cooperative Agreement was formed with ACTS to ensure wide input and participation across the automotive industry. The Cooperative Agreement has been primarily a cost-share effort, with ACTS (through funds from 17 participating automotive manufacturers) providing \$1 million in funding per year, and NHTSA matching that funding. ACTS is directing the overall effort with continual input from NHTSA. ACTS hired Program and Technical Managers to direct the programmatic and technical activities within DADSS. In addition, ACTS formed a Blue Ribbon Panel of automotive manufacturers, suppliers, public interest organizations, researchers, government representatives, and other international experts to provide feedback and input to the program as it moves forward. Working groups on Policy, Public Acceptance, and Technical Issues have also been formed to advise this effort. The automakers providing funding to the DADSS effort through ACTS include: BMW, Chrysler, Ford, General Motors, Honda, Hyundai, Jaguar, Kia, Land Rover, Mazda, Mercedes Benz, Mitsubishi, Nissan, Porsche, Toyota, Volkswagen, and Volvo.

As technology development progresses and decisions are being made about how to integrate DADSS technology into vehicles, there is a need to better understand public preferences with respect to in-vehicle alcohol detection devices so that the technology doesn’t move in a direction that would ultimately be unacceptable to the public. Optimization of technology and public acceptance of it once deployed will depend on the extent to which public attitudes are taken into account during the development process. It is essential that public preferences be obtained early enough so that they can still influence the development process before everything is largely set in stone. Both NHTSA and ACTS recognize this need. The sentiment was shared by Congress, which included in a Committee recommendation language not just calling for funding to conduct research on public acceptability of the DADSS technology, but also to address this issue as soon as possible. ACTS and its members wrote a Public Acceptance Management Plan with input and approval from NHTSA. The Plan includes focus groups and a national survey whose overall purpose is to obtain input from drivers to:

- Gauge public perceptions of advanced in-vehicle alcohol detection technology;
- Guide the technology design; and
- Guide a strategy for introduction of this technology.

Focus groups were conducted in 2011 with licensed drivers in four cities across the country to provide an initial understanding of public preferences concerning advanced alcohol detection technology (approved 12/2/10 under this OMB Control Number, 2127-0669). The focus groups had participants identify feelings and concerns they would have concerning the types of technology being developed, and their thoughts about what the features of the technologies

should be (see Attachment F for summary of results). The input was valuable in identifying different types of reactions and issues. But it was based on a very small number of people in only a few select sites. The large unknown is the extent to which these sentiments reside among the public. There is a danger of reacting to things stated in a focus group that in actuality reflect the position of a minute portion of the population. While the focus groups identified thoughts, concerns, etc. contained within the population pool, a national telephone survey is needed to determine their magnitude within the population, to help prioritize their use in guiding the technology development.

NHTSA therefore seeks approval to conduct a nationally-representative public opinion survey. The survey will determine how prevalent the sentiments expressed in the focus groups are in the general population of drivers age 21 and older so that the DADSS team can make appropriate decisions regarding the next stage of the technology development. A second objective is to confirm that the technology development has taken into consideration all the issues that could arise. Sometimes experts are so close to a situation that they miss something that a nonexpert might see. Since there were only a small number of people (nonexperts) in the focus groups, there remains the possibility an important factor could have been missed here as well. The national survey will allow a broad spectrum of drivers to respond to several open-ended questions that will serve as a check to make sure all issues are being properly accounted for.

The survey findings will have direct relevance to decisions about the next phase of technology development, which are beginning to be considered.

#### ***b. Legal basis for collecting data***

Title 23, United States Code, Chapter 4, Section 403 (attached as Attachment A) gives the Secretary authorization to use funds appropriated to carry out this section to conduct research on all phases of highway safety and traffic conditions; conduct ongoing research into driver behavior and its effect on traffic safety; and conduct research on, and evaluate the effectiveness of, traffic safety countermeasures, including seat belts and impaired driving initiatives (See 23 U.S.C. 403(a)(1), 23 U.S.C. 403 (a)(2) and 23 U.S.C. 403 (a)(5)).

#### **A.2. 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.**

Twelve focus groups, conducted in 2011, obtained information on public perceptions and attitudes concerning in-vehicle alcohol detection technology designed to prevent alcohol-impaired driving. Information from this phase of the project is being used by NHTSA and ACTS to provide input to decision making regarding vehicle integration with respect to the technology under investigation and to help guide questions for the national telephone survey.

NHTSA proposes to conduct a telephone survey of 1,000 licensed drivers 21 years of age and older to obtain nationally representative data on public perceptions and attitudes concerning in-vehicle alcohol detection technology designed to prevent alcohol-impaired driving. Survey items will obtain data on respondents' impressions of, and reactions to, the new advanced technologies

currently under development, including their features and characteristics, as well as equipment currently mandated in some jurisdictions for convicted drunk drivers. The survey will also include questions about the respondents' frequency of drinking and drinking and driving and their understanding of the relationship between number of drinks and BAC.

The results of this survey will assist NHTSA and ACTS in building an understanding from the driving public of how they feel about the concept of advanced alcohol impairment detection technology. In particular, the information will be used to guide technology development and performance specifications. Focus group participants have identified a few technology features that are not currently being incorporated into the DADSS technology. The survey will confirm whether these features are considered to be important among a representative national sample of drivers. These data will be critical as NHTSA and ACTS consider whether such features should be incorporated in the future.

Two types of alcohol-detection technology are being developed that use different approaches to measure blood alcohol concentration. One is touch-based and uses tissue spectroscopy to estimate a person's BAC based on infrared light absorption by the skin. The other is breath-based and measures alcohol in a driver's exhaled breath from inside the vehicle cabin. The survey will gauge drivers' opinions about these technological approaches and some of their specific features, and attempt to understand their reasons for these opinions.

**A.3. 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. Also describe any consideration of using information technology to reduce burden.**

All telephone interviews will be conducted using a state-of-the-art Computer Assisted Telephone Interviewing (CATI) system. This system allows interviewers to enter responses directly into a computer, which instantaneously feeds the information from each station to a mainframe computer. The CATI system is programmed to automatically control branching and skipping within the interview (where a respondent receives certain questions based on responses to earlier questions). Both of these techniques reduce respondent burden from a paper survey because it allows the interviewers to move through the survey questions in the most expedited manner possible.

A Random Digit Dial (RDD) telephone sample will be contacted using an advanced proprietary sample management system that automatically keeps track of the frequency and timing of calls to allow for the most efficient sample management possible. Auto-dialers will be utilized to speed dial landline telephone numbers. This system does not wait for a "live" voice on the line that can leave a blank time before an interviewer addresses the potential respondent, as can some such systems. Rather, in this system, an interviewer is on the line as soon as a "ring" is detected, thus making dialing of telephone numbers more efficient, and improving the likelihood that the respondent will accept the call.

To ensure we are interviewing a representative sample of cell phone only households we will also have a Random Digit Dial (RDD) cell phone sample. Using this additional sample provides us with the ability to combine mobile with landline sampling frames for the most complete coverage of all target audiences. Phone calls to the cell phone RDD sample will not use auto-dialers in accordance with the law.

**A.4. 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.**

The unique in-vehicle alcohol detection technologies that will be the subject of the phone survey are currently in development. Others, including the Insurance Institute for Highway Safety, MADD, and the AAA Foundation for Traffic Safety, have surveyed drivers about their potential acceptance of generic in-vehicle alcohol-detection technologies, but have not inquired in more depth about the individual technologies and their features. Thus, the concepts and prototypes have not been introduced to drivers. Consequently, drivers have not been able to provide feedback on the concepts, nor indicate their level of acceptance. Hence, there is no duplication of effort.

**A.5. If the collection of information impacts small businesses or other small entities, describe methods used to minimize burden.**

There will be no impact on small businesses or other small entities. Individuals will participate in the survey on their own time, not during working hours.

**A.6. 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.**

If the proposed information collection activities are not conducted, NHTSA cannot be certain that the new in-vehicle alcohol detection technology will be acceptable to the driving public if deployed as optional equipment in automobiles. As NHTSA has found in the past, when seat belt ignition interlocks were mandated for vehicles in the 1970s, if driver perceptions and driving behaviors are not taken into account as the technology is being developed, negative public sentiments can quickly derail their implementation. The focus groups that have already been conducted and the proposed national survey are designed to provide NHTSA with information on potential concerns about, and barriers to, new advanced impairment detection technology so that NHTSA can address these concerns as the technology is being developed. If the survey is not conducted, NHTSA will be denied important information critical to developing the technology and to building understanding of, and support for, the new emerging technologies.

**A.7. Explain any special circumstances that would cause the information collection to be conducted in a manner inconsistent with the guidelines set forth 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.

**A.8. 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. Describe efforts to consult with persons outside the agency to obtain their views.**

As required by the Paperwork Reduction Act of 1995, NHTSA published notices in the *Federal Register*, as noted below.

*a. Federal Register Notice*

NHTSA published a notice in the *Federal Register* with a 60-day public comment period to announce the proposed telephone survey information collection on September 20, 2011, Volume 76, Number 182, pages. 58341-58342. NHTSA did not receive any comments in response to the 60-day *Federal Register* notice

NHTSA published a notice in the *Federal Register* on June 20, 2013 (Volume 78, Number 119, pages. 37276-37277) with a 30-day public comment period to announce that NHTSA intended to forward the request for the proposed telephone survey information collection to OMB.

*b. Consultations*

The Blue Ribbon Panel of automotive manufacturers and research experts was consulted about the scope, topics, and content of the survey and provided input.

**A.9. Explain any decision to provide any payment or gift to respondents, other than remuneration of contractors or grantees.**

Telephone survey participants will not receive any payment or gift.

**A.10. Describe any assurance of confidentiality provided to respondents.**

Public Opinion Strategies, a firm with significant experience conducting telephone surveys, including on the topic of alcohol-impaired driving, will collect all of the telephone survey data. Respondents will be told at the onset of the telephone interview that “We’re talking with people in your community today, and would like to ask you a few questions on an anonymous basis.” Later in the survey when asking sensitive questions about alcohol use, they again will be reminded that “All answers are completely anonymous.” An additional safeguard is the fact that the name of the respondent is not collected during the course of the telephone interview, and the telephone number is separated from the survey data before analysis. All questionnaires, other records, and database entries will be identified by case identification numbers only. These procedures ensure that data on individual respondents cannot be traced to the sources.



**A.11. 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.**

We acknowledge that collecting information on drinking and driving is a sensitive issue for the public. However, as the in-vehicle technology being developed will screen drivers for use of alcohol and will ultimately affect those whose drinking is likely to impair their driving performance, NHTSA feels that it is important to understand the reaction of this segment of the driving population. The only means to identify those respondents who are likely to drink and drive is to ask about their drinking and driving behavior. Similarly, it is also important to gauge the reactions of those who do not drink, or do not drink and drive, as they could perceive the technology as unnecessary for them. Asking about drinking behavior is the only means to identify these segments of the driving public. The questions are not probing. Instead, they request basic information on behavior and are phrased in a neutral/ nonjudgmental fashion.

**A.12. Provide estimates of the hour burden of the collection of information on the respondents.**

NHTSA estimates that each pretest telephone interview will require an average of 15 minutes, or a total of 6.25 hours for the 25 respondents to complete the interviews. Each respondent in the final telephone survey sample will require an average of 15 minutes to complete the telephone interview or a total of 250 hours for the 1,000 respondents. Total respondent burden is therefore 256.25 hours. Since respondents will be contacted at home, the survey will not be an actual cost to the respondents (i.e., they will be participating during non-salaried hours). However, the time they spend on the survey can still be examined in terms of what it would have cost if the respondents had spent that amount of time on a task while on the job. The total number of estimated reporting burden hours on the general public would be 256.25 for the proposed survey. At \$21.35\* per hour, the total annual estimated cost associated with the burden hours is: \$21.35 x 256.25 hours for a total of \$5,470.94.

**COST BURDEN ON RESPONDENTS OF THE TELEPHONE SURVEY**

<b>Population</b>	<b>N</b>	<b>Cost per Hour</b>	<b>Total Hours</b>	<b>Total Cost</b>
Pilot respondents	25	\$21.35	6.25	\$133.44
Survey respondents	1000	\$21.35	250	\$5,337.50
<b>TOTAL</b>	<b>1025</b>	<b>\$21.35</b>	<b>256.25</b>	<b>\$5,470.94</b>

\*From [http://www.bls.gov/oes/current/oes\\_nat.htm](http://www.bls.gov/oes/current/oes_nat.htm), All occupations, Mean Hourly Wage Estimate; viewed September 15, 2011.

**A.13. Provide an estimate of the total annual cost burden to respondents or record keepers resulting from the collection of information.**

The telephone survey participants will not incur any record keeping or reporting costs from this information collection. Each respondent only participates once in the data collection. 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 data collections.

**A.14. Provide estimates of annualized cost to the Federal government.**

The annualized cost to the government for the telephone survey is \$100,000. This estimate includes all associated costs (e.g., costs for personnel, data collection, data storage, analysis and final report, presentations, etc.).

**A.15. Explain the reasons for any program changes or adjustments reported in Items 13 or 14 of the OMB Form 83-1.**

This is a revision to the information collection approved under OMB Control Number 2127-0669. OMB previously approved focus groups that provided qualitative information on reactions to the new in-vehicle alcohol detection technology. The program change is to obtain nationally representative data on how the public will view this new technology by conducting a telephone survey. The associated burden is 256.25 hours.

**A.16. For collections of information whose results will be published, outline plans for tabulation, and publication.**

Analyses of the telephone survey data will include chi-square tests of independence to assess the statistical significance of observed differences in responses as a function of age, gender, and self-reported drinking frequency. There will also be univariate analyses and cross-tabulations of the data as a function of the variables noted above. Stratification of the data by age and drinking frequency will be explored as sample size limitations allow.

A summary report will be prepared for NHTSA outlining the results of the phone survey. Survey findings will be used to guide technology development and performance specifications as well as provide information that can be used to aid implementation strategies. A subset of results may be presented at technical meetings such as the annual meeting of the Transportation Research Board, and the Enhanced Safety of Vehicles conference.

**A.17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons that display would be inappropriate.**

Approval is not sought to not display the expiration date.

**A.18. Explain each exception to the certification statement identified in Item 19, Certification for Paperwork Reduction Act Submissions,” of OMB Form 83-1.**

No exceptions to the certification statement are made.