### SUPPORTING STATEMENT

#### Introduction

This is a tracking study that NHTSA has conducted periodically since 1991. The last OMB approval was given in 2004 and the OMB approval number for that study was **2127-0634**. One change to the methodology has occurred: Previously the methodology for the survey included a minimum of 100 respondents per State. The new methodology will drop that State requirement and instead collect data to mirror the geographic distribution of those 16 years of age and older.

#### Part A. Justification

#### 1. Circumstances that make collection of information necessary:

#### 1. NHTSA mission

The National Highway Traffic Safety Administration (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. The severity of the alcohol crash problem

This collection supports the Department of Transportation's strategic goal in safety by working towards the elimination of transportation-related deaths and injuries. NHTSA Administrator Nicole Nason in a July 2007 press release noted no improvement in last year's alcohol-related fatalities — in 2006, 15,121 fatalities involved a driver or motorcycle operator, pedestrian, or cyclist who had .08 or above blood alcohol level (compared to 15,102 in 2005). In that same press release, U.S. Secretary Mary Peters declared, "Tough safety requirements and new technologies are helping make our vehicles safer and our roads less deadly ... but we all must do more when so many are killed or seriously hurt on our roads every day."

#### 3. Data needed to address the problem and the reduction goal

To properly plan and evaluate programs intended to reduce alcohol-impaired driving, NHTSA needs to periodically update its knowledge and understanding of the public's attitudes and behaviors with respect to drinking and driving. This type of information is especially important in view of the lack of change in alcohol-related traffic fatalities from 2005 to 2006 and NHTSA's focus on reducing the magnitude of this problem.

Effective enforcement and education countermeasures are based, in part, on an

understanding of the characteristics and attitudes of drinking drivers, and of those who accompany drinking drivers as passengers. A better understanding of the perceived effectiveness and acceptability of potential deterrents (enforcement actions, physical risk from crashes, social disapproval, etc.) to drinking and driving and to riding with an impaired driver will better equip NHTSA to devise programs to counteract these problem behaviors. Acquiring trended data (this survey has been administered on a periodic basis since 1991) allows NHTSA to measure the effectiveness of current programs and helps identify new areas in need of attention.

### 4. Legal basis for collecting data

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 of this title. The Vehicle Safety Act was subsequently recodified 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 (see Attachment E for full text).

### 2. Indicate how, by whom, and for what purpose the information is to be used. Indicate actual use of information received from the current collection.

The data from this study will be used to address the problem of alcohol-impaired driving and to aid in making recommendations to Congress. NHTSA will use the findings to identify areas of the population on whom to target current programs to achieve the greatest reductions in drinking and driving. NHTSA will examine trends in these data to determine the effectiveness of its programs, and will make adjustments to programs when appropriate.

Much of the study focuses on respondents' perceptions of current and potential programs for reducing alcohol-impaired driving. While enforcement will always be critical to gain compliance with drinking and driving laws for a certain proportion of the population, large and sustainable gains are often the result of voluntary compliance. NHTSA will use this study to gauge the nature and extent of public support of various measures to control drinking and driving. The most recent administration of the survey — in 2004 — found 51% of the driving age population is supportive of a "zero tolerance" policy for drinking and driving, 78% view drinking and driving as a major threat to their personal safety, and 70% believe penalties should be more severe for drivers who violate the drinking and driving laws.

This kind of information allows NHTSA, the States, and other agencies and advocates for highway safety to gain a better understanding of the measures that will be supported by the public, and ultimately those which will be most likely to succeed in reducing alcohol-impaired driving.

Over time, the data from these surveys have shown a small but gradual decline in the number of drinking drivers, i.e., those who drive within two hours after drinking. Continued measurement will allow NHTSA and other interested agencies to further refine their programs to continue the reduction of drinking and driving through public information and education, legislation, law enforcement, and other approaches.

The data collected in this effort is used by NHTSA for planning and policy-related issues as they arise. Because it is a repeat survey, trends are monitored over time, especially in regards to

attitudes, knowledge, perceived risk, and self-reported behavior. The data are also carefully added to NHTSA Fact Sheets and other documents that are provided to the States and others who support anti-DWI programs.

Survey items will obtain data on respondents' behaviors and attitudes on various topics related to drinking and driving including reported frequency of drinking and driving, prevention and intervention, riding with impaired drivers, designated drivers, perceptions of penalties, and knowledge of Blood Alcohol Concentration limits.

In brief, the data from this research study will be used to:

- Define appropriate target groups for countermeasures
- Provide support for related departmental initiatives
- Provide guidance to law enforcement
- Support agency recommendations to the Congress
- Provide guidance to drivers as they make decisions about driving after drinking alcohol
- Assist federal, State, and local highway safety agencies; law enforcement agencies; and citizen activist groups to reach decisions that will most effectively allocate resources
- Contribute to development of effective policies and programs related to alcoholimpaired driving

## 3. Describe whether the collection of information involves the use of technological collection techniques or other forms of information technology.

All 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 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.

## 4. Describe efforts to identify duplication. Show specifically why similar information cannot be used.

The data to be collected are not collected by any existing system, including those maintained by NHTSA, such as the Fatal Analysis Reporting System (FARS), or the National Automotive Sampling System (NASS).

One national survey of note, The Behavioral Risk Factor Surveillance System (BRFSS), in 2006 contained only one question regarding driving and drinking and an additional five questions on

just drinking. Another notable survey would be the Youth Risk Behavior Survey (YRBS) conducted in 2007. That survey had only two drinking and driving questions and an additional six drinking questions.

Mothers Against Drunk Driving (MADD) (1991, 1993, 2005) has conducted several national studies on drinking and driving. These studies were designed to track the public's attitudes toward drinking and driving and their experience with drunk drivers. The studies did provide some useful information on the drinking and driving problem; however, they did not acquire significant data on personal drinking and driving behaviors, knowledge and understanding of blood alcohol concentration (BAC) levels, personal responsibility, or designated drivers. In short, while the MADD studies offer a quick view of the public's general attitudes, they are not detailed enough to direct program initiatives or to make substantial recommendations to Congress on issues such as BAC levels and zero tolerance. In addition, these studies have not happened on a frequent enough basis to be useful to track program initiatives.

Finally, NHTSA has been conducting pre-/post-national surveys around alcohol crackdown mobilizations, including one currently being conducted under OMB clearance 2127-0646. However, those surveys primarily ask about awareness of the enforcement community's crackdown activity and add some questions about perceived level of enforcement. All of the above surveys are very limited in scope and nature, and are not sufficient for NHTSA's ongoing requirements.

### 5. If the collection of information involves small businesses or other small entities, describe the methods used to minimize burden.

No small businesses will be involved in this survey. The collection of information will involve individuals aged 16 and older on a single occasion each.

## 6. Describe the consequence for federal program or policy activities if the collection is not collected or is collected less frequently.

There are no legal obstacles to reducing the burden. In fact, in reviewing the previous survey administrations, it became clear that a less arduous data collection schedule could provide all the benefits of the survey yet reduce public burden. Therefore, the survey administration schedule was rebalanced downward (from every other year to periodically). However, if this study is not conducted, NHTSA will lack accurate data on trends in the nature and severity of drinking and driving, and the public's views on what should be done to address the problem. As a result, program and policy decisions that must be made will be subject to error. Furthermore, in direct consequence of the lack of information, the Agency's ability to respond to inquiries from Congress about the potential efficacy of alcohol and highway safety countermeasures will be limited.

## 7. Explain any special circumstances that require the collection to be conducted in a manner inconsistent with the guidelines set forth in 5 CFR 1320.6.

The question is not applicable as the procedures specified for this information collection are consistent with the guidelines set forth in 5 CFR 1320.6.

8. Provide a copy of the FEDERAL REGISTER document soliciting comments on the collection of information, a summary of all public comments responding to the notice, and a description of the agency's actions in response to the comments. Describe efforts to

### consult with persons outside the agency to obtain their views.

#### a. Federal Register Notice

A 60-day Federal Register Notice was published in the *Federal Register* on April 27, 2007, vol. 72, No. 81; pp. 21068-69 (see Attachment A).

#### b. Responses to the Federal Register Notice

NHTSA received one outside comment to the *Federal Register Notice*. The respondent believed that federal money should not be used for a survey of this nature. NHTSA's response to the comment is that this survey provides a status report to policy makers on current attitudes, knowledge, and self-reported behaviors related to drinking and driving so that they can determine if government crash reducation goals require adjustments to current programs. The complete comment is in Attachment B.

#### c. Consultation with outside experts

This study was originally designed in 1991, the first year of administration. At that time, consultation about questionnaire content, interview procedures, and the sampling plan occurred during planning meetings with various experts in the area of traffic safety and questionnaire design. More recently, for the 2001 survey, design experts at Gallup, Inc., and alcohol research experts at the National Public Service Research Institute of the Pacific Institute for Research and Evaluation, and the Prevention Research Center in Berkeley, further reviewed the questionnaire. In addition, the Prevention Research Branch of the National Institute on Alcohol Abuse and Alcoholism (NIAAA) and the Center for Disease Control (CDC) reviewed the 2001questionnaire for content. Only a few minor edits were suggested for the 2004 survey. These included edits based on comments by Gallup and NHTSA staff. In 2007, consultation was undertaken with members of NHTSA's Impaired Driving Division to assess current program information needs in preparation for the 2008 survey. Additional changes to the questionnaire were made as a result of those discussions. Gallup collaborated with NHTSA in making the final revisions to the proposed 2008 survey instrument, which is contained in Appendix C.

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

An incentive of \$10 for selected respondents will be included in the component of the survey involving the interviewing of cell phone only individuals. We will incorporate an experiment into the survey design to assess whether a small incentive appreciably helps increase the response rate. Persons identified as cell phone only will be randomly assigned to one of two groups. One group will be offered a \$10 incentive to participate in the full survey; the other group will not be offered the incentive.

#### 10. Describe any assurance of confidentiality provided to respondents.

Gallup will collect all of the data. Respondents will be told at the onset of the interview that "This survey is completely anonymous. Responses will never be linked to individual respondents." This notice will be repeated to the respondent prior to asking respondents for any demographic information. All interviewers will sign statements of confidentiality in which they promise not to

reveal the results of any interview.

An additional safeguard is the fact that the name of the respondent is not collected during the course of the 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.

It is noteworthy that in nearly 70 years of existence, Gallup has never been involved in an instance of breach of trust or anonymity of respondent data.

### 11. Provide additional justification for any questions of a sensitive nature.

Because the questionnaire asks respondents about their drinking and driving habits, the entire questionnaire could be construed as sensitive in nature. Therefore, the justification for all questionnaire items is listed in Attachment D. It should be noted that respondents are made aware that participation is completely voluntary, and that they may refuse to answer any questions with which they feel uncomfortable. Even though respondents have had an opportunity to refuse to answer questions, past administrations indicate fewer than about 8% of all respondents refuse to answer even the most sensitive questions. The highest item refusal rate has been for income, at about 12%.

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

NHTSA estimates that the pretest interviews will require an average of 20 minutes apiece, or a total of 6 hours for the 18 respondents to complete the interviews. Each respondent in the final survey sample will require an average of 20 minutes to complete the telephone interview or a total of 2,000 hours for the 6,000 respondents. Total respondent burden is therefore 2,006 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 looked at in terms of what it would have cost if the respondents had spent that amount of time on a task while on the job. U.S. Census Bureau data show mean income in 2003 for males was \$41,483 and for females was \$24,630 (from Current Population Survey). This translates into approximately 33.2 cents a minute for males and 19.7 cents a minute for females (assuming 52 40-hour workweeks). Below are cost calculations for the pretest and survey using the average interview lengths of 20 minutes.

Pretest	Sample Size	Cost/ Minute	Average Length	Cost/ Interview	Total	
Males	9	\$0.332	20 minutes	\$6.64	\$59.76	
Females	9	\$0.197	20 minutes	\$3.94	\$35.46	
Actual	Sample	Cost/	Average	Cost/	Total	
Survey	Size	Minute	Length	Interview		

					\$31,835. 22
Females	3000	\$0.197	20 minutes	\$3.94	\$11,820.0 0
Males	3000	\$0.332	20 minutes	\$6.64	\$19,920.0 0 ¢11.020.0

The figures above indicate an annualized cost of less than \$10 per person. It bears repeating that these cost figures are purely hypothetical. There is no actual cost to respondents since they will be interviewed during non-salaried hours. Participation will be voluntary.

### 13. Provide estimates of the total annual cost to the respondents or record keepers.

There are no costs to respondents or record keepers.

### 14. Provide estimates of annualized cost to the Federal Government.

The annualized cost to the government for this project is \$236,811. This estimate includes all associated costs (e.g. costs for personnel, data collection, data storage, analysis, final report preparation, etc).

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

This is a new information collection. As such, it requires a program change to add the estimated 2,006 hours for the new information collection to existing burden.

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

This study will be published as a NHTSA Technical Report. It is anticipated that multiple highly significant findings will emerge from the study, and that they will be of interest not only to traffic safety agencies, law enforcement, and legislators, but also to the general driving public. For that reason, the findings will be widely disseminated in both scientific and lay formats. NHTSA plans to do a press release of the data to highlight the main findings, and to ensure availability for continued analysis and study. The data (absent all identifying information) will be placed in the public domain.

### 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.

No such approval is being sought. The OMB survey number and expiration date are displayed on the interviewers' computer screens. They serve as a reference if needed.

### **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.

### **B. COLLECTION OF INFORMATION EMPLOYING STATISTICAL METHODS**

This study of national attitudes and behaviors of alcohol drinking and alcohol-involved driving will use a probability sample of respondents, aged16 and older, living in households with landbased or hardwire telephones in the United States. Since the interest and focus of this study is the *prevalence* of alcohol in conjunction with driving, a national probability sample is most appropriate.

The eligible target sample will be all persons aged 16 and older residing in telephone households in the United Sates. The total sample of 6,000 persons will be sufficient to allow the study findings to be broadly generalized to the U.S. population, and will also allow for various analyses to be performed on key sub-groups including youth, and drivers who drove after drinking in the past month. The sample will consist of a random sample of 6,000 persons selected from the 50 States plus the District of Columbia. The following sections describe sampling, questionnaire administration, and data analysis:

### NOTE ON CELL PHONE USAGE:

Because the increased usage of cell phones has been a concern in the market research industry, NHTSA, on the advice of their OMB desk officer, completed a recent study of cell phone users. The following information provides an overview of that study:

In total, 502 interviews with persons on cell phones (averaging about seven minutes) were completed in 2007. Forty-one percent were cell phone only — 59% also had a landline at home. The largest difference between the two groups (those with and those without a landline) was that the cell phone only respondents tended to be younger (58% were ages 20 to 29 vs. 13% among cell phone and landline group). There was also a higher percentage of cell phone only users who had incomes less than \$30,000, had graduated high school but not gone to college, were Hispanics and nonwhites, and were households with only one person aged 16 and older. There was little difference on geographic variables and sex. The cell phone-only subsample was then asked to participate in the Motor Vehicle Occupant Safety Survey (MVOSS), either by going to an Internet site or by calling the contractor back on a 1-800 number. Fully 57% of the cell phone-only sample went on to complete the MVOSS. There was little difference between those who completed the MVOSS survey and those who did not complete it.

The OMB statistician at the Department of Transportation Desk was contacted to discuss whether to incorporate the cell phone sample into the much larger sample that went through the MVOSS. It was agreed not to do so based on the extent of differences observed and implications for bias of weighting the cell phone-only sample. Therefore, for the drinking and driving study, we will make the same assessment — that no observed or implied differences are likely to exist for cell phone-only users. Instead, we will make every effort to ensure adequate representation among those who would likely be cell phone only, those between the ages of 20 and 29.

## **1.** Describe (including numerical estimate) the potential respondent universe and any sampling method.

### a. Respondent universe

The respondent universe theoretically consists of all persons of driving age (aged 16 or older as of their last birthday). However, since the survey will be administered by telephone, the sampling universe will be persons aged 16 or older living in non-institutionalized dwellings with working telephones (approximately 235 million, according to the U.S. Census Bureau

estimates). Also, since interviews will be conducted in only English and Spanish, any person who does not speak one of these two languages will be excluded from this study. The study will sample from all telephone households in the United States, including Alaska, Hawaii, and the District of Columbia, and will include both drivers and non-drivers.

It is not anticipated that the use of a telephone household sample will bias estimates of drinking and driving or of estimates of general public opinion towards these issues. Research has shown that telephone service for many households is intermittent, and that gains or losses in service are associated with changes in their financial situation, (Keeter, 1995). By implication, telephone coverage is not a static binary phenomenon, but rather, the telephone population at any given point includes households that were recently part of the non-household population. Households with intermittent telephone service are similar on a variety of important demographic characteristics to households who usually lack telephones (Keeter, 1995; Brick, Waksberg, and Keeter, 1994). Thus, post-stratification data weighting using key demographic variables can ensure the correct coverage in the final sample of persons such as those in non-telephone households.

### b. Statistical sampling methods

This study will use a two-stage sampling procedure to achieve a random representative sample of the driving public aged 16 or older. The total number of surveys to be completed nationwide will be 6,000. At the first stage, a stratified sample design (stratified by Census Region) will be used to sample telephone households. The sample will be allocated across the four Census Regions based on proportional allocation (i.e. the sample size allocated to each region will be roughly proportional to the 16 years of age and older population of that region). After selection of a household, one household member (16 years of age or older) will be selected at random at the second stage of sampling. To ensure adequate representation of the younger age group (aged 16 to 24), that age group will be slightly oversampled to include about 1,000 completed interviews nationwide from that age-group. For the purpose of sampling telephone households (telephone numbers), the truncated Casady-Lepkowski Random Digit Dial (RDD) method (1993) will be employed.

As previously mentioned, the universe of residential telephone listings will be stratified by Census Region. In the first stage of selection, a probability sample of households will be selected within each region, where households are defined as non-institutional places of permanent residence. For the second stage, within each sampled household, a respondent will be randomly selected for inclusion from all eligible members belonging to that household.

In the Casady-Lepkowski method, the Telcordia frame of all possible telephone numbers (containing both listed and unlisted numbers) is separated into two strata: a "high-density" stratum [stratum 1] consisting of 100 banks — a bank consists of 100 numbers with one or more listed residential numbers — and a "low-density" stratum [stratum 2] consisting of all the remaining numbers in the Telcordia frame. About 52% of the numbers in the high-density stratum are expected to be working residential numbers, whereas in the low-density stratum, the corresponding percentage is about 2%. In the standard Casady-Lepkowski procedure, a stratified simple random sampling design is used (i.e., simple random samples are drawn from each stratum).

A significant savings in the cost of sampling in the two strata is taken advantage of by determining the optimal sample size of each stratum. Considering the extremely low hit rate in the low-density stratum, and the significant increase in cost that sampling from the low stratum

would entail, the truncated Casady-Lepkowski design recommends sampling only from the high stratum. Thus, a high-density stratum will be constructed in each of the four major geographical Census Regions, by matching area code and exchange combinations with geographical areas. In each region, a RDD sample will then be drawn from the high-density stratum of that region. The difference between the two strata in terms of demographic (age, sex, and race) and other characteristics at the national level appears to be relatively small and generally not statistically significant (Brick and Kulp (1994): Bias in List-Assisted Telephone Samples: presented at AAPOR) and hence sampling only from the high-density stratum is not expected to introduce any bias in the estimates.

The final stage of selection occurs at the household level. Once a telephone number has been selected for inclusion, we must randomly select one person aged 16 or older living in that household to participate. The household-level selection will be made using the most recent birthday method, which represents a true random selection of household members, and is considered much less intrusive than the purely random selection method or grid selection, because these latter methods require enumeration of all household members in order to make a respondent selection. Once a person has been selected for inclusion in the study, that person cannot be replaced by another person in the household. If the selected person refuses to participate, refusal conversion attempts will be employed.

The sample data will be weighted to generate unbiased estimates. Within each Census Region, the selection probability of the households may differ depending on the number of residential telephone lines reaching that household. At the first stage of weighting, this will be corrected by weighting each household by the inverse of the number of telephone lines in the household. The second stage of weighting will adjust for unequal selection probability of individual household members selected using the within household sampling process. The selection probability of a household member will decrease with the increase in the number of eligible persons within that household. A weight equal to the number of eligible persons will be applied to each respondent. This will also include adjustments to correct for any oversampling that may be carried out within a household. To avoid extreme weights, it may be necessary to truncate the number of telephone lines and/or the number of eligible household members while using those numbers in the calculation of first and second stage weights. The third stage of weighting will use post-stratification weighting procedures so that the weighted distributions of the sample match the known demographic characteristics of the U.S. population within each Census Region. This weighting will be based on demographic characteristics like age, race/ethnicity, and gender.

### c. Cell phone only subsample

Approximately 900 out of the 6,000 interviews to be completed for NHTSA during administration of the 2008 National Survey of Drinking and Driving Attitudes and Behavior will be conducted with respondents who do not have landline telephones at home but have cell phones that they use (i.e., cell phone only). The methods that the Contractor will use to contact cell phone users and conduct interviews with them shall be designed to assure the safety of respondents (e.g., interviewing will not be conducted if the respondent is driving or otherwise unable to complete the interview), and shall be reviewed and approved by an Institutional Review Board. The Contractor shall obtain a frame of cell phone numbers that is separate from the frame that will be used to interview respondents on landline telephones. Potential respondents will be contacted on their cell phones, and asked a series of guestions to ascertain whether they are cell phone only. If the respondent also has a landline at home, then the person will be screened out as ineligible for the survey. If the person has no landline, then s/he will be asked to participate in the survey. We will incorporate an experiment into the design to assess whether a cash incentive helps increase the response rate. The eligible respondents (i.e., those who are cell phone only) will be randomly assigned to one of two groups. One group will be offered a \$10 cash incentive to participate in the study, the other group will not be offered the incentive. Respondents will be encouraged by the interviewers to set up an appointment time when the interviewers can call them back to conduct the full interview. The interview will include specific questions about shared cell phones, zip code and number of cell phones to weight the data at the end.

### 2. Describe the procedures for the collection of information

### a. Data collection

Telephone interviews with 6,000 persons aged 16 or older living in the United States is scheduled to occur over a three-month period from January through March 2008.

All sample management, interview scheduling, conducting and monitoring of interviews, and progress reporting of data collection will be handled by the CATI system (described above). A comprehensive data collection plan is proposed to ensure that high response rates, high data quality, and low respondent burden are achieved. The plan is structured to optimize telephone coverage and contact with respondents, and to minimize no contacts and refusals. Interviewer recruitment, training, and monitoring procedures are designed to support these aims.

The CATI programming process includes specification of data locations, question text, responses and corresponding codes, acceptable response ranges, consistency checks, interviewer instructions, skip patterns, and help screens. Two kinds of range and consistency checks are programmed: hard and soft checks. Responses outside the hard range will not be accepted by CATI. Soft range checks prompt the interviewer to verify the response. The questionnaire design and layout must pass a strict internal hard copy "proofing review" before it can be sent to the programming stage. After the questionnaire is programmed, it passes through two additional separate proofing stages with extensive testing before interviewing can begin. Separate questionnaires will be programmed in both English and Spanish.

### b. Interviewing plan:

Once a telephone number is selected for inclusion, an interviewer will make an initial call to reach the household. If there is no answer, or if a person aged 16 or older is unavailable at the time of the first call, up to six additional calls (over different days and time periods as presented below) will be made to reach the selected household and to randomly select a respondent. After reaching a respondent, if necessary, up to seven additional calls will be made to complete the interview. This "7x7" call design is used to attain a high response rate.

Because the number of contacts attempted and the not-at-home patterns of households are key factors in determining response rates, a temporally varied call design is important. The following call schedule will be used for both the initial contacts for selection of designated respondent and subsequent calls for completion of the interview:

Calling Period	Respondent's Local Time	Number of Attempts
Weeknights	5:00 p.m. to 7:59 p.m.	2
Weeknights	8:00 p.m. to 9:59 p.m. Saturday 11:00 a.m. to 5:00	2
Weekends	p.m. Sunday 1:00p.m. to 4:00	3
	p.m.	

All interviewers assigned to the project are experienced Gallup interviewers. These interviewers will receive training specific to this project. Representatives from NHTSA will be invited to be part of this training to verify that training and all other procedures are being performed. Remote monitoring of telephone interviewing is also available for external monitoring of interviews.

#### 3. Describe methods to maximize response rates and to deal with issues of non-response

Response rates are one measure of the extent to which a data set accurately reflects the characteristics and responses of a given population. Groves (1989) suggests that non-response rates are actually a composite of two factors whose underlying causes may be substantially different: non-contacts and non-interviews (i.e., refusals). The CASRO response rate for the 2004 administration was 44%. CASRO response rates near 30% are generally standard for national RDD samples. The 1993, 1995, 1997, 1999, and 2001 executions of this study achieved response rates at or above the current industry average at the time. Gallup expects to achieve a similar response rate to what was achieved in the 2004 administration.

#### a. No Contacts/Non-Response:

In accordance with OMB requirements, Gallup proposes to conduct a non-response bias study once the primary data collection has been completed. In a recent work, Groves<sup>1</sup> reports that there is no consistent relationship between response rates and non-response bias. As such, a lower response rate may not necessarily cause or result in non-response bias. However, it does not imply that this finding will be true in all circumstances. We, therefore, plan to undertake a separate non-response bias study to examine the non-response patterns and to assess the potential for non-response bias in this survey.

The pool of non-respondents for this study will consist of two groups: (i) Non-contacts (sampled cases without any human contact after primary data collection) and (ii) Refusals (sampled cases with human contact but with no completed interviews). The goal will be to complete about 200 interviews from the group of non-respondents. Only core questions within the survey will be asked in the non-response study. The mode of data collection for the non-response study will be telephone using a 7x7 call design, with up to seven calls devoted to contacting the household, and up to seven calls to interview the targeted respondent. We anticipate a data collection period of about four to six weeks to complete the call design and achieve the targeted number of completed surveys.

The non-response bias analysis will involve conducting an analysis of demographic characteristics using census or similar external data sources. The estimates based on non-respondents will also be compared, to the extent possible, to estimates based on respondents or those based on external data. If necessary, we may, for the purpose of better understanding the non-response patterns, investigate the suitability of examining select subgroups within the group of respondents for the main study. We may, for example, examine: (i) those that are "easiest to reach and interview" as measured by records of calls in our CATI system; and (ii) those that are "more difficult to reach" (require more callbacks) compared to group (i) above. The goal of the non-response bias study will be to detect if significant and policy-relevant differences exist between the survey estimates for respondents and the non-respondents.

### b. Refusals:

Refusals appear to be increasing and tend to account for a major proportion of non-responders with the potential for non-response bias. Although the reasons are unclear, the immense expansion of telemarketing activities, a possible tendency toward greater resistance to perceived intrusions into the privacy of one's home, and the increasing telephone saturation among certain market segments of the population, may all contribute. Because of the prominence of the Gallup name, and the skill of its interviewing staff, our refusal rate is well below the industry average.

At Gallup, an interaction with a respondent is only coded as a refusal if an interviewer has encountered two "soft refusals" after a description of the study, (e.g. "I am really not interested." or "I'm too busy to talk to you now.") or a hard refusal (e.g. "I'm not interested; don't call again." or "No, I don't want to do it!"). Any case where the person hangs up before the interviewer can complete the introduction will be called back at least once.

Gallup has conducted several in-house assessments to measure the impact of the "Gallup" name

<sup>1</sup> Groves, Robert M. 2006. "Nonresponse rates and Nonresponse Bias in Household Surveys." *Public Opinion Quarterly* 70: 646-675.

in conducting such random digit dial studies and has determined that, given the same interviewers and interviewing procedures, we experience a significant increase in the overall response due to our name. Respondents seem to understand the legitimacy of the research and are generally more willing participants when the "Gallup" name is used in the introduction. Intense interviewer training, the use of the Gallup name, and explanation of the importance of the study will all help to improve response rates and discourage non-response.

#### 4. Describe any tests of procedures or methods to be undertaken

Prior to the initiation of the study, the questionnaire will be tested with a sample of 18 randomly selected persons aged 16 or older. The goal of the pilot test is to assess the workability of newly added or modified question wordings, and to check the flow and general understandability of survey questions. In addition, Gallup will further test the survey on a group of approximately 10 Gallup associates, most of whom will actually work on the study. The purpose of these administrations to Gallup staff will be to test the survey instrument on a wider sample and familiarize interviewers with the survey instrument. Adjustments will be made to the survey as necessary based on the results of the pilot tests. None of the data collected in the pilot tests will be used in the final analysis.

# 5. Provide the name and telephone number of individuals consulted on statistical aspects of the design and the name of the contractors who will actually collect and analyze the information.

#### **Statistical Consultants:**

Dr. Sameer Abraham Gallup, Inc. 202-715-3166

Dr. Manas Chattapadhyay Gallup, Inc. 202-715-3030

### **Data Collection and Analysis**

Alison Simon The Gallup Organization 202.715.3168

Alan Block NHTSA-Office of Behavioral Safety Research 202-366-6401