#### 2011 National Survey of Speeding Attitudes and Behavior Supporting Statement for Information Collection Request - revised

Approval is requested to conduct the <u>2011 National Survey of Speeding Attitudes and</u> <u>Behavior (NSSAB)</u>. The NSSAB is an RDD telephone survey of 6,000 drivers living in the United States. The questionnaire will ask the drivers about their speeding behavior, their attitude towards speeding and their attitudes towards speeding countermeasures. A cell phone only sample will be included as well as an oversample of 16-34 year olds.

### 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 Speeding Problem

Traffic crashes are complex; often, they have multiple contributing factors, in which speeding is one of the primary factors leading to a crash. Over thirty percent of all fatal crashes are estimated to be speeding-related crashes, defined as racing, exceeding the speed limit, or driving too fast for conditions. Speeding-related crashes resulted in 11,674 lives lost in 2008 and an estimated cost of \$40.4 billion in 2000. Speeding is especially dangerous because it reduces the driver's ability to maneuver around obstacles in a timely manner, increases the distances a vehicle requires to stop, and increases the severity of injuries<sup>12</sup>.

Drivers' speed choices impose risks that affect severity of crashes. Reflecting the laws of physics, injury severity increases as the speed of the vehicle increases. However, this is not a linear relationship; rather, the energy release is proportional to the square of the impact speed. Therefore, decrease in driving speed can decrease the severity of injury.

<sup>&</sup>lt;sup>1</sup> NHTSA (2009). Traffic Safety Facts-2008: Speeding DOT HS 810 814

<sup>&</sup>lt;sup>2</sup> The National Highway Traffic Safety Administration determines it to be speeding-relating crashes, if the driver was charged with or if an officer indicated that racing, driving too fast for conditions, or exceeding the posted speed limit was a contributing factor in the crash.

Speeding is a pervasive behavior and controlling speed is difficult to address because most drivers do not see speeding as a risky or dangerous behavior. An interdisciplinary approach involving engineering, enforcement, and education is needed to change drivers' speeding behavior, thereby, reducing speeding-related crashes, fatalities and injuries. To design interventions and countermeasure strategies that are likely to lead to behavior change, it is important to focus studies on factors underlying behaviors such as attitudes or perceptions of norms that are changeable.

### b. Legal basis for collecting data

NHTSA has statutory authority to conduct crash injury research and collect relevant data in the interest of public health (see Attachment A). Specifically, NHTSA is authorized to: (1) engage in research on all phases of highway safety and traffic conditions; (2) undertake collaborative research and development projects with non-federal entities for the purposes of crash data collection and analysis; and (3) conduct research and collect information to determine the relationship between motor vehicles and accidents, and personal injury or deaths resulting from such accidents (See 23 U.S.C. 403(a)(1), 23 U.S.C. 403(f) and 49 U.S.C. 30168(a)). The term "safety" is defined as "highway safety and highway safety-related research and development, including research and development relating to highway and driver characteristics, crash investigations, communications, emergency medical care, and transportation of the injured" (23 U.S.C. 403(a)(3)).

## 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.

The purpose of this survey is to examine the extent to which drivers speed, who the speeders are, when and why drivers speed, and what countermeasures are most acceptable and perceived effective in reducing speeding. In addition, NHTSA aims to identify factors, such as attitudes, perceptions, norms, and underlying behaviors that may help explain and predict speeding behavior. Furthermore, NHTSA plans to measure whether or not self-reported behaviors, attitudes, and perceptions regarding speeding have changed over time, since the last administration of this national survey in 2002.

More specifically, this survey will collect detailed information important to developing effective programs, including data addressing the following areas of interest:

- The extent to which drivers speed;
- Demographic and typological descriptions of speeders;
- Locations and times when speeding is most frequent;
- Attitudes and perceptions about speeding;
- Reasons and motivations for speeding;
- Knowledge of measures to deter speeding;
- Attitudes towards measures to deter speeding;

- Correlates of speeding behavior;
- Trends and changes in trends in speeding behavior and attitudes compared to the 1997 and 2002 survey administrations; and

The data collected in the survey will be used to assist NHTSA in its ongoing responsibilities for: (a) planning and designing program activities which reduce speeding on our nation's roadways; (b) providing support to groups involved in carrying out speeding management programs and public safety; and (c) identifying countermeasure strategies that are most acceptable to the public and perceived as effective in deterring speeding.

The results will assist governmental agencies and private organizations in developing implementation strategies and action plans that will reduce the incidence of speeding-related crashes.

NHTSA will use the data to help State Highway Safety Offices, law enforcement agencies, and other organizations with establishing and sustaining programs aimed at speed regulation and to reduce the number of speeding-related crashes. The data will be used for planning and policy-related issues as they arise.

Regarding the trends analysis and comparisons to the 2002 survey, Table 1 shows a power analysis for testing differences between full sample estimates from the 2002 survey against full sample estimates from the 2011 survey. A two group  $\chi$ 2 test with a 0.05 two-sided significance level will have 80% power to detect the difference between a smaller proportion of 48.9% and a larger proportion of 51.1% (i.e., a difference of 2.2 percentage points) based on sample sizes of n=4,000 in 2002 and n=6,000 in 2011.

Table 1. Power Analysis for Longitudinal Difference of Proportions Tests*			
	2002 Estimates vs. 2011 Estimates		
Test significance level (alpha)	0.05		
Smaller proportion	48.9%		
Larger proportion	51.1%		
Detectable difference	2.2%		
Power (1 – beta)	.80		
Sample size in 2002	4,000		
Sample size in 2011	6,000		
* Based on 2-sided test			

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.

The contractor conducting the survey interviews, Abt SRBI Inc., will create a database and data entry protocol using its established system for telephone surveys. The data collection will be accomplished through the use of Computer Assisted Telephone Interviewing (CATI). CATI systems collect responses electronically. They also perform a number of functions which can be prone to error if performed by interviewers using hard copy questionnaires, including:

- Providing correct question sequence;
- Automatically executing skip patterns based on prior question answers (which decreases overall interview time and consequently the burden on respondents);
- Recalling answers to prior questions and displaying the information in the text of later questions;
- Providing random rotation of specified questions or response categories (to avoid bias);
- Ensuring that questions cannot be skipped;
- Rejecting invalid responses.

The CATI system lists questions and corresponding response categories automatically on the screen, eliminating the need for interviewers to track skip patterns and flip pages. This allows the interviewer to focus on interviewing and allows the instrument to be administered efficiently, thus reducing burden on the respondent, interviewers, and analysts. Moreover, the interviewers enter responses directly from their keyboards, and the information is automatically recorded in the computer's memory.

CATI allows the computer to perform a number of critical assurance routines that are monitored by survey supervisors, including tracking average interview length, refusal rate, and termination rate by interviewer, and performing consistency checks for inappropriate combination of answers.

# 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.

Overall, the following criteria were applied to determine whether existing information may be duplicative:

- <u>Currency of information</u> The data must be current in order to have utility for making sound strategic decisions concerning future programmatic and research activities, especially with regard to emerging technologies.
- <u>National basis</u> The safety efforts of NHTSA are national in scope. NHTSA therefore requires national-level data for its planning.
- <u>Focus on NHTSA program concerns</u> The items within the proposed survey instruments concern issues crucial to developing appropriate strategies for reducing speeding.

This data collection entails no duplication. This is the first nationally representative survey on attitudes and behavior survey on speeding in the past eight years. Since the last administration in

2002, advances in technology have made this collection effort essential and necessary in order to accurately gauge the public's perception and attitudes towards new and emerging technologies to deter speeding, including the proliferation of speed cameras and the use of in-vehicle speed governors. Further, there were a number of significant differences in the results between surveys conducted in 1997 and 2002 and these surveys were only five years apart. There is a need to collect up-to-date information about the public's attitudes and behavior on speeding in order to better inform programs aimed at reducing speeding. Furthermore, the advances in technology and speed deterrents since the previous data collection in 2002 have altered the way speeding is mitigated. We are also including cell phone sample in the current data collection effort, which was not done in the previous Speed Survey administrations.

### 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. The collection of information involves randomly selected individuals in their residences, not small businesses.

## 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.

NHTSA provides guidance to State and local governments in designing and applying a balanced and effective speed management program to reduce speeding-related crashes. Speeding is a complex problem, involving the interaction of many factors including public attitudes, road user behavior, vehicle performance, roadway design and characteristics, posted speed limits and enforcement strategies. In order to reduce speeding-related crashes, fatalities and injuries, an interdisciplinary approach involving engineering, enforcement, and education is needed. Findings from this speed survey will provide crucial information to be used in applying enforcement efforts and appropriate technology that effectively target speeders; marketing communication and educational messages that focus on high-risk drivers; soliciting the cooperation, support and leadership of traffic safety stakeholders; and providing updated speed and safety statistics. This information is necessary to support safety programs both at the local and national levels. Without such results, programs for addressing the speeding problem cannot be addressed and designed optimally and dedicating additional resources to the problem will be difficult to justify.

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.

#### a. Federal Register Notice

NHTSA published a notice in the *Federal Register* with a 60-day public comment period to announce this proposed information collection on September 13, 2010, Volume 75, Number 176, pages 55629-55630. A copy of the Federal Register Notice is provided in Attachment B.

NHTSA published a notice in the *Federal Register* on December 9, 2010 (Volume 75, Number 236, pages 76783-76784) with a 30-day public comment period to announce that the request for the proposed information collection was being sent to OMB for review and approval.

It should be noted that previous *Federal Register* notices were published for this project; however, because the actual OMB submission came a little more than one year after the original 60-day *Federal Register* notice, we were instructed by OMB to resubmit 60 and 30 day notices in the *Federal Register*. We complied with this request. Our resubmissions to the *Federal Register* are referenced above. Below are the references for the original submissions to the *Federal Register*.

NHTSA published a notice in the *Federal Register* with a 60-day public comment period to announce this proposed information collection on March 20, 2009, Volume 74, Number 53, pages 11992-11993. A copy of the Federal Register Notice is provided in Attachment B.

NHTSA published a notice in the *Federal Register* on March 2, 2010 (Volume 75, Number 40, pages 9474-9475) with a 30-day public comment period to announce that the request for the proposed information collection was sent to OMB for review and approval.

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

There were no comments received for the *Federal Register* notice published September 13, 2010. One comment was received for the original *Federal Register* notice. It came on March 2, 2010. The comment was as follows:

"survey on speeding "attitudes" - this has previously been done many many times. dont you know how to look up previously psychological studies so you keep doing them over and over and over? please hire some intelligent people who can look up previoius research and lay off those who cant read and research intelligently. this is an extremely wasteful project with no good emanating from it for america. this is simply wasteful spending." jean public 15 elm st florham park nj07932

Dr. Atkins of NHTSA responded to Ms. Public's comment as follows:

"Dear Ms. Public,

Thank you for your comment on the 2010 National Survey of Speeding Attitudes and Behaviors. We greatly appreciate your concern regarding fiscal responsibility with public funds. Here at NHTSA, we are also very committed to ensuring that the American people's public funds are spent wisely. Survey projects such as this one go through a rigorous review process at NHTSA with regard to current information needs for traffic safety programs, as well as being reviewed to assure scientific rigor, before these data collection efforts are allowed to go forth and be implemented.

While, as you correctly point out, there is existing research on speeding attitudes, it is important in our research to track trends in attitudes and behaviors over time in order to evaluate the effectiveness of related policies and programs and to identify current needs in this area. This survey will also address many items not previously addressed with regard to changing technologies, and it will include new questions regarding attitudes and behaviors that will help us to better understand this problem. Given that 31% of all fatal crashes are speed related, we believe that our continued research into this subject is an important and necessary part of our efforts to make our roadways safer for all Americans.

Thank you again for your comment on this survey.

Sincerely,

Randolph Atkins"

c. Consultation with outside experts

National experts at NHTSA and Abt-SRBI have collaborated on and agreed on the survey instrument and methodology. Prior to the survey development work, NHTSA program and regional offices and the Federal Highways Administration provided significant input on the speeding topics to be addressed in the survey.

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

No payment will be made to respondents who respond to the main survey conducted with a national Random Digit Dialing (RDD) sample. We will offer respondents a \$10 incentive if they respond via their cell phone in order to offset any costs incurred by the respondent while using their cell phone.

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

Respondents are informed in the survey introduction that their answers will be kept private and used only for statistical purposes. Participation in the survey is voluntary. There will not be any identifying information such as names, addresses, telephone numbers, or social security numbers in the database delivered to NHTSA.

## 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.

The survey does not contain any questions related to matters that are commonly considered sensitive or private.

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

Data collection will involve a pretest with 30 respondents and interviews with 6,000 randomly selected respondents during the main data collection effort. Each respondent will be administered the survey once.

NHTSA estimates that the pretest interviews will require an average of 20 minutes per interview or a total of 10 hours for the 30 respondents. Each respondent in the final survey sample would require an average of 20 minutes to complete the telephone interview or a total of 2,000 hours for the 6,000 respondents. The total estimated burden is shown in Table 2.

	Pretest	Main Data Collection	TOTAL
Respondents	30	6,000	6,030
Minutes	20	20	20
Burden Hours	10	2,000	2,010

TABLE 2 ESTIMATED BURDEN HOURS

The total number of estimated reporting burden hours a year on the general public would be 2,010 for the proposed survey. At 20.32 per hour, the total annual estimated cost associated with the burden hours is:  $20.32 \times 2,010$  hours for a total of 40,843.20 (see Table 3).

Respondents would not incur any other reporting cost from the information collection.

TABLE 3.						
COST BURDEN ON RESPONDENTS						
Population	Ν	Cost per Hour	Qx Length (mins)	<b>Total Cost</b>		
Pre-Test	30	\$20.32	20	\$203.20		
Main Data Collection	6,000	\$20.32	20	\$40,640.00		
TOTAL	6,030	\$20.32	20	\$40,843.20		

\*From http://www.bls.gov/oes/current/oes\_nat.htm#b00-0000, All occupations, Mean Hourly Wage Estimate; viewed May 26, 2009.

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

There are no record keeping costs to the respondents. Respondents will be contacted randomly, and asked specific questions about their speeding attitudes and behaviors. 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 start up costs, or (b) operation, maintenance, and purchase costs as a result of participating in the survey.

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

Total estimated cost to the government for conducting the survey is as follows:

Number of completed interviews (30 Pre-test)	6,030
Total estimated cost of conducting survey	\$691,822
Cost per completed interview	\$114.73

This estimate is based on the total cost of the awarded survey contract divided by the specified number of completed pretest/survey interviews.

### 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 reinstatement with changes of a previous survey that had expired: OMB# 2127-0613.

The number of interviews and costs has changed because this collection will include cell phones for the first time, which requires a larger sample, and general cost for surveys have changed since the previous survey in 2002.

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

NHTSA plans to publish results of the survey in two volumes:

- Volume I: Findings
- Volume II: Methodology Report

The Methodology Report will include information on the sampling frame, the survey participation rate, the weighting procedures, and copies of the questionnaires in both English and Spanish. The Findings Report will consist of Figures and Tables, with limited accompanying text. The data presentations will be largely made up of percentage distributions and cross-tabulations. The data will be segmented by the following characteristics:

- Age
- Race
- Gender
- Household income
- Driver Category (based on cluster analysis)

The final sample size of each cell will determine the categories each characteristic will be analyzed by. Only cells which have sufficient sample to draw reliable estimates will be used in the analysis and reported on.

Reports and summary sheets will be published in 2011.

### 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.

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

#### 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.