#### Supporting Statement for Paperwork Reduction Act Submission (Part A)

Office of Management and Budget (OMB) Control Number 2127-XXXX

An In-Depth Examination of Pedestrian-Involved Hit-and-Run Crashes

October 04, 2010

#### A. JUSTIFICATION

**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 that make collection of information necessary

#### 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. This pilot study will lead to a future survey that would support the DOT strategic goal to: *"Improve public health and safety by reducing transportation-related fatalities and injuries"*.

2. Severity of the pedestrian hit-and-run problem

NHTSA has identified the hit-and-run crash type, crashes in which the driver leaves the scene before the arrival of police, for intensive analysis to further its mission to save lives, reduce the negative economic impacts of crashes, and preserve the integrity of people and property. The proposed pilot study focuses on pedestrian-involved hit-and-run crashes in order to provide information on how to improve safety conditions for pedestrians, as well as a framework for authorities to establish better methods and practices to reduce the incidence of pedestrian-involved hit-and-run crashes and resulting fatalities. The potential for pedestrian fatality reduction is substantial.

Between 1998 and 2007, more than 48,000 pedestrian deaths were recorded within the United States, with more than 9,000 (19 percent) of those caused by hit-and-run crashes. Highly populated states with diverse populations have an even higher proportion of hit-and-run crashes over all pedestrian-involved crashes. California, Texas, Florida, and Illinois, which account for nearly 30 percent of the nation's population, are among the states in which the ratio of pedestrian deaths caused by hit-and-run crashes in relation to the total fatalities for the pedestrian group has been higher than the national average for several years. The proportion of pedestrian deaths that are hit-and-run-related has increased every year. Each fatality crash costs millions of dollars

(Council et al, 2005) and even a modest reduction in such crashes would result in improved safety for pedestrians. Although, it is not known how many pedestrian injuries are caused by hit-and-run crashes, it is known that in a single year, 2007, the number of pedestrians *injured* in pedestrian collisions was 61,000.

Hit-and-run crashes disproportionately affect pedestrians with 60 percent of hit-and-run crashes involving a pedestrian. Additionally, hit-and-run crashes increase the severity of injuries and the likelihood of a fatality from a crash as they delay crash notification and emergency response for the victim. The injury or death of a pedestrian in a crash has an economic impact, as well as the potential for an emotional impact on the driver, witnesses, victim, and victim's family and friends (AAA Foundation for Traffic Safety, 2006). Total personal and property damages as a result of pedestrian hit-and-run crashes are likely underestimated, since, based on both international and U.S. data, pedestrian-involved crashes in general may be underreported by 20 to 50 percent (Agran, 1990; Barancik, 1995; Lopez, 1999; Morrison, 1992; Rosman, 1994).

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

Little previous information or research characterizes hit-and-run crashes in general, particularly research that provides a set of recommendations and tools for reducing the magnitude of the problem. Most of the background literature on hit-and-run crashes centers on describing magnitude, temporal occurrence, and some gender and age trends of people involved in hit-and-run crashes. However, information about the physical environment, driver motivations, and countermeasures is lacking.

Even less information exists regarding pedestrian-involved hit-and-run crashes. Existing data comes mostly from the Fatality Analysis Reporting System (FARS) database, which only contains information on crashes that include at least one fatality. The few studies and reports that exist use limited cases to analyze spatial attributes and involvement of alcohol in the crash, determine forensics methods, and present anecdotal information.

Hit-and-run crashes are a significant component of crash-related pedestrian injuries and fatalities, but the available research on these crashes is limited. NHTSA has determined that a specific data collection effort for pedestrian-involved hit-and-run crashes is necessary to support the in-depth analysis needed to better understand the characteristics, magnitude, and impacts of such crashes on traffic safety. This understanding would enable NHTSA to identify areas in need of attention, design effective programs to address the problem, and reduce the occurrences of pedestrian-involved hit-and-run crashes.

#### 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 Appendix 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)).

# 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.

Since the topic of this information collection is sensitive, NHTSA will conduct a pilot study of 200 respondents to: A) Test the wording of the questions in the survey form and determine whether specific questions are not being answered by the survey participants; and B) Determine the response rate that is obtained for the individual questions and the overall survey form. Thereafter, results of this pilot test will be used in order to assess the usefulness of conducting a full survey of 700 additional respondents, as well as make revisions, if necessary, to the initial survey form before conducting additional interviews. The information obtained will be used to supplement the information that is available in existing databases related to pedestrian-involved hit-and-run crashes. As indicated above, the existing information on pedestrian-involved hit-and-run crashes is very limited. The survey will gather information on both fatal and non-fatal crashes. Survey items will obtain data on additional details on the crash that may not be in police reports or judicial records, information on events leading up to and possibly contributing to the crash, possible motivations for the driver to run or not run, and driver perceptions of the risk of getting caught and the associated consequences.

The results of the pilot study will help inform the future survey.

The results of the future survey (not part of approval under this collection) will help elucidate:

- Common trends associated with pedestrian-involved hit-and-run traffic crashes within individual jurisdictions.
- The reasoning behind and considerations affecting a driver's decision to "run" in the event of hitting a pedestrian with a motor vehicle

The results of the full study will assist governmental agencies and private organizations in directing the implementation of strategies and action plans that will reduce the incidence of pedestrian-involved hit-and-run traffic crashes.

NHTSA will use the data from the full studyto help State Highway Safety Offices, law enforcement agencies, and other organizations with establishing and sustaining programs to reduce the number of pedestrian-involved hit-and-run crashes. By necessity, the study will utilize a "sample of convenience," nevertheless, such samples are often useful in identifying patterns and trends that help define issues and provide hypotheses for more rigorous studies.

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, e.g., permitting electronic submission of responses, and the basis for the decision for adopting this means of collection. Also describe any consideration of using information technology to reduce burden.

The subcontractor conducting the pilot test and full survey interviews, Ewald & Wasserman Research Consultants (E&W), will create a database and data entry protocol using its established system for telephone surveys. A state-of-the-art computer-assisted telephone interview (CATI) laboratory is located in the E&W office in San Francisco. The CATI server is independently networked and firewalled and can only be accessed by trained personnel. All systems are password protected as well as internally firewalled to maximize security and provide a high degree of confidentiality for respondents and for the collected

data. The survey instrument is entered into the CATI software using Sensus programming code. Skip patterns (where a respondent receives certain questions based on responses to earlier questions) and qualifying criteria are built into the program to operate automatically, allowing the interviewer to focus on interviewing and enabling the instrument to be administered efficiently, thus reducing burden on the respondent, interviewers, and analysts.

The CATI system's sample management features include:

- Callback management (automatic re-scheduling of "No Answer" / "Answering Machine" callbacks, and interviewer re-scheduling of respondent callback requests)
- Sample distribution (foreign language interviews and refusal conversions)
- Callback reporting (daily reports on the schedule of callbacks for the next day)
- Sample disposition reporting (snapshots of the status of the sample by dispositions)
- Transaction reporting (accounting of sample cases by disposition by contact attempt)
- Interviewer scheduling (reporting the optimal workstation staffing given the sample available and the callbacks scheduled for the following day)
- Sample-serving to interviewer workstations
- Interview data retrieval from interview workstations.

## 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.

This is the first survey of drivers involved in pedestrian-involved hit-and-run crashes. No previous systematic surveys of drivers in pedestrian-involved hit-and-run crashes have been reported. Existing information from drivers is anecdotal or from very small samples of drivers. Little previous information or research has directly addressed the problem of hit-and-run crashes and even less pedestrian-involved hit-and-run crashes. Most of the existing information has been gathered from crash reports. As part of this project, existing crash data is being analyzed to provide updated and more accurate description of hit-and-run crashes. This study will also help identify characteristics of pedestrian-involved hit-and-run crashes and factors related to the incidence of these crashes. The driver survey will complement this analysis by providing information on the crash from the driver's perspective. By interviewing drivers from both pedestrian-involved hit-and-run and non-hit-and-run crashes using the survey instrument in Appendix B, driver motivation and perception can be explored, and possible countermeasures to reduce the incidence of pedestrian-involved hit-and-run crashes can be derived. This study will represent the only representative information available about the perception and motivation of drivers who have left the scene of a pedestrian-involved hit-and-run crash.

To avoid duplication and burden on respondents, where information about a crash is available from the police crash report or judicial records, it will not be collected again from the driver (aside from the minimum data items needed to identify the crash and test the level of accuracy for respondents).

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

This collection of information does not impact small businesses or other small entities. Information will only be collected from individuals.

# 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.

Fleeing the scene of a crash has several consequences for national and local efforts to reduce fatalities and injuries from traffic collisions. Fleeing the scene: (1) may cause delays in emergency care and thus an increase in the severity of injury or the probability of death, (2) reduces the amount of information available about the collision, and (3) reduces the probability that costs from the collision can be covered through insurance. The proportion of vehicle pedestrian collisions that are hit-and-run collisions has been increasing in recent years. Not conducting the proposed data collection will mean that the issue of hit-and-run collisions involving pedestrians cannot be optimally addressed.

Nearly one in five drivers in fatal crashes with a pedestrian flees the scene (Fatality Analysis Reporting System, 1994-2007). Since there is a severe lack of information about these crashes, without additional data from the pilot and the full survey, NHTSA will have difficulty identifying the root of the problem and designing targeted countermeasures. As a result, programs for addressing the problem cannot be designed optimally and dedicating additional resources to the problem will be difficult to justify. Even a modest reduction in such crashes would result in improved safety for pedestrians, reduce negative economic impacts, and preserve the integrity of humans and property.

- 7. Explain any special circumstances that would cause an information collection to be conducted in a manner:
  - \* requiring respondents to report information to the agency more often than quarterly;
  - \* requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;
  - \* requiring respondents to submit more than an original and two copies of any document;
  - \* requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records, for more than three years;
  - \* in connection with a statistical survey, that is not designed to produce valid and reliable results that can be generalized to the universe of study;
  - \* requiring the use of a statistical data classification that has not been reviewed and approved by OMB;
  - \* that includes a pledge of confidentiality that is not supported by authority established in statute or regulation, that is not supported by disclosure and data security policies that are consistent with the pledge, or which unnecessarily impedes sharing of data with other agencies for compatible confidential use; or
  - \* requiring respondents to submit proprietary trade secrets, or other confidential information unless the agency can demonstrate that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.

There are no special circumstances that would cause this collection to be conducted in a manner inconsistent with OMB guidelines.

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

Describe efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported.

Consultation with representatives of those from whom information is to be obtained or those who must compile records should occur at least once every 3 years—even if the collection of information activity is the same as in prior periods. There may be circumstances that may preclude consultation in a specific situation. These circumstances should be explained.

#### 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 February 19, 2009, Vol. 74, No. 32; pp. 7737 – 38. (See Appendix C.)

NHTSA published a notice in the *Federal Register* on July 13, 2009, Vol. 74, No. 132; pp. 33508-33509 with a 30-day public comment period to announce that this information collection would be sent to OMB for approval. (See Appendix E.)

#### b. Responses to the 60-Day Federal Register Notice

No comments were received.

#### c. Consultation with outside experts

National experts at NHTSA, Booz Allen Hamilton, E&W, and the University of California - Berkeley Traffic Safety Center have collaborated on and agreed to the survey instrument content, interview procedures, and interviewee identification plan. Additionally, the study team is conducting an extensive effort to contact local officials who are custodians of traffic collision and court records (i.e., police agencies, court clerks, departments of transportation, and departments of motor vehicles) in order to determine the steps needed to access driver contact information for the survey. The team has consulted with traffic safety officials in California who are knowledgeable about the pedestrian collisions. Generally, most traffic safety officials and people who are otherwise experts about pedestrian safety have relatively little understanding of pedestrian-involved hit-and-run collisions and express great interest in the outcome of the study.

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

There will be no payment or gift to respondents, other than remuneration of contractors or grantees.

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

This statement will be read to respondents before obtaining consent and beginning the survey:

"The US Department of Transportation has asked UC Berkeley to conduct a brief but important nationwide survey of drivers in order to better understand how to reduce injuries and fatalities due to traffic accidents involving pedestrians.

Your participation is completely voluntary. All information that you provide will be kept private, used only for statistical purposes, and protected to the full extent of the law. There is no direct benefit to you anticipated from participating in this study. However, the information gained from the study will help design programs to reduce pedestrian-related crashes, in particular, hit and run crashes.

This study is conducted solely for research purposes, and all identifying information will be removed from your responses. To help protect your privacy, the researchers have obtained a Certificate of Confidentiality from the National Institute on Alcohol Abuse and Alcoholism, part of the U. S. Department of Health and Human Services. With this Certificate, the researchers cannot be forced to disclose information that may identify you, even by a court subpoena, in any federal, state, or local civil, criminal, administrative, legislative, or other proceedings. We have this certificate because some of the questions are about illegal activities. Also, we want you to know that some questions may make you upset or uncomfortable. You may skip any questions or stop participating at any point during the survey. The survey will take about 20 minutes over the telephone. To ensure that I am doing this correctly, this call may be monitored by my supervisor. This survey is voluntary so you have the right to decline to participate or to withdraw at any point in this study.

Additionally, this study has been reviewed and approved by the Office of Management and Budget under the OMB control number 2127-XXXX. If you have any questions or concerns about your rights and treatment as a research subject, you may contact the office of UC Berkeley's Committee for the Protection of Human Subjects, at 510-642-7461 or subjects@berkeley.edu."

Respondents will be reminded throughout the survey that all answers will be kept private. All interviewers will sign statements of confidentiality in which they promise not to reveal the results of any interview.

Given the sensitive and confidential nature of this project, Booz Allen Hamilton, E&W, and the University of California at Berkeley will provide a high degree of confidentiality for the collected data as well as for the sample databases. CATI system access is restricted to authorized personnel, and file cabinets and storage devices containing confidential data are locked at all times. All computer systems are password protected and internally secured with multiple firewalls.

All information collected will be kept strictly confidential. Respondents' identifying information will not be included on study materials. A unique study code will be developed for each participant so as to link their responses with other information collected from public sources about their driving record or crash involvement. This link will be stored separately in an electronic file on a password protected, firewalled computer at the University of California, Berkeley. Once all information has been linked, any identifying information will be deleted.

The Traffic Safety Center and Booz Allen Hamilton have applied and received a US Department of Health and Human Services (HHS) Certificate of Confidentiality, which provides a legal basis for protecting the confidentially of personal data in research projects under section 301(d) of the Public Health Service Act (42 U.S.C. 241(d)). The Certificate does not protect against the voluntary disclosure of personal data by the researchers, but these disclosures must be specified in the consent state. All personal identifying information will be removed and certain collision attributes will be generalized before the data are provided to NHTSA, so that no survey data can be connected back to a specific collision.

The University of California, Berkeley IRB Committee has issued a letter of approval for this study

#### 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. This justification should include the reasons why the agency considers the questions necessary, the specific uses to be made of the information, the explanation to be given to persons from whom the information is requested, and any steps to be taken to obtain their consent.

The following table identifies the questions in the survey that could be construed as sensitive in nature or private. For each question identified, a justification is provided for the necessity of asking the question.

Verbal consent will be obtained from the respondents over the phone. Respondents are informed that nobody is required to participate, participation is voluntary, and the respondent may skip any question or stop participating at any point during the survey. The information gathered from this survey will be used to help design programs to reduce pedestrian-related crashes and, in particular, hit-and-run crashes. This is the rationale that will be provided to the potential respondent.

Survey Question	Justification		
Q 25. Did you have a valid driver's license at the time of the accident?	Unlicensed and/or uninsured drivers may be motivated to leave the scene of the crash to avoid potential legal and economic consequences (London Road Safety Unit, 2006).		
Q 26. Did you have valid auto insurance at the time of the accident?			
Q 27. Had you ever been convicted of a serious traffic offense such as			
reckless driving or a DUI (aside from the current incident)?	Literature suggests that previous arrests or legal issues may propel a driver to leave (Solnick and Hemenway, 1995). A driver with an active		
Q 28. Was there an active warrant for your arrest at the time of this accident?	warrant might flee to avoid apprehension for that warrant.		
	Illegal status may be a motivator to leave the scene in order to avoid discovery.		
Q 29. What was your legal status in the United States at the time of the crash?	A study performed in Singapore showed that ethnic minorities were more likely to run in all types of crashes than the Chinese majority (Tay, 2008). They did not distinguish among illegal immigrants, permanent residents, and citizens.		
Q 30. Did you drink any alcohol during the 2 hours before this accident?	Impaired driving is often a factor in crash involvement, and this impairment may also influence the decision to leave the scene after the crash by altering judgment and perception.		
Q 31. How many drinks did you have in the 2 hours before this accident?	In 2007, 32 percent of fatal crashes involved a driver with a blood alcoho concentration (BAC) of 0.08 or higher (NHTSA, 2008a). Solnick and Hemenway (1995) have suggested that the presence of alcohol can also b a motivator for drivers to run, possibly because they perceive that they ar more obviously at fault or likely to be judged so because they had been drinking. Alcohol involvement in crashes is greater at night, when hit- and-runs are also more likely to occur.		
Q 32. Did you take any prescription or over-the-counter medication in the 24 hours preceding the accident?			

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Survey Question	Justification	
Q 33. Did you take any illegal drugs in the 24 hours preceding the accident?	Drugs or medications taken can be difficult for police to detect or	
Q 34. Do you believe you were at fault in causing this accident?	identifycand the drixer may hereble to anovides information not scale by the crash.	
Q 39. Were there legal consequences for your involvement in the crash?		
Q 49. Were there legal consequences of your leaving the scene of the accident?	The answers to these questions enable comparison of the legal consequences, if any, experienced by: (1) those who ran to those who did not run, and (2) those who ran and turned themselves in to those who ran	
Q 52. Aside from any consequences of leaving the scene, were there any additional legal consequences of your involvement in the accident?	and were otherwise apprehended.	
Q 43. What was the most important factor in your decision to leave the scene?	The driver is the only potential source of this information, which is critical to understanding the motivation of hit-and-run drivers and designing countermeasures to reduce hit-and-run crashes.	

12. Provide estimates of the hour burden of the collection of information. The statement should:

- \* Indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated. Unless directed to do so, agencies should not conduct special surveys to obtain information on which to base hour burden estimates. Consultation with a sample (fewer than 10) of potential respondents is desirable. If the hour burden on respondents is expected to vary widely because of differences in activity, size, or complexity, show the range of estimated hour burden, and explain the reasons for the variance. Generally, estimates should not include burden hours for customary and usual business practices.
- \* If this request for approval covers more than one form, provide separate hour burden estimates for each form and aggregate the hour burdens in Item 13 of OMB Form 83-I.
- \* Provide estimates of annualized cost to respondents for the hour burdens for collections of information, identifying and using appropriate wage rate categories. The cost of contracting out or paying outside parties for information collection activities should not be included here. Instead, this cost should be included in Item 14.

The respondent universe consists of two groups of drivers involved in a pedestrian collision whose cases have been fully adjudicated: 1) Those who remained at the scene of the crash; and 2) Those who fled the scene, returned or were apprehended. The survey goal is to reach a total of 200 driver respondents for the pilot and an additional 700 driver respondents for the full survey, with each survey taking an average of 20 minutes. The time of 30 minutes is generally the upper limit for the hit-and-run respondents, who will have 12 additional questions to answer. The estimate for non-hit-and-run respondents will be a few minutes less. To be conservative, the upper limit is used. A trial test of the survey with students has been conducted and is consistent with an approximate length of 30 minutes for a completed survey. The total

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burden hours for the pilot would be 100 hours (i.e., 200 respondents x 30 minutes = 100 hours) and additional 350 hours (i.e., 700 respondents x 30 minutes) if the full survey is later conducted.

It is expected that a total of 9,000 drivers will need to be contacted in order to obtain the desired number of responses. There are three early termination points for the survey, ranging from 1 to 5 minutes to complete. An estimate of 3 minutes is the anticipated approximate average considering the expected variation in termination points for non-respondents. Therefore, the total burden hours for non-response or declining participation for participants for the pilot would be 90 hours (i.e., 3 minutes x 1800 respondents = 90 hours) and an additional 315 hours (i.e., 3 minutes x 6300 respondents = 315 hours) if the full survey is conducted.

As shown in the table below, the total burden hours for all participants is 855 hours, 190 for the pilot and an additional 665 for the full study. Although there is no actual cost to the participant since participation is voluntary, the cost to the respondent can be looked at in terms of their hourly wage. Based on the average income level in the United States, the average rate of \$18.30 per hour (US Department of Labor, Bureau of Labor Statistics, 2008) can be used to estimate annualized costs to respondents and non-respondents at 855 hours x \$18.30 = \$15,646.50 (i.e., \$3,477 for the pilot and \$12,169.50 additional for the full study).

Task	Estimated Burden per Respondent	Number of Respondents	Total Burden Hours
Driver Non-Response or Declining Participation (Pilot)	3 minutes	1800 drivers	90 hours
Driver Non-Response or Declining Participation (Full Survey)	3 minutes	6300 drivers	315 hours
Telephone Interview (Pilot)	30 minutes	200 drivers	100 hours
Telephone Interview (Full Survey)	30 minutes	700 drivers	350 hours
Total			855 hours

- 13. Provide an estimate of the total annual [non-hour] cost burden to respondents or record keepers resulting from the collection of information. (Do not include the cost of any hour burden shown in Items 12 and 14).
  - \* The cost estimate should be split into two components: (a) a total capital and start-up cost component (annualized over its expected useful life) and (b) a total operation and maintenance and purchase of services component. The estimates should take into account costs associated with generating, maintaining, and disclosing or providing the information [including filing fees paid]. Include descriptions of methods used to estimate major cost factors including system and technology acquisition, expected useful life of capital equipment, the discount rate(s), and the time period over which costs will be incurred. Capital and start-up costs include, among other items, preparations for collecting information such as purchasing computers and software; monitoring, sampling, drilling and testing equipment; and record storage facilities.
  - \* If cost estimates are expected to vary widely, agencies should present ranges of cost burdens and explain the reasons for the variance. The cost of purchasing or contracting out information collection services should be a part of this cost burden estimate. In developing cost burden estimates, agencies may consult with a sample of respondents (fewer than 10), utilize the 60-day pre-OMB submission public comment process and use existing economic or regulatory impact analysis associated with the rulemaking containing the information collection, as appropriate.

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- \* Generally, estimates should not include purchases of equipment or services, or portions thereof, made: (1) prior to October 1, 1995, (2) to achieve regulatory compliance with requirements not associated with the information collection, (3) for reasons other than to provide information or keep records for the government, or (4) as part of customary and usual business or private practices.

There are no costs to respondents or record keepers associated with participating in this survey. Respondents will not need to return any materials by mail or otherwise incur expenses.

14. Provide estimates of annualized cost to the Federal government. Also, provide a description of the method used to estimate cost, which should include quantification of hours, operational expenses (such as equipment, overhead, printing, and support staff), and any other expense that would not have been incurred without this collection of information. Agencies also may aggregate cost estimates from Items 12, 13, and 14 in a single table.

The estimated cost to the Federal government for the pilot study is \$645,840 over 34 months. The annualized cost is \$227,900. This estimate includes all associated costs (i.e., costs for personnel, data collection, data storage, analysis, report preparation) for the contractor. The cost of conducting the full study after the completion of the pilot study is not included.

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

This program change of an additional 855 hours is resulting from a new collection of information of which 190 hours is for the pilot and 665 additional hours for the full survey.

16. For collections of information whose results will be published, outline plans for tabulation and publication. Address any complex analytical techniques that will be used. Provide the time schedule for the entire project, including beginning and ending dates of the collection of information, completion of report, publication dates, and other actions.

The initial analysis will be to determine the results from the pilot study including respondents' willingness to participate and response rates for sensitive questions. If the full study is conducted, the research team will begin the survey analysis by performing descriptive statistics (tabulations and cross-tabulations) using SAS and/or STATA statistical software, accounting for the sampling methodology. The most appropriate methodology will be determined once data collection is completed. Linear and/or logistic regression may be used to predict the occurrence of hit-and-run given a pedestrian-involved collision and driver and environmental factors that prove significantly associated with this outcome. The characteristics of responders to non-responders will be compared in order to identify under sampled strata. Multiple imputation will be used, if necessary, to weigh responses and avoid systematic bias in the analysis. The survey seeks to answer the following questions:

- What factors motivate a driver to flee from the scene of a collision?
- How does the driver perceive the circumstances of a collision?

The entire project will be documented in a technical report, and a documented analysis data set will be created mainly for use by NHTSA. Based upon interest expressed by the public, the database may be released, upon request, to individuals or be posted on the NHTSA website. If the data is released, it will first be checked to insure that any Personally Identifiable Information (PII) is not included. Appendix D provides the project schedule.

It is anticipated that the results of the full survey will be of interest to traffic safety agencies, law enforcement, legislators, other researchers, and the general driving public. For this reason, the findings may be widely disseminated in both scientific and lay formats to facilitate further studies.

### **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.

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

There are no exceptions to the certification statement identified in Item 19 of the OMB Form 83-I.

# **B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS** Please see Part B

#### Bibliography

AAA Foundation for Traffic Safety (2006). Motor Vehicle Traffic Fatalities by State and Hit-and-Run Status, 2006. National Highway Traffic Safety Administration's Fatality Analysis Reporting System. Annual Report File: DF-1.4 11 0.

Agran, P.F., Castillo, D.N., & Winn, D.G. (1990). "Limitations of data compiled from police reports on pediatric pedestrian and bicycle motor vehicle events." *Accident Analysis & Prevention* 22(4): 361-70.

Barancik, J. I., & Fife, D. (1985). "Discrepancies in vehicular crash injury reporting: Northeastern Ohio Trauma Study. IV." *Accident Analysis & Prevention* 17(2): 147-54.

Council, F., Miller, T., Persaud, B., & Zaloshnja, E. (2005). "Crash costs in the United States by crash geometry." *Accident Analysis & Prevention*, 38, (2006) 644-651.

London Road Safety Unit - Transport for London (2006). "Hit and run collisions in Greater London." London, England. London Accident Analysis Unit topic 2006-1 April 2006. http://www.tfl.gov.uk/assets/downloads/2006-1-Hit-Run.pdf Accessed November 14, 2008.

Lopez, D.G.; Rosman, D.L.; Jelinek, G.A.; Wilkes, G.J.; & Sprivulis, P.C. (1999). "Complementing Police Road-Crash Records with Trauma Registry Data - An Initial Evaluation." *Accident Analysis & Prevention* 32(6): 771-777.

Morrison, P. (1992). "Underreporting of pedestrian accidents." *British Medical Journal* 304(21): 779-780. <u>http://www.pubmedcentral.nih.gov/picrender.fcgi?artid=1881582&blobtype=pdf</u> Accessed November 14th, 2008.

NHTSA. (1982-2007). Fatality Analysis Reporting System: Number of Pedestrians Involved in Hit and Run Events, by State and Level of Injury. Accessed November 14th, 2008 from <u>http://www-fars.nhtsa.dot.gov/QueryTool/QuerySection/SelectYear.aspx</u>.

NHTSA. (2006). "Early Edition." *Traffic Safety Facts—2006 Data*. DOT-HS-810-818. Washington, DC, National Highway Traffic Safety Administration.

NHTSA. (2008a). "Alcohol-Impaired Driving." *Traffic Safety Facts –2007 Data*.. DOT-HS-810-985. Washington, DC, National Highway Traffic Safety Administration.

NHTSA. (2008b). "Pedestrians." *Traffic Safety Facts – 2007 Data*. DOT-HS-810-994. Washington, DC, National Highway Traffic Safety Administration.

Rosman, D. L. & Knuiman, M. W. (1994). "A comparison of hospital and police road injury data." *Accident Analysis & Prevention* 26(2): 215-22.

Solnick, S. J. & Hemenway, D. (1995). "The hit-and-run in fatal pedestrian accidents: victims, circumstances and drivers." *Accident Analysis & Prevention* 27(5): 643-9.

Tay, R., Rifaat, S., M. &, Chin, H.C. (2008). "A logistic model of the effects of roadway, environmental, vehicle, crash and driver characteristics on hit-and-run crashes." *Accident Analysis & Prevention* 40(4): 1330-1336.

US Department of Labor, Bureau of Labor Statistics (2008). Employment Situation News Release dated December 5, 2008. http://www.bls.gov/news.release/archives/empsit\_12052008.htm

Paperwork Reduction Act Submission

Pedestrian-Involved Hit-and-Run Crashes

**Appendix A: Statutory Authority** (See Appendix A)

Appendix B: Survey Instrument (See Appendix B)

**Appendix C: 60 Day Notice** (See Appendix C)

#### Appendix D: Project Schedule

Item Number	Task Number	Deliverables (Up to OMB Approval)	Dates
0		Award	09/11/08
1	1.9.0	Monthly Conference Call (M)	Ongoing
2	1.9.0	Monthly Progress Reports (D)	Ongoing
3		Invoices (D/M)	Ongoing
4	1.1.0	Initial Project Meeting (M)	01/08/08
5	1.2.0	Refine and Submit the Revised Work Plan (M/D)	11/12/08
6	1.2.0	NHTSA TOM Approval [Work Plan (M/D)]	11/19/08
7	1.3.0	Conduct Literature Review and Submit Draft Letter Report (M/D) [2nd Draft]	03/30/09
8	1.3.0	NHTSA TOM Approval (M) [Literature-Review2nd Draft]	04/23/09
9	1.4.0	Develop Data Collection and Analysis Plan and Submit Draft Plan (M/D) [3rd Draft]	04/08/09
10	1.4.0	NHTSA TOM Approval (M) [Data Collection and Analysis Plan-3rd Draft]	04/21/09
11	1.4.1	Draft Report (1.4.1 Nationwide Analyses) (M/D)Recommend 15 areas	04/17/09
12	1.4.1	NHTSA TOM Approval (M) [Nationwide Analyses Report—1 <sup>st</sup> Draft; 15 Areas]	05/04/09
13	1.5.0	Contact for Access (M)	06/15/09
14	1.4.2	Implement Data Collection and Analysis Plan (1.4.2 and 1.4.3 Focus on Local Areas) (M)	02/26/10

Item Number	Task Number	Deliverables (Beginning with OMB Approval)	Dates
15	1.5.0	Receive OMB Approval (M)	09/08/10
16	1.5.0	Implement Pilot and deliver draft pilot report	12/13/10
16	1.5.0	Submit Final Letter Report (1.4.2-1.4.4) (M/D)	02/01/11
17	1.5.0	NHTSA TOM Approval (M) [Local Areas Data (1.4.2-1.4.4)	02/16/11
18	1.6.0	Submit Draft of Technical Report (D)	03/18/11
19	1.6.0	Agency Review/NHTSA TOM Approval (M) [Technical Report—1 <sup>st</sup> Draft]	05/04/11
20	1.7.0	Final Technical Report (D)	05/18/11
21	1.7.0	NHTSA TOM Approval (M) [Technical ReportFinal]	06/07/11
22	1.8.0	Presentation of Deliverables at NHTSA ) (M/D)	TBD

Appendix E: 30 Day Notice (See Appendix E)