

Information Collection Request Supporting Statement: Section A Effects of Education on Speeding Behavior

Abstract: The National Highway Traffic Safety Administration (NHTSA) of the U.S. Department of Transportation is seeking approval to collect information from licensed drivers who were recently cited for speeding for a one-time, voluntary study of the effects of an education course on speeding behavior. NHTSA proposes to approach up to 500 drivers appearing at the Wake County, NC district court because of speeding infractions to ascertain their interest in participating in the study after their case has been adjudicated. Wake County, NC was chosen because of the contractor's knowledge of the area and district court procedures. Of the 500 drivers, we expect to collect information from 300 potential participants to determine their eligibility for the study with the goal of recruiting 200 voluntary participants. Participants will be randomly assigned so that half will be in the experimental group, which receives the education course, and half will be in the control group that does not receive the training. The 200 participants will complete an informed consent form and a sensation-seeking questionnaire to measure psychological factors related to risky behaviors. Participants will also complete driver speeding questionnaires at the beginning, middle, and end of the study to explore any changes in their attitudes and beliefs regarding speeding as well as their self-reported tendency to speed during the study period. The experimental group will also complete a course evaluation after taking the training course. The sensation-seeking questionnaire will be used as a control in predicting speeding behaviors as sensation-seeking has been related to speeding in the past. In addition, NHTSA will collect naturalistic driving data, which involves unobtrusive observation of driving in a natural, on-road setting using a vehicle instrumented with position, speed, and other sensors. This collection is solely reporting to the research team, and there are no record-keeping costs to the respondents. NHTSA will use the information to produce a technical report that presents the results of the study. The technical report will provide aggregate (summary) statistics and tables as well as the results of statistical analysis of the information, but it will not include any personal information. The technical report will be shared with State highway offices, local governments, and those who develop driver education and traffic safety communications that aim to reduce speed-related crashes. The technical report will also be available to the public. The total estimated burden for recruiting: for approaching 500 participants to describe the study (83 hours), for screening 300 participants (45 hours), and for 200 participants to complete the study (842 hours) is 969 total hours.

A.1. Explain the circumstances that make the collection of information necessary. Identify any legal and 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 making the collection necessary

NHTSA was established to reduce deaths, injuries, and economic losses resulting from motor vehicle crashes on the Nation's highways. As part of this statutory mandate, NHTSA is authorized to conduct research for the development of traffic safety programs.

Despite national, state, and local efforts to address the speeding problem, speeding-related crashes comprised 26% of all fatal crashes in 2017¹, a percentage that has largely remained the same in the last 20 years. This stalled progress suggests that new countermeasures that differ from typical enforcement and engineering efforts may be needed to reduce speeding deaths. A speeding education course focused on known speeders may provide a new mitigation approach. The objective of the current study is to improve NHTSA's understanding of the potential effects of driver education about vehicle speeds, laws, and the risks of speeding behavior in improving driver knowledge and changing driver attitudes and behaviors, including its effects on reducing post-education speeding recidivism.

In general, driver education courses have been shown to be an effective countermeasure for reducing risky and unsafe driving behaviors and increasing safe and law-abiding driving behaviors. This has been found among novice and older drivers.^{2,3} However, despite their overall effects in the general population, there is some evidence that there is a need to specifically target higher-risk drivers with more tailored driver education programs. More specifically, increasing evidence has supported the idea of speeder-typologies and that speeder-types differ in important ways. Aside from inherently engaging in different speeding behavior, speeder-types commonly differ regarding their perceptions, attitudes, motivations, and knowledge of speeding, speeding risks, and speeding laws.^{4,5} Unsurprisingly, they also differ in having received speeding citations.⁶

For all these reasons, it is likely that different speeder-types will respond differently to countermeasures. Promising preliminary evidence has supported this idea, by showing differential effects of driver training between drivers who engaged in more versus less frequent risky behavior.⁷ More specifically, a driver training program, tailored to address any of several risky behavior(s) displayed by the drivers, was shown to reduce risky driving behaviors among all drivers, but particularly among the more frequently-offending drivers. Of all risky behaviors, the greatest effects were those of the speeding-tailored instruction on reducing speeding

¹ National Center for Statistics and Analysis. (2019, May) Speeding: 2017 data (Traffic Safety Facts. DOT HS 812 687). Washington, DC: National Highway Traffic Safety Administration.

² Thomas, F. D., Rilea, S. L., Blomberg, R. D., Peck, R. C., & Korbelak, K. T. (2016, January). Evaluation of the safety benefits of the risk awareness and perception training program for novice teen drivers (Report No. DOT HS 812 235). Washington, DC: National Highway Traffic Safety Administration.

³ Nasvadi, G. E. (2007). Changes in self-reported driving behaviour following attendance at a mature driver education program. *Transportation Research Part F: Traffic Psychology and Behaviour*, 10, 358–369.

⁴ Richard, C. M., Campbell, J. L., Lichty, M. G., Brown, J. L., Chrysler, S., Lee, J. D., Boyle, L., & Reagle, G. (2013, September) Motivations for Speeding, Volume II: Findings Report. (Report No. DOT HS 811 818). Washington, DC: National Highway Traffic Safety Administration.

⁵ Peer, E. (2010a). Speeding and the time-saving bias: How drivers' estimations of time saved when increasing speed affects their choice of speed. *Accident Analysis and Prevention*, 42, 1978-1982.

⁶ Richard, C. M., Payn, B. A., Bacon-Abdelmoteleb, P., Graving, J., Liu, T., Divekar, G., & Reagle, G. (2017, December). Matching countermeasures to driver types and speeding behavior (Report No. DOT HS 812 455). Washington, DC: National Highway Traffic Safety Administration.

⁷ Camden, M.C., Soccolich, S.A., Hickman, J.S., and Hanowski, R.J. (2019). Reducing risky driving: Assessing the impacts of an automatically-assigned, targeted web-based instruction program. *Journal of Safety Research*, 70, 105-115.

behavior. This study supports the importance of tailored driver education for reducing risky driving behaviors, such as speeding, particularly among higher-risk drivers.

Fortunately, public information and education are already established as important elements of effective speed management programs⁸ and recent NHTSA research has indicated that many drivers would like more information on stopping distances, laws, and risks involved.⁹ This provides an important opportunity for NHTSA to examine the current research question and address limitations of previous research, while simultaneously addressing the needs of traffic safety agencies, law enforcement, and the public. To address this need, the objective of the current research is to conduct a feasibility study to examine the effect of a tailored, speeding-focused driver education program on speeding-related knowledge, laws, risks, and behavior, among speeders with recent speeding citations. In addition to being the first research study to examine speeding-tailored driver education among higher-risk speeding offenders, it will also be the first to employ observations of speeding using naturalistic data (from a data acquisition system or DAS) to measure the effects of an education-based countermeasure that targets speeding. This study will add to the traffic safety field by increasing knowledge of the potential effect of driver education about speed and speeding (e.g. effects of speed, risks and laws) on speeding-related knowledge, attitudes, and behaviors; and further support the importance of tailored driver education for risky drivers. This information will be useful to State highway offices, local governments, and those who develop driver education and traffic safety communications that aim to reduce speed-related crashes.

Public information and education are important elements of effective speed management programs.¹⁰ The information gained from the present collection will be useful to State highway offices, local governments, and those who develop driver education and traffic safety communications that aim to reduce speed-related crashes.

b. Statute authorizing the collection of information

Title 23, United States Code, Chapter 4, Section 403 authorizes the NHTSA to conduct research and development activities, including demonstration projects and the collection and analysis of highway and motor vehicle safety data and related information needed to carry out this section, with respect to all aspects of highway and traffic safety systems and conditions relating to vehicle, highway, driver, passenger, motorcyclist, bicyclist, and pedestrian characteristics; accident causation and investigations; and human behavioral factors and their effect on highway and traffic safety, including distracted driving. [See 23 U.S.C. 403(b)(1)(A)(i), 23 U.S.C. 403(b)(1)(A)(ii), 23 U.S.C. 403(b)(1)(B)(iii)].

⁸ U.S. Department of Transportation. (2014). Speed Management Program Plan. DOT HS 812 028. Washington, D.C. National Highway Traffic Safety Administration.

⁹ Richard, C. M., Divekar, G., and Brown, J. L. (2016, April). Motivations for speeding – Additional data analysis (Report No. DOT HS 812 255). Washington, DC: National Highway Traffic Safety Administration.

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.

Battelle will conduct this study under a task order on an Indefinite Delivery/Indefinite Quantity contract with NHTSA. Participation in this study will be voluntary, and participants will be recruited from drivers that attend the Wake County, NC district court because of speeding infractions after their case has been adjudicated. The Wake County District Attorney has provided Battelle with permission to recruit individuals on courthouse property. Individuals interested in participating will complete a screening questionnaire (NHTSA Form 1492) to determine their eligibility and provide their contact information (NHTSA Form 1494). Eligible drivers will then schedule an enrollment visit with research staff to be conducted at a nearby study facility or while they are still at the courthouse.

During the enrollment visit, researchers will brief participants about the study and guide them through the Informed Consent Process, which will include completion of NHTSA Form 1493. Following consent, participants will complete questionnaires that cover attitudes, beliefs, knowledge, and behaviors regarding speeding - referred to as the Driver Speeding Questionnaire (NHTSA Form 1495). This form will provide data that support statistical analysis of the effects of the education course.

While participants complete the questionnaires, researchers will install a DAS in the participant's vehicle that will collect vehicle speed, GPS position, and a timestamp. Vehicle data collection imposes no burden on participants since it automatically records data as participants go about their normal driving. In the Strategic Highway Research Program 2 (SHRP2)'s use of a DAS to record driving behaviors, researchers found that drivers acclimate to the DAS within a week of it being installed. The first week of data will not be used in this study to minimize the effect of having the DAS on driving behavior. It should also be noted that the SHRP2 DAS system included multiple cameras mounted around the rearview mirror on the windshield and elsewhere in the vehicle. The DAS system for this project will be a barely noticeable device to collect GPS and vehicle speed data.

After one month of normal driving, participants will return to the study facility to complete the education course. At the end of the course, participants in the experimental group will again complete the Driver Speeding Questionnaire (NHTSA Form 1495) to document changes in driver responses immediately after taking the education course. Participants in the experimental group will also complete a brief evaluation of the course (NHTSA Form 1496). This information will guide refinement of the course. Participants in the control group will also return to the study facility after one month to have the DAS on their vehicle checked and to complete the Driver Speeding Questionnaire again, but they will not take the education course. This will ensure that all participants meet with the research staff three times and at the same point in their participation in the study to control for these effects.

The driver educational course that will be used in this study is a course developed by Adept Driver called the *Advanced Driver* course.¹¹ This course focuses on the "Big Six Skills" of active visual awareness, hazard detection, speed adjustment, space management, risk assessment, and lifestyle issues, all factors that can make a significant difference in reducing speeding-related

¹¹ Adept Driver *Advanced Driver* course: <https://www.adeptdriver.com/advanced-driver/>

driving issues and crashes. The course also includes a review of key concepts in each module and module quizzes. The on-line course takes approximately 3.5 hours to complete.

Participants will continue to drive normally for one additional month after the mid-study contact before returning to the facility for study close-out. Researchers will remove the DAS and return the vehicle to its original state. During the close-out, participants will complete the Driver Speeding Questionnaire (NHTSA Form 1495) for the third and final time. Participants will then complete a questionnaire about sensation seeking and general driving behavior (NHTSA Form 1497). These data will assess the persistence of changes in driver responses approximately 1 month after taking the education course (Driver Speeding Questionnaire, 1495) for the experimental group and any changes for all participants during the study period and are necessary for interpreting the statistical analyses related to knowledge retention in the experimental group and for comparisons of the experimental and control groups and the effects of the course for those drivers that took it compared to the control (Driver Speeding Questionnaire and Sensation-Seeking Questionnaire, 1495 and 1497).

Naturalistic driving data collected before/after the speeding education course within the experimental group will also be used to estimate effects of the education course and identify specific aspects of speeding (e.g., frequency, magnitude of speed exceedance, etc.) that were affected by the education course. The data from this study will provide NHTSA with information that will guide the development of education courses to reduce speeding-related crashes.

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 information technology. Also describe any considerations of using information technology to reduce burden.

Vehicle instrumentation will automatically collect vehicle speed, GPS location, and a timestamp. Other participant data will be collected using electronic questionnaires, with paper versions available if the participant requests them. Electronic surveys will be considered the default and encouraged because they employ question-skipping logic to only show the relevant questions, reducing burden because people will not answer questions unnecessarily. This process will also improve data quality.

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.

Multiple studies have examined speeding behavior in naturalistic settings. However, a literature search conducted earlier in the project revealed no previous studies on the effects of speed education courses on speeding as measured by naturalistic data. The current study relies on questionnaires that have been shown in previous studies to measure driver-specific predictors of

speeding.¹² The current study will use both naturalistic driving data and questionnaire measures to quantify the effects of a speeding education course.

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

Questionnaire information for this study will only be collected from individuals. There is no burden on small businesses for this information collection request.

A.6. Describe the consequences to Federal program or policy activities if the collection is not collected or collected less frequently.

Speeding-related crashes are a serious problem in the U.S. In 2017, there were 9,717 fatalities in speeding-related crashes—26% of all fatal crashes.¹³ Public information and education are important elements of any effective speed management program.¹⁴

So far, attempts to address this problem through a variety of approaches have not led to a substantial reduction in speed-related fatalities. The percentage of speeding-related fatalities in 2017 at 26% is only slightly lower than it was in 2000 at 29%.¹⁵ Speeding countermeasures have typically been associated with uncertain or limited success. NHTSA’s reference guide *Countermeasures That Work* provides a list of speeding countermeasures that have been demonstrated to be effective.¹⁶ However, most of these efforts focus on enforcement/punishment or engineering countermeasures to reduce speeding. A limitation with these types of countermeasures is that they are less effective with some driver groups, such as risk-taking young males, and new approaches need to be tried with these groups.

Without this new information and new countermeasures that may be developed based on the findings, programs will run and be managed as they have been in the past, missing opportunities to potentially reduce speeding-related traffic fatalities.

¹² Richard, C. M., Campbell, J. L., Lichty, M. G., Brown, J. L., Chrysler, S., Lee, J. D., Reagle, G. (2012). Motivations for speeding. Volume I: Summary Report. (Report No. DOT HS 811 658). Washington, DC: National Highway Traffic Safety Administration.

Richard, C. M., Payn, B. A., Bacon-Abdelmoteleb, P., Graving, J., Liu, T., Divekar, G., & Reagle, G. (2017, December). Matching countermeasures to driver types and speeding behavior (Report No. DOT HS 812 455). Washington, DC: National Highway Traffic Safety Administration.

¹³ National Center for Statistics and Analysis. (2018, March, revised) Speeding: 2016 data (Traffic Safety Facts. DOT HS 812 480). Washington, DC: National Highway Traffic Safety Administration.

¹⁴ U.S. Department of Transportation. (2014). Speed Management Program Plan. DOT HS 812 028. Washington, DC: National Highway Traffic Safety Administration.

¹⁵ Liu, C., Chen, C. L., Subramanian, R., & Utter, D. (2005). Analysis of speeding-related fatal motor vehicle traffic crashes (DOT HS 809 839). Washington, DC: NHTSA’s National Center for Statistics and Analysis.

¹⁶ Richard, C.M., Magee, K., Bacon-Abdelmoteleb, P., & Brown, J.L. (2018, April). Countermeasures that work: A highway safety countermeasures guide for State Highway Safety Offices, Ninth edition (Report No. DOT HS 812 478). Washington, DC: National Highway Traffic Safety Administration.

A.7. Explain any special circumstances that would cause an information collection to be conducted in a manner:

- a. requiring respondents to report information to the agency more often than quarterly;
- b. requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;
- c. requiring respondents to submit more than an original and two copies of any document;
- d. requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records, for more than three years;
- e. 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;
- f. requiring the use of a statistical data classification that has not been reviewed and approved by OMB;
- g. 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
- h. 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.

No special circumstances require this collection to be conducted in a manner inconsistent with these guidelines.

A.8. Provide a citation for the Federal Register document soliciting comments on this 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 copy of the 60-day Federal Register Notice, which notified the public of NHTSA's intent to conduct this information collection and provided a 60-day comment period, was published on August 30, 2019 (Vol. 84, No. 169, Pages 45827-45828). NHTSA received one comment, from the Insurance Institute of Highway Safety (IIHS), that was critical of the proposed information collection. IIHS stated that stand-alone education programs have not been found to be effective at addressing driver behaviors like speeding and that pursuing an education program is not an effective use of the agency's resources. They cited NHTSA's **Speed Management Program Plan** as having other activities with more promise for reducing speeding.¹⁷ They also indicated that NHTSA's **Countermeasures that Work** report promotes communications in support of enforcement but not education alone.¹⁸ They stated their view that incentives for intelligent speed

¹⁷ National Highway Traffic Safety Administration, Federal Highway Administration, & Federal Motor Carrier Safety Administration. (2014, May). *Speed management program plan* (Report No. DOT HS 812 028). Washington, DC: National Highway Traffic Safety Administration. Available at <http://www.nhtsa.gov/sites/nhtsa.dot.gov/files/812028-speedmgtprogram.pdf>.

¹⁸ Richard, C.M., Magee, K., Bacon-Abdelmoteleb, P., & Brown, J. L. (2018, April). *Countermeasures that work: A highway safety countermeasure guide for State Highway Safety Offices, Ninth edition* (Report No. DOT HS 812 478). Washington, DC: National Highway Traffic Safety Administration. Available at

adaptation outlined in the National Transportation Safety Board's (NTSB) **Reducing Speeding-Related Crashes Involving Passenger Vehicles** safety report was a more effective use of resources.¹⁹

We appreciate the comments from IIHS and thank them for thoughtfully considering the described collection. We agree with IIHS that stand-alone education programs that are not part of a larger comprehensive approach tend to have limited effects. However, as IIHS points out, NHTSA has a **Speed Management Program Plan** that includes an education component as well as a variety of other strategies. The program associated with this collection is one potential education program that could be part of a larger speeding management strategy that includes many of the additional elements IIHS describes. It is also important to note that participants for this study are being recruited at court after having recently received a citation for a speeding violation, so they have already experienced the enforcement and adjudication aspects of countermeasures for their speeding behavior. This education program is a follow-up to that experience for the participants, a teachable moment linked to prior speeding violation. NHTSA's **Countermeasures that Work** indicates that communications and outreach supporting speeding enforcement is a promising strategy (p. 3-31), and NTSB's **Reducing Speeding-Related Crashes Involving Passenger Vehicles** concluded that "traffic safety campaigns that include highly publicized, increased enforcement can be an effective speeding countermeasure" (p. 55). Additionally, NTSB recommended that NHTSA "collaborate with other traffic safety stakeholders to develop and implement an ongoing program to increase public awareness of speeding as a national traffic safety issue" (p. 57).

A 2011 meta-analysis by Phillips, Ulleberg, and Ross found that traffic safety public information and education campaigns reduced crashes by 9% on average but that campaigns focused on speeding did not indicate a statistically significant reduction.²⁰ Many of the education programs described by IIHS and included in the meta-analysis above are public awareness campaigns where messages are delivered through mass media or at the roadside. These education programs are not focused on drivers who speed but rather on all drivers. These broad education programs may appear less effective, especially on their own, because many drivers who receive the messages do not tend to speed. Education focused on people who have already received a speeding citation, such as proposed in this collection, could produce larger effects because they are designed to address the specific issues found with speeding drivers. Furthermore, NHTSA's **Countermeasures that Work** chapter on Speeding and Speed Management recommends more comprehensive strategies for drivers already cited for speeding or repeat offenders and mentions several programs that included interventions specifically designed to teach drivers about attitudes, skills, and knowledge related to speeding and personality traits associated with the behavior. These programs showed promise in reducing speeding among drivers who had received citations (p. 3-10). Therefore, education specifically for drivers who speed as well as more broad education to promote public awareness of the dangers of speeding are part of

<https://rosap.nhtsa.gov/view/dot/36719>.

¹⁹ National Transportation Safety Board. (2017, July). *Reducing Speeding-Related Crashes Involving Passenger Vehicles* (Safety Study NTSB/SS-17/01). Washington, DC: National Transportation Safety Board. Available at <https://www.nts.gov/safety/safety-studies/Documents/SS1701.pdf>.

²⁰ Phillips, R.O., Ulleberg, P., & Vaa, T. (2011). Meta-analysis of the effect of road safety campaigns on accidents. *Accident Analysis & Prevention*, 43, 1204-1218.

comprehensive programming referenced throughout NHTSA's **Countermeasures that Work and Speed Management Program Plan**.

The proposed speeding education program countermeasure in this study has two main elements that make it scientifically strong and likely to contribute to our ability to develop an effective program. The first element is that it will target individuals with a speeding citation instead of being broadly presented to all drivers. This step ensures that the audience who stands to benefit most from the education will receive it and that the content aligns with promising programs discussed in **Countermeasures that Work**. Additionally, directly after receiving a citation is when people are most open to messages about safe driving and avoiding the consequences of dangerous or illegal behaviors. The second element is that naturalistic data will be collected to determine if the program had an effect. The contractor has experience working with DAS data and found no issues with these devices confounding behavior. A baseline acclimation period is included to ensure the data used most accurately represent typical driving. Instead of relying on self-report, which IIHS rightly indicates can be biased, the proposed data collection will use instrumentation in the vehicle to evaluate speeding while the participants drive as they normally would both before and after the educational course. This step will ensure that conclusions drawn about the effect of the program will be based on objective driving data and not on reports of how people believe they drove or will drive in the future. By undertaking this collection, NHTSA will take steps towards an evidence-based education program that can be included in comprehensive speed management plans and contribute to reducing speeding-related injuries and fatalities.

A copy of the 30-day Federal Register Notice, which announced that this information collection request will be forwarded to OMB, was published on December 13, 2019 (Vol. 84, No. 240, Pages 68292-68294).

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

Study participants will be paid \$200 for their participation in all aspects of this study. Payments will follow the schedule of 1) \$25 following completion of study enrollment, 2) \$75 after completion of the education course session for the experimental group and at the mid-study DAS check for the control group, and 3) \$100 after study completion. This amount is comparable to other naturalistic driving studies (See Table 1).

Table 1. Participant compensation in previous naturalistic driving studies

OMB Control No.	Study name	Compensation	Participation duration
2010-16227	NHTSA Motivations for Speeding	\$150	2-3 weeks
2127-0722	NHTSA Older Driver Self-Regulation and Exposure	\$200	1 month
2127-0710	NHTSA Older Drivers and Navigation Devices	\$150	1 day
2127-0712	NHTSA Mild Cognitive Impairment and Driving Performance	\$150	1 month

No payment or gift will be provided to respondents for the screening. Participants will be offered \$200 as compensation for completing the study requirements. The increased compensation for the final visit reflects study completion and retrieving complete data important for analyzing the results of the study.

Our experience indicates that anything less than the proposed \$200 total compensation would likely result in failure to recruit enough participants to provide adequate statistical power. In addition to the time demands related to the training and evaluations, many adults with speeding convictions may want to avoid having their cars instrumented, such as is included in the proposed study, because they believe that being tracked speeding could lead to punishment, even though that could not happen to participants in the proposed study (data will be anonymized and aggregated, and no individual data will be shared with law enforcement or other officials). Recent studies by NHTSA have confirmed that this level of compensation is necessary to meet recruiting requirements. Both studies 2127-0710 and 2127-0712 had difficulties with recruitment, and incentives of \$200 were offered for projects following those projects to improve recruitment.

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

The Informed Consent Form, which each participant will read and sign before participating in the study, describes steps that will be taken to assure that participant data will be kept secure. All efforts will be made to keep respondent information confidential following all applicable laws. All published results will provide only summary statistics that cannot be used to identify any individual or individual's responses.

A.11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior or attitudes, religious beliefs, and other matters that are commonly considered private.

The questionnaire includes items about speeding and one question about driving after drinking (a contributing factor in speeding-related crashes), which are illegal. However, this information is

critical to understanding the safety problem, and it will only be used and reported in aggregate. The survey data collection does not contain additional 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.

The total estimated annual burden is 969 hours for the project activities. The following table summarizes the calculation of this estimated burden.

Table 2. Estimated Total Burden.

Form Number	Form Type	Estimated Burden per Response (in minutes)	Frequency of Response	Number of Respondents	Total Burden Hours
	Approaching potential participants to Recruit	10	1	500	83
1492	Participant Screener	8	1	300	40
1494	Contact Information	1	1	300	5
1493	Informed Consent Form + Install Equipment	30	1	200	100
1495	Highway Safety Questionnaire	25	3	600	250
1496	Education Course & Evaluation	215	1	100	358
1497	Sensation Seeking Questionnaire + Remove Equipment	40	1	200	133
	Total	329	9	2,200	969

The initial recruiting activities will involve multiple levels of contact with individuals. Based on previous experience of the study team, we expect to approach and describe the study to around 500 people (10 minutes each, totaling 83 hours). This step should lead to approximately 300 individuals interested in participating who complete the screener questionnaire (8 minutes each, totaling 40 hours) and contact information form (1 minute each, totaling 5 hours). The contact information form is a separate form to maintain confidentiality. The form will be stored separately from screener data collected in accordance with Institutional Review Board policies. We expect this process to provide 200 participants who are eligible and agree to enroll. The combined burden across all individuals contacted during the recruiting process is 128 hours.

Researchers will administer the remaining forms to the 200 recruited participants. The burden imposed by the Informed Consent Form (ICF) includes a combination of time reading the ICF,

explanation and discussion of understanding with researchers, and explanation of the DAS by the researcher. The researchers will also use this time to install the DAS on the participant's vehicle. The burden imposed by the Education Course and Evaluation includes time listening to a course instructor and viewing materials (3 hours and 30 minutes for each participant) and completing the course evaluation form (5 minutes) in the experimental group. The remaining forms are questionnaires and the assigned burdens reflect the time needed to complete the questionnaires. The DAS will be removed from the participant's vehicle while completing the last set of questionnaires (40 minutes total).

The opportunity cost to respondents could be computed using an average hourly wage. Based on mean per capita wage for all occupations in North Carolina, the maximum total input cost is estimated to be \$21,472. NHTSA estimates the hourly wage to be \$22.15 per hour.²¹ The total estimated wage cost associated with this information clearance is \$21,463.35 (\$22.15 per hour × 969 hours). The Bureau of Labor Statistics estimates that for civilian workers, wages represent 68.6% of total compensation.²² Therefore, the total cost associated with the hourly burden of this information collection is estimated to be \$14,723.86 (\$21,463.35 ÷ 0.686).

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

Participation in this study is voluntary, and there are no costs to respondents beyond the time spent completing the questionnaires and visits to the study facility.

A.14. Provide estimates of the annualized cost to the federal government

This is one-time data collection, and there will be no recurrence. The total cost to the Federal Government for this study is \$695,476. Since data collection is expected to take less than a year, the annualized cost is the same. The estimated cost in terms of government time is approximately 120 hours for the Contracting Officer's Representative (COR) and 20 hours for the supervisor for about \$9,000 in wages.

A.15. Explain the reasons for any program changes or adjustments in items 13 or 14 of the OMB 83-I

This is a new information collection. As such, it requires a program change to increase NHTSA's overall burden hour by 969 hours.

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

²¹ US Department of Labor, Bureau of Labor and Statistics, May 2017 State Occupational Employment and Wage Estimates North Carolina: https://www.bls.gov/oes/2017/may/oes_nc.htm#00-0000

²² Employer Costs for Employee Compensation-June 2019, <https://www.bls.gov/news.release/pdf/ecec.pdf>, last accessed December 6, 2019.

The current plan is for the final technical report to be published in late 2021. The technical report will provide summary statistics and tables, as well as the results of statistical analysis of the information, but it will not include any personal information. These plans are based upon data collection starting in September 2019. Delays in approval of this ICR could delay publication of the final technical report and will likely result in contract modifications and additional costs to the government.

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.

NHTSA will display the expiration date for OMB approval.

A.18. Explain each exception to the certification statement identified in item 19, “certification for paperwork reduction act submissions” of the OMB form 83-I

No exceptions to the certification statement are made.