

SUPPORTING STATEMENT
Recruitment and Debriefing of Human Subjects for Research Related to Motor Vehicle
Gear Selection Controls
OMB CONTROL NO. 2127-New

B. STATISTICAL METHODS

1. Describe the potential respondent universe and any sampling or other respondent selection method to be used. Indicate expected response rates for the collection as a whole.

The respondent universe is limited to an unknown number of adults with a valid driver's license residing within convenient access to Volpe, the National Transportation Systems Center (Volpe) with internet access that visit the recruitment advertisement website and self-select to participate in the research study. We expect a response rate for the information collection as a whole to be 72%; meaning, of those who respond to the recruitment, 72% will participate in a driving simulation session.

2. Describe the procedures for the collection of information including: Statistical methodology for stratification and sample selection, estimation procedure, degree of accuracy needed for the purpose described in the justification, unusual problems requiring specialized sampling procedures, and any use of periodic (less frequent than annual) data collection cycles to reduce burden.

This information collection is incidental to the recruitment and debriefing of participants for a driving simulator research study. Prospective study participants will initiate contact with Volpe via internet or telephone submission expressing interest to participate in the research study. A non-probability sampling method will result in a voluntary sample that is also a convenience sample. NHTSA is not conducting this survey for general purpose statistics. Statistical methods to analyze the eligibility information (name, email address, phone number) are not appropriate or applicable since this information is collected for purposes of scheduling a study session appointment. Sample eligibility criteria are year of birth, gender, and previous experience with various types of gear selectors in order to balance the sample. The 36 sample groups (both genders of age ranges 18-34, 36-50, and 51-75 driving six gear selector configurations) will populate based on answers to the eligibility questionnaire and in the sequential order of responses received. As soon as a sample group reaches 10 participants, recruitment for that sample group will end.

The post-experiment questionnaire will capture the participant's perceptions in the form of a user survey. These questions were designed to provide safety related insights regarding simulated driving behaviors and to inform researchers whether concepts and driving simulation features were understood by respondents. Discrete responses will be averaged within sample groups and by gear selector configuration types. No statistical methods, tests, or techniques will be applied to the debriefing results. Additionally, the debriefing questions may be followed by a discussion between respondent and Volpe staff member, to further probe the respondent's reaction, driving behavior, and comprehension of the questions in the survey instrument.

3. Describe methods to maximize response rates and to deal with issues of non-response. The accuracy and reliability of information collected must be shown to be adequate for intended uses.

Consistent with convenience sampling, there will be no effort made to ensure that this sample is representative of the population. Results will not be generalized to a target population. Additionally, NHTSA will take no action to maximize response rates.

Non-response to an eligibility survey question will prevent respondent from participating in the driving simulation session. Non-response to a debriefing survey question will be noted on the questionnaire form, without consequence and with no further action required. To ensure the eligibility information collected is accurate and reliable, Volpe staff will visually inspect the prospective participant driver's license and confirm age, gender, and validity status.

NHTSA intends to use the information collected through this survey for the purpose of motor vehicle safety research. NHTSA endeavors to obtain information of sufficient quality for the study of new and emerging technologies that may impact motor vehicle safety. This collection of information will result in information that will be collected, maintained, and used in a way consistent with OMB and NHTSA information quality guidelines.

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

No formal tests of procedures are planned for this collection of information.

5. Provide the name and telephone number of individuals consulted on statistical aspects of the design and the name of the agency unit, contractor(s), grantee(s), or other person(s) who will actually collect and/or analyze the information for the agency.

Questions or comments on NHTSA Forms 1263 and 1264 can be directed to Lisa Gavin at (202) 366-9291 or lisa.gavin@dot.gov.