SUPPORTING STATEMENT

SHARE THE ROAD SAFELY PROGRAM ASSESSMENT STUDY

Part B. Collections of Information Employing Statistical Methods

1. <u>Sampling methodology</u>.

The potential respondent universe for the Share the Road Safely Survey is the noninstitutionalized population of licensed drivers in the United States. FHWA collects licensed driver information from the States and publishes highway statistics necessary to support responsibilities to Congress and the public. According to FHWA's 2005 *Highway Statistics Report*, the total number of nationally licensed drivers is 200,548,972. Comparing the licensed drivers to the total population of 16 years of age and over, the total of 231,323,688 indicates that 85 percent of eligible drivers are licensed drivers.¹ The Bureau of Transportation Statistics (BTS)² National Household Travel Survey shows that 92 percent of U.S. households have 1.8 drivers per household. Combined, the FHWA and BTS figures imply that a general household survey will be efficient in yielding households with drivers for the STRS awareness surveys. As such, a multi-stage list-assisted random digit dialing (RDD) sampling methodology will be used to draw a sample from U.S. residential phone numbers. A list-assisted RDD sample ensures an equal and known probability of selection for every residential telephone number and greater coverage for purposes of this study. The table below provides the number of households with licensed drivers in the universe and the number of those households that FMCSA will sample in this study.

Population	Universe	Sample
Total households with licensed drivers	111,416,095	15,000

In order to account for ineligibles, terminates, and refusals, an initial sample of 15,000 phone numbers will need to be drawn to yield 1,500 completed interviews, which is an adequate size to make inferences to the population.

2. Procedures for the collection of information.

The data collection for this study will be conducted through telephone interviews. The telephone numbers from the list-assisted RDD sample will be programmed into a computer assisted telephone interviewing (CATI) system to guide the interviewers through the interview questions in a consistent manner. The software will randomize the sample; manage callbacks; and serve as a tool for the data collection, analysis, and reporting. When a household is reached, the interviewer will screen the participant for

¹ Federal Highway Administration, Office of Highway Policy, *Highway Statistics Report*, 2005, Washington, DC.

² Department of Transportation, Bureau of Transportation Statistics, <u>http://www.bts.gov</u>, DOT Releases *National Household Travel Survey (NHTS) Showing Vehicles in Households Outnumber Drivers*, 2003.

eligibility by asking to speak to a licensed driver living in the household.³ If the designated respondent is not available to conduct the interview at that time, interviewers will try to set up a convenient time(s) to call-back. Otherwise, the interviewer will conduct the interview, using the preprogrammed questions in the CATI system. Based on previous survey research experience with list-assisted RDD telephone surveys, FMCSA expects a response rate of at least 50 percent.⁴ The main objective of the survey is to gauge awareness of the STRS campaign's safety messages and activities in the general population of both CMV and passenger car drivers. FMCSA does not anticipate any significant impact of the survey study on public policies or private sector decisions.

To calculate the expected standard error, the agency assumes that 10 percent of the respondents will answer positively (i.e., will be aware of the STRS campaign). Given that outcome, the projected number of 1,500 respondents will produce an expected sampling error of the estimate of \pm 1.5 percentage points at the 95-percent confidence level.

3. Methods to maximize response rates.

The following survey procedures will help to increase the response rates for the survey:

- There will be a concentrated pool of interviewers dedicated to the survey and will be selected based on their specific qualifications and experience with similar research interviews. Training sessions will be conducted for the selected interviewers.
- Survey system software will be used to guide the interviewer through the questions to ensure consistency and maximize the quality of response rate.
- Multiple call-backs attempts will be made to each household and will be varied at different times or days of the week to ensure respondents can be reached.⁵
- Prior to launch of the survey, FMCSA can promote awareness of the survey by utilizing the agency's website, as well as use other methods to improve the response rate.
- Ensure RDD sample generated has gone through a filtering process where out-ofscope numbers are removed to minimize time spent on non-productive cases.

During the telephone interview, respondents will also be informed that the survey is being conducted for research purposes to determine the effectiveness of public service

³ To ensure we maximize the response rate, we will not conduct an additional procedure to select a respondent within the household such as the commonly used "most recent/next birthday" method because we are employing other measures that should offset any bias that may be introduced by the interviewer. The interviews will be conducted by different interviewers and at different times of the day to minimize potential bias. Furthermore, according to paper presented by John M. Kenney at the American Association for Public Opinion Research 1993 Annual Meeting, response rates were lower and field costs were higher for the last birthday method and about 20 - 25 percent of the households picked the wrong person with this method.

⁴ Fifty (50) percent is based on Bureau of Transportation Statistics' Omnibus Household Survey results. Survey research firms anticipate as high as 70 percent response rate for this type of survey.

⁵ To maximize response rate while balancing cost-effectiveness of the survey, it is anticipated that six callback attempts will be made for each household. Furthermore, a larger sample size is drawn to ensure 1500 completed interviews.

messages promoting highway safety, that answers will be entirely confidential, and that the survey will be of short duration.

FMCSA plans to conduct a study on non-response times for the survey to determine any non-response bias. FMCSA will compare the demographic characteristics of respondents to the general population of licensed drivers to determine whether there are any systematic differences (bias) in the sample from the overall universe. In addition, we will determine whether there are any differences in the geographical distribution of respondents versus non-respondents.

FMCSA may also compare those who responded early in the survey process with late respondents, those who required more effort or persuasion in providing their responses. These late respondents can serve as proxy for non-respondents in the comparative analyses.

Because we expect a low frequency of "positive" responses regarding awareness of the public service campaigns, we will use relatively large sample size to detect what we expect will be a low-frequency effect.

4. Test of procedures or methods.

Data collection instruments will be thoroughly reviewed by FMCSA and tested on fewer than 10 respondents if necessary. Appropriate revisions will be made to ensure clarity and maximize respondent cooperation.

5. Share the Road Safely Awareness Survey Contact Information.

Mr. Brian Ronk U.S. Department of Transportation Federal Motor Carrier Safety Administration 1200 New Jersey Avenue, SE Washington DC, 20590 202-366-1072 <u>brian.ronk@dot.gov</u>