

**Department of Transportation
Office of the Chief Information Officer**

**SUPPORTING STATEMENT
Survey of Motor Carriers Operating Small
Passenger-Carrying Commercial Motor Vehicles**

1. Circumstances that make collection of information necessary:

Section 212 of the Motor Carrier Safety Improvement Act of 1999 (see Attachment A) expanded the Federal Motor Carrier Safety Administration's (FMCSA's) statutory authority to ensure the safe operation of small passenger vehicle carriers operating in long-haul, interstate transportation. On August 12, 2003, the FMCSA published a final rule which made the Federal Motor Carrier Safety Regulations (FMCSRs) applicable to motor carriers operating commercial motor vehicles designed or used to transport 9 to 15 passengers (including the driver) in interstate commerce when such carriers are directly compensated for such services and the vehicle is operated beyond a 75 air mile radius from the driver's normal work-reporting location (see Attachment B). These newly regulated operators were required to comply with the FMCSRs by December 10, 2003. The FMCSA's mission is to improve the safety of commercial motor vehicles (CMVs) and save lives. A key strategy for the FMCSA to meet its mission is to provide educational materials specifically tailored to the managers and drivers of CMVs to increase their safety of their operations and compliance with the FMCSRs. The FMCSA is now initiating research to gain data, information, and insights into the safety performance, educational needs, and regulatory compliance of these newly regulated motor carriers to provide a foundation for future safety outreach initiatives.

Safety data on these small passenger vehicle carriers are limited. The FMCSA's initial analyses supporting the rulemaking indicate that there are safety problems associated with these operations, even though the magnitude of the problem is not well understood. This information, coupled with well-documented safety issues associated with 15-passenger vans^{4,3} and the results from a 2002 university survey detailing the problems with camioneta van operations⁴, suggests this is a transportation domain that will be well

⁴ National Highway Traffic Safety Administration. (2004). *Analysis of crashes involving 15-passenger vans*. Retrieved January 12, 2006 from <http://www.nrd.nhtsa.dot.gov/pdf/nrd-30/NCSA/Rpts/2004/809735.pdf>

² National Highway Traffic Safety Administration. (2004). *NHTSA action plan for 15-passenger van safety*. Retrieved January 12, 2006 from <http://www.nhtsa.dot.gov/cars/problems/studies/15PassVans/15passvan.html>

³ National Highway Traffic Safety Administration. (2004). *Testing the dynamic rollover resistance of two 15-passenger vans with multiple load configurations*. Retrieved January 12, 2006 from <http://www.nhtsa.gov/cars/problems/studies/15PassVans/15-PassVanStabilityControl.pdf>

⁴ Ellis, D. R. (2002). An examination of camioneta van operations in the Texas-Mexico border region of Texas. College Station, TX: Texas A&M University, Texas Transportation Institute.

served by research aimed at identifying the safety and educational needs for managers and drivers.

Small passenger vehicle carriers have unique operating characteristics and challenges that may affect the safety practices of their managers and drivers. The FMCSA is planning research to identify the most effective means to provide educational material for the managers and drivers of small passenger vehicle operations in interstate commerce to improve their safety performance and ensure compliance with the FMCSRs. As part of this initiative, the FMCSA is requesting approval for information collection based on brief telephone surveys of operators of small passenger commercial motor vehicles used to transport 9 to 15 passengers for direct compensation.

This information collection supports the DOT Strategic Goal of Safety.

2. How, by whom, and for what purpose is the information used:

Researchers from Booz Allen Hamilton, Inc., Virginia Tech Transportation Institute, and the Texas Transportation Institute, under contract to the FMCSA, will conduct a telephone survey of small passenger vehicle carriers that have registered with the FMCSA to obtain information on the operations, safety, and driver and management educational needs of small passenger vehicle carriers operating for direct compensation. The research and analysis results will provide findings and recommendations to guide the FMCSA's outreach and education to these carriers. It will also provide some insightful information on these carriers and provide data and analysis to effectively incorporate these carriers into FMCSA's compliance monitoring and enforcement initiatives.

In addition to the information collection described within this document (telephone survey), the research team will conduct 8 site visits of motor carriers operating two or more commercial motor vehicles designed to transport 9 to 15 passengers (including the driver) in interstate commerce, to perform a hierarchical task analysis on their operating procedures. Fewer than 10 entities will be involved in this aspect of the overall study, thus this process will not be described in great detail.

3. Extent of automated information collection:

This information collection does not include automated methods. Zero percent (0%) of the responses will be collected electronically. All surveys will be implemented via telephone, and responses will be handwritten on paper and later keyed into a database or word processing document to be saved on a password protected, firewalled computer within locked offices at the Virginia Tech Transportation Institute.

4. Efforts to identify duplication:

Only small passenger vehicle carriers that have registered with the FMCSA and provided information on the size and scope of their operations will be included in the survey. This

information stored in the FMCSA Motor Carrier Management Information System (MCMIS) database. The MCMIS information on these small carriers is often more than two years old and the FMCSA anticipates the information for these small companies may have changed. Therefore, the survey includes 4 questions to verify the type of operations the carrier performs and the scope of its operations (i.e., (1) does the carrier operate commercial motor vehicles designed or used to transport 9 to 15 passengers [including the driver], (2) are interstate operations conducted, (3) how many drivers are employed, and (4) how many miles are traveled.) Updating this background information on the carriers contacted will help ensure the survey has contacted an appropriate sample of carriers and that the information is valid and reliable.

Researchers who have conducted similar studies of a sub-sample of this driving population (i.e., “camioneta” van operations) have been contacted as subject matter experts in the survey design. Their previous research studies and the information obtained will be reviewed so as to not duplicate information through the current information collection. These subject matter experts are also providing their knowledge and opinions regarding what the most important questions are to pose, thus streamlining and improving the quality of the information to be collected.

In addition, national crash databases and the FMCSA information on roadside inspections of these small passenger vehicle carriers have been reviewed to extract meaningful information regarding this population. The survey does not include information that is available from these databases and so there is no duplication.

5. Efforts to minimize the burden on small businesses:

The majority of the motor carriers to be contacted for this survey are small businesses. On average, these carriers operate only five vehicles. The survey is designed to minimize the burden on these small businesses. Telephone surveys will be conducted only when it is convenient for the respondents. Once contacted, if the respondent indicates s/he would like to be surveyed at a later time, s/he will be asked for a more convenient date/time to be contacted.

As noted above, the research team has collaborated with other researchers and subject matter experts to ensure only the most pertinent information to the research objectives is collected in a brief amount of time (30 minutes or less). A majority of the questions posed involve simple yes/no responses, thus minimizing the survey completion time and burden on respondents.

Finally, the sampling strategy for this information collection excludes the smallest businesses (those only operating a single commercial motor vehicles designed or used to transport 9 to 15 passengers [including the driver]) so as to reduce burden on these motor carriers.

6. Impact of less frequent collection of information:

The proposed survey will be conducted only once. As stated above, little is known regarding the safety and regulatory compliance educational needs for these small passenger vehicle carriers. If this information collection is not conducted, the FMCSA will continue to know little about these specific carriers and their educational needs. The results of this survey will help the FMCSA effectively target its safety outreach and compliance resources to the specific needs of these carriers. FMCSA's outreach efforts to strengthen the safety and regulatory compliance of these carriers will be designed based upon the data obtained through the proposed survey of small passenger vehicle carriers. If managers and drivers of small passenger vehicle carriers have the educational material that they need to operate safely and in compliance with the FMCSRs, fewer crashes will be the beneficial result.

7. Special circumstances:

There are no special circumstances regarding this information collection.

8. Compliance with 5 CFR 1320.8:

The FMCSA published a notice in the Federal Register with a 60-day public comment period to announce this proposed information collection on December 8, 2006 (see Attachment C). One of the four received comments addressed the information collection process (see Attachment D). Such comment recommended that drivers be interviewed to gain a better understanding of their employers' regulatory compliance. It would not be practically feasible to interview drivers during telephone surveys. The telephone survey instrument is designed to be administered to one company official such as an owner or manager who has broad operational knowledge of the company. The research team, however, will interview drivers during the site visits.

The FMCSA published a notice in the Federal Register on April 6, 2007 with a 30-day public comment period that announced this information would be sent to OMB for approval (see Attachment E).

9. Payments or gifts to respondents:

Respondents are not provided with any payment or gift for this information collection.

10. Assurance of confidentiality:

During each conducted survey, FMCSA's research contractor will assure respondents that the information they provide will be provided confidentiality to the extent allowed by the Privacy Act of 1974. FMCSA, through its research contractor, will ensure that access to collected data, both paper and electronic, is restricted only to those persons authorized by FMCSA. Raw data will not be available to the public. After data collection, all links

to specific respondents will be discarded from the data to ensure that all responses are anonymous.

11. Justification for collection of sensitive information:

This survey will not include questions of a sensitive nature, such as sexual behavior and attitudes, drug/alcohol use, religious beliefs, and other matters that are commonly considered private.

12. Estimate of burden hours for information requested:

The FMCSA plans to survey 50 individuals. Each survey is estimated to take 30 minutes or less during a single contact. Based on this, the estimated current total annual hour burden of the information collection associated with the telephone survey is 25 hours (50 respondents x 30 minutes/60 minutes each = 25 hours).

Estimated Total Annual Burden: 25 hours.

13. Estimate of total annual costs to respondents:

This information collection does not require any cost burden to respondents beyond those associated with completing the telephone survey as described in the item above. For example, respondents will not need to consult records, purchase equipment, or perform any additional activities beyond speaking to the individual implementing the telephone survey for 30 minutes or less.

The only cost to the respondents is the salary related costs of the carrier managers who participate in the telephone surveys. The May 2005 National Occupational Employment and Wage Estimates of the U.S. Department of Labor, Bureau of Labor Statistics indicate that the median hourly wage of first-line supervisors/managers of transportation and vehicle operators is \$22.85. Therefore, FMCSA estimates that the total annual cost to the respondents of the information collection is approximately \$571.25 (50 respondents x \$22.85/hour x 30 minutes/60 minutes = \$571.25).

Estimated Total Annual Cost to Respondents: \$571.25.

14. Estimate of cost to the Federal government:

The research and survey development and implementation will be done in FY 2006 to 2008. The FMCSA has contracted with Booz Allen Hamilton, Inc. for this study and the total cost for the contract is \$197,530.

Estimated Annual Cost to Federal Government: \$197,530.

15. Explanation of program changes or adjustments:

The program changes in burden of 25 annual hours and \$571.25 in annual cost to respondents are due to a new information collection requirement.

16. Publication of results of data collection:

The results of this information collection will be documented in a technical report to be delivered to and maintained by the FMCSA. This information will be used by the FMCSA to design safety outreach initiatives for small passenger vehicle carriers. The project schedule began with a literature review and subject matter expert interviews which was completed on July 12, 2006. Safety data were then collected and analyzed, and a survey instrument was developed. These activities were completed on August 9, 2006. The necessary documents for OMB information clearance were developed. After OMB information collection approval is granted, the research contractor will take approximately five weeks to conduct the nationwide telephone surveys and approximately seven weeks to conduct site visits. There will be about a two-week overlap of these two activities. It will take approximately ten weeks to complete both activities. After completion, the research contractor will analyze all obtained data and information, vet major initial findings, and develop a draft research report. It will take approximately eight weeks to complete these activities. After a four-week review of the draft report by FMCSA, the research contractor will take two weeks to make requested revisions.

17. Approval for not displaying the expiration date of OMB approval:

The FMCSA is not seeking approval to not display the expiration date of OMB's approval for this information collection.

18. Exceptions to certification statement:

The FMCSA is requesting no exceptions to the certification statement.

Part B. COLLECTION OF INFORMATION EMPLOYING STATISTICAL METHODS

Sampling Strategy for Proposed Information Collection

This research involves a survey of motor carriers that operate commercial motor vehicles designed or used to transport 9 to 15 passengers (including the driver) in interstate commerce and have registered with the FMCSA. We will extract the sample for the telephone survey from the FMCSA's Motor Carrier Management Information System (MCMIS), a database which includes motor carriers registered with the FMCSA. The study will focus on these newly regulated carriers that primarily operate commercial motor vehicles designed to transport 9 to 15 passengers (including the driver). To meet the requirements of the study, the information in MCMIS was refined to develop a

sample of carriers. The process to develop the sample is described below (also refer to Table 1).

The FMCSA conducted an initial analysis of MCMIS by linking data to the Licensing and Insurance (L & I) database to narrow the sample of carriers identified for this study. Motor carriers that transport passengers in interstate commerce with a commercial motor vehicles designed and used to transport 9 to 15 passengers (including the driver) are required to have \$1.5 million of insurance. Therefore, we narrowed down the sample of motor carriers identified in MCMIS to those with \$1.5 million in insurance (N = 745), which will more accurately represent the population of interest. Several exclusionary steps were taken to focus our sampling strategy to the carriers of most interest in this study.

Six of the carriers in this pool were identified as operating in Canada, and were excluded, bringing the total pool to N = 739 carriers. We then excluded 292 carriers which own only one commercial motor vehicle designed to transport 9 to 15 passengers (including the driver), bringing the total pool to N = 447 carriers. While this step will not result in a pure representative sample (i.e., many of these operations are very small), we wish to reduce the burden on the smallest of businesses, and also believe carriers operating more than one vehicle will be able to provide a greater amount of information regarding safety and regulatory compliance challenges.

We then excluded 111 carriers which operate vehicles designed to transport 16 or more passengers, as we wish to only focus on carriers operating small passenger vehicles in this study. This step brought the total pool to N = 336 carriers. We then excluded 78 carriers which operate an equal or greater number of vehicles designed to transport 8 or fewer passengers in relation to vehicles designed to transport 9 to 15 passengers, as we want to focus on carriers which primarily operate the vehicles targeted by this research. This step brought the remaining total pool to N = 258 carriers.

Table 1: Steps Involved in Sampling Methodology

Process Step	Number of Carriers Identified for Exclusion	Remaining Carriers in Sampling Pool
MCMIS linked with L & I database	0	745
Remove carriers based in Canada	6	739
Remove carriers operating a single (9-15 passenger) vehicle	292	447
Remove carriers operating larger (16+ passenger) vehicles	111	336
Remove carriers operating an equal or greater number of smaller (1-8 passenger) vehicles relative to vehicles designed to transport 9-15 passengers	78	258

As this is a Nationwide telephone survey, the U.S. was divided into four geographic regions (West, South, East, and Midwest) as determined by the FMCSA in assigning responsibility to their Field Service Centers. Twenty-five (25) carriers were randomly selected from each region for a total of 100 carriers to be initially contacted for this telephone survey. The response rate for this survey is estimated to be 50% based on previous research⁵, thus we believe we will meet the study goal of 50 completed telephone surveys using this initial sample of 100 carriers. If the response rate is lower than expected after attempting to recruit from the original sample of 100 carriers, another random sample of the remaining 158 carriers will be drawn until the goal of 50 surveys have been completed.

In addition to the exclusion/inclusion criteria outlined above, an effort will be made to conduct approximately 30% of the telephone surveys with carriers which operate within a 75 air-mile radius. Doing so will allow comparisons to be made between those operating within a 75 air-mile radius and those that do not. These comparisons are important because recent legislation has mandated that FMCSA remove its 75 air-mile radius standard which determines applicability of its operational safety regulations. Given the relatively small sampling pool (n = 258), it is possible that less than 30% of the pool operates within a 75 air-mile radius. However, an effort will be made to ensure that carriers that operate within a 75 air-mile radius have adequate representation for the survey with a goal of 30% participation.

Validity & Reliability

The sampling procedure as described above will produce a statistically valid sample of the motor carriers targeted for the information collection. Assuming a population of 258 carriers, a sample of 50 would provide a ± 12 percent confidence interval (CI) at a 95 percent confidence level (CL), meaning we would be 95 percent sure that the sample reflects the target population and that the responses from the sample are within 12 percentage points of how the population would respond. The sample size could be adjusted upward for a tighter CI and/or CL; however, consideration must be given to the relatively short duration (30 weeks) of this project and the available budget.

This information collection is not intended to be representative of all motor carriers covered by the FMCSRs. Only carriers which are currently registered with the FMCSA will be included so as to reduce time burden (there is no efficient process for identifying carriers not registered with the FMCSA) and maximize response rate. Therefore, this information collection will not necessarily generalize to carriers who are not registered with the FMCSA.

Additionally, the results will not necessarily generalize to those operations which only operate a single vehicle or those businesses which operate larger vehicles such as motorcoaches. However, our sampling strategy is strategic to maximize the gain of the information collection (e.g., by focusing only on those operations specializing in

⁵ Majowicz, S. E., Edge, V. L., Flint, J., et al. (2004). An introductory letter in advance of a telephone survey may increase response rate. *Canada Communicable Disease Report*, 30, 121-123.

interstate transportation with commercial motor vehicles designed to transport 9 to 15 passengers [including the driver]) while minimizing the burden on small businesses.

We will take several primary actions to mitigate nonresponses by carriers that are contacted for a telephone survey. First, researchers who conduct the telephone surveys will call carriers during regular business hours (9 a.m. to 5 p.m.) when the probability is highest to converse with a company official who has broad operational knowledge. Second, the researchers who conduct the telephone surveys will be fluent in Spanish as well as English. The owners, management, and employees of some carriers will speak Spanish as a primary language. Third, those carriers that are targeted for a telephone survey based upon the screening process described above will be sent a notification letter advising them that they will be contacted for a survey and their cooperative participation would be appreciated and beneficial to their industry. Pre-survey notification letters will be written and sent in both the English and Spanish languages. The English version of the letter is located in Attachment F.

After survey administration is completed and a sample size of 50 carriers is attained, a nonresponse bias analysis will be conducted and the results of such analysis will be discussed in the final research report. A comparison of the characteristics of those carriers that participated in the survey and those carriers that were targeted for the survey, but did not participate, will be covered in the report. The telephone survey instrument is located in Attachment G.

Statistical Methods & Software

The information collection will be analyzed using basic descriptive statistics (e.g., frequencies, percentages, mean, median, range, etc.). Software used to perform the statistical analyses include SAS and Microsoft Excel.

Tests of Procedures and Methods

The survey procedures involved in this information collection will be tested on fewer than 10 individuals so as to refine the process and survey instrument (questionnaire) if necessary. Such testing will ensure that the researchers are minimizing burden and maximizing the utility of the information collection.

Study protocols have been developed to guide the research team in obtaining the highest quality data possible. Each researcher involved in administering the telephone interview or conducting site visits will be involved in a training session where protocols will be reviewed, discussed, and practiced before beginning data collection. Furthermore, during the telephone survey and site visit process, individual researchers' procedures and data collection will be monitored to ensure quality.

Contact Information for Contractor Conducting Information Collection

Project Lead for this information collection is:

Susan Bell Knisely

Booz Allen Hamilton (ASE)
918 Old County Road
Severna Park, Maryland 21146
Telephone: 410-647-1890
Fax: 410-647-8816
Mobile: 410-507-7343
E-Mail: knisely_susan@bah.com

Researchers at the Virginia Tech Transportation Institute will conduct the telephone survey information collection. Virginia Tech Transportation Institute, 3500 Transportation Research Plaza, Blacksburg, VA 24061 (individual contact information below).

Name	Title	Phone	Email
Richard Hanowski, Ph.D.	Director, Center for Truck & Bus Safety	540-231-1513	hanowski@vtti.vt.edu
Douglas Wiegand, M.A.	Research Associate	540-231-1055	dwiegand@vtti.vt.edu
Maria Fumero, M.S.	Research Associate	540-231-1048	mfumero@vtti.vt.edu

Attachments

- A. Section 212 of the Motor Carrier Safety Improvement Act of 1999, Public Law 106-159, 113 Stat. 1748, December 9, 1999.
- B. Final Rule (68 FR 47860) entitled, "Safety Requirements for Operators of Small Passenger-Carrying Commercial Motor Vehicles USED in Interstate Commerce, August 12, 2003.
- C. 60-day Federal Register notice (71 FR 71236), December 8, 2006.
- D. Comments and FMCSA replies to 60-day notice.
- E. 30-day Federal Register notice, (72 FR 17218) April 6, 2007.
- F. Pre-Survey Notification Letter.
- G. Telephone Survey Instrument.