

Department of Transportation Office of the Chief Information Officer

Supporting Statement Commercial Driver Individual Differences Study

INTRODUCTION

This is to request the Office of Management and Budget's (OMB) review and approval of a new Federal Motor Carrier Safety Administration (FMCSA) information collection request (ICR) titled "Commercial Driver Individual Differences Study."

Part A. Justification

1. CIRCUMSTANCES THAT MAKE COLLECTION OF INFORMATION NECESSARY

Transportation safety is the Department of Transportation's (DOT's) top strategic priority. Because the human toll and economic cost of transportation accidents are substantial, improving transportation safety is an important objective of all DOT modes. Within DOT, FMCSA is primarily focused on safe use of public roadways by motor carriers with the goal of reducing crashes, injuries, and fatalities involving large trucks and buses. The Secretary of Transportation has promulgated the Federal Motor Carrier Safety Regulations (FMCSRs) to further this purpose. In carrying out its safety mandate, FMCSA develops and enforces data driven regulations that balance motor carrier safety with industry efficiency; harnesses safety information systems to focus on higher risk carriers in enforcing the safety regulations; targets educational messages to carriers, commercial drivers, and the public; and partners with stakeholders including Federal, State, and local enforcement agencies, the motor carrier industry, safety groups, and organized labor on efforts to reduce bus and truck-related crashes.¹

Factors contributing to commercial motor vehicle (CMV) crashes can be classified as human, vehicle, or environmental and roadway conditions. Research on the causes of CMV crashes has consistently found that human factors predominate (Treat et al., 1979; Craft & Blower, 2004). The FMCSA Large Truck Crash Causation Study (LTCCS) found that drivers, rather than vehicle defects or environmental conditions, were responsible for about 87 percent of large truck crashes.² Driver factors may be related to performance, such as poor recognition of or reaction to hazards; driver decisions, the choice of speed or following distance being prominent examples; or to other factors such as driver fatigue and medical conditions.

¹ Federal Motor Carrier Safety Administration, "FMCSA's Strategy," <http://www.fmcsa.dot.gov/about/what-we-do/strategy/strategy.htm> (accessed June 30, 2010).

² <http://www.fmcsa.dot.gov/facts-research/research-technology/report/ltccs-2006.htm#TABLE7>

Although data are available on the factors that lead to CMV crashes, FMCSA has a critical need to identify factors associated with the personal characteristics of CMV drivers that can affect their risk of being involved in crashes in order to develop data driven countermeasures (which can include new federal regulations and safety outreach programs for CMV drivers and carriers) to prevent CMV crashes and improve CMV driver performance. CMV crash risk can be affected by drivers' situational factors, such as the amount of their previous nights' sleep; personal constitutional risk factors; vehicle condition factors; environmental factors, which include weather and road conditions; and, of course, risks created by other drivers and traffic. To meet this research need, FMCSA has developed the Commercial Driver Individual Differences Study (CDIDS), a major research effort to collect detailed data on driver characteristics and to compare them to driver performance data.

One fundamental question regarding human factors in CMV safety that CDIDS could help answer is the extent to which drivers are chronically at greater risk of being involved in crashes because of certain persistent characteristics, including physical or demographic factors, performance abilities, and medical conditions. These persistent personal traits may interact with other human, vehicle, and environmental factors to produce a differential effect on the occurrence of crashes and other negative events on the road.

In an FMCSA-funded, Transportation Research Board (TRB)-sponsored synthesis study of differential driver risk and high-risk commercial drivers, Knipling et al. (2004) presented survey results and statistical findings from several studies that supported the view that CMV driver crash risk varies greatly, and that a relatively small percentage of CMV drivers, 10 to 15 percent, account for a disproportionately large percentage of total fleet risk, 30 to 50 percent of crashes. Moreover, the findings of this report and subsequent analyses (Knipling 2005a, b) imply that relative driver risk, both general and related to specific factors like fatigue, endures over long periods of time. In other words, risk is to some extent a persistent personal trait, in addition to being related to specific situations and conditions. The CDIDS will help verify the significance and stability over time of driver personal traits related to crash risk, and to quantify and otherwise characterize that relationship.

Because a study like this has not been undertaken before, FMCSA determined that a pilot study should be performed with a smaller sample of subjects prior to the full study envisioned. This study (the Commercial Motor Vehicle Driver Risk Factor Study, OMB Control Number 2126-0043) surveyed drivers and included a medical examination for a subset of those sampled. A pilot of methods for this study was conducted and from this, the FMCSA and its chosen research team have been able to select what it believes to be the best methodology for the CDIDS.

The Job Descriptive Index (JDI) and related scales are frequently used by academic researchers and workplace professionals as a means of measuring employee attitudes such as job satisfaction. More specifically, the JDI is a "facet" measure of job satisfaction, meaning that participants are asked to think about specific facets of their job and rate their satisfaction with those specific facets. The JDI has remained one of the most widely used measures of job satisfaction (see Bowling, Hendricks, & Wagner, 2008; Cooper-Hakim & Viswesvaran, 2005) due to the strong emphasis on psychometric rigor and its frequent updates over the years. The JDI is comprised of five facets, including satisfaction with: coworkers, the work itself, pay, opportunities for

promotion, and supervision. These scales are easy to administer, easy to read, simple in format, and scores may be compared to those from a nationally-representative sample of United States workers (Balzer et al., 1997; DeMeuse, 1985). Cranny, Smith, & Stone, (1992) found that the JDI predicted job performance. In terms of outcomes, job satisfaction correlates with employee attitudes, behavior, and performance outcomes ([Locke, 1984](#); [P. C. Smith et al., 1969](#)). Job satisfaction is postulated to indirectly affect employee behavior and performance through intentions or effort ([Smith & Cranny, 1968](#); [Wanous, Poland, Premack, & Davis, 1992](#)).

The Life Experiences Survey (LES) is a 47-item self-report measure that allows respondents to indicate events that they have experienced during the last year (0-6 months or 7 months –1 year). It refers to life changes that are common to individuals in a wide variety of situations (Sarason, Johnson, & Siegel, 1978). Many of the items are based on Schedule of Recent Experience (SRE). Thirty-four of the events are similar to those found in the SRE (Holmes & Rahe, 1967).

McMurray (1970) studied the driving records of 410 individuals involved in divorce proceedings and found during the year in which divorce proceedings began, instances of crash involvement were between 77.7 percent and 140.8 percent higher than average when considering driving records 7 years prior to the divorce. In a self-report study of crash involvement and stress levels among 532 male drivers, Selzer and Vinokur (1974) found significant correlations between crashes, life changes, and subjective stress. Melamed et al. (1989) measured job-related and environmental stress experienced among 729 factory workers to find a significant linear trend ($p < .0001$) between this measure and injury experience while on the job. Along the same lines, Cartwright, Cooper, and Barron (1996) found accident-involved workers at a multi-site organization had experienced more stressful work environments than accident-free controls from the same organization. Hartley and Hassani (1994) found a measure of stress (Gulian et al., 1989) predicted 30 to 40 percent of the variance in crash or violation reports among a sample of 755 Australian car and truck drivers. Norris, Matthews, and Riad (2000) found when comparing subjective job stress levels across 504 drivers, those in the high-job-stress group were significantly more likely to have experienced a motor vehicle crash than those with no or low reports of job stress ($X^2 = 21.41$; $p < .001$).

The Secretary of Transportation's authority to conduct studies pertaining to commercial motor vehicle safety and to require motor carriers to maintain driver qualification files are located in 49 U.S.C. 504, 31133, 31136, 31502, and 49 CFR 1.73 (see Attachments A-E).

This information collection supports the DOT Strategic Goal of Safety.

2. HOW, BY WHOM, AND FOR WHAT PURPOSE THE INFORMATION IS TO BE USED

The CDIDS will identify risk factors by linking the characteristics of individual drivers with their driving histories, especially the presence or absence of crashes. One objective of the study is to identify, verify, quantify, and prioritize CMV driver risk factors. These are primarily personal factors such as demographic characteristics, medical conditions, attitudes, personal distress, and performance capabilities. Risk factors may also include work environmental conditions, such as carrier operations type and compensation method. Data on driver characteristics will be

collected from three sources: 1) Form MCSA-5863, Driver Survey paper and web based questionnaire; 2) driving records provided by carriers and 3) medical examinations. All respondents participating in this study will complete all methods of information collection. A sub-sample (a minimum of 29% of the full sample, or 6,000) will complete a second set of surveys (Follow-Up Survey) in addition to the Driver Survey.

The study is divided into three phases and two different recruitment methods:

- In **Phase 1**, the research team will survey 20,000 of the minimum 21,000 drivers. These drivers will be recruited using a prospective approach during their driving orientation at participating carriers. They will complete the Form MCSA-5863, “Commercial Motor Vehicle Driver Survey,” and their Form 649-F, Commercial Driver Fitness Determination, medical examination form and medical claims data will be made available to researchers for the duration of the study. Drivers participating in this study will be monitored for involvement in a DOT reportable crash for up to 36 months. The research team will collect additional data from the carriers employing the participating drivers.
- In **Phase 2**, the research team will contact at least 2,000 participants involved in a DOT reportable crash³ and request that they complete Form MCSA-5864, “Follow-Up Survey of Recent Life Experiences,” and packets that include the Recent Life Experiences Measure, Job Descriptive Index, Epworth Sleepiness Scale, and Berlin Questionnaire. At least an additional 1,000 drivers who are involved in DOT reportable crashes that occur during the 36-month monitoring period will be recruited into the study with a retrospective approach. They will complete both sets of surveys (Driver Survey packet and Job Descriptive Index from the Follow-Up questionnaire packet). Their completed Form 649-F medical forms, medical claims data and previous driving records will be made available to researchers.
- In **Phase 3**, matched controls for participants involved in DOT reportable crashes will be identified from the original prospective approach at Phase 1. These matched controls will complete the Form MCSA-5864, “Follow-Up Survey,” packet.

FMCSA has contracted with the Virginia Tech Transportation Institute (VTTI) at the Virginia Polytechnic Institute and State University (VT) to administer this study and analyze its results. The investigators currently performing this study are Dr. Jeffrey Hickman, Dr. Rich Hanowski, Dr. Feng Guo, Erin Mabry, and Laurel Marburg. In accordance with DOT policy on research involving human subjects, this study has been reviewed and approved by VT’s Institutional Review Board (IRB approval number 10-704, Attachment F).⁴ Staff members of motor carriers

³ Defined as an occurrence involving a CMV operating on a public road in interstate or intrastate commerce which results in: (1) a fatality; (2) bodily injury to a person who, as a result of the injury, receives medical treatment away from the scene of the accident; or (3) one or more motor vehicles incurring disabling damage as a result of the accident, requiring the motor vehicle to be transported away from the scene by a tow truck or other motor vehicle (49 CFR § 390.5).

⁴ In December 1981, the President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research (the Commission) issued a report which included a recommendation that Federal agencies engaged in research involving human subjects adopt the pertinent regulations of the Department of Health and Human Services (DHHS). These regulations, specified in 45 CFR, Part 46, deal with requirements for protection of human research subjects. In response to the Commission's recommendation, in March 1982, the Chairman of the Federal Coordination Council for Science, Engineering and Technology appointed an Ad Hoc Committee for the Protection of Human Research Subjects. The Ad Hoc Committee, composed of representatives of affected departments and agencies, developed a Model Policy which applies to research involving human subjects that is conducted, supported, or regulated by Federal departments and agencies. This policy is based on Subpart A of 45

who assist with participant recruitment will receive VT IRB ethics training to ensure that the rights of the research subjects are protected.

This study will examine several driver and situational safety factors to determine the prevalence of these factors and changes in crash risk associated with them. The major analysis paradigm of the study is “frequency of risk”. Project data will measure the frequency, incidence, magnitude, or range of each safety factor examined and then compare the baseline incidence of the factor to the frequency and incidence associated with crashes or other measures of risk. Comparison of cases of crash involvement to a control group with no crash involvement will permit the derivation of odds ratios and other statistics quantifying the risk associated with various driver factors. The risk associated with individual factors will be determined and assessments of individual risk factors will be combined into a multiple factor prediction of increased risk. The relationship between safety and risk factors will be modeled using the state-of-the-practice Poisson, Negative Binomial, or logistic regression models depending on the nature of the data. The model will provide a quantified assessment for the impacts of individual risk factors. The associated crash risk for individuals with a combination of risk factors can also be predicted.

3. EXTENT OF AUTOMATED INFORMATION COLLECTION

All of the survey items include check boxes, multiple choice, and fill-in-the-blank responses. The research team plans to offer all surveys in both paper and electronic form. Respondents who prefer the electronic version will be given a username and password to access the website. Public access to the site will be limited to just those respondents. Allowing drivers to select a preferred method of response is anticipated to increase the response rate. The electronic version has been also estimated to save some time (5 minutes) related to returning the survey versus the paper version which must be mailed. However, VTTI expects fewer than 20 percent of the survey responses will be completed electronically.

4. EFFORTS TO IDENTIFY DUPLICATION

FMCSA and the VTTI research team are unaware of other research conducted currently or in the past that could be used to fulfill the research goals of the CDIDS with the same level of detail and accuracy that this study has been designed to achieve. Previous research has been performed to identify risk factors associated with crash involvement (for reviews, see Beirness, 1993; Lancaster & Ward, 2002; Tsuang, Boor, & Fleming, 1985). These earlier studies were less comprehensive than the CDIDS because they used data on fewer risk factors, sampled fewer CMV drivers, or drew samples from a less representative population of drivers. The CDIDS will investigate a greater variety of driver risk factors and will attempt to create a larger, more representative sample than what was reported in earlier studies.

5. EFFORTS TO MINIMIZE THE BURDEN ON SMALL BUSINESSES

CFR, Part 46. On January 8, 1984, the Secretary of Transportation agreed to implement the Model Policy without exception.

Commercial vehicle drivers employed by large, national carriers will comprise most of the proposed study sample. However, it is likely that some owner-operators and independent drivers will be contacted. These individuals can be considered small businesses. To reduce work-related time conflicts, respondents will be encouraged to complete the information collection sessions when convenient for them. In addition, respondents will be compensated for their time. Participation in the CDIDS is voluntary, so no small business will have a burden imposed on them that they are not willing to bear.

6. IMPACT OF LESS FREQUENT COLLECTION OF INFORMATION

FMCSA and its research team believe that, to meet its research objectives, this study collects data at the lowest frequency possible within a single ICR approval. This study will be conducted once over a 36-month period. The Driver Survey packet will be given to 20,000 drivers at the beginning of the study period, and Follow-Up surveys will be given to drivers involved in DOT reportable crashes as well as matched controls for those participants involved in crashes. The 36-month monitoring period is the most time available for collecting these data within the standard ICR three-year approval period. Maximizing the monitoring period also maximizes the size of the subsample of drivers involved in crashes. A larger subsample of drivers involved in crashes increases the accuracy of any analysis conducted using these data.

Accurate analysis of CMV driver risk factors will allow FMCSA to formulate the best possible countermeasures and therefore provide a benefit to society by preventing CMV crashes. FMCSA's safety goals are shared by motor carriers, researchers, public safety advocacy groups, trade associations and other organizations. An accurate data collection will benefit all those interested in CMV safety and facilitate better informed discussions among these parties.

7. SPECIAL CIRCUMSTANCES

There are no special circumstances related to this information collection.

8. COMPLIANCE WITH 5 CFR 1320.8

FMCSA published a notice in the Federal Register with a 60-day public comment period to announce this proposed information collection on October 3, 2011 (76 FR 61136) (Attachment G). The Agency received five comments (Attachment H) in response to this notice that did not address the burden imposed by this proposed ICR. FMCSA responses to these comments are provided at Attachment I.

FMCSA published a notice in the Federal Register with a 30-day public comment period that announced this information would be sent to OMB for approval on March 14, 2012 (77 FR 15182) (see Attachment J).

9. PAYMENT OR GIFTS TO RESPONDENTS

Respondents will be compensated with a \$20 debit card for completing the Driver Survey packet, which takes no more than one hour to complete. If they are requested to complete the Follow-Up Survey and do so, they will be compensated with a \$12 debit card. The Follow-Up Survey should take 30 minutes or less to complete and a minimum of 29% of the sample (6,000 drivers) will complete this phase.

Monetary compensation for subjects participating in the information collection is considered essential for the reasons listed below:

Availability and time burden: Commercial truck drivers are difficult to reach for research studies due to irregular schedules and long working hours. Depending on whether a driver is selected to complete the Follow-Up Survey, the data collection requires 60 minutes for the Driver Survey and an additional 30 minutes if the Follow-Up Survey is requested. Compensation for these time burdens seems justified. This study also requests that respondents provide personal information such as name, driving history, and medical information. Monetary compensation may influence respondents' initial resistance to providing such information, which is essential for the study to be successful.

Data quality: Compensating respondents will significantly increase response rates for the information collection, thus improving the validity and reliability to an extent beyond that possible through non-compensation.

Complex study design: The proposed research requires ongoing participation of some respondents, each of whom is important to the achievement of the study goals. Subjects will be asked to complete a written Driver Survey on their own time at the beginning of the study, and at least 24 percent of them will be requested to complete a Follow-Up Survey up to three years after their initial participation. Compensation may substantially reduce attrition.

Past experience: Several of the research team members have extensive experience conducting research with commercial motor vehicle drivers (see, for example, Hanowski et al., 2005; Knipling, Hickman, Hanowski, & Blanco, 2005). Past experience indicates that it is difficult to obtain enough participants for studies of this size without providing adequate monetary compensation but that drivers will participate if they feel they are being provided with sufficient compensation. The compensation provided for participation in this study is comparable to the median CMV driver salary \$18.16 per hour reported by Bureau of Labor Statistics (2010).⁵

10. ASSURANCES OF CONFIDENTIALITY

All information collected will be kept strictly anonymous to the extent that anonymity can be protected by law (e.g., DOT has the right to access all the data collected in the study). Respondents completing the paper surveys will seal their completed packets in tamper proof envelopes to ensure security before mailing them to VTTI. Respondents' personally identifiable information (PII) will be removed from study materials received by VTTI. Electronic surveys will use a secure server. A unique participant number will be generated for all respondents linking their responses to the Driver Survey, Examination for Commercial Driver Fitness

⁵ <http://www.bls.gov/oes/current/oes533032.htm>. Accessed May 23, 2010.

Determination (Form 649-F), and Follow-Up Survey. A link between the respondents' participant number and identifying information is, however, needed to track participation and compensate respondents. A link between the respondents' participant number and driver number will also be needed to track violations reported by fleet managers. These links will be stored separate from study data in an electronic file on a password protected, firewalled computer at VTTI. After the project has been completed, all driver PII will be deleted from the file.

11. JUSTIFICATION FOR COLLECTION OF SENSITIVE INFORMATION

The CDIDS does not include questions about sexual behavior and attitudes or religious beliefs. However, some survey items are designed to evaluate sleep habits, life stressors, and satisfaction with their current job, which one may consider sensitive information. Analysis of medical conditions and their relation to levels of crash risk are also included in this research, requiring researchers to have access to basic medical information reported on the Medical Examination Report for Commercial Driver Fitness Determination (Form 649-F) as well as medical claims data. This includes information of the drivers' health history, vision, hearing, and blood pressure.

12. ESTIMATES OF BURDEN HOURS FOR INFORMATION REQUESTED

A total of 21,000 CMV drivers will be recruited for the CDIDS. Of these, 15,000 will participate by completing the Driver Survey only, at least 5,000 will complete both the Driver Survey as well as the Follow-Up Survey, and at least 1,000 participants will complete the Driver Survey and the Job Descriptive Index, which is part of the Follow-Up Questionnaire. It is estimated that these drivers will be drawn from approximately 20 carriers. These carriers will bear some paperwork burden due to their drivers' participating in the survey. For example, it is estimated that an average of two managers from each carrier will be needed to handle materials distributed and collected for the study.

The total number of respondents is 21,020 (21,000 drivers + 20 carriers).

The CDIDS will comprise two categories of burden, one associated with carrier level tasks, the other associated with driver tasks.

IC1, Carrier Tasks:

It is estimated that the driver sample will be drawn from about 20 carriers, each responsible for an average of 1,000 survey participants. Participating carriers will have to review and sign participation agreements. After establishment of the participating carriers, VTTI will provide IRB ethics training to carrier staff to protect the rights and welfare of human research subjects recruited to participate in research activities. These staff members will be responsible for recruiting driver respondents and distributing survey materials. Recruiting and managing the survey materials is estimated to take 5 minutes per respondent, or 83 hours per carrier (1,000 drivers \times 5 minutes \div 60 minutes per hours). Carriers will also be asked to track and deliver driving records of all drivers each month. It is estimated that it will take carrier personnel 30 minutes or less to locate and deliver the monthly crash reports to the researchers, totaling 360

hours total for the 20 carriers over the 36 months. Participating carriers will complete a fleet manager informed consent and survey about their operations estimated to take 10 minutes or less to complete, (Form MCSA-5865, “Fleet Manager Survey,” and informed consent letter at Attachment K). The estimates of burden hours for the carrier tasks in IC1 are presented below in table 1.

Table 1: IC1 Carrier Tasks

Task	Responses	Burden per Response	Total Burden Hours
Carrier participation agreements	20	2 hours	40
Training in IRB Certification, 2 Managers per carrier	40	2 hours	80
Recruiting driver respondents and managing survey materials	20	83 hours	1,660
Fleet managers’ survey	20	10 minutes	3
Carriers delivering monthly crash reports to VTTI, 20 carriers × 36 months	720	30 minutes	360
3-year Total	[780]		[2,143]
Annual Average	[260]		[714]

The total annual number of responses for IC1 is [260]. The total annual burden is [714] hours.

IC2: Driver respondent tasks:

Driver respondent burden is associated with completing survey materials. The Driver Survey is estimated to take 40 minutes, the Follow-Up Survey 30 minutes, and the Job Descriptive Index 10 minutes. Responding to paper surveys is estimated to take an additional 5 minutes per survey. The estimates of burden hours for the driver respondent tasks in IC2 are presented below in table 2.

Table 2: IC2 Driver Tasks

Task	Responses	Burden per Response	Total Burden Hours for 3-Year Study
Paper Driver Surveys	16,800	40 + 5 minutes	12,600
Electronic Driver Surveys	4,200	40 minutes	2,800
Paper Follow-Up Survey	4,000	30 + 5 minutes	2,333
Electronic Follow-Up Survey	1,000	30 minutes	500
Paper Driver Survey and Job Descriptive Index	800	50 + 5 minutes	733
Electronic Driver Survey and Job	200	50 minutes	167

Descriptive Index			
3-year Total	27,000		19,133
Annual Average	9,000		6,378

The total annual number of responses for IC2 is 9,000. The total annual burden is 6,378 hours.

Totals for this ICR:

Estimated Total Annual Burden Hours: 7,092 hours (714 hours for IC1 Carrier Tasks + 6,378 hours for IC2 Driver Tasks)

Estimated Total Annual Responses: 9,260 (260 responses for IC1 + 9,000 responses for IC2)

Estimated Total Respondents: 21,020 respondents (21,000 drivers + 20 carriers).

13. ESTIMATES OF TOTAL ANNUAL COSTS TO RESPONDENTS

There are no additional costs to respondents beyond those associated with the hourly burden presented above, which are not to be included in this section.

14. ESTIMATE OF COST TO THE FEDERAL GOVERNMENT

The research design and survey/examination development occurred in FY 2010 and implementation of the research methods will be completed in FY 2011. For this study and the total cost for the contract is \$3,000,000.

15. EXPLANATION OF PROGRAM CHANGES OR ADJUSTMENTS

This is a new data information collection.

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 FMCSA. The project timeline is included in Attachment L.

17. APPROVAL FOR NOT DISPLAYING THE EXPIRATION DATE OF OMB APPROVAL

No such approval is being requested.

18. EXCEPTIONS TO THE CERTIFICATION STATEMENT

None.

Attachments

- A. Title 49 U.S.C. § 504 titled, “*Reports and records.*”
- B. Title 49 U.S.C. § 31133 titled, “*General powers of the Secretary of Transportation.*”
- C. Title 49 U.S.C. § 31136 titled, “*United States Government regulations.*”
- D. Title 49 U.S.C. § 31502 titled, “*Requirements for qualification, hours of service, safety, and equipment standards.*”
- E. Title 49 CFR § 1.73 titled, “*Delegation to the Administrator of the Federal Motor Carrier Safety Administration.*”
- F. IBR Approval Letter.
- G. 60-day comment request Federal Register notice.
- H. Comments to 60-day comment request Federal Register notice.
- I. FMCSA responses to comments to 60-day comment request Federal Register notice.
- J. 30-day comment request Federal Register notice.
- K. Informed Consent Letter.
- L. Study Timeline.
- M. Commercial Driver Individual Differences Study Summary.
- N. Telephone Script for Follow-up Recruitment.
- O. Telephone Script for Retrospective Recruitment

Forms:

- MCSA-5863, “Commercial Motor Vehicle Driver Survey.”
- MCSA-5864, “Follow-Up Survey of Recent Life Experiences.”
- MCSA-5865, “Fleet Manager Survey.”
- Form 649-F, “Commercial Driver Fitness Determination.”