Request:

The Census Bureau plans to conduct additional research under the Generic Clearance for 2020 Census Field Test to Automate Field Data Collection Activities (OMB Control Number 0607-0971). The **Vehicle Inventory and Use Survey (VIUS)** (formerly the Truck Inventory and Use Survey) was the principal data source on the physical and operational characteristics of the nation's truck population from 1963 through 2002. The survey was discontinued prior to the 2007 survey due to budget constraints. The discontinuation of the survey left a significant void in the U.S. Department of Transportation's knowledge of the U.S. truck fleet.

The VIUS staff of the Economic Reimbursable Surveys Division, in conjunction with the Economic Statistical Methods Division, plan to conduct a pilot field test of a new VIUS questionnaire in 2021 to refine the survey instrument prior to production in 2022. VIUS is sponsored by the Bureau of Transportation Statistics, the Federal Highway Administration, and the U.S. Department of Energy, and is conducted by the U.S. Census Bureau. Our direct sponsor for this project is the Bureau of Transportation Statistics (BTS). BTS provided new and revised questionnaire items based on stakeholder feedback. As a part of this current submission we are seeking approval to conduct this pilot test.

The 2021 VIUS pilot study and additional respondent debriefings will be collected under the mandatory requirements of Title 13, Section 131, of the U.S.C. as in previous quinquennial economic censuses. VIUS was cleared under OMB #0607-0892 when it was conducted as part of the 2002 Economic Census.

Purpose:

The objective of the VIUS pilot is to have actual respondents engage with the new electronic VIUS instrument, to follow up with them on issues related to the content and ease of using the instrument, and to refine the instrument based on their feedback.

The 2021 VIUS will be the first VIUS to use an electronic instrument for data collection. Prior surveys were conducted by paper questionnaire only. The pilot will allow us to field test the instrument prior to the full production survey. This includes the ability to evaluate the need for hard or soft edits, help text, or other instructions. We will also conduct debriefing interviews with select respondents to obtain more detail about their responses and to evaluate the overall usability of the electronic instrument. Additionally, we plan to contact a subset of nonrespondents to learn about barriers to response. The pilot should also help us validate our interview length estimate.

Data collected during the pilot study and respondent debriefings will be used for research purposes only. No tabulated data products will be produced from the study.

Population of Interest:

The universe for the VIUS is Vehicle Identification Numbers (VINs) for trucks currently registered in the 50 states and District of Columbia. Government owned trucks, buses, ambulances, and farm tractors are not in scope for VIUS. Passenger cars are also out of scope. The registered owners of these VINs could be either private citizens or commercial businesses. The full VIUS universe includes five truck strata: (1) pickups, (2) sport utility vehicles, minivans, and light vans, (3) single-unit trucks under 26,000 pounds, (4) single-unit trucks 26,000 pounds or heavier, and (5) truck-tractors.

For the pilot study, truck VINs from two publicly-available data sources will be used to test the VIUS instrument: the New York City For-Hire Vehicles (NYC-FHV) database and the Federal Motor Carrier Safety Administration (FMCSA) database for inspections and crashes.

For the respondent debriefings, we will be recruiting respondents and non-respondents to the VIUS pilot study.

Pilot Sample:

A total sample of 500 trucks will be selected for the pilot from the two data sources:

- 200 truck records from NYC-FHV
- 300 truck records from FMCSA

The NYC-FHV database includes all for-hire vehicles licensed with the Taxi and Limousine Commission which are in good standing and able to drive. The database includes all types of passenger vehicles used for these services, but only records for pickup trucks, sport utility vehicles, or light? vans (truck strata 1 and 2) are in scope for the pilot study.

The FMCSA inspection file contains data from state and federal inspection actions involving motor carriers and shippers or transporters of hazardous materials operating in the United States. The FMCSA crash file contains data from state police crash reports involving drivers and vehicles of motor carriers operating in the United States. These two files were combined to create the database used to select records for the pilot study. The FMCSA data includes records for the straight trucks and tractor-trailer segments of the VIUS truck universe (truck strata 3, 4, 5).

The sample from these two sources provide records for all truck strata and vehicle owners needed to test the VIUS instrument. Light truck owners (i.e., pickups, SUVs, minivans, and other light vans) respond to a different series of questions than heavy truck owners. Privately-owned vehicle owners also respond to different questions than commercially-owned vehicle owners.

Language:

The survey questionnaire and mailing materials are in English only.

Timeline:

The data collection for the VIUS pilot study is planned for six weeks from January 11 through February 19, 2021. Respondent debriefings will be conducted simultaneously with data collection.

Method:

Electronic instrument will be the only mode of data collection planned for the VIUS pilot. All respondents will receive an initial letter with instructions to log into the electronic instrument to complete the survey for the vehicle listed. A PDF of the paper questionnaire will also be available for download when the respondent logs in. The PDF is for respondent use only and is not for data collection purposes.

The mailout operation includes time for one due date reminder. There will not be a telephone followup operation for the pilot study.

The questionnaire items used for the pilot are based on the 2002 VIUS instrument with the addition of some new and revised content. Between September 2019 and May 2020, the U.S. Census Bureau's Data Collection and Methodology Research Branch (DCRMB) conducted 41 cognitive interviews over two rounds of testing, regarding proposed new questions. Overall, testing revealed some questions could be improved with the addition of help text for respondents and several questions could be simplified by breaking them into multiple questions. Full results and recommendations from cognitive testing are included as attachments.

Approximately a week after data collection for the pilot, we will begin debriefing interviews (described further below). The respondent debriefing interviews are aimed at understanding how a respondent recently reported to a survey. All interviews will be conducted over the telephone or via Skype for Business. These interviews will not be recorded. The interviews will follow a semi-structured interview protocol. The protocol will be based on findings from the recent cognitive interviews regarding the VIUS content. Paradata from the pilot may be used to inform debriefing questions. Time permitting, subject matter staff will identify information in the paradata, such as write-in responses, to assess whether there are issues that could be asked about in depth in the debriefings (e.g., response categories that were confusing or incomplete). For the purposes of this research, the debriefing questions will be focused on the respondents' experiences in answering the survey (or not) and their evaluation of the content and survey instruments. Subject area specialists from the Census Bureau may participate in some of the debriefing interviews in order to observe the interview.

Respondent Debriefings:

Recruitment:

Debriefing respondents will be recruited via email and phone. Respondents will be informed that their participation is voluntary. The telephone script for these interviews is included in the protocol attachment.

Sample:

We plan to conduct a maximum of 50 debriefing interviews. The sample size necessary for this test was determined by several factors: standards in cognitive interviewing practice about the number of interviews that can be used to draw conclusions; the need to speak with registered non-commercial truck owners, as well as commercial truck owners from companies that cover varying industries, of varying sizes, and the constraints of timing and resources. The new content and web and paper instruments apply to both light trucks and heavy trucks, as such, we intend to split our sample between respondents/nonrespondents of the different truck types.

Incentives:

None

Enclosures:

Included in this package are the following enclosures:

- Respondent materials: initial letter, due date reminder
- VIUS questionnaires 9501 and 9502
- Spreadsheet of question revision history and data uses
- Cognitive interview final reports
- Debriefing protocols

Length of interview:

We estimate that respondents who use the electronic instrument or paper questionnaire will spend on average 65 minutes, per vehicle, completing the survey. This includes time for reading mailing materials.

The total estimated respondent burden for this pilot study is approximately 32,500 minutes, assuming everyone reads the mailing material and answers the survey.

For the respondent debriefings, we estimate that each interview will last no more than 60 minutes (50 cases x 60 minutes per case = 3,000 minutes). Additionally, to recruit respondents we expect to make up to five phone contacts per completed case. The recruiting calls are expected to last on average 3 minutes per call (5 attempted phone calls per completed case x 50 cases x 3 minute per case =750 minutes). The total estimated burden for the respondent debriefings is 3,750 minutes (3,000 minutes for interviews + 750 minutes for recruiting).

Thus, the total burden for the pilot test and the respondent debriefings is expected to be 36,250 minutes.

Schedule:

Initial mailout	January 11, 2021
Due date reminder	February 5, 2021
Respondent closeout	February 19, 2021
Debriefing closeout	March 5, 2021
Evaluation closeout	June 2021

Contact:

The contact person for questions regarding data collection and statistical aspects of the design of this research is listed below:

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