

**Department of Commerce
U.S. Census Bureau
OMB Information Collection Request
Vehicle Inventory and Use Survey
OMB Control Number 0607-0892**

Part A - Justification

1. Necessity of the Information Collection

The Census Bureau requests clearance of the forms that will be used to conduct the 2021 Vehicle Inventory and Use Survey (VIUS). Our sponsor for this joint statistical project is the Bureau of Transportation Statistics. The 2021 VIUS will collect data to measure the physical and operational characteristics of trucks from a sample of approximately 150,000 trucks. These trucks are selected from more than 190 million private and commercial trucks registered with motor vehicle departments in the 50 states and the District of Columbia. The Census Bureau will collect the data for the sampled trucks from the registered truck owners. We will publish physical and operational vehicle characteristics estimates for each state, the District of Columbia, and the United States. A public-use file will be released that will contain unaggregated microdata information for each truck for which data are collected. The records on the public-use file will be masked to avoid the disclosure of a sampled truck or owner.

The 2021 VIUS will be collected under the mandatory requirements of Title 13, Section 131 and 182, of the U.S.C. as in previous quinquennial economic censuses. VIUS was cleared under OMB #0607-0892 when it was last conducted as part of the 2002 Economic Census. Relevant excerpts from the Title 13 U.S.C. are provided in Attachment A.

2. Needs and Uses

The VIUS is the only comprehensive source of information on the physical and operational characteristics of the Nation's truck population. The VIUS provides unique, essential information for government, business, and academia. The U.S. Department of Transportation, State Departments of Transportation, and transportation consultants compliment VIUS microdata as extremely useful and flexible to meet constantly changing requests that cannot be met with predetermined tabular publications. The planned microdata file will enable them to cross-tabulate data to meet their needs.

Federal, state, and local transportation agencies use information from the VIUS for the analysis of safety issues, proposed investments in new roads and technology, truck size and weight issues, user fees, cost allocation, energy and environmental constraints, hazardous materials transport, and other aspects of the Federal-aid highway program. The Federal government uses information from the VIUS as an important part of the framework for: (1) the national investment and personal consumption expenditures component of the gross domestic product, (2) input-output tables, (3) economic development evaluation, (4) maintenance of vital statistics for prediction of future economic and transportation trends, (5) logistical requirements, (6) Metropolitan Planning Organization transportation development requirements, and (7) regulatory impact analysis.

Business and academia use information from the VIUS to assess intermodal use, conduct market studies and evaluate market strategies, assess the utility and cost of certain types of equipment, and calculate

the longevity of products. VIUS information also is used to determine fuel demands and needs for fuel efficiency, to produce trade publication articles and special data arrays, and to assess the effects of deregulation on the restructuring of the transportation industries.

If the VIUS is not conducted, the Federal government will lose a vital and unique transportation data source and will be unable to:

- assess the effects of proposed legislation and regulations on Federal transportation programs that support transportation planning and decision making by Federal, state, and local governments
- determine the investment needs of the Federal-aid highway program
- determine whether highway user charges for trucks are adequate and equitable
- assess and forecast highway revenues
- analyze and assess truck sizes and weight issues, and all other aspects of motor vehicle operations affecting metropolitan and interstate commerce
- have direct input into the national accounts, input-output tables, and other composite measures of economic activity
- assess safety standards and evaluate safety exposure to hazardous goods movements
- determine and evaluate vehicle performance and fuel consumption
- evaluate the national defense emergency preparedness.

Information quality is an integral part of the pre-dissemination review of the information disseminated by the Census Bureau (fully described in the Census Bureau's Information Quality Guidelines).

Information quality is also integral to the information collections conducted by the Census Bureau and is incorporated into the clearance process required by the Paperwork Reduction Act.

Attachment B provides a justification by data item.

3. Use of Information Technology

The 2021 VIUS will use an electronic reporting system as the main source of data collection for the first time. All respondents will receive an initial letter with instructions to log into the electronic instrument to complete the survey for the vehicle(s) listed. Once a respondent has completed the online survey, a PDF copy of the responses may be printed or saved for their records. While the second non-response mail followup operation will include a paper questionnaire, the enclosed letter will still encourage the respondent to respond online.

Many businesses with large truck fleets could have multiple vehicles selected for the survey. Respondents with five or more vehicles in sample will have the option to download an Excel spreadsheet, fill in the responses for all their vehicles, and upload the completed spreadsheet. This option reduces the burden on fleet managers who would otherwise have to complete the electronic instrument multiple times for their sampled vehicles.

The use of built-in edits ensures consistency among data received from all respondents. The electronic reporting system saves the respondent's progress and allows them to return later to complete the survey. The electronic reporting system also generates a validation check prior to submission that indicates if a respondent needs to revisit a page to make a correction. By implementing an electronic data collection, the Census Bureau reduces the cost of mailing this survey. Additionally, electronic responses yield higher quality response data by utilizing edits built into the electronic reporting system

to decrease manual edits when the data are received and processed ultimately leading to cost savings and increased data quality.

4. Efforts to Identify Duplication

VIUS was the principal data source on the physical and operational characteristics of the nation's truck population from 1963 through 2002. Since the survey was discontinued in 2002, metropolitan, state, and federal agencies have had no other alternative than to use the outdated 2002 VIUS data. The Census Bureau and our survey sponsor, the Bureau of Transportation Statistics, have investigated whether other data collections may duplicate the content, coverage, and detail planned for the 2021 VIUS. Further, we have consulted with major commercial and private trucking companies regarding the nature and content of other information collections in which they participate. These investigations found no data collections that duplicate the content, comprehensive coverage, industry detail, geographic detail, and statistical reliability provided by the VIUS. These features are unique characteristics of this periodic survey, which satisfies the requirements of principal data users.

While transportation data of a regulatory nature exist on trucks and administrative data exist on the number of registration transactions, there is no comprehensive source of data for the physical and operational characteristics for those registered trucks (other than the VIUS).

5. Minimizing Burden

The VIUS uses the following methods to minimize burden:

- The stratified random sample design of the VIUS data collection uses the least number of sampling units required to produce national and state-level estimates with the desired level of reliability, thus minimizing respondent burden.
- The sampling frame, developed from truck registration files for each of the 50 states and the District of Columbia, contains both private and commercial trucks. The majority of the trucks registered in the United States are used for personal transportation. Since small businesses normally operate a proportionally smaller fleet of trucks than large businesses and personal use trucks are included in the sampling frame, the probability of selection of trucks owned by small businesses is reduced, thus minimizing their overall burden. More information about the sampling methodology is provided in Part B of this document.
- VIUS collects data regarding light trucks (pickups, minivans, vans, and sport utility vehicles) and heavy trucks using two different questionnaires. The question content differs by truck type and usage, therefore reducing burden for some respondents, particularly light truck owners whose vehicles are only for personal use. Estimates are accepted for all data items as well.
- The 2021 VIUS survey instrument used the questionnaire from the 2002 VIUS as its starting point. New and revised questions were cognitively tested through the use of personal interviews prior to being added to the instrument. Question wording was simplified and instructions and help text were added based on feedback from cognitive testing interviews.
- Respondents with five or more vehicles in sample will be given the option to download a spreadsheet to use for reporting data on all sampled vehicles rather than completing the electronic instrument for each vehicle separately.

6. Consequences of Less Frequent Collection

Prior to 2002, the VIUS was conducted at 5-year intervals as part of the economic census. The data from this survey become progressively obsolete as the sampling frame ages. As it stands, the survey has not been conducted for nearly twenty years. Data users have been relying on the data from 2002 during this time.

Bringing VIUS back to its 5-year cycle ensures the timeliness and usefulness of the statistics we produce from it. Federal and state policy makers depend on reliable, up-to-date data to assess and evaluate all aspects of the Federal-aid highway program, energy consumption, national emergency preparedness, direct input into national accounts, input-output tables, and other measures of economic activity. The 2021 VIUS will also assess the rate of new vehicle technologies that mitigate climate change impacts and increase safety on the roadways. It is a necessity that current data from this survey be provided.

7. Special Circumstances

There are no special circumstances.

8. Consultations Outside the Agency

● Consultations with Stakeholders

After the VIUS was discontinued following the 2002 data collection, Oak Ridge National Laboratory (ORNL) was tasked by the U.S. Department of Transportation, the Federal Highway Administration, and the U.S. Department of Energy's Energy Information Administration to begin planning for a new VIUS. ORNL's Center for Transportation Analysis was asked to assist with administrative support and to conduct outreach, education and communications support. This included two Public Listening sessions and multiple sessions with key public and private stakeholders and user groups to identify needs and collect recommendations to improve the survey content and data products.

In 2019, the Bureau of Transportation Statistics contracted with the Census Bureau to reinstate VIUS and provided the information gathered from stakeholders during all these interim planning sessions to produce the 2021 VIUS questionnaire.

The Census Bureau has also consulted with the American Trucking Association and the Owner-Operator Independent Drivers Association to provide expert review of the draft questionnaires used in a VIUS pilot study.

A list of individuals from the federal and private stakeholders that were consulted for the review of the 2021 questionnaire content is provided in Attachment C.

● Consultations with Prospective Respondents

Two rounds of cognitive interviews with potential VIUS respondents were conducted between December 2019 and May 2020. These cognitive interviews consisted of gaining perspective on a respondent's ability to navigate through the questionnaires, as well as their response strategies. Questionnaire design elements and question wording were reviewed for the respondent's ability to follow skip instructions, avoiding answering of unnecessary questions, and reducing respondent variation in question and instruction comprehension. These cognitive interviews also were used to determine the following: (1) if the data requested were available from existing company records (or common knowledge if the respondent was a private truck owner); (2) how long it would take to

complete the survey; (3) the preferred method to supply responses (paper or electronic means), and (4) if any suggestions for improvement could be made. These interviews were conducted as additional research under the generic clearance for questionnaire pre-testing research (OMB number 0607-0725).

Some general findings from cognitive testing found:

- o Most respondents estimated needing between one and two hours to complete the survey.
- o Most respondents had vehicles registered at the same address where they receive mail and should be able to receive survey requests.
- o All respondents indicated they would complete the survey online or using the multi-vehicle spreadsheet.

There were some question specific recommendations based on respondent feedback. These included:

- o Rephrasing question text,
- o Simplifying terminology,
- o Splitting up complicated questions that asked multiple concepts in one question,
- o Adding help text to define less-familiar truck terminology,
- o Removing response items that are not relevant to light trucks, and
- o Including better instructions where needed.

A full list of changes that were incorporated for the 2021 VIUS is provided in Attachment D.

Recommendations which could not be implemented for this survey cycle are provided in Attachment E.

- **Federal Register Notice**

A pre-submission notice was published in the Federal Register, Volume 86, Number 48, Monday, March 15, 2021, pages 14305-14306, inviting public comments on our plans to submit this request. The pre-submission notice generated no comments.

9. Paying Respondents

The Census Bureau will not pay respondents of the VIUS.

10. Assurance of Confidentiality

The initial and follow-up letters for this data collection will give respondents the following assurance of confidentiality:

YOUR RESPONSE IS REQUIRED BY LAW and will be kept strictly **CONFIDENTIAL**. The U.S. Census Bureau is authorized to collect this information under Title 13, United States Code (Sections 131 and 182). The same law requires that you respond (Sections 224 and 225) and assures the confidentiality of the information you provide (Section 9). The Census Bureau is not permitted to publicly release your responses in a way that could identify you, your business, organization, or institution, and can use your responses only to produce statistics.

The statutory basis for these assurances of confidentiality is Title 13, U.S.C., Section 9. All activities relating to the collection and publication of economic census data satisfy requirements of this law.

11. Justification for Sensitive Questions

This information collection asks no questions of a sensitive nature.

12. Estimate of Hour Burden

VIUS requires one questionnaire per selected truck. Estimates for the number of hours per questionnaire are based on feedback from potential respondents during cognitive interviews conducted in 2019-2020. We estimate that respondents who use the electronic instrument will spend an average of 65 minutes, per vehicle, completing the survey. This includes time for reading mailing materials. We anticipate a potential time savings for respondents with multiple vehicles who choose the Excel spreadsheet option.

The 2021 VIUS sample of approximately 150,000 trucks will require an estimated respondent time burden of approximately 162,500 hours (150,000 x 65 minutes) which assumes everyone sampled reads the mailing material and answers the survey.

Number of Trucks in Sample	Time Per Response	Annual Burden
150,000	65 min.	162,500 hours

The 2021 VIUS sample is a mix of personal and business vehicles. Respondents who are owners of the commercial vehicles will also have a cost burden associated with responding to the VIUS questionnaire. We estimate that roughly half of the sampled trucks will be owned by a business while some are also used partially for business purposes. Additionally, some respondents will own multiple trucks in the sample. Therefore, we assume about 90,000 trucks may be commercial and their associated burden will be 97,500 hours (90,000 x 65 minutes).

We assume the respondent for most business trucks will be an office manager or bookkeeper of a business rather than a truck driver since the survey is sent to the registered truck owner. According to the 2019 Occupational Outlook Handbook, office managers/bookkeepers earn an hourly wage of \$20.39 and truck drivers earn an hourly wage of \$22.69. If we use the average hourly salary for these occupations (\$21.52) to account for different respondents, the total cost for their time to respond to the 2021 VIUS is estimated to be \$2,098,200.

13. Estimate of Cost Burden

We do not expect respondents to incur any costs other than that of their time to respond. The information requested is of the type and scope normally carried in company records and no special hardware or accounting software or system is necessary to provide answers to this information collection. Therefore, respondents are not expected to incur any capital and start-up costs or system maintenance costs in responding. Further, purchasing of outside accounting or information collection services, if performed by the respondent, is part of usual and customary business practices and not specifically required for this information collection.

14. Cost to Federal Government

The VIUS is jointly funded by the Bureau of Transportation Statistics and the Census Bureau. The estimated cost to the Federal Government to conduct the 2021 VIUS is \$11.1 million. The Census Bureau has planned and allocated resources for the effective and efficient management of this information collection.

The cost of the 5-year VIUS project includes the following:

- Project management
- Survey frame
- Pilot study (conducted in 2021)
- Data collection (including mailing costs)
- Data processing and review
- Data tabulation and publication
- Staffing (salaries, overhead, equipment)

15. Reason for Change in Burden

The 2002 VIUS used a smaller sample survey of 135,300 trucks with an estimated reporting burden of 85,170 burden hours. These estimates assumed a difference in reporting time based on which form a respondent received. We estimate a larger sample survey will be needed for the 2021 VIUS. We also calculated an average time to account for either form.

16. Project Schedule

The initial mailing for the 2021 VIUS is scheduled to occur in February 2022. The sample and contact information for the vehicle owners is purchased from commercial vendor, I.H.S. Polk. The timetable for data collection and data release are shown below.

Pre-submission notice published in Federal Register	3/15/2021
Submit clearance package to OMB	10/1/2021
Advance letter mailout	2/9/2022
Initial letter mailout	2/23/2022
Open electronic instrument to respondents	2/23/2022
Due date reminder mailout	3/23/2022
Send first mail followup	4/20/2022
Send first email followup	5/9/2022
Send second mail followup	6/6/2022
Send second email followup	6/27/2022
Begin telephone followup	7/5/2022
End of telephone followup	8/30/2022
3rd followup email	9/6/2022
Respondent closeout	10/31/2022
Finalize disclosure requirements	1/31/2023
Apply disclosure protection	9/8/2023
Publish data tables	9/29/2023
Release public-use file	12/29/2023

The data release will include tabulated data for the U.S., the 50 states, and the District of Columbia. These tables will include vehicle characteristics and uses by truck type and truck mile categories. After

the table release, a disclosure-protected, public use microdata file is planned for release. The disclosure protection will reduce the risk of identifying particular trucks or their owners/operators. All data products for the 2021 VIUS will meet the requirements of the Census Bureau's Disclosure Review Board.

17. Request to Not Display Expiration Date

The assigned expiration date will be included on the collection instrument.

18. Exceptions to the Certification

There are no exceptions to the certification.