

**Department of Commerce
United States Census Bureau
OMB Information Collection Request
Annual Survey of Manufactures (ASM)
OMB Control No. 0607-0449**

A. Justification

1. Necessity of the Information Collection

The Census Bureau is requesting a reinstatement with changes of the expired collection for the Annual Survey of Manufactures (ASM). The Census Bureau has conducted the ASM since 1949 under the mandatory requirements of Title 13, United States Code, Sections 131 and 182 to provide key measures of manufacturing activity during intercensal periods. In census years ending in "2" and "7," we mail and collect the ASM as part of the Economic Census covering the Manufacturing Sector.

The Census Bureau allowed the previous clearance to lapse since ASM inquiries for survey year 2017 (collected in 2018) are cleared as part of the 2017 Economic Census (0607-0998). Census is requesting reinstatement to continue annual collection of the ASM for survey years 2018, 2019, and 2020.

The ASM statistics are based on a survey that includes both mail and nonmail components. The mail portion of the 2018 ASM consists of a probability sample that was designed for the 2014 ASM. However, the industry strata for the 2018 ASM sample will be based on the 2016 North American Industry Classification System (NAICS), updated with births. For the 2014 ASM, approximately 50,200 manufacturing establishments were selected from a frame of approximately 101,250 establishments. The frame contained all manufacturing establishments of multiple-establishment firms (firms with operations at more than one location) and the largest single-establishment manufacturing firms within each industry. The 2014 ASM nonmail component contained approximately 193,350, small and medium-sized single-establishment firms. Since births are added annually to the mail sample, the 2018 ASM sample size is expected to be approximately 55,000 establishments. The sample will be updated for the 2019 ASM. No data are collected from firms in the nonmail component. Data are imputed based on models that incorporate the administrative records of the Internal Revenue Service (IRS), the Social Security Administration (SSA), and the Bureau of Labor Statistics (BLS) or are based on industry averages. Though the nonmail firms account for nearly two-thirds of the universe, they account for less than 7 percent of the manufacturing output.

The Census Bureau plans to make the following changes to the ASM data collection:

a. Elimination of the MA-10000(S)

The MA-10000(S) questionnaire will be eliminated. Historically, all locations of multiple-establishment firms and large single-establishment firms in the sample were asked to report on the MA-10000(L) questionnaire. The remaining single-establishment firms in the sample were asked to report on the MA-10000(S). In 2014, approximately 3,000 out of 51,000 sampled establishments received the MA-10000(S). This change will impact less than 6% of respondents. The MA-10000(S) was an abbreviated version of the MA-10000(L), and collected significantly less detailed data (Attachment C). Data not collected on the MA-10000(S) were imputed. Imputation rates and estimates will improve by eliminating the MA-10000(S). The MA-10000(L) will be renamed MA-10000 and all ASM establishments will be required to complete the MA-10000 (Attachment D).

The 2018 ASM will include two paths. The multiple-establishment firms will receive a questionnaire path that includes spreadsheet functionality. Firms will be able to enter data for their locations in a form view or select the spreadsheet option. Respondents have the ability to download, export, and import their spreadsheets. Respondents will have the option to “add locations” if there are establishments not listed for their firm. The path for single-establishment firms does not include spreadsheet functionality, or the ability to “add locations”. The multiple-establishment path includes instructions and a question related to interplant transfers; single-establishment firms do not have interplant transfers.

b. Elimination of Item 5B, Exports and Item 11, Inventories Outside the U.S.

Item 5B, Exports and Item 11, Inventories Outside the U.S. are no longer needed by the following stakeholders: International Trade Administration (ITA) and Bureau of Economic Analysis (BEA) (Attachment I). The elimination of these items was not documented in the ASM pre-submission notice dated July 13, 2018, because the decision was made after the notice was published in the Federal Register. Eliminating collection of these items has no impact on data users since these data items were not published as part of the ASM. Historically, exports data was used to publish the Exports from Manufacturing report, funded by ITA. This report was published by the U.S. Census Bureau and sponsored by ITA. <https://www.census.gov/manufacturing/exports/> The Exports from Manufacturing report was discontinued by ITA in 2012, due to lack of funding.

c. Addition of Item 17, Principal Business Activity

Item 17, Principal Business Activity on the MA-10000 will ask the respondent to identify their principal kind of business or activity. The question will pre-list suggested six-digit NAICS codes and descriptions for each establishment. The respondent will have the option to select the pre-listed NAICS that describes their principal business activity or to “write-in” their principal business activity if the pre-listed NAICS does not apply. Adding this question will help the Census Bureau identify out-of-scope establishments that do not conduct manufacturing activities and establishments which are classified in an incorrect manufacturing industry.

d. Change in Item 22, Product Classification

Previously, Item 22, Details of Sales Shipments Receipts or Revenue was collected on a NAICS basis. Beginning with the 2018 ASM, the collection of Item 22 will be based on the North American Product Classification System (NAPCS). NAPCS is a comprehensive demand-based hierarchical classification system for products that is not industry-of-origin based, but can be linked to the NAICS industry structure, and is consistent across the three North American countries. The primary objective of this product classification change is to identify, define, and classify the outputs produced and transacted (sold, transferred, or placed in inventory) by the reporting units within each industry regardless of their designation (intermediate or final).

<https://www.census.gov/eos/www/napcs/>

e. Elimination of Item 22, Miscellaneous Receipts

Due to the implementation of NAPCS, it is unnecessary to collect Miscellaneous Receipts. In previous ASM survey years, products were collected using only manufacturing sector NAICS codes. Non-manufacturing sector products, produced by manufacturing establishments were classified as Miscellaneous Receipts, which included contract work, resales, and other. NAPCS is an economy-wide solution, which allows ASM respondents to classify out of sector products in valid NAPCS codes.

f. Addition of Item 28, Special Inquiry on Robotic Use

Add a new Special Inquiry, Item 28 on basic robotic use in manufacturing to gauge the prevalence of robotics use in the manufacturing sector across different geographies and by firm size. Questions will be added to collect the number of industrial robots in operation, the number of industrial robots purchased, and the

value of capital expenditures for robotic equipment (Attachment H).

g. Item 29, Burden Estimate

Firms will be asked to provide an estimate of how long it took to complete the MA-10000 questionnaire. Responses to this question will be used to re-evaluate the burden hours we impose on respondents, given the various question additions, changes and deletions we are making. The Census Bureau will submit a nonsubstantive change request to revise the burden of this collection if analysis indicates a change. Efforts to analyze paradata to assess burden are currently being evaluated. ASM instrument paradata shows time logged-in and patterns of movement through the instrument, but not time spent reviewing instructions and gathering the necessary data. Nor does it provide an indication of idle time while the respondent is logged in. Paradata can help the Census Bureau calculate the time spent in the instrument but may not be a true reflection of respondent burden.

2. Needs and Uses

This survey is an integral part of the Government's statistical program. Its results provide a factual background for decision making by the executive and legislative branches of the Federal Government. Federal agencies use the annual survey's input and output data as benchmarks for their statistical programs, including the Federal Reserve Board's Index of Industrial Production and the Bureau of Economic Analysis' (BEA) estimates of the gross domestic product. The data also provide the Department of Energy with primary information on the use of energy by the manufacturing sector to produce manufactured products. These data also are used as benchmark data for the Manufacturing Energy Consumption Survey, which is conducted for the Department of Energy by the Census Bureau. Within the Census Bureau, the ASM data are used to benchmark and reconcile monthly and quarterly data on manufacturing production and inventories. The ASM is the only source of complete establishment statistics for the programs mentioned above.

The ASM furnishes up-to-date estimates of employment, payroll, hours, wages of production workers, value added by manufacture, cost of materials, value of shipments by NAPCS product code, inventories, cost of employer's fringe benefits, operating expenses, and expenditures for new and used plant and equipment. The survey provides data for most of these items at the two- through six-digit NAICS levels. The ASM also provides geographic data by state at a more aggregated industry level.

The survey also provides valuable information to private companies, research organizations, and trade associations. Industry makes extensive use of the annual figures on NAPCS product shipments at the U.S. level in its market analysis, product planning, and investment planning. State development/planning agencies rely on the survey as a major source of comprehensive economic data for policymaking, planning, and administration.

Information quality is an integral part of the pre-dissemination review of data disseminated by the Census Bureau (fully described in the Census Bureau's Information Quality Guidelines) at: <https://www.census.gov/about/policies/quality/guidelines.html>. Data quality is also integral to information collections conducted by the Census Bureau and is incorporated into the clearance process required by the Paperwork Reduction Act.

3. Use of Information Technology

Firms will satisfy their reporting requirement for this information collection by accessing the Respondent Portal and reporting data electronically, using a web-based electronic reporting tool. The initial mailing will include a letter instructing respondents to report online (<https://portal.census.gov/portal>) and provide a unique authentication code. Respondents have the option of printing a worksheet that lists all of the questions. Advantages to using the electronic reporting tools include: reduced time and expense to report, improved data quality through automatic data checks, the ability to exit the survey and resume at a later time without losing data already entered, the ability to save an electronic version (pdf) of the completed survey, and the ability to upload data from an Excel spreadsheet version. See Supporting Statement Part B, Question 4, for descriptions of the research projects conducted to ensure the electronic instrument minimizes response burden to the extent possible.

4. Efforts to Identify Duplication

The Census Bureau makes a concerted effort on a continuing basis to investigate possible duplications both within the agency and outside the agency and to eliminate them whenever possible.

One of the key features of the ASM is the ability, with Office of Management and Budget (OMB) approval, to add and delete questions based on the importance of the economic situation at the time. In the past, the Census Bureau added questions to the ASM survey such as exports, age of plant, and fuel consumed by type. If it were not for this feature, these data items would need to be collected in separate surveys.

The Congress granted the Census Bureau limited access to the information in the

IRS and SSA files, which includes employment and payroll data. The Census Bureau uses this information as input to models that impute other data items in lieu of mailing reports to many small businesses. Other items, such as the cost of materials, are not identical to information requested by the IRS. Even though there are similarities in the requested data, IRS does not insist on consistency and accuracy of each entry on the tax form as long as the taxable net income and the taxes paid are correct. Furthermore, IRS will accept a figure on the cost of goods sold that includes labor as well as materials and supplies used. The Census Bureau requires consistency in the data from firm to firm in order to publish valid statistical aggregations.

5. **Minimizing Burden**

Similar to the 2014 ASM, the 2018 ASM will exclude most small and medium-sized single-establishment firms from the mail portion of the survey. About 193,350 establishments (nearly two-thirds of the manufacturing universe) were excluded from the sampling frame used to select the 2014 ASM mail panel. No sample is selected from the nonmail stratum; information for these establishments is imputed and incorporated in the published estimates. Overall burden for the ASM would be reduced by directing burden away from the smallest firms in the population.

6. **Consequences of Less Frequent Collection**

The Manufacturing Sector is of vital importance to the Nation's wellbeing. Consequently, current information regarding the changing structure of manufacturing is extremely important to our economic growth. The Congress recognized this fact when it authorized the changeover from the biennial census program to the quinquennial economic census covering the manufacturing sector with an ASM in interim years. Less frequent collection of the data would adversely affect our ability to recognize and react to changes in the economy.

7. **Special Circumstances**

This information collection will be conducted in a manner consistent with OMB guidelines and there are no special circumstances.

8. **Consultations Outside the Agency**

Consultations for our general statistics items are held on a continuing basis with government agencies, trade associations, private research groups, and companies (Attachment F). Consultations with outside stakeholders were for the purpose of receiving individual opinions and not for the purpose of forming a group opinion.

We published a notice in the Federal Register (83FR, pages 32627-32629) on July 13, 2018 inviting public comment on our plans to submit this request. One comment was received during the 60-day comment period, which was from BEA, strongly supporting this data collection because it's the main data source for key components of BEA's economic statistics (Attachment G). Further, the BEA comment documents its support for our proposed changes to the ASM.

9. Paying Respondents

The Census Bureau does not pay respondents or provide gifts in return for complying with the ASM.

10. Assurance of Confidentiality

The online reporting system for this information collection will give respondents the following assurance of confidentiality (Attachment E):

YOUR RESPONSE IS REQUIRED BY LAW. Title 13, United States Code, Sections 131 and 182, authorizes this collection. Sections 224 and 225 require your response. The U.S. Census Bureau is required by Section 9 of the same law to keep your information **CONFIDENTIAL** and use your responses only to produce statistics. The Census Bureau is not permitted to publicly release your responses in a way that could identify your business, organization, or institution. Per the Federal Cybersecurity Enhancement Act of 2015, your data are protected from cybersecurity risks through screening of the systems that transmit your data.

Similar assurances will be included in the initial contact letter that directs respondents to report online.

11. Justification for Sensitive Questions

This information collection asks no questions of a sensitive nature.

12. Estimate of Hour Burden

There are 55,000 respondents who will receive the MA-10000. The average time required to complete the survey is 3.5 hours. The total annual response burden is estimated to be 192,500 work hours. This is a slight refinement of the 220,000 burden hours submitted in the notice published July 13, 2018 in the Federal Register.

We base the estimate of the average time required to complete the survey on discussions with many representatives of large and small firms. Respondents

have reported the data included in this annual survey with no major difficulty for many years. There will be an additional question for all firms asking for an estimate of the time it took to complete the questionnaire. These responses will be used for research purposes.

As described in Supporting Statement B Question 4, the Census Bureau will conduct respondent debriefing interviews to evaluate the performance and effectiveness of survey questions and data collection instruments. Up to 70 respondent debriefings with a total burden of 81 hours will be conducted to evaluate the newly added robotics questions. Additionally, there will be 80-90 respondent debriefings with a total burden of 100 hours conducted to evaluate other current ASM questions.

The estimated annual cost to respondents is approximately \$7,217,830. We base the annual cost on an average hourly wage of \$37.46 times the annual burden hours 192,681. The average hourly wage is that of an accountant according to the 2017 BLS Occupational Employment Statistics (OES) data, published by BLS https://www.bls.gov/oes/current/oes_nat.htm.

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

We estimate the total cost to the Government for the ASM program to which these forms relate to be \$6,537,730 all borne by the Census Bureau. Included in this cost are activities related to sample design, mail-out, collection, data capture, analysis and dissemination. This cost is expected to remain relatively fixed over the upcoming three years.

15. Reason for Change in Burden

This collection is being submitted as a reinstatement with change.

16. Project Schedule

The Census Bureau will mail letters directing respondents to the online reporting tool for the 2018 ASM information collection on May 1, 2019, with a due date of June 15, 2019. Mail follow-ups to non-respondents will begin in July 2019. These efforts, supplemented by telephone follow-ups to selected non-respondents, will continue through November 2019. Receipt of administrative records, automated edits, and initial efforts to resolve reporting problems will continue through November 2019. We will then prepare tabulations and related analytical summaries, perform analyses, and submit the data to further review and correction. Data is scheduled to be released in April 2020. The dates in the 2018 ASM scheduled are approximately three month later than typical ASM cycles. This is a result of the delayed Economic Census schedule and the availability of the Business Register (BR). The BR contains the information on the physical location of establishments, as well as payroll, employment, value of shipments/receipts/revenue/sales, and industry classification data obtained from prior censuses and surveys or obtained from the administrative records of the IRS and Social Security Administration (SSA) under special arrangements which safeguard the confidentiality of both tax and census records. Information from the Bureau of Labor Statistics (BLS) on industry classifications are also used to supplement the classification information from the IRS and SSA.

1Timetable for the 2018 Annual Survey of Manufactures

<u>Activity</u>	<u>Start^{1/}</u>	<u>End^{1/}</u>
Extract mailing list from the BR.....	03/2019	04/2019
Prepare mailing pieces.....	03/2019	04/2019
Mail initial contact letters.....	05/2019	05/2019
Receive and check in responses.....	05/2019	11/2019
Edit data, resolve edit problems.....	06/2019	11/2019
Response due date.....	06/2019	06/2019
Follow-up for nonresponse.....	07/2019	11/2019
Close out data collection.....	11/2019	11/2019
Receive, process administrative records.....	11/2019	11/2019
Prepare and analyze tabulation.....	11/2019	03/2020
Data Release	04/2020	04/2020

^{1/} All dates are approximate

16. Request to Not Display Expiration Date

1The assigned expiration date will be displayed on all questionnaires used in this information collection.

17. Exceptions to the Certification

1There are no exceptions.

18. North American Industry Classification System (NAICS) Codes Affected

For the 2018 ASM, the survey provide data at the two- through six-digit NAICS levels in the manufacturing sector (31-33). We also provide geographic data by state at a more aggregated industry level.