

**SUPPORTING STATEMENT B**  
**U.S. Department of Commerce**  
**U.S. Census Bureau**  
**Monthly Retail Surveys (MRS)**  
**OMB Control No. 0607-0717**

**B. Collections of Information Employing Statistical Methods**

- 1. Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection method to be used. Data on the number of entities (e.g., establishments, State and local government units, households, or persons) in the universe covered by the collection and in the corresponding sample are to be provided in tabular form for the universe as a whole and for each of the strata in the proposed sample. Indicate expected response rates for the collection as a whole. If the collection had been conducted previously, include the actual response rate achieved during the last collection.**

The Advance Monthly Retail Trade Survey (MARTS) is a subsample of approximately 4,800 units (companies and EINs) selected from the larger Monthly Retail Trade Survey (MRTS) sample of about 13,000 units.

Sample Revision: A sample revision is the process used to re-design and re-select the samples for many of the Census Bureau's surveys of the retail, wholesale, and service industries. We initially do a sample revision for MRTS and MARTS, then MARTS completes another sample revision halfway through the MRTS sample life. This process is performed to:

- ensure each sample is representative of its target population
- improve the efficiency of each sample
- incorporate updates to the industry classification structure
- expand industry coverage of the survey
- update questions and instructions to obtain more accurate data
- redistribute burden for small and medium size businesses

The current sample of retailers was introduced in April 2018 for MRTS and the new sample was introduced in November 2022 for MARTS. The next reselection of the MRTS and MARTS samples is scheduled to occur in late 2026 on a 2022 NAICS basis. The following sections describe the methodology of the current sample.

The sample is a probability sample selected from retail and food services employers (NAICS sectors 44, 45 and 722), contained in the Census Bureau's Business Register, which covers all employers who make social security payments for their employees under the Federal Insurance Contributions Act.

MRTS has approximately 13,000 retail firms included in the survey. Of this number, about 2,500

are large firms and were selected with certainty (100 percent chance of selection). The remaining are small and medium sized firms and were selected with non-certainty. MARTS has approximately 4,800 retail firms included in the survey. Of this number, about 1,150 are large firms and were selected with certainty (100 percent chance of selection). The remaining are small and medium sized firms and were selected with non-certainty.

Data for the MRS are obtained at the 6-digit NAICS level with all intermediate and summary tables obtained by summation. Tabulations will include estimates on sales, inventories, and inventories/sales ratios for MRTS, whereas MARTS only includes estimates for sales. Data for the MARTS are published for 3-digit NAICS levels and for select 4-digit NAICS levels and total summary levels. Data for MRTS are published for four-digit and selected five-digit NAICS levels and total summary levels.

Statistical analysis of the monthly data will be based on comparison of the monthly data to:

- (1) annual survey estimates;
- (2) prior year monthly and annual survey results;
- (3) the results of the most recent Economic Census; and
- (4) published trade, business, and media reports.

Comparisons of the monthly estimates to current and prior year annual and monthly estimates are produced by the use of data edits that identify firms exceeding predetermined tolerance cutoffs. The tolerance cutoffs specify acceptable dollar level and percent differences between the annual data, the previous annual estimates, and monthly data. Data analysis also includes research of inventory-to-sales ratios. Also, an analysis is made at the detailed NAICS level to determine if data reported for each subsector appear acceptable.

For the larger MRTS survey, for the latest 6 months (January 2025 – June 2025), the average response (in terms of total quantity response) to this voluntary survey was about 59 percent for sales, 61 percent for inventories, and 56 percent for e-commerce. The latest 6 months (January 2025 – June 2025) average response (in terms of units) to this voluntary survey was about 45 percent.

For the MARTS survey, for the latest 6 months (January 2025 – June 2025), the average response (in terms of dollar volume) to this survey was about 43 percent while the average unit response was about 51 percent.

For the MARTS mid-sample selection, executed halfway between MRTS samples, we allow a greater chance of selection for firms that have recently reported to the MRTS survey. This selection increases the dollar volume response rate once the mid-sample is implemented.

## **2. Describe the procedures for the collection of information including:**

- Statistical methodology for stratification and sample selection,
- Estimation procedure,
- Degree of accuracy needed for the purpose described in the justification,
- Unusual problems requiring specialized sampling procedures, and
- Any use of periodic (less frequent than annual) data collection cycles to reduce burden.

## **MRTS**

**Sampling Frame:** The sampling frame used for the MRTS consists of firms. The firms consist of one or more establishments. We create these sampling units from data collected as part of the 2012 Economic Census and from establishment records contained in the Census Bureau's Business Register as of December 2015.

To create the sampling frame, we extract the records for all employer establishments located in the United States and classified in the Retail Trade or Food Services sectors as defined by the 2012 NAICS. Beginning with the 2025 Benchmark report released April 2025, estimates are restated to the 2017 NAICS. For these establishments we extract sales, payroll, employment, name and address information, as well as primary identifiers and, for establishments owned by multi-unit firms, associated Employer Identification Numbers (EINs). To create the sampling units, we aggregate the establishment data for all retail establishments associated with the same firm identifier. No aggregation is necessary to put single-unit establishment information on a firm basis. Thus, the sampling units created for single-unit firms simultaneously represent establishment and firm information.

**Stratification:** The sample for the MRTS uses a stratified, one-stage design with primary strata defined by industry. There are 85 primary strata. We further stratify the sampling units within industry group by a measure of size (substratify) related to their annual sales. Sampling units expected to have a large effect on the precision of the estimates are selected "with certainty." This means they are sure to be selected and will represent only themselves (i.e., have a selection probability of 1 and a sampling weight of 1). Within each industry stratum we determine a substratum boundary (or cutoff) that divides the certainty units from the noncertainty units. We base these cutoffs on a statistical analysis of data from the 2012 Economic Census. Accordingly, these values are on a 2012 sales basis. We also use this analysis to determine the number of size substrata for each industry stratum and to set preliminary sampling rates needed to achieve specified sampling variability constraints on sales estimates for different industry groups. The size substrata and sampling rates are later updated through analysis of the sampling frame.

**Sample Selection:** Sample selection is a two-step process and begins by identifying the firms selected with certainty. If a firm's annual sales or end-of-year inventories are greater than the corresponding certainty cut-off, that firm is selected into the MRTS sample with certainty.

In the second step, all firms not selected with certainty are subjected to sampling. To be

eligible for the initial sampling, a firm had to have nonzero payroll in 2014. We stratify the firms according to their major industry and their estimated sales (on a 2012 basis). Within each noncertainty stratum, we select a simple random sample of firms without replacement.

The U.S. Census Bureau consolidated seven annual surveys, including the Annual Retail Trade Survey (ARTS) and Services Annual Survey (SAS), into one survey forming the Annual Integrated Economic Survey (AIES) starting with the 2023 survey year. The AIES collects annual data for all company operations at one time integrating questions from previous existing surveys while covering various trades and industry specific content. With the introduction of AIES, the future MARTS and MRTS samples will be selected independent of the AIES sample, meeting the design needs of the monthlies versus those of the annual surveys.

**Sample Maintenance:** We update the sample to represent EINs issued since the initial sample selection. These new EINs, called births, are EINs, recently assigned by the Internal Revenue Service (IRS), that have an active payroll filing requirement on the IRS Business Master File (BMF). An active payroll filing requirement indicates that the EIN is required to file payroll for the next quarterly period. The Social Security Administration attempts to assign industry classification to each new EIN.

EINs with an active payroll filing requirement on the IRS Business Master File we refer to as “BMF active,” and EINs with an inactive payroll filing requirement as “BMF inactive.”

We sample EIN births on a quarterly basis using a two-phase selection procedure. To be eligible for selection, a birth must either have no industry classification or be classified in an industry within the scope of the Service Annual Survey, the Annual Wholesale Trade Survey, or the Annual Retail Trade Survey, and it must meet certain criteria regarding its quarterly payroll. In the first phase, we stratify births by broad industry groups and a measure of size based on quarterly payroll. We select and canvas a relatively large sample to obtain a more reliable measure of size, consisting of sales in two recent months and a new or more detailed industry classification code. We contact births by telephone if they have not returned their questionnaire within 30 days.

Using this more reliable information, in the second phase we subject the selected births from the first phase to probability proportional-to-size sampling with overall probabilities equivalent to those used in selecting the initial MRTS sample from the December 2015 Business Register. Because of the time it takes for a new employer firm to acquire an EIN from the IRS, and because of the time needed to accomplish the two-phase birth-selection procedure, we add births to the sample approximately nine months after they begin operation.

In general, we will include any new establishments that a firm acquires—even if under new or different EINs—into sample with the same sampling status as the original firm.

Each quarter, we check against the current Business Register to determine if any EINs on the

survey have become BMF inactive. Typically, we do not canvass BMF inactive EINs during the reference month. Likewise, if any EIN on the survey was BMF inactive in a previous reference month and is now BMF active on the current Business Register, we again include these EINs in the canvass. In both cases, we only tabulate data for that portion of the reference year that these EINs reported payroll to the IRS.

Because births are not represented in the monthly survey until they go through the two-phase selection procedure, an interim procedure is used to account for births during the period-of-time between the onset of activity and the time of birth selection. This interim procedure consists of imputing data for all EINs currently in the monthly survey that go out of business but are still on the IRS BMF.

Births are added to the monthly survey in February, May, August, and November of each year. At the same time, inactive EINs are removed from the survey. To minimize the effect of births and inactive EINs on the month-to-month change estimates, we phase in these changes by incrementally increasing the sampling weights of the births and decreasing the sampling weights of the inactive EINs in a similar fashion. In the first month, we tabulate the births at one-third their sampling weight and tabulate the inactive EINs at two-thirds their sampling weight. In the second month, we tabulate the births at two-thirds their sampling weight and tabulate the inactive EINs at one-third their sampling weight. In the third month, we tabulate the births at their full sampling weight and the inactive EINs are dropped (sampling weight equals zero).

**Estimation Procedures:** Estimates of monthly sales and end-of-month inventories as well as quarterly e-commerce sales are derived from data collected in the MRTS. Each month, firms in the MRTS sample are asked to report their sales, e-commerce sales, and end-of-month inventory data for the month just ending. Monthly totals are computed as the sum of weighted data (reported and imputed) for all selected sampling units that meet the sample canvass and tabulation criteria. The weight for a given sampling unit is the reciprocal of its probability of selection into the MRTS sample.

The monthly totals are then benchmarked to the latest totals from ARTS and SAS. Non-employers were included in the ARTS totals, and therefore, the monthly benchmarked totals account for nonemployers until the MRTS Restatement in 2025. ARTS has since transitioned to AIES and began to formally collect data as part of AIES in March 2024. In September 2024, ARTS restated data to include employer-only firms to align with AIES, thus MRTS has restated data and will continue to include employer-only firms as of April 2025. MRTS will be tentatively benchmarking to the upcoming 2023 AIES release.

Monthly total estimates for broad industry groups (e.g., 2-, 3-, and 4-digit NAICS levels) are computed by summing the benchmarked monthly totals for the appropriate detailed industries comprising the broader industry group. Quarterly totals are computed similarly.

Period-to-period (e.g., month-to-month) change estimates are computed using the benchmarked monthly totals.

Variances are estimated using the method of random groups.

**Seasonal Adjustment:** Estimates are adjusted for seasonal variation and holiday and trading-day effects where appropriate using the X-11 filter-based adjustment procedure available in the Census Bureau's X-13ARIMA-SEATS (AutoRegressive Integrated Moving Average – Signal Extraction in ARIMA Time Series) program. Seasonal adjustment models are reviewed on an annual basis.

## **MARTS**

**Sampling Frame:** The MARTS sampling frame contains the active sampling units selected in MRTS.

**Stratification:** The MARTS units are stratified into 36 broader industry categories than MRTS and substratified by annual sales size. Within each industry stratum, we stratify the sampling units into 4, 7, 10, or 13 substrata by a measure of size related to their annual sales. We select sampling units expected to have a large effect on the precision of the estimates “with certainty.” This means they are sure to be selected and will represent only themselves (i.e., have a selection probability of 1 and a sampling weight of 1). To identify the certainty units, we determine a substratum boundary (or cutoff) that divides the certainty units from the noncertainty units. We base these cutoffs on a statistical analysis of data extracted from the 2012 Economic Census and the Census Bureau's Business Register. We also use this analysis to determine the number and boundaries of non-certainty substrata for each industry group.

**Sample Selection:** Sample sizes are calculated to meet reliability constraints on estimated annual sales totals for specified industries. Sample selection is done independently within each size stratum using a systematic probability-proportional-to-size (PPS) procedure where the size used is the MRTS sampling weight. Within this sampling procedure MARTS sampling weights are constrained to be no larger than 1,000.

The MARTS sample is selected once the MRTS sample is selected and then again about half-way between MRTS samples, referred to as the mid-sample. For a MARTS mid-sample, the annual sales size for each unit is recalculated based on data from the MRTS, and units are selected using the same PPS procedure with similar strata sampling rates as the original sample.

New businesses are not added during the life of the MARTS sample. Therefore, as firms go out of business, refuse to respond, etc., the sample deteriorates and becomes less representative. By reselecting the MARTS subsample from MRTS, it better represents current business conditions and many small and medium-size firms are relieved of the early reporting burden.

**Estimation Procedures:** Advance sales estimates for the most detailed industries are computed using a link-relative estimator. For each detailed industry, we compute a ratio of current-to-previous month weighted sales using data from units for which we have obtained usable responses for both the current and previous month. Imputed data for some influential units may also be used in the ratios. Then, for each detailed industry, the advance total sales estimate for the current month is computed by multiplying this ratio by the preliminary sales estimate for the previous month (derived from the larger MRTS) at the appropriate industry level. Total estimates for broader industries are computed as the sum of the detailed industry estimates.

Prior to April 2025, the preliminary sales estimate used in this computation includes data for non-employers (i.e., businesses without paid employees). Therefore, non-employers were represented in the published MARTS estimates. As of May 2025, MARTS publishes estimates for employer-only firms to align with ARTS and its transition to AIES. The link-relative estimate is used because there is no systematic tabulation-unit level imputation or adjustment for non-respondents in MARTS.

Variances are estimated using the method of random groups and are used to determine if measured changes are statistically significant.

Estimates are indirectly benchmarked to ARTS estimates via the link-relative estimation method.

**Seasonal Adjustment:** Estimates are adjusted for seasonal variation and holiday and trading-day effects where appropriate using the X-11 filter-based adjustment procedure available in the Census Bureau's X-13ARIMA-SEATS (AutoRegressive Integrated Moving Average – Signal Extraction in ARIMA Time Series) program. Seasonal adjustment models are reviewed on an annual basis.

3. **Describe methods to maximize response rates and to deal with issues of non-response. The accuracy and reliability of information collected must be shown to be adequate for intended uses. For collections based on sampling, a special justification must be provided for any collection that will not yield "reliable" data that can be generalized to the universe studied.**

Respondents have the option to receive the MRS by mail, or to report via Internet and would receive an email reminder. Responses can be provided via mail, telephone, or Internet. The option to receive and report MRS by mail will be discontinued in late 2025, but general survey forms will remain available for print online.

After the initial contact to the reporting unit each month, nonresponse follow-up procedures are performed. Companies that opt to receive e-mail notifications can receive up to 3 follow-up emails (Attachments 10 and 11) each month reminding them to report. The National Processing Center in

Jeffersonville, Indiana, performs a telephone follow-up if firms have not completely filled out the form or have reported questionable data that may be unacceptable for the estimates. Firms that refuse to respond to the survey are called to convey the importance of their participation.

The Census Bureau also has an "800" toll-free telephone number in both Washington, D.C. and Jeffersonville, Indiana, to permit respondents to call in data or ask questions without extra expense. A Frequently Asked Questions section on our website also provides respondents a simple way to obtain answers to their questions. Respondents can also report online through the "Centurion" system, which allows respondents to report 24 hours a day, 7 days a week, at their convenience.

### **Additional Efforts to Maximize Response**

Since the MARTS and MRTS surveys are voluntary, retailers have been increasingly reluctant to supply data. Census has employed a number of new strategies to encourage response, as explained below. We have:

- Continued the targeted calling lists for MARTS, and implemented for MRTS, which focuses on the largest nonresponse cases. This ensures that the largest dollar-volume cases are called by the National Processing Center to increase dollar-volume response rates.
- Continued participation in the Census Bureau's Account Manager program to reach a chosen group of large companies that cross multiple surveys. MRS has implemented the usage of this program in order to reduce respondent burden. The Account Manager is the primary contact with the company to streamline the company's reporting across multiple surveys. Companies included in this program receive correspondence that asks the respondent to reach out to their Census Account Manager for assistance completing the survey.
- Began to work with the Census Bureau's Alternative Census Reporting Team, which utilizes alternative data sources to reduce respondent burden. Companies have the option to report consolidated data for their entire organization in a single submission. The Census Bureau then takes on the responsibility of breaking out the data by survey. This approach shifts the burden of survey-specific data segmentation from the company to the Census Bureau, streamlining the reporting process for respondents.
- Continued to reach out to chief economists of large companies through collaboration with the National Association of Business Economists (NABE), asking them to convince their companies to participate in this important survey.
- Worked with the Secretary of Commerce to reach out to CEOs of large companies on the importance of their company's participation in the MRS. This outreach was either through phone calls or letters.



- Expanded our partnership with Circana (previously The NPD) group to obtain data to supplement response rates for some of our largest nonresponse cases.

4. **Describe any tests of procedures or methods to be undertaken. Testing is encouraged as an effective means of refining collections of information to minimize burden and improve utility. Tests must be approved if they call for answers to identical questions from 10 or more respondents. A proposed test or set of tests may be submitted for approval separately or in combination with the main collection of information.**

We continuously edit the reported data and monitor procedures and methods for data collection in an effort to reduce reporting burden and improve data quality. We also document respondent feedback on question clarity and any reported burden to inform improvements for future survey rounds.

5. **Provide the name and telephone number of individuals consulted on statistical aspects of the design and the name of the agency unit, contractor(s), grantee(s), or other person(s) who will actually collect and/or analyze the information for the agency.**

Direct questions regarding statistical aspects can be directed to Deanna Weidenhamer, Chief of the Retail and Wholesale Surveys Statistical Methods Branch, Economic Statistical Methods Division, U.S. Census Bureau, (301) 763-7186.

Questions concerning planning and implementation of this survey are under the direction of Evelyn Lewis, Chief of the Retail Indicators Branch, Census Bureau, (301) 763-2240.

#### **Attachments:**

1. MARTS - Press Releases June 2025
2. Copy of BEA letter of support
3. Initial Mail Letters
4. Monthly Letters
5. Screenshots of Centurion Online
6. MRTS Forms
7. MARTS Forms
8. MRTS Initial E-mail
9. MARTS Initial E-mail
10. MRTS E-mail Reminder
11. MARTS E-mail Reminder