

## SUPPORTING STATEMENT - PART B

### 2007 ECONOMIC CENSUS COVERING THE MANUFACTURING SECTOR

Note: This supporting statement covers the basic 2007 Economic Census for the Manufacturing Sector program, including the product, material, and special inquiry sections of the report form.

#### Collections of Information Employing Statistical Methods

##### 1. Universe and Respondent Selection

The 2007 Economic Census covering the Manufacturing Sector will measure the economic activity for more than 345,000 manufacturing establishments. The information collected is a complete enumeration of manufacturing establishments with one or more paid or leased employee on the U.S. Census Bureau's Business Register. We collect data for the universe of manufacturing establishments. Data are either collected from the establishments or estimated based on administrative information.

The 2002 Economic Census for the manufacturing sector received responses from 78.3 percent of the establishments that were mailed a report form. Since most of the large establishments reported, the coverage rate based on value of shipments was 88 percent. We expect to meet or exceed this response rate for the 2007 census (see Part B.3).

##### 2. Procedures for Collecting Information

###### A. Subsets of the Manufacturing Universe

In addition to the existing Annual Survey of Manufactures mail panel, the 2007 Economic Census covering the manufacturing sector will select establishments for its canvass from a frame given by the U.S. Census Bureau's Business Register. To be eligible for selection, an establishment will be required to satisfy the following conditions: (i) it must be classified in manufacturing sectors 31, 32 or 33; (ii) it must be an active operating establishment of a multi-establishment firm, or it must be a single-establishment manufacturing company with payroll; and (iii) it must be located in one of the 50 states or the District of Columbia. The following subsets of the manufacturing universe will be distinguished:

###### (1) Small Single-Establishment Manufacturing Companies That Will Not Receive an Economic Census Report Form (Administrative Records)

For the 2007 Economic Census covering the Manufacturing Sector, we estimate that approximately 140,000 small single-establishment manufacturing companies will be excused from filing census of manufactures report forms. Selection of these small establishments is done on an industry-by-industry basis and is based on the annual payroll contained in the administrative files of the Internal Revenue Service (IRS) and the Social Security Administration (SSA). The cutoffs are selected so that these

administrative record cases account for no more than three percent of the value of shipments at the industry level. Generally, the cut-off for single-establishment manufacturing companies is between 5 and 20 employees based on type of industry.

This same procedure was used in the 2002 Economic Census. To ensure that the mail-out parameters we develop for the 2007 Economic Census covering the manufacturing sector will set the number of administrative record establishments to approximately 140,000, we will tabulate the Business Register file that is used for mail-out and adjust the parameters if necessary.

Information on the physical location of the establishment, as well as information on payrolls, receipts (shipments), and industry classification, will be obtained from the administrative records of IRS and SSA under special arrangements which safeguard the confidentiality of both tax and census records. Information from the Bureau Labor Statistics on industry classifications will be used to supplement the classification information from IRS and SSA. Estimates for data other than payrolls and value of shipments for these small establishments will be developed from industry averages.

(2) Establishments That Will Receive an Economic Census Report Form

Approximately 205,000 establishments will receive a report form. These establishments are divided into three groups, and each group will receive a different report form. These groups are described below:

(a) ASM Establishments That Receive Form MA-10000

A separate set of instructions will be mailed to the 53,000 ASM establishments to ensure accuracy of their reporting.

These establishments also receive a census part of the report form which will be one of 299 versions containing products, materials, and special inquiries. (See Attachment C for a sample of selected 2007 (draft) and 2002 report forms). A complete set of 2007 and 2002 Economic Census report forms are available at the following URLs:

- For 2002 Economic Census forms

[http://help.econ.census.gov/econhelp/resources/mc-33/SEC\\_MC-33.html#forms](http://help.econ.census.gov/econhelp/resources/mc-33/SEC_MC-33.html#forms).

- For 2007 Economic Census forms

<http://www.census.gov/mcd/clearance/census>.

The diversity of manufacturing activities necessitates the use of these many forms to canvass the approximate 473 manufacturing industries. Each form is developed for a group of related industries. Appearing on each form is a list of products primary to the group of related industries, as well as secondary products and miscellaneous services that establishments classified in these industries are likely to be performing. The report form also contains a materials consumed inquiry which varies from form to form depending on the industries being canvassed. Finally, a wide variety of special inquiries are included to measure or investigate activities peculiar to a given industry, such as operations performed and equipment used.

(b) Large- and Medium-Sized Establishments That Receive the Non-ASM Long Form

Approximately 117,000 establishments are included in this group. A variable cutoff, based on administrative records payroll data and determined on an industry-by-industry basis, is used to select those establishments that are to receive one of the 299 economic census manufacturing sector regular forms. The first page of the manufacturing sector report form, requesting establishment data for items such as employment and payroll, is standard but does not contain all the detailed statistics included on the ASM form. The product, materials, and special inquiry sections are the same as those used for the ASM establishments. Reporting instructions for non-ASM manufacturing plants will be self-contained on the report forms.

(c) Small Single-Establishment Manufacturing Companies That Receive the Non-ASM Short Forms

This group consists of approximately 35,000 establishments. For those industries where application of the variable cutoff for administrative record cases results in a large number of small establishments being included in the mail canvass, an abbreviated or "short" form is used. These establishments will receive 1 of the 29 versions of the short form which requests detailed product information but not details on employment, payroll, cost of materials, inventories, and capital expenditures. A list of the industries that are covered by short forms is provided in Attachment D.

Use of the short form has no adverse effect on published totals for the industry statistics, since the remaining data items not requested on the short form will be developed from industry averages. Detailed information on materials consumed is not collected on the short form; thus, use of the short form increases the publication totals for the "not specified by kind" material categories.

B. Estimation Procedure

(1) Basic Statistics

Census tabulations for basic statistics are simple summations of data from a complete enumeration.

(2) ASM Only Statistics

Census tabulations for purchased services, inventory by accounting method, inventories outside of the United States, and employer's cost for fringe benefits covering health insurance and pension plans are based upon estimates derived from the ASM sample. These estimates are tabulated by summing weighted data, where each certainty establishment (not sampled) has a weight of 1 and each noncertainty establishment (part of a sample) has a weight that is greater than 1. Weights are computed as the universe of the probability of selection; therefore, the summation of weighted data will give estimates for these variables.

C. Required Accuracy

(1) Sampling Error

(a) Basic Statistics

The accuracy of basic statistics from the Economic Census covering the manufacturing sector is not affected by sampling error, since these measures are based on a complete enumeration of the manufacturing establishment universe. A high degree of accuracy and statistical reliability is required, because the census' basic statistics provide benchmarks for the national accounts, the U.S. Census Bureau's current surveys and other surveys conducted by trade groups, businesses, and researchers.

(b) ASM Only Statistics

The accuracy of ASM only statistics is affected by sampling error. Sampling variability occurs because these statistics are based, in part, on estimates from a sample of establishments and not on measurement of the entire universe. Since all eligible manufacturing establishments recorded in the Business Register will have a chance of being selected and since the probability of selection will be known for each establishment, it will be possible to estimate the sampling variability of the estimates from the sample.

(2) Nonsampling Error

The accuracy of all census data is influenced by nonsampling errors, such as those affecting coverage, use of administrative records, questionnaire design, reporting, processing, and tabulation. Although we make no direct measurement of nonsampling errors, we take precautionary steps in all phases of planning, report form development, data collection, processing, and tabulation to minimize their influence.

D. Problems Requiring Specialized Sampling Procedures

There are no known problems that will require specialized sampling procedures for the 2007 Economic Census.

E.. Use of Periodic Data Collection to Reduce Burden

The census uses periodic (five-year) data collection, as required by Title 13, USC, Section 131.

3. Efforts to Maximize Response

This information collection will maximize response through the following means: (i) mailing materials that emphasize the mandatory and confidential nature of census reports, as provided by Title 13, USC; (ii) effective census questionnaires and instructions that try to simplify reporting and minimize response burden; (iii) toll-free assistance for any business that has questions about completing its census report; and (iv) U.S. Census Bureau Internet website containing frequently asked questions; and (v) systematic mail follow-up for nonresponse, supplemented by telephone follow-up for selected firms. We expect to maintain or improve the response rate obtained by the 2002 Economic Census. This level of response will yield accuracy and reliability that are adequate for intended uses of economic census data.

4. Testing of Procedures or Methods

This information collection will use procedures that are based on a considerable body of experience with economic censuses and surveys. Previous economic censuses also have been the subject of evaluation studies that have examined methodology, conceptual issues, and related statistical questions. As a result, the procedures used by the 2007 Economic Census are very well tested.

5. Contacts for Statistical Aspects and Data Collection

Statistical methodology is developed under the direction of :

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Attachments

- A. List of Selected Trade Associations, Manufacturing Companies, and Government Agencies Consulted with Their Comments
- B. Draft Copies of MA-10000, Manufacturing Long and Short Forms for the 2007 Economic Census, and Instruction Manual
- C. Sample of Selected 2007 (draft) and 2002 Report Forms
- D. List of Industries Using Short Report Forms (Non-ASM)