

Response Improvement



UNITED STATES DEPARTMENT OF COMMERCE
Bureau of the Census
Washington, D.C. 20233

NONRESPONSE AT THE CENSUS BUREAU: INDUSTRY DIVISION

By

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NONRESPONSE AT THE CENSUS BUREAU: INDUSTRY DIVISION

INTRODUCTION

At the U.S. Bureau of the Census, a serious issue common to all surveys is the problem of nonresponse. Despite the fact that, in most cases, our surveys are mandatory and a response is required by law, the problem of nonresponse exists and the number of nonrespondents has remained relatively constant or increased over recent years. This presents a serious problem in that the reliability and accuracy of published statistics depends on the success of our efforts to reduce nonresponse rates. Higher response rates require fewer estimations for delinquent establishments and yield more reliable estimates as a whole.

The personnel and time required to carry out response improvement procedures becomes an integral part of our operations to produce reliable reports. Preventive measures are taken to reduce nonresponse before questionnaires are ever sent out. Tabulations are produced at regular intervals, sometimes as often as weekly, in order to have up-to-date information available on our response rates. Follow-up operations are performed on a strictly scheduled basis in order to best solicit response from nonreporters. These efforts notwithstanding, the failure of panel members to respond to Census Bureau questionnaires has been the cause of discontinued collection of certain data items, and in some cases, discontinuation of complete surveys.

There are several reasons consistently cited by nonreporters in explanation of their lack of willingness to respond to Census Bureau survey questionnaires. Obviously, mandatory surveys elicit higher response rates than do voluntary surveys, and a survey being voluntary is one of the major reasons for respondent delinquency. Many establishments are part of companies that have a corporate policy of not responding to voluntary government surveys. Sometimes respondents do not associate with all data items on our questionnaires. Cost is another factor. Establishments cite staff depletion or lack of staff time for their existing workers to fill out the forms properly and in a timely manner. Efforts are being made by establishments in this case to reduce the government paperwork burden for their companies, as information requested on Census Bureau surveys is but a small portion of their total amount of government reporting.

IMPROVING RESPONSE RATES

At the Census Bureau, a wide variety of techniques are used to help prevent nonresponse or to increase response rates. Most of these are used for all or nearly all of our surveys with the main difference being the amount of resources allocated to each survey or the specifics of the technique.

1. Work with respondents and data users--In depth analysis of the need and reportability of data items on each form are performed. Consultations both in and outside the Government help determine the justification for the

collection of data items chosen. Trade associations and respondents advice is sought on the classification of product and material details and the feasibility of reporting special items or modified questions.

2. Questionnaire design--The layout and design of the questionnaires are considered for ease of respondent reporting. Data items are grouped in convenient sequences with brief and clearly-stated instructions for the respondent. In some cases, questionnaires are tailored for a single industry or small group of industries so different forms of the questionnaire exist for the same survey. Another questionnaire design technique is to use short forms that require smaller firms to answer only the most important items.
3. Sample design--Samples are selected such that smaller establishments are rotated out of panels every five years. If more than one subsample is drawn from a primary panel, attempts are made to not include the same smaller firms in more than one subsample.
4. Administrative records--To save the very small firms from having to fill out a survey form, a few data items are taken from tax and social security records. This helps keep response rates higher because the very small firms are poor respondents, and it is not cost effective to use very many resources to get these companies to report.
5. Mandatory authority--The Census Bureau has mandatory authority for all surveys conducted annually or less frequently. Reporting is required for only a few surveys conducted monthly or quarterly. Also, mandatory authority cannot be used for surveys we conduct but which are sponsored by another agency or by a trade association. If a survey is mandatory, that is clearly stated in the instructions and any correspondence. However, many respondents have learned over the years that we do not prosecute nonrespondents as the law allows.
6. Confidentiality of data--All survey forms and any correspondence clearly state that the data being collected can be seen only by sworn Census Bureau agents and used only for statistical purposes. We believe our record of not disclosing the data for any one respondent is very important and guard it carefully.
7. Prior information--A variety of information is provided to respondents either before or at the time the survey is mailed. For some surveys, brochures are mailed explaining the survey and its importance. Early mailings of a copy of the questionnaires are used for selected large companies as well as companies that have reported late in prior years. This makes them aware of any record-keeping practices they need to change as well as any scheduling of staff time needed to complete the questionnaire. Companies are also asked to furnish the name of a primary contact.

8. Due dates for response--Every attempt is made to allow as much time as possible for the response. While due dates are included on the forms, an extension of time is allowed for annual reports and for the once-in-five years census reports. Thus, respondents have as long as 5 or 6 months to complete these reports. This allows respondents to complete their tax reports before having to work on our survey form.
9. Follow-up activities--Measures taken to solicit response from delinquent establishments following mailout are performed on a scheduled basis and are equally as exhaustive as the preventive measures taken prior to mailout. Like the preventive measures, there is a limit to their success. Due dates are specified on all surveys, and establishments not responding within the specified number of days are sent a follow-up letter requesting a reply. This action is repeated twice more at predetermined intervals for annual surveys if a response is still not received. The tone of each letter is slightly stronger with subsequent mailings. Nonrespondent establishments receive different letters depending on their size, with stronger efforts extended toward collecting data from the large companies. The tone of the letters also varies according to the status of the survey. For partial nonrespondents, certain important items being blank on a returned form automatically elicit a follow-up letter that repeats that part of the questionnaire. A telephone follow-up is the last effort made to collect the data. Efforts are again aimed primarily at the larger establishments. Many times, however, telephone follow-ups have minimal success in that few establishments are able to answer questions on economic data over the telephone with no prior notice.
10. Company visits--The Census Bureau staff visits large, chronic nonrespondents to try and get them to become regular reporters. This is an expensive follow-up technique and is only undertaken for companies vital to the reliability of our published statistics.

SURVEY PROGRAMS

There are five major program divisions for the surveys within the Industry Division. They are as follows:

1. The most important survey performed annually within the Industry Division is the annual survey of manufactures (ASM). This survey is performed every year with the exception of years ending in 2 and 7, for which the census of minerals and manufactures is conducted. The aim of the ASM is to provide an annual comprehensive statistical profile of the manufacturing sector. Manufacturing activity is characterized by large-scale operations, and while there are many small manufacturing plants, the larger operations account for the major part of the total output of

goods. The manufacturing industries are defined in terms of specific groups of related products made of similar materials and by similar processes. For every plant with one or more employees, data is obtained either directly from the respondent by questionnaires or indirectly from other Federal Government sources. General statistic data at the plant level is aggregated by industry, area, and employment size of establishment and produced in report form. New probability samples for the ASM are chosen every 5 years using the census of manufactures as a sampling frame.

Response to the ASM is mandatory and required by law. A great amount of effort is used to keep ASM response rates as high as possible. Advance letters announcing the survey are sent, as well as informational brochures describing the purpose of the survey, confidentiality, and how the data will be used (see Attachment A). Response rates for the ASM are calculated as a percent of reported data with value of shipments being the key data item used. The more traditional response rates, percentage of mailed cases returning a form, are also calculated. Recent ASM response rates are shown in Attachment B.

2. The most important survey conducted is the census of manufactures and mineral industries. This is conducted every 5 years and provides the basic data necessary for decision making by the private economy as well as all levels of government. Published census data becomes the foundation of the estimates which will be made by many trade associations and the benchmarks for key Government series such as gross national product (GNP) and industrial production. These reports are the basis on which many Federal policy decisions concerning the business community will be made. The census and the ASM are similar in that they collect much of the same information and are faced with the same types of nonresponse problems. The census, however, collects much greater product and materials data detail.

Response to the Census is mandatory and required by law, but again, much time and effort are expended in keeping response rates as high as possible. A company presidents' letter signed by the Secretary of Commerce is sent to large companies in order to elicit cooperation. Advance informational pamphlets are sent (Attachments C, D, and E), as well as booklets to assist accountants in preparing clients reports, which are mailed in cooperation with accounting professional societies (Attachment F). Early mailings of questionnaires are sent to companies with a history of late reporting in prior years. Response rates are calculated as a percent of reported data, using value of shipments as the key data item. The percentage of mailed cases actually returning a form is also measured. Recent response rates for the census are shown in Attachment B. Scheduled follow-up dates upon which reminder notices were sent to nonrespondents during the 1982 census are shown in Attachment G.

3. The third program of surveys is a set of 105 annual, quarterly, and monthly surveys classified as Current Industrial Reports (CIR). These surveys concentrate on measuring production and/or shipments of products in the durable and nondurable goods areas. These surveys, while important, are smaller in scale than the census and ASM operations and often rely on the data and information acquired from these operations as a frame. The CIRs use both universe and probability samples, but most panels are selected using a cutoff sample. Some monthly surveys have corresponding annual surveys whose panels serve as their sampling frame. For monthly or quarterly surveys not having a corresponding annual survey, an annual counterpart survey is conducted. Since they are annual, response to the counterpart surveys can be required by law, with their main purpose being to collect annual information from monthly and quarterly problem reporters. Of the 105 CIR surveys, 61 are mandatory; of these, 54 are annual surveys, 3 are quarterly, 4 are monthly.

Some of the CIR surveys are sponsored by industry trade associations. For these surveys, staff of the Census Bureau frequently form a close working relationship with trade association members to develop questionnaire content and to elicit response. For the annual surveys, scheduled mail follow-ups are sent, followed by telephone follow-ups if the additional mailings fail to get a response. Due to timing, the follow-up operations for the monthly surveys are done almost exclusively by telephone.

The same procedure could be used to estimate response rates for the CIR surveys as is used for the ASM and census, but this would require the selection of a proxy item to be used as a measure of response for each survey. Since the CIR surveys collect mostly product detail and therefore no single item is reported by all respondents, the use of a proxy variable has not been implemented. Rather, response rates for CIR surveys are calculated using the percentage of mailed cases actually returning a form. The Census Bureau is now seeking additional mandatory authority for three quarterly apparel surveys and for our monthly and quarterly textile surveys because of the increasing import penetration in these industries. A comparison of mandatory and voluntary survey response rates for the 1983 annual and monthly CIRs is shown in Attachment H.

4. The Manufactures' Shipments, Inventories, and Orders (M3) survey is the most important single monthly survey conducted in Industry Division. Responses to this survey are elicited from major divisions of companies rather than from establishments. The M3 is used for monitoring the manufacturing sector of the economy, both at the all manufacturing level and for specific industries. This survey is one of the Federal Government's principal economic indicator surveys in that it provides important economic indicators of changes or expected changes in the level of manufacturing. The data are used by several government agencies in analyzing economic conditions, forecasting future trends, and determining current economic policy, as well as to provide important components of the GNP estimates. They are also widely used by businesses and the academia in production planning and market analysis.

This survey particularly has had problems maintaining reporting levels in recent years. The M3 panel consists basically of any companies willing to report, all of which are panel members of the ASM. This survey has very little representation of medium or small-sized companies and therefore is used to make estimates based essentially on month-to-month changes reported by large companies. A special group of large companies have been categorized as "must" cases. These are cases where one or two reports make up a major portion of an estimate. This survey will not be published until data is reported or estimated for these companies. Follow-up efforts have heightened recently for this survey because of its importance. Intensive telephone follow-ups are conducted every month, and the number of visits to companies by Census Bureau employees to improve response has increased as well. A problem unique to the M3 survey exists in that advance estimates for durable goods are published around the 20th of the following month, causing many respondents to be rushed to get their data together.

Response rates for the M3 survey are calculated based on the percent of reported data with value of shipments as the key data item. For each month, response is measured as a coverage estimate which is the ratio of the reporting companies' value of shipments to that month's universe estimate as estimated from the ASM. Monthly M3 estimates are prepared using the month-to-month percentage changes of the reporting companies to bring forward prior month total estimates. (These level estimates are benchmarked annually to the ASM.) Response rates for total manufacturing industries have traditionally been around 50 percent over recent years, with rates varying within the durable and nondurable goods areas due to differences in divisional reporting by large complex companies. While several attempts have been made to make this survey mandatory, it remains a voluntary survey.

5. The final program of surveys is a set of four surveys designated as the special surveys. These surveys provide measures in several important areas of our Nation's economy: plant capacity utilization, pollution abatement activities, shipments to Federal Government agencies, and industrial research and development. These surveys use probability samples with value of shipments as the key data item. The Census and the ASM panels are used as sampling frames, with new samples being chosen at 5-year intervals. Response to all of these surveys is mandatory and required by law. Follow-up procedures consist of scheduled mailings of reminder notices, followed by telephone follow-ups if the additional mailings fail to get a response. Response rates are calculated using the percentage of mailed cases that return a form. Recent response rates for the special surveys are shown in Attachment I.

DIRECTIONS IN THE FUTURE

While there are many preventive measures and post-mailout operations carried out to reduce nonresponse at the Census Bureau, quantitative studies taken to evaluate the effects of our efforts have been rare. Upon introduction of the shortened

version of the standard questionnaires, a one-year evaluation was done on their effect on response rates. This study yielded no conclusive evidence that the short forms reduced nonresponse, although they did reduce respondent reporting burden. Further research in this vein is planned for the future.

One suggestion to improve response rates as well as to reduce the reporting burden is the use of computer tape or floppy disks by respondents to provide the data we request. For establishments with the facilities having the proper data formats, this concept would save much staff time. Two major difficulties with this approach are the requirements on data formats needed by the Census Bureau for our programs, that is, data in census years are not identical to those in ASM years, and the burden on the company of trying to comply to the different format requirements of different government agencies.

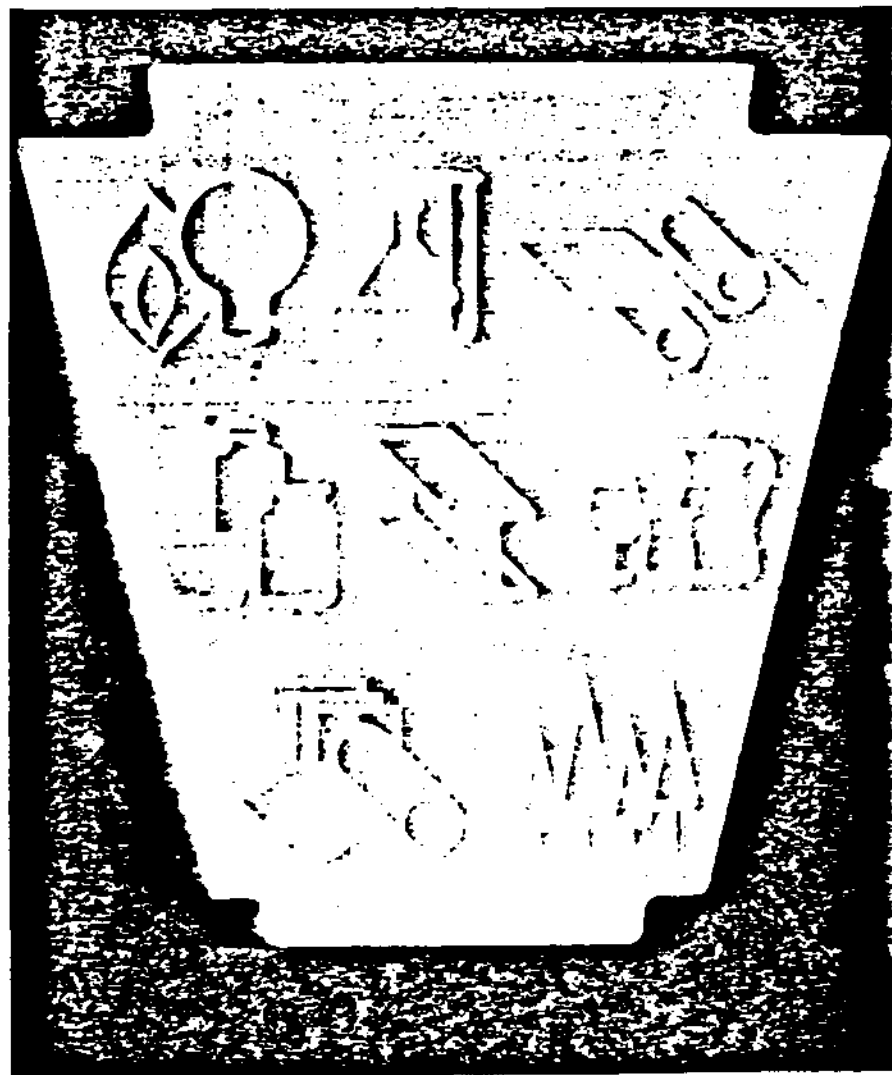
One area presently being considered is the Computer Assisted Telephone Interview (CATI) system, where data are collected by an operator over the telephone and entered as the respondent answers each question. We plan to experiment with this technique to see if it can help improve response rates as well as the timeliness of response.

While a wide variety of procedures have been described here, the Census Bureau is continually working to discover new and more efficient methods of improving response rates. Of the methods described here, while some are more effective than others, they do not cover the entire scope of possible efforts that could be put forth to reduce nonresponse. We at the Census Bureau are looking forward to discussions on successful techniques used in other countries to improve response rates.

Attachments

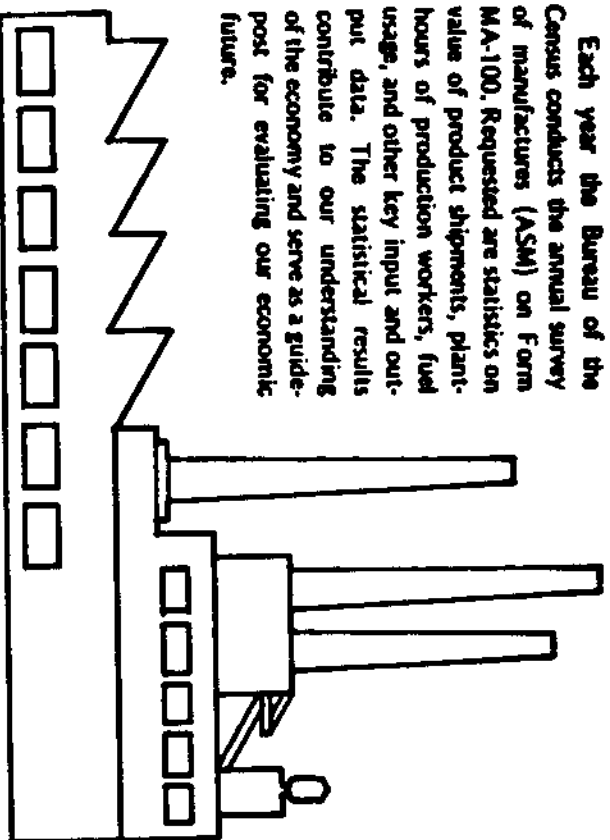
MANUFACTURES

Keystone of Our Economy



U.S. Department of Commerce
BUREAU OF THE CENSUS

Each year the Bureau of the Census conducts the annual survey of manufacturers (ASM) on Form MA-100. Requested are statistics on value of product shipments, plant-hours of production workers, fuel usage, and other key input and output data. The statistical results contribute to our understanding of the economy and serve as a guidepost for evaluating our economic future.



Why Collect Data on the Manufacturing Sector?

Accounting for some 25 percent of our Nation's output, manufacturing remains the largest sector of the United States economy. Historically, it moved our country forward from an agricultural economy to its current industrial magnitude.

Today, manufacturing employs about 20 percent of our labor force and its impact is felt throughout

the economy. Manufacturers are also major purchasers of the goods produced by our mining and farming communities. As substantial consumers of both electrical energy and fuels, manufacturers also play a crucial part in the energy crisis faced today.

If significant changes in these economic influences are to be detected, it is important that detailed information about the structure of the manufacturing sector be obtained periodically.

Can I Benefit from the Data Collected?

Manufacturers, financial institutions, universities, research groups, and others use economic statistics in market analysis, forecasting business trends, and studying trends in local areas. For example, the survey results are used in studying changes in the geographic distribution of industry, company sizes, productivity, capital expenditures, etc.

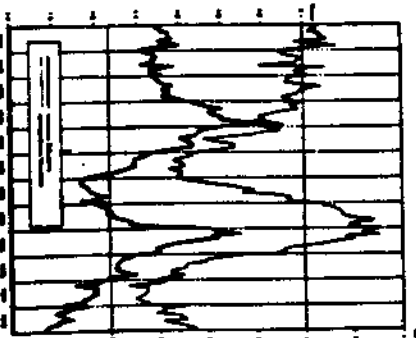


The data compiled in the annual survey of manufactures also provide key measures of our economy and are used extensively as input into broad indicators of economic activity such as the Gross National Product (GNP) and the Index of Industrial Production. The statistics compiled also help to provide the basis for actions by those concerned with monitoring various economic programs, such as the Council

of Economic Advisers and the Federal Reserve Board.

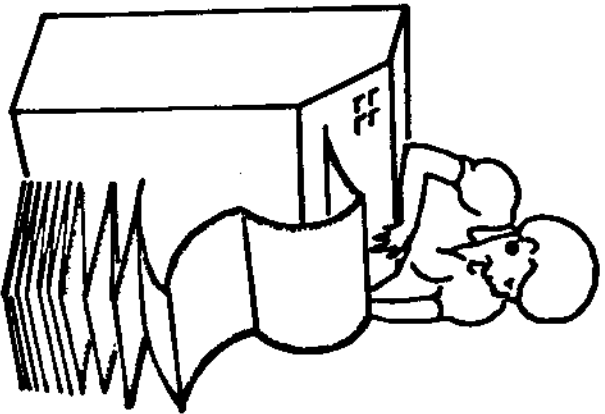
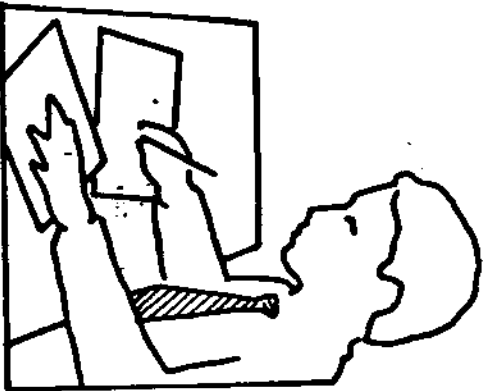
The individual businessperson might well find in the ASM data the answers to questions of concern to him or her, such as:

- How does my business compare with the average?
- What is my share of the market?
- How has it changed since last year?
- Where should I locate a new plant or warehouse?
- Am I manufacturing the right goods?
- How can I estimate my production requirements?
- Is business in my geographical area growing or declining?



What About the Burden of Paperwork?

The forms are reviewed by the Office of Management and Budget (OMB), with the assistance of the Business Advisory Council on Federal Reports to assure the need and continued reportability for each item. The reports are approved by OMB only after they have also determined that the information requested does not duplicate data available elsewhere and is available in the records of most business firms.



In recognition of the paperwork burden faced by the individual businessperson, the following steps have been taken:

- Short forms are sent to selected small manufacturers (reduced number of questions)
- The survey sample is changed every 5 years, thereby reducing the burden on smaller individual companies.
- As the survey is a probability sample, only 1 in 7 manufacturers are asked to report.

Will My Small Business Really Contribute Anything Significant to the Results?

YES. As your report represents the activity of many other small businesses, we need your report to provide a picture of small business activity.

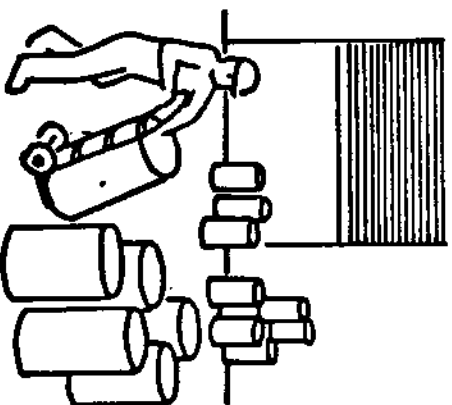
Despite the review procedure mentioned above, we find that some firms do not maintain records in the way the ASM form requests the data. The Bureau of the Census does not expect small business to keep special records just to complete census forms; therefore, the reporting instructions recommend the use of estimates. Most managers of small businesses find that they can prepare estimates that are reliable enough for use in statistical summaries.

In What Form are the Census Results Made Available?

The results will be released as computer tapes, microfiche, and

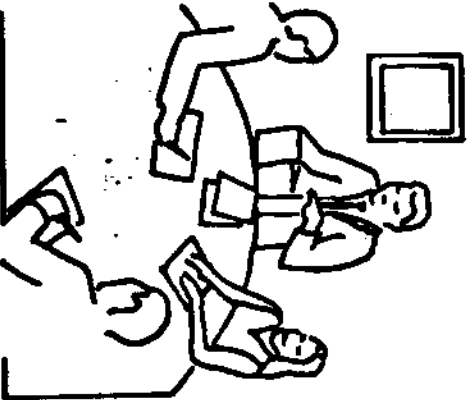
printed reports. The results are generally made available within 12 months of the survey year. The tabulations provided are by geographic areas, industries, the United States as a whole, and by States, counties, metropolitan areas, and cities.

The tabulations will include statistics on various products, materials, energy consumed, inventories, assets and capital expenditures in manufacturing. In addition, there will be a report on industry operating ratios such as output per hour.



Where Can I Get Census Publications?

Publications from the Annual Survey of Manufacturers will be sold through the Subscriber Services Section, Bureau of the Census, Washington, D.C., 20233. Respondents to the survey questionnaire are entitled to free copies of the publications. They will also be available through U.S. Department of Commerce District Offices which are located in major cities throughout the United States and Census Bureau's regional offices. Reports are also kept for research and reference at university, college, and large public libraries.



REQUESTS FOR DATA ON:

Computer tape—Data User Services

Division

Microfilm—Subscriber Services

Section

SEND REQUEST TO:

Bureau of the Census,

Washington, D.C. 20233

QUESTIONS REGARDING FORM,

INSTRUCTIONS, ETC.:

If you need any additional assistance or have any questions, please write to the above address or call our Industry Division in Washington, D.C., telephone number (301) 763-2510 or (301) 763-7304.

Notice of Data User Services

A Data User Program has been established in each of our regional offices to provide you with information about Census Data that may be of use in your business or profession. Listed opposite are the names of Census representatives whom you may contact if you would like to use this service. In addition, the Department of Commerce has offices in most major cities across the country. The staff in these offices can provide similar assistance.

Census Representatives

Bureau of the Census Regional Offices

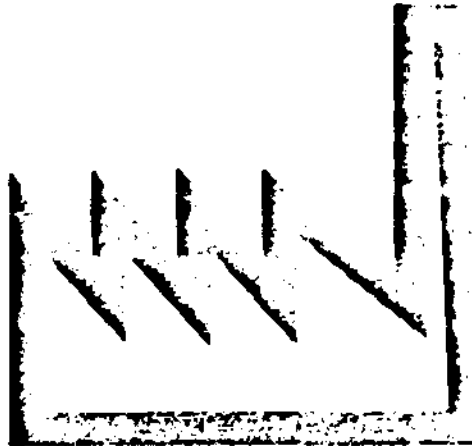
| | |
|---|--|
| Wyrne Wall (Atlanta) 404/881-2279 | 1365 Peachtree Street, N.E., Rm. 625 Atlanta, Georgia 30309 |
| Judith Cohen (Boston) 617/223-0668 | 441 Stuart Street, 10th Floor Boston, Massachusetts 02116 |
| Larry McNurt (Charlotte) 704/371-6142 | 230 South Tryon St., Suite 800 Charlotte, North Carolina 28202 |
| Stephen Laue (Chicago) 312/353-0980 | C.N.A. Building, Suite 1304 55 East Jackson Boulevard Chicago, Illinois 60604 |
| Valerie McFarland (Dallas) 214/767-0625 | 1100 Commerce Street, Rm. 3C54 Dallas, Texas 75242 |
| Jerry O'Donnell (Denver) 303/234-5825 | 575 Union Boulevard P.O. Box 25207 Denver, Colorado 80225 |
| Timothy Jones (Detroit) 313/226-7742 | Old Fed. Bldg. & U.S. Courthouse 231 West Lafayette St., Rm. 565 Detroit, Michigan 48226 |
| Kenneth Wright (Kansas City) 816/374-4601 | 1 Gateway Center 4th and State Streets Kansas City, Kansas 66101 |
| E.J. (Bud) Steinfield (Los Angeles) 213/824-7596 | 11777 San Vicente Blvd., Rm. 810 Los Angeles, California 90049 |
| Jeffery Hall (New York) 212/264-4730 | Federal Office Bldg., Rm. 37-130 26 Federal Plaza New York, New York 10007 |
| Dave Lewis (Philadelphia) 215/597-8314 | William J. Green Jr. Federal Bldg. Room 9244 600 Arch Street Philadelphia, Pennsylvania 19106 |
| Larry Harke (Seattle) 206/442-7800 | 915 Second Ave., Rm. 312 Seattle, Washington 98174 |

Annual Survey of Manufactures Response Rates;
Census Response Rates

| | <u>Percent of Mailed Panel Received*</u> | <u>Percent of Total Value of Shipments</u> |
|-------------|--|--|
| 1976 ASM | N/A | 95.3 |
| 1977 Census | 80.2 | 94.9 |
| 1978 ASM | 82.3 | 91.7 |
| 1979 ASM | 84.3 | 94.0 |
| 1980 ASM | 84.5 | 93.5 |
| 1981 ASM | 86.4 | 96.0 |
| 1982 Census | 82.8 | 94.5 |
| 1983 ASM | 84.8 | 94.6 |

*ASM figures shown are at the time of survey closeout. Report forms received after closeout increased the final response rates to over 90 percent.

What Is the Census of Manufactures?



EC-B-5

What is the Census of Manufactures?

It is the collection and publication of basic facts about manufacturers in the United States. These facts provide a picture of this segment of the economy as well as contribute to an overall view of the Nation's economic well-being.

The Census of Manufactures is taken once every 5 years. It is the only source of information that includes all establishments producing manufactured goods in the United States. Facts about manufacturers are published for over 5,000 geographic areas, and over 13,000 different types of products.

This census is being taken in 1983 covering all operations during 1982.

Why is it important?

Often, the source of information upon which important decisions are based is not apparent, but virtually every recognized economic series on the manufacturing industry uses census data.

Many organizations rely on the facts published in the census in advising the business community and in making policy decisions. Some of these are . . .

local chambers of commerce
trade associations
wholesalers
market research firms
Federal, State, and local governments

Information about what is happening in manufacturing is published for:

- Employment, payroll, and receipts by variable levels of industry classification, and by size of establishment.
- Quantities and value of products shipped and selected materials purchased.
- City, county, State, metropolitan area, and national measures for analysis of market structure change, trends, and market potential.

Where do I fit in?

If you are in the manufacturing industry, your firm is being asked to fill out this census form.

Filing your firm's report by the February 15, 1983, due date will help keep costs down and prevent unnecessary reminders being sent to you. If the report cannot be completed by this date, please request an extension of time by writing:

Bureau of the Census
1201 East Tenth Street
Jeffersonville, IN 47134

Please include your Census File Number (CFN) in any correspondence with the Census Bureau. Your Census File Number is shown on the address label on the report form.

Please do not hesitate to contact the Census Bureau if you have any questions concerning your census report.

Are estimates acceptable?

Yes. You may estimate the numbers where the questions asked are in a different format than your firm's records.

How were the questions derived?

The report form you have received is the result of extensive consultation with . . .

- business, trade, and professional associations representing every type of manufacturing activity
- individual business firms which supply and use the data
- local, State, and Federal agencies

A review of proposed questions was made by the Business Advisory Council on Federal Reports, which is made up of representatives from each major field of business. Proposed questions were supplied to the Congress for their review.

Final approval was obtained from the Office of Management and Budget, which is responsible for ensuring that the data requested were not available from other Federal sources.



Is it mandatory? Is it confidential?



Your response to this census is required by law (title 13, United States Code). This same law guarantees that the information furnished is kept confidential.

Your firm's report is used solely for developing summary statistics and cannot be used for purposes of taxation, investigation, or regulation.

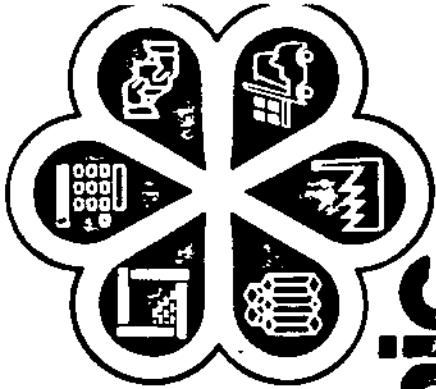
When and where can I get copies of the results of the Census?

Results will begin to be published in the fall of 1983. Over 1,200 reports covering this and other 1982 censuses will be sold through the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. They can also be reviewed and ordered in any of the Department of Commerce District Offices or the Census Bureau's regional offices which are located in major cities throughout the United States.

Publications are kept for research and reference at university, college, and large public libraries.



EC-31 (9-82)



**A Preview
of the
1982
Economic
Censuses**

Census of Manufactures

Census of Mineral
Industries

Census of Construction
Industries

Census of Retail Trade

Census of Wholesale Trade

Census of Service
Industries

Special Census Programs:

Enterprise Statistics

Transportation Surveys

Minority-Owned Business
Enterprises

Women-Owned Businesses

Census of Outlying Areas

U.S. Department of Commerce
BUREAU OF THE CENSUS

This booklet provides a preview of the 1982 Economic Censuses, which will be conducted early in 1983 covering economic activities for 1982. It briefly describes their background, uses and legal authority; gives a brief description of their scope and the data which will be made available; summarizes major changes from the 1977 censuses; and provides a preliminary indication of the approximate schedule for release of the census results.

HISTORY AND BACKGROUND

The economic censuses constitute comprehensive and periodic canvasses of the Nation's industrial and business activities. The first economic census of the United States was conducted as part of the 1810 decennial census, when inquiries on manufacturing were included with the census of population. Minerals data were first collected in 1840; the first censuses of construction, and retail and wholesale trades were taken in 1929; and service industries were first included in 1933. An integrated program of economic censuses was begun for 1954. In that year, the censuses covered retail and wholesale trades, selected service industries, manufactures, and mineral industries. Transportation was first included with the 1963 census; the construction industries were added for 1967; the minority-owned businesses program, in 1972; and women-owned businesses in 1977.

In planning the 1982 Economic Censuses, the Census Bureau consulted with trade, business, and professional associations; individual business firms; unions; census advisory committees; government agencies; and others regarding

questions to be asked and desired formats for publishing results. The Business Advisory Council on Federal Reports, comprised of representatives of each major field of business activity, reviewed the proposed questions; and the Census Bureau closely screened the questions to eliminate any not clearly in the public interest.

LEGAL AUTHORITY AND CONFIDENTIALITY

The economic censuses are required by law under title 13 of the United States Code, sections 131, 191, and 224, which requires that they be taken at 5-year intervals covering years ending in "2" and "7." The Census law imposes a joint obligation on firms to respond and on the Census Bureau to maintain the confidentiality of information reported to it. The law also specifies penalties for noncompliance and for disclosure of information by the Census Bureau. No data are published that could reveal the identity or activities of any specific individual or firm. Individual census questionnaires cannot be used for the purposes of taxation, investigation, or regulation. The law also affords the full protection of confidentiality to the file copy of a census questionnaire that is retained by the respondent.

PURPOSES AND USES

The economic censuses are a major source of facts about the structure and functioning of the Nation's economy and provide essential information for government, business, industry, and the general public.

FOR THE GOVERNMENT

- They provide an important part of the framework for such composite measures as the gross national product, input-output measures, indexes of industrial production, and indexes measuring productivity and price levels.
- Information taken from the censuses is used to establish sampling frames and as benchmarks for current surveys of business activity, which are essential for measuring short-term economic conditions.
- State and local governments use census data to assess business activities occurring within their jurisdictions.

IN THE PRIVATE SECTOR

- Companies use the data to forecast general economic conditions and sales; analyze sales performance; lay out sales territories; allocate funds for advertising; decide on locations for new plants, warehouses, or stores; and measure potential markets in terms of size, geographic areas, kinds of business, and kinds of products.
- Trade and professional associations use the information to study trends which may affect their industry.
- Business magazines use census statistics to provide technical background for articles.
- University and college professors apply census data in their teaching and research.

SCOPE AND CONTENT

Except for the major differences cited on page 7, the scope of the 1982 Economic Censuses is substantially similar to that of the 1977 Censuses. Tables 1 and 2 summarize the economic areas covered, which include over 7 million establishments, and the content of each census.

CLASSIFICATION SYSTEM

Statistics for the economic censuses are collected and summarized for publication primarily in terms of the "establishment." An establishment, as defined for census purposes, is a business or industrial unit at a single geographic location which produces or distributes goods, or performs services. When more than one economic activity is conducted at a single location, each activity is treated as a separate establishment if separate records are available and if the size of the individual activities is significant.

Except for portions of the census of transportation, data for the economic censuses are tabulated on the basis of the Standard Industrial Classification (SIC) system, defined under the auspices of the Office of Management and Budget. The SIC system is used in the classification of establishments by the type of activities in which they are engaged. The SIC divides the Nation's economic activities into broad industrial divisions (such as manufacturing and retail trade), 2-digit major groups, 3-digit industry subgroups, and 4-digit detailed industries.

In some instances, more detailed classification has been devised for census purposes so that additional industries, kinds of business, or specific products can be identified within the SIC categories. In addition, the Census Bureau has developed a system of classifying manufactured products into approximately 1,600 5-digit product classes and about 13,500 7-digit products consistent with the SIC system.

Together with the complementary 1982 Census of Agriculture, which will be conducted concurrently, the censuses will cover over 800 of the approximately 1,000 industries within the SIC system.

Table 1
SIC COVERAGE IN THE 1982 ECONOMIC CENSUSES

| Economic Areas | SIC Range | 1982 Economic Censuses |
|---|--------------------|--|
| Agriculture, forestry, fishing, hunting, and trapping | 01, 02, 07, 08, 09 | Not covered; parts included in the Census of Agriculture |
| Mining | 10 thru 14 | Census of Mineral Industries |
| Construction | 16 thru 17 | Census of Construction Industries |
| Manufacturing | 20 thru 39 | Census of Manufactures |
| Transportation, communication utilities | 40 thru 49 | Not covered except for special transportation surveys, and 422 and 4722 which are included in the Census of Service Industries |
| Wholesale trade | 50 thru 51 | Census of Wholesale Trade |
| Retail trade | 52 thru 59 | Census of Retail Trade |
| Finance, insurance, and real estate | 60 thru 67 | Not covered except for 6552, which is in the Census of Construction Industries |
| Services | 70 thru 89 | Census of Service Industries excludes 806, 821, 822, 863, 865, 866, and 88 |
| Public administration | 91 thru 97 | Not covered; parts included in the 1982 Census of Governments |
| Nonclassifiable | 99 | Not covered |

GEOGRAPHIC AREAS AVAILABLE

In general, the most detailed data will be published at the National level. In addition to National data, most statistics will be available for states, and many will be shown for cities and other places, counties, and standard metropolitan statistical areas. The level of geographic detail will vary by census, with fewer statistics appearing for smaller areas in order to avoid disclosing information for individual firms and to reduce overall publishing costs. The maximum detail, including data for major retail centers, will be available from

the census of retail trade, which covers almost 2 million establishments. Data for selected small areas not included in the printed reports will be available on microfiche.

INFORMATION THAT WILL BE PROVIDED

Data items from the component censuses and special surveys will vary significantly with the characteristics of the industries. However a number of key measures, such as sales (receipts or value of shipments), employment, and payroll, are almost universal.

Table 2
THE BASIC CENSUSES

| Major data items | NUMBER OF ESTABLISHMENTS AND FIRMS | | | | | |
|--|------------------------------------|-----------------|--------------------|-------------------------|--------------|--------------------|
| | Retail trade | Wholesale trade | Service industries | Construction industries | Manufactures | Mineral industries |
| All establishments | X | X | X | X | X | X |
| Establishments with payroll | X | X | X | X | X | X |
| Establishments by legal form of organization | X | X | X | X | X | X |
| Firms | X | X | X | X | X | X |
| Single-unit and multi-unit firms | X | X | X | X | X | X |
| Concentration by major firms | X | X | X | X | X | X |
| EMPLOYMENT | | | | | | |
| All employees | X | X | X | X | X | X |
| Production (construction) workers | X | X | X | X | X | X |
| Employment size of establishments | X | X | X | X | X | X |
| Employment size of firms | X | X | X | X | X | X |
| Production (construction) worker hours | X | X | X | X | X | X |
| PAYROLLS | | | | | | |
| All employees, entire year | X | X | X | X | X | X |
| All employees, first quarter | X | X | X | X | X | X |
| Production (construction) workers | X | X | X | X | X | X |
| Supplemental labor costs, legally required and voluntary | X | X | X | X | X | X |

Table 2 - Continued
THE BASIC CENSUSES

| Major data items | SALES RECEIPTS, OR VALUE OF SHIPMENTS | | | | | |
|---|---------------------------------------|-----------------------------|--------------------|----------------------|---------------------------|-----------------|
| | All establishments | Establishments with payroll | By product or line | By class of customer | By size of establishments | By size of firm |
| OPERATING EXPENSES | X | X | X | X | X | X |
| Cost of materials, etc. | X | X | X | X | X | X |
| Specific materials consumed (quantity and cost) | X | X | X | X | X | X |
| Cost of fuels | X | X | X | X | X | X |
| Electric energy consumed (quantity and cost) | X | X | X | X | X | X |
| Contract work | X | X | X | X | X | X |
| Products bought and sold | X | X | X | X | X | X |
| Advertising | X | X | X | X | X | X |
| Rental payments, total | X | X | X | X | X | X |
| Buildings and structures | X | X | X | X | X | X |
| Machinery and equipment | X | X | X | X | X | X |
| Communication services | X | X | X | X | X | X |
| Purchased repairs | X | X | X | X | X | X |
| CAPITAL EXPENDITURES | X | X | X | X | X | X |
| Total | X | X | X | X | X | X |
| New, total | X | X | X | X | X | X |
| Buildings/equipment | X | X | X | X | X | X |
| Used, total | X | X | X | X | X | X |
| Buildings/equipment | X | X | X | X | X | X |
| DEPRECIABLE ASSETS, GROSS VALUE | X | X | X | X | X | X |
| BUILDINGS/EQUIPMENT | X | X | X | X | X | X |
| Beginning of 1982 | X | X | X | X | X | X |
| End of 1982 | X | X | X | X | X | X |
| Depreciation (total and detail for buildings/equipment) | X | X | X | X | X | X |
| Retirements (total and detail for buildings/equipment) | X | X | X | X | X | X |
| INVENTORIES | X | X | X | X | X | X |
| Beginning of 1982 | X | X | X | X | X | X |
| End of 1982 | X | X | X | X | X | X |
| By stage of fabrication | X | X | X | X | X | X |
| OTHER | X | X | X | X | X | X |
| Value added | X | X | X | X | X | X |
| Specialization by type of construction/manufacturing | X | X | X | X | X | X |
| Type of operation | X | X | X | X | X | X |
| Floor space | X | X | X | X | X | X |
| Central administrative offices and auxiliaries | X | X | X | X | X | X |
| Water use | X | X | X | X | X | X |

SPECIAL CENSUS PROGRAMS

ENTERPRISE STATISTICS

A program in which the establishment data records from the basic censuses are regrouped under common ownership or control in order to show various economic characteristics of the owning or controlling firms. Data on separately reported auxiliary establishments of multiunit firms covered in the basic censuses are also included.

TRANSPORTATION SURVEYS

• Truck Inventory and Use Survey -

Information on the physical characteristics and operational use of the Nation's more than 32 million private and commercial trucks.

• Commodity Transportation Survey -

Statistics on the volume and characteristics of commodity shipments originated by manufacturers.

SURVEY OF MINORITY-OWNED BUSINESS ENTERPRISES

Basic statistics including information on sales, employment, payroll, and legal form of organization, by industry and geographic area on businesses owned by Blacks, persons of Spanish origin, Asian Americans, American Indians, and other minorities.

SURVEY OF WOMEN-OWNED BUSINESSES

Basic statistics including information on sales, employment, payroll, and legal form of organization, by industry and geographic area on businesses owned by women.

CENSUS OF OUTLYING AREAS

- Puerto Rico
- Virgin Islands
- Guam
- Northern Mariana Islands

Statistics on retail and wholesale trade, selected service industries, manufactures, construction (but not mineral industries) similar to those provided for the United States in the basic censuses.

WHAT'S DIFFERENT FOR 1982?

While the censuses will be substantially similar to those for 1977, a number of changes are being made to the publication program and coverage to reflect the most important needs of data users, improvements in data processing techniques, and budgetary resources.

PUBLICATION DIFFERENCES

• Preliminary Industry Reports will be issued from the censuses of retail trade, wholesale trade, and service industries. In 1977 industry statistics were available only in reports for specific geographic areas or in subject reports for selected industries.

• Earlier Release of Census Results - Improvements in data processing techniques, more extensive use of forms specialized by industry, and short forms for small firms will permit publication of census results from 2 to 6 months earlier than for the 1977 censuses.

COVERAGE DIFFERENCES

- The Census of Service Industries will not include hospitals, elementary and secondary schools, colleges and universities, labor unions, and political organizations.
- The National Travel Survey, part of the 1977 Census of Transportation, will not be conducted for 1982.
- The Commodity Transportation Survey will be conducted one year later than the basic censuses.

PUBLICATIONS

- Printed Reports
- Microfiche
- Computer Tapes

The results of the 1982 Economic Censuses will be released in printed reports, on microfiche, and on computer tapes. Printed reports for the individual economic censuses usually consist of separate series for industries, geographic areas, subjects, and special reports. For some of these series, preliminary reports are issued several months prior to the final reports. After the

final separate soft cover reports have been published, they are usually combined, assembled, and reissued in hard cover volumes. In many instances, these volumes may contain additional explanatory material and graphics not published previously in the individual reports. Under present plans, the published material will also be made available on microfiche. Most of these same summary statistics will be available on public-use computer tapes. In addition, a number of unpublished data series, which provide more detail than the printed reports, are made available on both microfiche and public-use computer tapes.

**Table 3
PRELIMINARY PUBLICATION SCHEDULE**

| Series | Estimated time of first publication in series | | | | | |
|-------------------------------------|---|-----------|------------|----------|-----------|------|
| | Early 1983 | Late 1983 | Early 1984 | Mid 1984 | Late 1984 | 1985 |
| RETAIL TRADE | | | | | | |
| Preliminary Industry | | X | | | | |
| Geographic Area | | X | | | | |
| Major Retail Centers | | | X | | | |
| Subject | | | | X | | |
| Merchandise Line Sales | | | | | X | |
| SERVICE INDUSTRIES | | | | | | |
| Preliminary Industry | | X | | | | |
| Geographic Area | | X | | | X | |
| Subject | | | | | | |
| WHOLESALE TRADE | | | | | | |
| Preliminary Industry | | X | | | | |
| Geographic Area | | X | | | | |
| Subject | | | | X | | |
| Commodity Line Sales | | | | | X | |
| CONSTRUCTION INDUSTRIES | | | | | | |
| Preliminary Industry | | X | | | | |
| Preliminary Summary | | X | | | | |
| Final Industry | | | X | | | |
| Geographic Area | | | | X | | |
| Special | | | | | X | |
| MANUFACTURES | | | | | | |
| Preliminary Industry | | X | | | | |
| Preliminary Geographic Area | | X | | | | |
| Preliminary Summary | | | X | | | |
| Final Industry | | | | X | | |
| Final Geographic Area | | | | | X | |
| Subject | | | | | X | |
| MINERAL INDUSTRIES | | | | | | |
| Preliminary Industry | | X | | | | |
| Preliminary Summary | | X | | | | |
| Final Industry | | | X | | | |
| Geographic Area | | | | X | | |
| Subject | | | | | X | |
| SPECIAL CENSUS PROGRAMS | | | | | | |
| Enterprise Statistics | | X | | | | X |
| Truck Inventory and Use | | | | | | X |
| Commodity Transportation Survey | | | | | | X |
| Commodity Transportation Survey | | | | | | X |
| Geographic Area Reports | | | | | | X |
| Outlying Areas | | X | | | | X |
| Minority-Owned Business Enterprises | | | | | | X |
| Women-Owned Businesses | | | | | | X |

MORE INFORMATION ON THE CENSUSES

There are a number of sources which will provide more detailed information about the content of the censuses and inform users of the availability of census results and how to obtain published reports and other data products.

• Mini-Guide to the 1982

Economic Censuses —

This publication, scheduled for release in the summer of 1983, will provide more detailed information on the scope, coverage, classification system, data items, and publications available for each of the economic censuses and related surveys and special reports. A similar mini-guide to the 1977 Economic Censuses is currently available.

• Data User News —

A monthly publication reporting plans for upcoming censuses and their data products, announcing conferences and workshops, describing major new data releases and reference materials, and providing answers to user questions. (\$20 per year from the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.)

• Monthly Product

Announcement — A monthly listing of the hundreds of new products — publications, microfiche, and computer tapes — made available during the previous month. Entries include GPO, stock or catalog numbers, Census notations, file order numbers, and prices. Each announcement also includes order forms. (Free)

TO OBTAIN INFORMATION

Additional information is available from the Bureau of the Census, Washington, D.C. 20233.

• For general information about the censuses or the informational publications described, contact

Data Users Services
(301) 763-4100

• For detailed information about the contents or publications from specific censuses or programs, contact

- Business Division
- Retail Trade
(301) 763-7038
- Wholesale Trade
(301) 763-5281
- Service Industries
(301) 763-7039
- Industry Division
- Manufactures
(301) 763-7304
- Durable Goods Industries
(301) 763-7304
- Nondurable Goods Industries
(301) 763-2510
- Mineral Industries
(301) 763-5938
- Construction Statistics Division
(301) 763-5435
- Economic Surveys Division
- Transportation
(301) 763-1804
- Enterprise Statistics
(301) 763-7085
- Outlying Areas
(301) 763-7778
- Minority-Owned Business Enterprises
(301) 763-7085
- Women-Owned Businesses
(301) 763-7085

In addition, the Bureau has regional offices in the following large cities. The Information Services Specialists in these offices are of particular help in answering questions concerning the uses of census data.

Atlanta, GA 30309
1365 Peachtree Street,
NE., Room 625 (404) 881-2271

Boston, MA 02116
441 Stuart Street,
10th Floor
(617) 223-2327

Charlotte, NC 28202
230 South Tryon Street,
Suite 800
(704) 371-6142

Chicago, IL 60604
55 East Jackson Blvd.,
Suite 1304
(312) 353-6251

Dallas, TX 75242
1100 Commerce Street,
Room 3C54
(214) 767-0621

Denver, CO 80226
575 Union Blvd.,
P.O. Box 25207
(303) 234-3924

Detroit, MI 48226
Federal Building &
U.S. Courthouse,
Room 565,
231 West Lafayette
(313) 225-7742

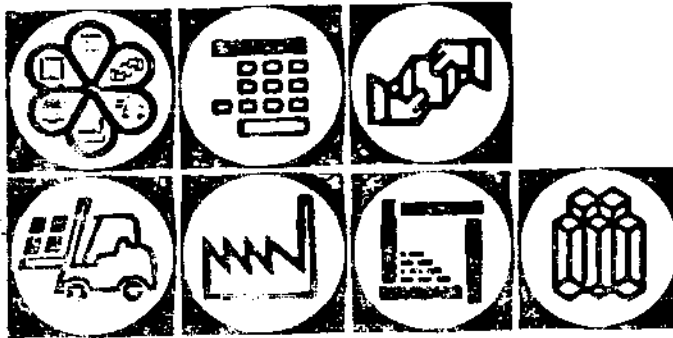
Kansas City, KS 66101
One Gateway Center
4th and State Streets
(816) 374-4601

Los Angeles, CA 90049
11777 San Vicente Blvd.,
Room 810
(213) 824-7317

New York, NY 10278
Federal Office Building,
Room 37-130,
26 Federal Plaza
(212) 264-3860

Philadelphia, PA 19106
William J. Green, Jr.,
Federal Bldg.,
600 Arch Street,
Room 9244
(215) 597-4920

Seattle, WA 98109
Lake Union Building,
1700 Westlake Avenue,
North (206) 442-7800



1982 Economic Censuses

Advance
Information to
Assist Your
Company in
Preparing for
These Censuses

U.S. Department of Commerce
BUREAU OF CENSUS

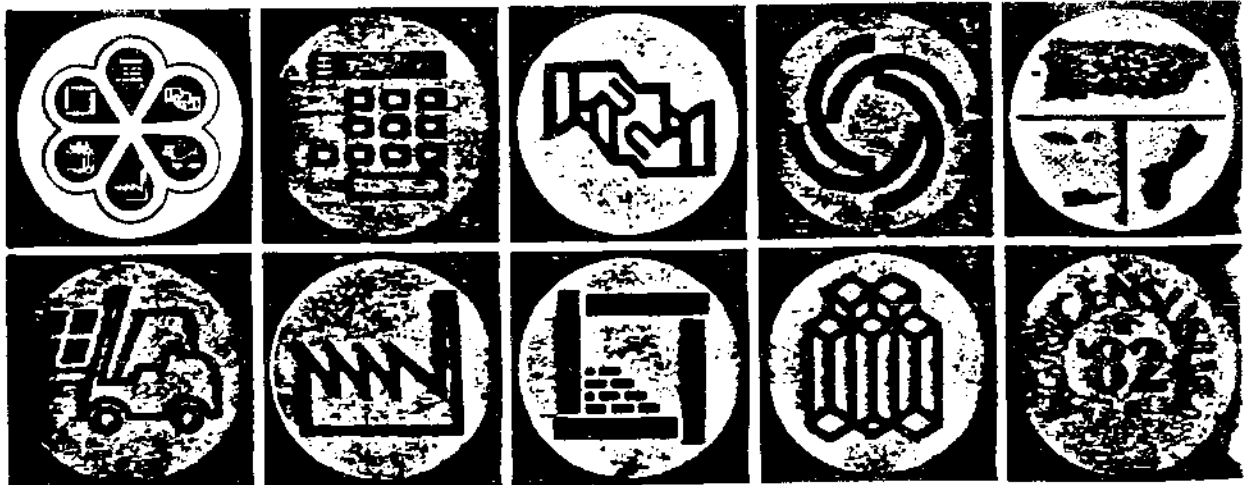
Use information to Your advantage in planning for Economic Censuses

| | |
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| OVERVIEW OF THE 1982 ECONOMIC CENSUSES | |
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1982 Censuses

EC-26

Information to Assist Accountants in Preparing for the 1982 Economic and Agriculture Censuses



... census report forms will be mailed to respondents at the ... forms are developed so that business firms can complete these question- ... ing estimates. If necessary -- we know that many of your clients will ask you ... define their census forms. Many accountants will also receive census forms ...

... the National Society of Public Accountants (NSPA) and the American ... (AICPA), the ... Bureau has prepared this booklet to ... have asked questions about the censuses and how the ... completed.

The three most frequent questions are --

- 1. Why is the filing date -- this conflicts with tax filing?
- 2. Why must the report have to cover the calendar year?
- 3. Why are there so many non-financial questions?

This booklet suggests ways to deal with the problems that generate these questions.

We also know that you will save a lot of time you have to spend on completing these questionnaires. We have provided a table of contents to help you find the appropriate sections.

We would like to thank you for your work over the years in completing census report forms. Your conscientious efforts have reduced the problems we face in processing the completed reports. Your cooperation has been invaluable in developing the statistical measures of the changes occurring in the economy. We also thank the NSPA and the AICPA for their effort in helping us simplify the report forms and we prepare this booklet in order to reduce the paperwork burden of these censuses.

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1982 ECONOMIC CENSUSE - FOLLOWUP DATES

| <u>COUNTY</u> | <u>MONTH</u> | <u>YEAR</u> | <u>APPROXIMATE QUANTITY</u> |
|---------------|--------------|-------------|-----------------------------|
| | December | | 3,000,000 |
| Alameda | February | 1983 | 1,300,000 |
| Alameda | March | | 200,000 |
| Alameda | March/April | 1983 | 700,000 |
| Alameda | April/May | 1983 | 115,000 |
| Alameda | April/May | 1983 | 450,000 |
| Alameda | May | 1983 | 382,000 |
| Alameda | June | 1983 | 12,000 |

Report prepared as February 15, 1983

1983 ANNUAL CIR RESPONSE RATES (Percent)

| | <u>MANDATORY</u> | <u>VOLUNTARY</u> |
|------------------|------------------|------------------|
| AT 1st FOLLOW-UP | 23.2 | 14.2 |
| AT 2nd FOLLOW-UP | 55.0 | 33.5 |
| AT 3rd FOLLOW-UP | 73.1 | 44.9 |
| FINAL | 92.3 | 58.9 |
| # SURVEYS | 54 | 9 |
| ACTIVE ESTIMES | 30,290 | 3,262 |

1983 MONTHLY CIR RESPONSE RATES (Percent)

| | <u>MANDATORY</u> | <u>VOLUNTARY</u> |
|--------------------|------------------|------------------|
| PRIOR TO FOLLOW-UP | 36.8 | 52.8 |
| FINAL | 92.3 | 80.8 |
| # SURVEYS | 3 | 23 |

1983 QUARTERLY CIR RESPONSE RATES (Percent)

(ALL ARE VOLUNTARY)

| | <u>AVERAGE</u> | <u>HIGH</u> | <u>LOW</u> |
|--------------------|----------------|-------------|------------|
| PRIOR TO FOLLOW-UP | 14.3 | 28 | 7 |
| FINAL | 66.8 | 84 | 54 |
| # SURVEYS | 11 | | |

SPECIAL SURVEYS - HISTORICAL RESPONSE (percent)

| | <u>MQ-C1:</u> Plant Capacity Utilization | <u>MA-200:</u> Pollution Abatement | <u>MA-175:</u> Shipments to Federal Gov't Agencies |
|------|---|--|---|
| 1978 | 93.7 | 85 | 86 |
| 1979 | 96.0 | 87.0 | 87 |
| 1980 | 87.0 | 93.3 | 87.9 |
| 1981 | 90.0 | 88 | 86.0 |
| 1982 | 90.4 | 89.0 | 86.9 |
| 1983 | 91.7 | 88.9 | 89.1 |
| 1984 | 91.9 | 87.6 | 88.5 |