

Determining Economic Census Content

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Determining the content of the Economic Census is one of the Census Bureau's most important tasks. It involves balancing the needs of the data user with the burden imposed on the respondents; deciding which of the competing needs for data are most important and appropriate for the Economic Census; and working with groups that represent both data users and data suppliers to develop questions that will result in data that are both accurate and relevant.

For many years, the Economic Census has been the foundation of much of the nation's economic statistical system. Determining the content of the census—that is, deciding what data will be gathered by the questions that are placed on the census forms—is one of the most important jobs that the Census Bureau does. Census Bureau staff—in consultation with other federal government agencies, private industry, and academic community officials—must decide which of the various requests for data will, or will not, be included on the questionnaires. Moreover, the Census Bureau has had to decide which data, while valuable, can no longer be collected due to various constraints that will be discussed below.

The specific data to be collected are governed by the chief purposes served by the Economic Census. Economic Census data are used for:

- Benchmarks and sample frames for monthly, quarterly, and annual surveys that provide timely measures of the nation's economy between censuses;
- Data for measuring growth and changes in the nation's economy over time;
- The basic statistical framework for composite measures of the nation's economic activity;

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- Development and analysis of federal economic policy;
- Planning and evaluating the results of a wide variety of programs of other federal agencies;
- Geographic area statistics, which local governments use for planning and evaluation purposes and for comparing their areas of jurisdiction with other areas;
- Business planning for such purposes as:
 - Determining the best locations for manufacturing plants, warehouses, stores, and other facilities;
 - Measuring potential markets;
 - Forecasting sales and analyzing sales performance;
 - Laying out sales territories;
 - Allocating advertising budgets; and
 - Trade publications and by trade associations for programs and studies to assist their members and readers.¹

The overall responsibility for determining the questions to be asked is vested (by Title 13, Section 5, of the *U.S. Code*) in the Secretary of Commerce, who has delegated this authority to the Director of the Census Bureau. The Economic Census provides general purpose statistics. The data needs of all users are considered, but not all their requests can be granted. Fortunately, the needs of many data users are similar. However, some prefer more geographic detail; others need more industry or product information; and yet other data users would like greater detail on materials used, for example, in the manufacturing process, or some other area of interest. These differences are usually reconciled, or compromises agreed upon, during the planning process. Differences on such issues as level of geographic detail involve *only the summary level at which the data will be published*, not the actual data to be collected.

Nevertheless, various problems can arise: Many data users correctly view the Economic Census as a “golden opportunity” to obtain statistical information about their industry or field of interest. They request that questions be included to meet these needs. But, some of the resulting requests are for data that are not required by large numbers of data users. To honor such requests would greatly increase the cost of the Economic Census and the burden upon those who provide the information. Although Title 13 *requires* businesses to report in the Economic Census, the *cooperation* of the business community is essential to the success of the program. This is particularly true for questions that require companies to provide estimates or other information not available from financial, tax, or other records.

Moreover, legislation currently limits the total response time needed by businesses to complete federal agency information requests. As a result of these practical and legal restrictions—on the quantity of information that can be obtained through the Economic Census—there is an increasing competition for placement of questions on the census forms. On the one hand, information currently collected is important. On the other hand, new data may be required to answer questions about rapid changes occurring in the nation’s economy. To weigh and resolve these competing needs, the Census Bureau has established a number of criteria for determining what questions, from among the hundreds upon hundreds of questions proposed, will be included on the questionnaires.

CRITERIA FOR INFORMATION COLLECTED IN THE ECONOMIC CENSUS

General Purpose Statistics

As mentioned, the Economic Census is designed to provide general purpose statistics to all users of economic statistics. Collection requests for data that are needed by only a single data user, or a small number of data users, are generally not accepted.

Priority of User or Program

For the most part, requests for data from other federal agencies are given the highest priority. Requests from the Bureau of Economic Analysis (BEA) for data that will be used for the national accounts and for benchmarking or improving estimates of Gross Domestic Product (GDP) are considered the most important. High priorities also are given to data requests from the Federal Reserve Board and the Bureau of Labor Statistics, as well as from other federal agencies that request data for such mandates as monitoring the impact of foreign trade.

Costs

As with many other federal agencies, the Census Bureau operates within an increasingly limited budget. The cost of collecting and disseminating data has become a more and more important consideration. The Census Bureau has, at times, had to deny certain data requests, and in some cases, eliminate previous data collection efforts, simply because the funds are no longer available.

When requests are made for additional data to be collected, the assumption is that—since the Economic Census is being conducted in any case—there can be but little or no additional expense for further inquiries. This assumption is just partially true: it is predominantly true for such things as printing and mailing questionnaires. However, *each additional question can incur substantial costs* for:

- Follow-up by mail or telephone of establishments that do not respond;
- Data keying;
- Computer editing of reported data;
- Resolutions of problems discovered in the analysis of reported data, including, possibly, the need to contact respondents;
- Analysis of additional summary data at every level of publication; and
- Dissemination of the data, both electronically and on paper.²

Availability of the Same or Similar Data

Requests to collect data that are already available—or for which substantially similar data are available from another government or private source—generally are not accepted. Such data may be available, or potentially available, from statistical programs or administrative records of other federal agencies, from trade associations, or from business publications.

The availability of similar—or even apparently identical—information does not, however, mean that a request will *automatically* be denied. Frequently, it can be demonstrated that the available data are inadequate in quality or scope. For example, in some cases, statistical information that is available as a by-product of programs of other agencies may not meet the needs of economists or other data users because they are the result of tax or regulatory programs that involve fundamentally different definitions of the data items.

Availability of Company Records; Respondent Difficulty in Making Estimates

To the extent possible, census questions are designed so that the information can be provided from records that companies customarily maintain for accounting, tax, or other purposes.

The need for data occasionally involves information for which such records are not maintained. The capability of companies to make *reasonable estimates*—if such records are not available—is an important consideration in determining if a proposed question will be included in the census.

This issue arises when the need for information involves summary data that are not required for a company's own purposes. In some cases, data requests involve information that clearly is *not* available in the records of the affected companies. In such situations the company still may be the only feasible source of estimates. For example, information may be required about the uses that are made by the customer of the products sold, or whether products sold by manufacturers to other producers become part of other products that are exported. If data based on the industrial classification of the producing or selling company are required, they can only be obtained from that source. When, for any reason, book records are not available, companies are requested to provide their best estimates.

While the lack of records and the difficulty of making estimates are important factors for not including a question in the census, the need for the information may be so great that the question must, nevertheless, be included. In such situations, the Census Bureau often has found that estimates prepared by—or under the direction of—the owner or manager of a business are better than those available from any other source. (This is particularly true of information for which the business has detailed information but does not summarize the data in the manner required for census purposes. For example, expense categories or sales by type of product may be summarized by a company's operating divisions rather than by store, plant, or other location. It is less true for data for which the business does not have detailed records, such as questions about the use or disposition of products after they are sold. In that case, the owner or manager cannot provide the information.)

Burden of Reporting Imposed on Business Community

Another important consideration in determining which questions to ask in the Economic Census is the amount of burden and expense that the proposed inquiry would impose on the business community. "Response burden" is the measure of the total time required to complete a questionnaire—that is, the average time needed to complete the census form—multiplied by the number of respondents to whom the form is sent.

The Census Bureau is but one of many federal, state, and local government agencies that require reports (that is, completed census forms) from businesses for tax, regulatory, and statistical purposes. In total, these reports represent a major cost to businesses. The problem is particularly acute for small and medium-sized businesses for which the census reports may represent a much larger burden in proportion to their size and financial resources. To reduce the reporting burden of the small business community, census reports are not required from most (about 15 million) very small firms—particularly in the construction, trade, and services sectors. Limited data for these very small businesses are obtained from probability samples or from administrative records³ obtained by the Census Bureau from the Internal Revenue Service (IRS) and/or the Social Security Administration (SSA).

In response to concerns from the business community about the increasing reporting burden imposed on businesses by federal agencies, the Paperwork Reduction Act was enacted in 1980. In fact, the law required an actual reduction in the level of paperwork during the first two years, but did not specify which data efforts should be curtailed or eliminated. This was left to the discretion of the individual agency and the Office of Management and Budget (OMB) of the Executive Office of the President.

Because of the importance of the Economic Census, no major cuts were made in the content or coverage program as a direct result of the law. However, the Census Bureau did substantially increase its use of administrative records as a proxy source of information for small firms. And, it has become an important consideration in determining if an inquiry will be included in the Economic Census, since—as a consequence of the law—additional respondent burden resulting from questions *added* to the census must be *offset by reductions* in other Census Bureau data collection programs.

Comparability of Proposed Data Requests with Similar Data from Administrative Records

A further consideration in determining census content is the similarity of proposed data requests with data available from administrative records. This is an outgrowth of the Bureau's increased use of such records. Limited, but key, data from administrative sources are used:

- As proxy statistics for most very small businesses (particularly in trade, construction, and services);
- For control purposes to compare reported data with known information about that firm (to detect errors in reporting or coverage); and
- As the basis for estimating essential data for companies for which reports cannot be obtained.

Since administrative records are an integral part of the structure by which the Economic Census is conducted, census definitions may be designed to assure that reporting is based upon the same definition used in the program from which the administrative records are obtained. For example, the definition of “payroll” on the census forms is identical to that on the quarterly report (IRS Form 941) that companies file when they submit federal pay-

roll taxes withheld from employees' salaries. Furthermore, the reporting period for the census, for the number of employees, is the same as for the quarterly tax report.

For statistical purposes, some variations from the tax form definitions might be preferable. However, using the same definition on the census form as that used for administrative files facilitates combining data from these two sources. This outweighs any disadvantages of a restricted definition. Moreover, it often happens that the use of administrative source definitions on census forms actually improves the quality of data reported by larger firms.⁴

Historical Continuity of Data

Another criterion is the historical continuity of the data. However, when other needs predominate, then this criterion becomes less important. The 1997 Economic Census provides a case in point.

The North American Industry Classification System (NAICS)

The 1997 Economic Census will be the first to collect data and publish results in terms of NAICS. NAICS replaces the Standard Industrial Classification (SIC) system (used in the United States since the 1930s) as the basis for grouping all economic activities into like categories. NAICS was developed in cooperation with Canada and Mexico.⁵ The new system will meet the needs of analysts to compare the data of the three North American Free Trade Association trading partners.

During the time that SIC was in use, there were periodic updates that were intended to reflect the changes in technology—and structure of the U.S. economy—that had taken place over time. These updates, while keeping up with some types of changes reasonably well, did not effectively keep up with the more dramatic changes that occurred since SIC was originally adopted. In order to reflect adequately the new structure of the economy, a new classification system was developed.

In order to address the break that NAICS will introduce into the historical continuity of Economic Census data, the Census Bureau will publish *Bridge Tables*, to be issued early in the year 2000, covering all U.S. industries at the national level. *Bridge Tables* will present 1997 Economic Census Data cross tabulated by both the old and new classification systems. This will help alleviate problems for data users when dealing with breaks in time series data.⁶ The introduction of the new classification system also had tremendous consequences for the Economic Census' forms design process. Many of the additions and changes that the Bureau made to the 1997 census forms were made in order to classify correctly establishments under NAICS. Because the NAICS approach in many areas is quite different than the SIC, a large number of special inquiries and check box questions have been added to the forms to collect information on classification. Much of this collection is for information that will not actually be published but that will be used by the Census Bureau in editing and tabulation operations.⁷

In sum, the historical continuity of data—as a criterion for inclusion of questions in the Economic Census—is given some weight, but questions are not automatically retained because they were included in the previous census. Figure 1 summarizes the factors that have been discussed that relate to the determination of Economic Census content.

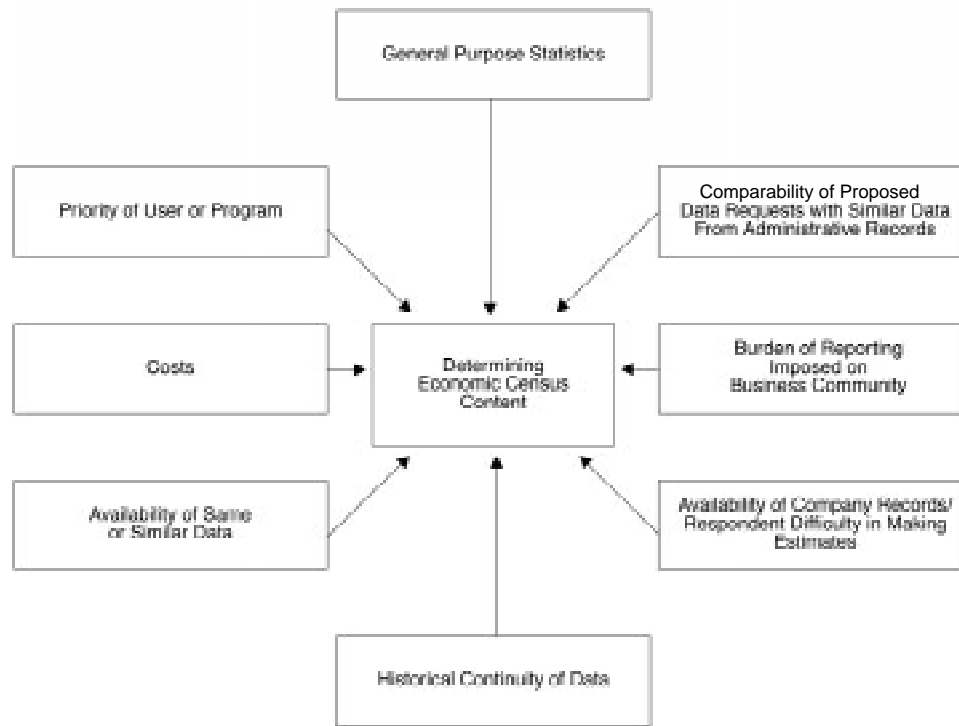


Figure 1
Criteria for Determining Economic Census Content

THE SELECTION PROCESS

Once the criteria are established—guiding the Census Bureau in determining what questions will be included—the next step is the actual selection process. When does the process begin? Who recommends questions for inclusion? And, who actually *decides* what questions will be asked?

In a broad sense, the selection process is continuous. Recommendations received too late for one Economic Census automatically are considered for inclusion in the following census. Recommendations may be made by any public or private individual or organization, but the Census Bureau makes the final determination.

As the Census Bureau has planned and conducted nine Economic Censuses since the combined census program was introduced in 1954,⁸ procedures have developed that may be considered typical. Beginning with the 1954 Economic Census, the Bureau has been consolidating the previously separate censuses of manufactures, minerals, commerce, and the like with a fully integrated census that provides comparable data across economic sectors. With each succeeding census, the Bureau has developed more consistency in time periods, concepts and definitions, classifications, and reporting units. The move toward a fully integrated Economic Census will be completed with the 1997 Census, where the

Bureau will standardize the data product line by adopting a uniform presentation of results across sectors.⁹ This move toward an integrated Economic Census has been carried through in the procedures for determining the content of the questionnaires.

Meeting with User Federal Agencies

To obtain concrete recommendations from federal agencies that are major users of census data, meetings are held early in the planning process. The meetings for the 1997 Economic Census were held in early 1995 and in 1996. Agency representatives were advised that, even though funding for the census permitted no major expansion in scope or coverage, changes to the census content for specific industries and questionnaires could be considered. For example, changes could be made to the list of products produced, materials used, and special inquiries tailored to the 450 manufacturing—and the more than 300 other—industry classifications covered by the 475 variations of the 1997 Economic Census questionnaire. Representatives were asked to review their agencies' data needs, together with the data from past censuses, and to make written recommendations for changes. Agencies that could not, or did not, attend the meeting were invited by letter to provide recommendations.

Recommendations from the Bureau of Economic Analysis

Because of the critical importance of the Economic Census to the BEA, special consideration is accorded BEA's recommendations. BEA extensively uses Economic Census data directly and indirectly in developing and benchmarking estimates of GDP and for related national accounts work.¹⁰

Studies in recent years directed at improving estimates of GDP have identified many areas in which improved or additional census data are required. The large expansion of the coverage of the 1992 Economic Census was the result of recommendations of BEA and others federal agencies. At that juncture, the Finance, Insurance and Real Estate, Communications, and Electric, Gas, and Sanitary Services sectors were added to the Economic Census. Since that time, however, budget reductions have forced the Census Bureau to limit adoption of additional recommendations from BEA. Nevertheless, BEA recommendations are carefully considered by the Census Bureau. Most of the long-range plans for enhancement of the census address BEA's data needs for improvements to the national accounts.

Recommendations from Trade Associations and Trade Publications

To obtain specific recommendations for the private sector, the Census Bureau contacts hundreds of specialized trade and professional associations and trade publications. These organizations are asked to review a copy of the most recent census questionnaire for their industry and are invited to provide recommendations for improving census data. Meetings are held with many of these organizations to update industry terminology, lists of products and materials used, and special inquiries that are tailored to the needs of each industry. These cooperative meetings with industry representatives are the most effective means of determining the data needs of individual industries.

Most of these organizations fully appreciate the value of the Economic Census to their industries, and want to work closely with Census Bureau subject analysts to reconcile differences and to resolve problems. They may want to benchmark their *own* monthly or annual surveys to the census results. The resulting continuous personal contacts with trade association representatives enable Census Bureau staff to keep abreast of the latest industry trends, terminology, technology, and data needs. The role of trade associations in determining the census content is highly important.

Meetings with Accounting Organizations

As part of the planning process for recent censuses, meetings have been held with public accounting organizations to obtain their assistance. The interest of these organizations—whose members frequently complete the census questionnaires for their clients—is somewhat different from that of other professional associations. Accounting organizations basically are concerned with keeping the reporting burden of their members to a minimum.

By bringing accounting organizations into the planning process, several objectives are achieved:

- Accountants gain a better appreciation of the importance of the census, both to the nation in general and to their members and clients;
- Their suggestions frequently result in reductions in respondent burden; and
- Valuable information is obtained about the types of records maintained by businesses and the burden imposed by certain types of data requests.

Informal Contacts with Data Users and Suppliers

Equally important as these formal meetings and solicitations of recommendations are various informal means of learning about the needs of data users and the feasibility of collecting the data. Inquiries about the availability of data, or requests that specific data be collected, are received regularly from data users in both the public and private sectors. Letters from respondents, or notes on completed questionnaires, advise the Census Bureau of problems in reporting certain information. As a result, alternative data items frequently are suggested. Recommendations or requests also are received at the various conferences, seminars, and training programs that the Census Bureau conducts for data users in the public, private, and academic areas. While, individually, such requests are not critical in the processes of determining the data to be collected, collectively they provide important information both about the needs of data users, and the problems of data suppliers. Figure 2 summarizes the sources of recommendations for the question selection process.

EVALUATION OF RECOMMENDATIONS AND DEVELOPMENT OF QUESTIONNAIRES

Data users frequently request that data be collected in the census, but sometimes this occurs with little understanding of the difficulties that may confront businesses in providing the

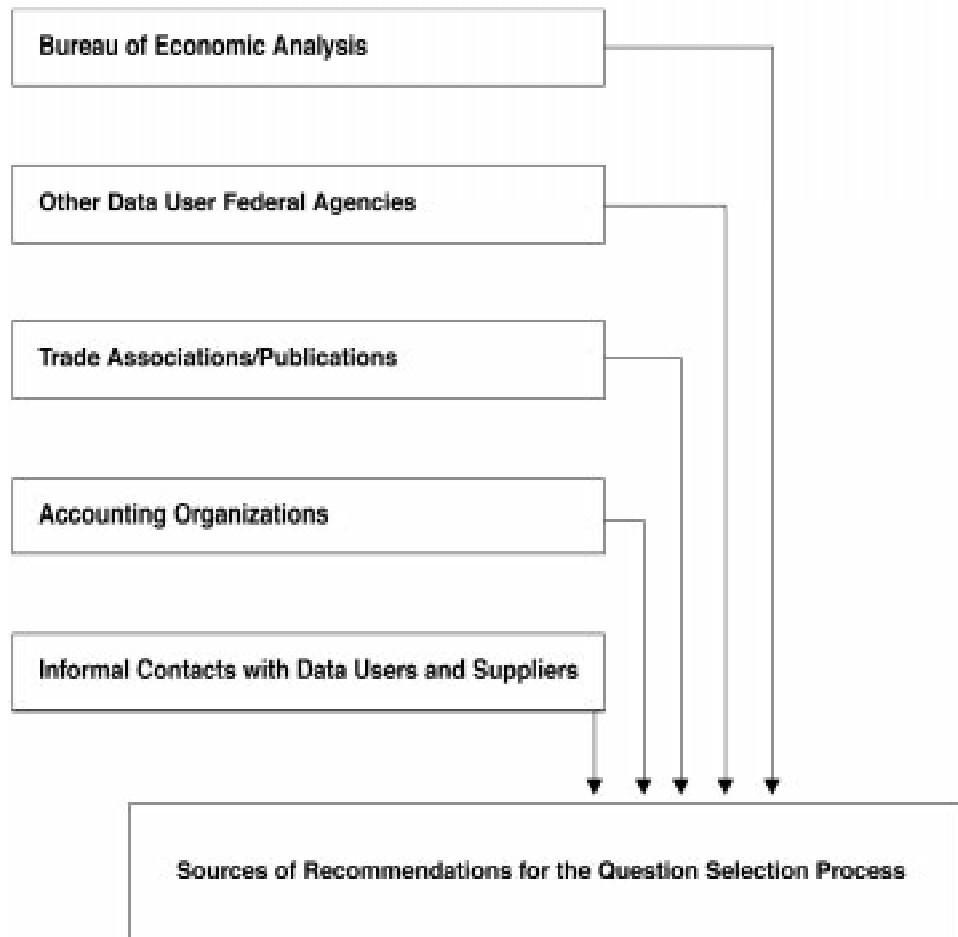


Figure 2
Sources of Recommendations for the Question Selection Process

information. The Census Bureau is sometimes viewed as the *source or producer* of data—rather than as a *collector and compiler of information* from *other* data sources. While this may appear obvious in a written account such as this, it is often overlooked in the desire to obtain information.

To determine if the sought-after information *can* be reported, one or more of several possible actions may be taken by the Census Bureau. If the information clearly may be required by businesses for financial, tax budgetary, regulatory, or other purposes, then the Census Bureau knows that the information potentially is available. In other cases, trade or professional associations, or accounting organizations familiar with the industry, may provide adequate information to the Census Bureau about the availability of information from establishment records.

Recordkeeping Practices Survey

For certain data needs, there may be no clear pattern of information available from establishment records. Because of the importance of designing questionnaires that can be completed from available records—or for which reasonable estimates can be made—the Census Bureau may conduct a survey of the recordkeeping practices of representative firms. The objective of such a survey is to determine if companies have the capability of providing data not previously requested in the Bureau's Economic Census and surveys. The survey also may obtain information for evaluating data currently being collected in the census or in current surveys. No attempt is made to collect actual data in these surveys, only to gather information on how companies and establishments maintain records.

The most recent survey of this type was the 1989 Recordkeeping Practices Survey. It was an extremely comprehensive survey conducted through both mailed questionnaires and personal visits. The questions asked on the survey covered such diverse items as:

- Preferred paper size and style of forms;
- Past experience with reporting on the census;
- What information about individual establishments is available from the company;
- The company's ability to provide demographic information about the owners or stockholders; and
- Records that were maintained regarding such items as assets and capital expenditures, purchased services, inventories, depreciation charges, and employment by function.

The above mentioned expansion of the coverage of the Economic Census in 1992, along with rapid organizational changes that were occurring at the time in the business world, led to one of the most important questions in the Recordkeeping Practices Survey, namely: What is the appropriate statistical unit to collect some of these types of data? The results of the 1989 survey revealed two important findings, namely that: For much of the data the Bureau was trying to collect, the traditional establishment¹¹ was still an appropriate unit of measure; and that much of the data the Bureau was seeking *was* available from establishment records.

There were, however, data items that the Recordkeeping Practices Survey indicated should be collected by means other than the establishment-based Economic Census. In some cases, the entire company, or major segment of a company, would be the appropriate statistical unit; in others, a sample survey would produce better data; and in yet other cases, the survey indicated that the information simply was unavailable—for example, capital expenditures for industrial machinery. In relation to this, for a number of years, there has been significant interest in the country-of-origin of certain kinds of industrial machinery purchased by manufacturers. The Recordkeeping Practices Survey indicated that 95 percent of companies kept no records for, and therefore did not know, the origin of the equipment they purchased. Consequently, questions concerning this aspect of capital expenditures have not been added to the forms for the Economic Census.

Information from the 1989 and earlier surveys have been invaluable in determining if inquiries under consideration meet the various evaluation criteria. These surveys have frequently been the most reliable guide for deciding if the data being requested are maintained

in company or establishment records, and if the definitions are consistent with those used by the companies the Census Bureau plans to canvass.

Testing Proposed Inquiries or Questionnaires

Test or "pilot" surveys of representative companies occasionally are conducted in advance of the census. The purpose is to test new survey methodologies designed to reduce costs, sampling error, or respondent burden. Since this is an extremely expensive undertaking, pilot surveys are normally done only when major methodological changes are being considered. Pilot surveys also may be used to test the wording of inquiries and instructions for a proposed survey, question, or solution to a problem.

FINAL DETERMINATION AND APPROVAL OF QUESTIONNAIRES

After all recommendations have been received, after the requirements for classification revisions have been determined, and after the results of recordkeeping or test surveys have been evaluated, it might be assumed that the items to be included on the form would be selected by a committee or through the application of a set of objective rules. In fact, no such mechanism exists. In many cases, only the Bureau's subject analysts have the necessary understanding of both the need for the data, and the problems and costs of collection to make an informed decision.¹²

While the data items selected for inclusion in the census are subject to extensive review, in general, the individuals who work most closely with the industry, group of industries, or economic sector involved play the dominant role in the final determination. For this purpose, it is appropriate to divide census inquiries into two types: (1) inquiries that are unique to a specific industry or group of related industries; and (2) general inquiries that are applicable to entire sectors, such as manufacturing or construction, or to all of the sectors covered by the census.

The first group—items that are unique to a specific industry—includes such information as the specific products produced or lines or merchandise sold; types of materials consumed in manufacturing; types of machinery or equipment owned or used; or the manufacturing process employed. These are questions for which the knowledge of the Bureau's subject analysts, as well as the aforementioned trade associations and other industry representatives, is essential in the decision-making process. Such inquiries are selected, and the wording designed, by the subject analysts after evaluating all of the available information and recommendations.

The decision process for questions common to an entire economic sector, or to all sectors covered in the Economic Census, is more complex. Such questions frequently are based on the needs of economists for additional or improved data for the national accounts. They may present serious problems of definition, respondent burden, or cost of collection. They include questions on topics such as capital expenditures, depreciation, gross and net value of assets, inventories, operating expenses, and sales by type of customer that apply to *all* industries in an economic sector. And, they include the even broader measures of total

sales or shipments, employment, and payroll that are common measures across the entire Economic Census.

Since these measures are needed for broader areas of the economy, it is important that the data be collected using the same concepts and definitions applicable to all industries and sectors. Consequently, decisions on such data items are made at a higher Census Bureau organizational level¹³ after considering all of the relevant criteria. These two basic types of data items cannot be completely separated, however. For example, after the basic decisions are made on such inquiries as shipments or materials consumed in manufacturing, the lists and definitions of specific products or materials are developed by the subject analysts.

After the general questions, related definitions, and formats are determined for each sector, they are provided to the subject analysts for completion of the 475 different industry-specific questionnaires used for the 1997 Economic Census. The format of the questionnaires and general inquiries are similar *within* each economic sector. Specifics, such as the list of products produced and materials consumed by manufacturing industries, vary.

Review and Clearance

OMB has responsibility for final approval of all census forms requesting data from individuals, businesses, and other organizations in the private sector. As part of its review, OMB is required, by law, to verify that the requested information:

- Is necessary;
- Is not already available from other government or private sector sources; and
- Can be reported from the records customarily maintained by respondents, or that reasonable estimates can be provided.

It also determines that the data collection will be conducted within the reporting burden control program, that is, will not result in an overall increase reporting burden on the business community.

Prior to submitting the draft forms to OMB for final approval, a notice is published in the *Federal Register* announcing the Census Bureau's plan to conduct the census, and informing interested parties of their opportunity to comment on the forms. At the time of this announcement, copies of the proposed forms are made available at the Bureau's Internet site—www.census.gov/econ97. Interested parties also may write to the Census Bureau for copies of the census forms. Comments concerning the forms, or the proposed data collection, can be sent either to the Census Bureau or to OMB.

Final Preparation of Forms

Once the final content of the forms is determined, the industry specialists (subject analysts) take several actions:

- They notify anyone who submitted comments or suggestions of the Bureau's decision with respect to their recommendations.
- They finalize the wording for questions, insuring that questions that are common across sectors are consistent.
- They incorporate any modifications that pertain either to instructions or to layout of the form.

Determining the content of the Economic Census and developing the questionnaires designed to collect the data are intricate and lengthy processes, as well as one of the Census Bureau's most important tasks. Figure 3 summarizes the processes that have been described in this article, and shows their important relationship to the feature attraction itself: the actual conducting of the Economic Census.¹⁴

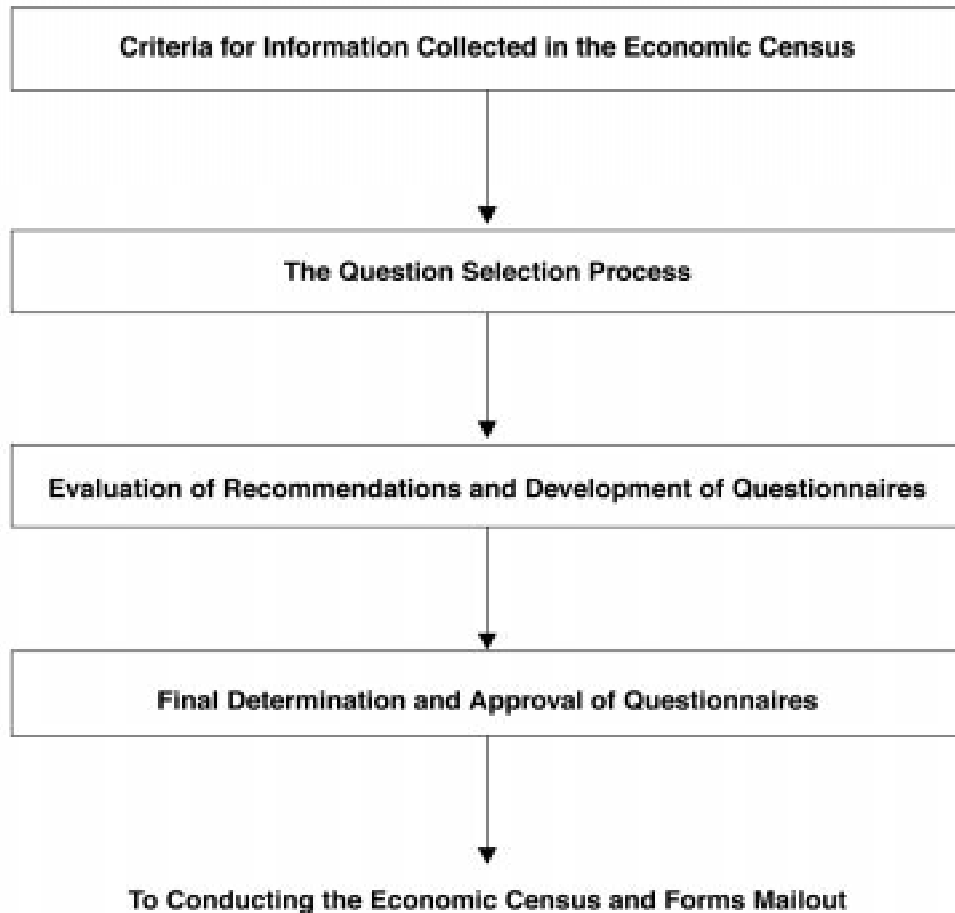


Figure 3
The Processes Underlying the Determination of Economic Census Content

NOTES AND REFERENCES

1. See Mark E. Wallace, "Public and Private Sector Uses of Economic Census Data," *Government Information Quarterly*, 15 (1998):321–336, for a discussion of the chief purposes served by Economic Census data, and for examples of data use for business planning purposes.
2. To see how the addition of questions to the questionnaire would incur such additional costs, see Shirin A. Ahmed, Lawrence A. Blum, & Mark E. Wallace, "Conducting the Economic Census," *Government Information Quarterly*, 15 (1998):275–304. This article provides a step-by-step account of how census data are collected, processed for use, and then published and distributed.
3. "Administrative records" is the term used to describe data on the business entity, its classification, payroll, employment, and receipts that the Census Bureau obtains from the records filed with the IRS or the SSA. (The relationship, however, is not two-way: the Census Bureau *does not share the data it collects on businesses with any other agency*. These data are confidential, and this confidentiality is protected by Title 13 of the *U.S. Code*.) Where possible, the Census Bureau makes use of all, or part of, administrative record information to substitute for data that would otherwise be collected in a direct canvass. This alleviates the reporting burden for small firms.
4. For example, the Bureau of Economic Analysis requires measures of retail sales that include state and local sales taxes as well as federal excise taxes. The sales figures available from administrative records generally include excise taxes, but exclude sales taxes. This matches the information available on business accounting records, since excise taxes are normally paid by the manufacturer or distributor, but sales taxes are normally paid by the customer.

Because of the importance attached to the needs of the national accounts, the Census Bureau tried, for many years, to include both categories of taxes in the sales definition, leaving it to national accounts economists to adjust the portion of census sales data based on administrative sources. However, the census definition was inconsistent with the respondents' own records. Therefore, what resulted was a very poor reporting of sales taxes as a component of sales. It was a particular problem with multi-establishment firms, whose accounting records for sales taxes are structured according to administrative reporting requirements, rather than by the store in which taxes were collected, which corresponds to the census reporting structure.

Not only was it difficult to collect sales figures including sales taxes, but also special studies were required to determine the portion of sales taxes that had been omitted from reported sales. The work of national accounts economists had been made *more* difficult rather than easier. The census definition of sales now excludes sales taxes paid directly to tax authorities. The quality of the reported data is much improved, and BEA accountants can more reliably adjust the census sales to suit national accounts purposes.

This experience underscored the importance of requesting data based on definitions consistent with business records. Good quality reported data are generally preferable to poor quality data that exactly meet user's definitions. The data user often can obtain the necessary information to adjust for any deficiencies and with a better overall result. In this example, it is possible that BEA could develop estimates of sales taxes from information directly from the authorities. This information could then be used by BEA to adjust the sales and receipts data. In this way, they would have much more confidence about what is actually included in the data.

5. See Carole A. Ambler & James E. Kristoff, "Introducing the North American Classification System," *Government Information Quarterly*, 15 (1998):263–273, for a complete account of the emergence and characteristics of the new system.
6. For more discussion on this subject, see Paul T. Zeisset & Mark E. Wallace, "How NAICS Will Affect Data Users," published on the Internet at www.census.gov/epcd/www/naicsusr.html This brochure also is available in paper: Lanham, MD: Bernan Press (1997). See also Paul T. Zeisset, "Disseminating Economic Census Data," *Government Information Quarterly*, 15 (1998):305–320.
7. Ahmed, Blum, & Wallace, in "Conducting the Economic Census," discuss editing and tabulation operations in detail.
8. For further discussion on changes (in the format of the Economic Census) that were initiated in 1954 and that are continuing through to 1997, see the U.S. Census Bureau's *The Economic Census—Two Moments of Truth: 1954 and 1997*, September 1997. The Internet address for this brochure is: www.census.gov/epcd/www/img/ec97x-tm.pdf

For a fuller account of the Economic Census of 1954—and, indeed, of the entire history of the U.S. Economic Census—see William F. Micarelli, “Evolution of the U.S. Economic Census: the Nineteenth and Twentieth Centuries,” *Government Information Quarterly*, 15 (1998):337–379.

9. Ahmed, Blum, & Wallace, in “Conducting the Economic Census,” delineate standardization of the product line.
10. Wallace, in “Public and Private Sector Uses of Economic Census Data,” provides further discussion of how BEA uses Economic Census data.
11. Distinctions among the “establishment” (the physical site of the business), the “company” or “firm” (the organizational entity that owns the establishment), and the “enterprise” (which is a combination of companies) are treated in Ahmed, Blum, & Wallace, “Conducting the Economic Census;” Wallace, “Public and Private Sector Uses of Economic Census Data;” and Zeisset, “Disseminating Economic Census Data.”
12. Ahmed, Blum, & Wallace, in “Conducting the Economic Census,” elaborate upon the substantial role of the subject analysts in preparing data for release.
13. The U.S. Census Bureau organizational structure can be found in Ahmed, Blum, & Wallace, “Public and Private Sector Uses of Economic Census Data.”
14. See Ahmed, Blum, & Wallace, “Conducting the Economic Census,” for the sets of graphics that show the next steps in the process. The graphics (and respective accompanying discussions) in both that article and the present one form a unified account of the Economic Census—from determining census content, to collection and processing of data, to publication and distribution of results.