Country Paper: United States Census Bureau

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Second International Workshop on Economic Census Seoul, Republic of Korea

6-9 July 2009

1. Why an Economic Census?

1.1 Circumstances and Necessity of the Economic Census

Under what circumstances is the economic census conducted in your country? Why is the economic census necessary?

In the United States, the Economic Census is required by law. According to Title 13, U.S. Code, Section 131:

"The Secretary [of Commerce¹] shall take, compile, and publish censuses of manufactures, of mineral industries, and of other businesses, including the distributive trades, service establishments, and transportation (exclusive of means of transportation for which statistics are required by law to be filed with, and are compiled and published by, a designated regulatory body), in the year 1964, then in the year 1968, and every fifth year thereafter, and each such census shall relate to the year immediately preceding the taking thereof."

The February 1954 report of the Watkins Commission supported the need for the Economic Census with the following justification, which remains true more than 50 years later:

"The fact-gathering program of the [Census] Bureau is not one of assembling statistics for statistics' sake. Rather, it is a purposive program authorized by the Congress for the periodic measurement of the condition of the country. These measures serve in themselves as a basis for innumerable decisions and actions, throughout our national life."

"Census measures serve also as the foundation for the great structure of current economic indicators maintained by Federal, state, and local governmental agencies and by nongovernmental institutions and agencies and business concerns and organizations. These economic indicators in turn serve as indispensable guides to action by all agencies of government and by the many millions of separate units composing our society, and not least by our 4 million business concerns."

"Without these census records, it would not be possible to construct or interpret this system of economic indicators. Business executives, farmers,

The U.S. Census Bureau is part of the Department of Commerce. The Secretary of Commerce delegates authority to conduct the censuses to the Director of the Census Bureau.

labor leaders, professional men, scholars, scientists, government officials, and administrators in all phases of our society are dependent on census records or on economic indicators based on census records. . ."

"[The] comprehensive system of economic indicators...based on relatively low-cost sampling studies and representative indexes...rests in one way or another on the benchmark statistics provided by the Bureau of the Census."

1.2 Goals, Scope, and Coverage

What are the goals, scope, and coverage of the economic census in terms of units, activities, and classifications, as well as in terms of geographical coverage; thresholds used etc.

The Economic Census provides a comprehensive and detailed profile of the U.S. economy. It produces statistics that serve as benchmarks for the national accounts, other economic indicators, and current economic surveys; meet the needs of the Congress and other government policymakers; and support a wide variety of analytical uses by businesses, economic and academic researchers², and the general public. Core data products comprise some 1,600 reports that provide basic statistics for detailed industries and geographic areas; information on sales, receipts, revenue, or shipments by product; and data from a broad array of industry-specific special inquiries. Additionally, census-related programs produce statistics on topics of special interest, including business expenses for industries in the services sectors, the characteristics of business owners, and data on the flow of domestic freight shipments.

The unit of enumeration for the Economic Census is the *establishment;* this statistical unit is defined as a single physical location where business is conducted or where services or industrial operations are performed (for example, a factory, mill, store, hotel, movie theater, mine, sales office, warehouse, or central administrative office). Generally, the establishment represents the smallest operating entity for which business records provide information on the cost of resources, materials, labor, and capital employed to produce the units of output. Further, the establishment is the unit to which the North American Industry Classification System (NAICS) is applied. Such a localized and granular unit of enumeration is required to produce the detailed industry and geographic area statistics presented in Economic Census data products.

The Economic Census' geographic coverage is determined by Title 13, U.S. Code, Section 191; it includes establishments located in the 50 States and the District of Columbia, the Commonwealth of Puerto Rico, the U.S. Virgin Islands, Guam, the Commonwealth of the Northern Mariana Islands, and American Samoa. For 2007, coverage of the 50 States and the District of Columbia included establishments in the NAICS sectors shown by Table 1. Industry coverage varied by program for the Census

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The Census Bureau's Center for Economic Studies and its network of Census Research Data Centers give qualified researchers access to confidential microdata, including data from the Economic Census, for the purpose of conducting approved economic research projects. The projects must benefit Census Bureau programs conducted under Chapter 5 of Title 13, U.S. Code, and researchers must have Census Bureau special sworn status, which obligates them to uphold the confidentiality provisions of Title 13.

of Puerto Rico and the Island Areas, the Business Expenses Survey, the Survey of Business Owners, and the Commodity Flow Survey.³

Table 1. Industry Coverage for the 2007 Economic Census Core Programs: 50 States and the District of Columbia⁴

NAICS	
Code	North American Industry Classification System (NAICS) Sector
21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing excluding NAICS 482—Rail Transportation and NAICS 491t—Postal Service
51	Information
52	Finance and Insurance excluding NAICS 525—Funds, Trusts, and Other Financial Vehicles except NAICS 52593—Real Estate Investment Trusts (REITS, which are covered)
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services excluding NAICS 6111—Elementary and Secondary Schools; NAICS 6112—Junior Colleges; and NAICS 6113—Colleges, Universities, and Professional Schools
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Food Services
81	Other Services (Except Public Administration) excluding NAICS 8131—Religious Organizations, NAICS 81393—Labor Unions and Similar Labor Organizations, NAICS 81394—Political Organizations, and NAICS 814—Private Households

1.3 Approaches and Methods Used in the Economic Census

The Economic Census is a complete enumeration of covered establishments. For 2007, the total target population for the 50 States and the District of Columbia amounted to 7.2 million establishments with paid employees and nearly 22 million businesses

Details on industry coverage for census-related programs are available on the Census Bureau's website: <www.census.gov/econ/www/>.

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The Economic Census does not cover NAICS Sector 11, Agriculture, Forestry, Fishing, and Hunting; the Department of Agriculture's National Agricultural Statistics Service conducts a separate Census of Agriculture that covers NAICS 111, Crop Production, and NAICS 112, Animal Production. Also, the Economic Census does not cover NAICS Sector 92, Public Administration; the Census Bureau conducts a separate Census of Governments that provides statistics on the activities, employment, and finances of State and local government entities. The reference periods for the Economic Census, Census of Agriculture, and Census of Governments are coordinated; all cover years ending in '2' and '7'.

without paid employees. Of these, 4.5 million establishments were covered by direct collection. This direct collection component included all establishments of multi-establishment enterprises (multiunits); larger single-establishment enterprises (single units) with paid employees, as determined by industry-specific annual payroll thresholds; and a sample of smaller (below threshold) single units with paid employees. Smaller single unit employers excluded from direct collection and all businesses without paid employees were represented by classifications and basic economic measures obtained from administrative records of other Federal agencies, mostly tax records obtained from the Treasury Department's Internal Revenue Service (see Item 3.3 for more information on Economic Census use of administrative records). Direct collection was done by means of more than 530 questionnaires that were tailored to specific industries or to small groups of related industries. These questionnaires were available in both electronic versions sent/returned via secure Internet transmission and paper versions sent/returned by postal mail.

1.4 Uses of Economic Census Results

Economic Census data provide the foundation for most of the United States statistics on business and industry. Every five years, census measures provide the benchmarks for the national income and product accounts and for key economic indicators, such as Producer Price Indexes and measures of industrial productivity. Federal and State agencies also use Economic Census data to gauge the effectiveness of programs such as minority contracting guidelines, trade policies, and job retraining. Emergency response agencies use Economic Census data on the location of businesses by industry and geographic area to estimate potential losses to employment and productive capacity that might result from a major hurricane, flood, or other disaster.

Economic Census data are also essential for businesses making marketing and investment decisions. They use the data to assess the size or competitiveness of markets, locate new facilities, design sales territories, and set sales quotas. Economic development offices use local area data from the Economic Census to help business owners assess their marketing and management challenges and develop business plans. Economic Census data are also an essential ingredient for industrial research; the data are essential to assessing the changing industrial structure of communities and to identify opportunities for expanding the local tax base.

2. Planning and Organization of the Economic Census

2.1 Legal Provisions

Title 13, U.S. Code⁵, covers the activities of the U.S. Census Bureau. It grants authority to the Secretary of Commerce, who delegates responsibility to the Director of the Census Bureau.

The complete text of Title 13, U.S. Code, is available at: <www4.law.cornell.edu/uscode/13/>.

Provisions of Title 13 that relate most directly to the Economic Census are as follows:

- Section 131 directs the taking of Economic Censuses at 5-year intervals, as noted above (see the excerpt quoted in Item 1.1).
- Section 191 determines the geographic scope of the Economic Census.
- Section 195 authorizes the use of sampling.
- Section 224 makes it mandatory for businesses to report to the Economic Census and to related economic surveys.

Other general provisions that pertain more broadly to Census Bureau activities, including the Economic Census, are as follows:

- Section 5 gives the Secretary of Commerce the authority to determine content for censuses and surveys covered by the statute.
- Section 6 authorizes the Secretary of Commerce to acquire information from other Federal agencies and from State and local governments and to use such information in lieu of direct collection "to the maximum extent possible and consistent with the kind, timeliness, quality and scope of the statistics required…"
- Section 9 makes information reported to the Census Bureau confidential. In particular, the information collected under this law may be used only for statistical purposes; data products may not disclose data furnished by any particular business or individual; only sworn officers and employees may examine individual reports; and reports submitted to the Census Bureau are immune from legal process. There is an exception to these confidentiality provisions for public records information collected by the Census of Governments and by interim current surveys of governments.

Title 26, U.S. Code (the Internal Revenue Code) also has an important provision that authorizes the Census Bureau's use of certain tax data. According to Section 6103(j)(1), "the Secretary [of the Treasury] shall furnish...such returns, or return information reflected thereon, to officers and employees of the Bureau of the Census...as the Secretary [of the Treasury] may prescribe by regulation for the purpose of, but only to the extent necessary in, the structuring of censuses...and conducting related statistical activities authorized by law."

Finally, under Public Law 104-13 (The Paperwork Reduction Act), the Office of Management and Budget (OMB) must review and approve all requests by Federal agencies to collect information. This is done to improve the quality and practical utility of the information collected and to reduce the paperwork burden on the public. Accordingly, all Economic Census questionnaires are reviewed and approved by the OMB before use, and the questionnaires must cite the OMB approval number and its expiration date.

2.2 Financial and Budget Provisions

The 2007 Economic Census consisted of eight core program components and several related data collections. The core components are separately tailored for each major domestic business sector, provide comprehensive and detailed information on the

structure of the U.S. non-farm economy, and are the cornerstone of our nation's economic statistics programs. The related data collections are more specialized and provide supplementary information on businesses owned by women and minorities, supplementary information on expenditures and expenses for non-goods producing businesses, transportation information on the movement of goods, and periodic census information on the economies of Puerto Rico and the island territories.

The Economic Census budget is broken into the following five line items based on census activities:

- Direction: Direction includes planning and support activities required to conduct the census. Specific activities include providing overall direction and coordination of census planning, design, collection, processing, and dissemination operations.
- Content Determination/Design: Activities include a review of census program components and content, including the Survey of Business Owners and other census-related surveys, with business and government analysts, data providers, and other data users, as well as the design and printing of more than 530 industry specific report forms.
- Mail List Development and Mailout: Activities include assembling and preparing the census enumeration list of nearly 29 million business locations. Specific activities include computer specifications, procurement and processing of administrative records, programming support, and labeling and assembly of initial mailing, follow-up, and correspondence packages. Postage costs also are included in this line item.
- Collection and Processing: Activities include all collection and clerical operations conducted in Jeffersonville, Indiana at the Census Bureau's National Processing Center. Activities include check-in of forms, data capture, customer support associated with handling incoming telephone calls and correspondence, re-mailing of forms and telephone follow-ups of delinquent businesses, computer edits of reported data, and the correction of erroneous and/or inconsistent data. This line item also includes the development, testing, and maintenance of processing systems and computer programs that support data collection and processing, including an electronic reporting infrastructure to support the electronic reporting option offered to nearly 3.7 million businesses.
- Publication and Dissemination: Activities include all operations related to the
 final review of tabulated census data, the development of census products, and
 the dissemination of census results. More than 1,600 census products will be
 developed and delivered in electronic media supported by metadata, which
 describes the data to users, and support tools that let users access information
 across subject-related topics. Products will profile industries, geographic areas,
 and special subjects.

Each census cycle consists of six budget years. Total costs for the 2007 Economic Census are estimated to be \$513 million. This is about 60% higher than the 2002 census, which cost \$320 million. The higher costs are related to expanded content, increased procurement costs for administrative records, growing security costs,

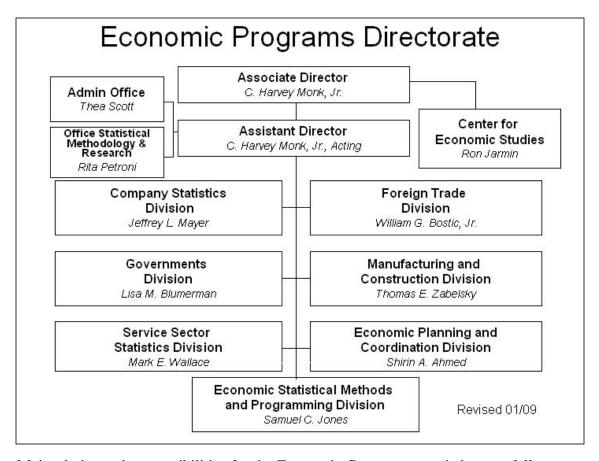
and additional costs related to maintaining response rates. These increases are on top of the typical inflationary increases associated with staff, postage, and contracted services that occur over a six-year period. The estimated cost of the 2012 Economic Census is about \$695 million. Table 2 below compares costs by major budget activity for the 2007 and 2012 Economic Censuses.

Table 2. 2007 and 2012 Economic Census Full-Cycle Costs by Budget Line Item

	2007 Cycle		2012 Cycle		
	Estimated		Estimated		
	Full		Full		
	Cycle	%	Cycle	%	Cycle to
	Costs	Line	Costs	Line	Cycle
	(\$1,000)	Item	(\$1,000)	Item	Change
Economic Censuses					
Direction	\$29,130	6%	\$37,702	5%	129%
Content Determination and Design	\$44,762	9%	\$75,681	11%	169%
Mail List Development and Mailout	\$38,769	8%	\$47,618	7%	123%
Collection and Processing	\$279,696	55%	\$389,499	56%	139%
Publication and Dissemination	\$120,180	23%	\$144,940	21%	121%
Total Actual and Estimated Obligations	\$512,537	100%	\$695,440	100%	136%

2.3 Administrative Arrangements

As noted above, Title 13, U.S. Code grants authority for Census Bureau activities to the Secretary of Commerce, who delegates responsibility for day-to-day operations to the Director of the Census Bureau. Within the Census Bureau, the Associate Director for Economic Programs has primary responsibility for the Economic Census and a variety of annual, quarterly, and monthly business surveys; for the Census of Governments and interim current surveys of governments; for monthly Foreign Trade Statistics; and for economic research conducted through the Center for Economic Studies. The Economic Programs Directorate maintains a permanent staff to plan and manage the activities of the Economic Census and other economic programs. The chart below shows the Directorate's organizational structure.



Major duties and responsibilities for the Economic Census are carried out as follows:

- The Associate Director and Assistant Director direct the program, plan and allocate resources, and make or approve major program decisions. Further, they act as the program's chief representatives and advocates in the budget process and in broader dealings with the Census Bureau, the Department of Commerce, the Office of Management and Budget, the Congress, and other key Federal stakeholders.
- The Company Statistics Division plans, implements, and manages program components for the Economic Census of Puerto Rico and the Island Areas and the Survey of Business Owners.
- The Manufacturing and Construction Division plans, implements, and manages program components for manufacturing, mining, and construction sectors.
- The Service Sector Statistics Division plans, implements, and manages program components for the services sectors (i.e., for NAICS Sectors 22, 42, 44-45, 48-49, 51, 52, 53, 54, 55, 56, 61, 62, 71, 72, and 81; see Table 1 on page 3 for descriptive sector titles and for industries in these sectors that are out-of-scope to the census), the Business Expenses Survey, and the Commodity Flow Survey.
- The Economic Planning and Coordination Division plans, coordinates, and manages Economic Census projects and business processes that affect the program as a whole or cross division boundaries. In particular, it plans processing systems used throughout the Economic Census, develops

requirements, oversees testing, and manages production; further, this division manages the Business Register that provides the Economic Census enumeration list and it plans and implements collection activities.

- The Economic Statistical Methods and Programming Division (ESMPD) plans, engineers, develops, deploys, maintains, and manages Economic Census processing systems; administers databases; and otherwise manages data for those systems.
- The Center for Economic Studies and its network of Research Data Centers oversee and support approved projects that use confidential microdata from the Economic Census, other Census Bureau economic surveys, and other sources in economic research that benefits the Census Bureau's Title 13, Chapter 5 programs.
- The Office of Statistical Methodology and Research, working in collaboration with counterparts in the Divisions, develop statistical methods related to sampling, estimation, variance estimation, editing, imputation, and disclosure avoidance and provide advice and assistance in implementing these methods.

Other Census Bureau Divisions and offices also support the Economic Census; the following assist most directly:

- The National Processing Center (NPC) in Jeffersonville, Indiana provides staff and other resources to carry out many Economic Census data collection and processing operations, including mailout preparation and mailout; receiving, checking in, opening, and sorting responses; follow-up mailings and telephone calls; scanning of returned paper questionnaires; data capture (key from image); response to toll-free telephone assistance calls; and first-level problem resolution for front-end Business Register edits and back-end trade edits. The NPC supplements its permanent staff with intermittent or temporary employees during periods of peak Economic Census workload.
- The Geography Division provides processes that assign geographic classifications to establishments in the Census Bureau's Business Register based on business address. The Economic Census uses these classifications to produce geographic area statistics that summarize data for States, metropolitan statistical areas, counties, and places (cities, towns, and census designated places).
- The Administrative and Customer Services Division assists with preparing and administering contracts for commercial printing of paper questionnaires and for coordinating those contracts through the Government Printing Office.

2.4 Economic Census Plan and Activities

Includes scope and methodology used for conducting a pilot survey and preliminary sample test, zoning enumeration districts, preparation and maintenance of the establishment list for surveys, etc.

The U.S. Economic Census is based on a foundation of many decades' experience. The methods and systems used for each 5-year iteration generally build upon and improve those of the predecessor censuses. Major innovations may be introduced for selected processes (recent examples include electronic reporting and key from image data

capture), but other changes tend to be evolutionary and incremental; therefore, it generally is not necessary to test Economic Census methods and procedures through pilot surveys.

Exceptions have occurred when there has been a major expansion of industry scope, as was done most recently for the 1992 Economic Census. In this case the Census Bureau conducted a 1989 Census Test that covered a sample of establishments in sectors added by the expansion; this test was designed to evaluate new questionnaires developed for industries in those sectors. The test was limited to data collection and analytical evaluation of responses; it was not a complete, front-to-back test of census processes.

When planning a new inquiry or making a substantial revision to an existing inquiry, the Census Bureau does not conduct a census test. Instead, it performs cognitive testing for a relatively small number of businesses; to conduct these tests, specialists visit the business, ask the respondent to complete a questionnaire that includes the new or revised inquiry, observe the response process, and debrief the respondent regarding his/her understanding of the inquiry and the factual content of the data reported, all in an effort to determine whether the inquiry's design and wording were effective and whether the resulting data were reported correctly.

The U.S. Economic Census does not use zoning enumeration districts.

The enumeration list for the Economic Census is derived from the Census Bureau's Business Register, which is maintained continuously by means of updates from administrative records and an annual Company Organization Survey, which updates the establishment composition and organization information for multi-establishment enterprises. See Item 3.2 on page 14 for more information on the Business Register and its use in the Economic Census.

2.5 Staff Recruitment and Training

During the five-year cycle for the U.S. Economic Census, the number of staff members working on the program range from a low of about 600 in the year preceding the Census to a high of almost 900 during the data collection year. The low number reflects the permanent staff, which is devoted to Economic Census management, planning, and development activities throughout the cycle. Approximately 300 staff members are added on a temporary basis during the data collection year; these additions are primarily clerical personnel who work in one of five processing units at the NPC. The units are Check-in, Open and Sort; Batch/Scan; Data Capture; Telephone; and Problem Solving. The NPC maintains a list of persons who have previously worked for the Census Bureau on an intermittent or temporary basis, and they are called first to fill positions. New applicants must apply through our employment web site and be qualified according to Federal civil service hiring procedures. Applicants are recruited via job fairs, Census Bureau web sites, and newspaper advertising.

The Census Bureau permanent staff provides all training. Experienced managers in each area provide training both in classrooms and on-the-job.

2.6 Questionnaire Development and Design

In particular, describe selection procedure of enumeration items.

The Census Bureau designed approximately 530 industry-specific questionnaires ⁶ with both electronic and paper versions to collect data for the 2007 Economic Census. Additionally, a smaller number of general forms was used to collect information about company affiliation and to obtain improved classifications for small single-establishment employers that the Census Bureau's Business Register could not assign to a 6-digit NAICS industry. The Census Bureau determined the content of the Economic Census in consultation with other federal agencies, businesses, other data users, and the academic community.

Question wording, question formats, and other question attributes are recorded in the Economic Metadata Repository (EMR), and the Generalized Instrument Design System (GIDS) uses information from the EMR to generate both paper and electronic layouts for Economic Census questionnaires. Paper layouts are rendered as Adobe Portable Document Format (pdf) files for commercial printing and as PostScript files for ondemand report form printing by Xerox DocuPrint equipment located in NPC; electronic layouts are used by the Surveyor electronic reporting system. GIDS also produces reports from templates that give X/Y coordinates for all answer areas and provides this information to the data capture system described in Item 3.5 on page 17.

To report electronically, respondents download the Surveyor software, a manifest that lists establishments for which reports are required, and applicable forms via secure Internet transmission. Respondents then install the Surve yor software on their personal computer and use the application to complete the questionnaires; they also may import data into Surveyor from industry standard spreadsheets. When finished, respondents upload the completed response to the Census Bureau's servers, again via secure Internet transmission.

Under provisions of the Paperwork Reduction Act, the OMB must review and approve all information collections proposed by Federal agencies. Prior to submitting draft questionnaires to OMB for approval, the Census Bureau publishes a notice of its intention to carry out the Economic Census in the Federal Register. In the notice, the Census Bureau asks for public comments and suggestions on questionnaire content and design. In addition to the Federal Register notice, the agency seeks feedback and suggestions from its advisory committees, other federal stakeholders (particularly the Bureau of Economic Analysis, the Council of Economic Advisors, the Federal Reserve Board of Governors, the Bureau of Labor Statistics, and the Office of Trade and Economic Analysis), industry groups, and professional and business associations.

Some questions are commonly asked across all questionnaires and other questions are specific to a sector or industry. Occasionally new questions or major revisions to existing questions are suggested. In these instances, the Census Bureau conducts cognitive testing in an attempt to word questions in a manner most easily understood and answered by all the respondents.

Adobe Portable Document Format versions of all 2007 Economic Census questionnaires are available at: bhs.econ.census.gov/ec07/CEN_2007FORMS.html.

2.7 Raising Awareness and Promoting Response to the Economic Census

The Census Bureau conducted a comprehensive program to encourage business response to the 2007 Economic Census. The effort involved systematic improvements in direct mail communication, partnership with business organizations and news media to distribute supporting messages to potential respondents, development of a new web site,
business.census.gov>, to demonstrate the value of the data, managed relationships with large businesses, and communication of a strong message regarding the legal requirement to respond.

Research has shown that awareness of the reporting requirement improves business response. We therefore provided a message, "Your Response is Required by Law" on outgoing envelopes and in the text of much-simplified cover letters. We also adopted standardized formatting and wording of questionnaire elements. To ensure delivery of census forms, we sent several reminder letters with replacement forms.

In focus groups and other research, businesses have told us that they look to their industry associations, chambers of commerce, and news media to understand and prioritize government regulatory requirements. To spread the word about the importance of the census, we assembled a list of over 10,000 business and news organizations. We placed particular emphasis on accounting organizations and payroll providers that often are called upon to complete the census forms, as well as about 20 associations that represent industries with the most numerous businesses; we met frequently with these organizations and provided tailored messages for their member publications. We also provided resources for the entire list of 10,000 organizations: monthly e-mails provided the status of census collection and included a brief message that could be included directly in a member publication.

As part of the association effort, we developed a new website, <business.census.gov>, to demonstrate the value of the data and answer the business question "What's in it for me?" The website uses a graphic interface that businesses find attractive, and it provides easy access to case studies and other information that show how businesses can use the data. "Industry Snapshots" on the site provide ratios that businesses can use as metrics to benchmark their performance against industry averages.

We sent a "Contact Exchange Card" to the 15,000 largest businesses, asking them to provide the name, telephone number, and verified address for the person in their organization who would coordinate census reporting. Our experience with previous Economic Censuses has shown that companies are about 13 percent more likely to respond if they have returned such a contact exchange card. In addition, we assigned Account Managers (AM) to each of the top 1,200 companies; these companies represent about one third of US employment and over 650,000 business locations. The AM worked with their assigned company contact to help the company prepare for the census, use the electronic reporting tool, and provide whatever assistance might be necessary.

Toward the end of data collection, we sent letters to nonresponding companies from the Census Bureau's top legal official. The letters advised companies that they had failed to provide mandatory census information and could be subject to fines; it then requested a completed response within fifteen days. These letters were mailed to over 400,000

single location businesses; unlike earlier reminder letters, a replacement form was not enclosed. About 65 percent of the delinquent small businesses completed and returned their census forms after receiving the letter. Similar letters were mailed to about 200 very large companies, but these letters were personalized and sent by express mail to senior company executives. Most of the companies receiving the letter immediately reached out to their AM, and all but ten submitted a completed response.

2.8 Field Supervision and Reappraisal of Questionnaire Responses

The Census Bureau does not employ a field force for Economic Census operations; all data collection is done by means of electronic instruments that are sent/returned via the Internet or by paper questionnaires that are sent/returned by postal mail. These methods are supplemented by telephone follow-up to selected establishments that have not responded.

All questionnaire responses are examined by computer edits. These edits identify missing items, data that are logically inconsistent, and data relationships that are statistically extreme in relation to distributions observed for establishments in the same industry. When an apparent anomaly in the questionnaire response is a relatively simple problem, the computer edits also take action to resolve it. When an apparent anomaly is a more complex problem or when the establishment is significant in its industry, the edits refer the problem to an industry analyst; the analyst will then review the problem and resolve it based on examination of the entire questionnaire, knowledge of the industry, other data sources, follow-up contact with the respondent, and other considerations. For more information on the computer edits, see Item 3.2 on page 14.

3. Data Collection and Data Processing

3.1 Data Items Collected

The variety of activities within the economy and within the major economic sectors precluded complete standardization in questionnaire design and content (for example, the Census Bureau used 292 separate questionnaires to enumerate establishments in the manufacturing sector). However, all questionnaires requested the following basic data items (excluding the shorter classification forms sent to some small single-establishment employers):

- Months in Operation
- Employer Identification Number (EIN, which is the Federal government's identifier for business tax-paying entities)
- Physical Location of the Economic Activity
- Number of Employees
- Payroll
- Value of Sales, Receipts, Revenue, Work Done, or Equivalent
- Certification (name, address, telephone number, etc., of the person completing the questionnaire)

Within each major economic sector, the Census Bureau customized the questionnaires to the greatest extent possible for ease of response, but the data requested varied considerably from sector to sector.

Specialized inquiries on questionnaires for particular sectors or industries are grouped into six general categories:

- Inventories: This item measures the tangible inventories owned by an establishment.
- Assets and expenditures: This item asked for information on assets, capital expenditures, and depreciation; rental payments; and lease rents.
- Costs and Expenses: Two questions asked for information on costs and expenses of business operations.
- Check Box Inquiries: These inquiries were used to collect relatively simple information on specific subjects that could be answered by checking off an appropriate box on the questionnaire. Four general kinds of check box inquiries were used: kind of business/type of operation, class of customer, method of selling, and activity of operating establishments.
- Selected Sections: These sections of the questionnaires included three primary kinds of questions directed toward specific industries or industry groups. For example, they might request data on type of construction (i.e., building or nonbuilding, by respective type), shipping and handling (whether receipts for shipping and handling were received, what the value of those receipts was, and whether they were included in the sales and receipts totals reported elsewhere on the questionnaire).
- Special Inquiries: Individual items that varied from industry to industry and appeared on virtually all the questionnaires. The specific items were customized to the industry to which the questionnaire was tailored.

3.2 Methods of Data Processing

Include wireless data transmission from field; principle of data collection and imputation by types of establishment (head offices and branch offices); guidelines for profiling multi-establishment enterprises, etc.

Attachment A provides a high-level process model that identifies major activities and processing systems for the Economic Census.

The Economic Census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. Head and branch offices generally are treated as separate establishments. Companies engaged in distinctly different lines of activity at one location (e.g., a restaurant in a hotel) are asked to submit a separate report for each activity if business records permit such a separation and if the activities are substantial in size. For selected industries, only payroll, employment and classification were collected for individual establishments; revenue and other data were collected for consolidated reporting units that represent industry segments of multi-establishment enterprises.

Nonresponse is handled by imputing missing data. Imputation is defined as the replacement of a missing or incorrectly reported item with a value derived from logical edits or statistical procedures. The methodology for imputing missing data is established by experts in each major trade area and thus varies by trade and by item. Imputation for most data is done by first utilizing all available reported data and data from administrative sources; then estimates for missing items are calculated using models derived from industry regression factors (industry averages).

3.3 Use of Registers and Administrative Data

For example, use of tax data for the purpose of Economic Census.

Authorized by Title 13, U.S. Code and a 1968 OMB directive, the Census Bureau's Business Register provides establishment information for the Census Bureau's economic censuses and periodic surveys. Its coverage includes establishments of all domestic employer and non-employer businesses (except agriculture, forestry, and fishing; private households; and governments). It contains information on more than 180,000 multi-establishment enterprises that have more than 1.8 million affiliated establishments, nearly 5.9 million single units with paid employees, and nearly 22 million businesses without paid employees.

The Business Register functions as a universe file that controls questionnaire mailing and data processing for the Economic Census. Business Register information is maintained continuously using administrative records data from the Internal Revenue Service, the Bureau of Labor Statistics, and the Social Security Administration. Additionally, the Census Bureau conducts the annual Company Organization Survey to maintain Business Register information about the establishment composition and organization of multi-establishment enterprises. As part of its preparations for the census, the Census Bureau also conducted the 2006 Classification (Refile) Survey to obtain a NAICS classification for single-establishment employer enterprises that had missing or incomplete industry codes on the Business Register. The Census Bureau uses Business Register data as the primary source for Economic Census statistical operations, including preparation, mailout and follow-up operations, data processing, quality assurance, and disclosure avoidance. Census

3.4 Use of Sampling in Economic Census

For example, sample survey application to small establishments (less than 5 employees).

The 2007 Economic Census covered nearly 29 million establishments. Of these, nearly 1.6 million were affiliated with multiunit enterprises, and all such establishments were asked to complete a regular census questionnaire; there was no payroll threshold for

The Business Register data is establishment-based and includes business location, organization type (e.g., subsidiary or parent), industry classification, and operating data (e.g., receipts, payroll, and employment). The scope, detail, and reference period for information vary by establishment type and size and by the source of list information. Business Register information is maintained separately for each establishment, company, and major intra-company organizational unit. U.S. Census Bureau, "Business Register," www.census.gov/econ/overview/mu0600.html, February 28, 2008.

active multiunit establishments. Treatment of single units with paid employees varied somewhat by sector as outlined below. Generally, larger single units, as identified by industry-specific annual payroll thresholds, were asked to complete a regular census questionnaire; below-threshold mining and manufacturing single units were asked to complete a short form that collected minimal basic information, whereas below-threshold single units in other sectors were excluded from direct collection and were represented instead by classifications and basic economic measures from administrative records. Some below-threshold single units that otherwise would have been excluded from direct collection were asked to complete a very brief census classification form because the Business Register could not assign the required 6-digit NAICS industry code. Finally, nearly 22 million businesses without paid employees were excluded from direct collection and were represented entirely by data from administrative records.

The payroll thresholds for single unit employers generally were set so that the establishments excluded from direct collection accounted for about 3 percent or less of total sales, receipts, revenue, or value of shipments for their respective industries, but some industries had a payroll threshold of \$0, causing all single unit employers to receive a questionnaire. While the below-threshold single units represented a small percentage of total dollar volume, they accounted for a relatively large number of establishments because the establishment size distributions are highly skewed.

Mail selection for sectors or groups of related sectors was done as follows:

- Mining: All multiunit establishments and above-threshold single unit employers received one of 19 industry-specific mining long forms; all below-threshold single unit employers received a mining short form.
- Manufacturing: Multiunit and single unit employer establishments that were in the sample for the Annual Survey of Manufactures (ASM) received an ASM questionnaire.⁸ For non-ASM establishments, multiunits and above-threshold single unit employers received one of 292 industry-specific manufacturing long forms, whereas below-threshold single unit employers received a manufacturing short form.
- Construction: All multiunit establishments received a census questionnaire. Single unit employers were sampled (treated as below-threshold) by partitioning the frame into two overlapping components. The primary component consisted of establishments that could be classified to a 6-digit NAICS industry code with high confidence; a stratified probability proportionate to size (PPS) sample was selected from this group. The secondary component included all remaining single unit employers; a PPS sample was selected from this group as well. Finally, a small supplemental sample was drawn from 2007 entries ("births") identified after the initial sampling operation.
- Other sectors (services): All multiunit establishments received a census questionnaire. For single units, an annual payroll threshold was established for each 8-digit NAICS industry (payroll for establishments that operated part-year

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⁸ The ASM collection is integrated into the Economic Census collection for census reference years.

was projected to a full-year basis); for some industries, the threshold was \$0, placing all single unit employers above the cutoff. Establishments at or above the industry threshold received a census questionnaire, whereas those below the threshold were represented by administrative data. Some below-threshold single unit employers received a classification form.

• Puerto Rico and the Island Areas: All multiunit and single unit employer establishments received census questionnaires; there was no payroll threshold.

Table 3. 2007 Economic Census Mail Counts

	N	umber of Est	ablishments	*	
			Single Units		
				Below	Classifi-
			Above	Threshold	cation
	Total *	Multiunits	Threshold	Sample	Forms
50 States and the District of Columbia	3,543,038	1,573,401	1,487,875	481,762	951,019
Construction	128,407	15,638		112,769	159,296
Minerals	15,423	6,030	8,188	1,205	242
Minerals long	14,218	6,030	8,188		
Minerals short	1,205			1,205	
Manufactures	194,468	62,269	91,812	40,387	6,542
ASM	56,824	37,334	19,490		
Manufacturing long	97,257	24,935	72,322		
Manufacturing short	40,387			40,387	
Wholesale trade	398,962	120,965	277,997		
Retail trade; accommodations and food services	1,015,439	584,518	342,521	88,400 (12.3%)	187,571
Utilities; transportation and warehousing	144,678	52,606	75,731	16,341 (19.8%)	27,024
Finance and insurance; real estate and rental and leasing	427,545	210,548	180,705	36,292 (11.1%)	155,667
Other services	1,218,116	520,827	510,921	186,368 (10.9%)	358,003
Unclassified (general classification form)					56,674
					,-,-
Puerto Rico and the Island Areas	48,252	9,881	38,371		
Puerto Rico	41,512	8,544	32,968		
U.S. Virgin Islands, Guam, Northern Mariana Islands, American Samoa	6,740	1,337	5,403		

^{*} Excludes classification forms, which are shown separately in the right-most column.

3.5 Technological Innovations for Reducing Costs of the Economic Censuses

For example, web-based data collection system, Internet survey.

The integrated Computer Assisted Data Entry (iCADE) system was created by Census Bureau employees with experience in large-scale data capture systems specifically designed to meet demanding census requirements. This system performed data capture on the 2002 and 2007 Economic Censuses. The Economic Census is an extremely

complex process consisting of 4,500 distinct page designs, 20,000 data concepts, and over 125,000 answer-zone locations that must be recognized and processed by the imaging system. The 2007 Economic Census was processed at 40% of the cost of the same census 10 years earlier, and in less calendar time, largely due to efficiencies realized by iCADE. An evaluation was performed of several surveys that have used the iCADE system and it was determined there was a 60% savings in data capture cost versus traditional key-from-paper methods. When iCADE is coupled with the technology at Census that stores the paper images, the average cost is reduced to \$0.19 per image.

Surveyor software enabled businesses to download, complete, and submit electronic questionnaires. Also, it allowed businesses to import information from spreadsheets produced by industry-standard office automation software, which greatly facilitated reporting and reduced response burden for multiunits that had to complete reports for many establishments. Once the respondent imported the data from the spreadsheet(s) into Surveyor for all establishments and made any corrections flagged by the software, the completed electronic questionnaires were submitted directly to the Census Bureau via secure Internet transmission. More than 28% of all responses and more than 54% of responses by multiunit establishments were submitted electronically. Electronic responses saved approximately \$0.58 per establishment in mail-back postage and data capture costs.

For the first time, the 2007 Economic Census provided respondents with a secure means of communicating with the Census Bureau via e-mail. A Secure Messaging Center was deployed as part of the Business Help Site⁹, which is a set of web pages designed to assist businesses in responding to the census.

3.6 Quality Assurance for Economic Census Processes

The Census Bureau applies statistical quality assurance procedures to key Economic Census processes and work products. For deterministic processes, these procedures generally select a sample from each lot of completed work and assess the quality of the lot by comparing results for the sample to a standard or to results obtained by reworking the sample independently. If the apparent error rate for a lot is below the acceptance threshold, apparent errors are adjudicated and corrected as needed, and the lot is accepted; on the other hand, if the apparent error rate exceeds the acceptance threshold, the lot is rejected and reworked completely. For less deterministic processes, quality assurance procedures monitor work samples for acceptability and provide feedback needed to improve staff skills and resolve observed process errors.

Economic Census processes and work products subjected to quality assurance include:

• Administrative records—These records serve as an input for maintaining the Business Register, which serves as the basis for the census enumeration list; administrative records also provide Economic Census data for many smaller single units with paid employees and all businesses without paid employees, as described above in Item 3.4, pages 15 – 17.

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⁹ See
bhs.econ.census.gov/BHS/index.html>.

- Correspondence processing.
- Geographic coding.
- Census questionnaires printed commercially.
- Questionnaires printed on-demand by Xerox DocuPrint equipment.
- Questionnaire labeling.
- Mailout package assembly.
- Scanning of questionnaires.
- Data capture (key from image).
- Clerical resolution of front-end Business Register edit referrals (mainly business register coverage and related problems).
- Clerical resolution of back-end trade edit referrals (mainly census reporting problems).

Interactive updates to Economic Census data are carefully controlled by applications that assign Census Bureau employees to user classes with varying levels of access and update authority. Automated validity and consistency edits enforce data integrity rules for these updates. Additionally, data from the Economic Census are subjected to a variety of statistical microdata edits and macrodata analyses designed to detect and resolve reporting errors as the information is prepared for use in statistical products.

The Economic Census has also gone through the Office of Management and Budget's Program Assessment Rating Tool (PART) process. The PART is a series of questions designed to provide a consistent approach to rating programs across the Federal government. The PART relies on objective data to inform evidence-based judgments to assess and evaluate programs across a wide range of issues related to performance.

As an assessment of the program overall, the PART also examines factors that the program or agency may not directly control but which are within the influence of the program or agency. To date, seven Census Bureau programs have been PARTed. While all Census Bureau programs have scored well above the average for the Department of Commerce, the Census Bureau's parent organization, and other Federal programs, the Economic Census' 90% is the highest Census Bureau score and second highest in the Department of Commerce.

4. Post-Census Activities

4.1 Post-enumeration Checks

The U.S. Economic Census does not use post-enumeration checks.

4.2 The Economic Census as a Basis for Subsequent Sample Survey Programs

Final data from the Economic Census strengthen the Census Bureau's annual, quarterly, and monthly business surveys in the following ways. First, sample survey estimates are benchmarked to results of the latest Economic Census. Second, Economic Census data are incorporated into the Business Register, where they improve the quality of NAICS

classifications, basic size measures, and activity measures that are important to frame construction and sampling. Third, some surveys use Economic Census data directly in sampling because it provides product detail and other relevant information that is not available from the Business Register; for example, sampling procedures for the Annual Survey of Manufactures incorporate data from the Census of Manufactures.

4.3 Economic Census Reports

The data from the 2007 Economic Census are released in more than 1,600 reports, which are released over a 2-year period. These reports are grouped into the publication series described below. The majority of these data reports cover statistics for a single NAICS sector, but selected ones cover all Economic Census sectors.

The Core Business Statistics Series includes four distinct reports. The first, the Advance data files, present data at the 2- and 3-digit 2007 and 2002 NAICS levels for all Economic Census sectors for 2007. These are the first data files released from the Economic Census. These files include statistics on the number of establishments; employment; payroll; and output for establishments of firms with paid employees at the U.S. level only. These data are superseded by data released in later files.

Following the release of the Advance data files are the files from the Industry Series. These files present data at a much more detailed 2007 NAICS level by sector for 2007 and include statistics on the number of establishments; employment; payroll; product shipments and sales; and other items for establishments of firms with paid employees at the U.S. level only.

Released next are the data files from the Geographic Area Series. These files include data at the 2- through 6-digit (plus selected 7- and 8-digit) 2007 NAICS levels by sector for all valid economic geographies for 2007. The list of covered geographies varies by Economic Census sector. These files include similar statistics as are shown in the Industry Series.

The Geographic Area Series also includes the Economy-Wide Key Statistics data file. This file consolidates the data for all published 2007 NAICS levels, all valid economic geographies, and all Economic Census sectors for 2007 into one file. This file includes statistics on the number of establishments; employment; payroll; and value of sales, receipts, revenue, or shipments for establishments of firms with paid employees. In addition, for the first time, this file will also include statistics on the number of firms and receipts for establishments with no paid employees (or "Nonemployers").

Following the release of the Geographic Area Series data files are the files from the Subjects and Summary Series. These files present high-level summaries of the data presented in the Industry Series and Geographic Areas Series files. They also include a number of miscellaneous, detailed tabulations of statistics not included in these earlier data files. These data are primarily published at the U.S. level but selected data are available for lower geographic levels.

The Core Business Statistics Series also includes the Comparative Statistics and the Bridge Between 2007 NAICS and 2002 NAICS files. These files are released following the Subjects and Summary Series files. The Comparative Statistics file presents data at the 2- and 3-digit, and selected 4- through 7-digit 2002 NAICS levels for all sectors for

2007 and 2002. This file includes similar statistics as the Advance report at the U.S. and State levels. The Bridge Between 2007 NAICS and 2002 NAICS files present data for 2007 for industries whose NAICS classification have changed between 2002 and 2007 and outline the components of the change from 2002 to 2007 and visa versa. These files include similar statistics as the Advance files at the U.S. level only.

The fourth and final set of data files from the Core Business Statistics Series, the Franchise Statistics file, is new for the 2007 Economic Census. It presents data for selected 6-digit 2007 NAICS codes, which have establishments engaged in franchising. This file includes the same statistics as the Advance files at the U.S. level only.

The final data files released from the Economic Census are the ZIP Code Statistics files. These files present data at the 2- thru 6-digit (plus selected 7- and 8-digit) 2007 NAICS levels for selected Economic Census sectors for 2007. They only include statistics on the number of establishments by sales size by U.S. Postal Service ZIP Code.

4.4 Forms of Dissemination

For the 2002 and prior economic censuses, the primary mode of data dissemination was printed reports and Portable Document Format (PDF) files on the Census Bureau Internet site. Data were also available on CD-ROM and DVD-ROM, in HTML tables, and (starting for the 1997 Economic Census) the new American FactFinder (AFF) online database system, but these formats were considered secondary to the PDF files.

The 2007 Economic Census is following the Census Bureau's move away from printed (and print-format) publications and distribution of diskettes by disseminating all 2007 data via the Internet using AFF and eliminating these other formats. This change acknowledges data users' preferences for user-friendly data dissemination, but it also eliminates printing costs, and speeds the agency's ability to provide data to the public.

The Census Bureau's AFF is an Internet-enabled information system that makes a wide range of census information available to agency personnel and external users. The system is interactive and allows easy access and efficient dissemination, and inquiry of data. Although the Census Bureau initially developed AFF to disseminate Census 2000 data, the system now disseminates data generated by programs throughout the agency (i.e., economic censuses and some economic surveys, demographic surveys, and the American Community Survey).

4.5 Confidentiality Issues

Title 13, U.S. Code, Section 9, stipulates that no statistical data may be published that would disclose information about an individual business. Further, the Census Bureau has a Disclosure Review board that is responsible for examining and approving disclosure avoidance methodology.

According to the Census Bureau's disclosure rules, the number of establishments in a NAICS industry is not considered a disclosure; therefore, this information may be released even though other information is withheld.

For most Economic Census data products, dissemination processes examine statistical summaries in order to identify data cells that would disclose information about an

individual enterprise; this determination is made according to a standard rule, the details of which must be treated as confidential in order to preserve the integrity of disclosure avoidance measures. Such cells are withheld from publication as primary disclosures. Once the primary disclosures have been identified, another examination is done to identify additional cells that would make it possible to derive the cells withheld as primary disclosures; those additional cells are also withheld from publication as complementary or secondary disclosures.

Data products for the Economic Census of Puerto Rico and the Island Areas, Nonemployer Statistics, and the Commodity Flow Survey use an alternate methodology. For these programs, primary disclosures are withheld, but complementary disclosures are not. Instead, a relatively small amount of protective noise is infused (i.e., the original data are multiplied by a factor that is $1 \pm a$ small random percentage) into the microdata upon which the tabulations are based. This noise prevents derivation of accurate estimates for the cells withheld as primary disclosures.

4.6 Evaluation, Analysis and Acceptance of Economic Census Results

All data compiled in the Economic Census are subject to nonsampling errors. Nonsampling errors can be attributed to many sources during the development or execution of the census:

- Inability to identify all cases in the actual universe;
- Definition and classification difficulties:
- Differences in the interpretation of questions;
- Errors in recording or coding the data obtained; and
- Other errors of collection, response, coverage, processing, and estimation for missing or misreported data.

Precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize the effects of nonsampling errors. It is believed that most of the important operational errors were detected and corrected during the U.S. Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensated in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the data files.

The Census Bureau obtains limited information extracted from administrative records of other federal agencies, such as gross receipts from federal income tax records and employment and payroll from payroll tax records. This information is used in conjunction with other information available to the Census Bureau to develop estimates for nonemployers, small employers, and other establishments for which responses were not received in time for publication.

In addition, selected data from the Economic Census were expanded to account for establishments that did not respond to the particular inquiry for which data are

presented. Files in which data were expanded include a coverage indicator for each publication category, which shows the effect of this expansion.

Data for the Construction sector (as well as selected statistics for other sectors) are also subject to sampling errors. The estimates of the magnitude of the sampling errors are provided by the standard errors of estimates shown in the data files.

5. Future of the Economic Census in Economic Statistics Programs

5.1 Future Plans

A direct-Internet reporting option will be developed and offered to the single-unit companies and classification forms for the 2012 Economic Census. The Census Bureau intends to pilot direct-Internet reporting in the 2010 and 2011 Annual Survey of Manufactures and the 2011 Refile in preparation for the 2012 Economic Census and will continue to offer Surveyor for multiunit companies.

In 2011, the Census Bureau will begin disseminating data by means of a new and improved American FactFinder. The new American FactFinder system will be available in late spring of 2011, and its first uses for new economic data will be the 2009 County Business Patterns and 2009 Nonemployer Statistics releases. Data products from the 2012 Economic Census will be released through the new system, and 2007 Economic Census products will be migrated to the system as well.

The Census Bureau is considering a new Enterprise Statistics Program (ESP), which would be based substantially on the Economic Census and would draw on existing governmental data sources to create a new database linking data on establishments and enterprises, assigning these entities to flexibly definable industry categories, and tracing the experience over time of both the enterprises and their component parts. The database would provide a foundation for a range of data products describing and enabling the analysis of business performance at the enterprise level.

The Business Register data would provide a framework and much of the content for an enterprise statistics database, and would support a range of new ESP data products. The Business Register contains information at the establishment and enterprise levels, with links to complementing administrative data, for all known U.S. businesses. The Business Register also includes comprehensive and current data on the organizational changes of U.S. businesses.

For the new series of data products about enterprises, we propose adding a limited number of items to the 2012 Economic Census to better measure globalization and innovation. Such items may include, for example, questions about manufacturing services to better assess the value chain and role of enterprises in production of goods. Additionally, to support the Bureau of Economic Analysis' announced plan to integrate the Research and Development satellite account into the National Income and Product Accounts in 2013, we may also include questions about the size and use of intangibles by enterprises as part of their business model.

5.2 **Key Issues**

The Census Bureau's first major challenge is securing adequate resources for our statistical programs. Over the past 50 years, the fundamental need for the U.S. Economic Census has been seriously challenged only once in 1953; however, securing adequate funding, especially in data collection years has been a periodic problem. In 1953, the Eisenhower Administration failed to provide funding for the 1953 Economic Census. Then Secretary of Commerce, Charles Sinclair Weeks, wanted to know if the Economic Census was indeed necessary. To answer his question, in October 1953, he appointed Dr. Ralph J. Watkins, Director of Research for Dun and Bradstreet, Inc., to form an Intensive Review Committee to study the issue. The Committee released its report, "Appraisal of Census Programs," in February 1954. Thereafter known as the "Watkins Commission Report," its series of unreserved testimonials – from the business, financial, professional, and governmental groups represented on the Committee – led to the recommendation to reinstate the Economic Census for 1954.

The most recent major threat to the Economic Census occurred in 2003 when the Senate Appropriations Committee threatened to cut the budget request by 30% or \$25 million, two months before the mailing of 5 million report forms. We ultimately received full funding 5 months into the fiscal year, but only after the personal involvement of Allan Greenspan, Chairman of the Federal Reserve Board, who characterized the Economic Census as "indispensable to understanding America's economy," and Glenn Hubbard, the Chairman of the Council of Economic Advisors, and the vocal support of a number of business and trade organizations such as the National Association of Manufactures.

Over the past 6 years the Census Bureau has fared very well, obtaining new funding for the American Community Survey, full funding for the 2002 and 2007 Economic Census data collection and processing, and additional monies for new service and e-business statistics. While we have been very fortunate in recent years we cannot expect the future to be as rosy. The Census Bureau is not going to be the only organization facing this problem and we are going to need the energetic and effective support of government, business, and other stakeholders. This support will only be forthcoming if we continue to provide data that responds to the needs of these constituencies. We cannot use budget constraints as an excuse for retaining the status quo.

In fact, our second challenge is to ensure that our programs change and improve even in the face of constrained resources. Otherwise we jeopardize future funding for existing programs. Terminating programs and program components is always difficult, but if this is the only way we can fund program improvements, terminate we must.

Our third major challenge is improving cooperation and maintaining high response rates. Relevant, accurate, and timely statistics require the continued cooperation of our data providers and suppliers. We cannot take this support for granted. We must proactively and aggressively seek innovative ways to reduce reporting burden on businesses. To accomplish this goal, we must better understand our data providers' environments and needs. We need to improve our knowledge of their record keeping practices, organizational structure, reporting processes, and data availability. We also need more information about how data providers understand our concepts, questions, and instructions, their reporting problems and concerns, and their ideas about how we

can facilitate and simplify reporting. Bottom line, we need to make sure that our data requests align more closely with accounting conventions and companies' record keeping practices.

2007 Economic Census Concept DiagramnCore Program Components * se promotion (via intermediaries) Mailing pieces (advance info materials, paper forms, CSAQ CDs, ollow-up, correspondence Content consultation & testing info b. Admir Secure mes business help, & AM com BHS SMC c. Content d. Mailout. f. Receipt, Check-in, i. Promotion Consultation Follow-up & Determination Correspon-Open, and & Publicity & Testing dence e. Surveyor Content (e-Reporting) Assistance Management OMB for PRA clearance QUI I. Electronic n. Feith m. Scanning Commercia Report Pre-Edit Printing Paper Forms Question (paper forms) instru-ments (CSAQs, PostScript files for DocuPrint) BR Preparation collection info AM info esponse data e-report o. Economic GIDS KFI MIS Metadata Collection q. KFI Data Ca Mailing info (name & address, form #, etc.) data (paper) Instrument Design System COTS Tools u. Business DIPSE MIS s. OMB Register Front-End v Business Register Edits t. Other Mailing w. DIPSE--BR Rese BR Piece Design BR mi Problem Solving microdata (FEE) Emplo micro data (DIPSE) FDD BR to MADb CAPS Retrieval z. CES Back-End TIPSE ECONDD Analytical Database Research & Trade Archives Edits (MADb) Trade Edit roblem Solving Query & Drill Down (TIPSE review & corrections) (ECONDD queries) Note: this diagram does not cover the data (table records) Puerto Rico & the Island Areas Survey of Business Owners Business Expenses Survey **Analyst's** MARS SODS dd. Tabulation Commodity Flow Survey lated **Desktop** hh. Disclosure , jj. Publicationmm. ii. Pre-FDRT DMUI Analysis Dissemination Metadata Repository (Complemer Ready System File II Disse Product Review Metadata Preparation AFF nn. Data pp. Metadata Extraction System Legend System Interactive (AFF review & Database www Dissemination Other Electronic Batch Data Storage (incl. SAS Datasets) Process Content consultation info (key data users)

26