### **Supporting Statement**

# Annual Capital Expenditures Survey (ACES) Forms ACE-1(S), ACE-1(M), ACE-1(L), and ACE-2

#### A. Justification

1. Necessity of the Information Collection

A major concern of economic policymakers is the adequacy of investment in plant and equipment. Data on the amount of business expenditures for new plant and equipment and measures of the stock of existing facilities are critical to evaluating productivity growth, the ability of U.S. business to compete with foreign business, changes in industrial capacity, and overall economic performance. The ACES survey is the sole source of detailed comprehensive statistics on investment in buildings and other structures, machinery, and equipment by private nonfarm businesses in the United States.

Data users tell us that they need comprehensive and consistent data on investment by all private nonfarm businesses, by industry, by kind of investment, *i.e.*, whether in new or used structures or equipment. The objectives of the ACES survey are:

- (a) to provide estimates of capital expenditures for all private nonfarm sectors of the economy by 3-digit and selected 4-digit North American Industry Classification System (NAICS) levels;
- (b) to base the survey on a probability sample that yields measures of the statistical reliability of the survey estimates;
- (c) to develop a base survey to benchmark more frequent surveys on capital expenditures that do not have complete industry coverage;
  - (d) to produce annual enterprise-level data with the level of detail, coverage, and quality which previously was only available as part of the quinquennial economic census;
  - (e) to provide detail on capital expenditures for estimating the national income and product accounts, estimating the productivity of U.S. industries, evaluating fiscal and monetary policy, and conducting research using capital expenditures data; and

(f) to provide industry analysts with capital expenditures data for market analysis, economic forecasting, product development, and business planning.

The Census Bureau conducts this survey under the authority of Title 13 of the United States Code, Sections 182, 224, and 225.

This request is for a revision of a currently approved collection and will cover the 2007 through 2009 ACES (conducted in fiscal years 2008-2010). Changes from the previous ACES authorization are the collection of capital expenditures by type of structure and type of equipment in the 2008 ACES, and the incorporation of the 2007 North American Industry Classification System (NAICS) in the 2009 ACES.

Capital expenditures by type of structure and type of equipment were last collected from employer companies in the 2003 ACES. These data, collected together once every five years, will again be collected in the 2008 ACES. The data are critical to evaluating the comprehensiveness of capital expenditures statistics in years detailed data on types of structures and equipment are not collected. The detailed structures data will provide a 5-year benchmark for estimates of new construction put in place. The detailed equipment data will provide a periodic measure of expenditures by type of equipment and assist in evaluating estimates of the private equipment and software components of nonresidential fixed investment.

Through the 2008 ACES, data will be based on the 2002 NAICS. Beginning with the 2009 ACES, however, we will collect and publish data based on the 2007 NAICS. Industries in the survey will comprise 3-digit and 4-digit 2007 NAICS codes.

To collect data, the Census Bureau will rely primarily on mail out/mail back survey forms. Employer companies will be mailed one of three forms based on the diversity of their operations, i.e., the number of industries in which they have payroll. All employer forms will have the 3-digit or selected 4-digit NAICS industries imprinted on the form to minimize the need for industry self coding.

Companies that operate in only one industry will receive an ACE-1(S) form. These companies will not be asked to report capital expenditures by industry, thus eliminating the need for industry self coding. Companies that operate in more than one but less than nine industries will receive an ACE-1(M) form. Companies that operate in nine or more industries will receive an ACE-1 (L) form.

All ACE-1 forms request sales and receipts information to calculate industry investment to sales ratios and to assist in verifying that consolidated company data are being reported. Asset and depreciation information, also collected, assists

in measuring changes in the Nation's capital stock estimates.

Capital expenditures data are also collected annually from a small sample of nonemployer enterprises using Form ACE-2. This collection is intended to better represent the total capital expenditures activity of all firms.

The survey Forms ACE-1(S), ACE-1(M), ACE-1(L), ACE-2 and accompanying instructions were developed through consultation described in Section 8, Consultation Outside the Agency.

### 2. Needs and Uses

The ACES is an integral part of the Federal Government's effort to improve the quality and usefulness of National economic statistics. Federal agencies, including the Census Bureau, use these data to improve and supplement ongoing statistical programs:

The Census Bureau uses the data to improve the quality of monthly economic indicators of investment. The Bureau's Value of New Construction Put in Place survey currently uses the ACES data to benchmark its industrial buildings data. The Bureau of Economic Analysis (BEA) uses the data in refining and evaluating annual estimates of investment in structures and equipment in the national income and product accounts, compiling annual input-output tables, and computing gross domestic product by industry. The Federal Reserve Board uses the data to improve estimates of investment indicators for monetary policy. The Bureau of Labor Statistics uses the data to improve estimates of capital stocks for productivity analysis.

In addition, industry analysts use the data for market analysis, economic forecasting, product development, and business planning.

Ensuring information quality is an integral part of the pre-dissemination review of information disseminated by the Census Bureau (fully described in the Census Bureau's Information Quality Guidelines). Information quality is also integral to information collections conducted by the Census Bureau, and is incorporated into the clearance process required by the Paperwork Reduction Act.

# 3. <u>Use of Information Technology</u>

Beginning with the 2006 ACES, electronic reporting was offered to all respondents using an encrypted Internet Data Collection System (Census Taker) as a substitute for the paper form mailed to all companies. Based on the 2006 results, we estimate that 32 percent of the responses on the 2007 and later ACES

will be collected electronically.

# 4. <u>Efforts to Identify Duplication</u>

The ACES is the only survey that provides annual capital investment data on a consistent basis for all private nonfarm businesses in the United States, by the investing industries, and by new and used structures and equipment.

During 1995 and 1996, Census assembled a team of its survey managers to review several Bureau programs that collect investment data and proposed to eliminate all but essential duplication of capital expenditures data on its surveys. This effort revealed that although the collection of selected components of investment data occurred on various Census surveys, none of these surveys aimed at creating combined comprehensive investment statistics. Most of the programs reviewed serve multiple purposes of which investment data are only a part. The surveys are also conducted at different frequencies; the reporting units vary from enterprise to establishment; and the amount of detail is limited.

In the Annual Survey of Manufactures (ASM), for example, aggregated annual capital expenditures data were available on an establishment basis for manufacturing industries. However, the survey excluded all but essential control totals at the 6-digit NAICS level.

There are no capital expenditures questions on the annual surveys covering the wholesale, retail, and services sectors, which are generally conducted at the Employer Identification Number (EIN) level. To add such questions to all these surveys would be extremely burdensome to respondents. Also, large companies often make decisions about investment not at the establishment or EIN level but at the corporate level.

The 2002 Census of Manufactures and Mineral Industries programs, which are part of the 5-year economic census, also did not collect detailed data on capital expenditures. Only essential control totals for the 6-digit NAICS level were retained.

No capital expenditures questions are included in the Census programs covering the wholesale, retail, and services sectors, with the exception of the information sector. Selected industries in the information sector collect data on capital expenditures for new construction, including renovation because these data are considered essential to that program.

The 2002 Business Expenditures Survey, which is also part of the 5-year economic census, eliminated all data requests for capital expenditures.

To identify other available sources of data, we have also reviewed requirements for reporting to the Securities and Exchange Commission and regulatory requirements for utilities companies. While these sources require data on capital expenditures, they do not provide comprehensive and consistent data, nor are the data presented in the detail provided by the ACES survey.

# 5. <u>Minimizing Burden</u>

To minimize reporting burden on small businesses, we limit the sample size to the smallest size necessary to provide statistically reliable estimates. We also select a new sample each year to reduce the likelihood of a business being asked to respond to the survey more than once in a 5-year period. Our sampling methodology minimizes the probability of selection for any individual small or mid-sized business. (See Sections B.1 and B.2.a. for additional detail)

### 6. <u>Consequences of Less Frequent Collection</u>

ACES data are collected annually. Collecting the data less frequently would seriously impair their usefulness as a trend estimator of investment and as a benchmark for the national income and product accounts and estimates of capital stocks. Data on investment by types of structures and types of equipment are collected once in a 5-year period, with the next collection planned for the 2008 survey.

### 7. <u>Special Circumstances</u>

There are no special circumstances.

# 8. <u>Consultations Outside the Agency</u>

During development of the ACES survey, the Census Bureau conducted extensive pre-testing, a response analysis survey, and a comprehensive program evaluation. In addition, we maintain ongoing consultations with data users and respondents. Based on these consultations, we modified the survey's information collection instruments and dropped our plan for the annual collection of detailed data on types of structures and equipment.

We have periodic discussions about the content and nature of the ACES with data

users at the BEA, the FRB, the BLS, and the Department of the Treasury. Based on these discussions, in particular with the BEA, we issued the "Technical Note on New Capital Expenditures Survey" to accompany the 1993 survey publication. In addition, we clarified the information collection instruments to minimize any ambiguity in our data collection. Since the issuance of the technical note, we continually review data discrepancies between the BEA's estimate of nonresidential fixed investment and the Census Bureau's estimate of new structures and equipment from the ACES. When appropriate, we modify the ACES collection instruments to minimize these discrepancies.

The Census Bureau consults periodically with the following Federal Government data users:

## **Bureau of Economic Analysis**

Dennis Fixler	(202) 606-9607

Chief Statistician

Brent Moulton	(202)	606-9606
---------------	-------	----------

Associate Director for National Economic Accounts

Sumiye Okubo	(202) 606-9612
--------------	----------------

Associate Director for Industry Accounts

George Smith (202) 606-9983

Chief, Current Industry Analysis Division

Carol Moylan (202) 606-9711

Chief, National Income and Wealth Division

Stephen Andrews (202) 606-9701

**Assistant Division Chief** 

National Income and Wealth Division

Paul Lally (202) 606-9743

Chief, Investment Branch

National Income and Wealth Division

David Wasshausen (202) 606-9752

Economist, Investment Branch

National Income and Wealth Division

Michael Glenn (202) 606-9718

Economist, Investment Branch

National Income and Wealth Division

Belinda Bonds (202) 606-9328

Chief, Goods Branch

**Industry Benchmark Division** 

## Federal Reserve Board

Carol Corrado (202) 452-3521

Chief, Industrial Output Section Division of Research Statistics

Norman Morin (202) 452-2476

Economist, Industrial Output Section

Division of Research Statistics

John Stevens (202) 452-2206

Economist, Industrial Output Section Division of Research and Statistics

### **Bureau of Labor Statistics**

Michael Harper (202) 691-5600

Associate Commissioner for Productivity and Technology

### **Department of the Treasury**

Mike McDonald (202) 622-1785

Financial Economist Office of Tax Analysis

#### Centers for Medicare and Medicaid Services

Jean Stiller (410) 786-0708

**Economist** 

The 2007 ACES presubmission notice was published in the Federal Register on July 9, 2007 (Volume 72, Number 130) Page 37186-37187, inviting public comments on our plans to submit this request. The presubmission notice closed September 9, 2007. We received comments from the BEA supporting the continued collection of the ACES because the data are crucial to key components of BEA's economic statistics. No additional comments relating to the notice were received.

## 9. Paying Respondents

We do not pay respondents or provide them gifts.

## 10. <u>Assurance of Confidentiality</u>

The report form for this information collection will provide respondents with the following assurance of confidentiality:

YOUR RESPONSE IS REQUIRED BY LAW. Title 13, United States Code requires business and other organizations that receive this questionnaire to answer the questions and return the report to the U.S. Census Bureau. By the same law, YOUR REPORT IS CONFIDENTIAL. It may be seen only by persons sworn to uphold the confidentiality of Census Bureau information and may be used only for statistical purposes. Further, copies retained in respondents' files are immune from legal process.

Similar guarantees will be included in the cover letter that accompanies the report form. The statutory basis for these assurances of confidentiality is Title 13, USC, Section 9. All activities relating to the collection and dissemination of these data satisfy requirements of this law.

#### 11. <u>Justification for Sensitive Questions</u>

No sensitive questions are asked.

#### 12. Estimate of Hour Burden

The estimate of total respondent burden hours for the 2007 ACES and the 2009 ACES (conducted in fiscal years 2008 and 2010) is 132,900 hours per year. This estimate was derived as follows:

	Survey forms	Hours per response	Burden hours
FY 2008 & 2010:	27,900 Form ACE-1(S) 17,500 Form ACE-1(M) 600 Form ACE-1(L)	2.0 <sup>1</sup> 3.0 <sup>1</sup> 16.0 <sup>1</sup>	55,800 52,500 9,600
	15,000 Form ACE-2	1.0	15,000

The difference in hours per response is due to the expected number of industry categories reported by companies. Highly diversified companies will report a greater number of industries.

Fiscal year total:	132,900 hours
Average for 46,000 ACE-1 responses:	2.56 hours
Average for 15,000 ACE-2 responses:	1.0 hours
Average for all 61,000 responses:	2.18 hours

Due to the addition of structure and equipment detail by type collected from employer companies for the year 2008 ACES (conducted in fiscal year 2009), the estimate of total respondent burden hours for fiscal year 2009 is 203,000 hours. This estimate was derived as follows:

	Survey forms	Hours per response	_
FY 2009:	27,900 Form ACE-1(S)	2.0 1	55,800
	17,500 Form ACE-1(M)	3.0 1	52,500
	600 Form ACE-1(L)	$16.0^{\ 1}$	9,600
	27,900 ACE-1 (S)Supplement	1.0 1	27,900
	17,500 ACE-1(M)Supplement	$2.0^{1}$	35,000
	600 ACE-1 (L)Supplement	12.0 <sup>1</sup>	7,200
	15,000 Form ACE-2	1.0	15,000
Fiscal year total:			203,000 hours
Average for 46,000 A	ACE-1 responses:		4.09 hours
Average for 15,000 A	ACE-2 responses:		1.0 hours
Average for all 61,00	00 responses:		3.33 hours

These burden hour estimates are based on estimates of the average time required to complete the survey as reported in the response analysis survey conducted during the pre-testing of the ACES, on conversations and correspondence with respondents, and on estimates of time required to complete similar surveys conducted by the Census Bureau. We adjust our estimates to account for the modification of data items collected.

A total of about 46,000 companies will receive Form ACE-1. About 600 of the companies that receive Form ACE-1(L) are highly diversified. We expect them to report expenditures for 9 or more industry categories. Approximately 17,500 companies receiving Form ACE-1(M) are engaged in fewer industries. We expect these companies to report expenditures for 1 to 8 industry categories. The remaining 27,900 companies will receive form ACE-1(S) and generally will be active in one industry. A total of about 15,000 nonemployer companies will receive Form ACE-2. No industry level data are requested from these companies.

The total cost to all respondents is estimated to be \$3.3 million annually for both

fiscal year 2008 and fiscal year 2010 based on the median hourly wage of \$24.75 for accountants and auditors multiplied by the annual burden hours (132,900).

The total cost to all respondents is estimated to be \$5 million for fiscal year 2009 based on the median hourly wage of \$24.75 for accountants and auditors multiplied by the annual burden hours (203,000).

#### 13. Estimate of Cost Burden

We do not expect respondents to incur any costs other than that of their time to respond. The information requested is of the type and scope normally carried in company records at variable levels of detail and no special hardware or accounting software or system is necessary to provide answers to the survey questions. Therefore, respondents are not expected to incur any start-up costs or system maintenance costs in responding. Further, purchasing of outside accounting or information collection services, if performed by the respondent, is part of usual and customary business practices and not specifically required for this information collection.

#### 14. <u>Cost to Federal Government</u>

We estimate the total cost to the government of the survey to be \$4.4 million per fiscal year 2008, 2009, and 2010, all borne by the Census Bureau. The Business Investment Branch of the Company Statistics Division has planned and allocated resources for the effective and efficient management of this information collection.

### 15. Reason for Change in Burden

We estimate an additional 70,100 burden hours for fiscal year 2009 will be needed due to the addition of structure and equipment detail by type collected in 2009 for the 2008 reference year. This detail will not be collected for 2007 or 2009 and will not be requested again until the 2013 ACES.

#### 16. <u>Project Schedule</u>

The survey to collect 2007 data will begin in March 2008. Data collection for 2007 will occur from March 2008 through September 2008. Data will be processed using Census Bureau computer equipment. Census Bureau analysts will review the survey returns and the tabulated data for reasonableness. We estimate that the review process will continue through October 2008.

We plan to publish data for new and used structures and equipment by industry category. These data will be released in late 2008 or early 2009. We expect processing and publication for subsequent years to follow a similar schedule.

## 17. Request to Not Display Expiration Date

The assigned expiration date will be displayed on all report forms used in the information collection.

## 18. Exceptions to the Certification

There are no exceptions to the certification.

### 19. NAICS Codes Affected

The survey covers all private nonfarm businesses within the following NAICS sectors:

<u>Title</u>		NAICS Sectors
Forestry, Logging, Fishing, Hunting, Trapping, and	1	
Agricultural Support Activities		113-115
Mining	21	
Utilities		22
Construction		23
Manufacturing	31-33	
Wholesale Trade		42
Retail Trade		44-45
Transportation and Warehousing (except Postal Se	ervice)	48, 492,493
Information		51
Finance and Insurance	52	
Real Estate and Rental and Leasing		53
Professional, Scientific, and Technical Services		54
Management of Companies and Enterprises		55
Administrative and Support and Waste Manageme	nt	
and Remediation Services		56
Educational Services		61
Health Care and Social Assistance		62
Arts, Entertainment, and Recreation		71
Accommodation and Food Services		72
Other Services (except Private Households and		
Public Administration)		811-813

Companies receiving Form ACE-1 are asked to report information for industry categories at the 3-digit and selected 4-digit NAICS levels. The industry categories for each company are computer-imprinted on the form. We ask each company to review the industries and correct them if necessary using the list of industry categories that appears in the instruction manual.