Generic Information Collection Request

Request: The Census Bureau plans to conduct additional research under the generic clearance for questionnaire pretesting research (OMB number 0607-0725). The Census Bureau plans to conduct cognitive interviews on a proposed question for the Annual Capital Expenditures Survey (ACES) conducted by the Census Bureau.

Purpose
The ACES is a mandatory annual collection that gathers data on business investment for new and used structures and equipment. This survey is collected under the authority of Title 13, United States Code (U.S.C). It is a sample survey of approximately 70,000 companies. Basic data for each year include all expenditures during the year for both new and used structures and equipment chargeable to asset accounts for which depreciation or amortization accounts are ordinarily maintained. For reference years ending in "2" and "7," detailed data by types of structures and types of equipment are collected from companies with employees.

Data on the amount of business expenditures for new plant and equipment and measures of the stock of existing facilities are critical to evaluate productivity growth, the ability of U.S. business to compete with foreign business, changes in industrial capacity, and measures of overall economic performance. Industry analysts use the data for market analysis, economic forecasting, identifying business opportunities, and developing strategic plans. Government agencies use the data to improve estimates for investment indicators for monetary policy, improve estimates for capital stocks for productivity analysis, monitor and evaluate the healthcare industry, and analyze depreciation. Other users of the data include private companies, organizations, educators, students, and economic researchers.

Further information regarding ACES can be found at this website:
https://www.census.gov/programs-surveys/aces/about.html

The proposed question is attached (Enclosure 1). The question asks for the dollar value of new and used robotic equipment expenditures within the company. We plan to discuss the possibility of collecting either a dollar amount or a percentage. Robotics have been increasingly used across all sectors of the economy with little data collected about them. Areas of research using this data may include the types of firms that use robotics, their relationship with human labor and employment rates, and how various aspects of the market might influence the use of robotics.

Staff from the Data Collection Methodology & Research Branch within the Economic Statistical Methods Division (ESMD) of the Census Bureau will be conducting cognitive interviews regarding this testing, with support from staff from the Office of the Associate Director for Economic Programs (ADEP), and the Economy-Wide Statistics Division (EWD). For this testing, we will interview up to 40 respondents in two separate rounds.

Population of Interest: Staff from EWD and ADEP will provide DCMRB staff with a list of businesses and respondent contact information, from which we will recruit. The frame of respondents will be recent respondents to the ACES, with a particular focus on respondents who are expected to have an understanding of robotics. We will also be focusing more on companies

in the service industries because there have been recent interviews with manufacturing companies on a similar question on the establishment-based Annual Survey of Manufactures (ASM). Since the ASM is establishment-based and the ACES is company-based, we will still conduct interviews with a small number of manufacturers.

Approximately 40 interviews will be conducted in total, with approximately 20 interviews in each of the two rounds. This number of interviews was selected because it is a manageable number of interviews for the time period allotted, and should be large enough to provide reactions to the question and definitions that are representative of the survey population.

Language
Testing will be conducted in English only.

Method
The method of research will be cognitive interviews, which are interviews aimed at understanding the way that a person interprets the items that are being presented to them, in order to understand and reduce potential measurement error before these questions are included in the survey. We will also be asking early stage scoping questions, which have a broader focus on the respondents' understanding and familiarity with the concepts being addressed in the question, the way their company's records are organized, and the terminology that they use in reference to these concepts. These interviews will take place in-person at the respondent's location. The locations for each round have not yet been selected, but they will be determined based on where we expect to find companies who are likely to have robotic equipment. The interviews will follow a semi-structured interview protocol (Enclosure 2).

Subject area specialists from the Census Bureau will participate in as many of the cognitive interviews as possible. Their primary purpose will be for observation, but they may also assist in cases where additional clarification of the subject matter is required, and to provide information on the purpose and uses of the survey. We will request that the cognitive interviews be audio recorded with the participants' permission (see Enclosure 3), to aid researchers in accurately summarizing key findings from the interviews.

Sample recruitment
We will contact potential participants via phone, explain the nature of our research, and ask them to participate in our study. The sample of participants will be those who are able to be contacted and who agree to participate in the study. Efforts will be made to sample respondents across all sectors, with an emphasis on the services industries. During recruitment, we will screen respondents to determine if their company has any robotics equipment, prioritizing those who do have it in the first round and interviewing several without it in the second round. The script for recruiting and screening participants can be found in Enclosure 4.

Participants will be informed that their response is voluntary and that the information they provide is confidential and will be seen only by Census Bureau employees involved in the research project. We will not be providing monetary incentives to participants in this study. After an interview is scheduled, respondents will receive a confirmation email as well as a reminder email or phone call prior to the interview.

Timeline:
Recruiting for these interviews will begin as early as May, 2018 and continue through October, 2018.

We anticipate that each interview will include one or two participants, for an average of 1.5 participants. We estimate that, on average, the interviews will take one hour. Thus, the total estimated burden for completed interviews is 60 hours (40 interviews X 1.5 participants X 1 hour).

Potential participants who are interested will need to be screened to determine whether they have the types of machinery that could be considered robotics; we anticipate that to get 40 interviews, we may need to conduct 80 screening calls, which may take up to 10 minutes each. We anticipate that to reach 80 potentially interested persons, we may need to conduct 320 total calls; therefore, we anticipate up to 240 refusals or non-responses. The anticipated maximum burden for a refusal or a non-response is two minutes. As such, we estimate the maximum associated recruiting burden to be approximately 21.33 hours (80 screening calls x 10 minutes = 800 minutes; 240 refusals/nonresponses x 2 minutes = 480 minutes; 800 + 480 minutes = 21.33 hours). Thus, the estimated total public reporting burden for this research is approximately **81.33 hours**.

Enclosures: Below is a list of materials to be used in the current study:

1. Draft question (Enclosure 1)
2. Protocol used for the study (Enclosure 2)
3. Consent form (Enclosure 3)
4. Recruiting script (Enclosure 4)

Contact: The contact person for questions regarding data collection and statistical aspects of the design of this research is listed below:

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Enclosures

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