Generic Information Collection Request:
Cognitive testing for the 2018 Annual Business Survey

This letter is an update to the letter previously submitted on July 10, 2018. This package reflects the survey sponsor's changes to the research and technology questions being evaluated during this testing. The Census Bureau and NSF worked collaboratively to develop the materials for this research.

Request: 1The 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 pretesting activities for the 2018 Annual Business Survey (ABS).

The ABS is conducted annually as a supplement to the economic census collected by the Census Bureau and sponsored by the National Center for Science and Engineering Statistics (NCSES) within the National Science Foundation (NSF).

The ABS provides a detailed, regularly collected source of data on the status, nature, and scope of women-, minority-, and veteran-owned businesses. The ABS provides estimates for the number of employer firms, sales and receipts, annual payroll, and employment by owners' gender, ethnicity, race, and veteran status. The ABS also provides information on research and development activity and cost for businesses with 1-9 employees and includes survey questions to measure business innovation in firms of all sizes. For the 2018 ABS, estimates will be available for the U.S., states, and select metropolitan statistical areas (MSA). Among other uses, the Small Business Administration (SBA) and the Minority Business Development Agency (MBDA) use results from the ABS to assess business assistance needs and allocate available program resources. Data collected on research and development and innovation may be used to compare R&D costs across industries, determine where R&D activity is conducted geographically, and identify the types of businesses with R&D, to contribute to the Bureau of Economic Analysis (BEA) system of national accounts; to increase investments in research and development, strengthen education, and encourage entrepreneurship; and to compare US business innovation with innovation in other countries, including those in the European Union.

The ABS is collected via a self-administered questionnaire using the Census Bureau's online survey reporting system. Respondents are mailed a letter informing them of the requirement to complete the survey and providing them with access information. Paper forms are not available, but respondents can download a PDF worksheet containing the survey questions and instructions.

Purpose: The ABS asks questions about the business owner(s) as well as various characteristics about the business. The 2018 ABS cognitive testing will include some general questions from section A and research and development (R&D) questions from Section D of the ABS as well as a new technology module. The types of questions in the R&D and technology module are listed below:

- **Intensity of Use** asks about the intensity of usage of different technologies during the recall period (three years including 2016-2018).

- **Motivation for Technology Adoption and Utilization** asks about the reasons behind adoption and utilization of the technologies.
- **Impact of Technology on Workforce** is designed to understand how each technology helped reorganize the responding company's workforce during the three years 2016 to 2018.
- **Impact of Technology on Worker Types** assesses the impact of each technology for different worker types.
- **Factors Adversely Affecting Technology Adoption and Utilization** asks about how different factors adversely affected the adoption or utilization of specific technologies from 2016 to 2018.
- **Research and Development** asks about R&D activities. These data are used to compare R&D costs across industries, determine where R&D activity is conducted geographically, and identify the types of businesses with R&D.

The results from the cognitive testing will be recorded and a report produced that outlines the findings of the pretest and recommendations for improvement.

Population of Interest: Sample members from the 2017 ABS.

Timeline: Testing will be conducted from August through October 2018.

Language: Testing will be conducted in English only.

Method: We will conduct one round of cognitive interviews with up to 20 respondents in order to evaluate and refine the new and revised questions. During the interviews, respondents will answer self-administered paper questionnaires (see Attachments B, C, and D). We will use concurrent and retrospective probes to assess respondents' understanding of the questions and the flow of the questionnaire. Travel is required for the cognitive interviews. Locations are yet to be determined. Interviews will be conducted by researchers from the Data Collection Methodology and Research Branch. Staff from the NSF and Census Bureau's Center for Economic Studies (CES) and/or Business Owners Branch may observe if available.

Attachment A contains the instructions for the cognitive interview as well as the follow up questions for Attachments B, C, and D. Each respondent will read Attachments B, C, and D on their own and the interviewer will ask the probes included in Attachment A.

Sample: We plan to conduct a total of 20 interviews. We plan to conduct interviews with a variety of sizes and types (i.e., industries) of businesses. This number of interviews was selected because it is a manageable number of interviews for the time period allotted, it should adequately cover target companies, and should be large enough to provide reactions to the questions in order to identify meaningful findings. We will be targeting companies that can help evaluate the questions on the new technology module.

Recruitment: Participants will be recruited using a list of respondents from the 2017 ABS. During the recruitment phase, participants will be asked screening questions to ensure that they meet the criteria for testing the technology module questions on artificial intelligence, cloud-

based computing systems and applications, specialized software, robotics, and specialized equipment. Before beginning the interviews, we will inform participants that their response is voluntary and that the information they provide is confidential under Title 13. The interviews may be recorded (with consent), to facilitate summarization.

Protocol: A copy of a draft interview protocol and a draft questionnaire for testing purposes are enclosed. Cognitive interviews will be conducted in person. Participants will be asked to complete the draft ABS questions, R&D questions, and Technology Module questions. We anticipate all sessions will take 60 minutes to complete.

Use of incentive: Monetary incentives for participation will not be offered.

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

Attachment A: Draft protocol used to outline how the research study will be conducted
Attachment B: Draft ABS questions for evaluation
Attachment C: R&D questions for evaluation
Attachment D: Technology Module questions for evaluation
Attachment E: Consent form to obtain participant consent for participant and recording of the session
Attachment F: Recruiting script for R&D Interviews
Attachment G: Recruiting script for Technology Interviews

Length of interview: For cognitive interviews, we expect that each interview will last no more than 60 minutes (20 cases x 60 minutes per case = 20 hours). Additionally, to recruit respondents we expect to make up to 5 phone contacts per completed case. The recruiting calls are expected to last on average 3 minutes per call (5 attempts per phone call per completed case x 20 cases x 3 minutes per case = 5 hours). Thus, the estimated burden is 25 hours (20 hours for interviews + 5 hours for recruiting).

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

Krysten Mesner
Data Collection Methodology and Research Branch
U.S. Census Bureau
Washington, D.C. 20233
(301) 763-9852
krysten.mesner@census.gov

cc.:

Ron Jarmin	(ADEP) with enclosures
Nick Orsini	(ADEP) with enclosures
John Jankowski	(NSF) with enclosures
Audrey Kindlon	(NSF) with enclosures
Kevin Deardorf	(ERD) with enclosures
Aneta Erdie	(ERD) with enclosures
Patrice Norman	(ERD) with enclosures
Carol Caldwell	(ESMD) with enclosures
Xi Jian Liu	(ESMD) with enclosures
Carma Hogue	(ESMD) with enclosures
Diane Willimack	(ESMD) with enclosures
Amy Anderson Riemer	(ESMD) with enclosures
Jennifer Hunter Childs	(ADRM) with enclosures
Jasmine Luck	(ADRM) with enclosures
Danielle Norman	(PCO) with enclosures
Mary Lenaiyasa	(PCO) with enclosures