

**Generic Information Collection Request:
Cognitive testing for the 2019 Annual Business Survey**

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 pretesting activities for the 2019 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 2019 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. For more information regarding ABS:
<https://www.census.gov/programs-surveys/abs.html>

Purpose: The ABS asks questions about the business owner(s) as well as various characteristics about the business. The 2019 ABS cognitive testing will include new questions in the innovation module. The types of questions in the innovation module are listed below:

- **New or Improved Goods and Services** asks if the business has introduced new or improved goods or services, how much revenue those goods or services account for, how those goods and services are performed, and some information about the development (three years including 2017-2019).
- **New or Improved Business Processes** asks about the activities the business conducted to improve its processes and their associated costs.
- **Government Support** asks about which programs and grants the business took advantage of to aid innovation.

- **Drivers and Barriers of Innovation** assesses the impact markets, public policy, and society had on the decision of whether or not to conduct innovation activities.
- **Business Strategies** asks about a business' focus on a multitude of specific innovation activities.
- **Use of Digital Technologies** asks about which digital technologies the business uses in its innovation activities and the business' capability to acquire and use new technologies.

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

Population of Interest: Sample members from the 2017 ABS who responded yes to one or more of the innovation questions. Businesses should be representative of all sized businesses (in particular small and medium) and cover a variety of industries.

Timeline: Testing will be conducted from May through September 2019.

Language: Testing will be conducted in English only.

Method: We will conduct two rounds of cognitive interviews with up to 40 respondents total in order to evaluate and refine the new and revised questions. During the interviews, respondents will answer self-administered paper questionnaires (see Attachments C, D, and E). We will use concurrent and retrospective probes (see Attachment A) to assess respondents' understanding of the questions and the flow of the questionnaire.

Researchers will then ask participants to complete a card sort to assess the Digital Technologies topics (see Attachment F). Card sorting is a well-established research technique for discovering how people understand and categorize information. Card sorting involves creating a set of cards that each represent a concept or item, and asking people to group the cards in a way that makes sense to them.

Finally researchers will conduct an exploratory interview to assess respondents' understanding of 'Technology Capabilities' (see Attachment G). These exploratory conversations will be used to form the 'Technology Capabilities' lists into survey questions.

Travel is required for the cognitive interviews. Locations are yet to be determined, but will be based on the concentration and availability of our target population of interest. Interviews will be conducted by researchers from the Data Collection Methodology and Research Branch. Staff from the NCSES and Census Bureau's Center for Economic Studies (CES) and/or Economic Reimbursables Division may observe if available.

Sample: We plan to conduct a maximum of 40 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 innovation module.

Recruitment: Participants will be recruited using a list of respondents from the 2017 ABS. Only respondents that previously reported engaging in innovative activities will be contacted (see Attachment I). Once interviews are scheduled, researchers will send participants a confirmation email. 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 audio 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 Innovation Module questions. We anticipate all sessions will take 60 minutes to complete, and only one participant will be interviewed at a time.

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

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

Attachment A: Protocol used to outline how the research study will be conducted

Attachment B: Draft ABS Innovation Module questions for evaluation

Attachment C: Innovation Handout 1 - 'New and Improve Goods and Services,' 'New or Improved Business Processes,' and 'Government Support'

Attachment D: Drivers and Barriers to Innovation Handout

Attachment E: Business Strategies Versions A & B

Attachment F: Digital Technologies Cards

Attachment G: Technologies Capabilities Lists

Attachment H: Consent form

Attachment I: Cognitive Interview Recruiting Script

Length of interview: For cognitive interviews, we expect that each interview will last no more than 60 minutes (40 cases x 60 minutes per case = 40 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 40 cases x 3 minutes per case = 10 hours). Thus, the estimated burden is 50 hours (40 hours for interviews + 10 hours for recruiting).

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

Aryn Hernandez
Data Collection Methodology and Research Branch
U.S. Census Bureau
Washington, D.C. 20233
(301) 763-7982
Aryn.Hernandez@census.gov

cc.:

Nick Orsini	(ADEP) with enclosures
John Jankowski	(NSF) with enclosures
Audrey Kindlon	(NSF) with enclosures
Rebecca Morrison	(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
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