



Council of Professional Associations on Federal Statistics
2121 Eisenhower Avenue, Suite 200, Alexandria, VA 22314 www.copafs.org
LINKING YOU WITH A THRIVING STATISTICAL SYSTEM

November 25, 2014

Ms. Jennifer Jessup
Departmental Paperwork Clearance Officer
Department of Commerce, Room 6616
14th and Constitution Avenue NW
Washington, DC 20230

Dear Ms. Jessup,

I write to commend the systematic approach that the U.S. Bureau of the Census has taken in reviewing the content of the American Community Survey (ACS) and the transparency with which the ACS Content Review results have been reported.

However, a number of the members of the Council of Professional Associations on Federal Statistics (COPAFS) are concerned that inadequate account was taken of the small area uses, legislative mandate, and federal program-related benefits of ACS Person Question No. 12 regarding Undergraduate Field of Degree. We wish to make five points about the benefits of this question, within the context of your review methodology.

- 1. Person Question No. 12 is the sample frame for another critically important federal survey.** ACS respondents who have at least a baccalaureate degree create the sampling frame for the National Science Foundation's (NSF) National Center for Science and Engineering Statistics (NCSES) to conduct its National Survey of College Graduates (NSCG). The NSCG is an entirely unique longitudinal survey that permits examination of the characteristics of college-educated individuals over time, including: Educational histories; Primary work activity (e.g., teaching, basic research, etc.); Publication and patent activities; Salary; Satisfaction and importance of various aspects of job; School enrollment status; Sector of employment (academia, industry, government); Work-related training; gender, race and ethnicity, disability status, and other demographic data.
- 2. The NSCG, which relies on Person Question #12, is mandated by law.** NSF collection and reporting of statistics about the participation of women, minorities, and persons with disabilities in science and engineering education and employment is mandated by the *Science and Engineering Equal Opportunities Act* (Public Law 96-516). If ACS Person Question No. 12 was discontinued, NSF would have to reproduce a national survey to identify Baccalaureate degree holders, an action that would be highly cost inefficient and would possibly violate the *Paperwork Reduction Act* (Public Law 104-13).

- 3. Person Question No. 12 and the NSCG that is based upon it, do provide the only data by which the success of a long-standing, major federal program can be measured and tracked.** That program is Science, Technology, Engineering and Mathematics (STEM) education, first formalized in the *Science and Technology Equal Opportunities Act* of 1979. Several Federal agencies have statutory responsibility to provide STEM education, including: the Department of Commerce, Department of Energy, the Department of the Interior, Department of Defense, the National Aeronautics and Space Administration, and the U.S. Department of Agriculture.

STEM education for women, minorities, and (more recently) the disabled has been a stated high priority of every U.S. president for 35 years. For example, in his State of the Union Address on January 31, 2006, President George W. Bush announced the American Competitiveness Initiative to address shortfalls in federal government support of educational development and progress at all academic levels in the STEM fields. The initiative called for significant increases in federal funding for advanced R&D programs and an increase in U.S. higher education graduates within STEM disciplines. In the current Administration, President Obama launched the Educate to Innovate initiative to move American students from the middle to the top of the pack in science and math achievement over the next decade.

STEM is one of the U.S. Chamber of Commerce's 2014 Policy Priorities, specifically to "Support efforts to generate more U.S. graduates with a credential in a STEM (science, technology, engineering, and mathematics) field." The National Governor's Association deems STEM education so important to U.S. global competitiveness that it has an entire site devoted to it (<http://www.nga.org/stem>).

STEM is bi-partisan, supported by Congressional legislation, recognized as important by industry and State governments, and reliant, in part, on the NSCG, and thus ACS Person Question No. 12, to operate efficiently. You cannot efficiently implement a federal program without the means to measure its progress in isolation of other educational, employment, economic, and demographic trends. There is no alternative source of data to accomplish such measurement.

Not only have the Decennial Census and, later, the ACS been the historical source data on STEM by gender, race, income level, and area, the data are needed for STEM program planning, implementation, and evaluation. Indeed, the Department of Commerce, itself, evaluated the gender gap in STEM education based on the ACS field of degree data¹.

- 4. Communities, which may not have had the opportunity to contribute to the ACS Content Review, rely on the small-area validity of ACS Person Question No. 12 and the STEM information it enables.** States, cities and rural communities use area-specific educational attainment as a goal for economic development or an attraction for more specific industries to locate there. For example, The Greater Houston Partnership uses the technical knowledge of Houston's population as a selling point of the area, stating in its promotional materials that "According to the Census Bureau's 2013 American Community Survey, science, engineering and related degrees have been awarded to 586,898 Houstonians or 48.1 percent of Houston's total college graduates – compared to only 44.0 percent of college graduates nationwide." It can be even more important for rural areas to track the disciplinary foci of their residents in planning which industries they can attract or what kind of educational advances or shifts are needed to draw investment to the area.

- 5. A wide variety of other users of the results of ACS Person Question No. 12, on its own, may not have been captured by the ACS Content Review.** These include the nation's prospective post-secondary students, their guidance counselors, and their parents. The ACS data on field of undergraduate degree, in association with income and employment information from individual respondents to the ACS, permit timely assessment of how graduates in various fields are faring in the job market and how employment and earnings vary among fields. Organizations including the Georgetown Center for Education and the Workforce and the Pew Research Center have used ACS Person Question No. 12 to estimate the financial payoff associated with earning degrees in different fields of degreeⁱⁱ. These analyses, in turn, inform those who are making decisions about which field of degree to pursue. Colleges and universities also have a stake in knowledge about how and to what extent their particular specialties contribute in the marketplace. For example, the American Association of Colleges and Universities used the ACS field of degree data and related NSF data to test, and subsequently reject the hypothesis that majoring in the liberal arts leads to lower employment and earningsⁱⁱⁱ.

In conclusion, we believe there is ample evidence that ACS Person Question #12 has high benefits -- in running and evaluating a federal program, to states, cities, and rural communities for local economic development, and to a range of stakeholders for whom no alternative STEM or linked economic, educational, and demographic data source exists.

Thank you for the opportunity to comment on the U.S Bureau of the Census' ACS Content Review results.

Sincerely,

Katherine R. Smith
Executive Director

ⁱ David Beede, Tiffany Julian, David Langdon, George McKittrick, Beethika Khan, and Mark Doms, Office of the Chief Economist. *Women in STEM: A Gender Gap to Innovation*, Aug. 2011, ESA Issue Brief 04-11, Department of Commerce:

<http://www.esa.doc.gov/sites/default/files/reports/documents/womeninstemagaptoinnovation8311.pdf>

ⁱⁱ Anthony P. Carnevale, Jeff Strohl, and Michelle Melton. What's It Worth? The Economic Value of College Majors, May 2011, Georgetown University Center for Education and the Workforce:

<https://cew.georgetown.edu/whatsitworth> ; Pew Research Center. Is College Worth It? May 2011:

<http://www.pewsocialtrends.org/files/2011/05/Is-College-Worth-It.pdf>

ⁱⁱⁱ Debra Humphreys and Patrick Kelly. *How Liberal Arts and Sciences Majors Fare in Employment: A Report on Earnings and Long-Term Career Paths*. Jan. 2014, Association of American Colleges and Universities:

<https://www.aacu.org/press/press-releases/new-report-documents-liberal-arts-disciplines-prepare-graduates-long-term>
