

15. STRENGTHENING FEDERAL STATISTICS

Public and private decisions rely on data more than ever before. Ready and equitable access to relevant, accurate, timely, and objective information helps make *citizens* more informed, *businesses* more competitive, and *government* smarter. The Federal government's statistical agencies and programs, along with many other Federal government programs, play a vital role in generating the data that citizens, businesses, and governments need to make informed decisions.

- *Citizens.* Access to reliable information on their communities improves their ability to make the best decisions for themselves and their families about where to go to school and what to study, where to work and how to get there, where to live, and more.
- *Businesses.* Access to reliable information on current and potential markets, international trade, and changing economic conditions informs critical business decisions on new products, locations for new production facilities and retail outlets, marketing strategies, workforce characteristics and hiring strategies, and more. In addition to informing business and investment decisions, Federal data serve as a vital input for a network of firms that do not produce their own data, but rather aggregate, repack-age, and analyze data to provide products and services to households, businesses, other organizations, and governments. Federal data can also multiply the value of private sector data because their high quality and reliability provide a necessary benchmark reference that lends context, validity, and increased applicability to data generated by businesses.
- *Government.* Access to reliable data helps to inform and evaluate Federal government budget, management, and policy decisions at the Federal, State, local, and tribal levels. An effective and efficient Federal government requires evidence about where needs are greatest, what works and what does not, where and how programs could be improved, and how programs of yesterday may no longer be suited for today or prepare us for tomorrow. The Federal statistical system continues to expand and strengthen the Federal evidence base to meet increasing demand while working collaboratively to minimize the cost and burden to the public by exploring the use of administrative data, sensor data, satellite data, and more in order to supplement or replace surveys that are more burdensome and interviews.

A modest share of budget resources is devoted to supporting Federal statistics—about 0.04 percent of Gross Domestic Product (GDP) in non-decennial census years and roughly double that in decennial census years. These

resources are necessary to safeguard the ability of Federal principal statistical agencies to objectively design, collect, process, edit, compile, store, analyze, release, and disseminate data. The Federal statistical community continues to maximize the value of this investment by developing and applying innovative ideas and techniques to improve current measures, create new information products, and strengthen our Federal evidence base. A few recent examples include:

- *Improving current measures.* Citizens and businesses now have more accurate early reads of the Nation's economy with reduced revisions to GDP because the **Bureau of Economic Analysis** started incorporating into the initial GDP estimates the advance monthly inventory data and preliminary quarterly services data from the **Census Bureau**. Efforts to reduce response burden on high-impact farm operations by implementing customized data collection strategies are underway by the **National Agricultural Statistics Service**.
- *Creating new information products.* Energy industry businesses, investors, and traders now have access to near real-time hourly electricity operating data for the Lower 48 states, published by the **Energy Information Administration**, to make better business and investment decisions. Farmers and businesses can now review the impacts of the "shale revolution" on the farm sector through the comprehensive view of energy use and production in agriculture published by the **Economic Research Service**. Communities and their leaders, health-care providers, and others can now identify in additional detail the circumstances of and specific drugs involved in drug overdose deaths because the **National Center for Health Statistics** developed a new method to extract additional information from the literal text on death certificates. Employers and job seekers can now better understand the physical demands, environmental conditions, mental and cognitive demands, and vocational requirements of jobs using new data published by the **Bureau of Labor Statistics** from the *Occupational Requirements Survey*.
- *Strengthening Federal evidence base.* The **National Center for Science and Engineering Statistics**, as part of an Office of Science and Technology Policy Committee, improved the accuracy and consistency of research and development spending data by establishing a mechanism for Federal agencies to identify and share best practices for the identification, classification, and reporting of these data. In an effort to create more timely and relevant economic and

social measurements and reduce respondent burden by harnessing the power of big data, the **Census Bureau**, in collaboration with the **Bureau of Economic Analysis**, launched the Big Data Center. The **Census Bureau's** Center for Administrative Records Research and Applications has been evaluating the use of administrative and third party data to reduce visits to vacant households in the 2020 Census, which will improve accuracy and lessen the need for census takers to knock on doors, saving time and money.

Underlying data systems that produce Federal statistical products must be credible in order to be beneficial to their wide range of users. Federal statistical programs foster this credibility by adhering to high quality standards for maintaining integrity, objectivity, transparency, and efficiency in the production and curation of data. As data stewards, Federal statistical agencies balance public information demands and decision-makers' needs for information with legal and ethical obligations to minimize reporting burden, respect respondents' privacy, and protect the confidentiality of the data provided to the Government. The Office of Management and Budget (OMB) reinforced these fundamental responsibilities through the issuance of OMB Statistical Policy Directive No. 1, *Fundamental Responsibilities of Federal Statistical Agencies and Recognized Statistical Units*.¹ OMB Statistical Policy Directive Nos. 2, 3, and 4 assure the high quality and independence of statistical methods and data.² The remainder of this chapter presents highlights of principal statistical agencies' 2018 program budget proposals.

Highlights of Fiscal Year 2018 Program Budget Proposals

The U.S. Federal statistical system is highly decentralized. Agencies spread across every cabinet department and several independent agencies carry out the programs that provide essential statistical information for use by governments, businesses, researchers, and the public. Excluding cyclical funding for the decennial census, approximately 39 percent of the total budget for these programs provides resources for 13 designated statistical agencies or units that have statistical activities as their principal mission (see Table 15–1). The remaining funding supports work in approximately 115 agencies or units that carry out statis-

tical activities in conjunction with other missions such as providing services, conducting research, or implementing laws and regulations. More comprehensive budget and program information about the Federal statistical system, including its core programs, will be available in OMB's annual report, *Statistical Programs of the United States Government, Fiscal Year 2018*, when it is published later this year. The following highlights the Administration's proposals for the programs of the 13 principal Federal statistical agencies, giving particular attention to new initiatives and to other program changes.

Bureau of the Census (Census Bureau), Department of Commerce: Funding is requested to provide continued support for ongoing Census Bureau programs and to: 1) build operations and systems for a reengineered modern and cost-effective 2020 Census, including testing to validate the integration of 2020 Census operations, procedures, systems, and infrastructure in the 2018 End-to-End Census Test, which is the last opportunity to conduct this test before the 2020 Census; 2) move to 100 percent Internet response of the 2017 Economic Census to increase the efficiency, reduce the reporting burden on businesses and governments, lower costs to the Census Bureau, and provide quick data releases; 3) continue research into in-office geographic imagery to inform decisions about areas of the country where in-field address canvassing operations are required; 4) support the fourth year of the Census Enterprise Data Collection and Processing Initiative and deliver several capabilities into production in support of the 2018 End-to-End Census Test for the 2020 Census; and 5) reengineer current survey processes and make operational and methodological changes to several surveys and programs, while preserving the fundamental social and economic data that inform effective public and private decision-making.

Bureau of Economic Analysis (BEA), Department of Commerce: Funding is requested to incorporate necessary reductions while preserving the timeliness, relevance, and accuracy of some of the Nation's most critical economic statistics and to: 1) research the release and expansion of GDP detail to the lowest level of aggregation—over 3,100 U.S. counties—to provide complete coverage of all geographic areas, in particular rural areas; 2) continue the development of new data sources to improve data quality; and 3) reprioritize previous work analyzing the small business, health care, and trade in services industries to support BEA's core programs and products.

Bureau of Justice Statistics (BJS), Department of Justice: Funding is requested to maintain BJS's research portfolio of nearly fifty statistical programs and to continue exploring new ways to support analyses of a broad range of criminal justice issues. For example, BJS proposes to use funding to support the following major priorities: 1) continue to support and improve the current National Crime Victimization Survey and its supplements, as well as major redesign efforts currently underway to generate state and metropolitan area estimates and improved measurement of rape and sexual assault; 2) continue to expand the use of administrative

¹ OMB Statistical Policy Directive No. 1: Fundamental Responsibilities of Federal Statistical Agencies and Recognized Statistical Units. <http://www.gpo.gov/fdsys/pkg/FR-2014-12-02/pdf/2014-28326.pdf>.

² OMB Statistical Policy Directive No. 2: Standards and Guidelines for Statistical Surveys. https://obamawhitehouse.archives.gov/sites/default/files/omb/inforeg/statpolicy/standards_stat_surveys.pdf. OMB Statistical Policy Directive No. 3: Compilation, Release, and Evaluation of Principle Federal Economic Indicators. https://obamawhitehouse.archives.gov/sites/default/files/omb/assets/omb/inforeg/statpolicy/dir_3_fr_09251985.pdf. OMB Statistical Policy Directive No. 4: Release and Dissemination of Statistical Products Produced by Federal Statistical Agencies. https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/federal_register/FR2008/030708_directive-4.pdf.

records to support various projects; 3) provide support to Office of Justice Programs components and other federal agencies through BJS's statistical infrastructure to examine program outcomes and improve measures to better understand the U.S. justice system, for example by looking at how the flow of Bureau of Justice Assistance Byrne/Juvenile Justice Assistant Grant funds impacts changes in crime rate at the jurisdiction level and assisting the Office of Victims of Crime's efforts to collect more geographically based data on victimization; and, 4) if funding and staff resources are available, reinstate core, annual and biennial BJS collections that were halted due to lack of funding, such as the National Judicial Reporting Program and State Court Processing Statistics.

Bureau of Labor Statistics (BLS), Department of Labor: Funding is requested to provide support for ongoing BLS programs, including collecting data on the domestic labor force, prices and cost of living, compensation and working conditions, productivity and technology, and also conducting widely-used surveys such as the Current Employment Statistics Survey, National Longitudinal Surveys, Job Openings and Labor Turnover Survey, and American Time Use Survey. With funding from the Department of Labor, the Current Population Survey will release data in 2018 from the May 2017 Contingent Worker Supplement (CWS). For the first time since 2005, BLS will be able to capture important information about the ever-growing "gig" economy. Specifically, the CWS identifies workers with contingent or alternative work arrangements; measures workers' satisfaction with their current arrangement; and measures earnings, health insurance coverage, and eligibility for employer-provided retirement plans.

Bureau of Transportation Statistics (BTS), Department of Transportation: Funding is requested to support ongoing BTS programs and to: 1) estimate annual levels of passenger travel; 2) improve methods and data for calculating the value of transportation infrastructure and services; 3) estimate the inventory and use of motor vehicles; 4) research the feasibility of technological advances and new data sources to develop more relevant statistics in a more timely manner; and 5) carry out the new Port Performance Freight Statistics Program authorized in the 2015 Fixing America's Surface Transportation.

Economic Research Service (ERS), Department of Agriculture: Funding is requested to provide support to continue ERS' highest priority core programs, including research, data, and market outlook on the following: 1) how investments in rural people, businesses, and communities affect the capacity of rural economies to prosper in a changing global marketplace; 2) economic issues related to developing natural resource policies and programs that respond to the need to protect the environment while enhancing agricultural competitiveness; 3) production agriculture, domestic and international markets, and Federal farm policies, to understand the U.S. food and agriculture sector's performance; and 4) the Nation's food and nutrition assistance programs, to study the relationships among factors that influence food choices and

health outcomes, and to enhance methodologies for valuing societal benefits associated with reducing food safety risks. Reductions in lower priority programs, such as bioenergy, international activities, and drought resilience, combined with reductions in the consumer data information program and extramural collaborations, will serve to focus ERS' 2018 agenda towards its highest priority core programs.

Energy Information Administration (EIA), Department of Energy: Funding is requested to continue most core statistical and analysis activities and to: 1) maintain recent program enhancements and 2) follow through on planned cybersecurity initiatives. EIA would also scale back efforts to address certain emerging energy issues, including: 1) data and analysis of U.S. regional issues, 2) more timely and relevant information about energy consumption trends "behind the meter," and 3) development of new international hydrocarbon and electricity models to provide a greater understanding of U.S. energy markets within a global context.

National Agricultural Statistics Service (NASS), Department of Agriculture: Funding is requested to support the normal activity levels resulting from the cyclical nature of the 5-year Census of Agriculture (COA) program and increased workload in the peak data collection and processing year of the Census, including: 1) expenses for outgoing and return postage for the approximately 3 million potential farmers and ranchers on the Census Mail List; and 2) a streamlined and standardized edit and analysis unit, similar to the one that proved to be a critical piece to publishing the 2012 COA in a timely manner, with four NASS staff serving on detail to train, guide, and provide quality control to the temporary, intermittent employees handling the large volume of work associated with the data collection year.

National Center for Education Statistics (NCES), Department of Education: Funding is requested to provide support for NCES ongoing activities and to: 1) support U.S. participation in the 2018 Teaching and Learning International Survey of teachers and school principals of students in grades 7-9 to help countries identify policies that support effective teacher preparation, professional development, and instruction; 2) support the 2017-18 National Teacher and Principal Survey that serves as the nation's primary source of information on teacher and principal preparation, classes taught in public schools, and demographics of the teacher and principal labor force; 3) support the school year 2017-18 first year of data for the Middle Grades Longitudinal Study grade 6 cohort, including oversamples of students with disabilities, that will be followed through grade 8 to collect data on students' high school readiness, inclusion, and math and literacy learning in the middle grades; 4) support U.S. participation in the 2018 International Computer and Information Literacy Study to evaluate students' computer and information literacy, students' abilities to collect, manage, evaluate, and share digital information, as well as their understanding of issues related to the safe and responsible use of electronic information; and 5) support for the ongoing transition of the National Assessment of

Educational Progress and international assessments to a digitally-based administration that is designed to address the growing use of technology (i.e., computers) in the learning environment.

National Center for Health Statistics (NCHS), Department of Health and Human Services: Funding is requested to provide support for ongoing NCHS programs and to: 1) incorporate the collection of electronic health records and other data sources in NCHS surveys to improve efficiencies, quality, utility, and timeliness; 2) advance research on innovative methods to address priority health topics; 3) continue efforts to enhance the comparability of key indicators from NCHS data collections with other Federal surveys; 4) expand flexibility within surveys to address emerging health issues and monitor public health priorities; 5) incorporate advances in survey methodology and measurement for critical health surveys such as the National Health Interview Survey and the National Health and Nutrition Examination Survey; 6) support the NCHS data linkage program to enhance the value and utility of survey data and administrative records; and 7) continue to modernize data dissemination practices to improve access and availability of critical health information.

National Center for Science and Engineering Statistics (NCSES), National Science Foundation: Funding is requested to maintain NCSES' ongoing activities to measure research and development trends, the science and engineering workforce, U.S. competitiveness, and the condition and progress of STEM education. Efficiencies and cost savings are anticipated in the areas of: 1) the National Survey of College Graduates and the Survey of Doctorate Recipients with the accelerated implementation of advanced data collection techniques; 2) acquisition of external, open market data sets; and 3) reduced FY 2018 efforts on modernizing the functionality and usability of online data systems and tools.

Office of Research, Evaluation, and Statistics (ORES), Social Security Administration: Funding is requested to: 1) produce policy-relevant research, funding the three research centers of the Retirement Research Consortium and the two research centers of the Disability Research Consortium; 2) support surveys and link SSA administrative data to surveys (e.g., the Census Bureau's Survey of Income and Program Participation and Current Population Survey; and the University of Michigan Health and Retirement Study); 3) prepare a broad range of statistical databases, tables, and publications using our Analytics Research Center; and 4) provide statistical and analytical support for initiatives to improve Social Security.

Statistics of Income Division (SOI), Internal Revenue Service, Department of the Treasury: Funding is requested to provide support for ongoing SOI programs and to: 1) provide continued opportunities to study the impacts of tax law and economic changes on tax administration by further integrating existing administrative data with edited data to allow for improved data linkages across sectors, building on existing efforts that have reduced cost and improved timeliness by streamlining data processing, thus reducing the number of, or eliminating the need for, fields to be transcribed; 2) continue evaluation of and implement changes to sample designs for major programs to expand population coverage and improve estimation; 3) support innovative research with the potential to improve tax administration by working with experts within and outside Government; 4) improve available statistical information for high-income individuals by replacing existing high-income taxpayer information with more analytically useful statistics; and 5) continue efforts to modernize SOI's public communications efforts by developing extensive data visualizations, conducting social media outreach, and redesigning the public Tax Stats web pages.

Table 15–1. 2016-2018 BUDGET AUTHORITY FOR PRINCIPLE STATISTICAL AGENCIES¹
(In millions of dollars)

Agency	Actual	Estimate	
	2016	2017	2018
Bureau of Economic Analysis	105	105	97
Bureau of Justice Statistics ²	91	97	90
Bureau of Labor Statistics	609	608	608
Bureau of Transportation Statistics	26	26	26
Census Bureau ³	1397	1394	1524
Salaries and Expenses/Current Surveys and Programs ³	286	298	276
Periodic Censuses and Programs	1111	1096	1248
Economic Research Service	85	85	77
Energy Information Administration	122	122	118
National Agricultural Statistics Service ⁴	168	168	186
National Center for Education Statistics ⁵	295	293	293
Statistics ⁵	125	122	122
Assessment	149	149	149
National Assessment Governing Board	8	8	8
National Center for Health Statistics	160	160	155
National Center for Science and Engineering Statistics, NSF ⁶	58	59	57
Office of Research, Evaluation, and Statistics, SSA	15	14	20
Statistics of Income Division, IRS	38	34	34

¹ Reflects any rescissions and sequestration.

² Includes directly appropriated funds as well as funds transferred to BJS for research and statistical services; management and administrative costs; and assessments for rescissions.

³ Salaries and Expenses/Current Surveys and Programs funds include discretionary and mandatory funds. FY15 Actuals are displayed in the prior FY15 budget structure; FY16 is the start of the new FY16 budget structure.

⁴ Includes funds for the periodic Census of Agriculture of \$42, \$42, and \$64 million in 2016, 2017, and 2018, respectively.

⁵ Includes funds for salaries and expenses of \$13, \$14, and \$14 million in 2016, 2017, and 2018, respectively, that are displayed in the Budget Appendix under the Institute of Education Sciences (IES). In addition, NCES manages the IES grant program for the State Longitudinal Data System which is funded at \$35, \$32, and \$32 million in 2016, 2017, and 2018, respectively, and the EDFacts Initiative which is funded at \$11 million in 2016, 2017, and 2018.

⁶ Includes funds for salaries and expenses of \$7.6, \$8.6, and \$8.7 million in 2016, 2017, and 2018, respectively.

