

16. STRENGTHENING FEDERAL STATISTICS

The ability of governments, businesses, and the general public to make informed choices about budgets, employment, investments, taxes, and a host of other important matters depends critically on the ready and equitable availability of relevant, accurate, timely, and objective Federal statistics. Taken together, the data produced by the decentralized Federal statistical system form a robust evidence base to support both public and private decision-making.

Federal statistical programs have been a cornerstone of this evidence base for many decades, producing fundamental information to illuminate public and private decisions on a range of topics, including the economy, the population, the environment, agriculture, crime, education, energy, health, science, and transportation. These statistics are used in part to describe and increase understanding of the basic condition and performance of our economy and society, as discussed in Chapter 5, “Social Indicators.”

The share of budget resources devoted to supporting Federal statistics is relatively modest—about 0.04 percent of GDP in non-decennial census years and roughly double that in decennial census years. This funding is leveraged to inform crucial decisions in a wide variety of spheres. The Administration is committed to continuing cost-effective investment in Federal statistical programs in order to build and support agencies’ capacity to incorporate evidence and evaluation analyses into budget, management, and policy decisions. For example, this budget proposes strategic investments to strengthen the Federal statistical infrastructure for acquiring, linking, and curating administrative and other alternative datasets, and to make those datasets available to additional Federal and academic researchers through the Federal Statistical Research Data Center program. It also highlights emerging efforts to harness and inform sound statistical practice for “big data” and “big data” analytics.

The Federal statistical community has leveraged a number of other opportunities to improve these measures of our Nation’s performance and strengthen our Federal evidence base. For example, during 2015 and 2016, Federal statistical agencies:

- published, for the first time, information on changes in the prices of treating different diseases, laying the groundwork to improve the measurement of health care spending in the U.S. economy (*Bureau of Economic Analysis*);
- issued newly developed crime victimization rates for the 50 States and select large counties covering 1999 to 2013 that required almost no additional data collection, but instead were derived from statistical

models that used national survey and other auxiliary data for violent and property crimes as well as for intimate partner and domestic violence incidents (*Bureau of Justice Statistics*);

- introduced experimental disease-based price indexes to provide alternative estimates of inflation for medical output and consumption using price data from both the Producer Price Index and the Consumer Price Index programs along with quantity data from the Department of Health and Human Services’ Medical Expenditure Panel Survey in order to provide data users additional ongoing insight into the evolution of the Nation’s healthcare system (*Bureau of Labor Statistics*);
- initiated development of a port performance freight statistics program of the Nation’s ports to provide timely and nationally consistent measures of performance in terms of capacity and throughput for the Nation’s top 25 ports by tonnage, intermodal container volume, and dry bulk (*Bureau of Transportation Statistics*);
- identified, researched, and tested four major cost saving innovations (i.e., reengineering address canvassing, optimizing self-response, utilizing administrative records and third-party data, and reengineering field operations) that have the potential to save approximately \$5.2 billion in the 2020 Census compared with repeating the 2010 Census design (*Census Bureau*);
- began the regular release of quarterly Gross Domestic Product by State data, presenting businesses and policy-makers with a more detailed and timely picture of economic activity at the State level (*Bureau of Economic Analysis*);
- expanded the use of billions of observations of proprietary household and retail scanner data to provide unique detailed insights into consumer food purchase behaviors and nutrition-related policy, program, and regulatory impacts and combined them with other multifaceted data products to enhance the depth of nutrition data offerings, facilitating research into the food choices, nutrition, and health of Americans (*Economic Research Service*);
- initiated monthly State-level estimates of small-scale distributed solar photovoltaic (PV) arrays, including rooftop generation, based on a blend of survey, administrative, and third-party data sources to provide the public, government, and industry with the ability to track where and by how much small-scale distributed PV generation contributes to the

Nation's electricity supply (*Energy Information Administration*);

- released a comprehensive set of statistics on land tenure for the first time in 15 years, including information on whether land owners either operate the land they own or rent it out to others as well as projected the future outlook of land transition to help estimate new or expanding farming operations (*National Agricultural Statistics Service*);
- released more than 1,500 data products from the 2012 Economic Census covering the economic activity of more than 1,000 industries and providing detailed industry statistics by geographic area and enhanced the Longitudinal Business Database to provide more information about business innovation and entrepreneurship to the public (Census Bureau);
- administered the first nationally representative large-scale high school senior assessment in advanced mathematics and physics in two decades, TIMSS Advanced (TIMSS is the Trends in International Mathematics and Science Study), to measure the college and career-readiness of our "top" students compared with their peers in other countries (*National Center for Education Statistics*);
- redesigned Science and Engineering Indicators 2016, a primary source of evidence supporting the National Science Board and other decision-makers, into a fully digital document supporting interactive graphics, enhanced navigation, and increased accessibility to its data sources (*National Center for Science and Engineering Statistics*);
- implemented methodological improvements for existing geographic administrative population-based data that expand the population of included tax returns and provide an enhanced year-to-year matching process (*Statistics of Income Division, Internal Revenue Service*); and
- published data from a new survey on how much foreign investors are spending to acquire, establish, or expand U.S. businesses, providing additional insight into the impact of foreign direct investment in the United States (*Bureau of Economic Analysis*).

In order for Federal statistical products to be beneficial to their wide range of users, the underlying data systems that produce them must be credible. To foster this credibility, Federal statistical programs seek to adhere to high quality standards and to maintain integrity, transparency, and efficiency in the production and curation of data. As the collectors and providers of these basic statistics, the responsible Federal statistical agencies act as data stewards—balancing 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. To reinforce the fundamental responsibilities that Federal statistical agencies

have related to the collection, analysis, and dissemination of data, the Office of Management and Budget (OMB) has affirmed and codified them by issuing OMB Statistical Policy Directive No. 1, *Fundamental Responsibilities of Federal Statistical Agencies and Recognized Statistical Units*.¹ The Administration remains committed to these principles, as agencies work to codify them within their own policies and practices. By unlocking the power of Government data to improve the quality of information available to the American people, the Federal statistical system fosters the Nation's long-term global competitiveness while maximizing the cost-effective use of resources for the provision of Federal statistics within a constrained fiscal environment. The remainder of this chapter presents highlights of principal statistical agencies' 2017 program budget proposals.

Highlights of 2017 Program Budget Proposals

The programs that provide essential statistical information for use by governments, businesses, researchers, and the public are carried out by agencies spread across every department and several independent agencies. Excluding cyclical funding for the decennial census, approximately 40 percent of the total budget for these programs provides resources for 13 agencies or units that have statistical activities as their principal mission (see Table 16–1). The remaining funding supports work in approximately 115 agencies or units that carry out statistical activities in conjunction with other missions such as providing services, conducting research, or implementing 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 2017*, when it is published later this year. The following highlights the Administration's proposals for the programs of the principal Federal statistical agencies, giving particular attention to new initiatives and to other program changes.

Bureau of Economic Analysis (BEA), Department of Commerce: Funding is requested to provide support for ongoing BEA programs and to: (1) expand the scope of geographic information available from BEA's economic accounts, including developing new statistics on gross domestic product (GDP) by county and creating a Regional Economic Dashboard that will allow users to quickly access, manipulate, and extract information on the performance of local economies across the United States; and (2) improve the measures of GDP and other key BEA statistics by incorporating expanded and accelerated economic indicators to foster economic growth by providing users with more timely and accurate information to drive decisions on investment and job creation.

Bureau of Justice Statistics (BJS), Department of Justice: Funding is requested to provide support for ongoing BJS programs and to: (1) continue to improve BJS'

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>.

criminal victimization statistics derived from the National Crime Victimization Survey with special emphasis on generating sub-national estimates and enhancing data on rape and sexual assault; (2) increase the use of administrative records data in police and correctional agencies to provide new statistics on topics such as recidivism, arrests, and offenses known to the police; (3) expand the use of “open source” information to foster the production of statistics on police use of force; (4) expand surveys of inmates of prisons and jails to inform the process of re-entry and support the linking of survey data with criminal history administrative records; (5) improve the availability of justice statistics for Indian country; and (6) continue to support the enhancement of criminal justice statistics available through State statistical analysis centers.

Bureau of Labor Statistics (BLS), Department of Labor: Funding is requested to provide support for ongoing BLS programs and to: (1) add an annual supplement to the Current Population Survey, capturing data on contingent work and alternative work arrangements biennially, with data on other topics collected in the intervening years; (2) fund the first year of activities for a survey of employer-provided training; and (3) support the Census Bureau in the development of a statistical supplemental poverty measure using Consumer Expenditure Survey data.

Bureau of Transportation Statistics (BTS), Department of Transportation: Funding is requested to support ongoing BTS programs and to: (1) estimate the inventory and use of motor vehicles; (2) improve methods and data for calculating the value of transportation infrastructure and services; and (3) implement a port performance freight statistics program.

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 2020 Census that has the potential to save over \$5 billion, including field-testing a suite of integrated operations and systems to collect and process data for over 120 million housing units, finalize methodologies for key design areas and most census operations, and complete the development of interoperable production systems for an end-to-end test in 2018; (2) move to 100 percent Internet response to increase the efficiency of the 2017 Economic Census; (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 third year of the Census Enterprise Data Collection and Processing Initiative and deliver scheduled systems into production in support of the 2017 Economic Census and the Company Organization Survey/Annual Survey of Manufactures; and (5) collaborate in a joint venture with BEA to accelerate and improve the quality of economic indicators by integrating multifaceted approaches to increase the accuracy and timeliness of a substantial number of key economic indicators.

Economic Research Service (ERS), Department of Agriculture: Funding is requested to provide support for ongoing ERS programs and to: (1) conduct a second

round of USDA’s National Household Food Purchase and Acquisition Survey, including representative populations of participants in Women, Infant and Children (WIC) and school meal programs; (2) analyze barriers to entry for beginning farmers and ranchers that will examine differences in demographic characteristics of new farmers and ranchers, including the socially disadvantaged, women, and veterans; and (3) analyze drought resilience issues in the agricultural sector.

Energy Information Administration (EIA), Department of Energy: Funding is requested to enable EIA to continue its core programs and to: (1) revamp petroleum data and analysis to provide more regional detail; (2) improve renewable generation information; (3) provide timely international analyses, including petroleum trade estimates related to Canada-Mexico collaboration; (4) collect transportation energy consumption data; and (5) enhance commercial building energy efficiency data.

National Agricultural Statistics Service (NASS), Department of Agriculture: Funding is requested to provide support for ongoing NASS programs and to: (1) collect data on new and beginning farmers in order to gauge the effectiveness of programs implemented by USDA; (2) conduct new surveys on hogs, cattle and poultry to support the President’s National Strategy for Combating Antimicrobial Resistant Bacteria (CARB); (3) expand geospatial research to augment current satellite-based agriculture statistics monitoring, extend current monitoring capabilities of CropScape and VegScape, and enrich the evaluation of climate change effects at the local level on crop production; (4) conduct a special study on farm structure to better reflect the changing face of agriculture, especially including women, new farmers, and veterans; (5) continue preparations for the 2017 Census of Agriculture; and (6) maintain the annual Census of Agriculture Current Agriculture Industrial Reports.

National Center for Education Statistics (NCES), Department of Education: Funding is requested to provide support for NCES ongoing activities and to: (1) support the conduct of a new round of the Early Childhood Longitudinal Study -- Birth cohort, and U.S. participation in the International Early Learning Assessment, which will allow policymakers to better understand the range of outcomes for children in early childhood education; (2) collect selected National Postsecondary Student Aid Survey data every two years instead of every four years to provide more timely data on educational costs, financial aid, enrollment, and student progress and fresh information on student loan borrower behavior and choices through a new study on college loan performance; (3) support full U.S. participation in the next Teaching and Learning International Survey (TALIS), including the TALIS video study to provide the only internationally comparable data on the behavior of teachers in the classroom since 1999; (4) support NCES contributions to the My Brother’s Keeper initiative; and (5) support new awards to States under the Statewide Longitudinal Data Systems program to advance their use of data to improve education and information policy and enhance data coordination, quality, and use at the national, State, and local levels.

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) continue the expansion and upgrading of electronic death reporting to provide faster access to data on prescription drug overdose deaths and other deaths significant for public health, such as the Vital Statistics Rapid Release program initiated in 2015; 2) further reduce the turnaround time associated with research access to NCHS-compiled birth and death data, including for tracking priority initiatives in prevention and teenage pregnancy, such as the NCHS Data Visualization Gallery with national and State trends on teen births; 3) enhance the quality and usability of health data through improved access and presentation methods; 4) test and implement modules to the National Health and Nutrition Examination Survey to address the growing need for information on infectious diseases and chronic health conditions; 5) incorporate electronic health record information into the family of health care provider surveys following the inclusion of NCHS in the Final Rule for Stage 3 of the Electronic Health Record Incentive Programs (Meaningful Use); 6) launch a new, more efficient sample for the National Health Interview Survey that incorporates information on changing population demographics from the Decennial Census; and 7) update the content and structure of the National Health Interview Survey to harmonize with other Federal health surveys, improve measurement of covered health topics, and incorporate advances in survey methodology and measurement.

National Center for Science and Engineering Statistics (NCSES), National Science Foundation: Funding is requested to provide support for ongoing NCSES programs and to: (1) continue the development of enhanced data access tools, techniques, and visualizations, including integration of the Scientists and Engineers Data System (SESTAT) with the Integrated Science and Engineering Resources Data System (WebCASPAR) and the NSF Survey of Earned Doctorates Tabulation Engine databases; (2) improve survey instruments and data collection techniques to enhance measures of innovation and address data gaps related to educational and career pathways of scientists and engineers, and research activities in non-profit organizations; and (3) provide support for re-

search and education grants under the NCSES Research on Science and Technology Enterprise: Statistics and Surveys program.

Office of Research, Evaluation, and Statistics (ORES), Social Security Administration: Funding is requested to provide support for ongoing ORES programs and to continue to: (1) support outside survey and linkage of SSA administrative data to surveys; (2) complete data collection, produce data files, and provide SSA with data from the redesigned Survey of Income and Program Participation to address Social Security's data needs for microsimulation models, program evaluation, and analysis; (3) provide enhanced statistical and analytical support for initiatives to improve Social Security and other government agency programs; (4) fund the three centers of SSA's Retirement Research Consortium; and (5) fund the two centers of SSA's Disability/Research Consortium.

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 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, while reducing cost and improving timeliness by streamlining data processing, thus reducing the number of, or eliminating the need for, fields to be transcribed; (2) implement recommended sample improvements to expand population coverage and improve estimation; (3) complete statistical tables and analysis on complex corporations and new data provided in compliance with the Foreign Account Tax Compliance Act and the Affordable Care Act; (4) support innovative research with the potential to improve tax administration by working with experts within and outside Government; (5) complete an extensive reprogramming of all SOI studies using modernized software and continue to upgrade SOI's information technology infrastructure and deploy virtualization throughout the agency to improve security and reduce costs; and (6) continue to modernize data dissemination practices, developing more web-based products and data visualizations and conducting social media outreach to increase the public's awareness and understanding of the tax system.

**Table 16-1. 2015-2017 BUDGET AUTHORITY FOR
PRINCIPAL STATISTICAL AGENCIES¹**

(In millions of dollars)

	Actual	Estimate	
	2015	2016	2017
Bureau of Economic Analysis	96	105	111
Bureau of Justice Statistics ²	66	52	67
Bureau of Labor Statistics	592	609	641
Bureau of Transportation Statistics	26	26	26
Census Bureau ³	1113	1397	1660
Salaries and Expenses/Current Surveys and Programs ³	295	299	314
Periodic Censuses and Programs	818	1098	1346
Economic Research Service	85	85	91
Energy Information Administration	117	122	131
National Agricultural Statistics Service ⁴	172	168	177
National Center for Education Statistics ⁵	256	282	296
Statistics ⁵	116	125	139
Assessment	132	149	149
National Assessment Governing Board	8	8	8
National Center for Health Statistics	155 ⁶	160	160
National Center for Science and Engineering Statistics, NSF ⁷	58	58	60
Office of Research, Evaluation, and Statistics, SSA	29	26	27
Statistics of Income Division, IRS	37	38	38

¹Reflects any rescissions and sequestration.²Includes directly appropriated funds as well as funds transferred to BJS for research and statistical services; minus assessments for management and administrative (M&A) costs, and known rescissions.³Salaries 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.⁴Includes funds for the periodic Census of Agriculture of \$48, \$42, and \$42 million in 2015, 2016, and 2017, respectively.⁵Includes funds for salaries and expenses of \$13, \$13, and \$14 million in 2015, 2016, and 2017, 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 million, \$35 million, and \$81 million in 2015, 2016, and 2017, respectively, and the EDFacts Initiative which is funded at \$11 million in 2015, 2016, and 2017.⁶All funds from Budget Authority. Amounts include funds to implement the CDC Working Capital Fund.⁷Includes funds for salaries and expenses of \$7.6, \$7.7, and \$7.8 million in 2015, 2016, and 2017, respectively.

