18. STRENGTHENING FEDERAL STATISTICS

The Federal Statistical System (FSS) has reliably and impartially informed the nation about its population, condition, and progress since its founding, beginning with the first constitutionally-mandated Census in 1790. The mission of the FSS is to collect and transform data into useful, objective information; making it readily and equitably available to government, private businesses, and the public. There are thirteen Principal Statistical Agencies (PSAs—see Table 18–1) and almost 100 non-PSA statistical units spread across the Executive Branch that generate statistics on such topics as the economy, workforce, energy, agriculture, foreign trade, education, housing, crime, transportation, and health. The PSAs are continuously developing new methods for collecting and combining data from multiple sources in order to expand and improve the quality and timeliness of statistical evidence needed to make important decisions in today's information-rich society. Agencies are increasing their collaborative efforts as demands grow for more high quality, reliable information to drive mission and meet the needs of the public.

Coordination of the Federal Statistical System

Although the Principal Statistical Agencies are spread across government, they share common principles and practices and operate as a closely-knit network. Many of the data products and publications generated by the FSS are the result of collaborative efforts involving multiple agencies. Through conferences, joint training sessions, and informal engagements, agencies share best practices and innovations in topics ranging from secure storage of confidential data to natural language processing of written responses. Because of its interconnected nature, the state of the system as a whole depends on the health of the individual member agencies. Changes to programs at one agency frequently impact many other agencies in the system.

Recognizing the importance of coordination and the interdependent nature of the statistical system, Congress used the Paperwork Reduction Act of 1995 (PRA) and the Confidential Information Protection and Statistical Efficiency Act of 2002 (CIPSEA) to create three important tools: the position of the Chief Statistician of the United States at the Office of Management and Budget, the Interagency Council on Statistical Policy (ICSP), and a consistent framework for protecting confidential respondent information. The PRA directs the Chief Statistician to coordinate the activities of the FSS to ensure its efficiency and effectiveness, integrity, objectivity, impartiality, utility and confidentiality of information collected for statistical purposes; ensure that budget proposals are consistent with system-wide priorities; and develop and oversee the implementation of Governmentwide statistical policies, principles, guidelines, and standards. The Chief Statistician chairs the ICSP, made up of the heads of the thirteen PSAs and one rotating member from a non-PSA agency that conducts significant statistical activity, currently the National Center for Veterans Analysis and Statistics. The ICSP provides strategic leadership for the FSS on system-wide priorities such as improving researcher access to confidential data while protecting privacy, increasing response rates on surveys while easing the cost and burden on respondents, and acquiring and maintaining a highly skilled workforce. CIPSEA provides a common statutory framework for the collection, handling, and dissemination of confidential data and allows agencies to assure respondents that their data will only be used for statistical and research purposes.

The recently enacted Foundations for Evidence-Based Policymaking Act of 2018 (Evidence Act) further emphasizes the importance of coordination of the evidence-building functions of the Federal Government, and includes several provisions to improve capacity and coordination at not only the thirteen principal statistical agencies, but also at the numerous other offices that conduct significant statistical activities in the performance of their regulatory, enforcement, program delivery, or scientific missions. The Evidence Act requires the head of each CFO Act agency to designate a statistical official to advise on statistical policy, techniques, and procedures, and specifies that these officials will serve as members of the ICSP, providing a forum for broader coordination across the FSS. The Act also requires each agency to produce an assessment of the coverage, quality, methods, effectiveness, and independence of the statistics, evaluation, research, and analysis efforts of the agency as part of their strategic plan, providing an opportunity for increased intra-agency coordination. The Act calls for the Chief Statistician to chair a new Advisory Committee on Data for Evidence Building to make recommendations on how to facilitate data sharing, enable data linkage, and develop privacy enhancing techniques to coordinate Federal data use for evidence building across agencies. Several provisions in the Evidence Act are designed to promote intra- and inter-agency sharing of government data for statistical purposes, including an update to CIPSEA that creates a presumption of accessibility of government data assets for statistical agencies and units, calls for the use of disclosure limitation techniques to expand the availability of less-restricted versions of confidential data sets, and the requirement of a standard application process for secure researcher access to CIPSEA-protected data.

Focus on the Value of Collaborative Evidence-Building

In addition to the implementation activities of the Evidence Act, several exciting interagency initiatives are underway that promise to strengthen collaboration and cooperation across government:

The President's Management Agenda, released in October 2018, includes a Cross-Agency Priority goal on Leveraging Data as a Strategic Asset. This goal is operationalized as a Federal Data Strategy designed to coordinate and integrate the Federal Government's approach to using data to deliver on mission, serve the public, and steward resources while respecting privacy and confidentiality. The Data Strategy is co-led by the Chief Statistician and many of the statistical agencies are providing staff, expertise, and best practices to the effort.

The Administration's Reform Plan and Reorganization Recommendations include a proposal to relocate the Bureau of Labor Statistics within the Commerce Department alongside the Bureau of the Census and the Bureau of Economic Analysis. Aligning these three agencies more closely will not only increase cost-effectiveness and reduce respondent burden, it will improve data quality and result in the creation of much needed new information products that help our understanding of the nation's economy.

The Federal Committee on Statistical Methodology and the Interagency Council on Statistical Policy are working to create a unified framework for transparent reporting of data quality for integrated data products, including appropriate statistical standards. Whether Federal statistics come from traditional household and establishment surveys and carefully designed administrative records systems or from sources not initially designed for statistical purposes, data quality must be communicated transparently and understood to provide the best available statistical information to the public and to ensure the statistics are used wisely. In addition, FCSM and the Confidential Data Access Committee will be revising and modernizing Statistical Policy Working Paper 22 (SPWP22), a manual for employing disclosure limitation techniques that protect the privacy and confidentiality of individuals and businesses. Once completed, SPWP22 will be an online repository of up to date information, recommendations, techniques, and tools for Federal agencies across government to leverage in their own efforts to better protect confidential data, while making it safely available for evidence-building. The work supports the Federal Data Strategy principles related to protecting and securing data.

Current Examples of Collaborative Evidence-Building

In addition to the highly interdependent relationships within the FSS, statistical agencies and units also work closely with non-statistical Federal agencies. By leveraging their expertise and infrastructure for data collection, storage, and analysis, The FSS helps agencies unlock the value of the data that they already collect and maintain by linking that data with other administrative or statistical data to create new insights. In turn, the statistical agencies rely on the data collected or generated by program implementation, regulatory, and other agencies in order to reduce burden on the public and increase the accuracy, timeliness, and granularity of their statistical products. The Evidence Act promotes this relationship in its new presumption that CIPSEA agencies, where employees take an oath to protect data confidentiality and face severe penalties for any violations, should be allowed access to program data unless specifically prohibited by statute. Some recent examples of interagency cooperation taking on real world problem-solving follow.

Post-prison employment. Research suggests that employment may reduce the likelihood of recidivism following an offender's release from a correctional institution, yet the nation lacks detailed information on post-prison employment activities of offenders. At the request of Congress, the *Bureau of Justice Statistics* partnered with data linkage experts at the *U.S. Census Bureau* to combine state prison data with data on employment and income to produce the first national-level estimates for post-prison employment, job stability, and time from release to employment.

Veterans food security. According to recent research, veterans overall experience lower rates of food insecurity than the general population. However veterans of the wars in Iraq and Afghanistan experience greater food insecurity and lack of access to sufficient food for a healthful lifestyle compared to other veterans and non-veterans. The *Economic Research Service* linked data from their Food Security Supplement on the *U.S. Census Bureau's* Current Population Survey with the *Department of Veteran's Affairs* administrative data on veterans in order to examine the prevalence and trends in food security among working-age veterans and their households. The combined survey and administrative data provides accurate and detailed information that helps Federal programs target their assistance more effectively and helps policymakers make smarter, better-informed decisions.

Veteran's education and careers. The *National Center for Science and Engineering Statistics* (NCSES) initiated the collection of veteran status data on the National Survey of College Graduates to enable investigation of the relationship between education and career pathways for veterans with four-year degrees.

NCSES also partnered with the *U.S. Census Bureau* to launch the Annual Business Survey, which combined four previously separate business surveys into a single platform: Survey of Business Owners, Annual Survey of Entrepreneurs, Micro-business Research and Development Survey, and a totally new Business Innovation Survey. This effort will produce timely estimates on minority-owned businesses, R&D, innovation, technology, and other characteristics.

Reducing respondent burden. The Decennial Census and the American Community Survey from the *U.S. Census Bureau* together provide the foundation for thousands of other surveys and studies across the Federal government and private industry. As non-survey data

sources inform policies and business decisions, the demand for high quality and high granularity benchmark data will only increase. In addition to providing highly valuable benchmark studies, the *U.S. Census Bureau* partnered with the *National Center for Health Statistics* to redesign the National Health Interview Survey, which significantly reduced respondent burden while ensuring timely and salient health topics are covered.

Faster access to more information. A *U.S. Census Bureau* collaboration with the *Federal Reserve Bank of St. Louis* provides data users with access to *U.S. Census Bureau* economic indicator data at any time on any device. The *Statistics of Income* is finalizing a contract to join the *U.S. Census Bureau's* Federal Statistical Research Data Center (FSRDC) system and launch a pilot project using *Statistics Of Income* data, allowing researchers controlled access for statistical purposes.

Disparities in life expectancy by geography. Measuring mortality outcomes in small geographic areas is key to identifying health disparities within a population. In partnership with the *Robert Wood Johnson Foundation* and the *National Association of Public Health Statistics and Information Systems*, the *National Center for Health Statistics* produced estimates of life expectancy at birth for most of the census tracts in the United States for the period 2010-2015. These estimates show how life expectancy compares in different areas of the country and reveal differences in life expectancy at birth down to the census tract level. This information informs programs aimed at enabling people to live longer, healthier lives.

Highlights of 2020 Statistical Program Budget Proposals

The following highlights reflect the Administration's proposals for the programs of the PSAs, giving particular attention to new initiatives and to other program changes. More comprehensive budget and program information about the FSS, including its core programs, will be available in OMB's annual report, Statistical Programs of the United States Government, Fiscal Year 2020, when it is published later this year. Agencies with proposed budget increases include the Census Bureau and BEA. Agencies with proposed funding reductions include ERS, EIA, and NASS.

Bureau of the Census (Census Bureau), Department of Commerce: Funding is requested to provide continued support for ongoing Census Bureau programs and to: (1) conduct the major self-response and non-response operations of the 2020 Census, which includes internet, telephone and paper self-response options for nearly everybody, as well as field enumeration operations to count Americans living in special situations ; (2) deploy scaled and secured systems in support of peak operations for the 2020 Census; (3) release data to the Bureau of Economic Analysis for use in setting the baseline for Gross Domestic Products and other Principal Economic Indicators; (4) support further transformation of Census Bureau data dissemination through the Center for Enterprise Data Services and Consumer Information; (5) fund a research study conducted by the National

Academics of Sciences, Engineering, and Medicine to evaluate and improve current U.S. poverty measurement methods and indicators; and (6) support research and increased partnership with third party data providers to accelerate data innovation and solve complex data challenges.

Bureau of Labor Statistics (BLS), Department of Labor: In FY 2020, BLS will continue to transform how it collects, analyzes, and delivers its data. BLS has met its core mandates in a constrained fiscal environment primarily through increasing use of technology and identifying efficiencies to improve data accuracy, lower respondent burden, and reach its customers better. For example, in FY 2020 the Office of Prices and Living Conditions will continue efforts to incorporate outlet data from the Consumer Expenditure Survey in sample selection for the Consumer Price Index. These data replace the Telephone Point of Purchase Survey, which is being eliminated as a stand-alone survey in order to improve survey efficiencies and reduce global respondent burden. BLS also will continue efforts to expand collection capabilities for additional data through the Electronic Data Interchange (EDI) Center. Furthermore, the Survey of Occupational Injuries and Illnesses will release data that incorporates a broader use of computer-assisted coding for some injuries and illnesses, and will deploy the neural network auto-coder for automatically assigning occupation, nature of injury, part of body, event that caused injury, and source of injury codes. In addition, in FY 2020, BLS requests funding for costs associated with a new lease for the national headquarters; the current lease expires in May 2022. BLS is working with the General Service Administration to address the lease expiration in an efficient manner in order to maintain critical production processes and assure the continued timely release of critical economic data.

Bureau of Economic Analysis (BEA), Department of Commerce: Bureau of Economic Analysis (BEA), Department of Commerce: Funding is requested to (1) support core programs, including the production of some of the Nation's most critical economic statistics—such as gross domestic product (GDP), (2) produce new measures of GDP for Puerto Rico consistent with BEA's methods for estimating GDP for the other four U.S. territories, and (3) participate in the development of a framework for a Federal Data Service, as outlined in the President's Management Agenda, that would improve external stakeholder data access and use, exploit new and nontraditional data sources, and foster the development of new data products.

Bureau of Justice Statistics (BJS), Department of Justice: Funding is requested to maintain BJS's core portfolio of statistical programs and analysis activities, expand the use of administrative records for statistical and research purposes, and support or enhance major program areas, including: (1) administer the Analysis of Publicly Available Court Data collection to assess how and what data courts make available, collect and report nationally representative data on felony sentences in state courts, and assess whether state courts can report

more information on criminal cases; (2) use criminal history records to complete new national recidivism studies on prisoners released from state prisons, including the nature and frequency of contact with the justice system; (3) enhance BJS's National Crime Victimization Survey and its supplements through ongoing redesign efforts to improve the quality, accessibility, and relevance of victimization statistics; (4) enhance the use of state and local law enforcement data to produce detailed national estimates of the nature and incidence of reported crime by partnering with the FBI on the National Crime Statistics Exchange (NCS-X) Initiative; (5) continue redesign efforts to enhance BJS's Survey of Inmates in Local Jails and collaborate with the U.S. Census Bureau to administer the survey and produce more precise and timely national estimates of demographic and crime justice characteristics, mental and physical health conditions, and drug and alcohol use and abuse (in particular for prescription opioids) in the nation's jails; (6) facilitate the linkage of correction records obtained through BJS's National Corrections Reporting Program to other administrative data files, including housing, employment, income, and Medicaid and Medicare records, to research pre- and post-prison experiences of offenders in Federal and state correctional systems; and (7) explore new data acquisition and linkage opportunities with other Federal agencies to enable more detailed analyses in new areas for BJS's Federal Justice Statistics Program, for example on the role of immigration in the Federal criminal justice system.

Bureau of Transportation Statistics (BTS), Department of Transportation: Funding is requested to maintain and enhance its freight statistics programs, expand its statistics on transportation economics and finance, and explore the use of new data sources for more timely, granular statistics that reduce burden on respondents. For example, BTS is using location tracking data from the Coast Guard for ships to measure port performance.

Economic Research Service (ERS), Department of Agriculture: Funding is requested for ERS's core programs of research, data analysis, and market outlook. Proposals for ERS budget priorities include research that: (1) builds on unique or confidential data sources or investments at the Federal level; (2) provides coordination for a national perspective or framework; (3) requires sustained investment and large teams; (4) directly serves the U.S. Government's or USDA's long-term national goals; and (5) addresses questions with short-run payoff or that have immediate policy implications. ERS also seeks to cover the breadth of USDA programs (except forestry) and provide funding to ensure sustained expertise in the analysis of farming, commodity markets and trade, natural resources and the environment, rural communities, food safety, food markets, and nutrition. The USDA intends to relocate ERS out of the Washington DC area and move it organizationally under the Chief Economist in the Office of the Secretary during 2019.

Energy Information Administration (EIA), Department of Energy: Funding is requested to continue core statistical and analysis activities that produce reports critical to EIA's customer base, including: Weekly Natural Gas Storage Report, which is designated as one of the nation's Principal Federal Economic Indicators; Weekly Petroleum Status Report, which provides statistics on oil and petroleum product stocks, imports, and production; Short-Term Energy Outlook, which provides monthly forecasts of U.S. and global supply, consumption, trade, stocks, and prices with a horizon of 12 to 24 months; and the Annual Energy Outlook, which projects U.S. energy supply, consumption, and trade over a 25- to 30-year period.

National Agricultural Statistics Service (NASS), Department of Agriculture: Funding is requested to conduct the Census of Horticulture Specialties. This survey was last conducted for the 2015 growing season. NASS also plans to conduct the Organic Agriculture follow-on survey. In FY 2020 NASS plans to bring back the Mink survey, July Cattle survey and Rice Stocks.

National Center for Education Statistics (NCES), Department of Education: Funding is requested to provide support for NCES ongoing activities and to: (1) support the development of a new socio-economic status measure for individuals based on residential location; (2) support the continued development of digital based assessment for the National Assessment of Educational Progress (NAEP) and international assessments and to evaluate approaches to integrating NAEP information about students and National Teacher and Principal Survey information about teachers to both improve operational efficiency and available information linking teachers and students; (3) support for the continuation of the School Survey on Crime and Safety and the School Crime Supplement to the National Crime Victimization Survey, which are the primary sources of data on bullying in schools and school safety practices; (4) support to expand the scope and volume of NCES data products utilizing geospatial data collections and graphic presentations of data.

National Center for Health Statistics (NCHS), Department of Health and Human Services: Funding is requested to provide support for ongoing NCHS activities and to: (1) support innovative research in survey methods and new technologies for data collection and survey participation; (2) expand the collection of electronic health records in national health surveys of providers and facilities; (3) provide new opportunities for researchers to analyze changes in health status and health care utilization by continued linkages of survey data and administrative records; (4) implement the redesigned content and structure of the National Health Interview Survey; (5) 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; (6) enhance the quality and value of health data through improved access, visualization, and presentation tools; and (7) continue the development of high value data release efforts such as the Vital Statistics Rapid Release Program and the Provisional Drug Overdose Death Counts.

National Center for Science and Engineering Statistics (NCSES), National Science Foundation:

Funding is requested to maintain NCSES ongoing activities measuring research and development trends, the science and engineering workforce, U.S. competitiveness, and the condition and progress of STEM education. In addition, NCSES seeks to continue efforts to improve coverage, content, alternative data source usage, and data quality through: (1) incorporating a longitudinal design for the Survey of Doctorate Recipients; (2) identifying data sources to reliably measure the skilled technical workforce; (3) sustaining the measurement of research and development trends in microbusiness and the non-profit sector; (4) assessing the possible fielding of a Federal laboratories survey; and (5) investigating non-traditional data source for estimation purposes.

Office of Research and Evaluation Statistics (ORES), Social Security Administration: Funding is requested to (1) conduct original research on Social Security programs and their beneficiaries, including publishing papers in the Social Security Bulletin; (2) continue providing policymakers and the public with objective, scientific, and methodologically sound information and analysis; (3) continue efforts to automate and modernize the production of statistical publications; (4) continue to leverage the expertise of researchers around the country through administering grants and contracts, such as the newly-awarded Retirement and Disability Research Consortium; (5) continue providing objective, secure data and statistics while protecting privacy through strict adherence to disclosure review policies.

Statistics of Income (SOI), Treasury Department: Funding is requested to provide support for ongoing SOI programs and to: (1) incorporate new tax law provisions enacted under the Tax Cuts and Jobs Act (TCJA) into its data correction and error resolution programs (2) develop timely, innovative web products for the public to provide prompt and illuminating insights into effects of various aspects of the TCJA; (3) seek new opportunities to integrate administrative data with SOI edited statistical data, part of an ongoing effort that has reduced cost, improved timeliness, and allowed for production of more detailed data on small geographic areas, while streamlining data processing and reducing or eliminating the need for some data items to be transcribed; (4) support innovative research with the potential to improve tax administration through a public call for proposals targeting experts within and outside Government; (5) integrate automated and modernized procedures into production of public corporate and partnership data releases that will also strengthen protection of taxpayer privacy; (6) work with other agencies to develop new data access models for expanding use of Federal statistical data for research and evidence-building purposes while strengthening protection of individual privacy; (7) assess existing data to identify opportunities to bring together data from multiple tax filing populations to provide more comprehensive and statistically useful information on broad economic sectors; (8) continue efforts to modernize SOI's public communications by developing new data visualizations, conducting social media outreach, continuing the redesign of the public Tax Stats web pages by implementing a comprehensive taxonomy to facilitate better search results for customers immediately and facilitate longer-run improvements; (9) continue efforts to address the impact of IRS' consolidation of its Submission Processing Centers, working to minimize the effects of the center closures on the quality and timeliness of SOI's statistical products; (10) explore automated approaches, such as optical character recognition and machine learning, to data editing to improve the availability and quality of IRS administrative data for statistical purposes.

Table 18–1.   2018–2020 BUDGET APPROPRIATIONS FOR PRINCIPLE STATISTICAL AGENCIES[1]

(In millions of dollars)

Agency	Actual	Estimate	
	2018	2019	2020
Bureau of Economic Analysis	$99.00	$100.99	$107.99
Bureau of Justice Statistics[2]	$98.51	$84.38	$95.82
Bureau of Labor Statistics[3]	$612.00	$615.00	$655.00
Bureau of Transportation Statistics	$26.0	$26.0	$26.0
Census Bureau	$2,830.10	$3,816.96	$6,165.85
Salaries and Expenses/Current Surveys and Programs[4]	$284.68	$269.13	$284.01
Periodic Censuses and Programs	$2,545.42	$3,547.83	$5,881.84
Economic Research Service	$86.49	$45.00	$61.00
Energy Information Administration	$125.00	$125.00	$118.00
National Agricultural Statistics Service[5]	$191.72	$191.72	$163.00
National Center for Education Statistics[6]	$296.20	$303.20	$303.20
Statistics	$109.50	$109.50	$109.50
Assessment	$149.00	$151.00	$151.00
National Assessment Governing Board	$7.70	$7.70	$7.70
National Center for Health Statistics	$159.86	$160.40	$155.00
National Center for Science and Engineering Statistics, NSF[7]	$62.43	$60.17	$57.7
Office of Research, Evaluation, and Statistics, SSA	$27.00	$30.00	$32.00
Statistics of Income Division, IRS	$33.67	$35.22	$34.7

[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 (M&A) costs; and assessments for rescissions.

[3] Includes $40 for costs associated with the BLS headquarters physical move, including replication of space, furniture, fixtures, and equipment, as well as relocation of the BLS data center to a shared facillity.

[4] Current Surveys and Programs funds include discretionary and mandatory funds.

[5] Includes funds for the periodic Census of Agriculture of $63.4, $63.4, and $45 million in 2018, 2019, and 2020, respectively.

[6] Includes funds for salaries and expenses of $18, $18, and $18 million in 2018, 2019, and 2020, 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 $5 million, $6 million, and $6 million in 2018, 2019, and 2020, respectively, and the EDFacts Initiative which is funded at $12 million, $11 million, and $11 million in 2018, 2019, and 2020 respectively.

[7] Includes funds for salaries and expenses of $9.0, $9.0, and $9.1 million in 2018, 2019, and 2020, respectively.