Value of Federal Statistics

People everywhere rely on data and statistics to go about their everyday lives—from deciding what route to take to avoid traffic to where to live to be near good schools and whether and how much to invest in their education, home ownership, or other purpose. Institutions and organizations, including governments and businesses, also rely on data and statistics to make decisions and evaluate their impacts. Official statistics from the federal government are a critically important source of needed information in the United States for policymakers and the public, providing information that meets the highest professional standards of relevance, accuracy, timeliness, credibility, and objectivity.

Official statistics from the federal government matter immensely for the nation. The U.S. Congressional Budget Office (CBO) uses federal statistics and research with federal statistics as inputs to its influential "scoring" of a bill's likely effects on future budgets, the economy, and the target population. Media reports of federal statistics inform the public and policymakers about the economy (inflation, unemployment); economic well-being (income and poverty); social well-being (public safety, education, health); and many other topics. Businesses, the financial markets, federal, state, and local agencies, nongovernmental organizations (NGOs), and professionals in politics rely on federal statistics for planning,

and academic researchers mine federal statistics for important insights. A whole business sector exists that repackages and enhances federal statistics for clients. The U.S. decennial census is written into the U.S. Constitution as the basis for reapportioning the U.S. House of Representatives, and court decisions for one person, one vote virtually require census data for redistricting. Many federal and state statutes require federal statistics for allocating funds and making grants. (See Box A-1 for examples of important uses of federal statistics and Box A-2 for relevant citations.)

People produce federal statistics. Hard-working, dedicated people generate the statistics the nation uses—people in the 13 principal federal statistical agencies, the office of the chief statistician of the United States in the Office of Management and Budget (OMB), 3 recognized statistical units, and 100 programs with significant statistical activities in other federal agencies (see Supporting Materials: B for a brief history and overview of the federal statistical system). Statistical agency staff produce estimates that are objective, nonpartisan, and for the use and good of all, according to quality standards that have been developed professionally over years of testing and experience. Statistical agency staff have been innovation leaders for decades in ways that have not only improved the statistics they produce but also contributed to improvements in survey and market research in the private sector and academia, as in their work on probability sampling and longitudinal surveys. Most recently, the principal agencies responded with alacrity to the need for new and expanded information sources during the height of the

Covid-19 pandemic, as with the Household and Small Business Pulse Surveys that launched in late April 2020 (see Supporting Materials: H).

The federal statistical system makes outsize contributions to the nation on a very modest budget. In fiscal 2023, the 13 principal statistical agencies accounted for $3.6 billion in appropriations, or 0.2% of the total federal budget of $1.7 trillion. Adding in other programs that account for $500,000 or more in statistical activities (e.g., surveys funded by NIH) would increase the total federal statistical budget to about $8 billion, or about 0.5% of the total federal budget. Permanent full-time career staff (excluding part-time interviewers) in the principal statistical agencies totaled about 12,000 (FY 2022), or about 0.5% of the total federal permanent career staff of 2.2 million.

The private sector produces useful statistics but cannot replace the federal statistical system, despite what one sometimes hears. Federal statistics are a public good, just like national defense, in that they benefit everyone in the country and cannot readily be replaced by private firms. Indeed, private firms rely on federal statistics, not only for their own planning uses but also when they use federal data as the basis for information (e.g., trend projections) that they sell to clients.

The private sector can supplement and contribute to federal statistics (many statistical agencies "scrape" data from the web or purchase private sector data as inputs to their series), but it cannot replace them. The private sector needs a good business case to invest—but many federal statistical series need to cover the entire population, not just people of interest to a company for marketing. Other federal statistical series, such as data on science and engineering, are of national importance, but their "market" is small, and achieving the needed quality and coverage of federal statistics would be costly. A key challenge going forward is for the statistical agencies to expand their efforts to integrate multiple data sources, including surveys, government records, and private sector data, to improve the quality, coverage, timeliness, and relevance of their series.

Box A-1. Uses of Federal Statistics: Examples

CBO—Analysis and bill scoring:

- CBO Publishes New Health Insurance Coverage Projections for 2023 to 2033 (May 24, 2023). This projection model uses data from the Current Population Survey and administrative records. The Budgetary and Economic Effects of S. 2488, the Raise the Wage Act of 2023 (December 18, 2023.) This analysis uses data and research findings from a variety of sources.

MEDIA—Sample leads from newspaper articles:

- "The United States economy grew faster early this year than previously believed. Gross domestic product, adjusted for inflation, expanded at an annual rate of 2 percent in the first three months of the year...." (Washington Post, June 20, 2023)

- "In Texas and across the country, the 2022 Nation's Report Card or National Assessment of Educational Progress was a call to action." (Dallas Morning News, December 26, 2022)

- "Child poverty in the US jumped and income declined in 2022 as coronavirus pandemic benefits ended." (Associated Press, September 12, 2023)

PLANNING AND EVALUATION—Federal, state, and local agencies, NGOs, businesses all use federal statistics:

- Local governments pull together federal statistics and other data for traffic analysis zones (small areas built up from blocks) for siting fire stations, schools, parks and other facilities, for transportation planning and projections, for emergency planning, and other uses.

- Public health agencies use federal statistics as denominators for death and disease rates for counties and smaller areas to target public health initiatives and medical resources and to assess risks for people living near environmental hazards.

- Businesses use federal statistics to evaluate labor markets and other features of alternative site locations.

RESEARCH INSIGHTS—Examples abound:

- Chetty, R., Hendren, N., Kline, P., Saez, E., and Turner, N. (2014). Is the United States still a land of opportunity? Recent trends in intergenerational mobility. American Economic Review Papers and Proceedings 104(5), pp. 141-147. The article uses linked and anonymized tax records from the IRS Statistics of Income Divison. **Main result:** Children going to work today have the **same chances of earning more than their parents as children born in the 1970s.** However, the "birth lottery" (how well off your parents were) matters more because of the increase in inequality.

- Strum R., and Datar, A. (2005). Body mass index in elementary school children, metropolitan area food prices and food outlet density. Public Health 119(12), pp. 1059-68. This study uses merged data from the National Center for Education Statistics' Early Childhood Longitudinal Study with metropolitan data on food prices and per capita number of restaurants, grocery stores and convenience stores in the child's home and school zip code. Main result: Lower real prices for vegetables and fruits **predicted a significantly lower gain in BMI between kindergarten and third grade.**

ADDING VALUE—The private sector includes companies and nonprofit organizations that:

- Facilitate access to federal statistics.

- Benchmark their own data to federal statistics (every public opinion poll of necessity does this because of low response rates).

- Analyze federal statistics to develop market segmentation and other products.

- Add value to federal statistics by projecting trends and developing estimates for small areas and groups.

- Map and chart federal statistics to facilitate business and local government planning.

U.S. CONSTITUTION—Legislation builds on constitutional provisions:

✔ Article 1, Section 2, Clause 3: "Representatives ... shall be apportioned among the several States ... according to their respective Numbers, ... The actual Enumeration shall be made within ... every ... ten Years, in such Manner as they [Congress] shall by Law direct."

✔ P.L. 94-171, enacted in 1975, requires the Census Bureau to provide small-area tabulations for use in redistricting no later than 1 year after Census Day.

✔ Voting Rights Act of 1965, as amended, requires the Census Bureau to provide estimates every five years of limited-English proficiency among people who speak Asian, American Indian and Alaska Native, or Spanish languages for geographic areas that must provide language assistance during voting (based on ACS data).

FUND ALLOCATION—Federal and state agencies allocate funds using federal statistics:

✔ Title 1 education funds for disadvantaged children: $16 billion allocated in FY 2021 to school districts using the Census Bureau's Small-Area Income and Poverty Estimates (SAIPE) program, which uses American Community Survey and administrative records data.

✔ Child Care and Development Block Grant: $51 billion allocated in FY 2021 to states based on state shares of children under age five and children receiving free or reduced-price lunches, and state per capita income.

✔ Many states, including Montana, Nevada, and Tennessee, share revenue with local governments using federal statistics in their allocation formulas.

Box A-2.

For Further Reading

Auerbach, J., and Pierson, S. (2020, September 17). What would happen if the deadline for the 2020 Census data collection operation changed? Estimates of apportionment of the House of Representatives and distribution of federal Medicaid funding under different deadlines. Technical Report. Office of Science Policy, American Statistical Association, Alexandria, VA. https://www.amstat.org/docs/default-source/amstat-documents/pol-2020-census-deadline-extension.pdf

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