



The Nation's Data at Risk

Meeting America's Information Needs for the 21st Century

A REPORT OF THE AMERICAN STATISTICAL ASSOCIATION
IN PARTNERSHIP WITH GEORGE MASON UNIVERSITY—JULY 2024

FEDERAL STATISTICS ARE ESSENTIAL INFRASTRUCTURE

Federal statistics on employment, crime, health, income, transportation, education, and many other topics are essential U.S. infrastructure (see sidebar). They compose the official facts and figures on which countless government, personal, and business decisions depend. Federal statistics support free and fair elections, economic growth and stability, fair and impartial courts, an informed civil discourse, and other vital functions that the private sector cannot replicate.

This report assesses the core of the federal statistical system—the 13 principal statistical agencies that produce official statistics as their primary mission and the chief statistician's office in the U.S. Office of Management and Budget (OMB).¹ We examined available evidence on the agencies': (a) professional autonomy (i.e., their ability to determine, without inappropriate political interference, the best statistical methods to carry out their mission; (b) support from their parent agency; (c) sufficiency of

their budget and staffing; (d) challenges and opportunities for data quality and innovation to meet new demands; and (e) engagement with users. Similar to how engineers regularly assess America's transportation infrastructure (roads, bridges, airports, railroads), the goal was to identify capabilities, threats, and opportunities, and to recommend needed action.²

The Importance of Federal Statistics:

- Without federal statistics, the nation would not know how many kids have high lead levels in their blood or be able to monitor reductions in those levels from phasing out lead in gasoline, food, soft drink cans, and water.
- Without federal statistics, the nation would not know how many kids still lag in their reading and math skills following the Covid-19 pandemic.
- Because timely federal statistics on the entirety of the service sector (e.g., finance, insurance, real estate) were not funded until after the Great Recession began, initial estimates of the decline in gross domestic product were significantly short of the actual decline, which left policymakers assuming that the programs enacted to boost the economy were adequate instead of falling short.

¹ In contrast to other countries that have a single statistical agency, the United States has a decentralized statistical system, which evolved over many years as new cabinet departments were established—each with one or more statistical units—to handle policy concerns that rose to the federal level. Decentralization makes it harder for the agencies, individually and collectively, to fend off threats and pursue opportunities when each of them operates under different authorizations and requirements.

² The project team expects to add topics and other federal statistical units and programs to their second-year assessment and welcomes feedback.

FEDERAL STATISTICS ARE AT RISK

Our bottom-line assessment is that *federal statistics are at risk*. Federal statistical agencies have many strengths—economic indicators, such as the inflation rate, gasoline prices, and retail sales, roll out weekly, monthly, or quarterly on time and without fail; several agencies and OMB moved rapidly to produce timely, frequent data during Covid-19 on such topics as remote work and Covid-19 effects on health; and the 2020 Census was completed during the height of the pandemic. But the agencies face increasing challenges to their ability to innovate to the extent necessary to meet the nation’s detailed information and evidence requirements in the 21st century (e.g., for data on the economic effects of investments in infrastructure or of AI on work, education, and other sectors of society). The chief statistician’s office in OMB is under-resourced for its necessary functions to coordinate and lead a decentralized statistical system.

Key findings:

- Statistical agencies are experiencing significant weaknesses in at least one out of three critical supports:
 - Many agencies lack statutory protection to sustain a high degree of professional autonomy (i.e., decision-making authority) regarding statistical methods and processes for data collection, estimation, and dissemination to assure data quality and protect against inappropriate political interference.
 - Not all agencies have strong support from the cabinet department or independent agency (“parent agency”) in which they reside, which is necessary for the statistical agency to exercise its autonomy appropriately, obtain adequate budget and staffing, and do its best work.

-Most agencies have suffered a decline in resources in real dollar terms over the last 15 years so that they are stretched to carry out basic responsibilities, let alone testing and development to meet demands for new, revised, and more detailed information.

- A consequence of weaknesses in the three critical supports is that long-standing statistical series that produce important economic indicators, such as the unemployment rate, are prone to become outdated in content and methods because of the statistical agencies’ inability to invest in continuous testing and improvement. In other cases, essential programs have been cut, delayed, or otherwise curtailed without due consideration of the consequences to data users outside the parent agency.
- Agencies face a challenging environment. Much of their data collection methodology is rooted in 20th century technology and survey-taking techniques. But the public is less cooperative, and agencies are hampered by legal and other barriers in their abilities to more rapidly develop and implement new data collection methods and tap other public and private data sources to sustain quality and timeliness, increase efficiency and productivity, and keep up with policy areas of interest.
- Agencies are increasingly challenged to protect the confidentiality of respondents’ information in a time of increased risks of disclosure—while still serving their fundamental responsibility to provide data that are fit for users’ needs. Increasingly, statistical agencies are reducing available data content or taking other steps that threaten equitable data access.

- Federal statistical agencies remain vulnerable because of weaknesses in their professional autonomy to political meddling and improper influence, as has been attempted in the past. Such interference, if successful (as has occurred in some countries), would undercut the federal statistical agencies’ ability to support informed civil discourse and policymaking in the public and private sectors, as well as compromising public trust in the data, both domestically and abroad.

Opportunities for agencies that would facilitate their continued production of relevant, trusted, quality statistics—two examples:

- “Blending” survey data with administrative records and commercial sources can improve data quality and content (e.g., fill gaps in data from survey questions that many people do not answer; link health, housing, and environmental data for policy insights; produce estimates for small geographic areas to better track infrastructure investments’ economic effects). These potential benefits require reducing existing barriers to obtaining alternative data sources.
- Increasing outreach by statistical agencies to interact with and understand their users can pay big dividends in more relevant information for the public.

FIFTEEN ACTIONS THAT WOULD STRENGTHEN FEDERAL STATISTICS

Immediate action is needed to put the agencies and the chief statistician’s office on a firmer footing so that federal statistics remain widely trusted and useful to a society that is saturated with information from many sources, credible and not.

Our recommendations, summarized below, have been endorsed by the Board of Directors of the American Statistical Association. They are addressed to Congress, parent agencies where the statistical agencies reside (the Departments of Agriculture, Commerce, Education, Energy, Health and Human Services, Justice, Labor, Transportation, and Treasury; the National Science Foundation; and Social Security Administration), OMB, and the statistical agencies themselves.

CONGRESS

- 1 Enact legislation that accords all principal statistical agencies professional autonomy over data collection, analysis, dissemination, and other aspects of how they do their job and explicitly authorizes those statistical agencies that lack specific authorization.
- 2 Enact legislation to extend the authority in the Foundations for Evidence-Based Policymaking Act of 2018 for data sharing between statistical agencies and from other federal and state agencies to the statistical agencies.
- 3 Make budget levels and authority commensurate with responsibilities. Adequate funding and authority for multiyear funding are essential to enable statistical agencies to regularly update and supplement long-running data series and to test and implement data collection improvements.
- 4 Enact legislation to help the statistical agencies and data users strike a reasonable balance of access for all and protection for individual responses by extending existing

penalties for statistical agency staff to anyone who willfully misuses federal statistics to identify an individual or business.

- 5 Ensure informed congressional monitoring and oversight through annual or more frequent meetings of relevant members and staff directly with statistical agency leadership.

PARENT AGENCIES

- 6 Proactively protect and promote professional autonomy. Parent agencies should regularly examine their procedures and policies for protecting statistical agency autonomy, including making sure that current and incoming leadership are aware of them.
- 7 Provide shared services as expeditiously as possible. Agency HR offices should facilitate and speed the hiring process for statistical agency staff. When services such as IT are shared, parent agencies should take steps to ensure that the statistical agency can meet deadlines, protect confidentiality, and innovate.
- 8 Provide adequate budget and staffing. Parent agencies have multiple bureaus to support but should recognize that statistical agencies need sufficient resources for continuous improvement of long-standing data series and other initiatives, including IT modernization.
- 9 Interact with and support their statistical agencies. Parent agency leadership should regularly meet with statistical agency leadership on mission, challenges, and opportunities.

PRINCIPAL STATISTICAL AGENCIES

- 10 Relate to parent agencies and Congress. Statistical agencies should proactively demonstrate agility and flexibility to meet parent agency and congressional needs for data for policymaking and evidence-building, while maintaining integrity and objectivity in methods and operations.
- 11 Relate to stakeholders and data users. Statistical agencies should proactively and interactively identify and reach out to a broad community of stakeholders and data users, using not only one-way methods (e.g., webinars) but also two-way, interactive dialogue to help establish priorities and understand user needs. They should ensure that stakeholder outreach covers as much of the political and policy spectrum as possible.
- 12 Increase transparency and accessibility. Statistical agencies should provide comprehensive, accessible documentation of content, technical features, and methodological decisions for data programs. When data user needs conflict, or when data series require major changes, statistical agencies should proactively reach out to affected users and be as transparent as possible about the rationale for the ultimate decision.

U.S. OFFICE OF MANAGEMENT AND BUDGET (OMB)

- 13 OMB leadership should finalize as soon as possible its regulation on the fundamental responsibilities of statistical agencies and parent agencies (“Trust Regulation”), as required by the Evidence Act. This

regulation is essential to bolster parent-agency support for all statistical agencies, which, in turn, is essential to enable the statistical agencies to do their job and have credibility with the public. The chief statistician's office should move expeditiously to craft and issue the regulations on data access and confidentiality required by the Evidence Act.

- 14 The chief statistician's office and the Interagency Council on Statistical Policy should develop a strategic plan and vision for the federal statistical system and take actions to implement it.
- 15 OMB leadership should provide the chief statistician's office with sufficient resources to effectively carry out its statutory duties and other responsibilities. In particular, staff are needed so that the office can not only update statistical policy standards, issue guidance, and approve survey questionnaires but also provide substantive leadership to the federal statistical system.

We believe these 15 actions would fill important gaps in existing legislation and regulations to bolster statistical agencies' professional autonomy, data-sharing authority, and resources, which are critical for the agencies' ability to continue to provide

relevant, accurate, timely, detailed, and credible data for the public and policymakers. The statistical agencies are achieving much with the resources and authorities they have. Following through on our recommendations, which include the agencies' stepping up their interactions with data users and stakeholders, should position them to respond effectively to the increasing information demands and challenges of the future. Not following up on our recommendations would put needed federal statistics at unnecessary risk.

One of the most important functions of Congress in conducting oversight is to assess the performance, need and value of federal programs. Timely, high-quality data from the federal statistical system is essential in carrying out this important function, across every committee and for every Member.

PAUL RYAN, SPEAKER, U.S. HOUSE OF REPRESENTATIVES, 2015-2019

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