

NATIONAL
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Principles and Practices for a Federal Statistical Agency

Eighth Edition

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COPAFS MARCH 7, 2025

The U.S. National Academies of Sciences, Engineering, and Medicine



- Private, non-profit societies of distinguished scholars and scientists, elected by their peers to membership for outstanding contributions to research
- [National Academy of Sciences](#) established by an Act of Congress, signed by President Abraham Lincoln in **1863**
- [National Academy of Engineering](#), [National Academy of Medicine](#) founded 1964, 1970

National Academies' Capabilities

The three Academies work together to provide **independent, objective analysis** and **advice to the nation** and conduct other activities to solve complex problems and inform **public policy** decisions

Provide Trusted, Consensus Advice	Convene Experts
Manage Original Research and Analysis	Promote the Scientific Enterprise

Serving the Statistical Community

The mission of the Committee on National Statistics (CNSTAT):

- Provide advice to the federal government and the nation grounded in the current, **best scientific knowledge** and practice to improve statistical methods and information upon which to base public policy
- Assist agencies with **specific issues**
 - Improve **economic and social measurement**
 - Review and evaluate **major statistical programs and surveys**
 - Improve statistical methods and estimates **for policy use**
- Address system-wide and **cross-cutting issues (decentralized system)**

Current CNSTAT Membership

Katharine Abraham (*chair*) (NAS),
Economics, Federal Statistics

Mick P. Couper, Survey Methodology

William (Sandy) A. Darity, Jr., Economics

Robert M. Goerge, State/Local Data

Erica L. Groshen, Economics, Federal
Statistics

Roe Gutman, Biostatistics

Colleen M. Heflin, Sociology, Public Policy,
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Daniel E. Ho, Administrative Law, Political
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H.V. Jagadish, Computer Science

Sharon Lohr, Statistics

Lloyd B. Potter, Demography

Nela Richardson, Economics, Private Sector
Data

Elizabeth A. Stuart, Biostatistics

Florencia Torche (NAS), Sociology

Salil Vadhan, Computer Science

Note: all members serve *pro bono*

Principles and Practices for a Federal Statistical Agency (*P&P* or the “purple book”)

- **Flagship publication** authored by CNSTAT itself
- Published since 1992
- Foundational: supports **invaluable role** of **widely available, trustworthy, relevant, accurate, and timely** government statistics
- Describes **decentralized structure** of U.S. statistical system
- Specifies **principles** fundamental to a statistical agency and **practices** for making the principles operational

How *P&P* Supports Federal Statistical Agencies, Units, and Other Statistical Programs

- Articulates a shared culture
- Communication and training tool
- Shares challenges and opportunities
 - Empowers statistical officials in achieving quality and data governance standards
 - Supports officials in demonstrating the value of their data
- Concrete examples for best practice

What *P&P* Is and Is Not

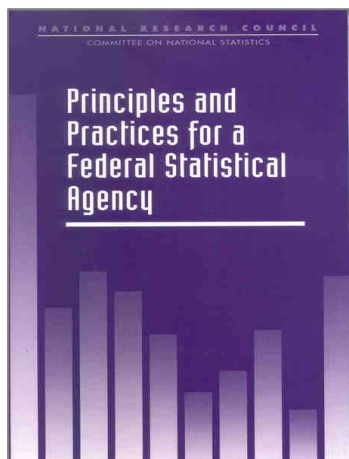
- It **IS** a statement of **principles** that statistical agencies must embody to carry out their mission fully
- It **IS** a statement of **practices** that provide the means for statistical agencies to implement the five principles
- It **IS NOT** a guide to best practices for data collection, processing, statistical methods, or dissemination
- It **does NOT** provide a set of data quality standards
- It **IS** a set of **guidelines** and **NOT** a set of prescriptions; **updated every 4 years** to help meet new challenges and opportunities
- It **does NOT** mention resources, but to live up to *P&P*, most federal statistical agencies today require a boost in staff and other resources

Who Uses *P&P*?

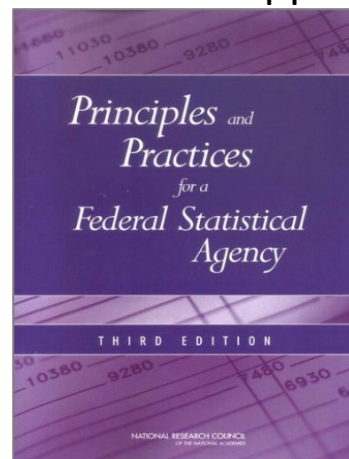
- Federal statistical agencies and other statistical programs
 - To inform Cabinet department officials, advisory committees, Congress, stakeholders, and others
- Office of Management and Budget (OMB)
 - Has cited *P&P* in multiple Statistical Policy Directives
- U.S. Government Accountability Office (legislative branch)
 - Has cited *P&P* in many reports
- It has been cited in statistical agency head **confirmation hearings**

“P&P”—The First Seven Editions

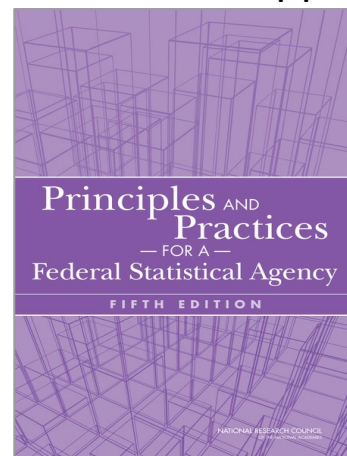
1992 — 27 pp.



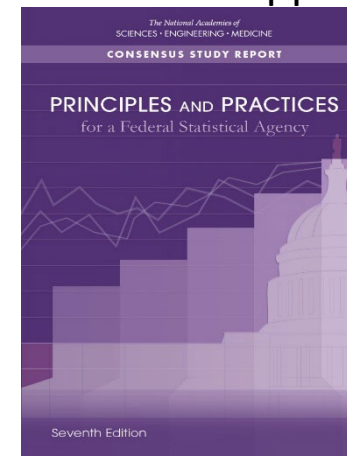
2005 — 66 pp.



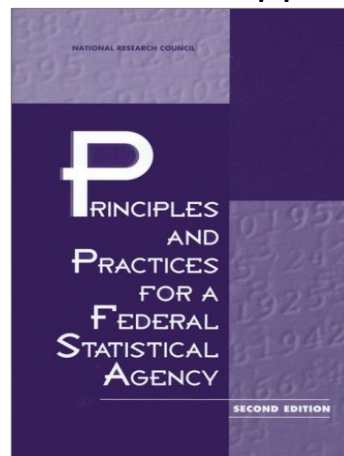
2013 — 166 pp.



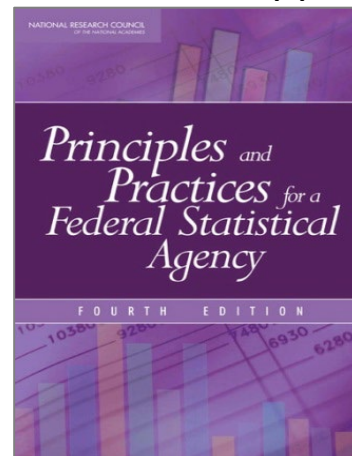
2021 — 167 pp.



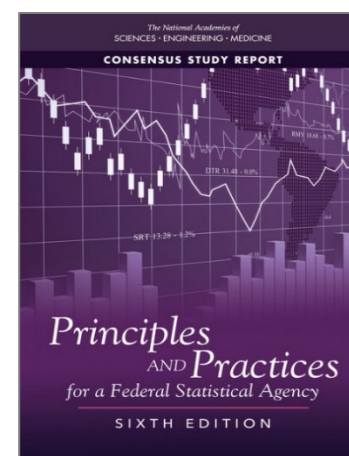
2001 — 44 pp.



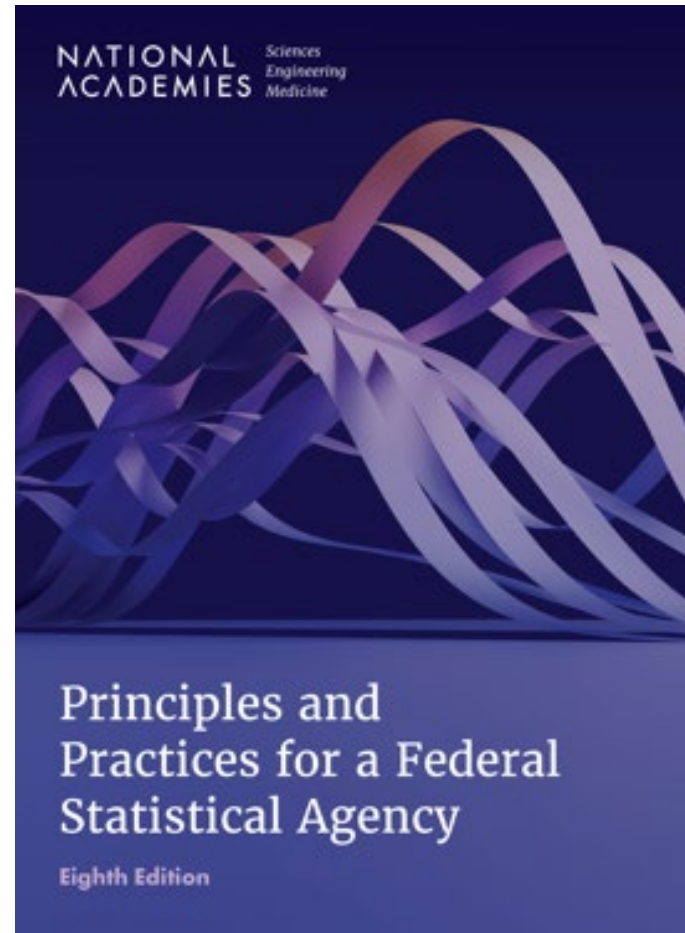
2009 — 123 pp.



2017 — 156 pp.



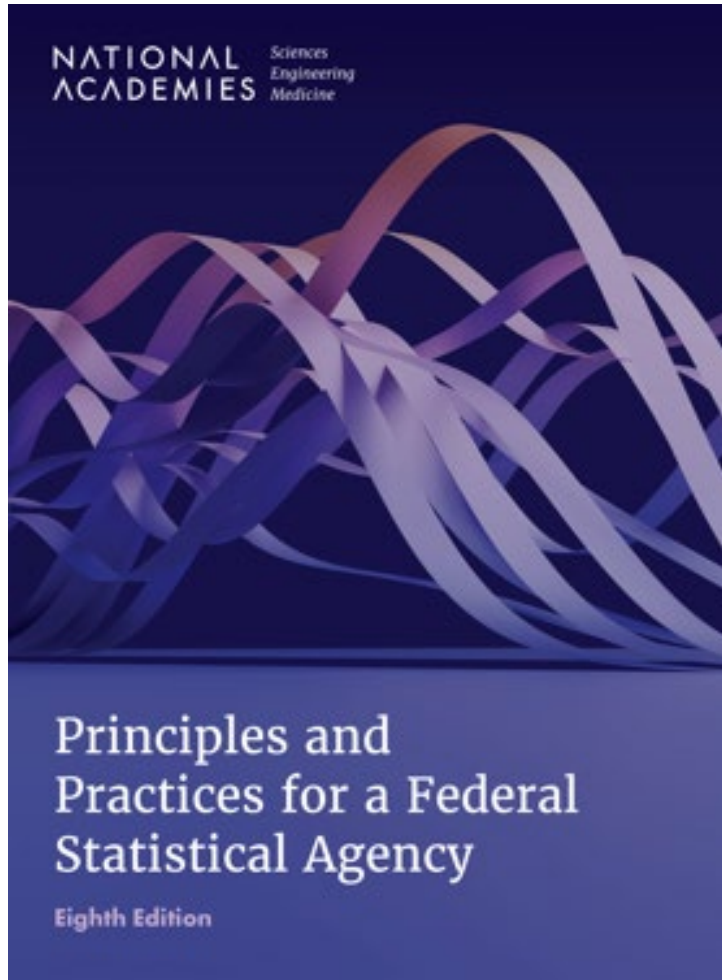
Introducing:
Principles and Practices for A Federal
Statistical Agency, 8th Edition



Brief Overview of Changes to the 8th Edition

- **Principles and practices remain the same**
- **Restructured and streamlined** the introduction and chapter on the value of the federal statistics
- **Tightened terminology** for precision and consistency (marked in red font in this presentation)
- **Examples and references updated** to reflect evolving federal statistical system and significant policy changes

Outline of the Report



Dedication to Katherine Wallman
Summary

Chapter 1: Introduction

Chapter 2: Value of Federal Statistics

Chapter 3: Principles

Chapter 4: Practices

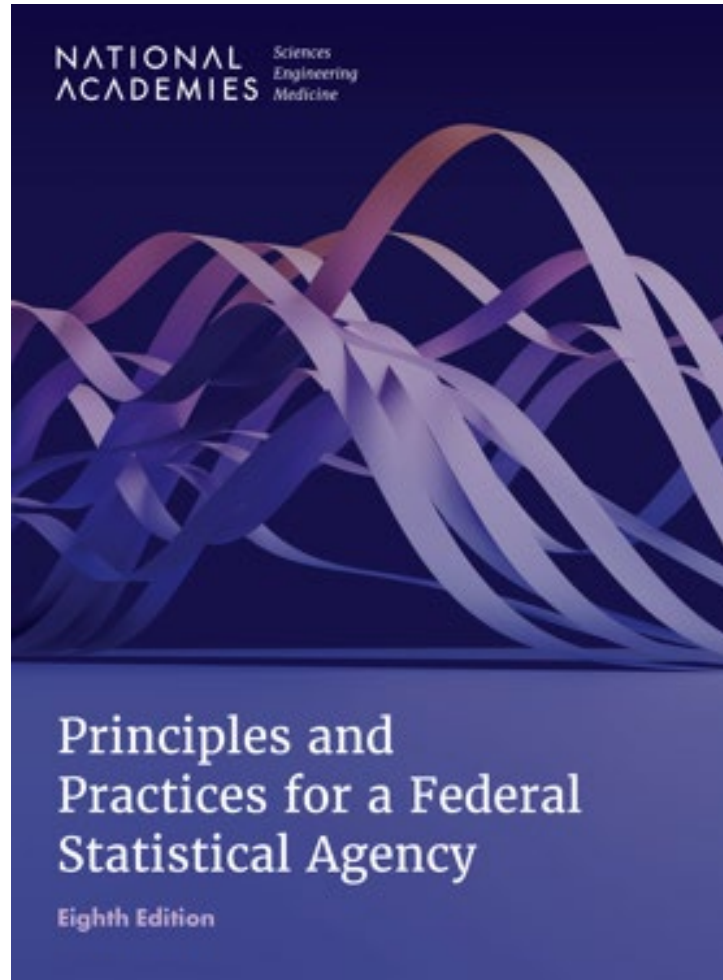
References

Acronyms and Abbreviations

Glossary of Selected Terms

Appendices

Chapter 1: Introduction



An **essential and complex system**

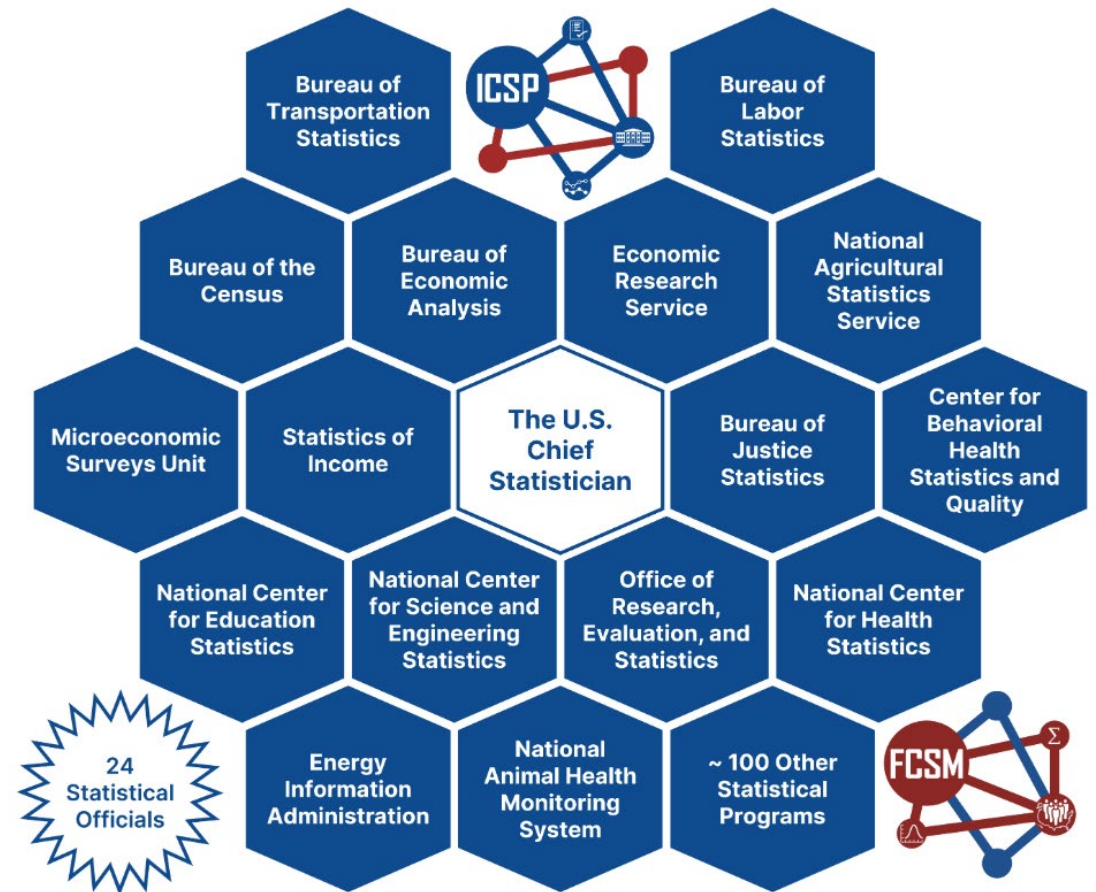
- The Value of National Statistics
- A Decentralized and Federated Statistical System
- Unique Responsibilities
- Expanded Availability of New Data Sources

The Federal Statistical System

- Highly decentralized
- Responsibilities established by the [Paperwork Reduction Act](#) and underscored by the [Foundations for Evidence-Based Policymaking Act](#) (“Evidence Act”)
- Coordinated by the U.S. Chief Statistician
- Advised by the Interagency Council on Statistical Policy
- Influences over 100 statistical programs across the federal government

See also

- <https://www.statpolicy.gov/about/#fss>
- P&P Appendix B



OMB's view of the Federal Statistical System

Recognized Statistical Agencies (13)

Principal function is to collect, compile, analyze, and disseminate information for statistical uses

- Bureau of Economic Analysis (BEA), Department of Commerce
- Bureau of Justice Statistics (BJS), Department of Justice
- Bureau of Labor Statistics (BLS), Department of Labor
- Bureau of Transportation Statistics (BTS), Department of Transportation
- U.S. Census Bureau, Department of Commerce
- Economic Research Service (ERS), Department of Agriculture
- Energy Information Administration (EIA), Department of Energy
- National Agricultural Statistics Service (NASS), Department of Agriculture
- National Center for Education Statistics (NCES), Department of Education
- National Center for Health Statistics (NCHS), Department of Health and Human Services
- National Center for Science and Engineering Statistics (NCSES), National Science Foundation
- Office of Research, Evaluation, and Statistics (ORES), Social Security Administration
- Statistics of Income (SOI), Department of the Treasury

Recognized Statistical Units (3)

Principal function is to collect, compile, analyze, and disseminate information for statistical uses

OMB also recognizes 3 statistical units that are subcomponents of agencies

- [Microeconomic Surveys Section \(MSS\)](#), Division of Research and Statistics, Federal Reserve Board
- [Center for Behavioral Health Statistics and Quality \(CBHSQ\)](#), Substance Abuse and Mental Health Services Administration, Department of Health and Human Services
- [National Animal Health Monitoring System \(NAHMS\)](#), Animal and Plant Health Inspection Service (APHIS), Department of Agriculture

Other Significant Statistical Programs (100+)

Specialized programs

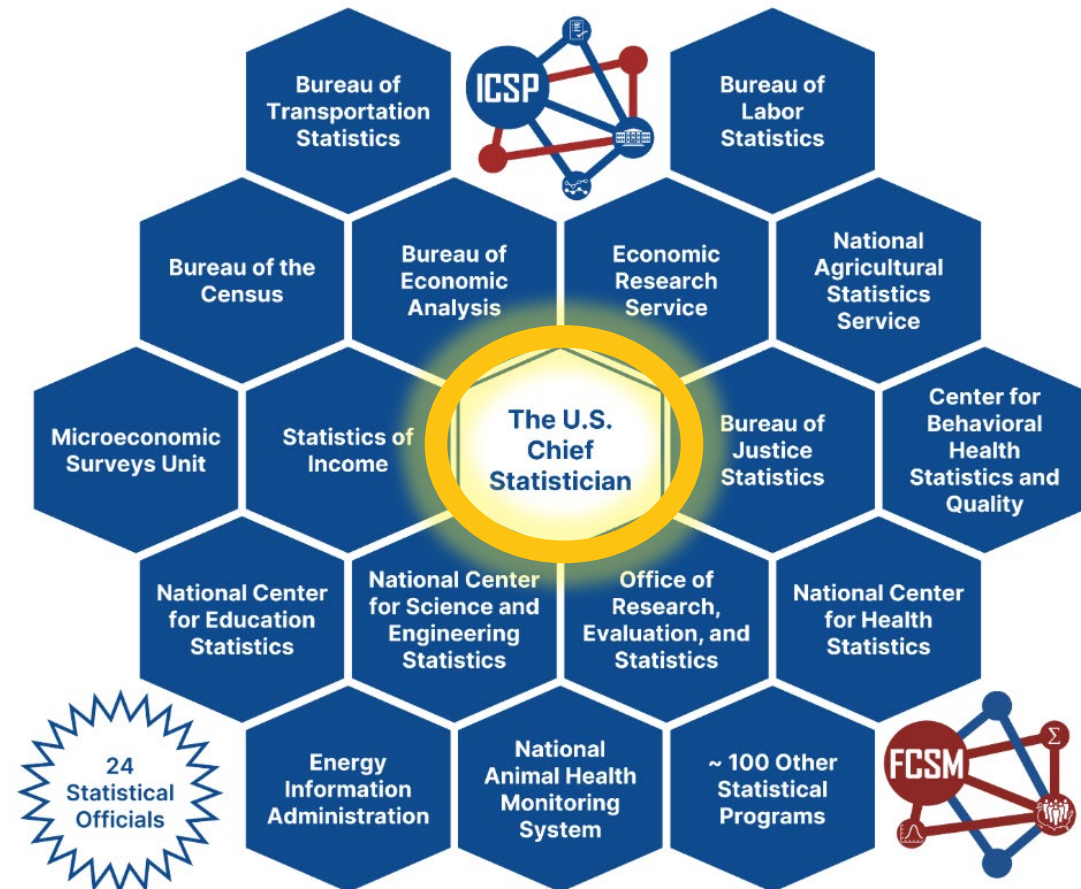
- Produce and disseminate statistics in support of their mission areas
- Evidence-building functions
- Required to use federal data to
 - inform policy making,
 - ensure their data assets are in formats that are findable, accessible, and efficient, and
 - balance potential privacy risk with public interest
- Subject to Information Quality Act, Privacy Act, Evidence Act, statistical standards

Examples

- Agency for Healthcare Research and Quality, Dept. of Health and Human Services
- Office of the Assistant Secretary for Planning and Evaluation, Dept. of Health and Human Services
- Office of Policy Development and Research, Dept. of Housing and Urban Development
- Office of Data Governance and Analytics, Dept. of Veterans Affairs

The U.S. Chief Statistician

- Coordinates the system
- Advises on statistical program budget review
- Maintains statistical standards and efficiency
- Represents the U.S. in international statistical collaboration



OMB's view of the Federal Statistical System

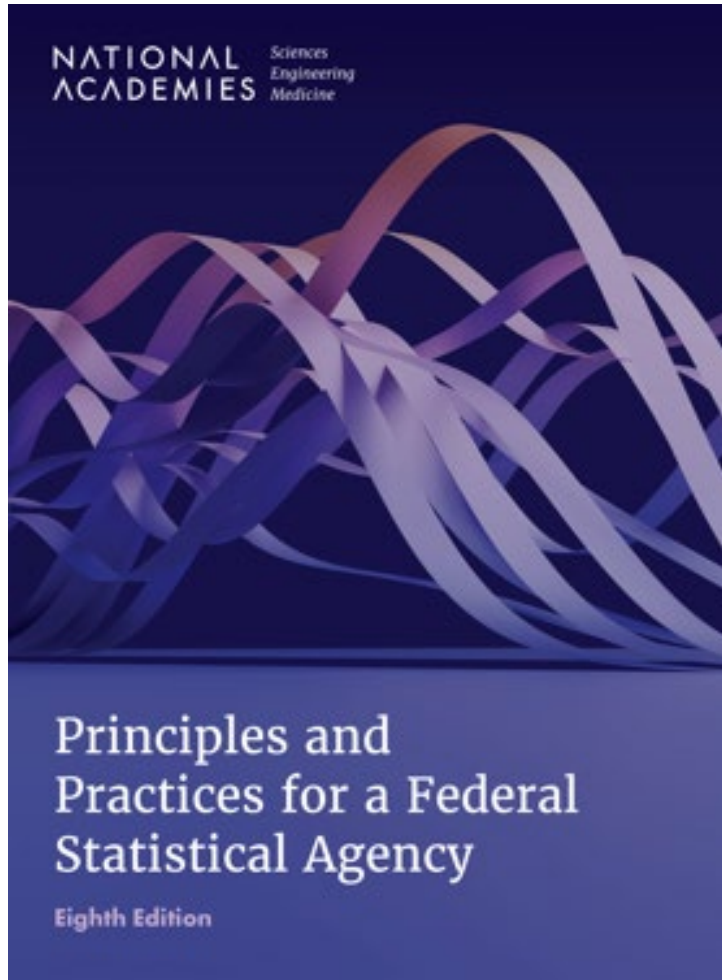
Interagency Council on Statistical Policy

- Chaired by the U.S. Chief Statistician
- Comprised of:
 - 16 recognized statistical agencies and units (RSAUs)
 - 13 additional Statistical Officials from [Chief Financial Officer Act](#) agencies (under the Evidence Act)
- Supported by the [Federal Committee on Statistical Methodology](#)



OMB's view of the Federal Statistical System

Chapter 3: Principles



1. Relevance to Policy Issues and Society
2. Credibility Among Data Users and Stakeholders
3. Trust Among the Public and Data **Providers Subjects**
4. Independence from Political and Other Undue External Influence
5. Continual Improvement and Innovation

Principle 1: Relevance to Policy Issues and Society

Federal statistical agencies must provide objective, accurate, and timely information that is relevant to important public policy issues.

Principle 2: Credibility Among Data Users and Stakeholders

Federal statistical agencies must have credibility with those who use their data and information.

Principle 3: Trust Among the Public and Data ~~Providers~~ Subjects

*Federal statistical agencies must have the trust
of those whose information they obtain.*

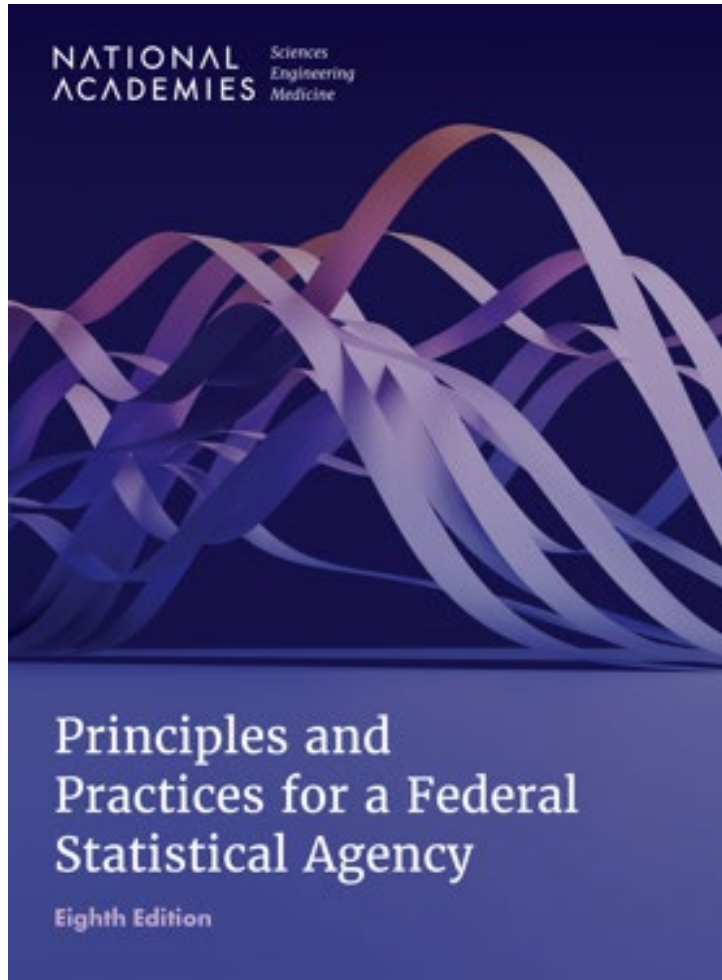
Principle 4: Independence from Political and Other Undue External Influence

Federal statistical agencies must be independent from political and other undue external influence in developing, producing, and disseminating statistics.

Principle 5: Continual Improvement and Innovation

Federal statistical agencies must continually seek to improve and innovate their processes, methods, and statistical products to better measure an ever-changing world.

Chapter 4: Practices



Ten important practices provide the means for statistical agencies to implement the **five** principles.

- Practices 1-4 pertain to an agency's **internal** operations
- Practices 5-7 **bridge internal** operations and **external** relations with professional communities
- Practices 8-10 focus on **external** stakeholders: data users, holders and providers.

Practices

1. A Clearly Defined and Well-Accepted Mission
2. Necessary Authority and Procedures to Protect Independence
3. Commitment to Quality and Professional Standards of Practice
4. Professional Advancement of Staff

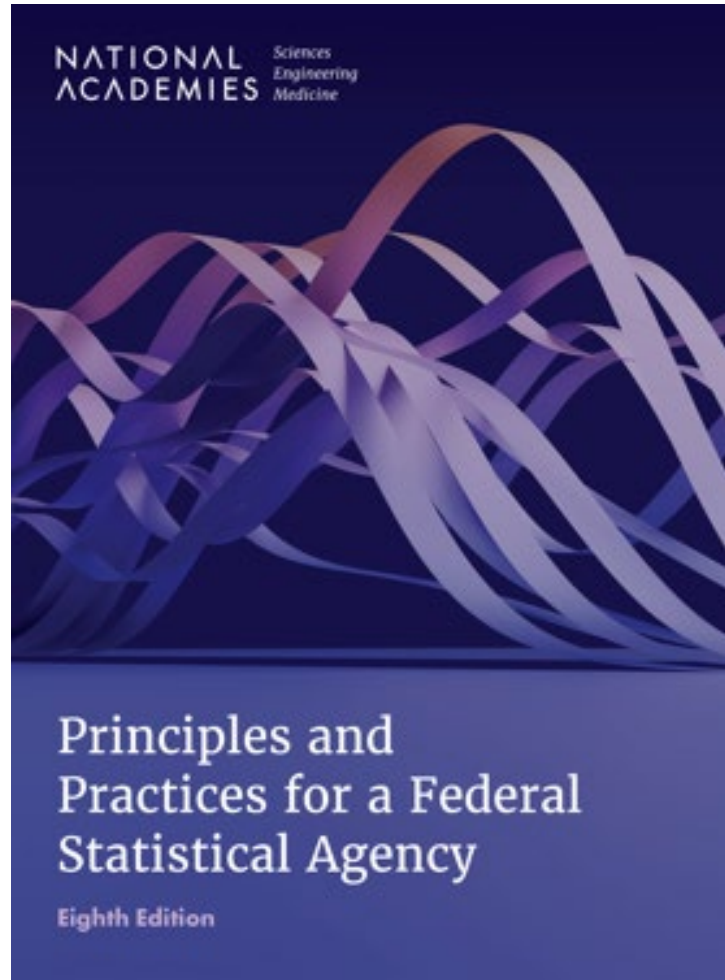
Practices (continued)

5. An Active Research Program
6. Strong Internal and External Evaluation Processes for an Agency's Statistical Programs
7. Coordination and Collaboration with Other **Statistical** Agencies

Practices (continued)

8. Respect for Data ~~Providers~~ **Subjects and Data Holders** and Protection of Their Data
9. Dissemination of Statistical Products that Meet Users' Needs
10. Openness about Sources and Limitations of the Data Provided

Appendices (available online)



- A. Legislation, Regulation, and Guidance Governing Federal Statistics
- B. Organization of the U.S. Federal Statistical System
- C. Additional Frameworks Relevant for Federal Statistics
- D. Committee Biosketches

Overview of Appendices

A. Legislation and Regulations

- a. Laws (13 pp)
- b. Regulations, Directives, and Bulletins (12 pp)
- c. Executive Policy Memoranda (11 pp)
- d. Statistical and Science Policy Guidance (6 pp)

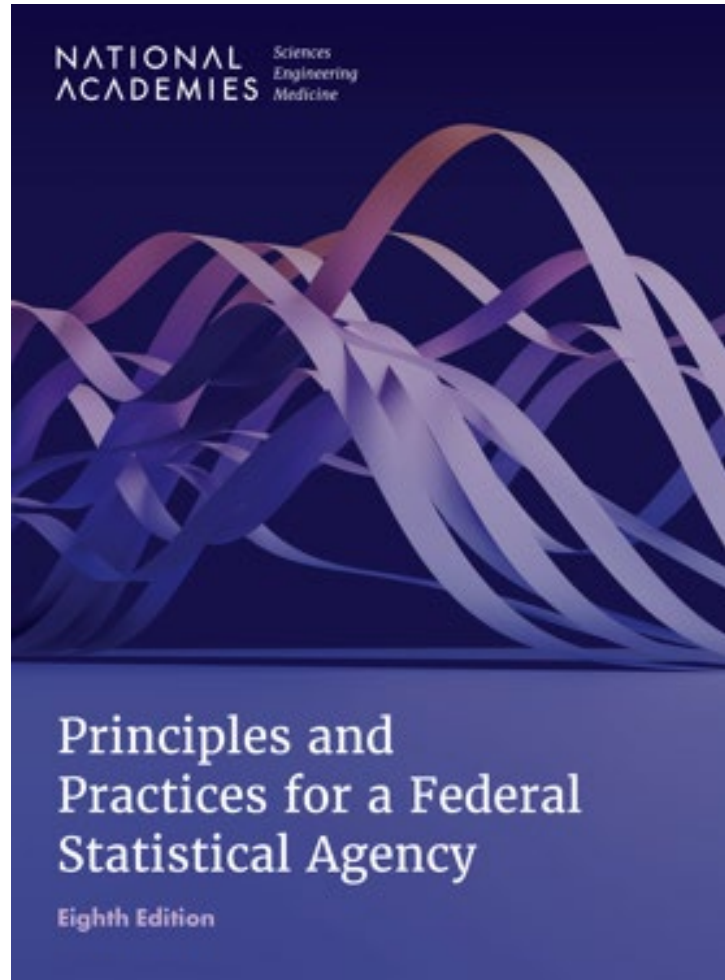
B. Organization of the Federal Statistical System

- a. A Brief History of the Federal Statistical System (1 p)
- b. Current Structure and Membership (27 pp)
- c. Coordination of the System (5 pp)

C. Additional Frameworks Relevant for Federal Statistics

- a. U.S. Guidance for Ethical Data and Statistical Practice (7 pp)
- b. International Guidelines for Official Statistical Practice (4 pp)
- c. Generic Statistical Business Process Model (1 p)

Dissemination (if you can't get enough of P&P!)



1. Events
2. Briefings, conversations, and trainings
3. Resources and materials
4. Your feedback and ideas

Overview of Dissemination Plans

- **Events**
 - CNSTAT Spring Seminar (tentative: May 2025)
 - Presentations to professional organizations upon request
- **Briefings, conversations and trainings**
 - CNSTAT can provide other briefings upon request
 - Exploring collaboration with ICSP mentorship program
- **Communications** – [sign up for CNSTAT emails](#) for information

Resources and Materials

- **Materials available now**
 - [Prepublication report](#) (released 11/5/24, includes all final content and is usable now)
 - [4-page highlights](#)
 - [One-page summary](#)
 - [Strengthening Partnerships with State and Local Data Stewards](#) (topical brief)
- **Materials available in the near future (still in soft launch period)**
 - Topical briefs: 2- to 4-page summaries of particular report topics
 - Program Agency Statistical Officials and Other Statistical Staff (eta: March 2025)
 - Value of federal statistics
 - Updated interactive website
 - Published version of the report (copy-edited, printed)
 - Please tell us how many hard copies your agency would like so we can place the order!

Ongoing Engagement

- Your feedback and ideas
 - Did we miss anything? Let us know! (*Already planning P&P9...*)
 - Use cases (still developing plans)
 - Exploring cosponsored events
 - Other ideas?
 - How else can CNSTAT support your agencies?

Thank you!

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