

# The Committee on National Statistics (CNSTAT):

Helping Improve Federal Statistics,  
Methods, and Practices for Over 50 Years

*Melissa Chiu, Director, Committee on National Statistics*



# The 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

- **Mission of CNSTAT** is to provide advice to the federal government and the nation grounded in the current best scientific knowledge and practice that will lead to improved 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**
- **Expanding our reach** and making our products more widely used and more useful to the statistical **community**

# Current CNSTAT Membership

- **Katharine Abraham**, chair, University of Maryland (NAS)
- **Mick Couper**, University of Michigan
- **Diana Farrell**, JPMorgan Chase Institute
- **Robert Goerge**, Chapin Hall at the University of Chicago
- **Erica L. Groshen**, Cornell University
- **Daniel Ho**, Stanford University
- **Hilary Hoynes**, University of California, Berkeley
- **Daniel Kifer**, The Pennsylvania State University
- **Sharon Lohr**, Arizona State University, Emerita
- **Nela Richardson**, ADP Research Institute
- **C. Matthew Snipp**, Stanford University
- **Elizabeth A. Stuart**, Johns Hopkins University

# Committee on National Statistics (CNSTAT) – Portfolio

Standing group that manages a portfolio of work national statistics, data, and methods for the common good

## Topics include:

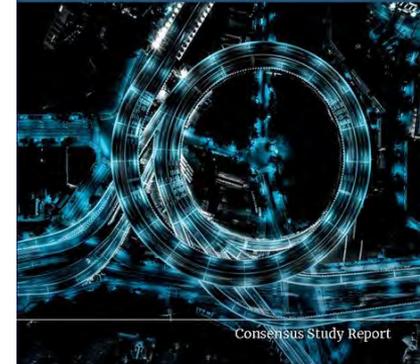
- Data infrastructure for the 21<sup>st</sup> century
- Blended data sources including administrative, commercial data
- Privacy protection and ethics
- Estimation methods, e.g., seasonal adjustment, missing data methods
- Survey design, questionnaire design, concept measurement
- Sampling
- Data collection methods, modes
- Data quality and effects on evidence

## Recent reports:

- [\*Principles and Practices for a Federal Statistical Agency\*](#)
- [2020 census data quality, SIPP disclosure avoidance](#)
- [Supplemental Poverty Measure update](#)
- [Measuring sex, gender identity, & sexual orientation](#)
- [Patient-centered outcomes research data capacity](#)
- [Genomic data and NHANES](#)
- [Consumer inflation statistics](#)
- [Transparency in statistical information](#)
- [AI and computation in educational assessment](#)
- [Understanding the aging workforce](#) (collab)
- [Longitudinal studies of aging](#)

# Toward a Vision for a New Data Infrastructure for Federal Statistics and Social and Economic Research in the 21st Century

- Study 1: *Toward a 21st Century National Data Infrastructure: Mobilizing Information for the Common Good*
  - [December 9 & 16, 2021](#); [Report published September 15, 2022](#)
- Study 2: *Toward a 21st Century National Data Infrastructure: Enhancing Survey Programs by Using Multiple Data Sources*
  - [May 16 & 18, 2022](#); [Report published March 2023](#)
- Study 3: Approaches for Sharing Blended Data in a 21st Century Data Infrastructure
  - [May 22, 23, 25, 2023](#); [Report expected fall-winter 2023-24](#)
- *Supported by the National Science Foundation – Thank you!*



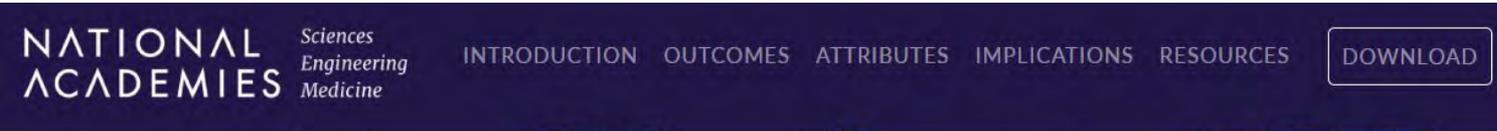
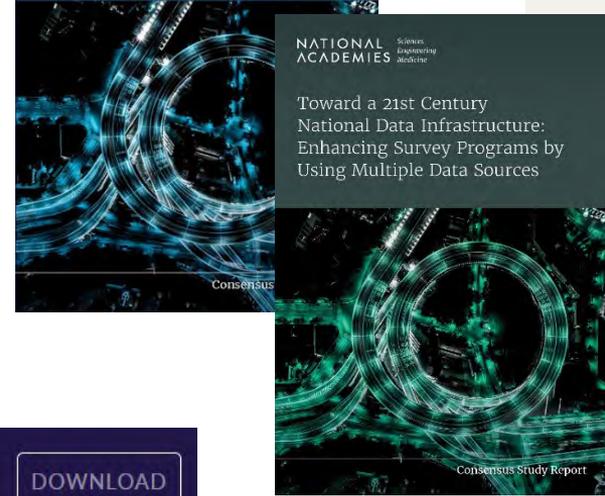
# Report Resources

## Publications and resources

- Reports
- Report highlights
- Policy brief
- Private sector data brief

## Interactive site

- Accessible, digestible format
- FAQ section



Toward a 21st Century

# CNSTAT Core Activities

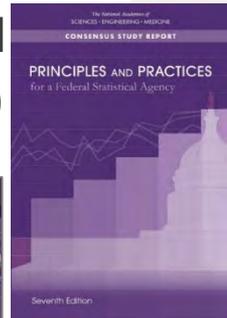
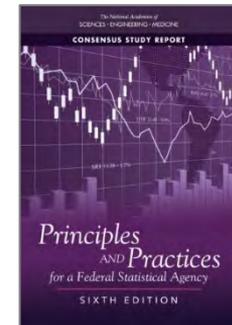
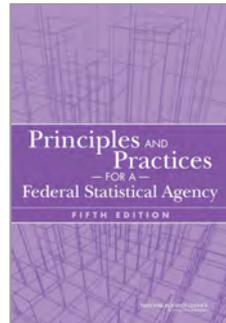
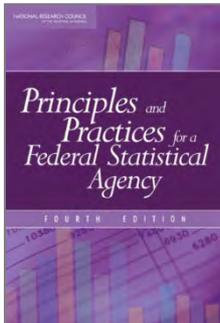
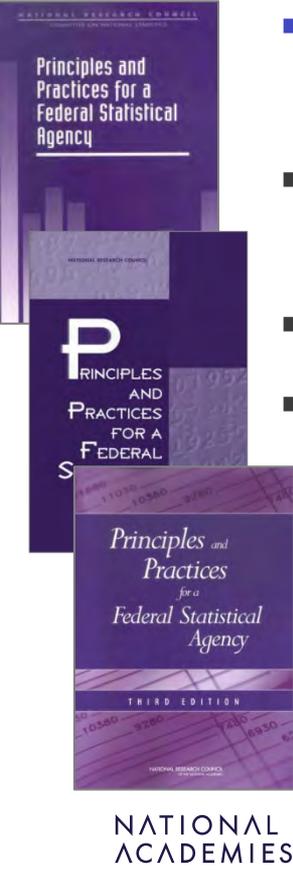
- Meetings in DC in May and October
  - Meet with selected statistical agency heads, chief statistician, and others
  - Hold a luncheon with all the statistical agency heads and chief statistician to discuss current topic or issue
  - Members identify important cross-cutting topics for study, develop prospectuses, and seek out funding for panels or workshops
- Convene public seminars in spring and fall
- Convene periodic workshops of broad interest to statistical community
- Monthly newsletter
- Produce new edition of ***Principles and Practices for a Federal Statistical Agency*** every 4 years

# *Principles and Practices for a Federal Statistical Agency* (P&P)

- **Flagship publication** authored by CNSTAT itself
  - 1<sup>st</sup> edition, 1992; updated every 4 years beginning in 2001; 7<sup>th</sup> edition 2021
- Supports **invaluable role** of widely available, trustworthy, accurate, and timely **government statistics**
- Describes **decentralized structure** of U.S. statistical system
- 2021 edition prescribes **5 principles** (fundamental to a statistical agency) and **10 practices** (for making the principles operational)

## **PRINCIPLES**

- ✓ Relevance
- ✓ Credibility
- ✓ Trustworthiness
- ✓ Independence
- ✓ Innovation



## **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.

# Who Uses *P&P*?

- Federal statistical agencies and programs
  - To inform Cabinet department officials, advisory committees, Congress, stakeholders, and others
- Office of Management and Budget (OMB) (The White House)
  - 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](#)

# Resources

## [Report](#) [One-Page Summary](#) → [Highlights](#)

## [Interactive Web Tool](#)

Accessible, digestible format

NATIONAL ACADEMIES Sciences  
Engineering  
Medicine Value Government & Policy-making Agencies Principles Practices Get the Report

# PRINCIPLES AND PRACTICES

for a Federal Statistical Agency

SEVENTH EDITION

This report is intended to support the invaluable role of widely available, trustworthy, relevant, accurate, and timely government statistics. **The publication and the information below draws on CNSTAT's many studies of specific statistical and research agencies, programs, and topics.** Previous editions have proven helpful to Congress, OMB, federal statistical agencies, and others about what constitutes an effective and credible statistics entity. Beginning with the second edition in 2001, CNSTAT

## PRINCIPLES AND PRACTICES for a Federal Statistical Agency, Edition 7

*Principles and Practices for a Federal Statistical Agency* is intended to support the invaluable role of widely available, trustworthy, relevant, accurate, and timely government statistics. The Committee on National Statistics (CNSTAT) of the National Academies of Sciences, Engineering, and Medicine developed these principles and practices and has refined and updated them periodically as part of its mission to provide an independent review of federal statistical activities. CNSTAT intends for its principles and practices to assist statistical agencies and units, as well as other agencies engaged in statistical activities, to carry out their responsibilities to provide accurate, timely relevant, and objective information for public and policy use. It also intends this report to inform legislative and executive branch decision makers, data users, and others about the characteristics of statistical agencies that enable them to serve the public good.

### FIVE PRINCIPLES

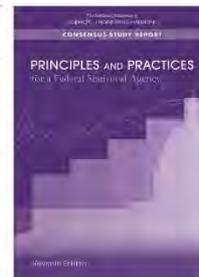
**PRINCIPLE 1: Relevance to Policy Issues and Society:** Federal statistical agencies must provide objective, accurate, and timely information that is relevant to important public policy issues.

**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:** 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.



### TEN PRACTICES

In order to fulfill these five principles, 10 practices are essential for statistical agencies to adopt:

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
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
8. Respect for Data Providers and Protection of Their Data
9. Dissemination of Statistical Products That Meet Users' Needs
10. Openness About Sources and Limitations of the Data Provided

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CNSTAT

# Revising *P&P* for the 8<sup>th</sup> Edition

## Seeking feedback from the Federal Statistical System

- Questions and considerations –
- How have you used *P&P*?
- Content – How could *P&P* be more useful?
  - Are there important things missing that need to be added? Things that need more emphasis? Things included that don't belong?
  - Online appendices of relevant laws, regulations, guidance
- Resources and dissemination – improvements?
  - Currently have 1- and 4-page summaries, interactive website
  - CNSTAT will give briefings to staff or Department officials
- **Send comments** to [CNSTAT@nas.edu](mailto:CNSTAT@nas.edu) with “**P&P**” in subject line

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**CNSTAT website, events, and projects** <http://www.nationalacademies.org/cnstat>

**All CNSTAT reports available from National Academies Press (free)**

<https://nap.nationalacademies.org/author/CNSTAT/>

[P&P main page](#) and [interactive site](#)

**Send comments on P&P to [CNSTAT@nas.edu](mailto:CNSTAT@nas.edu) with “P&P” in subject line**

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Select DBASSE – “National surveys and statistics”

**Thank you!**