#### The Nation's Data At Risk Meeting America's Information Needs for the 21<sup>st</sup> Century

#### ASA AMERICAN STATISTICAL ASSOCIATION Promoting the Practice and Profession of Statistics<sup>®</sup>

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#### Federal statistics are essential U.S. infrastructure

A New Effort to Assess the Health of the Principal Federal Statistical Agencies & Chief Statistician's Office in OMB

Jonathan Auerbach, Claire McKay Bowen, Connie Citro, Steve Pierson, Nancy Potok, Zach Seeskin, funded by the Alfred P. Sloan Foundation

proactive monitoring to identify needs and vulnerabilities before they are major problems

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#### Outline

### Motivation Methods Steve Pierson Framing **Connie Citro** Findings **Recommendations** Nancy Potok **Future Work**

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### Motivation Challenges and Threats

- undue political interference (meddling in operations, gutting staff)
- shrinking budgets (declining purchasing power)
- growing challenges (declining response rates, unfunded mandates)
- demand for more timely, granular, and frequent data

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#### Federal Statistical Agencies are the backbone of US data infrastructure

Just as our transportation infrastructure supports the US economy, governance, and society...

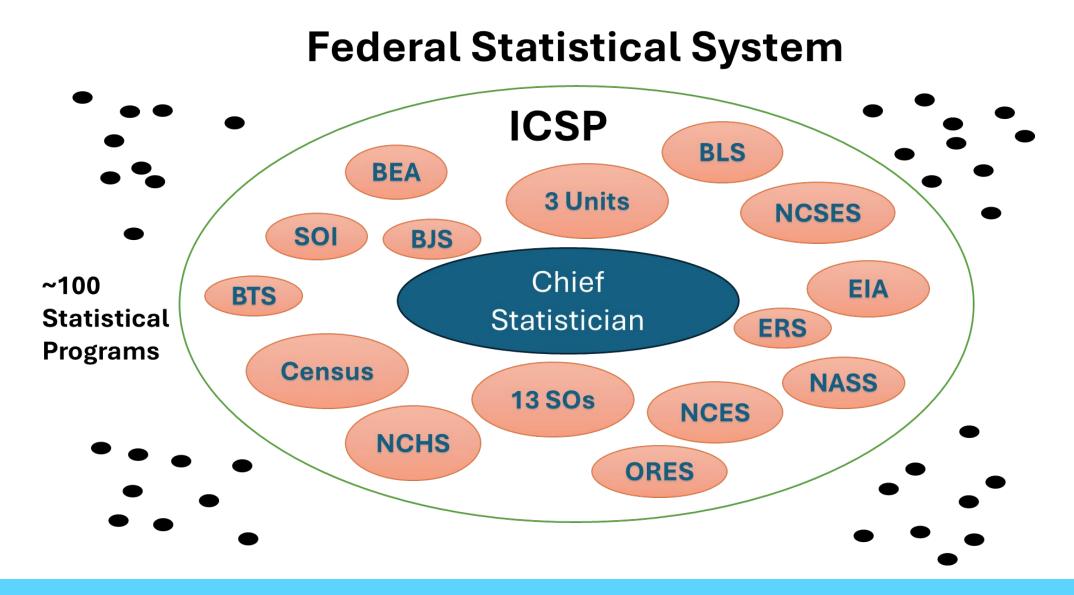
# ... so too do the federal statistical agencies.

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#### **Motivation** We Examine the US Statistical System



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#### Methods Data and Outreach

- Conducted listening sessions with 13 principal agencies, US Chief Statistician
- surveyed the principal statistical agencies
- Collected information from agency websites, OMB, OPM and Data Watch
- held a workshop in November 2023. Participants included 12 agencies, 11 agency heads, Chief Statistician and staff.
- received guidance from a Scientific Advisory Board of federal statistics experts
  - 11 report reviewers

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First two inspired by the Evidence Act

- 1. Does the agency consistently produce relevant, timely, credible, accurate, and objective statistics?
- 2. Is the agency trustworthy and accountable?

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- 3. Does the agency have sufficient support in three key areas:
  - professional autonomy
  - parent-agency support
  - budget and staffing

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#### FIGURE 3. Yeses and Nos of Parent Agency Support

#### Yes:

Parent Agency



- Support to ensure the agency can be agile, trusted, effective, and efficient, and meet the scientific standards for a federal statistical agency
- · Guidance, with Congress, on what topics to be covered

#### No:

 Influence on how the agency produces its information or that otherwise undermines the agency's professional autonomy

A statistical agency must be responsive to its parent agency for its information needs and should constantly work to earn the trust of the parent agency.

#### Federal Statistical Agency

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- 4. What are the challenges and threats the agency faces and their magnitude and potential consequences?
- 5. Is the agency agile? What is its record with innovation and with opportunities to respond to future data needs?
- 6. Is the agency responsive to user needs and transparent about its data products and decisions that affect users?

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### Findings Federal Statistics Are At Risk

 Federal statistical agencies have many strengths—timely production of key economic and social indicators; innovative data to respond to Covid-19

 BUT agencies face increasing challenges to innovate (e.g., granular data on infrastructure & AI impacts on work, education, society)

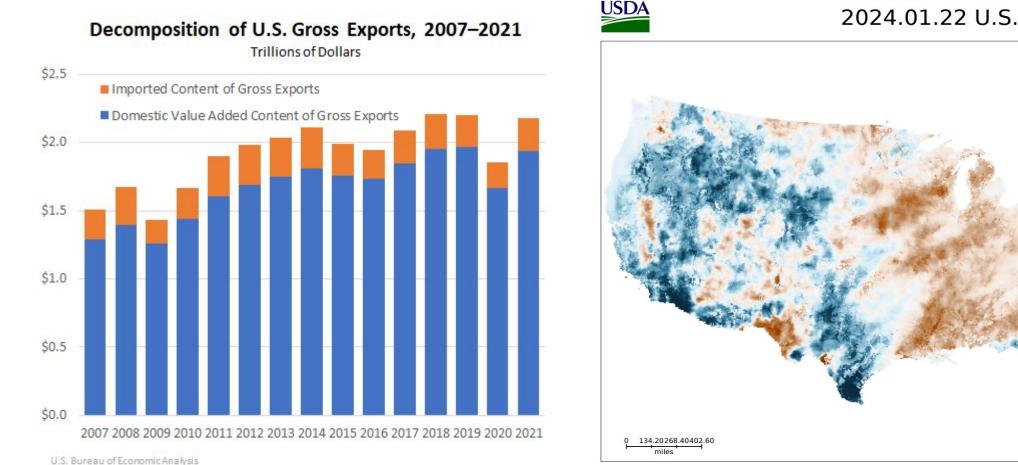
Chief statistician's office in OMB under-resourced for its necessary functions to lead a decentralized statistical system

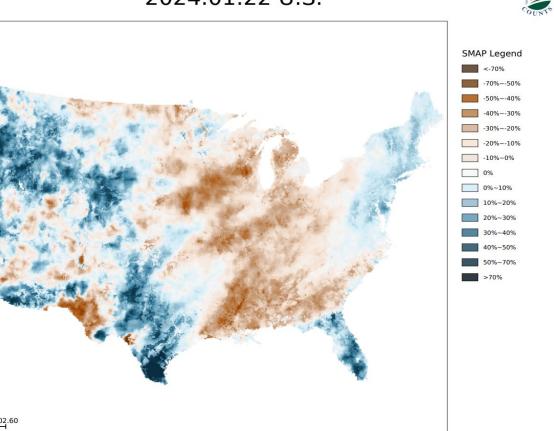
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# Findings Two Examples of Innovation





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## Findings Federal Statistics Are At Risk

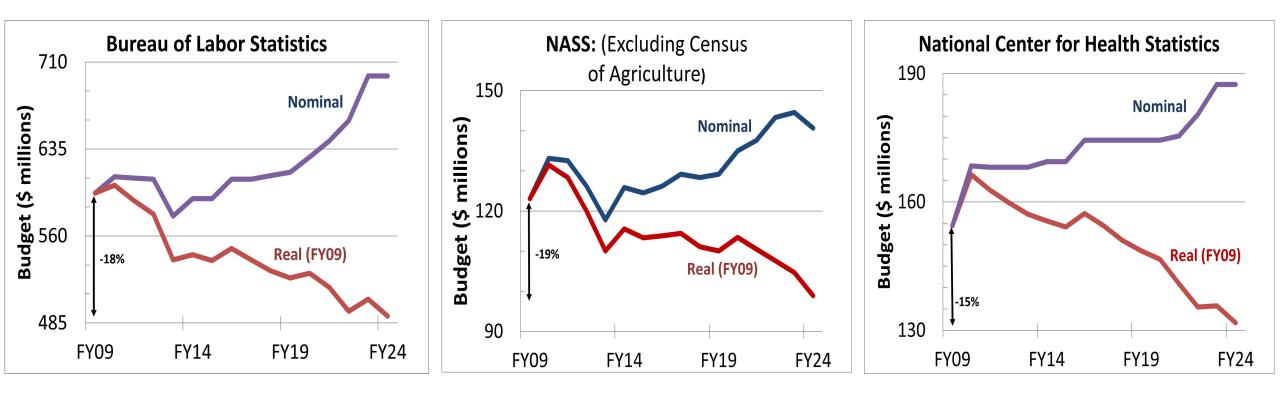
- Most, if not all, statistical agencies have a significant weakness in at least one of three critical supports:
  - Weak legislative protection for "professional autonomy" makes agencies vulnerable to political meddling as has happened in other countries
  - Lack of strong support from cabinet department or independent agency ("parent agency")
  - Insufficient resources (budget and staffing levels often woefully so)

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### Findings Federal Statistics Are At Risk.



NASS: National Agricultural Statistics Service; GDP deflator used to adjust for inflation; total nondefense discretionary domestic budget increased by 16% in real terms over same period

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### Findings Federal Statistics Are At Risk

- Long-running series for key economic and social indicators prone to become outdated in content and methods–e.g., Current Population Survey (CPS) unemployment rate, consumer spending....
  - Agencies lack resources for testing, improvement, concurrent series
- Essential programs cut without full consideration of user needs-e.g.,
  - CPS sample size cut; Commercial Energy Consumption Survey delayed; School Survey on Crime and Safety cancelled; County estimates for crops and livestock cancelled....

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### Findings Federal Statistics Are At Risk

- Environmental headwinds drive up survey costs, degrade quality, and make "blended data" solutions hard to achieve
  - Survey response rates declining here and abroad
  - Costly to strive to maintain response rates
  - Other data sources could help (e.g., administrative data, commercial data), but barriers (legal, regulatory, cost) often stand in the way
- Increasing threats to privacy and confidentiality; agencies pulling more data into limited access research centers, limiting equitable data access

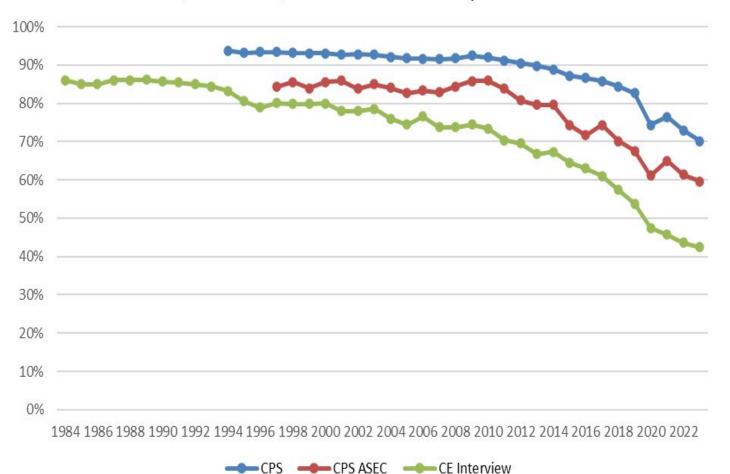
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# Findings Declining Response Rates

CPS, CPS ASEC, & CE Interview - Response Rates



#### Current Population Survey

produces monthly unemployment rate

 CPS Annual Social and Economic Supplement

produces yearly poverty rate, median household income

Consumer Expenditure Survey

produces market basket weights for the CPI

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### Findings Federal Statistics Are At Risk.

- Chief statistician's office lacks sufficient resources to fully carry out its myriad responsibilities—only 12 staff plus detailees
- Office is remarkably productive given small size, but lacks capacity to
  - Conduct meaningful strategic planning
  - Expedite and coordinate needed innovation in cross-cutting topic areas-e.g., education, health, labor force, economic well-being
  - Handle full plate of standards and regulations on a timely basis

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### Findings Federal Statistics Are At Risk.

- Statistical agencies obtain input from advisory committees, user conferences, and other means
- But not investing enough to inform decisions on data programs and innovation priorities by understanding the needs/views of data users, parent agencies, policymakers, and the public (they are data "stewards")
- The Evidence Act requires proactive engagement to obtain broad feedback on the utility of agencies' data

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# Findings Agency Profiles

For each principal statistical agency reviewed, four parts

- Support ratings: weak, challenging, mixed, good, strong
- Key agency information
- Strengths, Weaknesses, Challenges, Opportunities
- Agency-specific recommendations

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# Findings Agency Support Strength Ratings

Agency*	Resources	Staffing applicable only to BJS, NCES & NCSES)	Professional Autonomy	Parent-Agency Suport
BEA	Mixed	_	Challenging	Good
BJS	Weak	Challenging	Mixed	Mixed
BLS	Challenging	—	Mixed	Good
BTS	Challenging	_	Weak	Challenging
Census	Mixed	_	Weak	Good
EIA	Challenging	_	Good	Strong
ERS	Challenging	—	Challenging	Good
NASS	Challenging	—	Challenging	Good
NCES	Challenging	Weak	Weak	Weak
NCHS	Challenging	—	Mixed	Mixed
NCSES	Mixed	Challenging	Mixed	Mixed

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#### **Recommendations** 15 Actions to Strengthen Federal Statistics

Directed at Congress, parent agencies, statistical agencies, and OMB to:

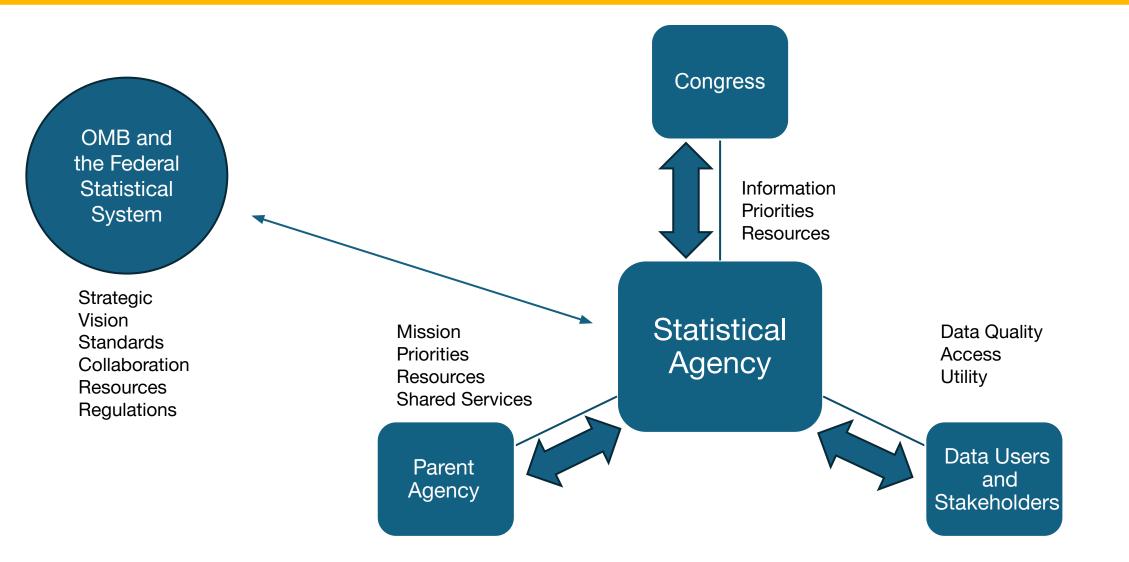
- 1. Protect and enhance professional autonomy;
- 2. Provide adequate budget and staffing support for baseline work and innovation;
- 3. Conduct more effective communications between statistical agencies and Congress/parent agencies;
- 4. Develop proactive outreach to data users; and
- 5. Strengthen the Chief Statistician's ability to lead.

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#### **Recommendations** Communications



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#### **Recommendations** Congress

#### Enact legislation to:

1. Accord professional autonomy to each agency 3. Provide adequate multi-year funding

2. Expand data sharing authority beyond Evidence Act 4. Extend privacy and confidentiality violation penalties to the public

5. Congress should meet at least annually with agency leadership

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#### **Recommendations** Parent Agencies

6. Proactively promote and support professional autonomy to each agency

8. Request and provide adequate multi-year funding and resources

7. Provide shared services expeditiously to support IT and hiring 9. Hold regular meetings with statistical agency leadership

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#### **Recommendations** Statistical Agencies

10. Interact proactively with parent agency and Congress to prioritize information needs

11. Reach out more productively to data users and other stakeholders to incorporate valuable feedback on information needs and quality 12. Provide more and better information on methods and methodological decisions to users and stakeholders, particularly on controversial decisions

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#### **Recommendations** Office of Management and Budget

13. Finalize the "Trust Regulation" and other regulations as required by the Evidence Act (OMB leadership)

14. Develop a strategic plan and vision for the Federal Statistical System and implement it (Chief Statistician and ICSP)

15. Provide the Chief Statistician's office sufficient resources to provide substantive leadership and carry out statutory duties (OMB Leadership)

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#### Future Work Plans and Considerations

- Conduct deeper dive into the 13 federal statistical agencies and the chief statistician's office
- Expand effort to other 16 members of ICSP
- Consider efficiency of the federal statistical system as a whole
- Examine the role of state, local, and tribal governments
- Add the perspective of parent agencies and data users
- Conduct international comparisons

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### Future Work Call for Input

What did we miss, get wrong, or correctly assess?

What should we prioritize for year 2?

How do we further the report's impact?



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We thank the twelve members of our Scientific Advisory Board

Katherine Smith Evans (Chair) • William Beach • Tyra Dent • Haishan Fu • Arnold Jackson • Margaret Levenstein • Thomas Louis • Mark Mazur • Ted McCann • Jeri Mulrow • Charles Rothwell • Katherine Wallman.

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#### Questions

Please insert your questions using the Zoom Q&A feature.

Contact: spierson@amstat.org

Feedback: bit.ly/NationsDataAtRiskFeedback

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