

Governance, Accountability, and Transparency Focus Area

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National Secure Data Service

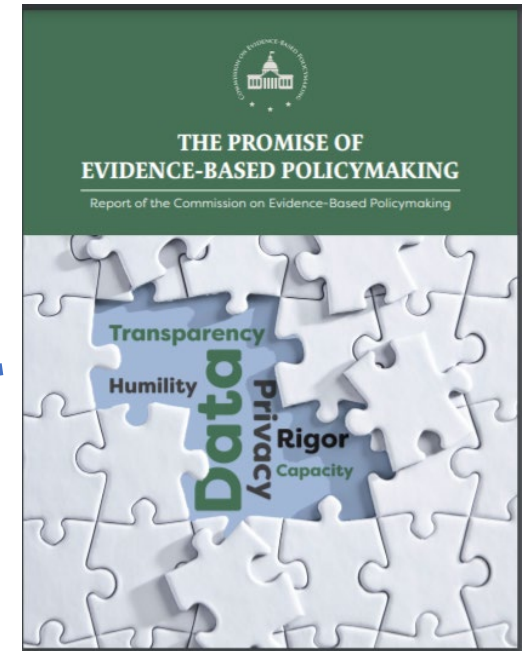
National Secure Data Service Recommendations from the Evidence Commission

The Evidence Commission provided 22 recommendations, 10 of which referenced the National Secure Data Service, including:

- Rec. 2-1:** Goal to facilitate data access (and linkage) for evidence building, or “statistical activities,” while also encouraging applications of privacy-preserving technologies.
- Rec. 2-2:** Envisioned as a shared service not a data warehouse, for temporary data linkage.
- Rec. 2-3:** Enable the Data Service to operate within the authorities of the Confidential Information Protection and Statistical Efficiency Act (CIPSEA), with modifications to the Privacy Act.
- Rec. 3-2:** Coordinate with federal departments on applications of privacy-preserving technologies.
- Rec. 4-1:** Established in the Department of Commerce as an entity unique from the Census Bureau.
- Rec. 4-2:** Operate with support of a steering committee.
- Rec. 4-3:** Operate with “unparalleled” transparency, including to disclose projects and audits of established rules and procedures.
- Rec. 4-4:** Operate with administrative flexibility, including for public-private partnerships and supported by user fees.
- Rec. 4-5:** With temporary linkage and a minimal core of data, rely on agency data inventories to identify relevant data assets including for data sensitivity.
- Rec. 5-5:** Authorized with sufficient resources to support, beyond user fees exclusively.

Establishment of a public-private partnership through an FFRDC creates a quasi-governmental entity responsive to intergovernmental needs as well as academic and industry users.

Non-profits with state-of-the-art capacity for providing the functions of a secure data service, or the capability to rapidly develop them, could operate the FFRDC.



MODERNIZING U.S. DATA INFRASTRUCTURE:

Design Considerations for Implementing a National Secure Data Service to Improve Statistics and Evidence Building

DATA

Attributes of NSDS (from CEP and Hart/Potok)

1. Transparency and trust,
2. Legal authority to protect privacy and confidentiality,
3. Independence,
4. Legal authority to collect data from agencies,
5. Scalable functionality,
6. Sustainability,
7. Oversight and accountability,
8. Intergovernmental support

Four possible entity structures

1. Establishing a new statistical agency within government, specifically the Commerce Department,
2. Re-tasking an existing government operation within the Commerce Department,
3. Establishing a new public-private partnership within the National Science Foundation (NSF),
4. And developing a new university-based consortium.

DATA SERVICE ORGANIZATIONAL OPTIONS AND SATISFACTION OF KEY ATTRIBUTES

OPTIONS → ATTRIBUTES ↴	OPTION 1: NEW AGENCY AT COMMERCE	OPTION 2: RE-TASK AGENCY AT COMMERCE	OPTION 3: FFRDC AT NSF	OPTION 4: PUBLIC-PRIVATE PARTNERSHIP
TRANSPARENCY AND PUBLIC TRUST	Create new mechanisms, co-opt existing approaches from Census and BEA, and be covered by SPD1.	Create new mechanisms, reallocate from existing mechanisms, co-opt existing approaches from Census and BEA, and be covered by SPD1.	Create new mechanisms guided by the National Center for Science and Engineering Statistics (NCSES) and federal statistical principles and practices and be covered by SPD1 through NCSES.	Create new mechanisms, borrow from existing academic experience, and mimic principles in SPD1.
LEGAL AUTHORITY FOR PRIVACY PROTECTIONS	CIPSEA-eligible Privacy Act Ad hoc use limitations	CIPSEA-eligible Privacy Act Ad hoc use limitations	CIPSEA-eligible Privacy Act Ad hoc use limitations	Ad hoc arrangements in data sharing agreements
INDEPENDENCE	Subject to some Commerce Secretarial discretion and independent body oversight. May be at risk of political interference and prioritizing Commerce activities instead of interagency priorities.	Subject to some Commerce Secretarial discretion and independent body oversight. May be at risk of political interference and prioritizing Commerce activities instead of interagency priorities.	Quasi-independent, subject to some NSF Director discretion and independent oversight body. Less likelihood of being prioritized for NSF activities.	Quasi-independent with independent or third party oversight body.
ABILITY TO ACCESS AND ACQUIRE DATA	Yes, within CIPSEA framework	Yes, within CIPSEA framework	Yes, within CIPSEA framework	Limited
SCALABLE AND TIMELY	Yes, but would navigate existing business processes at Commerce. Likely slow development.	Yes, but would navigate existing business processes at Commerce and retool existing infrastructure. Likely slow development.	Yes, working with flexible NSF business processes. Allows for rapid development, particularly for acquiring capacity and skilled workforce.	Yes, with flexible and rapid development and hiring processes.

Proposed outline for report

- Review options and include hybrid FFRDC supporting programmatic and statistical agencies
- Identify governance options for each and evaluate against the eight criteria
- Compare for use cases (individual level records; state and federal)
 - Education and workforce data – completion rates; credentialling
 - Health data – mortality



Governance features to be considered

- Mission statement (twin imperatives of Value, Privacy)
- Principles – Ethics, Transparency, Accountability, Scientific Integrity (Independence; Privacy)
- Sponsoring organization (mission alignment and CIPSEA protections)
- Funding source (Line, Task based, Membership)
- Board structure and composition (Directors and Advisory)
- Reporting requirements
- Performance measures

Investigate possibility of interim followed by permanent

Dimensions of assessment

1. Framework

- Legal (federal, state, municipal)
- Institutional roles (owners, users)
- Controls (privacy, security, transparency, tiered-access)
- Scaling and Growth (vertical/horizontal)

2. Operations

- Quality (e.g., accuracy, timeliness, missingness, and breadth)
- Cost (start-up, routine, scaling)
- Data Governance/Management (Interoperability, Data Inventories, Documentation, Consistency, Timeliness, Accuracy)
- Transparency

3. Implementation

- Defining success (use, value, small 'n'/equity issues)
- Incentive structure to promote innovation
- Lessons learned; what did and did NOT work (Privacy implementation; data security; data usage; data sharing; data access)

Resources upon which to draw

General

- Scientific Integrity Taskforce
- NAIRRTF (national AI research resource taskforce)
- Equitable Data Working Group

FFRDC

- MITRE. FFRDCs - A Primer: Federally Funded Research and Development Centers in the 21st Century. McLean, VA: The MITRE Corporation (2015). <https://www.mitre.org/sites/default/files/publications/ffrdc-primer-april-2015.pdf>, accessed July 16, 2019.
- Office of Management and Budget, Office of Federal Procurement Policy (OFPP). Policy Letter 11–01, Performance of Inherently Governmental and Critical Functions. 76 F.R. 56227, September 12, 2011 (corrections to final policy letter at 77 F.R. 7609).
- National Science Foundation National Center for Science and Engineering Statistics, Master Government List of Federally Funded R&D Centers (2019).
- Federal Acquisition Regulation, 48 CFR § 35.017-2, Establishing or changing an FFRDC.
- Amitai Y. Bin-Nun, Gabriel Chan, Laura Diaz Anadon, Venkatesh Narayanamurti, Sarah Jane Maxted. The Department of Energy National Laboratories: Organizational design and management strategies to improve federal energy innovation and technology transfer to the private sector. Cambridge MA: Harvard Belfer Center, p 26 (2017).
- Gallo, Marcy E. Federally Funded Research and Development Centers (FFRDCs): Background and Issues for Congress. Congressional Research Service Report R44629 (2016).
- Professional Services Council, PSC: Strategic Reassessment of FFRDCs Needed, June 5, 2012 (<https://bit.ly/2JB5DCT>); PSC Questions Scope of DHS FFRDC, November 30, 2015; (<https://bit.ly/2LpQMxa>); accessed July 17, 2019.

Data trusts

- <https://www.qlarion.com/insights/what-is-a-data-trust/>
- <https://theodi.org/article/what-is-a-data-trust/>
- <https://gpai.ai/projects/data-governance/data-trusts/>
- https://en.wikipedia.org/wiki/Public%E2%80%93private_partnership