

Meeting 7 Notes and Actions April 23, 2021

Next Meeting: May 21, 2021 (9 AM - Noon (EDT))

Meeting Agenda:

- 1. Data Challenges in the Physical Sciences Otis Brown, Heather Strosnider, Adam Smith, Ed Kearns
- 2. Using the Hart-Potok Report Framework as an Organizing Principle Nick Hart
- 3. Public Comment Analysis Avi Alpert

I. Data Challenges in the Physical Sciences – Otis Brown (North Carolina State University), Heather Strosnider (National Center for Environmental Health), Adam Smith (NOAA NCEI Center for Weather and Climate), Ed Kearns (First Street Foundation)

The introductory presentation by Otis Brown described the impact of the OPEN Government Data Act, Title II of the Evidence Act, and its primary goal of making data open by default. He presented historical impediments to sharing scientific data including infrastructure, access costs, and confusion as to what data is shareable and what is not. Finally, he introduced the three perspectives that were subsequently shared by presenters, two from the Federal government and one from outside government.

The second presentation by Heather Strosnider provided an overview of the CDC's environmental public health tracking program and how it is used to increase data-driven decisions. Through multiple localized examples of how CDC data is being used to improve decisions and health outcomes she highlighted 3 key elements in identifying opportunities:

- 1. Do we have **evidence** of the impact?
- 2. Do we have **data** that can inform decisions?
- 3. Do we have the *capacity* to bring that data to those who can act on it? She stressed that the capability required to bring this together is a combination of the technological infrastructure and the people operating it.

The third presentation by Adam Smith focused on NOAA's approach to using Federal data to help cost the impact of extreme weather and climate events. This approach requires integrating a broad array of data from Federal, State, and private sources to capture the direct costs associated with events. He described the key challenges NOAA faced in this effort including the lack of homogeneity in data standards which may be something a National Secure Data Service (NSDS) could help address.

The final presentation by Ed Kearns discussed a private non-profit enterprise's effort to use U.S. government open data to communicate the personalized risk of climate change to individuals. He described how to integrate a variety of weather, topographical, property and economic data from sources such as NOAA, USGS, USACE, FEMA and NASA to model the anticipated financial impact of flooding driven by climate change at the individual property level. He compiled the



modeled data into a visually accessible and easily consumable webpage. He noted that First Street Foundation is exploring the possibility of financing the democratization of data by leveraging the financial value the data has to commercial users. Among the challenges he described facing were finding a secure mechanism for accessing and sharing property-level data.

(See presentation at bea.gov/evidence under Meetings tab.)

Committee Feedback/Discussions:

→ Challenging Individual Computing Power:

- In many Agencies, it is a challenge for individuals to have access to the computing power for analysis
- Much time and thought is given to how agencies will scale up their analysis because they are not provided with the tools they need
- The evolution towards Enterprise IT within Federal Agencies runs counter to the individual autonomy and ownership often given to data analysts in the private sector

→ Data Visualization Tools:

- Visualization of data is important to convey complicated information, empower individuals, and make the impact of data tangible to individuals in a way that macro-analysis cannot
- The Committee should determine what role NSDS may play in providing appropriate tools to generate visual outputs with the raw data it will make available

II. Using the Hart-Potok Report Framework as an Organizing Principle – Nick Hart (The Data Foundation)

The presentation by Nick Hart provided design considerations for implementing a NSDS. He discussed the progress made since the Commission with the Evidence Act and the work still to be done including OMB guidance and regulations that the Committee is now in a position to provide recommendations on. He also noted that the Committee, by making a statement now on the macro concepts and specific areas they already agree on, can frame the value proposition for OMB in 2021 and moving forward aligned with Administration priorities, such as framing the Data Service around issues of equity and the related data challenges NSDS could help solve.

He discussed his analysis of four options for where to stand up an NSDS against eight key attributes including transparency, legal authorities, independence, and scalability. He then laid out why he believes standing the NSDS up as a Federally Funded Research and Development Center (FFRDC) at the National Science Foundation (NSF) was the best option and how it can be established. He concluded by providing four questions the Committee should consider as it develops its recommendations for an NSDS:



- 1. Value proposition of the NSDS
- 2. Organizing within the existing ecosystem
- 3. Sustainable resources and financing
- 4. Oversight and measurement needed to ensure accountability

(See presentation at <u>bea.gov/evidence</u> under Meetings tab.)

Committee Feedback/Discussions:

→ Pilots as Proof of Concept:

- The NSDS structure needs to be able to work across Federal agencies and State and local governments quickly and agilely; a FFRDC could do that
- A structure that can act quickly with existing authorities can rapidly establish pilot programs that demonstrate the value proposition
- o In the right structure this could happen in months rather than years

→ Governance and Intergovernmental Cooperation:

- The NSDS cannot be a monopoly, it needs to operate in some form of coordinated federation
- Intergovernmental cooperation must go beyond Federal agencies to include
 State and local government
- The Committee should recommend a governance structure that balances flexibility, action, and oversight

→ Cost Considerations:

- Need to be conscious of stacking costs for data users when combining data sets within the NSDS
- The Committee should consider ways to fund the NSDS beyond appropriations (e.g., user fees, reimbursable structures, commercial licensing fees) while balancing broad access regardless of financial ability to contribute

III. Public Comment Analysis – Avi Alpert (ACDEB Rapporteur)

The Rapporteur, Avi Alpert, provided a summary analysis of the public comments received in response to the Federal Register Notice. He noted that the 35 respondents representing a broad array of entities provided 141 comments addressing all 10 questions asked. The respondents expressed widespread support for the Commission's recommendations, including affirming the NSDS concept while offering suggestions for its structure and functions.

He pointed out how the public comments received by the Committee build upon the robust public input the Commission solicited through various channels. Finally, He laid out several options for deeper analysis of the responses in support of the Committee and subcommittees as they build towards findings and recommendations.

(See presentation at bea.gov/evidence under Meetings tab.)



Committee Feedback/Discussions:

→ Continuing Public Engagement:

- Since the Federal Register Notice asked broad questions, the Committee did not expect to receive much detailed reaction.
- As the Committee begins developing more specific language and recommendations it should consider opportunities to solicit more specific public feedback

V. Conclusion

The Committee closed with a discussion on how to transition from information gathering to generating recommendations. The Committee discussed options for putting out initial shared findings while simultaneously working in subcommittees to develop deeper ideas around the NSDS and other legislative and regulatory areas. The idea was put out to first establish the value proposition for the NSDS before determining what subcommittees to establish and that was balanced against the idea of starting with those the Committee knows will be needed.

May

TBD