

Other Services and Capacity-Building Opportunities

Focus Area

Co-Chairs, Kim Murnieks and Matt Soldner, ACDEB Members

July 2022

Members: Richard Allen, Len Burman, Shawn Davis, Barry Johnson, and David Park

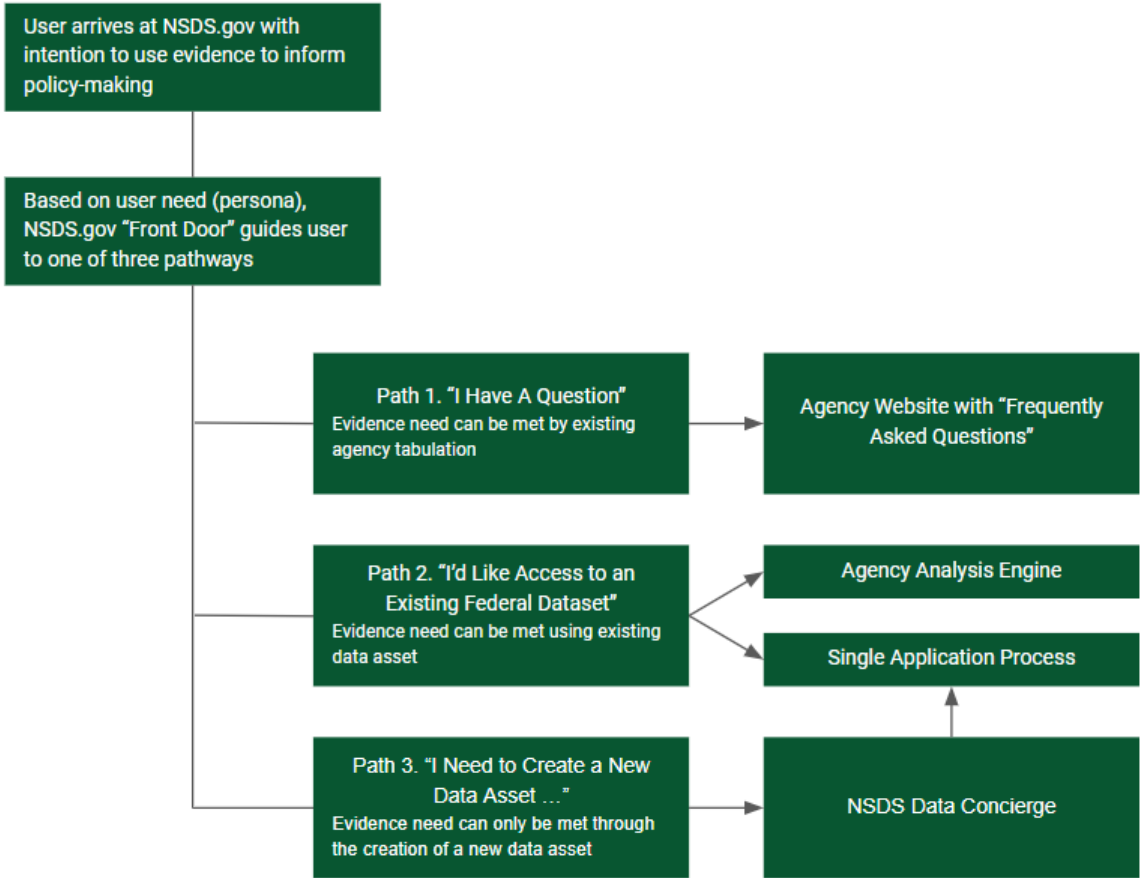
Findings

Focus Area Discussion: Technical Assistance Strand

- In our prior ACDEB meeting, we presented our *Communications* recommendations to the full committee. Today, we're focusing on *Technical Assistance*; that is, what services does the NSDS need to provide to data providers and data users to better ensure that this resource is both useful and used.
- The subcommittee spoke with representatives from a variety of entities that provide similar services to their constituents. This included representatives from:
 - The Federal Statistical Research Data Centers
 - The Inter-university Consortium for Political and Social Research
 - Federal agencies that offer data curation, analysis, and related services to federal employees

Draft Recommendation 1

The NSDS website should serve as a “Front Door” to the nation’s data assets, organized around a set of personas that reflect specific user needs.



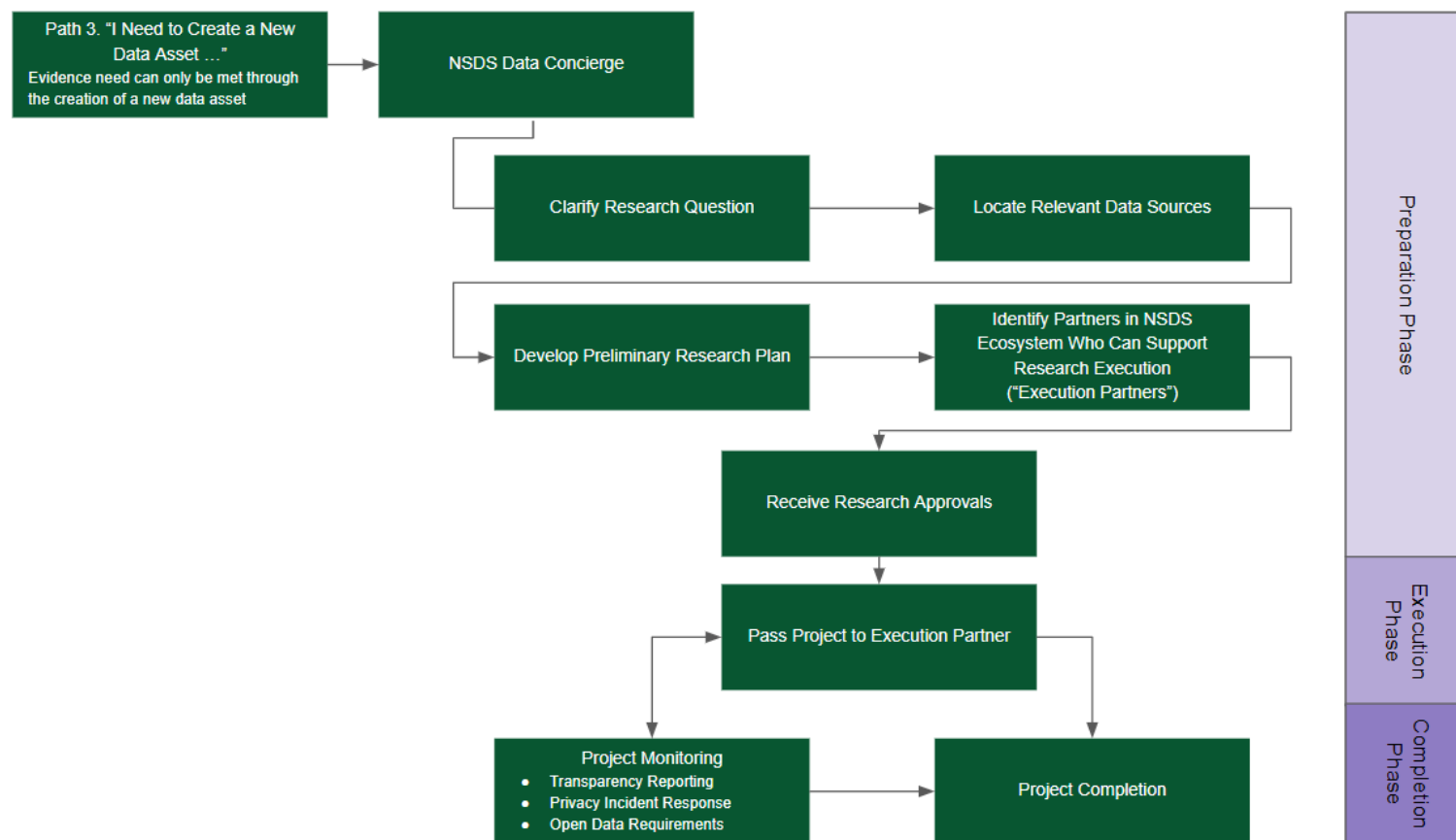
Draft Recommendation 2

The NSDS should identify opportunities for automation in its “intake process,” providing a high-quality user experience while focusing staff effort on more complex user needs.

- If our communications efforts are effective, we will generate significant traffic to *nsds.gov* – perhaps more than can be accommodated by its inaugural staff.
- To effectively triage incoming requests, we recommend that the NSDS take full advantage of what other federal agencies have learned about self-service and virtual assistant technologies, such as the Department of Education’s *Aidan* system, *studentaid.gov*’s chatbot.

Draft Recommendation 3 (Slide 1 of 3)

The NSDS should employ Data Concierges to help NSDS users (including those who are seeking access to data assets via the SAP) refine their research projects, locate relevant data, and acquire access to that data.



Draft Recommendation 3 (Slide 2 of 3)

The NSDS should employ Data Concierges to help NSDS users (including those who are seeking access to data assets via the SAP) refine their research projects, locate relevant data, and acquire access to that data.

What are the potential functions of an Execution Partner?

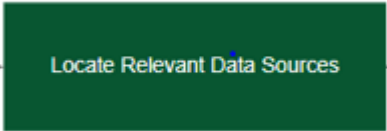
- Providing compute and network environments, including associated cyber- and physical security responsibilities;
- Data cleaning services, metadata services (including metadata standardization efforts);
- Data linkage services;
- Analysis and reporting services; and
- Disclosure avoidance and review services.

Pass Project to Execution Partner



Draft Recommendation 3 (Slide 3 of 3)

The NSDS should employ Data Concierges to help NSDS users (including those who are seeking access to data assets via the SAP) refine their research projects, locate relevant data, and acquire access to that data.



What do we mean by “locate?” Should Concierges:

- Curate a catalog of assets and assist users in navigating the catalog?
- Help users track down assets that *aren’t* in the catalog but could meet their needs?



How much “monitoring” should a Concierge do once a project is passed off to an Execution Partner?”

For example, if the partner is an FSRDC and there is a privacy breach, would we expect that the FSRDC alert the NSDS?



Draft Recommendation 4

The NSDS should employ Technical Assistance Leads who develop educational resources for data stewards and data users related to the methods and technologies used in the NSDS ecosystem.

- Our fact finding suggested we should anticipate a wide range of user capacity to navigate a service like the NSDS and, therefore, any number of topics on which education will be needed to maximize the value of the service. These might include:
 - Basic NSDS operational protocols (e.g., how to write and submit a research proposal);
 - Data (and metadata) quality, management, and cleaning;
 - Data linking methodologies;
 - Privacy-preserving analysis techniques;
 - Legal issues associated with data sharing and linkage; and
 - Disclosure avoidance.

Draft Recommendation 5

The NSDS should actively encourage the development of communities that are incentivized to provide “crowdsourced” support to the Service’s users, complementing the work of Data Concierges.

- Based upon its fact finding, the subcommittee recommends that the NSDS support the growth of user communities related to the Service’s operations. These communities might arise around shared disciplinary interests (e.g., postsecondary education and training), common methods (e.g., spatial analysis), or other technical interests (e.g., multiparty computing).
- Communities might take the form of relatively traditional structures with familiar incentives for participation, such as role-alike communities of practice, or less traditional forms, such as code competitions (e.g., the Coleridge Initiative’s *Show US the Data* competition).
- Communities might support:
 - Shared (psuedo)code for common data management, analysis, visualization, and reporting that complements materials created by NSDS staff;
 - A repository of working papers that illustrate the use and value of NSDS-based analyses; and
 - Discussion forums that create a space for members to offer help and assistance to others in the user community.

Draft Recommendation 6

Technical assistance services, including those provided by Data Concierges and Technical Assistance Leads, should be informed and improved by a systematic process of stakeholder engagement.

- For an NSDS to be useful and used, the Service must develop one or more mechanisms for routinely and systematically gathering information from key stakeholders for the purpose of improving its operations.
- Audiences might include, but would not be limited to, federal, state, and local data stewards and users; researchers and research organizations; policymakers; and advocacy organizations.
- Potential topics for engagement include:
 - Emergent needs of data stewards, including ways in which the Service could increase the value of the NSDS to federal, state, and local government;
 - The needs of data users, including ways in which the user experience might be optimized; and
 - Surfacing emergent data sources, analytic methods, and computational technologies relevant to the NSDS.

Full Committee Discussion

Discussion Questions

- Any friendly (or not so friendly) amendments or additions?
 - Things that might be missing?
 - Things that might be worrisome?
 - Things your subcommittee may have worked on that seems relevant here?