

National Data Service

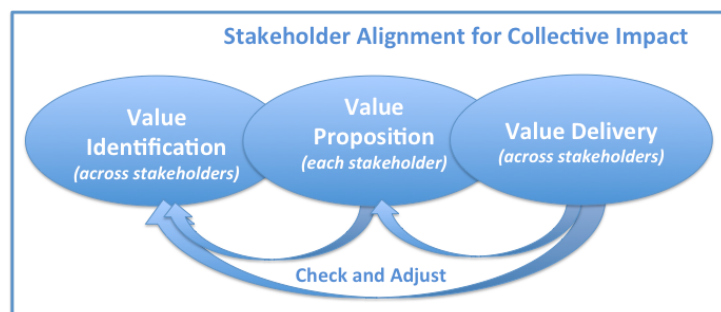
Core Stakeholders and Value Propositions

Overarching Vision

- A successful National Data Service will advance the frontiers of discovery and innovation by enabling open sharing of data and increasing collaboration within and across fields, disciplines, and institutions. Success will be achieved through coordinated and concentrated efforts, developing an open environment of *federated, interoperable, and integrated* national-scale services. Researchers, scholars, policy makers, teams, and large collaborations will provide guidance to NDS through the NDS Consortium in order to help efficiently, conveniently, securely, and sustainably store, curate, share, publish, access, discover, verify, attribute, visualize, and operate on all forms of scholarly, research and policy data.

Core Stakeholders

- Researchers/end users
- Builders
- Operators
- Funders
- Science/data initiatives
- Professional societies/publishers/communities



Shared Value Proposition

- Accelerating progress on scientific and societal challenges enabled by data services.

Researcher/End User Value Propositions

- Delivering services to end users is the intent and focus for NDS. This includes seamless, integrated, unobtrusive, low cost services that better enable research and scholarship.
- Services begin with connecting users to basic data storage, sharing, and discovery needs in each research community and extend to enabling credit for the reuse of data, tools, and models, and supporting the generation of indexes, catalogues, and other aspects of data infrastructure.

Builder Value Propositions

- Builders are drawn to NDS by the opportunity to collaborate with the best in the business on some of the most challenging problems in the profession, developing software and middleware that enters broad use with real impacts.
- The aim is to achieve network effects through interoperable and extensible software (n services generating n -squared capabilities), with clarity around commercialization and open source matters.

Operator Value Propositions

- Serving the academic, policy and commercial research communities with new and exciting capabilities that align and extend operators' missions, while enabling national capacity planning for data infrastructure.
- Developing and utilizing common pool resources that no one operator can host on their own, such as shared back-ups or educational resources, and matching end users to operators' distinctive areas of expertise.

Funders Value Propositions

- Achieving increased returns on investments through the coalition of builders and operators spanning fields and disciplines, attaining better science at fixed or lower costs as a result of infrastructure investments.
- Enabling compliance with open data mandates (by government agencies) and strategic objectives (by private funders), with demonstrated system-level impacts.

Science/Social Science/Humanities Data Initiatives Value Propositions

- Coordinated impacts and interoperability across initiatives, accelerating scientific progress.
- Balancing standardization and innovation (and avoiding duplication) within and across working groups, initiatives, and nations.

Professional Societies/Publishers/Communities Value Propositions

- Delivering value-added services to members/customers, mitigating risks to business models for scholarly publications, and increasing know-how for data management in science, social science, and humanities.
- Providing forums for harmonizing policies and practices around open and shared data used for research, policy, and innovation.

Stakeholder Survey Results on NDS Priorities

Note: Items ranked as high priority from stakeholders. Items ranked as a low priority may either reflect lower priority or incomplete awareness and understanding.

NDS Priorities March 2015 (n=70)	NDS Priorities June 2014 (n=42)
#1 (2.67 +/-1.5) Access/use —data, models, & software tools	1. Access/use (290 points)
#2 (2.80 +/- 1.9) Discovery —data, models, & software tools	2. Discovery (258 points)
#3 (4.02 +/-2.1) Trust/provenance/quality (history, intended use, limits)—data, models, & software tools	3. Storage (204 points)
#4 (4.82 +/-2.7) Storage —data, models, & software tools	4. Trust/provenance/quality (203 points)
#5 (5.31 +/-2.4) Metadata correspondence — enabling the combined use or brokering of different data, models, & software tools	5. Metadata correspondence (196 points)
#6 (5.59 +/-2.2) Sharing/presenting —data, models, & software tools in persistent, citable formats	6. Workflow integration (185 points)
#7 (5.66 +/-2.1) Workflow integration — time/resources/ease in preparation/curation for reuse	7. Publishing/presenting (160 points)
#8 (6.29 +/-2.5) Credit for reuse — credit for reuse by others of data, models, & software tools	8. Credit/feedback (143 points)
#9 (6.50 +/-2.5) Teaching/mentoring — use of data, models, & software tools by students and colleagues	9. Teaching/mentoring (137 points)