

Comprehensive Research Data Strategy Task Force

Sponsored by the Executive Vice Chancellor, the Vice Chancellor for Research and Economic Development, and the Dean of Libraries, the University of Nebraska-Lincoln convenes a task force to research, plan, and author a comprehensive research data strategy for UNL. The comprehensive research data strategy will be a holistic, university-wide approach to anticipating, managing, and supporting the increasingly complex set of challenges that contemporary researchers face as they create, use, and maintain research data. The purpose of the comprehensive strategy is to enable and sustain groundbreaking research, scholarship, and creative activity; maintain and grow institutional competitiveness; mitigate a variety of risks; and avoid redundancy of resources and effort, while anticipating critical gaps and identifying strategic directions for resources and investment.

Guiding principles

The task force is convened under the following guiding principles, which the task force may further expand through their work. The task force:

- Operates with transparency and generosity.
- Is attentive and responsive to the needs of all disciplines, inclusive of big and small data, and considers a range of solutions.
- Prioritizes researcher buy-in throughout discovery, planning, and implementation phases.
- Seeks to advance the critical and timely goals of expanding transparency and reproducibility of scientific results; increasing scientific rigor and public trust; accelerating the pace of discovery; promoting research impact; and making effective use of public funds.
- Adopts an agile approach and methodology, including iterative development, reflection, and application of lessons learned.
- Makes space for and considers solutions beyond only UNL, including scaled, multiinstitution and consortial solutions; corporate partnerships and service providers; and large competitive opportunities.
- Promotes a can-do approach to building out what is required.

In addition, research data services resulting from the comprehensive strategy must be commonly offered to all researchers, advertised and findable, transparent, synergistic, coordinated across service providing units, and non-duplicative/non-competing.

Scope In Scope

- The full research data lifecycle, from project planning/pre-award to data archiving and preservation after active and/or sponsored project phases.
- The technology infrastructures and the expertise (professional, human infrastructures) needed to partner to advance research, and strategies for sustaining and growing both.

 Data acquisition, storage, management, curation, processing, and transmission and sharing (including internally and externally) are all in scope and need to be addressed. Within each of these areas—and any others identified by the team consider security, confidentiality and privacy, compliance, legal and ethical issues and considerations, and intellectual property and ownership, including as informed by NU system policies on research data and security, and risk classification and minimum data security standards.

Out of scope

- Implementation. The task force is not by itself an implementing group, though there may be overlap in members of the task force and individuals in implementing groups and in service units.
- Institutional data and learning data efforts on the campus.
- System-wide strategy. The task force may be informing to the NU system, and some members will have system-wide responsibilities (e.g., ITS, HCC), but the task force is not a system-wide strategy. The focus and responsibility is on UNL operations, researchers, infrastructures, etc.

Responsibilities and Outputs/Outcomes

The Task Force is charged with the following responsibilities and tasks:

- Conduct background research to provide situational context for the authored strategy. The following are expected sources of information, and the task force may identify others:
 - Faculty/researcher perspectives of needs and requirements. The Summer 2020 listening sessions provide a rich survey of these needs and requirements.
 - Administrative/service unit documentation of needs and requirements, including the recently issued NU system policies on research data and security, and risk classification and minimum data security standards.
 - Large research funder requirements for data management, compliance, security, sharing, and public access.
 - Publisher requirements for research data.
 - Professional best practices. Look to professional organizations and networks, as well as other institutions, to identify best practices for research data strategy.
 - Given rapidity of changes and developments in many of these areas and sources of information, strategies for staying updated will be crucial.
- Develop an overall schematic of key areas of research data strategy to incorporate into the authored document.
- For each key area, author needed outcomes and requirements and suggested plans
 to get there. Demonstrate integration of areas with one another and how they work
 synergistically. See scoped areas above. Ensure planning includes strategies for
 making campus researchers aware of service offerings in a clear and accessible
 manner.
- Clearly author/depict coordination across service units (existing and proposed) in plans to meet needed outcomes.

- Advise on operationalization as various of the areas are defined and stood up.
- Assess researcher buy-in through faculty/researcher representation on the task force and committees, and possibly through focus groups or other opportunities for assessment. Adjust accordingly, to ensure buy-in as the strategy is implemented.

Membership and Roles

In addition to task force sponsors and co-chairs, membership includes leadership and/or designated team members from campus service units with key responsibilities for aspects of research data. These units include Holland Computing Center, Information Technology Services, the Office of Research and Economic Development, and University Libraries. Membership also includes broad faculty representation to integrate the perspectives of those with disciplinary expertise in this area, and to ensure the strategy meets the needs and that buy-in is achieved among those engaged in research, scholarship, and creativity activity across the campus. Committees or working groups involving additional members may be formed for more time-limited periods in the strategy development in order to focus on specific areas of the scope.

Timeline

The task force is expected to commence in October 2022 and complete its work by December 2023. As a general principle, the task force will complete major deliverables at least quarterly that can be communicated to project sponsors at these intervals. Following initial activities that foster task force orientation to an overarching frame for the work, the task force is encouraged to move quickly to take up *research data storage* as a first area of focus. Beginning with this specific element will allow for working across the research data lifecycle, engaging partners across campus, considering the range of legal, policy, ethical, and other issues, and also for experimenting with the combination of task force, committee, and other structures that will be necessary in the development of the full comprehensive research data strategy.