Data Management Plans for NEH Office of Digital Humanities Proposals and Awards¹

Executive Summary

The data management plan (DMP) should be short (no more than two pages) and should be submitted as a document supplementing a grant application. The plan will need to address two main topics:

What data will your research generate? What is your plan for managing the data?

"Data" is defined as materials generated or collected during the course of conducting research. Examples of humanities data could include citations, software code, algorithms, digital tools, documentation, databases, geospatial coordinates (for example, from archaeological digs), reports, and articles. Excluded, however, are things such as preliminary analyses, drafts of papers, plans for future research, peer-review assessments, communications with colleagues, materials that must remain confidential until they are published, and information whose release would result in an invasion of personal privacy (for example, information that could be used to identify a particular person who was one of the subjects of a research study).

Many variables govern what constitutes "data" and the management of data, and each discipline has its own culture regarding data. For example, the data produced by an archeologist might be quite different from the data produced by a historian. The data management plan will be evaluated as part of each proposal. Proposals must include sufficient information to enable peer reviewers to assess an applicant's data management plan. The plan should reflect best practices in the applicant's area of research, and it should be appropriate to the data that the project will generate.

The plan should describe how the project team will manage and disseminate data generated by the project. As noted earlier, NEH peer reviewers will consider the DMP when they evaluate proposals. If the project is awarded a grant, NEH will also require the grantee to discuss compliance with the DMP in post-award reports.

Applicants should consult sample plans from successful ODH applications for Digital Humanities Advancement Grants, as well as a growing number of online resources. For instance, the <u>Inter-</u><u>University Consortium for Political and Social Research</u> and the <u>Digital Humanities Curation Guide</u> provide useful resources for preparing a data management plan, including specific examples. The <u>California Digital Library</u> also offers tools, checklists, and guidance for data management planning.

In recent years, numerous institutions of higher education have established data management policies and have designated staff responsible for working with humanities researchers on these issues. Applicants from such institutions should consult with their libraries and sponsored research offices early in the grant writing process.

¹ The Office of Digital Humanities wishes to thank the National Science Foundation's Directorate for Social, Behavioral, and Economic Sciences for allowing us to use much of the language from its data management plan guidance. In 2011 NSF began requiring Data Management Plans for all proposals. As a result, many universities and other institutions have developed data management policies and guidance for their faculty. Because many institutions apply to both NEH and NSF, we purposely kept this guidance in alignment with NSF's, to better enable grantees to take advantage of emerging data management resources at their home institutions.

Applicants may also seek out partnerships or third-party solutions capable of meeting the data management and digital preservation needs of a particular project. Such solutions should offer clear protocols for transferring data to new systems in the future. Some repositories may focus on storing a particular type of data. For instance, <u>Open Context</u> and the <u>Digital Archaeological Record</u> provide data storage services for the archaeological community. Applicants may wish to consult resources such as the <u>Community Owned Digital Preservation Tool Registry</u> in order to survey some existing data management solutions. NEH does not endorse the use of any specific repository or tool.

Contents of the Data Management Plan

The DMP should clearly articulate how sharing of primary data is to be implemented. It should outline the rights and obligations of all parties with respect to their roles and responsibilities in the management and retention of research data. It should also consider changes to roles and responsibilities that will occur if a project director or co-project director leaves the institution or project. Any costs stemming from the management of data should be explained in the budget notes. Specific components of the DMP are listed below.

Expected data. The DMP should describe the types of data, samples, physical collections, software, curriculum materials, or other materials to be produced in the course of the project. It should then describe the expected types of data to be retained.

Project directors should address matters such as these in the DMP:

- the types of data that their project might generate and eventually share with others, and under what conditions;
- how data will be managed and maintained until shared with others;
- factors that might impinge on their ability to manage data, for example, legal and ethical restrictions on access to non-aggregated data;
- the lowest level of aggregated data that project directors might share with others in the scholarly or scientific community, given that community's norms on data;
- the mechanism for sharing data and/or making it accessible to others; and
- other types of information that should be maintained and shared regarding data, for example, the way it was generated, analytical and procedural information, and the metadata.

Period of data retention. NEH is committed to timely and rapid data distribution. However, it recognizes that types of data can vary widely and that acceptable norms also vary by discipline. It is strongly committed, however, to the underlying principle of timely access. In their DMP applicants should address how timely access will be assured.

Data formats and dissemination. The DMP should describe data formats, media, and dissemination approaches that will be used to make data and metadata available to others. Policies for public access and sharing should be described, including provisions for appropriate protection of privacy, confidentiality, security, intellectual property, and other rights or requirements. Research centers and major partnerships with industry or other user communities must also address how data will be shared and managed with partners, center affiliates, and other major stakeholders.

Data storage and preservation of access. The DMP should describe physical and cyber resources and facilities that will be used to effectively preserve and store research data. These can include third-party facilities and repositories.

Post-Award Monitoring

After an award is made, data management will be monitored primarily through the interim and final performance reports that grantees are required to submit, as well as through evaluation of subsequent proposals.

Interim Reports. Interim reports must provide information on the progress on data management and sharing of the research products. This information could include citations of relevant publications, conference proceedings, and descriptions of other types of data sharing and dissemination of results.

Final Performance Reports. Final performance reports are required for all NEH awards. The final performance report must discuss the execution and any updating of the original DMP. This discussion should describe

- data produced during the grant period;
- data to be retained after the grant period expires;
- verification that data will be available for sharing;
- discussion of community standards for data format;
- the plan to disseminate the data;
- the format that will be used to make data available to others, including any metadata; and
- the archival location of data.

White Papers. All Office of Digital Humanities programs require a final white paper that will be shared with the public. The white paper should also discuss data management challenges.

References and Resources

• Council on Governmental Relations, Access to and Retention of Research Data: Rights and Responsibilities, March 2012 (PDF). <u>http://www.cogr.edu/sites/default/files/access to sharing and retention of research data-rights %26 responsibilities.pdf</u>

• National Science Foundation, Proposal and Award Policies and Procedures Guide, January 2017. <u>http://www.nsf.gov/publications/pub_summ.jsp?ods_key=papp</u>

• Office of Management and Budget, Circular A-110, September 30, 1999. White House Website, OMB Home. <u>https://www.whitehouse.gov/omb/circulars_a110</u>