Creating Your Data Management Plan

The suggested process regarding data management is for all members of the West Virginia University (WVU) research community to have a data management plan (DMP) in place at the start of every externally-funded research project. All DMPs should comply with any applicable sponsor-specific requirements. If research data will not be generated during the life of a sponsored project, please indicate this in your DMP.

Currently, the DMP Tool (https://dmp.cdlib.org/) offers templates for many of the sponsors that now require a DMP as a part of a sponsored project application.

If the sponsor for your specific funding opportunity is not listed on the DMP Tool website, then please use the following generic template to create your DMP document. Once you have completed each section and provided answers to all key questions, please convert this document to a PDF file and attach it to your WVU Electronic Blue Sheet (EBS) proposal under the “Supplemental Documents” tab.

Data Management Plan for (Insert title of proposed sponsored project)

Section One—Types of Data

1. What data will be generated in the research?
2. What data types will you be creating or capturing?
3. How will you capture the data?
4. If you will be using existing data, then state that fact and include where you obtained this data. What is the relationship between the data you are collecting and the existing data?

Section One Recommendations

• Give a short description of the data, including amount (if known) and content. If the project will be collecting data of a sensitive nature, note the sensitivity here and reflect upon it in subsequent sections. Data types could include text, spreadsheets, images, 3D models, software, audio files, video files, reports, surveys, patient records, etc.

• NSF states data are defined as samples, physical collections, software, curriculum materials, and other materials to be produced in the course of the project.

Section Two—Data and Metadata Standards

1. Which file formats will you use for your data, and why?
2. What form will the metadata describing/documenting your data take?

3. How will you create or capture these details?

4. Which metadata standards will you use and why have you chosen them? (e.g. accepted domain-local standards, widespread usage)

5. What contextual details (metadata) are needed to make the data you capture or collect meaningful?

Section Two Recommendations

• Describe the format of your data and how it will be “documented.” Think about what details (metadata) someone else would need to be able to use these files. For example, you may need a “readme file” to explain variables, structure of the files, etc.

• NSF policy states Standards to be used for data and metadata format and content (where existing standards are absent or deemed inadequate, this should be documented along with any proposed solutions or remedies).

Section Three—Policies for Access and Sharing and Provisions for Appropriate Protection/Privacy

1. How and when will you make the data available? (Include resources needed to make the data available: equipment, systems, expertise, etc.)

2. What is the process for gaining access to the data?

3. How long will the original data collector/creator/principal investigator retain the right to use the data before opening it up to wider use?

4. Explain details of any embargo periods for commercial/patent reasons.

5. Are there ethical and privacy issues? If so, how will these be resolved?

6. What have you done to comply with your obligations in your IRB Protocol?

7. Who will hold the intellectual property rights to the data and how might this affect data access?
Section Three Recommendations

This section is very important. The main reason a DMP is required, is for you to think about how you prepare (manage) your data for sharing and describe how you will actively share your data with non-group members after the project is completed. You should explain how and when the data will become available. Will data be accessible on a web page, by email request, via open-access repository, etc.? If there is an embargo period for sharing the data, make sure you provide details explaining this delay (e.g. publisher, political, commercial, patent reasons). And, if the data are of a sensitive nature—human subject concerns, potential patentability, species/ecological endangerment concerns—that public access is inappropriate, address here the means by which granular control and access will be achieved (e.g. formal consent agreements; anonymization of data; restricted access, only available within a secure network).

Section Four—Policies and Provisions for Re-Use, Re-Distribution

1. Will any permission restrictions need to be placed on the data?
2. Which bodies/groups are likely to be interested in the data?
3. What and who are the intended or foreseeable uses/users of the data?

Section Four Recommendations

Explain how the policies you outline above can be applied to the re-use and re-distribution of your data. In other words, you need to identify who will be allowed to use your data, how they will be allowed to use your data, and whether or not they will be allowed to disseminate your data. If you are planning on restricting access, use, or dissemination of the data, then you must explain how you will codify and communicate these restrictions in this section.

Section Five—Plans for Archiving and Preservation of Access

1. What is the long-term strategy for maintaining, curating, and archiving the data?
2. Which archive/repository/database have you identified as a place to deposit data?
3. What procedures does your intended long-term data storage facility have in place for preservation and backup?
4. How long will/should data be kept beyond the life of the project?
5. What data will be preserved for the long-term?
6. What transformations (to more shareable formats) will be necessary to prepare data for preservation/data sharing?

7. What metadata/documentation will be submitted alongside the data or created on deposit/transformation in order to make the data reusable?

8. What related information will be deposited?