

What is a Data Management Plan?

The Data Management Plan is a document that formulizes how the research project data will be managed, shared, accessed, preserved, as well as who will oversee the data management along with any tools or standards needed to access or manipulate the data.

Why do I need to know?

Over the past several years large funding entities such as NIH and NSF have been updating policies and procedures to ensure that data and samples collected as part of federally funded studies are shared within a reasonable period of time. As of January 2023, major federal funders such as the NSF, NIH, NASA, IMLS, DOD, and DOJ require a DMP to be provided at the time of proposal. The idea is that sharing scientific data in a timely manner, will accelerate research discovery and enhance rigor and reproducibility. As a result you will now need to complete a DMP at the time of proposal. As part of the proposal, this DMP is considered part of the scope of the project, and any changes may be subject to prior approval request from the sponsor.

Budget Considerations

Sponsors allow and expect costs associated with data management to be included within the budget. This could include, but is not limited to, personnel effort, repository fees, costs associated with any tools or software needed to manipulate shared data, and long-term preservation storage fees. Make sure to consider and include these costs within your budget and mention the purpose within the budget justification.

The NIH has a helpful webpage that provides an overview of how to <u>budget for data management</u> and <u>sharing</u>, including a list of allowable and unallowable costs. This may be a good starting point to review when budgeting for data management costs for any sponsor.

University Libraries

The University Library has several resources to help you develop a strong <u>DMP GMU Library Helpful Hints to Data Monitoring Plan</u>. It also provides a link to the <u>DMPTool</u>; a great application, with directions, templates and <u>examples</u>. You can log onto this website with your Mason ID and password to get started and walk through the steps. Contact <u>datahelp@gmu.edu</u> for assistance early on in the proposal process.

What to include in a DMP

The plan should include the following elements:

- **Type of Data to be shared**—*Note:* researchers are not required to preserve and share all scientific data.
 - The plan should explain what data will be preserved and what will not and why. Data should describe the type (images, interview transcripts, etc.) and amount of data shared (50 images, 27 interview transcripts, etc.) and list the metadata and any associated documentation that will be made accessible.
- Related Tools, Software, and/or Code

Are there any specialized tools needed to access or manipulate shared scientific data to support replication or reuse? If so, indicate how these tools can be accessed.

Standards

Describe what standards, if any, will be applied to the data and any associated metadata (data formats, data dictionaries, identifiers, definitions, or other data documentation).

Data Preservation, Access and Associated Timelines

Name the repository(ies) where data will be stored (the Mason libraries can assist you in identifying one).

How will the data be findable and identifiable (possibly with a unique identifier or other standard indexing tools)

When will the data be made available to others? For how long? Be sure to identify any differences in timelines for subsets of data to be shared.

- Access, Distribution, or Reuse Considerations
 - Describe any factors affecting access, distribution, or reuse of scientific data related to informed consent, privacy and confidentiality protections, if access to data derived from humans will be controlled, restrictions imposed by federal or state laws, regulations, policies, or agreements, and any other considerations that may limit the extend of data sharing.
- Doversight of Data Management and Sharing How will compliance with the submitted DMP be monitored and managed? Include the frequency of oversight and indicate who (title and roles) will oversee.

Helpful Resources

- » NIH Data Management and Sharing Basics
- » NIH Optional DMS Plan Format
- » NIH Sample Plans
- <u>University Libraries Research Data</u><u>Management Basics</u>
- » <u>DMP Tool</u>
- » NSF Data Management Plan
- » DOJ Resources