

CREATE AN EFFECTIVE DATA MANAGEMENT PLAN

This brief guide presents a general framework for creating an effective data management plan (DMP) to help you plan and organize your research and to meet research funder requirements.

To prepare your DMP, visit the [Portage DMP Assistant tool](#).

GENERAL GUIDELINES

- Begin by providing a description of your research project, its focus, and purpose.
- Avoid the extensive use of discipline specific jargon - your DMP should be easily understood by anyone.
- Provide clarification for any acronyms used.
- Do not leave sections or questions blank.
- Provide rationale for decisions made - help others understand why you have made a decision.
- Your DMP is a living document - update it as needed!

DATA COLLECTION

- Include descriptions of how you will collect data, including from where and in what format(s).
- Provide an estimate of the amount of data you will collect (e.g., MBs/GBs/TBs).
- Describe any software and/or platforms that will be used for data collection.
- Clearly explain how you will both store and transfer data.
- Explain how you will organize your data, including details relating both to file naming and versioning.

DOCUMENTATION AND METADATA

- Describe what information will be needed for others to understand or reuse your data.
- Describe how you will consistently capture documentation throughout the project.
- Choose a metadata standard suited to your discipline and/or chosen data repository or provide rationale for creating your own.



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STORAGE AND BACKUP

- Provide an estimate of storage space needed during the active phases of your research - remember to take into account file versioning, backups, and data growth.
- If needed, follow the 3-2-1 backup rule: 3 copies of your data, on 2 different storage media, with 1 located offsite.
- State a data backup schedule, automatic being most ideal.
- Describe how collaborators or research team will be able to access, modify, contribute, and work with your data.

PRESERVATION

- Not all data that you create necessarily needs to be preserved - consider such things as the value of your data, funding requirements, etc., and decide which, if any, should be preserved. Consult with experts in your Library as needed.
- Consider optimal file formats (preferably non-proprietary) for supporting long-term preservation.

SHARING AND REUSE

- Consider the appropriate sharing of your data, including any funding, ethical and/or confidentiality requirements.
- Explain what uses can be made of your data through licenses like [Creative Commons](#).
- Consult with colleagues or librarians to choose an appropriate data repository or search [re3data.org](#) to find one.
- Choose a repository that assigns permanent identifiers to datasets (e.g., DOI) to enhance discoverability, accessibility, and citability.
- If applicable, describe how you will ensure file integrity, anonymization and de-identification.

RESPONSIBILITIES AND RESOURCES

- Identify data stewardship roles and responsibilities of project members and other organizations during and after the project.
- Estimate and describe any required resources and costs for data management and long-term access to your data.



ETHICS AND LEGAL COMPLIANCE

- Describe if there are any legal, ethical, and intellectual property issues when managing and sharing your data.
- Explain how you will comply with any applicable privacy legislation and laws, including funding and institutional requirements.
- Describe how you will ensure your data are securely managed after the project is completed including the secure management of sensitive data and in accordance with any ethical obligations.

