

# 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.





# 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 deidentification.

## **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 longterm 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.

