

DRAFT

Tri-Agency

Research Data Management Policy – For Consultation

1. Preamble

The [Canadian Institutes of Health Research \(CIHR\)](#), the [Natural Sciences and Engineering Research Council of Canada \(NSERC\)](#), and the [Social Sciences and Humanities Research Council of Canada \(SSHRC\)](#) (the agencies) are federal granting agencies that promote and support research, research training, knowledge transfer and innovation within Canada.

The agencies expect the research they fund to be conducted to the highest professional and domain standards, domestically and internationally . These standards support research excellence by ensuring that research is performed ethically and makes good use of public funds, experiments and studies are replicable, and research results are as accessible as possible.

Research data are data that are used as primary sources to support technical or scientific enquiry, research, scholarship, or artistic activity, and that are used as evidence in the research process or are commonly accepted in the research community as necessary to validate research findings and results. All other digital and non-digital content have the potential of becoming research data. Research data may be experimental data, observational data, operational data, third party data, public sector data, monitoring data, processed data or repurposed data.¹ Research data enable researchers to ask new questions, pursue novel research programs, test alternative hypotheses, deploy innovative methodologies and collaborate across geographic and disciplinary boundaries. The ability to store, access, reuse and build upon digital research data has become critical to the advancement of science and scholarship, supports innovative solutions to economic and social challenges, and holds tremendous potential for Canada’s productivity, competitiveness and quality of life.

Research data management is necessary at all stages of the research project lifecycle, from design and inception to completion and beyond. It is best to conduct research data management through developing and implementing a data management plan. Data management plans assist researchers in determining the costs, benefits and challenges of managing data and should be consulted and updated throughout the research project. These plans can also assist institutions with organizing data management services for a campus. The use of data management plans has emerged as an international best practice and is integral to research excellence.

Governments and research funders across the globe recognize the value of research data and the need for policies to enable excellence in data management. Canada has joined many other countries at the forefront of this movement, as shown in its support for the Organisation for Economic Co-operation and Development’s [Declaration on Access to Research Data from Public Funding](#) (2004); its commitment to

¹ CASRAI http://dictionary.casrai.org/Research_data

the [Open Government Declaration](#) (2011); and its approval of the [G7 Science Ministers Communiqué](#) (2017).

The Government of Canada's [Action Plan on Open Government](#) aims to maximize access to the results of federally funded research, to encourage greater collaboration and engagement with the scientific community, private sector and public. The action plan includes a commitment to adopt policies to support effective data stewardship.

The agencies believe that research data collected with the use of public funds should be responsibly and effectively managed and belong, to the fullest extent possible, in the public domain and available for reuse by others. They also strongly support the creation of a robust and efficient environment for data stewardship in Canada and internationally. The agencies have encouraged data management through the [Tri-Agency Statement of Principles on Digital Data Management](#) (2016), SSHRC's [Research Data Archiving Policy](#) (1990), and data sharing provisions for CIHR grant holders in the [Tri-Agency Open Access Policy on Publications](#) (2015). They will continue to promote excellence in data management practices within the Canadian research community.

2. Policy Objective

The objective of this policy is to support Canadian research excellence by promoting sound data management and data stewardship practices.

3. Policy Statement

This policy applies to grant recipients and to institutions administering tri-agency funds. It does not apply to scholarship, fellowship or Chair holders.

Institutions

3.1 Institutional Strategy

Each institution administering tri-agency funds is required to create an institutional research data management strategy. The strategy will outline how the institution will provide its researchers with an environment that enables and supports world-class research data management practices, and should include items such as:

- recognizing data as an important research output and fostering excellence in data management;
- supporting researchers in their efforts to establish and implement data management practices that are consistent with ethical, legal and commercial obligations, as well as tri-agency requirements, including the [Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans – 2nd edition](#), the [Tri-Agency Framework: Responsible Conduct of Research](#) and other relevant policies;
- promoting the importance of data management to researchers, staff and students;

- guiding their researchers on how to properly manage their data in accordance with the principles outlined in the *Tri-Agency Statement of Principles on Digital Data Management*, including the development of data management plans;
- committing to develop their own data management policies and standards for data management plans;
- ensuring that their researchers have data management plans in place; and
- providing, or supporting access to, recognized repository services or other platforms that securely preserve, curate and provide continued access to research data.

The strategy must be made publicly available on the institution's website, with contact information to which inquiries about the strategy can be directed. The institution should regularly review, and revise the strategy where appropriate, as research data management services, infrastructure and practices evolve.

Institutions are encouraged to consult existing resources to support the development of their strategies, such as the Portage Network's [Institutional Strategy Template](#).

Researchers

3.2 Data Management Plans

All grant proposals submitted to the agencies should include methodologies that reflect best practices in research data management. The agencies encourage grant applicants to complete data management plans (DMPs) as an essential step in research project design. For specific funding opportunities, the agencies may require DMPs to be submitted to the appropriate agency at time of application; in these cases, the DMPs may be considered in the adjudication process.

The content and length of DMPs depend on the research project. Generally, DMPs describe:

- how data will be collected, documented, formatted, protected and preserved;
- how existing datasets will be used and what new data will be created over the course of the research project;
- whether and how data will be shared; and
- where data will be deposited.

DMPs also indicate who is responsible for managing the project's data, describe the succession plans in place should that person leave the research team, and identify the data-related roles and responsibilities of other team members where appropriate. Finally, DMPs outline ethical, legal and commercial constraints the data are subject to, methodological considerations that support or preclude data sharing, and which data repository has been selected for data deposit (if applicable).

Grant applicants are encouraged to use standardized tools to develop their DMPs, such as the Portage Network's [DMP Assistant](#).

3.3 Data Deposit

Grant recipients are required to deposit into a recognized digital repository all digital research data, metadata and code that directly support the research conclusions in journal publications, pre-prints, and other research outputs that arise from agency-supported research. The repository will ensure safe storage, preservation, and curation of the data. The agencies encourage researchers to provide access to the data where ethical, legal, and commercial requirements allow, and in accordance with the standards of their disciplines. Whenever possible, these data, metadata and code should be linked to the publication with a persistent digital identifier.

4. Implementation Date

The agencies plan to implement the policy incrementally, as determined through ongoing engagement with the research community and in step with the continuing development of research data practices and capacity in Canada and internationally.

5. Compliance with Policy

By accepting agency funds, institutions and researchers accept the terms and conditions as set out in the agencies' policies, agreements and guidelines. In the event of an alleged breach of agency policy, agreement or guideline, the agency may take steps outlined in accordance with the [Tri-Agency Framework: Responsible Conduct of Research](#) to deal with the allegation.

6. Policy Review

The agencies will review and revise this policy as appropriate.

7. Additional Information

- [Frequently asked questions](#)