ASSOCIATION OF CANADIAN MAP LIBRARIES AND ARCHIVES
# BULLETIN

# GIS Trends

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# GETTING A GRIP ON RESEARCH DATA MANAGEMENT

## Abstract

In March 2021 the Tri-Agency released its Research Data Management Policy, including its three pillar requirements. This article reviews some key points from the Alliance RDM (Portage Network) workshop *"Putting the Tri-Agency Policy into Practice: Workshopping Your Institutional Research Data Management Strategy."*

### Getting a Grip on Research Data Management

In March 2021 the Tri-Agency released its Research Data Management Policy. The objective of this policy is "to support Canadian research excellence by promoting sound research data management and data stewardship practices."[i] It requires postsecondary institutions and research hospitals eligible to administer CIHR, NSERC or SSHRC funds to meet requirements associated with its three pillars:

1. Institutional RDM Strategy – To be completed by March 1, 2023
2. Research Data Management Plans – Implementation begins Spring 2022
3. Data deposit – Implementation anticipated to begin Spring 2023 (Recipients of CIHR funding must continue to comply with 2008 guidelines where appropriate) [ii]

In October 2021 the Digital Research Alliance of Canada (or the Alliance for short) Portage Network[iii] National Training Expert Group (NTEG) organized a 4-day workshop **"*Putting the Tri-Agency Policy into Practice: Workshopping Your Institutional Research Data Management Strategy*."** The aim was to enable post-secondary institutions to form RDM strategies. Attendees heard from a range of speakers from the Alliance, the Tri-Agency and other post-secondary

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[i] Government of Canada (2021). *Tri-Agency Research Data Management Policy*.
https://science.gc.ca/eic/site/063.nsf/eng/h_97610.html
[ii] Government of Canada (2021). *Tri-Agency Research Data Management Policy*.
https://science.gc.ca/eic/site/063.nsf/eng/h_97610.html and Mathew Lucas, SSHRC "Tri-Agency Research Data Management Policy; *Putting the Tri-Agency Policy Into Practice: Workshopping Your Institutional Research Data Management Strategy Introduction to the Tri-Agency Policy and Pillar 2: Data Management Plans* (slide presentation), Monday 25 October 2021, Available at: https://portagenetwork.ca/event/putting-the-tri-agency-policy-into-practice-workshops/
[iii] NDRIO and Portage now rebranded to the Digital Research Alliance of Canada and Alliance RDM. Further information: https://portagenetwork.ca/news/update-on-portage-and-the-digital-research-alliance-of-canada/

institutions and research agencies. Each day focused on a different pillar of the policy. The third day included a workshop on strategy development, with enrollment limited to allow for collaborative breakout sessions. VPs Research (or equivalent) were asked to designate three persons within their institution to attend on this day, with the suggestion that they be chosen to represent the different stakeholders involved with RDM. The final day included a panel discussion with colleagues at several universities that are at different stages of building their RDM strategies.

Links to slides and recordings from each day have been made available.

I was fortunate to attend this excellent virtual event with two colleagues from IT and our Research Office. Here are some key points I learned:

- Establishing Institutional RDM strategies calls for a collaborative effort. The success of this effort depends on being able to draw on expertise from across the institution, including the research office, library departments, information technology/computing, ethics boards, graduate students, faculty, research staff, administrators, legal counsel and indigenous communities.
- RDM strategies are by nature unique and living documents that reflect local conditions such as institution size, research intensity and existing RDM capacity.[iv]
- These strategies must recognize the importance of Indigenous data sovereignty and RDM Principles that recognize and respect self-determination for First Nations, Inuit, and Métis People through a distinctions-based approach.[v]
- Post-secondary institutions qualifying for Tri-Agency grants must notify the Tri-Agency when their RDM strategy is complete, and by March 1, 2023 make it publicly available by posting it on their web site. The Agencies will review but not formally evaluate institutional RDM policies.[vi]
- When they begin developing their RDM strategy institutions may wish to make use of an assessment tool to evaluate existing RDM practices and capacity. A Canadian Assessment tool called the "MAMIC" (RDM **M**aturity **A**ssessment **M**odel **i**n **C**anada) is newly available; it is based on RISE and SPARK assessment models. Categories of assessment within the MAMIC include Institutional Policies and Processes, IT Infrastructure, Support Services, and Financial Support.[vii]

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[iv] Digital Research Alliance of Canada (2021), Institutional RDM Strategy Template Revision Working Group, *Institutional Research Data Management Strategy Development Template* v. 3.0, p.3. https://zenodo.org/record/5745906

[v] Government of Canada (2021) *Frequently Asked Questions: Tri-Agency Research Data Management Policy*. Section 2. Indigenous Research, https://www.science.gc.ca/eic/site/063.nsf/eng/h_97609.html

[vi] Matthew Lucas, SSHRCC, *Tri-Agency Research Data Management Policy; Putting the Tri-Agency Policy Into Practice: Workshopping Your Institutional Research Data Management Strategy, Pillar 1: Institutional RDM Strategies,* Wednesday 27 October 2021, Slide presentation. Available at: https://portagenetwork.ca/event/putting-the-tri-agency-policy-into-practice-workshops/

[vii] Digital Research Alliance of Canada (2021), Institutional RDM Strategy Template Revision Working Group, RDM Maturity Assessment Model in Canada (MAMIC), https://doi.org/10.5281/zenodo.5745492

- The Institutional Research Data Management Strategy Development Template is useful for assisting with the development of an Institutional RDM Strategy. It is intended to serve as a template for the process, not the product.[viii] It includes activities for five distinct stages:
    - Assemble Your strategy Development Team;
    - Assess the Current State of RDM;
    - Envision the Future State of RDM;
    - Articulate Your Institution's Path Forward;
    - Assemble and Launch Your Strategy.
- In 2022 the Tri-Agency will announce phased Data Management Plan (DMP) requirements, identifying funding opportunities that will require submission of DMP Plans at the time of application as outlined in the call for proposals.
- A range of tools are available to researchers to help with developing RDM plans, including Portage's DMP Assistant.
- In consultation with stakeholders, the Tri-Agency will issue requirements for data deposit for grant recipients, with implementation anticipated to begin in Spring 2023.
- Data deposit should be guided by FAIR Principles[ix] to make research data **F**Indable, **A**ccessible, **I**nteroperable and **R**eusable, and CARE Principles[x] for Indigenous Data Governance with considerations for **C**ollective benefit, **A**uthority to control, **R**esponsibility, and **E**thics.
- Researcher requirements for data repositories will vary and may include using Dataverse, FRDR or a range of other discipline-specific repositories. An appropriate data repository should facilitate safe storage, curation, discoverability, accessibility, interoperability, and reuse of data.
- A listserv has been announced for institutional designates who attended the workshop.
- We're not alone! There is an abundance of support available through the Alliance's Portage Network and colleagues at other universities.

In the coming months I look forward to working on RDM strategy with colleagues both within and outside my institution. Many ACMLA readers work with spatial data, and so RDM is clearly relevant to our community. It is not yet clear the extent to which there are unique considerations surrounding spatial data and technologies that need to be considered in relation to RDM. But I do know that it will be important for the ACMLA community to be part of the institutional RDM strategy development process. This presents a great opportunity to evaluate our services, increase levels of RDM support, and interact with researchers and other stakeholders within our university communities.

[viii] Digital Research Alliance of Canada (2021), Institutional RDM Strategy Template Revision Working Group, *Institutional Research Data Management Strategy Development Template* v. 3.0, p.3. https://doi.org/10.5281/zenodo.5745906
[ix] GO Fair, *Fair Principles*, https://www.go-fair.org/fair-principles/ (retrieved December 2021)
[x] The Global Indigenous Alliance (GIDA), *CARE Principles for Indigenous Data Governance*, https://www.gida-global.org/care (retrieved December 2021)

**Disclaimer:** All errors or omissions within this article are the responsibility of the author. Opinions are my own.

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