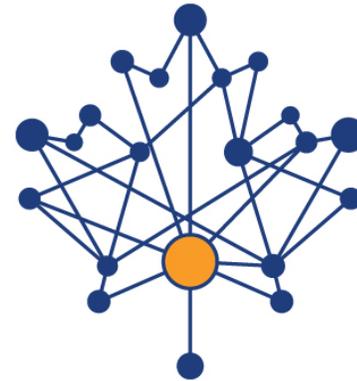


**portage**

SERVICES PARTAGÉS POUR LES DONNÉES DE RECHERCHE  
SHARED STEWARDSHIP OF RESEARCH DATA

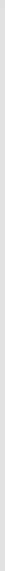


# Portage Network: Update on Progress and Transition

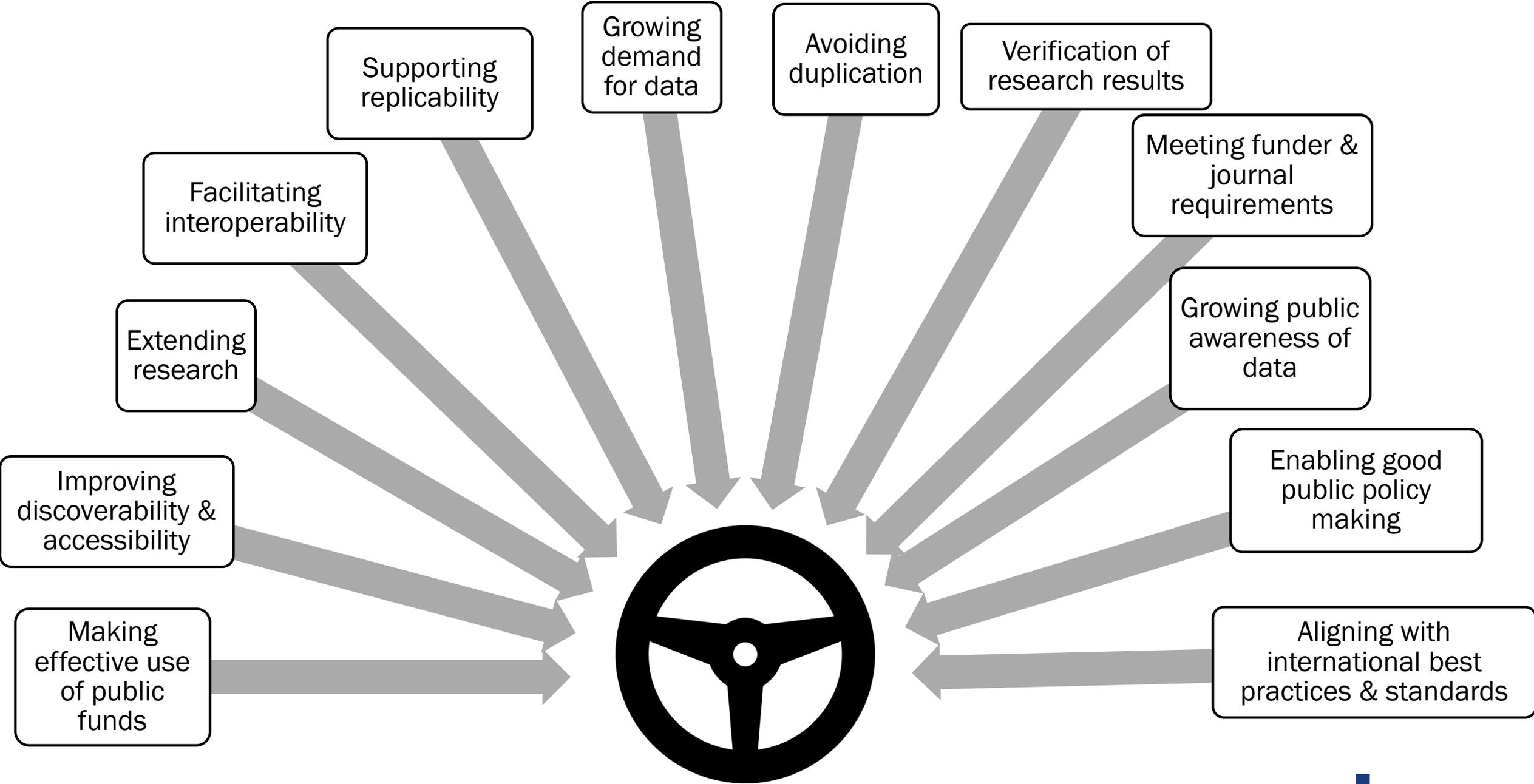
Jeff Moon, Director, Portage  
NDSF Summit, Ottawa | 5 February 2020

# Agenda

- RDM Drivers
- FAIR Principles & Portage
- RDM in Transition



# RDM Drivers



# RDM Drivers



**What keeps me up at night . . .**



A large school of yellowtail snappers (Lutjanus fulvus) is swimming in clear blue water. In the foreground, a tiger shark (Galeocerdo cuvier) is swimming towards the right. The shark has a white underbelly and a dark brown back with a prominent dark stripe running along its side. The word "Data" is written in white text in the upper right corner of the image.

Data

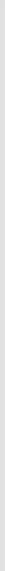
Commercial interests



Preventing data loss



**. . . it can happen to you!**

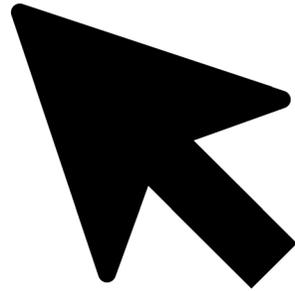


# FAIR Principles & Portage

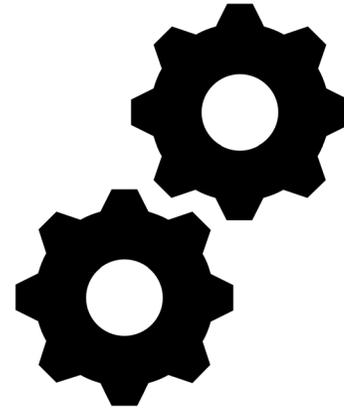
# Fair Principles



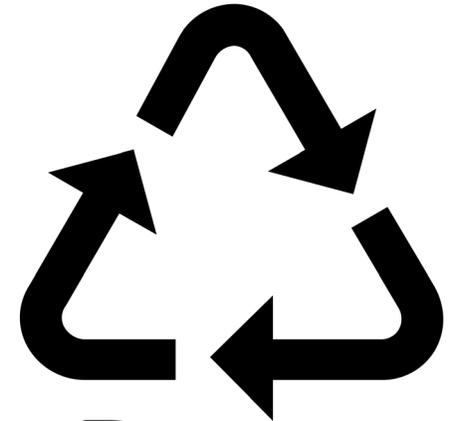
**F**indable



**A**ccessible

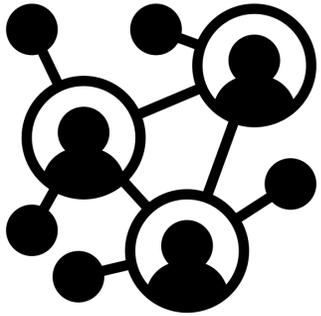


**I**nteroperable

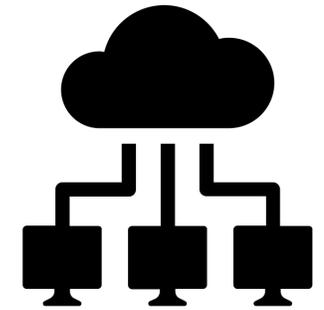


**R**eusable

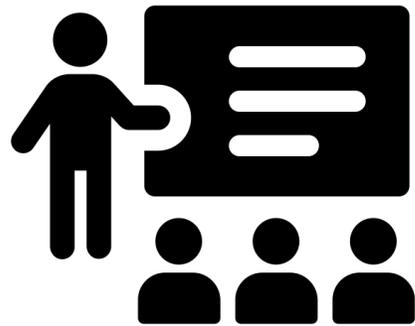
A set of principles to ensure that data are shared in a way that enables and enhances reuse by humans and machines



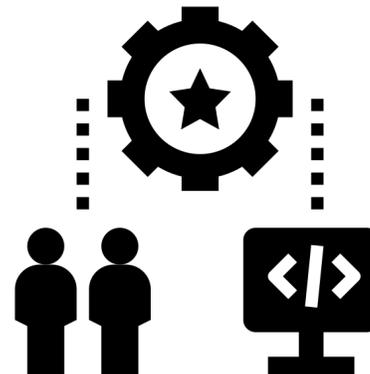
Network of Experts



Infrastructure Platforms



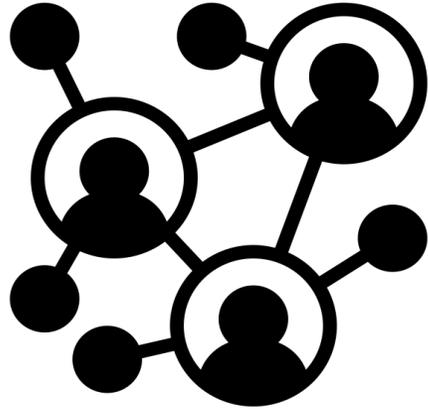
Training



Services



Tools



## Network of Experts

### Expert Groups

- Data Management Planning
- Curation
- Data Discovery
- Preservation
- Training
- Research Intelligence
- Data Repositories

**portage**

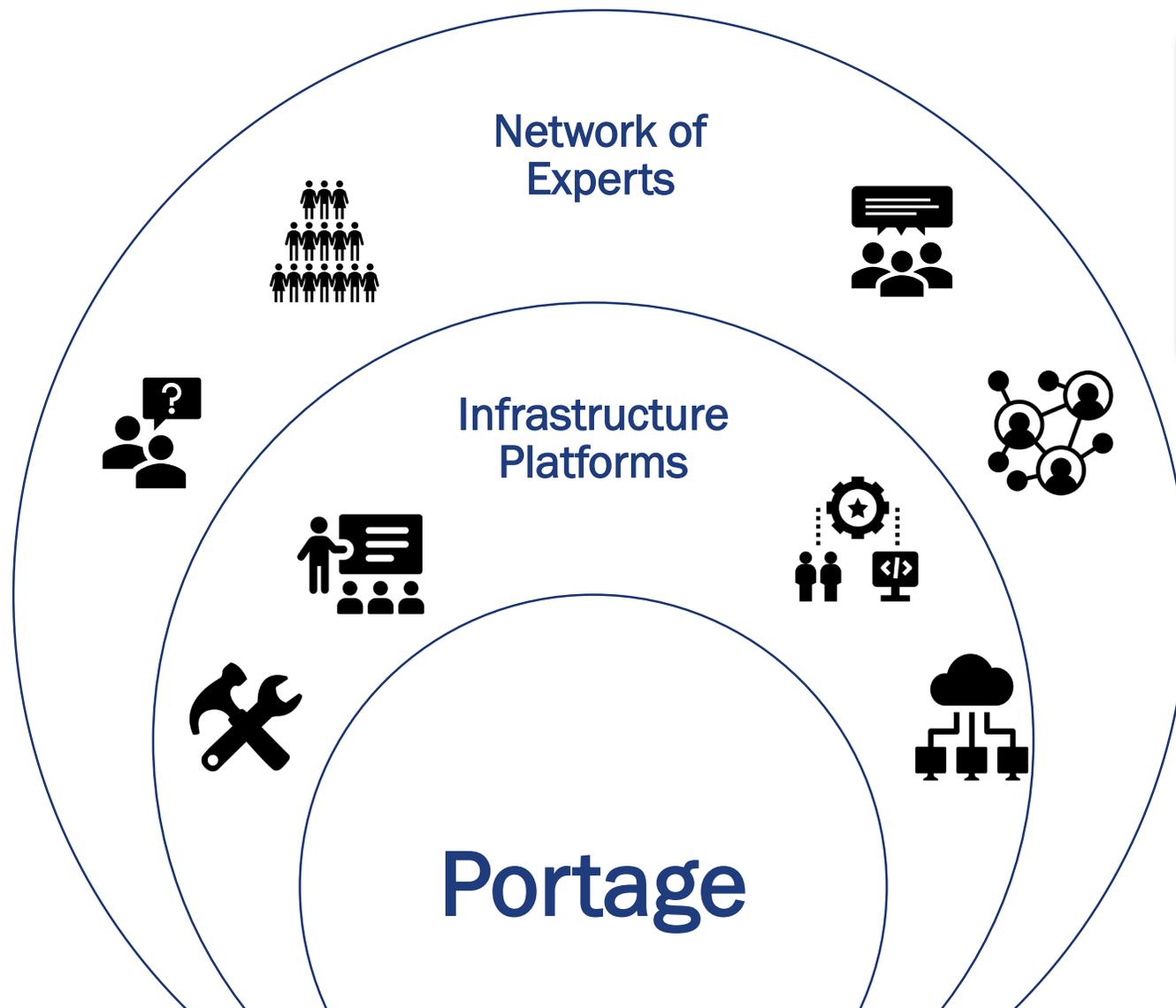
SERVICES PARTAGÉS POUR LES DONNÉES DE RECHERCHE  
SHARED STEWARDSHIP OF RESEARCH DATA

130+ Experts

60+  
Organizations

### Working Groups

- Dataverse North
- Responsible Research Data Management Practices for Sensitive Data
- FRDR Service Model
- FRDR Discovery Service
- Institutional RDM Strategies



Make RDM best practices *possible*, then make them *easy*...

# Fair Enablers



Findable



Accessible

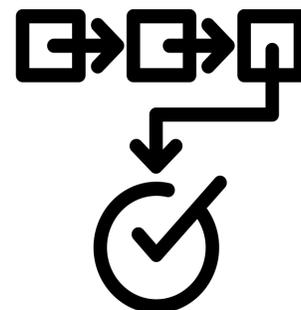


Interoperable

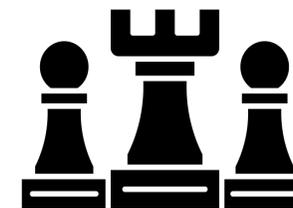


Reusable

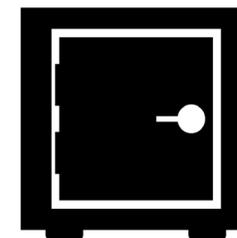
Funder  
Policies



Data Management  
Plans (DMPs)



Institutional  
Strategy

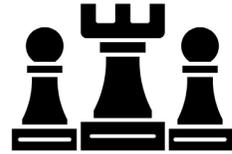


Deposit



SSHRC  CRSH

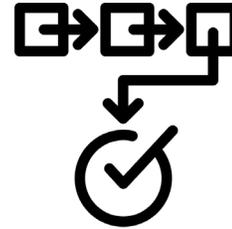
# Portage actions related to Tri-Agencies' policy...



Institutional Strategy



RDM Strategy Template

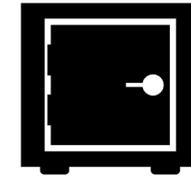


Data Management Plans (DMPs)



DMP Assistant

National, online, bilingual, Data Management Planning Tool



Deposit



National, Multi-disciplinary Repository Options

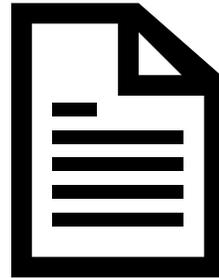


## Portage RDM Strategy Template

### Strategy components

1. Raise Awareness
2. Assess institutional readiness
3. Formalize RDM practices
4. Define a roadmap

+ associated guidance

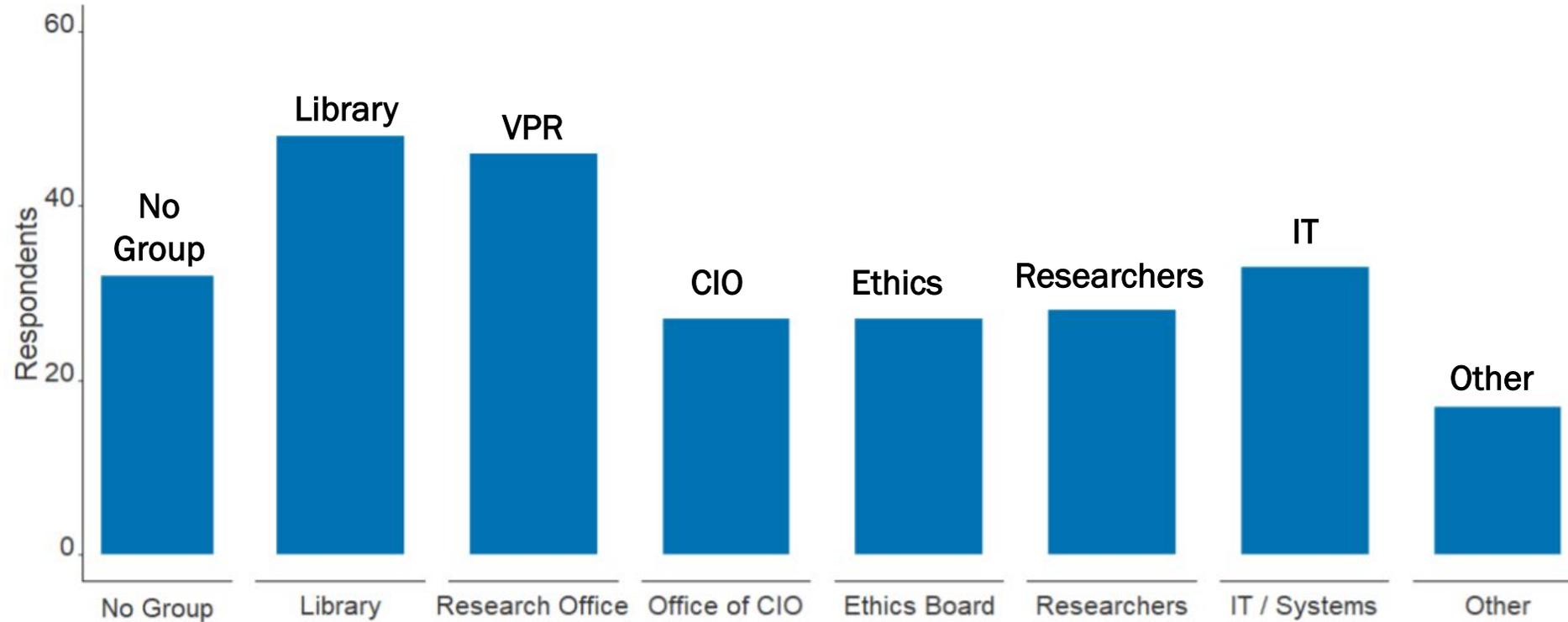


## RDM Strategy Template

## Institutional RDM Strategy Survey

- 6 questions
- 88 responses
- 63 institutions
- June 2019

# Institutional RDM Strategy Survey: Representation on campus working groups



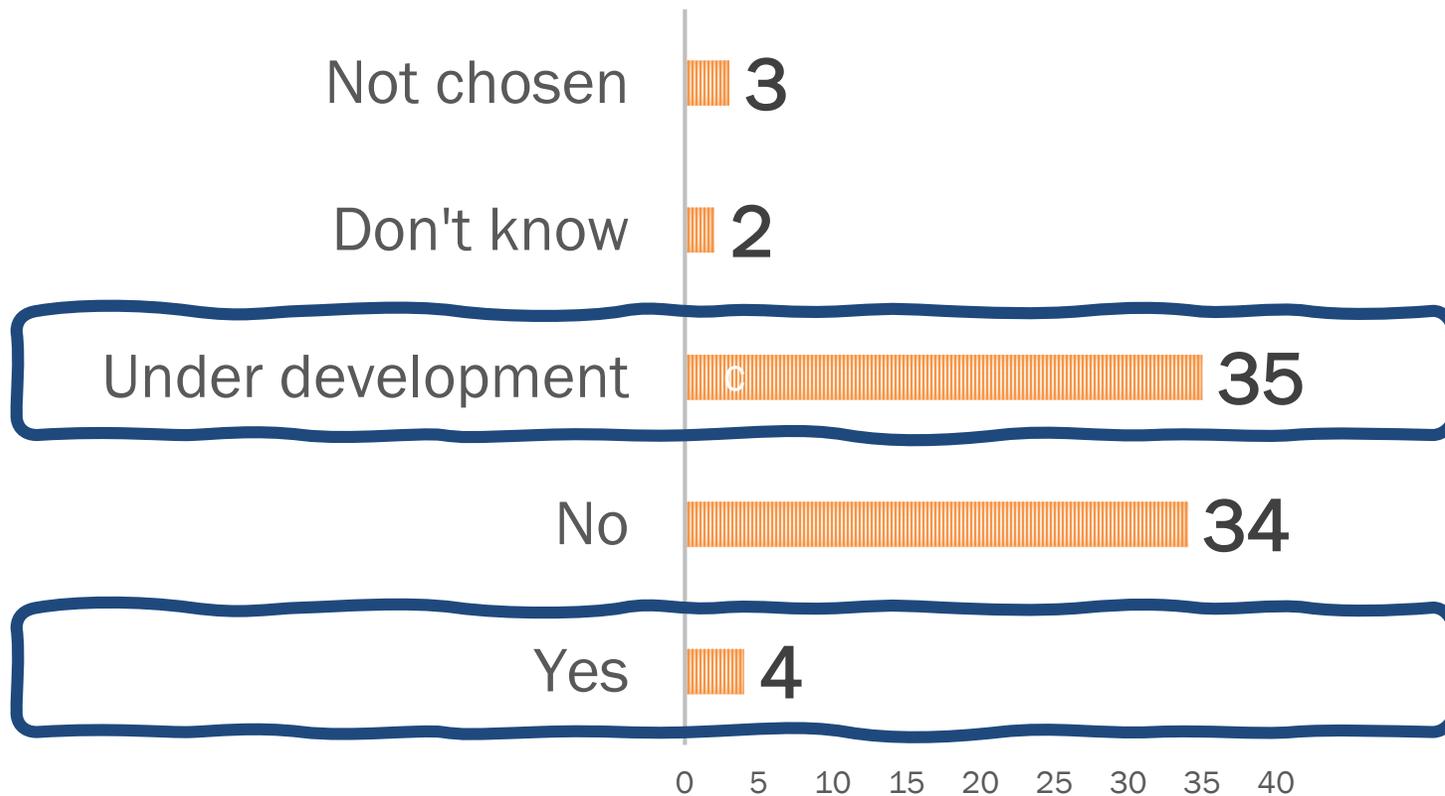
# Institutional RDM Strategy Survey: Resources being used to develop RDM Strategy



## Institutional RDM Capacity Survey

- 27 questions
- 78 institutional responses
- September-October 2019

# Institutional RDM Services Capacity Survey



Does your institution currently have a research data management strategy?

**Figure 2.** Level of RDM strategy development by institution. (n=78). Q14a “Does your institution currently have a research data management strategy?”



## DMP Assistant

- National
- Online
- Bilingual
- Data Management Planning Tool

# Transition to DMP Assistant 2.0



Based on single, open-source platform:  
**DMP Roadmap**

## Joint initiative

- Digital Curation Centre
- University of California Curation Centre

## New features

- Provides foundation for machine actionable or ‘active’ DMPs
- Supports DMPs as “living documents”
- Supports use of ORCID IDs
- Includes APIs for creating and sharing DMPs
- Supports researchers ‘opting in’ to share their DMP

# Transition to DMP Assistant 2.0



Based on single, open-source platform:  
**DMP Roadmap**

## Joint initiative

- Digital Curation Centre
- University of California Curation Centre

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- Provides foundation for machine actionable or 'active' DMPs
- Supports DMPs as “living documents”
- Supports use of ORCID IDs
- Includes APIs for creating and sharing DMPs
- Supports researchers 'opting in' to share their DMP

# DMP-related initiatives

Portage is developing a number of discipline-specific **DMP Exemplars** and a **DMP-specific repository** to enhance discovery and sharing.

## Customized **DMP Templates**

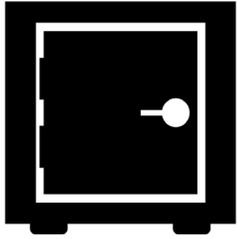
By institution

By discipline

By use case

→ Indigenous data template





National,  
Multi-disciplinary  
Repository Options

**FRDR**

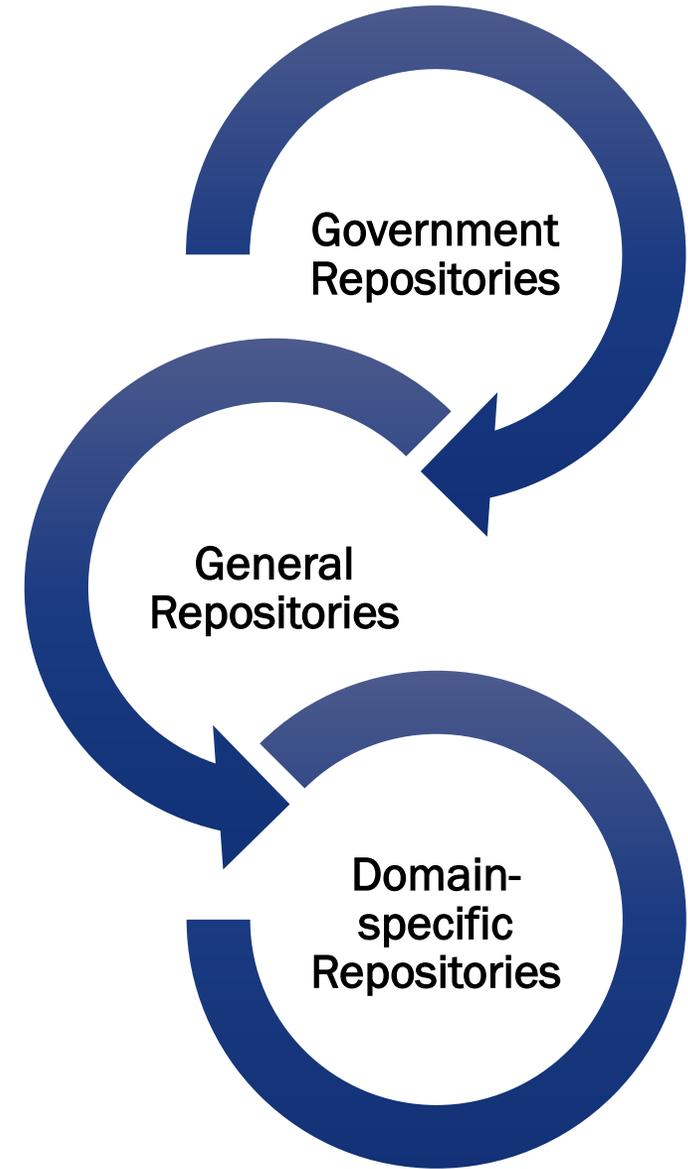


Federated Research Data Repository

**Dataverse**  
North



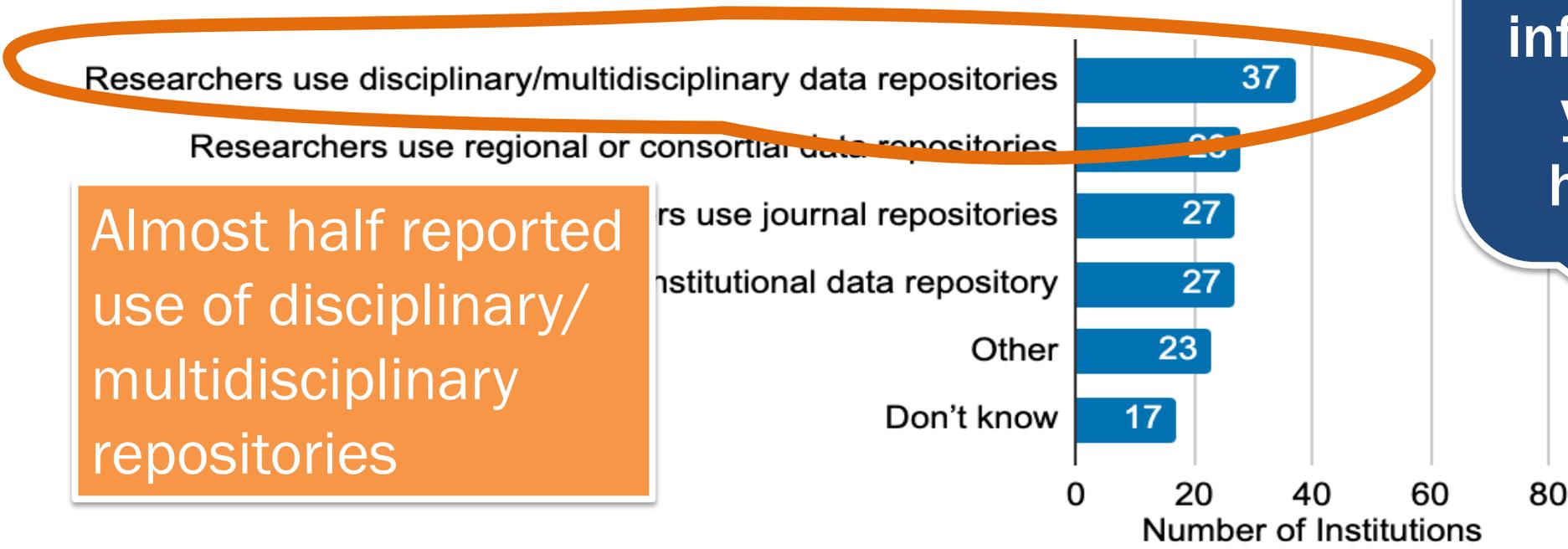
National Instance of Dataverse



**portage**

# Institutional RDM Services Capacity Survey

What research data management infrastructure does your institution have access to?



Almost half reported use of disciplinary/multidisciplinary repositories

Figure 6b. Data repository access. Institutions (n=78) could select all that applied. Q10 “What research data management infrastructure does your institution have access to? Check all that apply.”

**Dataverse** 

# Dataverse



Scholars  
Portal  
Dataverse



Nov 12, 2019



University of British Columbia licensed  
Simon Fraser University  
University of Northern British Columbia



UAL  
Dataverse



DALHOUSIE  
UNIVERSITY  
Dataverse



**DATVERSE**  
RESEARCH DATA REPOSITORY





### Regional Partnerships

- Agreement with **BCI** to serve 19 university libraries in Quebec
- Working on agreements with **COPPUL** and **CAUL**

### Policy Development

Engaging with Portage's **Dataverse North Working Group** to develop policy

### Funding

Transitional funding from Portage will support **storage expansion** to subsidize costs for institutions



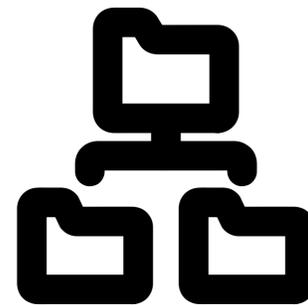
Federated Research Data Repository

# Federated Research Data Repository

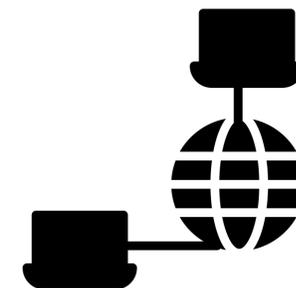
A scalable, federated platform for digital research data management and the discovery of Canadian research data



Big data capable  
& scalable



Retains file  
hierarchies



Geographically  
distributed



# Federated Research Data Repository

A scalable, federated platform for digital research data management and the discovery of Canadian research data



>40 partnering  
research  
groups

>100 datasets  
(9+ TB)

Production launch in Fall  
2020

Informational and training  
sessions will be provided  
ahead of launch



# Federated Research Data Repository



## FRDR Transitioning to Full Production

2  
National  
Hosting  
Sites

Data deposit for all researchers (PIs) and librarians, or their designates, from Canadian postsecondary institutions

Access to **curated repository storage** *without cost* up to a certain threshold;  
more storage possible if needed



# National Discovery Layer

“There needs to be a  
central clearinghouse of  
publicly available datasets  
in Canada”



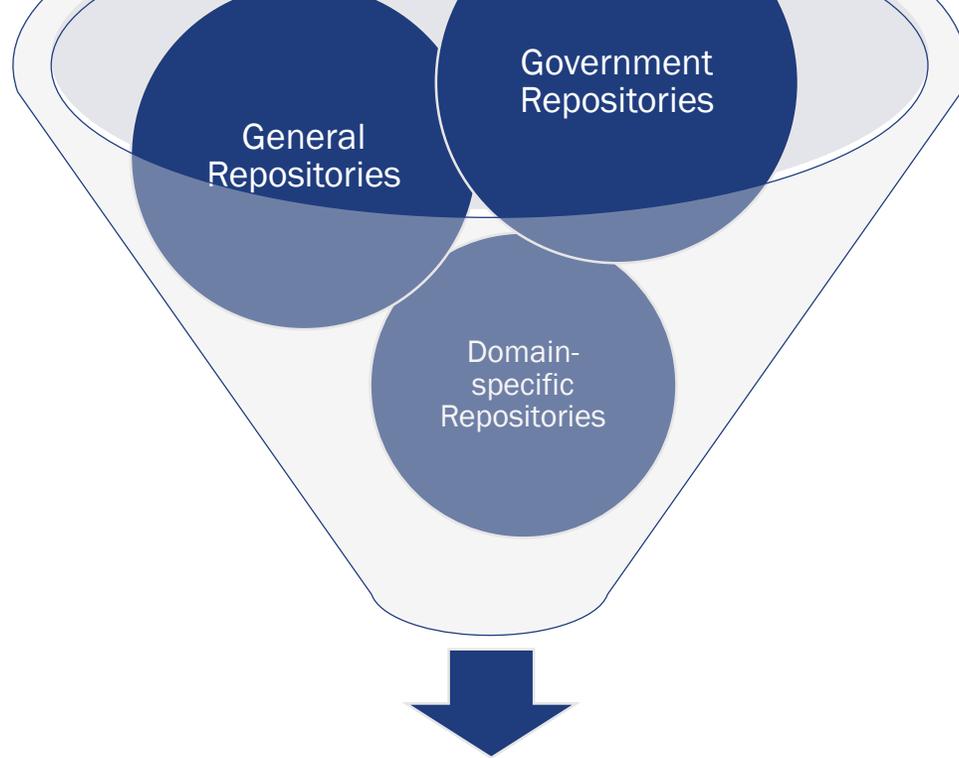
Globe & Mail  
28 January, 2019



**Fuyuki Kurasawa**

Director, Global Digital Citizenship Lab  
York University





Metadata harvested to FRDR

**National Discovery Layer**



Improve discovery of Canadian research (meta)data

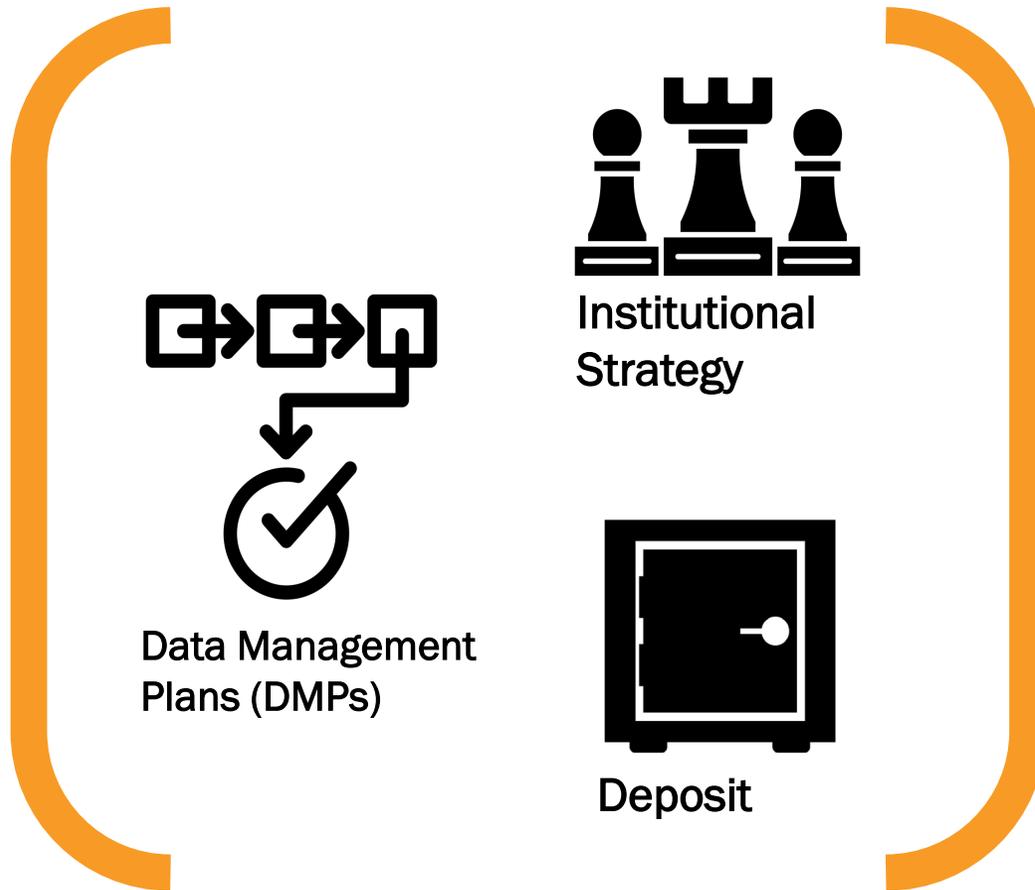
Break down repository siloes

Drive traffic to existing repository sites

Create interoperability between Canadian and international platforms



# Core activities of Portage to date...



## National Discovery Layer



# Fair Enablers



Findable



Accessible



Interoperable



Reusable

## Persistent Identifiers (PIDs)

- DOIs for data or journal publications



# CRKN & CARL Portage: The DataCite Canada Consortium

## DataCite Blog

### Good news for the new year: the DataCite Canada Consortium will launch on January 1, 2020

December 18, 2019 by Helena Cousijn • 3 min read

<https://doi.org/10.5438/agr4-ee34>

Following the [updates to the DataCite member model](#) earlier this year, we have been working with several organizations on establishing DataCite consortia. We are therefore very excited to announce that the DataCite Canada Consortium will [launch](#) on January 1, 2020!

For the past ten years, DOIs in Canada were provided through the National Library of Medicine. When we started conversations about forming a DataCite consortium, the Canadian Research Knowledge Network (CRKN) might be willing to provide a collective negotiating body for academic libraries in Canada. As part of our services, CRKN leads the Canadian ORCID consortium, and provides tools, and services, CRKN leads the Canadian ORCID consortium, and a community around persistent identifier (PID) infrastructure.

[Visit: https://stats.datacite.org/](https://stats.datacite.org/)

58  
Organizations

> 425,000  
DOIs

# Fair Enablers



Findable



Accessible



Interoperable



Reusable

## Persistent Identifiers (PIDs)

- DOIs for data or journal publications
- ORCID for individuals





# ORCID-CA Consortium

## The ORCID Consortium in Canada



Consortium Lead Organization



17 member multi-stakeholder working group

# Fair Enablers



Findable



Accessible



Interoperable



Reusable

## Persistent Identifiers (PIDs)

- DOIs for data or journal publications
- ORCID for individuals
- Research Organization Registry (ROR) for organizations



# Fair Enablers



Findable



Accessible



Interoperable



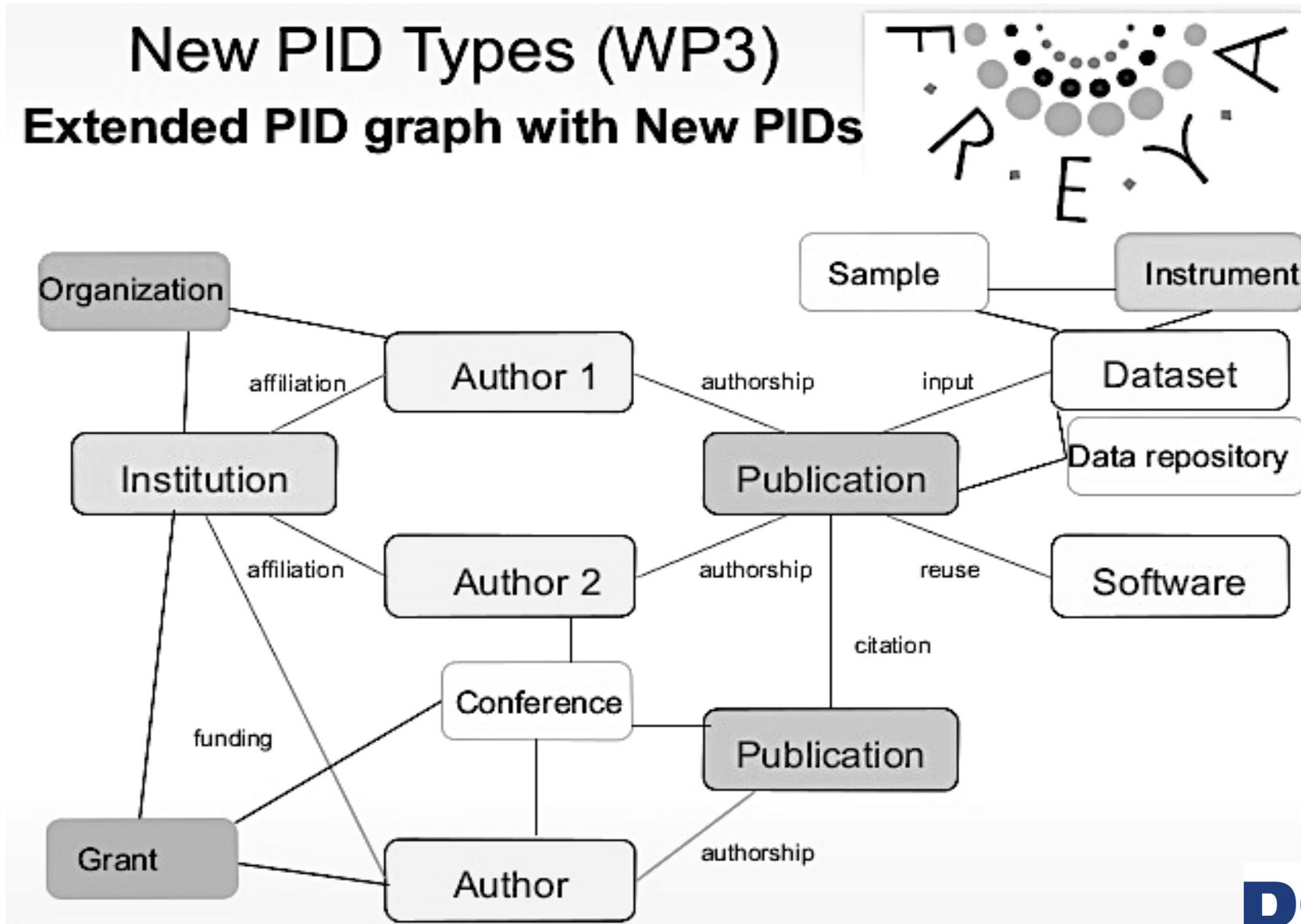
Reusable

## Persistent Identifiers (PIDs)

- DOIs for data or journal publications
- ORCID for individuals
- Research Organization Registry (ROR) for organizations
- RAiD (Research Activity Identifiers) for projects



# Other Potential PIDs



# Fair Enablers



Findable



Accessible



Interoperable



Reusable

## Repository Certification



**RDC**  **DRC**  
Research Data Canada – Données de Recherche Canada

**Best Practices**

**COAR**  
Confederation  
of Open Access  
Repositories

**portage**

# Fair Enablers



Findable



Accessible



Interoperable



Reusable



OCLC

FAST

Subject Headings

(Faceted

Application of

Subject

Terminology)

Metadata, Controlled Vocabularies  
& Discovery

Improving &  
expanding  
metadata  
harvesting  
from Canadian  
Repositories

Improving  
Geospatial  
discovery  
through  
GEODISY  
Project

# Fair Enablers



Findable



Accessible



Interoperable



Reusable

## Interoperability



**FAIRSFair**  
Fostering Fair Data Practices in Europe

FRDR selected to receive support from FAIRSFair to improve international interoperability

**portage**

# Fair Enablers



Findable



Accessible



Interoperable



Reusable

## Sensitive Data

- ✓ Glossary of 'sensitive data' terms
- ✓ Defining risks related to roles of individuals
- ✓ Deposit-friendly text for ethics, informed consent
- ✓ Data access agreements
- ✓ **Research Data Risk Matrix**



# Fair Enablers



Findable



Accessible



Interoperable



Reusable



SIMON FRASER  
UNIVERSITY

## Sensitive Data

- ✓ **FRDR-aligned project** to support sensitive data
- ✓ Exploring viability of zero-knowledge encryption in an RDM context
- ✓ Developing tools to encrypt packages at time of deposit
- ✓ Supporting metadata-only review and discovery of sensitive datasets.

# Fair Enablers



Findable



Accessible



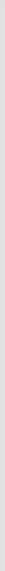
Interoperable



Reusable

## Other areas of activity

- Preservation workflow
- National network of curation support
- Training and outreach activities
- Governance – Dataverse & FRDR
- Increased engagement with domains



# RDM in Transition



Government of Canada

CANARIE



canarie

Canada Foundation  
for Innovation

**INNOVATION.CA**

CANADA FOUNDATION FOR INNOVATION | FONDATION CANADIENNE POUR L'INNOVATION

Research Data Canada

**RDC**  **DRC**

Research Data Canada - Données de Recherche Canada

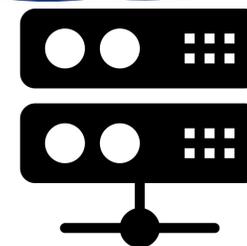
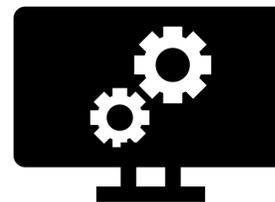
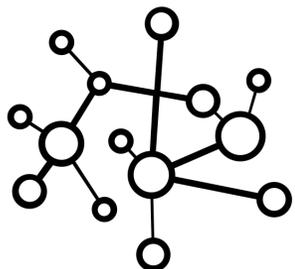
Canadian Association  
of Research Libraries



Compute Canada



compute  
canada | calcul  
canada



Digital Network for  
Research and Education

Data  
Management

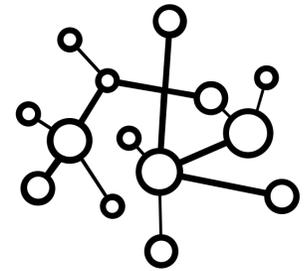
Research  
Software

Advanced  
Research  
Computing

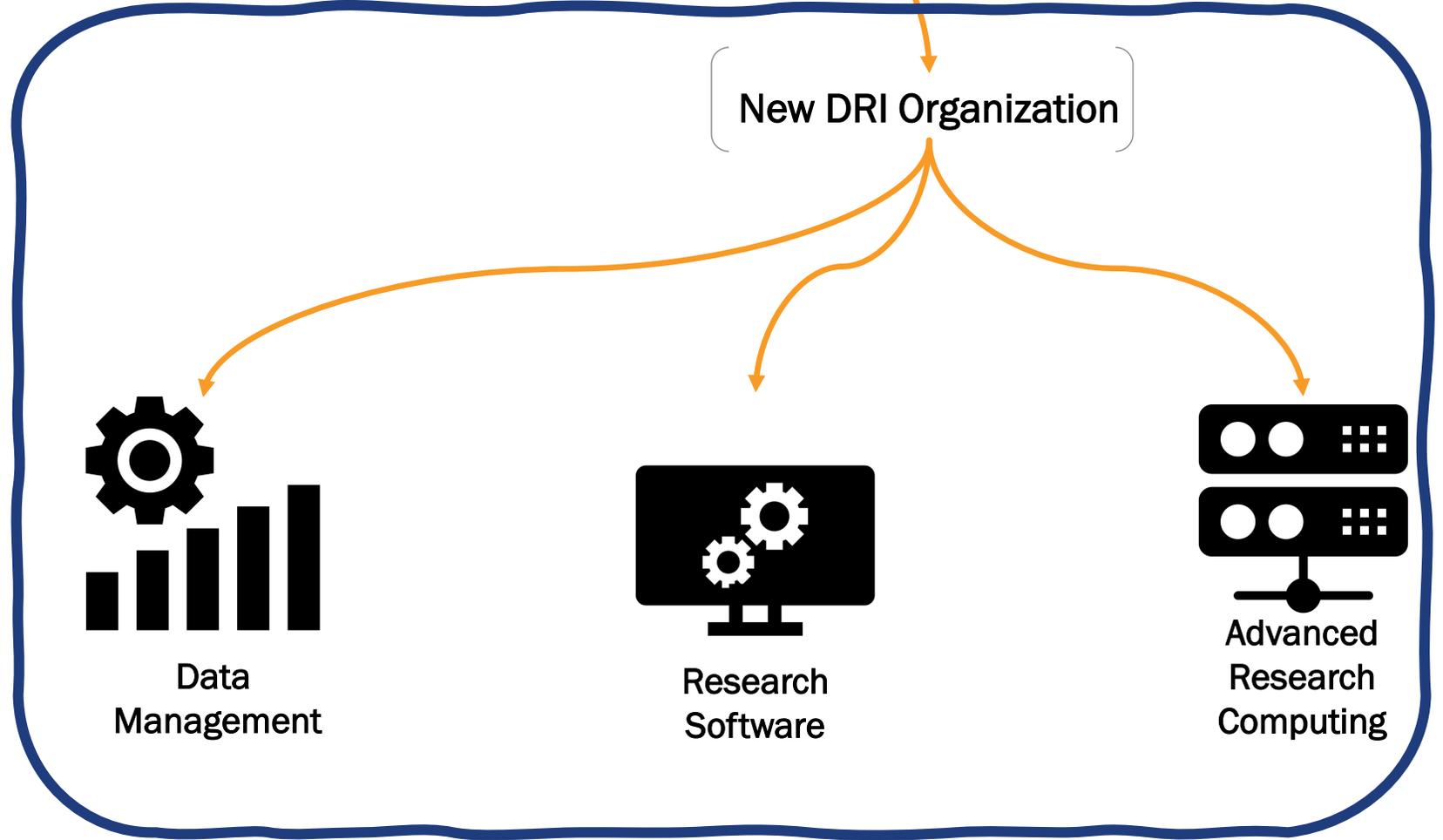
Current DRI Landscape

Network by Meaghan Hendricks from the Noun Project  
data management by Creative Stall from the Noun Project  
Software by mr. logitec from the Noun Project  
Server by Graphic Tigers from the Noun Project

 Government of Canada



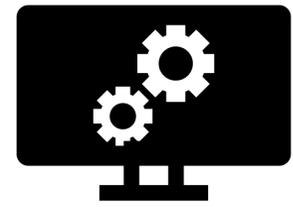
Digital Network for  
Research and Education



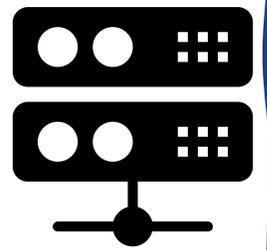
New DRI Organization



Data  
Management



Research  
Software



Advanced  
Research  
Computing

Moving toward a new DRI organization

# Key transition priorities for Portage



## National Data Stewardship Support

Providing coordinated support at the  
national level



## RDM Platform Support and Development

Develop and operationalize national,  
collaborative RDM platforms and  
services

# National Data Stewardship Support



**Erin Clary**  
Preservation  
Coordinator



**Beth Knazook**  
Preservation  
Coordinator



**Kelly Stathis**  
Discovery  
&  
Metadata  
Coordinator



**Melanie Parlette-Stewart**  
Training  
Coordinator



**Caitilin O'Hare**  
Communications  
Officer



**Veronica Amirault**  
Project  
Manager



**Jennifer Abel**  
Project Officer



**Lee Wilson**  
Service Manager



Nora



**Jeff Moon**  
Director

# RDM Platform Support & Development



## Partners



DMP Assistant  
[Sign In](#) [Sign Up](#)



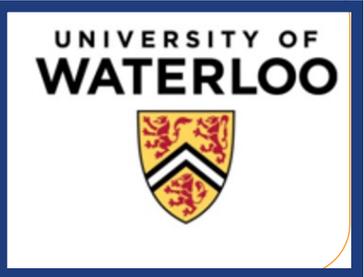
FRDR Archival Storage



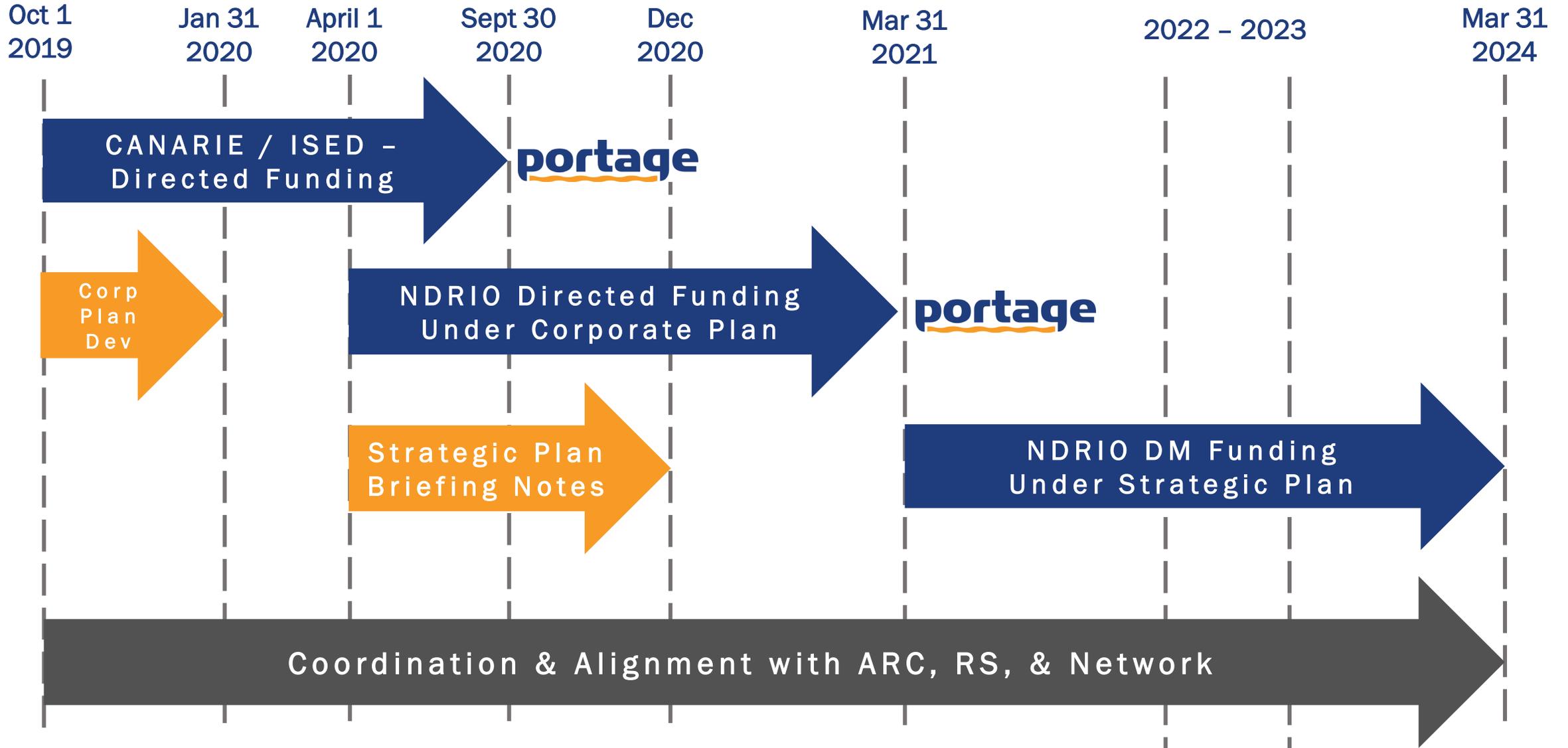
FRDR Project Lead



FRDR Host Sites



# DM Timeline for transition to NDRIO



# Looking Forward

- Improving discovery
- Developing & deploying a national RDM training strategy
- Growing a national network of data curation support
- Supporting the evolution of national preservation services
- Addressing issues related to sensitive data
- Working closely with domains to address discipline-specific issues
- Advancing repository certification efforts in Canada

# Portage

“I was at the tracks recently and won a tidy sum on a horse named Portage”



**Simon Hodson**  
Executive Director  
CODATA





CARL Library Directors  
(and others) decided  
to back Portage...

...and this backing has paid off well in serving  
the RDM needs of researchers and institutions

# Thank you to our partners

CARL Portage is supported by directed funding from Innovation, Science & Economic Development Canada (ISED), flowing through CANARIE



Innovation, Science and  
Economic Development Canada  
Innovation, Sciences et  
Développement économique Canada



canarie



Network of Experts





portagenetwork.ca

**Jeff Moon**

Director, Portage Network

Email: [portagedir@carl-abrc.ca](mailto:portagedir@carl-abrc.ca)

Questions?