

Results of the CARL DPWG Survey of

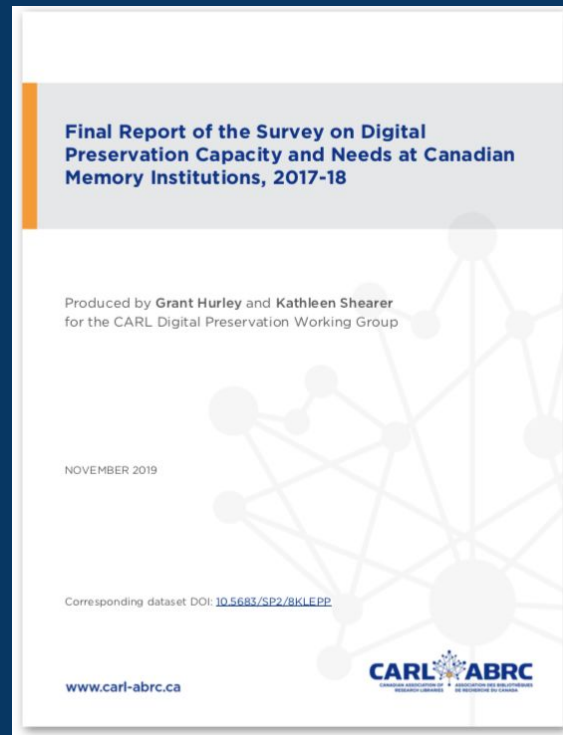
# Digital Preservation Capacity and Needs

at Canadian Memory Institutions

Grant Hurley  
Digital Preservation Librarian, Scholars Portal  
January 23, 2020

# Outline

- Introductions
- Goals/context
- Key findings
- Acknowledgements
- What's next?



# Who does this voice belong to?

- Born-and-raised New Brunswicker
- Plenty of graduate school at UBC
- Digital preservation support + services go-to person at [Scholars Portal](#) since 2016
- [DPWG](#) member since 2017



He/him pronouns

Twitter: [@GrantHurley](#) (semi-active)

[www.granthurley.ca](http://www.granthurley.ca)  
(occasional blog post)

# Goals of the DPWG Survey

- Establish a clearer picture of the current state of digital preservation activities among memory institutions in Canada
  - Last similar surveys in Canada were conducted by [CHIN in 2011](#) and Allana Mayer in [2013/14](#)
- Identify gaps in capacity and needs at institutions
- Help inform future resource commitments, research projects, and opportunities for collaboration in Canada

# Context

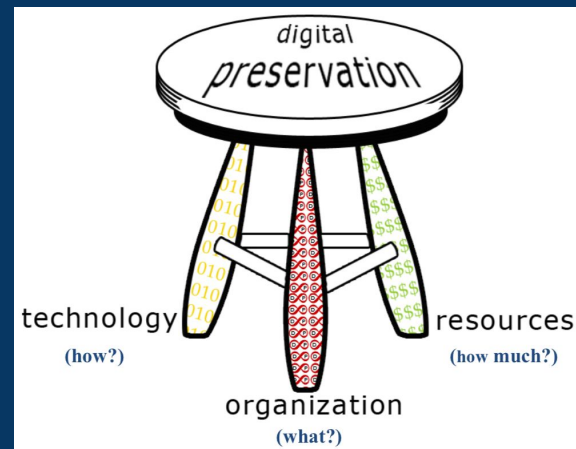
One definition of “digital preservation”:

“The series of managed activities necessary to ensure continued access to digital materials for as long as necessary” ([Digital Preservation Coalition](#), 2016)

# Context

Inspired by Anne Kenney and Nancy McGovern's "three-legged stool" metaphor for digital preservation:

- Organization (commitment, policies, planning)
- Technology (hardware, software, networks)
- Resources (staff, skills, money)



# Survey Timeline

- Summer 2017: Survey development
- October - December 2017: Phase 1 - CARL members
- August - September 2018: Phase 2 - broader set of Canadian memory organizations
- December 2018 - January 2019: Updates from Phase 1 respondents

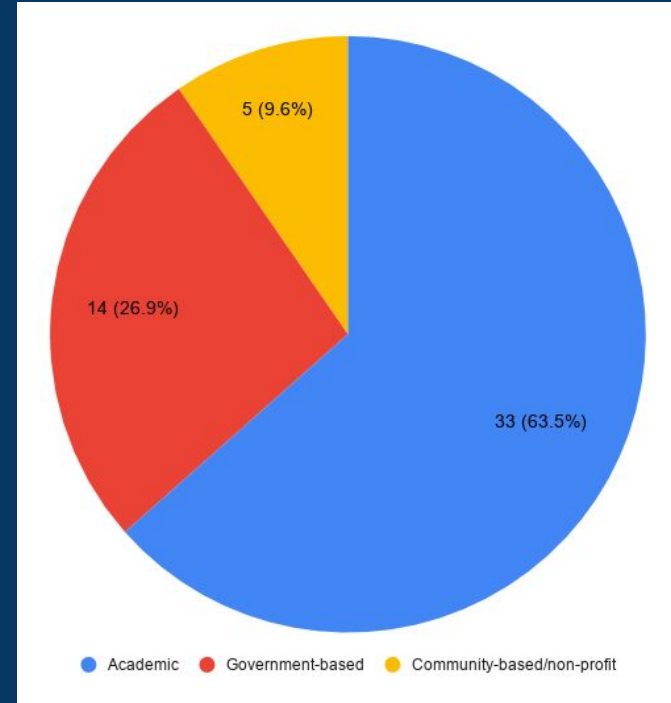
## Reporting

- Presentation at [@Risk North 2](#) forum, November 2018
- Publication of [Phase 1](#) and [Phase 2](#) interim reports, December 2018
- Publication of final report ([English](#) & [French](#)) & [accompanying dataset](#), November 2019

# Respondents

52 respondents in total

- 26 academic CARL members (52%)
- 7 academic libraries not members of CARL (13%)
  - 33 respondents in total from the academic sector (63% total)
- 14 government-based organizations (25%)
  - Includes 1 CARL member
- 5 community-based/non-profit organizations (10%)





# Structure

- Collections
  - Organizational commitment
  - Policies/procedures
  - Tools/applications
  - Access
  - Storage
  - Funding
  - Concluding questions
- 
- Set of 'gaps and challenges' responses for key sections

Okay, time for facts

All respondents have digital collections,  
and quite a lot of them

# Collections

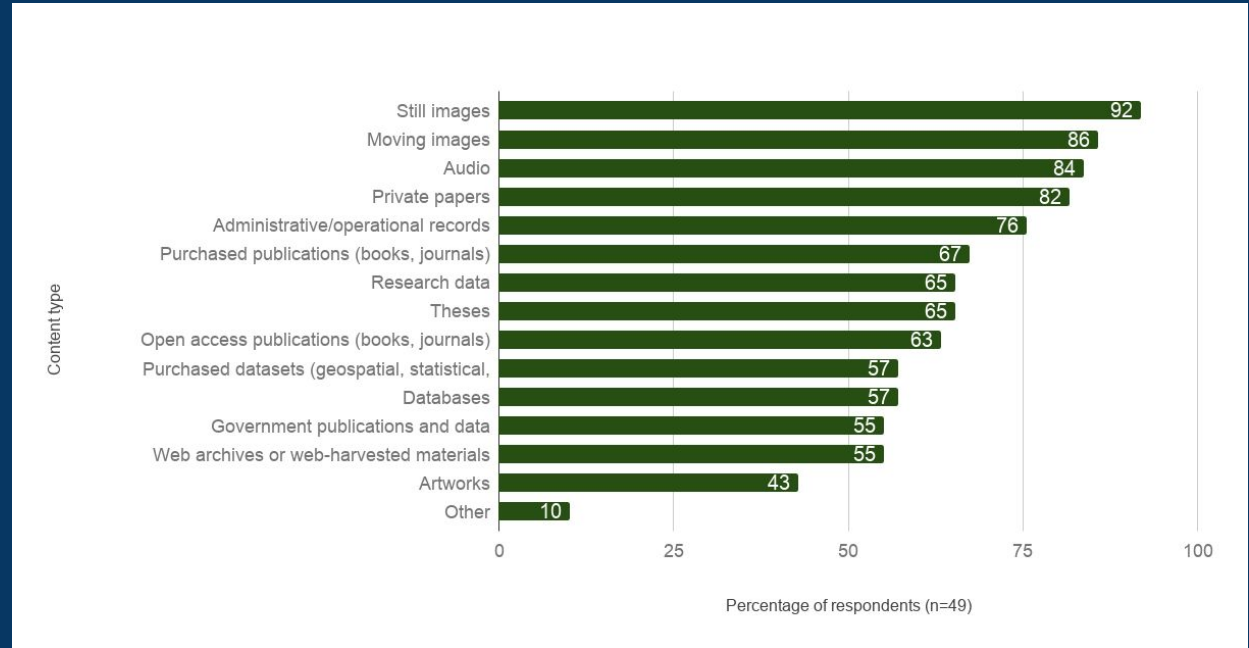
- All respondents have digitized materials in their collections
- 94% are acquiring born-digital materials
- Those not acquiring born-digital materials: say they do not have preservation capacity

# Collections

- The median amount of collections data in storage per respondent was **20 TB**
- 45 respondents (87%) could give an approximate quantity of data in storage:
  - 0-10 TB (17 respondents)
  - 10-100 TB (21)
  - 100-400 TB (6)
  - 3720 TB (1)

# Collections

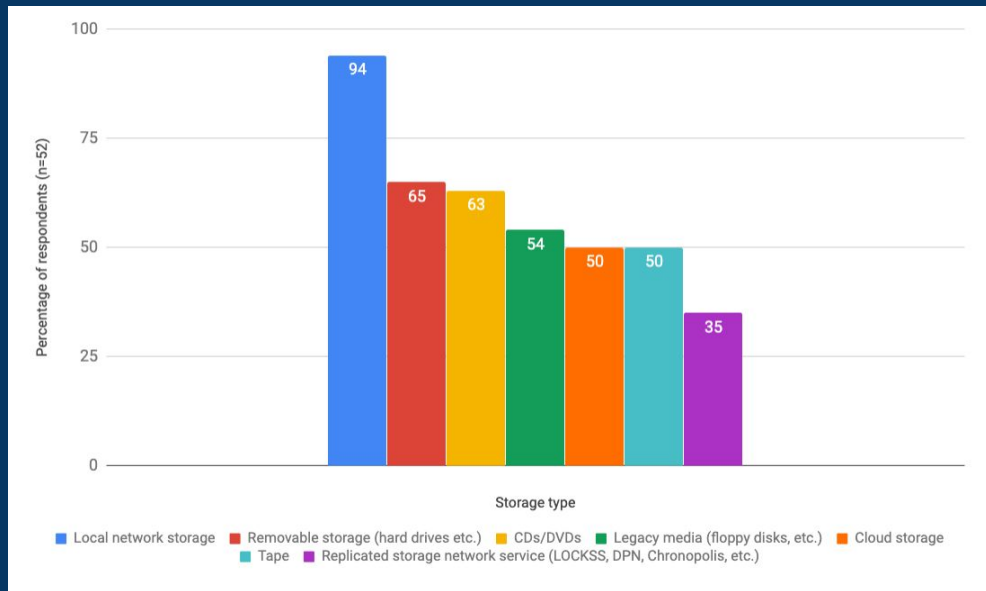
## Content types in collections



In general, these collections are not  
being managed according to  
preservation-friendly practices

# Storage

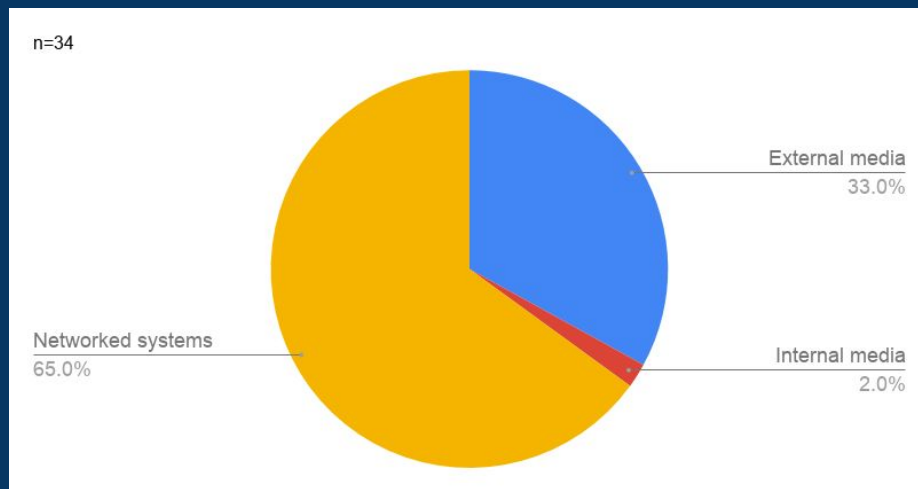
- Most respondents are relying on:
  - Local servers
  - External media (e.g. hard drives)
  - CDs/DVDs
- 81% selected one of these
- 38% selected all three
  
- Fewer institutions are using preservation-friendly storage methods (cloud, tape, replicated networks)
  - 50% and below selected at least one of these as an option





# Storage

- 33% of assets stored, on average, on external media like hard drives, disks, etc.
- 2% of assets on internal media, like a donor's personal computer
- 29% are using tools for digital forensics



# Tools for Preservation

- 21% of respondents overall are using any one tool for preservation processing in production
- But 96% provide access to digital materials under their care
- Problem: if you lose it, you can't provide access to it

Very few people are doing this work in  
Canada

# Staffing

On average, staff with responsibilities for digital preservation represent 0.77% of all staff FTEs at respondent organizations

***For every 100 staff members at an organization, less than 1 of them is supporting digital preservation work***

# Staffing

- 38% of respondents have the equivalent of one full-time individual supporting digital preservation work across **all staff** listed with responsibilities in this area
- 18% have at least 1 full-time individual supporting digital preservation work
- 48% of roles listed had between 0 and 20% FTE assigned

# Staffing

- 48% (25 respondents) said they expected to increase staffing through new hires or reassignment

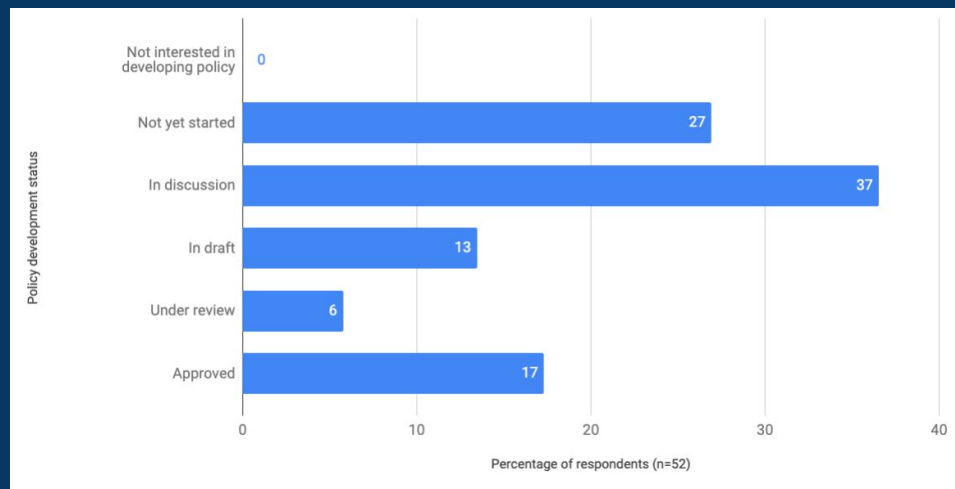
The following methods for increasing staffing were selected:

- Both new hires and assigning current staff (10 respondents, 40%)
- Reassigning current staff only (8, 32%)
- New hires only (7, 28%)

Policies and procedures are not being documented

# Policies

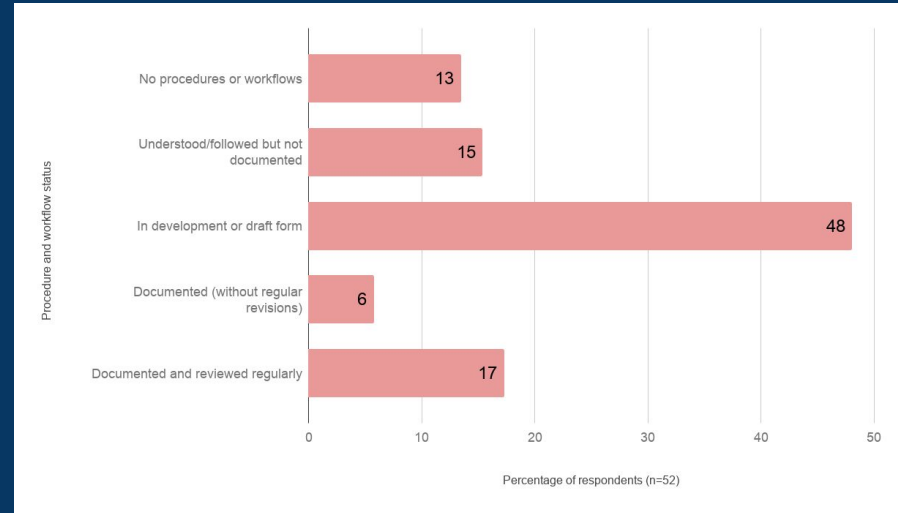
- 17% have published digital preservation policies
- 19% have policies under review or in draft form





# Procedures and Workflows

- 23% have procedures that are documented
- 48% have procedures in development or draft form



# Areas of preservation concern:

“What digital assets do you wish you could preserve but currently cannot?”

- Web-based content (12 mentions)
  - Public, internal websites, websites of student organizations, local news
- Organizational records (8)
- Research data (5)
- Digital audiovisual carriers (5)
- Email (3)

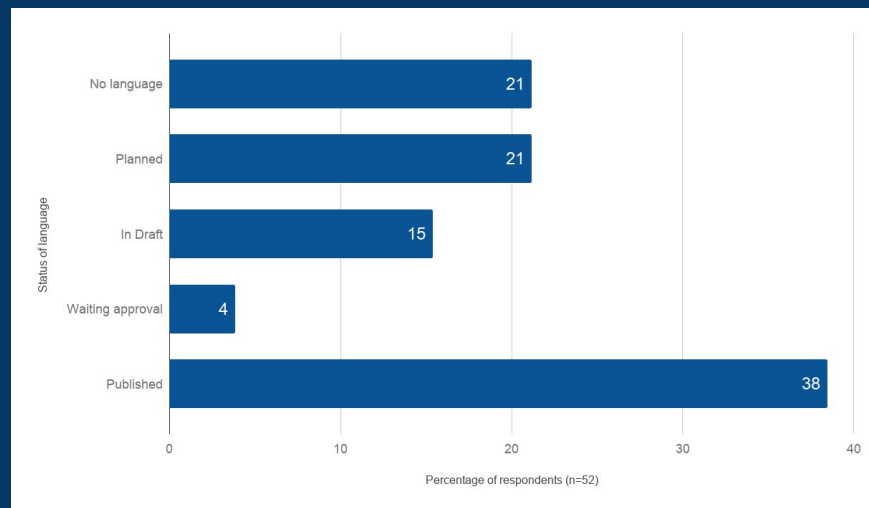
# Top 5 “gaps and challenges” selected

1. Policy: Lack of time/resources for policy development (41 respondents, 79%)
2. Staffing: Lack of funding for new positions (40, 77%)
3. Procedures and workflows: Lack of time/resources for procedure documentation (39, 75%)
4. Organization: Lack of resources to pursue organizational change (33, 63%)
5. Tied:
  - a. Forensics: Lack of staff knowledge/skills (28 respondents, 54%)
  - b. Preservation processing tools: Lack of money to support tools (28%, 54%)

Some good news

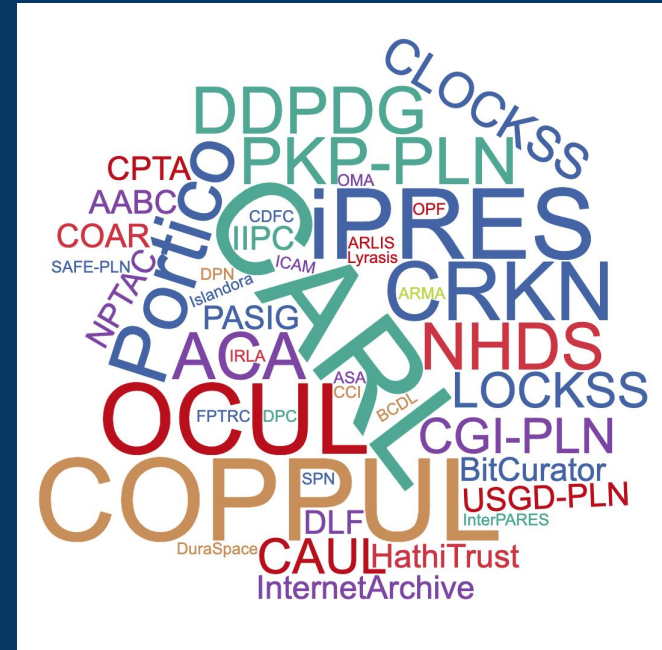
# Organizational Commitment

- 79% of respondents (41) have some kind of language expressing commitment to digital preservation published, waiting approval, drafted or planned
  - For example, language in a strategic plan, mission statement, etc.
- 81% have an individual or group responsible for coordinating digital preservation activities across the organization



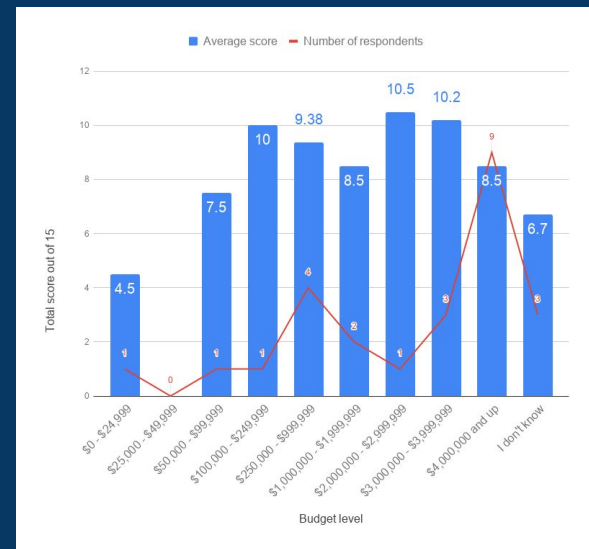
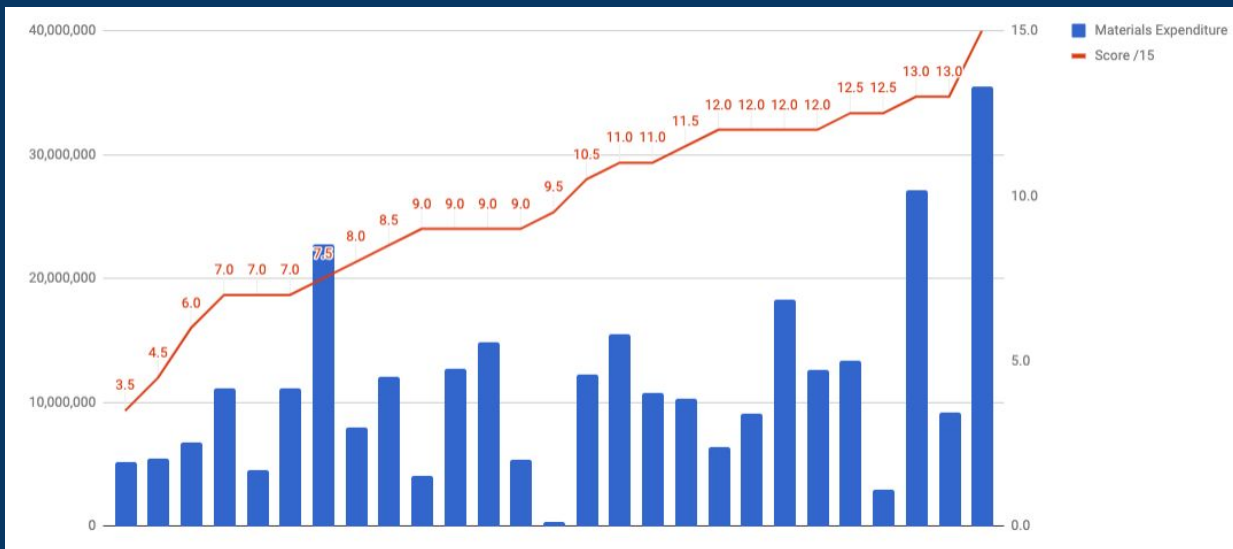
# Organizational Commitment

- 75% (39) indicated participation in regional, national, or international organizations, conferences or projects specific to digital preservation
- There are lots of collaborative things happening:
  - 49 distinct entities were mentioned by respondents
  - 44% of these were mentioned just once



# Capacity vs. Resources

You don't have to be a big or well-resourced institution to do digital preservation



Overall score against materials expenditures, CARL members (left) and budget ranges (right)

# Summary

- **Strengths:**
  - Organizations seem to be at least committed on paper
  - There are many opportunities for collaboration
  - More procedures are 'in draft,' which isn't a bad thing
  - While being a well-resourced institution can help build a program, it is not a requirement for doing so
- **Weaknesses:**
  - Low uses of preservation-friendly storage infrastructures and tools for processing
  - Very low staffing to do digital preservation work
  - Policies are not well-established



# Up next for the DPWG

New subgroups for 2020:

**Policy:** Investigating the digital preservation policy “stack”; opportunities for inter-institutional policy support and sharing. Lead: Geoff Harder

**Infrastructure:** Scoping out infrastructures on local, regional, provincial levels with the goal of integrating or coordinating services at a national level. Lead: Steve Marks

**Staffing:** defining staff roles and identifying applicable and successful job descriptions for supporting digital preservation work. Lead: Lara Wilson

# Acknowledgements

My deep appreciation goes to:

- The survey respondents for taking the time to answer our questions
- DPWG members for their feedback and encouragement
- CARL for their support - especially Lise Brin for administering the survey
- Kathleen Shearer, the report co-author, for her sage advice and editing skills
- Jonathan Dorey for his excellent translation of the report into French

# Questions?

- Did these findings surprise you or confirm your own experiences?
- How do these findings resonate with your own institutional context?
- Potential further research: for the institutions meeting their preservation goals, how did they build preservation programs?

Reach out!

[grant@scholarsportal.info](mailto:grant@scholarsportal.info)