



Passing the Puck: Taking National Action on Digital Preservation in Canada

Grant Hurley and Corey Davis

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Land acknowledgements

We acknowledge with respect the Lekwungen peoples on whose traditional territory the University of Victoria stands and the Songhees, Esquimalt and WSÁNEĆ peoples whose historical relationships with the land continue to this day.

Tkaronto (Toronto) is the traditional territory of many nations including the Mississaugas of the Credit, the Anishnabeg, the Chippewa, the Haudenosaunee and the Wendat peoples and is now home to many diverse First Nations, Inuit and Métis peoples. Toronto is covered by Treaty 13 signed with the Mississaugas of the Credit, and the Williams Treaties signed with multiple Mississaugas and Chippewa bands.



Introductions...



Corey Davis, Digital Preservation Librarian,
University of Victoria | Visiting Program Officer,
Canadian Association of Research Libraries



Grant Hurley
Digital Preservation Librarian, [Scholars Portal](#)



Building the rink

- Canadian Association of Research Libraries' [Digital Preservation Working Group](#) (DPWG) struck in 2016
- Initial goals
 - Survey on digital preservation readiness (up next!)
 - National forum on digital preservation - [@Risk North 2, Montreal 2018](#)
 - Web archiving community of practice - [CWAC](#)
 - Awareness and advocacy strategy



Getting to know the team

DPWG survey goals:

- Establish a clearer picture of the current state of digital preservation activities in Canada
- Identify gaps in capacity and needs at institutions
- Help inform future resource commitments, research projects, and opportunities for collaboration in Canada



Survey Timeline

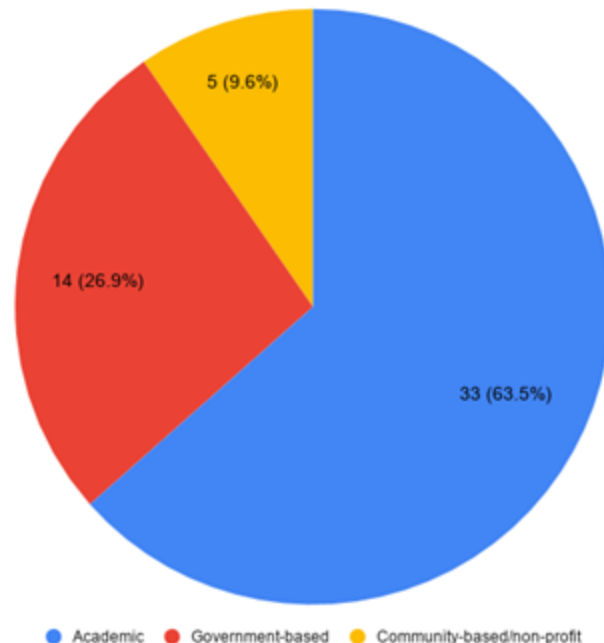
- Summer 2017: Development
- October - December 2017: Phase 1 - CARL members
- August - September 2018: Phase 2 - Broader set of Canadian memory organizations
- December 2018 - January 2019: Updates from Phase 1 respondents
- Publication of [Phase 1](#) and [Phase 2](#) interim reports, December 2018
- Publication of final report of the *Survey on Digital Preservation Capacity and Needs at Canadian Memory Institutions, 2017-18* ([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%)
- 5 community-based/non-profit organizations (10%)



Academic library sector in Canada

- 75 academic members of [Canadian Research Knowledge Network](#)
 - Member student Full Time Equivalents (FTEs) from ~500 to 87,000+
- 29 largest Canadian research libraries are members of CARL
 - Member student FTEs from ~8,000 and up
 - Average = ~30,000 full time students ([source](#))

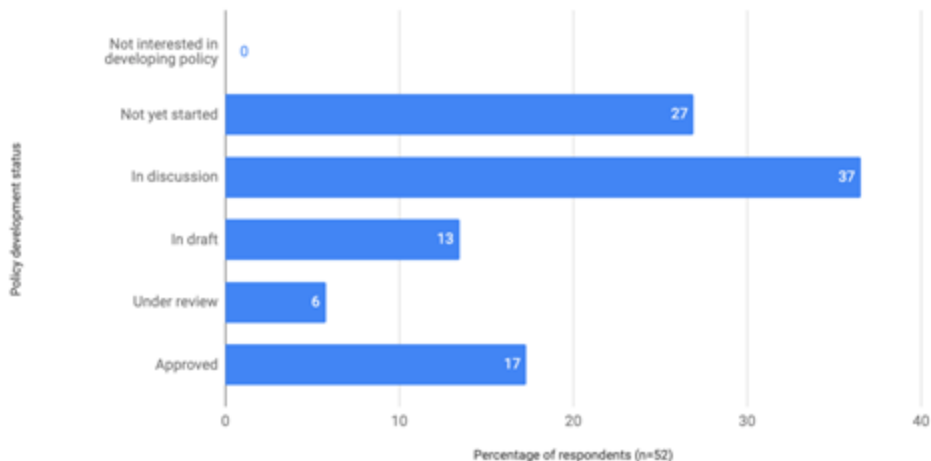


Organizational commitment

- 38% have language that **expresses a commitment** to digital preservation published in a strategic plan, mandate or mission statements
 - Another 40% have plans to make this happen
- 81% have an individual or group responsible for **coordinating digital preservation activities** across the organization
- 44% have a committee or working group related to digital preservation



Policies and procedures

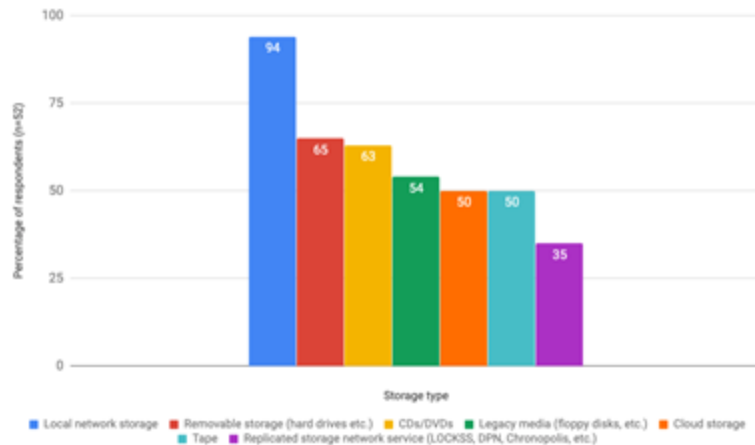


- 17% have an **approved digital preservation policy** or set of policies
- 71% have some form of **workflow/procedure documentation**



Storing digital collections

- **All** respondents have digital collections
- Median amount of collections data in storage:
20 TB
- **Most** commonly used storage methods:
 - Local servers (94%)
 - CDs/DVDs (65%)
- **Least** commonly used storage methods:
 - Cloud (50%)
 - Tape (50%)
 - Replicated storage services (eg. LOCKSS) (35%)



Doing the work: Preservation processing tools

- 21% of respondents overall reported using any one tool for **preservation processing (in production)**
 - Another 27% reported using at least one such tool in a **testing capacity**
- 29% respondents are using tools for **digital forensics**



Doing the work: people

On average, **staff with responsibilities for digital preservation** represent 0.77% of all staff Full Time Equivalents (FTEs) at respondent organizations

- *For every 100 staff members at an organization, less than 1 of them is supporting digital preservation work*
- 18% reported at least 1 full-time individual supporting digital preservation work
- 48% of the 166 roles listed with FTE values had between 0 and 20% FTE assigned
- 28% of job titles listed belonged to senior administrators



Top “gaps and challenges”

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



A good summary from one respondent

“Our challenges include devoting staff resources, obtaining sustainable long-term storage and infrastructure, formalization of policies, and development of partnerships locally, regionally, and nationally.”



Some good news

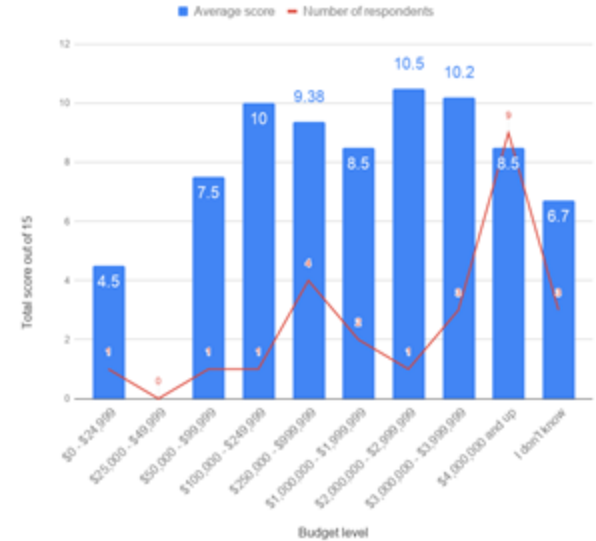
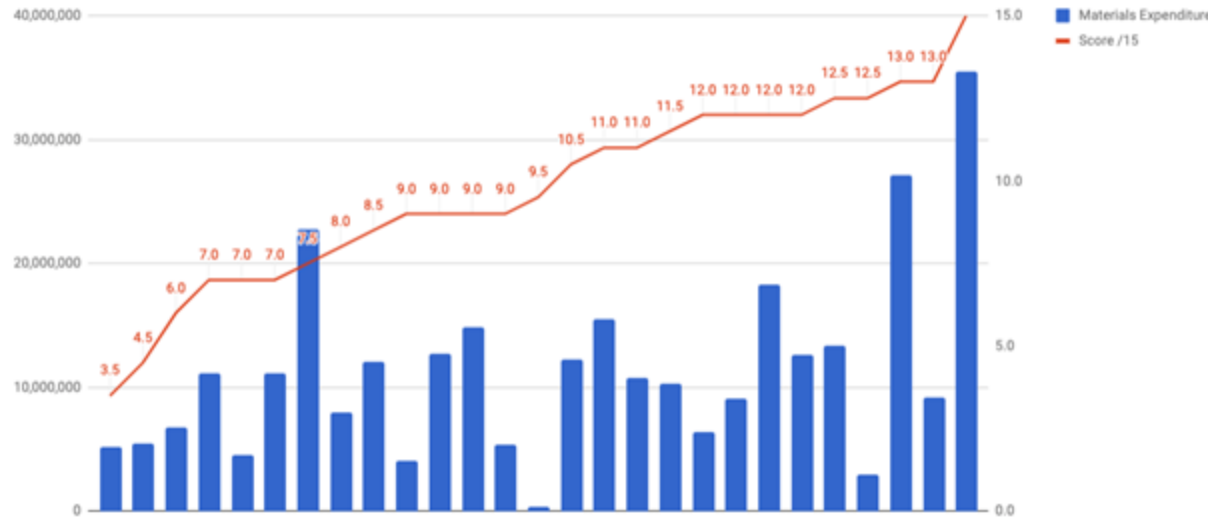
75% indicated participation in regional, national, or international organizations, conferences or projects specific to digital preservation

- 49 distinct entities were mentioned



Some good news

- There was no relationship between large well-resourced organizations and the extent of their digipres activities



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

Recap

- Pockets of expertise and well-developed capacity among a handful of respondents
 - 8% of respondents with well-developed capacity, and another 23% right behind them in the medium-high area
- 70% of respondents with low capacity or work in progress
 - Policies, procedures, statements of mandate/commitment in draft
 - Tools, workflows in testing
 - Preservation-friendly storage infrastructures not yet operationalized
 - Staff members for whom digital preservation work is “side of the desk”



An emerging national strategy...



Digital Preservation Working Group

“...assessing digital preservation capacity, available resources, and funding opportunities... identifying and promote relevant approaches, standards, practices, and technologies, and liaise with relevant international efforts...”

Four key areas:

1. Infrastructure
2. Policy
3. Capacity
4. + Web Archiving



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Infrastructure

- Identifying gaps to ensure national coverage
- **Scaling** institutional and regional infrastructure (technically and through agreements)
- A focus on **repositories**, **preservation processing**, and **storage**



Examples

Ontario Library Research Cloud (OLRC)

- “[...] collaboration of Ontario's university libraries to build a high capacity, geographically distributed storage and compute network.”
- Building ‘nodes’ outside of Ontario and looking at agreements to extend service nationally

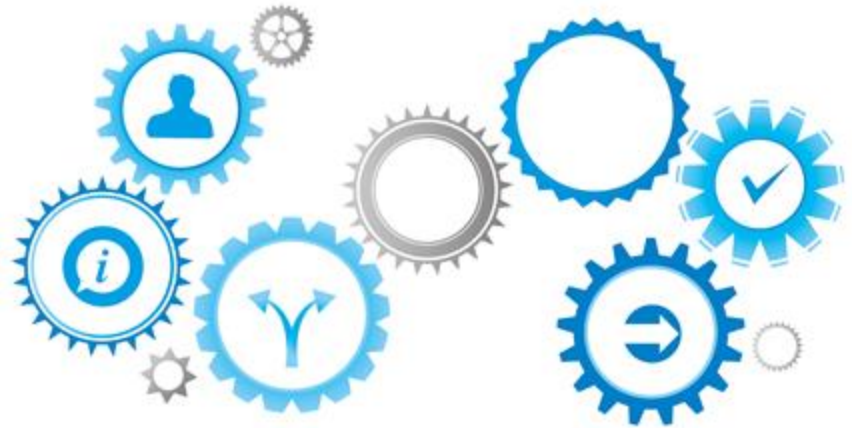
Archivematica-as-a-Service (AaaS)

- Offering Archivematica in through COPPUL in Western Canada in partnership with Artefactual and UBC
- Expanded to include the Maritimes in an attempt, with Scholars Portal, to ensure national coverage



Policy

- **Institutions need help formalizing policy**
- Undertaking an environmental scan and policy analysis
- Creating a toolkit to help institutions develop effective policy
- **Some policy roadblocks related to capacity, etc.**



Capacity

- Focusing on getting more human resources dedicated to digital preservation
- Analysis and sharing of position descriptions
- Interviews w/ leadership at exemplar institutions



Web Archiving

Established the Canadian Web Archiving Coalition (CWAC)

- “...an inclusive community of practice [that] explores gaps and opportunities that can be addressed by nationally coordinated strategies, actions, and services...”
 - Consortial discounts on tools
 - Information sharing (community calls, webinars, listserv)
 - National preservation strategy for Archive-It
 - A forum for academic institutions and national libraries to communicate



Hat trick?

- The survey informed a three-part framework for a national digital preservation strategy: **Policy, Infrastructure and Capacity/Staffing**
- These areas of focus can be further built upon by:
 - Communities of practice (e.g. web archives, RDM) nationally, regionally
 - Regional-level services, training, coordination
 - Institution-level operationalization, stewardship over collections
- Effective teams know the strength of their players



Thanks everybody!

Grant Hurley <grant.hurley@utoronto.ca>

Corey Davis <coreyd@uvic.ca>

