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Canadian Institute for Historical Microreproductions (CIHM) / Institut canadien de microreproductions historiques (ICMH)

www.erpanet.org

ELECTRONIC RESOURCE PRESERVATION AND ACCESS NETWORK

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Executive Summary

Digitisation, preservation and the provision of access to early Canadian printed materials (1558-1920) are the core activities of the Canadian Institute for Historical Microreproductions (CIHM). To date, over 90,000 titles are available on microfiche. Since 1999, CIHM have had an online presence via the Early Canadiana Online project that enables access to over a million digitised pages from 8,500 publications.[6] Digitisation activities have been undertaken primarily to increase access and distribution. Microfiche remains the National Library of Canada's media of choice for preservation while digital versions, for the time being, are seen as additional backup preservation copies. However, CIHM predicts that digital reproductions will eventually replace microfiche for both access and preservation. As such, they are working towards establishing a flexible environment that will be capable of sustaining long-term readability of their digital resources. This case study examines some of the efforts being made by CIHM to achieve this.

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[6] http://www.canadiana.org/eco/english/collections.html.

Chapter 1: The ERPANET Project

The European Commission and Swiss Confederation funded ERPANET Project[1] (Electronic Resource Preservation and Access Network) works to enhance the preservation of cultural and scientific digital objects through raising awareness, providing access to experience, sharing policies and strategies, and improving practices. To achieve these goals ERPANET is building an active community of members and actors, bringing together memory organisations (museums, libraries and archives), ICT and software industry, research institutions, government organisations, entertainment and creative industries, and commercial sectors. ERPANET constructs authoritative information resources on state-of-the-art developments in digital preservation, promotes training, and provides advice and tools.

ERPANET consists of four partners and is directed by a management committee, namely Seamus Ross (HATII, University of Glasgow; principal director), Niklaus Bütikofer (Schweizerisches Bundesarchiv), Hans Hofman (Nationaal Archief/National Archives of the Netherlands), and Maria Guercio (ISTBAL, University of Urbino). At each of these nodes a content editor supports their work, and Peter McKinney serves as a co-coordinator to the project. An Advisory Committee with experts from various organisations, institutions, and companies from all over Europe give advice and support to ERPANET.

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[1] ERPANET is a European Commission funded project (IST-2001-32706). See www.erpanet.org for more details and available products.

Chapter 2: Scope of the Case Studies

While theoretical discussions on best practice call for urgent action to ensure the survival of digital information, it is organisations and institutions that are leading the drive to establish effective digital preservation strategies. In order to understand the processes these organisations are undertaking, ERPANET is conducting a series of case studies in the area of digital preservation. In total, sixty case studies, each of varying size, will investigate awareness, strategies, and technologies used in an array of organisations. The resulting corpus should make a substantial contribution to our knowledge of practice in digital preservation, and form the foundation for theory building and the development of methodological tools. The value of these case studies will come not only from the breadth of companies and institutions included, but also through the depth at which they will explore the issues.

ERPANET is deliberately and systematically approaching disparate companies and institutions from industry and business to facilitate discussion in areas that have traditionally been unconnected. With these case studies ERPANET will broaden the scope and understanding of digital preservation through research and discussion. The case studies will be published to improve the approaches and solutions being developed and to reduce the redundancy of effort. The interviews are identifying current practice not only in-depth within specific sectors, but also cross-sectorally: what can the publishing sector learn from the aeronautical sector? Eventually we aim to use this comparative data to produce intra-sectoral overviews.

This cross-sectoral fertilisation is a main focus of ERPANET as laid out in its Digital Preservation Charter.[2] It is of primary importance that disparate groups are given a mechanism through which to come together as best practices for digital preservation are established in each sector.

Aims

The principal aims of the study are to:

- build a picture of methods and match against context to produce best practices;

- accumulate and make accessible information about practices;

- identify issues for further research;

- enable cross-sectoral practice comparisons;

- enable the development of assessment tools;

- create material for training seminars and workshops; and,

- develop contacts.

Potential sectors have been selected to represent a wide scope of information production and digital preservation activity. Each sector may present a unique perspective on digital preservation. Organisational and sectoral requirements, awareness of digital preservation, resources available, and the nature of the digital

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[2] The Charter is ERPANET's statement on the principles of digital preservation. It has been drafted in order to achieve a concerted and co-ordinated effort in the area of digital preservation by all organisations and individuals that have an interest and share these concerns. http://www.erpanet.org/www/content/documents/Digitalpreservationcharterv4_1.pdf.

object created place unique and specific demands on organisations. Each of the case studies is being balanced to ensure a range of institutional types, sizes, and locations.

The main areas of investigation included:

- perception and awareness of risk associated with information loss;

- understanding how digital preservation affects the organisation;

- identifying what actions have been taken to prevent data loss;

- the process of monitoring actions; and,

- mechanisms for determining future requirements.

Within each section, the questions were designed to bring organisational perceptions and practices into focus. Questions were aimed at understanding impressions held on digital preservation and the impact that it has had on the respective organisation, exploring the awareness in the sector of the issues and the importance that it was accorded, and how it affected organisational thinking. The participants were asked to describe, what in their views, were the main problems associated with digital preservation and what value information actually had in the sector. Through this the reasons for preserving information as well as the risks associated with not preserving it became clear.

The core of the questionnaire focused on the actions taken at corporate level and sectoral levels in order to uncover policies, strategies, and standards currently employed to tackle digital preservation concerns, including selection, preservation techniques, storage, access, and costs. Questions allowed participants to explore the future commitment from their organisation and sector to digital preservation activities, and where possible to relate their existing or planned activities to those being conducted in other organisations with which they might be familiar.

Three people within each organisation are targeted for each study. In reality this proved to be problematic. Even when organisations are identified and interviews timetabled, targets often withdrew just before we began the interview process. Some withdrew after seeing the data collection instrument, due in part to the time/effort involved, and others (we suspect) dropped out because they realised that the expertise was not available within their organisation to answer the questions. The perception of risks that might arise through contributing to these studies worried some organisations, particularly those from sectors where competitive advantage is imperative, or liability and litigation issues especially worrying. Non-disclosure agreements that stipulated that we would neither name an organisation nor disclose any information that would enable readers to identify them were used to reduce risks associated with contributing to this study. In some cases the risk was still deemed too great and organisations withdrew.

Chapter 3: Method of Working

Initial desk-based sectoral analysis provides ERPANET researchers with essential background knowledge. They then conduct the primary research by interview. In developing the interview instrument, the project directors and editors reviewed other projects that had used interviews to accumulate evidence on issues related to digital preservation. Among these the methodologies used in the Pittsburgh Project and InterPARES I for target selection and data collection were given special attention. The Pittsburgh approach was considered too narrow a focus and provided insufficient breadth to enable full sectoral comparisons. On the other hand, the InterPARES I data collection methodology proved much too detailed and lengthy, which we felt might become an obstacle at the point of interpretation of the data. Moreover, it focused closely on recordkeeping systems within organisations.

The ERPANET interview instrument takes account of the strengths and weaknesses from both, developing a more focused questionnaire designed to be targeted at a range of strategic points in the organisations under examination. The instrument[3] was created to explore three main areas of enquiry within an organisation: awareness of digital preservation and the issues surrounding it; digital preservation strategies (both in planning and in practice); and future requirements within the organisation for this field. Within these three themes, distinct layers of questions elicit a detailed discovery of the state of the entire digital preservation process within participants' institutions. Drawing on the experience that the partners of ERPANET have in this method of research, another important detail has been introduced. Within organisations, three categories of employee were identified for interview: an Information Systems or Technology Manager, Business Manager, and Archivist / Records Manager. In practice, this usually involved two members of staff with knowledge of the organisation's digital preservation activities, and a high level manager who provided an overview of business and organisational issues. This methodology has allowed us to discover the extent of knowledge and practice in organisations, to understand the roles of responsibility and problem ownership, and to appreciate where the drive towards digital preservation is initiated within organisations.

The task of selecting the sectors for the case studies and of identifying the respective companies to be studied is incumbent upon the management board. They compiled a first list of sectors at the very beginning of the project. But sector and company selection is an ongoing process, and the list is regularly updated and complemented. The Directors are assisted in this task by an advisory committee.[4]

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[3] See www.erpanet.org. We have posted the questionnaire to encourage comment and in the hope that other groups conducting similar research can use the ideas contained within it to foster comparability between different studies.

[4] See www.erpanet.org for the composition of this committee.

Chapter 4: Canadian Institute of Historical Microreproductions (CIHM) / Institut canadien de microreproductions historiques (ICMH)

The Consultative Group on University Research urged the Canada Council to create a preservation-quality microfiche collection of early printed materials (1558 to 1920) about Canada, by Canadians or with a Canadian imprint. In response, the Canadian Institute of Historical Microreproductions (CIHM) was created in 1978. CHIM facilitates access to a consolidated national collection of microfiche that were created and made available to the Canadian library community and the general public as an alternative to the original document for research purposes. Ensuing CIHM projects have concentrated on the digitisation of microfiche to increase access.

Initial investment by the Canada Council in CIHM was $2 million. Since then, the project has been financed through the sale of subscriptions to microfiche and digitised resources, grants from the Department of Canadian Heritage and via fund-raising. CIHM also receives in-kind support from the National Library of Canada. The National Library assumes responsibility for the preservation of the microfiche masters while CIHM maintains the digital version. In the event that CIHM becomes no longer viable, the National Library of Canada will assume responsibility for the care of all CIHM materials.

There are eleven full-time employees at CIHM and almost one third of these have been with the corporation since its inception. The team consists of administration, IT and cataloguing staff. As they are all based in the offices in and around the National Library, they have an opportunity to work closely together and to communicate with each other effectively. CIHM is given advice and guidance by both a Board of Directors and Advisory Committees, which are made up of members of the Canadian Library and Academic Community.

In 1997, the Early Canadiana Online (ECO) pilot project (www.canadiana.org) was funded to create a full text, searchable digital library of primary materials that document Canadian history from the 1500's to 1920. In the first phase of the project 550,000 pages of CIHM's microfiche collection were digitised. The second phase of the Early Canadiana Online project is called Canada in the Making and will involve the digitisation of over 1,500,000 pages of Canadian government documents. The Early Canadiana Online project will digitise materials indefinitely through the initiation of new projects.

The main users of CIHM subscription resources have been the Canadian research community and universities. However, since access to some of the resources has been made possible online via the ECO, usage among the general public and businesses has been increasing. The site currently receives over 2 million hits per month.

Chapter 5: Details and circumstances of the Interviews

Initial contact was made with William Wupplemann, Electronic Systems Specialist who then contacted Magdalene Albert, Executive Director and Judi MacNeil, Cataloguing Coordinator. All three participated in an interview that was held at CIHM offices on January 6, 2004.

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(Note: both French and English versions of the site can be accessed from the above URL)

Chapter 6: Analysis

This section presents an analysis of the data collected during the case study. It is organised to mirror the sequence of topics in the questionnaire.

- Perception and Awareness of Digital Preservation

- Preservation Activity

- Compliance Monitoring

- Digital Preservation Costs

- Future Outlook

Perception and Awareness of Digital Preservation

As the sole mission of CIHM is to preserve and provide access to early Canadian printed materials, all staff members are extremely aware of the importance of digital preservation.

The Main Problems

In practical terms, the main problem for CIHM lies in securing funding. The majority of funding comes from Canadian Heritage grants, subscriptions, and fund-raising activities. As financial resources are not stable, CIHM must constantly be on the lookout for new sources of funding to ensure that they remain viable.

CIHM are keen to see the collective development of workable and effective strategies, practices and standards by the international community. Such guidance would help CIHM ensure the long-term preservation of their digital resources.

Copyright clearance can also be problematic for some CIHM materials, however the majority of documents that CIHM encounter are known to be in the public domain.

CIHM monitors digital preservation activity through participating in discussion groups, attending local conferences and through their close relationships with the National Library of Canada and special interest communities such as the Canadian Initiative on Digital Libraries (CIDL).

Asset Value and Risk Exposure

CIHM resources are often one-of-a-kind and, as such, are invaluable to Canadian heritage. The risk of the loss of this information is well understood by all staff.

Studies into usage patterns[8] and costs[9] were commissioned to compare microfiche and digital documents. The results indicated that many benefits could be gained through digitisation that cannot be achieved through microfiche alone. These benefits

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[8] Joan Cherry and Wendy Duff, Early Canadiana Online Summary of Findings from a Usage Study, Facsimilie No.22 (November 1999): 18
[9] Kingma, Bruce. The costs of Print, Fiche and Digital Access, the Early Canadiana Online Project. D-Lib Magazine 6:2 (February 2000) which is available at http://www.dlib/february00/kingma.html.

include timeliness of resource delivery, increased search options, the potential to add value to the digitised version (e.g., the creation of online lesson plans to complement source documents), reduced physical storage requirements and cheaper production costs. Interestingly, the usage study revealed that researchers mainly access the microfiche collection while the general public primarily uses the online digital materials. This illustrates how online accessibility can often increase and expand the types of users of a given data set.

CIHM is keenly aware that their digital resources will require active management to ensure their long-term survival. All staff interviewed anticipate that digital copies will eventually replace microfiche as both the access *and* preservation versions of the original printed material and, as such, are invaluable.

Regulatory Environment

CIHM is a not-for-profit corporation. They are not subject to any major regulations or legal requirements. The only requirements they must meet are those set out by the Department of Canadian Heritage which states that any material produced through their funding must be freely available to the public in both of Canada's official languages – French and English. They do however have a governing board of directors comprising of research library directors and Canadian scholars to ensure that they remain true to their mandate of preserving access to early Canadian printed materials.[10]

Preservation Activity

Policies and Strategies

While no formal policies exist for the creation and management of digital information, CIHM have created manuals and documentation to ensure that all digitisation efforts are approached in a methodical and thorough fashion. Much of these practices have been developed through trial and error. For instance, previously materials were digitised or filmed and then catalogued. However, it became apparent that with this approach backlogs generally ensue as cataloguing is more time consuming than the capture process. This led to the adoption of the unwritten policy that all materials must be catalogued prior to microfilming or digitisation. This ensures that a full record exists for each item prior to its generation. In addition, manuals and handbooks are created to ensure that these processes are continued as existing staff members leave or new staff join the team. Digital preservation strategies are updated and modified on an on-going basis while microfilming strategies have remained stable for many years.

Selection

Ultimately, all material selected for digitisation must fall under the remit of the CIHM mission statement – namely that it must be an early printed publication (dating from 1558 to 1920) about Canada, by a Canadian or with a Canadian imprint. The advisory committees contain subject specialists who determine which materials should be acquired, filmed and digitised.[11] In addition, the research library community also identifies and prioritises the materials that they feel require preservation

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[10] For a list of board members and advisory committees and members, see http://www.canadiana.org/cihm/cihmbrd.htm.
[11] *Ibid*

treatment. As funding for CIHM is not stable, projects are funded in an ad-hoc manner. The goals for individual projects further define the parameters for the selection of material to be digitised.

Preservation

CIHM are aware of the benefits of applying good metadata to their digital resources. William Wupplemann describes the application of metadata to CIHM resources in Metadata and Early Canadiana Online.[12] This publication explains that CIHM employ an in-house XML Document Type Definition (DTD) that includes full descriptive cataloguing based on AACR2. This is included in the metadata as an XML encoded MARC record along with the full OCR text, and image information (resolution, pixel dimensions and format). The format addresses purpose, content, format, maintenance and preservation. A decision was made that it was far better to record too much information than too little at this stage, as it is easier to go back and remove unwanted data than to add it. Therefore, CIHM add everything that could be useful to their metadata records and can be obtained without unreasonable amounts of effort. This philosophy should stand CIHM in good stead for adapting to future cataloguing developments.

Originally, CIHM used an SGML based format for their metadata records but have since switched to an XML application that is validated against an in-house DTD. The DTD allows easy validation of the XML record after generation and each subsequent modification.

CIHM realise that XML is an open format that is supported by a large range of applications and that it enables their data to be transported across various operating systems and architectures. Even though they capture more metadata than they currently require, the actual XML records need little storage space – just 4 GB of disk space whereas the document images themselves require 120 GB of disk space.

Metadata records are not viewed as static by staff at CIHM. As new technologies in OCR emerge, CIHM expects that some documents will be rescanned resulting in changes to the metadata record. Metadata is stored in a central repository with each authoritative copy of a document. All changes to the metadata are recorded here. In addition, up-to date copies of the metadata records are also stored on the Early Canadiana Online server (which is located on the other side of town from the central repository). Finally, the records are backed up to ISO 9660[13] formatted CD-R disks periodically to ensure that a portable copy of the records is available and can be stored off-site.

The total current holding of digital images was collected on a set of 200 CD-R disks in 2002. As all the CD-R disks are less than 2 years old, the current collection of digital material has not yet required migration. Migration will occur as changing technology dictates. CIHM are confident that their application of XML and their DTD will facilitate migration to any new format that may be chosen in the future.

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[12] For more on metadata application at CIHM, refer to Metadata and Early Canadiana Online by William Wupplemann. CIDL News #9, September 2003. Available at http://www.nlc-bnc.ca/cidl/news-sept03-e.html.

[13] http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=17505&ICS1=35&ICS2=220&ICS3=30.

CIHM avoids the use of proprietary software preferring instead to use open source whenever possible. The ECO site operates using standard Intel hardware that runs Linux. CIHM have also incorporated the use of XML in the development of the static part of the ECO website.

Access

Access to the digitised documents is made available via Early Canadiana Online. Part of the collection is freely available to the general public (around 750, 000 digitised pages) while the remainder is only available through subscription. The majority of subscription holders are university libraries and research bodies.

Access to read-only records is available to all CIHM staff. However, permission to modify records is only available to two CIHM staff members in an attempt to limit the possibility of accidental modification or deletion of records.

Compliance Monitoring

Strict international standards are observed for the monitoring of the microfiche holdings. CIHM currently check online digital images once per year for integrity and perform periodic checks on corresponding metadata. Integrity checks are conducted by in-house staff. A comprehensive check of the offline data, stored to 200 CD-R disks in 2002, has not yet been undertaken. However, it is anticipated that this will henceforth be carried out annually.

Digital Preservation Costs

As the mission of CIHM is to preserve access to early Canadian printed materials, their entire budget is in one way or another directed to preservation. CIHM anticipate that the cost, per-item, to preserve their digital resources will decrease over time as storage technology become cheaper. CIHM have been working towards conducting all digitisation and preservation activity in-house.

As funding for CIHM is not stable, it is impossible to predict future spending on digital preservation at this time. However, if more funding becomes available, CIHM would like to invest more in addressing the long-term sustainability of their digital resources, cost-recovery and increasing production.

Future Outlook

For the time being, CIHM stakeholders are satisfied with the use of microfilm as the primary preservation media. However, CIHM questions the efficiency and effectiveness of using film as a preservation medium and would like to further explore the viability of focusing on digital copies to serve as the main preservation strategy.

CIHM feel that the current strategy will be adequate in meeting the organisation's needs for the next five years. However, they do anticipate that they will run out of room on their current server and will need to migrate to a new, larger server within the next year or two. They also plan to improve the application of access enabling metadata to their resources. CIHM will revise and adjust their strategies as needed and plan to investigate new technologies for preservation.

Chapter 7: Conclusions

It appears that CIHM is in a good position to preserve their existing digital holdings and any new holdings they generate for the foreseeable future. Should CIHM cease to be viable due to a lack of funding, they have adequate provision plans in place to ensure the long-term survival of their digital resources. By adopting recognised standards for the creation and maintenance of their digital data, migration to new formats should require a minimum of effort. Right now, digital preservation efforts undertaken at CIHM are balanced between best practice and realistic goals. However, CIHM has adopted a proactive approach to the long-term preservation of their digital resources and as a result, their digital resources should be available to researchers of Canadian printed heritage for many years to come.

Appendix 1: CIHM Subscription Fees (July 1, 2003 – June 30, 2004)

(http://www.canadiana.org/eco/English/fees.html)

Degree-granting academic institutions		
FTE Students	New Subscription	Renewal
0-2,500	$3,485	$2,785
2,501-5,000	$4,875	$3,900
5,001-7,500	$6,960	$5,570
7,501-10,000	$9,050	$7,240
10,001-12,500	$13,225	$10,585
12,501-15,000	$17,410	$13,925
15,001-17,500	$20,885	$16,710
17,501-20,000	$22,975	$18,380
20,001-25,000	$25,065	$20,050
25,001-30,000	$27,155	$21,725
30,001-	$29,245	$23,395

Other institutions and individuals	
Institution Type	Membership Fee
Elementary/secondary schools, CEGEP (Canadian)	$25 One-time setup fee
Other educational	$55 per 200 FTE students*
Public libraries	$55 per 11,000 residents served*
Research libraries and institutions	Contact us
Other institutions	$55 per 200 FTE employees*
Individuals	$55 flat rate

* Or fraction thereof.

Appendix 2 : Technical Fact Sheet

(www.canadiana.org/eco/english/techfaq.html)

The Collection

Early Canadiana Online consists of approximately 8,500 digitized volumes comprising approximately 1,496,000 scanned page images.

Approximately 795,000 of these images are freely accessible to the general public. The remaining 701,000 images are available to paid subscribers and registered Canadian elementary and secondary schools.

Images

ECO images are digitally scanned from preservation microfiche at a resolution of between 300dpi and 600dpi, depending on the reduction ratio of the source microfiche.

The images are stored as compressed TIFF files with 1-bit (black and white) colour. The size of the average TIFF is 100 KB. The entire image collection fits on approximately 200 CD-ROMs.

Metadata

Metadata is used to provide document-level access through bibliographic searching and page-level access through full-text keyword searching. Metadata is stored in portable XML documents and indexed into the database.

Bibliographic information comes from the MARC record, which is produced from high-quality in-house original cataloguing to AACR2 standards.

Page text is acquired via OCR. The OCR text is scanned using an automated process and is uncorrected. The median confidence rating of the images in the collection is about 90% of the OCR software's maximum confidence.

Hardware and Software

ECO runs on standard commodity Intel hardware running Linux. It uses a combination of customized software developed by isagn and open source software including the Apache Web server and Perl.

Web Site

The static portion of the ECO Web site is developed using XML. The source documents are transformed with XSLT into documents which conform to the XHTML 1.0/Transitional specification. Cascading Style Sheets (CSS) are used for formatting and layout.

The ECO search interface is generated by the application using m4 templates. The interface aims to eventually comply with the XHTML 1.0/Transitional specification and to employ CSS for formatting and layout.

For additional technical information about ECO, please contact us.

Appendix 3: ECO Partners and Subscribers

(www.canadiana.org/eco/english/partners.html)
Note: this list is subject to change and is accurate as of January 2004.

Early Canadiana Online is a community effort. It is made possible by the support and contributions of partners and subscribers. The success of the Canadian Institute for Historical Microreproductions in providing broad online access to a growing number of early Canadian publications is dependent on the contributions of these organizations and individuals.

Partners
The following have contributed to the development of Early Canadiana Online through their generous financial support:

- The Andrew W. Mellon Foundation
- Bibliothèque nationale du Québec
- The Birks Family Foundation
- Canadian Heritage
- The Chawkers Foundation
- Department of Foreign Affairs and International Trade
- George Cedric Metcalf Charitable Foundation
- The Gladys Krieble Delmas Foundation
- The Harold Crabtree Foundation
- Histor!ca Foundation
- Hollinger Inc.
- Hudson's Bay History Foundation
- Human Resources Development Canada
- International Council for Canadian Studies
- IMASCO Ltd.
- Industry Canada
- J.P. Bickell Foundation
- Jackman Foundation
- Library and Archives Canada
- The McLean Foundation
- Millennium Bureau of Canada
- R. Howard Webster Foundation
- Royal Bank Financial Group
- Social Sciences and Humanities Research Council of Canada
- Université de Laval
- University of Toronto Library

Subscribers
A large portion of the funding for the development and maintenance of Early Canadiana Online comes from subscriptions. Subscribers also support and influence the priorities and direction of the Early Canadiana Online project.

Academic Subscriber Institutions
Universities and other research institutions provide critical support to ECO. The following institutions have, through their subscriptions, provided both vital funding as well as direction and support to the project:

- Acadia University
- Athabasca University Library
- Brock University

- Carleton University
- Lakehead University
- Laurentian University
- McGill University
- Memorial University of Newfoundland
- Princeton University
- Queen's University
- Simon Fraser University
- Trent University
- Trinity Western University
- Université de Montréal
- Université de Sherbrooke
- Université de Laval
- University College of the Cariboo
- University of Alberta Library
- University of British Columbia
- University of Calgary Library
- University of Guelph
- University of Manitoba
- University of New Brunswick
- University of Northern British Columbia
- University of Ottawa
- University of Regina
- University of Saskatchewan
- University of Toronto
- University of Victoria
- University of Western Ontario
- University of Windsor
- University of Winnipeg
- Wilfrid Laurier University
- Yale University
- York University

Other Subscriber Institutions

The Canadian Institute for Historical Microreproductions would like to acknowledge the following organizations, whose subscriptions provide funding for ECO and whose participation enables ECO to reach a wider audience:

- Aborigial Affairs Portfolio, Department of Justice Canada
- Archéotec Inc.
- Archives of Ontario
- Art Gallery of Ontario Research Library & Archives
- Banff Centre: Paul D. Fleck Library & Archives
- Bradford West Gwillimbury Public Library
- Canadian Museum of Civilization
- Canadore College
- Chinook Arch. Regional Lib. System
- College of the Rockies
- Commission de la capitale nationale du Québec
- Department of Canadian Heritage, Knowledge Centre
- Douglas College
- Fort McMurray Public Library
- Golden Museum
- Greater Madawaska Public Library

- Halton Hills Public Library
- Heenan Blaikie
- The Historica Foundation of Canada
- Hul'Qumi'num Treaty Group
- Indian and Northern Affairs Canada
- Indian Claims Commission Library
- James A. O'Reilly & Associates, Inc.
- Keyano College Library
- Library of Parliament
- LearnAlberta
- Marigold Library System
- Medicine Hat College Library
- Ministry of the Attorney General, Legal Services Branch, Aboriginal Literature & Research Division
- Mount Royal College Library
- National Archives of Canada Library
- National Gallery of Canada Library & Archives
- National Library of Canada
- Northern Lights College
- Oakville Public Library
- Parks Canada Library
- Peace Library System (includes Grande Prairie Public Library)
- Praxis Research Associates
- Privy Council Office
- Prince Rupert Library
- Provincial Museum of Newfoundland and Labrador
- Public History Inc.
- Public Works and Government Services Canada (Real Property Geomatics Services)
- Rabaska Multimédia Inc.
- Red Deer College Library
- St. Albert Public Library
- Shortgrass Library System (includes Medicine Hat Public Library)
- Toronto Public Library
- Torys LLP
- Treaty & Aboriginal Right Research Centre
- Tseshaht First Nation
- Union of British Columbia Indian Chiefs
- Vaughan Public Libraries

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