

InterPARES 3 Project

International Research on Permanent Authentic Records in Electronic Systems

Title: Case Study 08 – North Vancouver Museum and Archives (NVMA): Case Study Report

Status:	Final (Public)		
Version:	2.4		
Date Submitted:	August 2010		
Last Revised:	October 2010		
Author:	The InterPARES 3 Project, TEAM Canada		
Writer(s):	Cindy McLellan School of Library, Archival and Information Studies, The University of British Columbia		
	Shamin Malmas School of Library, Archival and Information Studies, The University of British Columbia		
Project Component:	Final Report		
URL:	http://www.interpares.org/ip3/display_file.cfm?doc= ip3_canada_cs08_final_report.pdf		

Document Control

Version history			
Version	Date	By	Version notes
1.0	2010-06-01	C. McLellan, S. Malmas	Discussion draft prepared following TEAM Canada Plenary Workshop 06.
2.0	2010-06-25	C. McLellan, S. Malmas	Edits and incorporating feedback.
2.1	2010-06-30	R. Preston	Minor content and copy edits.
2.2	2010-08-22	C. McLellan, S. Malmas	Edits and incorporating feedback.
2.2.1	2010-08-25	C. McLellan	Adding to section E.
2.2.2	2010-08-27	S. Malmas	Adding to section E.
2.3	2010-08-31	C. McLellan, S. Malmas	Edits incorporating feedback from R. Preston.
2.4	2010-10-07	R. Preston	Minor content and copy edits

Table of Contents

A.	Overview
B.	Statement of Methodology
C.	Description of Context
	Provenancial
	Juridical-administrative4
	Procedural
	Documentary
	Technological
D.	Narrative answers to the policy case studies questions for researchers7
E.	Narrative answers to the projects applicable research questions
F.	Bibliography
G.	Conclusions 16
App	pendix 1: NVMA Statement of Purpose
App	bendix 2: NVMA Collections Policy and Conservation Policy
App	bendix 3: Maintaining Your Digital Records
App	endix 4: Maintaining Digital Records: Business Edition
App	bendix 5: Managing E-mail
App	bendix 6: Consider donating your records to North Vancouver Museum & Archives 50
App	bendix 7: Digital Records Acquisition Policy
App	bendix 8: Customizable Versions of Products

Case Study Report

A. Overview

Case Study 08, "The North Vancouver Museum and Archives (NVMA) Policies and Procedures for the Preservation of Electronic and Digital Materials Acquired from Private Donors," has gone through various stages. Originally the case study examined the technological capabilities of NVMA as it prepared to acquire, manage, preserve and provide access to digital records. Specifically, the study considered digital textual records created by the District and City of North Vancouver and by the Commission, as well as materials donated to the Archives. It quickly became apparent that the above mentioned task was not only an enormous undertaking, but outside the mission and mandate of NVMA. Thus, the case study was refocused to better reflect the Archives' responsibility to the community. When the case study was refocused it was noted that the relationship between the Archives and the community records creators is informal. It is understood that the community has a strong sense of NVMA responsibility and accountability to it. The archivist provides records management and preservation advice when it is sought by donors or members of the public. The Archives also offers workshops but, ultimately, contact with the Archives is initiated by the records creators.

The desire to acquire records of community significance reflects NVMA's commitment as a community repository in North Vancouver. To acquire, maintain and preserve the digital records being created by individuals, families, volunteer organizations and small and medium-sized businesses in North Vancouver, NVMA must not only put in place the policies, procedures and technology, it must also begin a dialogue with donors. As the community repository of North Vancouver, NVMA has a responsibility to reach out to the community; in the digital age, educating potential donors is vital.

Through her "Family Recordkeeping" series, NVMA archivist, Janet Turner, was confronted with a desire for increased educational materials from members of various community organizations and prominent North Vancouver families. Without a formal forum to address issues of digital records creation, appraisal and preservation, Turner felt that she was unable to adequately address these community concerns. Current educational materials that address these needs are written for experts in the field. Although comprehensive, these materials are often too complex and are not relevant to community members. Therefore, the need to create formal educational materials targeted at community audiences was realized.

To support the educational needs of NVMA, InterPARES 3 Project Graduate Research Assistants (GRAs) developed a series of four brochures addressing issues related to the creation, maintenance, preservation and potential donation to an archives of digital records. These brochures are written in layperson's language and will be incorporated into the "Family Recordkeeping" series taught by NVMA. The four brochures are titled as follows:

- 1. Maintaining Your Digital Records
- 2. Maintaining Digital Records: The Business Edition
- 3. Managing E-Mail
- 4. Consider Donating Your Records to North Vancouver Museum and Archives

Since these brochures encourage the donation of digital records to NVMA, it became apparent that NVMA's Acquisition Policy needed to specifically address digital records; consequently, the GRAs also created a Digital Records Acquisition Policy to fulfill that need.

In addition, the GRAs created 'generic' versions of the products with the intent of making them available to other institutions. These versions do not contain any references to NVMA or North Vancouver and it is hoped that institutions will adopt them for their own use. It is assumed that as technology changes, these products will be revised and updated accordingly. For example, constant changes in hardware and software will affect how the steps in these brochures are implemented; therefore, it is important that archivists administering these brochures ensure that the brochures are up to date and include relevant examples (e.g., common accepted formats for preservation do not remain stable; thus, this section will need to be revised regularly).

B. Statement of Methodology

Once the case study was refocused, a literature review and search for similar materials was conducted; however, no relevant materials written in layperson's terms were found. With the help of archivist, Janet Turner, the GRAs started creating this material. The GRAs conducted several brainstorming sessions to produce a series of important messages to communicate in the

brochures. Information was gleaned from existing InterPARES 2 Project documents,¹ but significantly simplified to communicate with the target audience.

For the brochure on e-mail management, the GRAs looked to similar resources created by other InterPARES 3 case studies.² For the brochure on digital records donation, the GRAs researched information available on the Web sites of local archival institutions for guidance.³

The brochures were reviewed, edited and modified by InterPARES 3 TEAM Canada researchers over the course of eight months. The templates can be updated and revised as it becomes necessary.

C. Description of Context

<u>Provenancial</u>

NVMA is governed by a Commission of citizens and councillors appointed by the City and the District of North Vancouver. Both the City and District appoint three citizens and designate one councillor to act as members and form the Commission. The President of the Friends of the North Vancouver Museum Society also sits on the Commission.

The NVMA Commission's vision statement is "to provide an appropriate level of museum and archives services, in accordance with accepted contemporary standards and community priorities, for the City and District of North Vancouver."⁴ The mandate of the Commission is "to develop and maintain an appropriate level of museum and archives services, in accordance with commonly accepted standards, to meet the needs and interests of public bodies, corporations and organizations doing business in North Vancouver and private citizens living in the two municipalities."⁵

http://www.interpares.org/ip2/ip2(pub)preserver guidelines booklet.pdf, respectively.

² See: Donald C. Force and Alan Doyle, "Corporate E-mail Guidelines," Workshop 02 Action Item 27, Case Study 10(1) – University of British Columbia School of Music - Policies, Procedures and Tools for E-mail Management and Preservation in an Academic Unit, InterPARES 3 Project, TEAM Canada (v2.3, November 2008). Available at

¹ Specifically, the Creator Guidelines Making and Maintaining Digital Materials: Guidelines for Individuals, and the Preserver Guidelines Preserving Digital Records: Guidelines for Organizations, available at http://www.interpares.org/ip2/display_file.cfm?doc=ip2(pub)creator_guidelines_booklet.pdf and

http://www.interpares.org/rws/display_file.cfm?doc=ip3_canada_cs10-1_wks02_action_27_v2-3.pdf; Leah Pearse, Donald Force and Carolyn Downs, "E-mail Management Guidelines," Workshop 02 Action Item 36, Updated for Workshop 06, Case Study 10(3) – University of Victoria Office of the University Secretary - Policies, Procedures and Tools for E-mail Management and Preservation in an Administrative Unit, InterPARES 3 Project, TEAM Canada (v2.4, April 2010). Available at http://www.interpares.org/rws/display_file.cfm?doc=ip3_canada_cs10.3_wts02_action_36_wts06_update_3-2_pdf

http://www.interpares.org/rws/display_file.cfm?doc=ip3_canada_cs10-3_wks02_action_36--wks06_update_3-2.pdf. ³ Including the following: the City of Vancouver, City of Richmond, Simon Fraser University, and the City of West Vancouver.

⁴ North Vancouver Museum and Archives Commission, "Mandate, Operations and Vision for a New Museum Facility, July 2006," 1.

⁵ NVMA, "About the Museum & Archives." Available at <u>http://www.northvanmuseum.ca/about3.htm</u>.

Although the Commission is responsible for the overall governance of the archives, the day-to-day management of NVMA is fulfilled by Nancy Kirkpatrick, the Director of NVMA. Nancy Kirkpatrick is responsible for the operations of both the Museum and the Archives.

NVMA primarily functions as a community repository and resource centre. This means that the Archives has an informal accountability relationship with the community it serves, and has a public service rather than a business orientation. The community NVMA serves is defined by geographic boundaries, which is mirrored in the Archives' collection policy. The community encompasses the area made up of both the City of North Vancouver and the District of North Vancouver. Members of this community can include individuals, voluntary organization, quasigovernmental organizations, and businesses. NVMA fulfills the recreational and citizenship needs of the community by providing access to community records. In turn, it is understood that the community has a strong sense of NVMA's responsibilities and accountabilities to it.

As part of a public service philosophy, NVMA assists records creators in the maintenance and preservation of their own records, functions as the designated repository for community records, and provides access to community materials.

NVMA's mission statement is as follows: "to preserve and present the heritage of North Vancouver by providing excellence in museum and archives services to the community."⁶

The purpose of the Archives is to act as a community repository. It is not the official archives for either the District or the City. The Archives does not acquire core records (in electronic or other forms) from the City or the District. The City donates paper records more frequently, transferring approximately twelve boxes per year to the Archives, while the District donates between six and seven boxes per year.

<u>Juridical-administrative</u>

NVMA was founded in 1972 as an agency of the City of North Vancouver. On January 1, 1996, operational responsibility was transferred to the NVMA Commission, which was jointly established by the City and District of North Vancouver. Governance is by a Commission jointly controlled by the City and the District of North Vancouver. The NVMA's records that are

⁶ NVMA, "Statement of Purpose," December 2004.

maintained on the District's document management system are subject to District of North Vancouver's Bylaw 7385.⁷

Records created by or in the custody of NVMA must follow applicable provincial and national Freedom of Information and Protection of Privacy legislation. The institution also adheres to copyright legislation and the *Company Act*.⁸

The large majority of records in the custody of the Archives are from individual, family and community organizations who have donated their records to the Archives. Individuals and families are not subject to legal requirements and constraints. However, organizations might have legal recordkeeping requirements if they are a business or a voluntary organization with charitable status. For some organizations, the *Societies Act*, R.S.B.C 1996, and the B.C. *Personal Information Protection Act* (PIPA) apply.

<u>Procedural</u>

The mission of NVMA is to preserve and present the heritage of North Vancouver by providing excellence in museum and archives services to the community. One of the premier documents that guides this mission is the NVMA Collections Policy. The intent of the Collections Policy is to define the nature and scope of the collections to be managed and developed, and to define the professional and institutional standards and procedures by which materials will be acquired, documented, maintained and disposed of by NVMA.

NVMA's key functions include: acquisition and appraisal, arrangement and description, preservation, outreach, training, exhibition, reference services, administration, and student and volunteer supervision.

Outreach is an integral function of NVMA. The Archives works with the public programming section at NVMA; it has a dedicated member of staff (Shirley Sutherland). Although much of this public programming concentrates on Museum activities, the Archives also engages in several events and workshops of its own.

The basic philosophy behind this outreach is that archival knowledge is useful to people who are not archivists. Archival outreach at NVMA takes a number of forms. There are two workshops that are held regularly. "Help for the Family Record Keeper" is very popular within

⁷ Bylaw 7385, also known as the "District of North Vancouver Records Management Bylaw," serves to define records and schedules, and establishes a classification scheme and a retention schedule for all of the records of the District. The Council adopted the bylaw on April 22, 2003.

⁸ Available at <u>http://www.qp.gov.bc.ca/statreg/stat/C/CompanyAct/96062_00.htm</u>.

the community, with good word of mouth. The demographics for this workshop are often seniors, mostly women. The second workshop is "Using Archives," which provides attendees with information about how to do archival research. Additionally, many of the public programs involve outreach with other groups and history/heritage centred organizations, including the Heritage Building Club, the Historical Society, and Capilano University Elder College.

<u>Documentary</u>

As mentioned previously, NVMA does not receive regular accruals of the City's or the District's records. Up to this date, NVMA has acquired a small number of digital records from private donors. The donors have been primarily voluntary organizations. It is anticipated that although the number of digital records acquisitions will increase, the types of records and the activities from which they are created will remain similar to the "paper world."

The records acquired by NVMA include minute books, presentations, reports, photograph albums, newsletters, scrapbooks and digital sound and moving images (particularly of performances). These records are acquired in paper and in digital format on 3.5 inch floppy discs, DVDs, CDs, mini-discs, memory sticks, and as attachments to e-mail. Digital records are acquired in a variety of formats including, but not limited to: WordPerfect, Word, Excel, MPEG-2, LPCM 2, TFF, JPEG, MP3 and PDF.

Technological

NVMA is spread between two buildings. For the purposes of InterPARES 3, research focused on the archival operation only, which is housed in a converted school building at 3203 Institute Road, North Vancouver, British Columbia. This building is shared with administrative offices and public programming facilities. Archival facilities include the archivist's office, a reference room and a vault with compact storage. There is an adjacent room that houses semi-active records of the District, but these holdings are out of the jurisdiction of the archivist.

NVMA currently uses an Eloquent Systems database to house its archival description. This system is maintained by the City of North Vancouver. Turner has been exploring options for moving to new software, probably ICAtom, in the near future. The rest of NVMA's electronic documents are stored in the District of North Vancouver's networked E-Docs management system. Recently, the District has allotted NVMA dedicated server space to the extent of about 300 GB. The server is a RAID 5 configuration that has the support of the IT

department and is subject to the security and backup that the District of North Vancouver provides to all its digital records. Although Turner has expressed concern that this is not adequate server space, it is an improvement from the previous situation. The server will be used for NVMA's archival master tiffs of photographs, for born digital documents, and for digital audio and moving image files.

D. Narrative answers to the policy case studies questions for researchers

The director and staff of NVMA develop draft policies to submit to the NVMA Commission for approval. For example, if a digital records acquisition policy is required, the NVMA archivist will draft it and then consult with Nancy Kirkpatrick, the Director of the NVMA, who will take it to the Commission for approval. If approved by the Commission, the Archivist will implement it.

The Archives, Museum and NVMA Commission develop policies specific to the Museum and Archives, such as the Strategic Plan, Statement of Purpose (see Appendix 1) and the Collections Management and Conservation Policy (see Appendix 2). The City of North Vancouver and the District of North Vancouver, however, make the final decision regarding policies.

The City provides NVMA with financial and HR services, while the District provides the NVMA with IT services. NVMA is subject to City and District policies and procedures in these areas.

Whenever the District Executive Committee is considering an issue that may affect NVMA, the Director may attend and contribute on behalf of the Commission. The City and District appoint members to the Commission, which serves as a liaison between the City, the District and NVMA. NVMA develops goals and then seeks out the means to accomplish those goals within and among the contributing jurisdictions and organizations.

The archivist is not constrained in acquiring community archives by the City's and the District's policies as the archivist has the competency to acquire new acquisitions. Any policies that govern community interactions are developed internally by the Archives.

Policies originate in the department responsible for the activity described by the policy. Collection and other Museum- and Archives-specific policies originate in NVMA or the Commission and are subject to the Commission for approval. Whenever there is overlap between any of the City, District or Museum and Archives concerns, all parties have input. Currently the Museum is undertaking a major review of policies. The archivist is involved in this process.

The City and District delegate authority to the Commission to issue archives policy but, ultimately, the City and District are responsible for all policy that falls under their jurisdiction. The archivist attends Records Committee meetings; however, that participation is informal.

The director of NVMA delegates to the archivist the responsibility for implementing archival policies. The archivist is also responsible for ensuring that all NVMA staff members are aware of the Archives' policies.

NVMA communicates its archives policies to donors and the public through informal conversations and site visits to the donors' houses or organizations. Policies are also conveyed formally through donor agreements signed with NVMA. By signing donor agreements, NVMA is legally obligated to preserve and provide access to the donated records. In addition, the Archives has a moral obligation to the public to preserve community memory.

Once a year, the archivist reports informally to the Commission about recent acquisitions. The NVMA Commission Collection Policy (see Appendix 2) was updated in May of 2007 and it is once again under review.

Daien Ide is the Reference Historian in charge of research and photograph orders in the Archives; she is considered a member of the public programming staff not the archival staff. Janet Turner, Archivist, is in charge of collections and donations and is the only person responsible for processing archival materials. Cecil Halsey is photographer and exhibit preparatory. Bonnie Miller is the receptionist in charge of bookings, registration and information; she is also responsible for graphic design and public relations. Joan Thornley is the membership secretary for the Friends Society and is also responsible for bookings (Bonnie and Joan report to Jan Manaton). Jan Manaton does budget and personnel for the Archives; she is responsible for maintaining records for the Commission, but has no specific archival function.

The primary users of NVMA are the North Vancouver community at large. This includes City and District employees as well as genealogists, writers and researchers of local history, model ship enthusiasts, university and school age students. Internal use of the Archives is also made by Archives' and Museum staff, especially to support the Museum's exhibits and programming services. The number of records received by the archives each year varies. In 2008, for example, the archives received 50 donations, while in 2007 the archives received 85. The number of donations has no relationship to the physical extent of the donations, which vary case-by-case.

The Archives has received floppy disks, sound and moving images, CDs, DVDs and memory sticks. In future, the Archives expects to receive more of the same digital material as well as minutes, photographs, newsletters and scrapbooks. At this time the Archives does not have a formal digital preservation policy; however, the InterPARES 3 GRAs have drafted a Digital Records Acquisition Policy, which will be presented to Nancy Kirkpatrick and the Commission at a later date for approval.

E. Narrative answers to the projects applicable research questions

NVMA is a small archives responsible to its community for collecting, preserving, maintaining and giving access to records that are representative of North Vancouver. This includes acquiring, preserving and allowing access to digital records that are a part of the heritage of North Vancouver. In aiding North Vancouver, by creating a digital records acquisition policy and community outreach materials, many of the Research Questions of the InterPARES 3 Project were directly answered or at least addressed.

How can we adapt the existing knowledge about digital records preservation to the needs and circumstances of small and medium sized archival organizations or programs?

In its role as a community repository, NVMA saw a need to produce effective communication tools for its community members regarding the preservation, management and donation of digital records. In adapting and translating existing guidelines⁹ for the NVMA outreach brochures, the case study demonstrates one way that existing knowledge can be adapted for the needs of small and medium-sized archival institutions. In this case, for existing knowledge to be useful to small and medium-sized archives it needed to be translated into layman's terms. By making the brochures available electronically and fully developed with customizable features, InterPARES 3 is providing useful tools for institutions with limited budgets and limited staff.

⁹ Such as the InterPARES 2 Project's Creator Guidelines: Making and Maintaining Digital Materials: Guidelines for Individuals and Preserver Guidelines: Preserving Digital Records: Guidelines for Organizations, op cit.

How and when should these archives or programs prepare themselves for digital preservation?

To prepare for digital preservation initiatives, small and medium-sized archives must work to build strong relationships with their potential donors, as well as with the management structure within which they operate. Outreach programs and donor education programs build awareness of the archives and the looming issue of digital records preservation. Cultivating strong relationships with funding bodies and the community ensures appropriate resources can be devoted to preservation projects at the archives. Having policies and procedures related to the acquisition, maintenance and preservation of digital records supports the efficient and effect implementation of archival endeavours.

In addition, training for the archivist or other staff who will be responsible for implementing any digital records acquisition and maintenance strategy is another key component to success. Continued learning is a constant necessity when it comes to the archival profession. Making use of the products and expertise of research projects, workshops and other educational opportunities will help ease the learning curve.

What kinds of digital records, either soon to be preserved by a small or medium sized archival organization or program or already in its custody, are currently most in need of attention, and what are the most urgent issues and problems associated with their creation, management and/or preservation?

The most pressing issue for small and medium-sized archives wanting to acquire digital records is the fact that intervention is required to extend the life and accessibility of digital records. The ability to effectively preserve digital records in the community context is complicated by the general lack of knowledge. Communication with community records creators is necessary to ensure that records survive long enough to be acquired by an archives. In addition to the obvious problem of records creators failing to preserve their own records, many individuals do not understand that digital records can be preserved in their local archives. Therefore, education of the public is an important task of any community archives wishing to preserve community digital records.

For example, if the local Lions Club starts taking and storing the official meeting minutes on a laptop and stops including meeting minutes in its annual donation, the archivist should address this issue. The archivist can help the Lions Club's executive to properly ensure the longterm preservation of these important records for the Club itself, and assure them that the archives is both prepared and committed to collecting these important records, now kept in digital form.

What are the nature and the characteristics of the relationship that each of these archives or programs should establish with the creators of the records for which it is responsible?

Establishing early relationships with records creators strengthens the possibility that digital records will be preserved long enough to be donated. If small and medium-sized archives position themselves in the community as records experts with knowledge useful to anyone creating and maintaining records there are many possible positive outcomes. Goodwill, respect and an open dialogue with records creators are all useful when attempting to establish and maintain a digital records acquisition program.

What kind of policy, strategy and procedures should any such archives or program have in place to be able to control the digital records for which it will be or already is responsible from creation to preservation, and on what factors are these administrative devices dependent (e.g., a specific accountability framework and governance structure)?

The governance structure of small and medium-sized archives will vary greatly whatever form it takes it should be understood so that responsibilities and duties can be assigned. The archivist at NVMA has a certain amount of autonomy; she makes all acquisition decisions (based on the NVMA Collections Policy). The approval process for new policy is straightforward. Having a Digital Records Acquisition Policy in place allows the archivist to refuse inappropriate materials and assure donors that NVMA is willing and prepared to care for digital records over the long term (please see Appendix 7 for a copy of the Digital Records Acquisition Policy created for NVMA). This Policy also strengthens NVMA's overall commitment to the preservation of community digital records.

What action plans may be devised for the long-term preservation of these bodies of records?

Given NVMA's community driven approach to the acquisition and preservation of archival material, an action plan for long-term preservation of these records relies heavily on the development of outreach projects directed by the archivists to educate and inform community members about issues, concerns and solutions related to the long-term preservation of digital records. In addition, ensuring that targeted informational sources, such as brochures, are devised for community members and explain, in laymen's terms, these issues and solutions, will help ensure that digital records are acquired and preserved by the archives (see Appendices 3 through 6 for examples). It is important to remember that the target audience for NVMA is a local community member without any formal education or training in archival science, digital records management or records management; consequently, the brochures were designed to be short yet informative. Each of the brochures can be used and understood separately, but it is hoped that success with one brochure will lead users to seek out more brochures and knowledge. Attention was taken to ensure that the brochures were not filled with technical language so that they would educate and interest, rather than overwhelm.

Can the action plan chosen for a given body of records be valid for another body of records of the same type, produced and preserved by the same kind of organization, person, or community in the same country?

The brochures developed for NVMA can be adopted and applied to other small and medium-sized archives across Canada. Institutions that acquire community records face similar challenges. Community archives can no longer afford to wait for boxes of records to appear on their door steps once the records have lost their usefulness to their creators. Ensuring digital records are acquired by small and medium-sized archives requires archivists to educate their communities about digital preservation *prior* to donation. The likelihood of a digital record surviving much beyond five years without some forethought and planning is slim-to-none (hard drive crashes, as well as software and hardware obsolescence are all common threats to digital records). In the case of NVMA, four educational outreach brochures were developed, each aimed at a different audience or issue.

Although these specific brochures will be made available for easy use and adaptation by other institutions, it may be that supplementing these brochures with additional topics (such as digital photograph preservation, for example) or creating an additional series of brochures will be necessary or desirable.

Can the action plan chosen for a given body of records be valid for another body of records of the same type, produced and preserved by the same kind of organization, person or community in another country or culture?

The brochures developed for NVMA can be adopted and applied to other small and medium-sized archives across North America, in Europe and, perhaps, elsewhere in the world. Like archival institutions in Canada, archival institutions across the world face the challenge of educating community donors about digital records. Recently, the Society of American Archivists (SAA) released a series of brochures (*A Guide to Donating your Personal or Family Papers to a Repository* and *A Guide to Donating you Organizational Records to a Repository*), which addresses similar issues as the NVMA brochure *Consider Donating Your Records to [institution name]* developed by InterPARES 3; thus, the use of brochures has already been chosen as an effective means of providing information to potential donors. However, the SAA brochures fail to mention the possibility of donating digital records. In fact, the word 'digital' does not appear in either SAA brochure, although other specific formats are mentioned, such as audio recordings, scrapbooks, photographs and videotapes. Again, it is possible that a need for additional brochures may emerge to suit the needs of specific institutions or communities; however, the model still applies—create a short, informative brochure in laymen's terms, with enough information to interest and educate, but not overwhelm.

Can the action plan chosen for a certain type of record or system be valid independently of the creating or preserving organization and its context?

Yes. Although the brochures and digital acquisitions policy were developed for use by NVMA, they are adaptable for wider use by other archival institutions. As discussed throughout this report, small and medium-sized archives face similar challenges with regards to the long-

term preservation and acquisition of digital records, therefore the resources developed by GRAs were created in the hopes that they could be used by institutions other than NVMA.

What knowledge and skills are required for those who must devise policies, procedures and action plans for the preservation of digital records in small and medium sized archival organizations or programs?

It is essential that the archivists responsible for developing policies, procedures and actions plans for the preservation of digital records in small and medium-sized archival organizations and programs have a clear understanding of the issues, challenges and solutions related to the acquisition, management and long-term preservation of a variety of record types. Archivists need to be up to date on the literature and be constantly aware of changes in the creation and storage of digital records that will affect how they are preserved over the long term.

How can records professionals keep their knowledge of digital preservation up-to-date in the face of ongoing and increasingly fast technological change?

GRAs recently presented draft editions of the brochures developed for NVMA at the AABC (Archives Association of British Columbia) mini conference held at the University of British Columbia (UBC) in April 2010. Participating in and attending these conferences helps keep archivists current with research and developments happening locally, nationally and internationally. Such events also allow for a dialogue between archivists and researchers—in meeting the needs of small and medium-sized archives it is essential to be aware of any changes or newly perceived needs. In addition, participation with research projects, such as InterPARES, as well as maintaining a relationship with archival education programs, like UBC's School of Library, Archival and Information Studies, will help records professionals and archivists keep up to date with current theories, issues and solutions related to the long-term preservation of digital records.

F. Bibliography

Canadian Conservation Institute (2008), "Electronic Media Collections for Small Museums and Archives," *Canadian Conservation Institute*.

http://www.cci-icc.gc.ca/crc/articles/elecmediacare/index-eng.aspx

Canadian Heritage (2002), "Preserving my heritage: How to care for...," *Canadian Conservation Institute.*

<u>http://www.preservation.gc.ca/index_e.asp</u> (Great Web site—practical information for preserving everything from photographs to teddy bears—but nothing about digital records)

- Canada Revenue Agency (2009), "Keeping Records," *Canada Revenue Agency*. <u>http://www.cra-arc.gc.ca/tx/bsnss/tpcs/kprc/menu-eng.html</u>
- Cannon, Braden (April 2009), "Preserving Communities: A Guide to Archiving for Community Organizations," *Halifax Regional Municipality Archives*. <u>http://www.halifax.ca/archives/documents/GuideToArchivingForCommunityOrgs.pdf</u>
- Digital Preservation Coalition (2002), "The Handbook," *Digital Preservation Coalition*. <u>http://www.dpconline.org/graphics/handbook/</u>
- Etherington, Suzanne and Ann Marie Przybyla (2003), "Inventory Planning: The First Steps in Records Management," *New York State Archives*. <u>http://www.nagararesources.org/index.php?page=miscellaneous-2</u>
- Iraci, Joe (2005), "Remedies for Deteriorated or Damaged Modern Information Carriers," Canadian Conservation Institute Technical Bulletin #27. <u>https://www.cci-icc.gc.ca/bookstore/viewCategory-e.cfm?id=18</u>
- Iraci, Joe (2002), "Disaster Recovery of Modern Information Carriers: Compact Discs, Magnetic Tapes and Magnetic Disks," Canadian Conservation Institute Technical Bulletin #25. <u>https://www.cci-icc.gc.ca/bookstore/viewCategory-e.cfm?id=18</u>
- National Park Service (2000), "Planning Digital Projects for Preservation and Access," Conserve O Gram. <u>http://www.nagararesources.org/index.php?page=preservation</u>
- Norris, Thomas D. (February 2002), "The Seven Attributes of an Effective Records Management Program," *New York State Archives*. http://www.nagararesources.org/index.php?page=miscellaneous-2
- N. C. Department of Cultural Resources (April 2008), "Archival Process for Data and Image Preservation: The Management and Preservation of Digital Media," *North Carolina State Archives.*

http://www.nagararesources.org/index.php?page=preservation

G. Conclusions

The NVMA case study demonstrates the need for educational materials targeted at the general public and small and medium-sized organizations as an important element in ensuring the successful donation of community materials to archival repositories. The four brochures created as a result of this case study address many of the issues related to the preservation of digital records that concern members of the North Vancouver community.

Brochure 1, "Maintaining Your Digital Records" (see Appendix 3), aims to educate individuals and small volunteer organizations on the proper preservation of their digital records. The brochure offers practical advice and tips that can be applied with minimal resources. It includes four steps individuals should follow. The first step, *appoint a trusted custodian*, stresses the importance of identifying a trusted individual who will take responsibility for the overall care of the records, particularly those that are identified as vital. The second step, *take charge of your records*, includes information about understanding and organizing current digital records. The third step, *plan for software and hardware obsolesce*, warns about the dangers of hardware and software obsolescence and includes information about standard file formats. The fourth and final step, *preventing loss*, provides information about back up systems to help ensure preservation of digital records. The brochure also includes a section titled "More things to consider," where additional information is presented, along with a list of additional resources for interested parties.

Brochure 2, "Maintaining Digital Records: The Business Edition" (see Appendix 4), aims to help businesses and small organizations with formalized structures understand the key issues related to management and preservation of their digital records. Based on the same format as brochure 1, the second brochure outlines five steps businesses can take to help manage and preserve their digital records. Similar to the first step in brochure 1, the first step in brochure 2 is also, "*appoint a trusted custodian*." The second step, "*understand the records*," expresses the importance of having a records inventory to properly apply retention and disposition schedules to digital records. The third step, "*understand the technology of the records*," encourages the trusted custodian to ensure they know all of the software and hardware used by their organization in order to keep them up to date. The fourth step, "*plan for hardware and software obsolescence*," discusses the importance of keeping both software and hardware up to date and current. It also encourages the trusted custodian to ensure that file formats are being maintained in de facto standards. The Final step, "*preventing loss*," outlines various backup copy and safety

copy strategies that businesses might adopt to help prevent the loss of their vital records. The brochure also includes a section titled "More things to consider," which includes such things as definitions of key terms and concepts and a list of additional resources for interested parties.

Brochure 3, "Managing E-mail" (see Appendix 5), aims to create awareness of the need to organize, manage and preserve e-mail. Over the course of the development of the first brochure it became apparent that the many issues related to e-mail management needed to be addressed separately, both for businesses and for individuals.¹⁰ This brochure identifies different types of e-mails and provides various strategies for managing and preserving each type. The brochure also includes a section on e-mail etiquette, which is intended to encourage people to think about the amount and types of e-mails they generate, and the reasons for which they are generated.

Brochure 4, "Consider donating your records to the North Vancouver Museum and Archives" (see Appendix 6), addresses what to donate, when to donate and how to prepare records for donation. It also specifically addresses donating digital records and encourages individuals to seek the advice provided in the other brochures.

These brochures will be made freely available in both paper and electronic form for use by the general public. The Web versions will be hyperlinked and made available for anyone with Internet access to download. Turner will create and make available, in paper form, the series of brochures for the brochure rack at NVMA, and she will incorporate the information in the brochures into her "Family Recordkeeper" workshops.

InterPARES 3 GRAs also worked with Turner to create a Digital Records Acquisition Policy for NVMA (see appendix 7), guided, in part, by work already done for the InterPARES 3 general study on the development of policy and procedures templates (GS11). The policy explains why a collection policy specifically targeted at the acquisition of digital records is necessary for the Archives and outlines ways in which the Archives will preserve and provide continued access to the digital records over the long term. The template for the finalized policy will also be made available on the InterPARES 3 Web site.

To make these products widely accessible, all five were edited for customizable use by any institution. They will be made available for free download from both the InterPARES 3 Web

¹⁰ It is important to acknowledge that this brochure recycled much of the work on the management of e-mail done by InterPARES 3 GRA Donald Force for both the School of Music and the University of Victoria case studies (CS10-1 and CS10-3, respectively).

site¹¹ and the Archives Association of British Columbia (AABC) Web site¹² (see Appendix 8 for print copies of these versions).

¹¹ <u>http://www.interpares.org/ip3/ip3_index.cfm</u> ¹² <u>http://aabc.ca/</u>

Appendix 1: NVMA Statement of Purpose

NORTH VANCOUVER MUSEUM AND ARCHIVES

STATEMENT OF PURPOSE

MISSION STATEMENT

To preserve and present the heritage of North Vancouver by providing excellence in museum and archives services to the community.

GOALS AND OBJECTIVES

- 1. To adhere to the highest standards of professionalism and institutional operation.
- 2. To build and maintain collections that reflects the heritage of human experience in North Vancouver.
- 3. To use collections to communicate effectively and interestingly the story of North Vancouver's historical, social, political and economic development and its relationship with its neighbours in the Lower Mainland.
- 4. To foster an appreciation of past achievements in the building and development of North Vancouver, and to provide the historical context for a better understanding of our community today.
- 5. To promote awareness and a sense of ownership of activities and programs of the Museum and Archives so as to build and strengthen a partnership with the community.

HISTORICAL THEMES

The following seven themes covering the "North Vancouver Story" are designed both to guide the collecting practices of the Museum and Archives and to provide focus for the development of museum exhibitions, school and public programs, publications and extension initiatives.

- 1. The Native People's Experience Post Contact. Cultural identity, heritage and traditions
- The Identity of North Vancouver. Settlement patterns, growth and development. Civic governments and political life.
- **3. Logging and Lumber.** The first industry. Local and export markets.
- **4.** The Waterfront. Shipbuilding. Shipping, the Port of Vancouver and related economic activities. The definition of community character.
- 5. Transportation and Urban Development.

Roads, railways, ferries and bridges.

Physical expansion of the urban infrastructure.

6. The Social Fabric.

Growth and expansion of education and health services; family life; the changing role of women; religion; sports and cultural activities.

7. The Wilderness on the Doorstep.

The "north shore" environment and recreational opportunities: trails, mountain, climbing, fishing and skiing.

December 3rd, 2004

Appendix 2: NVMA Collections Policy and Conservation Policy

NORTH VANCOUVER MUSEUM AND ARCHIVES COMMISSION

COLLECTIONS POLICY

1. **PREAMBLE**

The North Vancouver Museum and Archives Commission holds in public trust collections owned by the Corporations of the City of North Vancouver and the District of North Vancouver. While retaining ultimate responsibility for the maintenance of this public trust, the Councils of the City and District have delegated the management and development of the collections to the North Vancouver Museum and Archives Commission in their respective establishing Bylaws.

2. INTENT OF THE POLICY

The intent of the Collections Policy is to define the nature and scope of the collections to be managed and developed, and to define the professional and institutional standards and procedures by which materials will be acquired, documented, maintained and disposed of by the North Vancouver Museum and Archives

3. THE EXISTING COLLECTIONS

- 3.1 Materials currently existing in the collections will be documented in accordance with commonly accepted professional registration and accessioning procedures. All reasonable attempts will be made to provide for easy identification and access. The maintenance of storage conditions will adhere to the institution's mandate for preservation.
- 3.2 A Master List of items in the collection identifying City, District or Joint Ownership and updated from time to time but at least once per calendar year in accordance with Sections 5.3.1 and 7.7 of this Policy, shall be maintained on file for insurance purposes with the Purchasing Department of the City of North Vancouver.

4. THE NATURE/SCOPE AND PURPOSE OF THE COLLECTIONS

- 4.1 The collections will be maintained and developed in accordance with the *Statement of Purpose of the North Vancouver Museum and Archives* approved from time to time and incorporating a Mission Statement, Goals and Objectives and themes illustrative of the 'North Vancouver Story'.
- 4.2 The geographical area to be reflected in the collections of the North Vancouver Museum and Archives is deemed to consist of those lands stretching back from Burrard Inlet between the Capilano River in the west to Indian Arm in the east, forming the municipalities of the City of North Vancouver and the District of North Vancouver.
- 4.3 The purpose of the collections is to preserve materials that provide a resource for research, exhibition and education. The institution's prime responsibility is to maximize the use of the collections in programs developed and administered by the museum at its principal location(s) in North Vancouver; secondly to support programs generated by other organizations within the jurisdiction of the two municipalities that constitute "North Vancouver"; and thirdly to co-operate with organizations developing exhibitions or educational programs beyond the boundaries of "North Vancouver".
- 5. ACCESSIONS
- 5.1 **Definition**

Accessions involve materials acquired through a legal transfer of ownership. They are the result of field collection, purchases, gifts, bequests and exchanges.

5.2 **Priorities**

The North Vancouver Museum and Archives will not normally acquire materials unless they relate directly to, or may be illustrative of, the history and development of North Vancouver. The main focus of the collections will be social, political and economic, with the aim of developing a regional institution of history and industry. Materials will usually, but not exclusively, be at least 25 years old. More recent materials can be collected if they continue to enhance an area of strength in the collections, if they relate to another artifact or document, if they fill a perceived gap in the collections, or if they are demonstrably useful in the delivery of a museum or archival program.

5.3 <u>Authority to Acquire</u>

- 5.3.1 Authority to purchase and to accept donations of artifacts and archival materials is delegated to the Director. No less than twice in each calendar year, the Director will report a list of accessions to the North Vancouver Museum and Archives Commission. Each list will be attached to, and form part of, the minutes of the meeting to which it is presented.
- 5.3.2 Acquisitions that may impact significantly on a subsequent year's budget will only be processed with the approval of the Commission following receipt of a report from the Director who, in consultation with the Chair of the Finance Committee, will provide an "all inclusive" cost estimate of the proposed acquisition to the Commission.

5.4 Acquisition Criteria

- 5.4.1 The following criteria will assist in determining, within the context of the priorities outlined above, those materials to be brought into the collections:
 - (a) Availability of appropriate storage or exhibition space.

(b) Condition and cost, including the potential costs of maintenance and conservation.

(c) Relationship to items, individual, or a range of materials already in the collections.

(d) Practical value of the proposed acquisition for exhibition, study or research, or for museum educational programs.

- (e) Completeness of documentation.
- (f) Quality; rarity; historical, scientific or technical value; representativeness.
- 5.4.2 The application of these criteria to a particular acquisition is determined by the Director, working in co-operation with the curatorial and archival staff. At all times the staff of the Museum and Archives reserves the right to refuse artifacts or archival materials considered to be inappropriate for the collections.

5.5 **Compliance with Laws**

5.5.1 The Museum and Archives will acquire collections in accordance with the laws of the Province of British Columbia and the Government of Canada, and international agreements between Canada and other countries.

5.5.2 The Museum and Archives will only acquire collections that have been legally and ethically acquired by their previous owners. Acquisitions involve a formal transfer of ownership and must be accompanied by a legal document, for example, a completed and duly signed donation form or receipt for purchase.

5.6 **Conditional Donations**

In normal circumstances, no acquisitions will be made whereby the conditions of acquisition may restrict the use or disposition of that object (or group of objects) in fulfilment of the goals of the institution. If restrictions are attached to an acquisition, a reasonable date for their termination will be set.

5.7 **<u>Co-operation with other Institutions</u>**

The North Vancouver Museum and Archives will co-operate with other museums, archives and heritage preservation agencies in order to avoid unnecessary duplication and unseemly competition, and to promote an integrated plan for preservation and interpretation.

5.8 <u>Appraisals</u>

- 5.8.1 The Museum and Archives will not provide appraisals for tax deduction or other purposes external to those of the institution.
- 5.8.2 Donors wishing to receive an income tax receipt for a donation may be required to provide, normally at their cost, an independent appraisal to determine the value of their donation. If, in the opinion of the curatorial or archival staff and the Director, the donation is worth more than One Thousand Dollars (\$1,000.), at least one independent appraisal must be obtained before a receipt can be issued.

5.9 <u>Authentication</u>

Identification and authentication of materials external to the institution's own collections will be given only for professional, scientific or educational purposes.

5.10 Conflict of Interest

No member of the staff of the Museum and Archives nor any member of the Museum and Archives Commission can collect in an area of interest to the Museum and Archives without declaring that interest and establishing a procedure to ensure that the collecting activities of the Museum and Archives will not be compromised.

5.11 Public Record

The Museum and Archives will make a record, suitable for easy public access, of all items acquired for the collections.

6. LOANS

6.1 Formal Agreement

All loans, incoming and outgoing, must be subject to a signed agreement.

6.2 <u>"Permanent" Loans</u>

The Museum and Archives will not accept in-coming "permanent" loans and will not be party to any "permanent" loan arrangement - incoming or outgoing - with any person or organization. All loans must have a termination date clearly stipulated at the time of their acceptance or release. Normally, in order to avoid custodial responsibilities and expenses and exposing North Vancouver Museum and Archives' material to undue risk over a long period of time, no loan agreement, whether incoming or outgoing, will be for a period of more than two (2) years.

6.3 <u>Temporary Loans</u>

Temporary and short-term incoming loans may be accepted by the Director upon the recommendation of the curatorial or archival staff. Such loans will be for research, exhibition and Museum program use, or for archival copying purposes.

6.4 **Insurance Value of Loans**

All incoming loans to the Museum must be accompanied by an insurance value established by the lender and accepted by the Director or his delegate.

6.5 <u>Authority to Make Loans</u>

No commitment to lend material to another custodial institution may be made without the approval of the Director or his delegates on the curatorial or archival staff. Loans to a commercial concern for promotional purposes, or for the purpose of profit, must have the approval of the Director.

6.6 <u>Personal Use</u>

There shall be no loan of any materials from the collections to any individual for personal use or private display.

6.7 **Requirements of Borrowers**

Loans to other custodial institutions or to interested organizations will only be considered if the borrowing institution or organization can guarantee to provide a level of care and security for the material(s) equal, at least, to that provided by the North Vancouver Museum and Archives; also, if there are no restrictions or covenants on the use of the materials which would be violated by the proposed loan. All lending institutions or organizations must agree to give full recognition, in any public display of loaned materials, to the North Vancouver Museum and Archives.

6.8 Access to the Collections

Individuals or representatives of other institutions shall at the discretion of the curatorial and archival staff have reasonable access to the collections of the North Vancouver Museum and Archives for research and information gathering purposes.

7. DEACCESSIONS

7.1 **Definition**

Deaccessioning involves the documented and approved removal of materials from the collections. As a result of changing perspectives, the goals and priorities of the institution, the acquisition of superior examples of items already in the collections, and redundancies that may occur or become apparent, it is acceptable practice and indeed desirable from time to time to deaccession materials from the collections.

7.2 **Procedure**

The North Vancouver Museum and Archives will maintain rigorous and uniform procedures for the deaccession process.

- 7.2.1 Action regarding the disposal of material will be initiated by the curatorial and archival staff which will make recommendations to the Director. The North Vancouver Museum and Archives will not dispose of any item in its collections contrary to the terms upon which it was given or bequeathed. If practical and reasonable to do so, the institution will notify the donor if it intends to remove donated items from the collections.
- 7.2.2 Materials being considered for deaccession will be thoroughly investigated. A full record of the circumstances and conditions of the deaccession of every item will be made and retained as part of the institution's collection records.
- 7.2.3 The Director will seek formal approval from the Museum and Archives Commission for permission to proceed with the deaccession of each item under consideration. A list of items and the reason(s) for recommending their deaccession will be provided to the Commission. This list, with any deletions deemed appropriate by the Commission, will form part of the retained record of the meeting and will be referred to the owner (City and/or District of North Vancouver) for final approval in keeping with the North Vancouver Museum and Archives Commission Agreement D.15.
- 7.2.4 Materials will be disposed of according to their nature and the circumstance in one of the following ways:

(a) transfer of ownership, outright or as part of an exchange, to another public institution or organization;

(b) sale in the public market place in a manner that will best protect the interests and objectives of the North Vancouver Museum and Archives; or

(c) destruction.

7.3 Limitations to Receipt of Deaccessioned items

No member of the staff of the Museum and Archives, nor any member of the Museum and Archives Commission, nor any member of the Councils of The Corporation of the City of North Vancouver and The Corporation of the District of North Vancouver, nor any Employees of either the City or the District of North Vancouver may buy or receive any materials deaccessioned from the collections, except as provided for in 7.2.4(b) above.

7.4 **Compliance with Laws**

The deaccession process will adhere to the applicable laws of British Columbia and Canada, and to any international agreements and treaties.

7.5 <u>Use of Revenue</u>

All proceeds generated through the sale of materials from the collections shall be used in one of two ways:

- 7.5.1 to purchase other items for the collections of the Museum and Archives; or
- 7.5.2 to meet the cost of a suitable capital expenditure for the care and preservation of the collection.

7.6 Accidental Loss/Destruction

In the event of accidental loss (theft, unaccountable disappearance) or destruction of an item in the collection, the Director will report such loss to the Museum and Archives Commission.

7.7 **<u>Report to City Authorities</u>**

A list of all items formally deaccessioned or deemed to be lost shall be provided to the Purchasing Department of the City of North Vancouver so that they can be deleted from the Master List held by that Department and so that the necessary adjustments, if any, may be made in insurance coverage.

8. IMPLEMENTATION

The Museum and Archives Commission relies on the professionalism and competence of its staff to implement this policy. With respect to the collection, as in other matters, the Commission assumes in good faith that its staff will maintain a level of performance and operation and ethics consistent with the standards established by the British Columbia Museums Association, the Archives Association of British Columbia, the Canadian Museum Association, the Association of Canadian Archivists and the International Council of Museums.

NORTH VANCOUVER MUSEUM AND ARCHIVES COMMISSION

CONSERVATION POLICY

Amended December 1998

INTRODUCTION

The purpose of this policy is to assist the North Vancouver Museum and Archives to fulfill its Mission Statement: "To preserve the heritage of North Vancouver by providing excellence in museum and archives services to the community."

The main principles of the conservation policy are:

To establish and maintain a high standard in conditions of storage, display, use, and handling of cultural property, and to study, record, retain, and restore the culturally significant qualities of the object with the least possible intervention.

The main means by which this goal can be achieved is through preventative conservation. While restorative procedures will at times be necessary, these are time consuming and costly. It makes more sense to keep deterioration from happening in the first place.

Preventative conservation is the essence of conservation, although conservation policy includes other concerns. Preventative conservation is concerned with the procedures, guidelines and standards that are adopted and practiced on an everyday level. It applies to all those handling and making use of the collection, including other agencies that might wish to borrow the Archives documentary material.

While Presentation House is an old building with no environmental controls and with plumbing and electrical systems that have seen better days, much can be done, even within a limited budget, to ensure our collection is around for many generations to come. The following are strategies aimed at embedding the general principles of conservation in our particular archival setting.

GENERAL RULES AND GUIDELINES

A1 HANDLING OF ARCHIVAL MATERIAL

A1.1 In the Reading Room:

When handling an unencapsulated photograph wear cotton gloves. Oils and acids from skin can leave fingerprints and damage the emulsion layer.

When any item in the Archives is being used for research, ballpoint pens and the like should not be used. Pencils only should be used.

Light levels in the reading room should ideally be no more than 150 lux* (15 footcandles). High light levels can cause fading of dyes and pigments and yellowing and embrittlement of paper. Where records are stored on an ongoing basis, lights should be turned off. Ultraviolet radiation, a nonvisible light wave found in daylight and fluorescent

lighting, is also very damaging to archival collections. Windows or fluorescent lights in the reading rooms or document storage areas of an archives should be covered with U.V. filtering film, (or in the case of such lights with U.V. filtering tubes), or with curtains or blinds kept drawn. If there are fluorescent lights in areas of the building where documents are used or stored, U.V. filters should be placed over the tubes.

Do not allow the archival collection to come in direct contact with cardboard, any pressure sensitive tapes, wood, kraft paper, elastic bands or rubber.

Avoid metal fasteners such as pins, paper clips or staples which can rust and subsequently stain the document and initiate degradation. Those within the collection should be removed.

Storage mats should be 100% rag and standard sizes to fit acid-free commercial Hollanger boxes.

A1.2 Handling of Archival Material In Document Storage Areas:

Archival materials should be stored on metal shelves or in cabinets with a baked enamel finish. Wooden shelves of cabinets should be sealed with Vapex primer and latex paint.

Dust and air pollutants should be kept to a minimum as they are a potential source of acidity and stain, and they invite insects. An air conditioner with a filter, door mats, and all around general good housekeeping help to reduce potential threats.

Containers for storage should permit documents to be stored unrolled and without folds to avoid the risk of strain or distortion. Large maps, plans and drawings should be stored in shallow drawers, in a map storage cabinet. If too large they should be wrapped around Mylar "D" covered tubes and interleaved with acid-free tissue or Permalife paper, and the entire package then covered with Mylar "D". Smaller documents should be stored acid-free, preferably in alkaline buffered storage boxes. An ordinary cardboard box can be adapted for this purpose if it is lined with Mylar and acid-free tissue or Permalife paper.

A relative humidity (RH) of 45-55% and a temperature of 20-23C should be maintained. Archival materials become mouldy in humidities above 60% and emulsion layers of photographs soften. If temperatures are allowed to become high and RH is low materials become dry and brittle. Rapid changes in RH can cause dimensional distortion in paper, books and photographs. Daily changes in RH should not exceed 3%.

If several documents are being stored in a folder, they should be interleaved with a sheet of acid-free paper or Mylar to prevent the migration of acids or transfer of inks or graphite and other media, or possibly adhesive residues from pressure sensitive tape etc. Generally documents should be stored vertically in acid-free, alkaline buffered file folders.

Documents and maps should be kept in buffered or neutral pH paper folders. Photographs are by nature acidic, so buffered paper envelopes or folders should be avoided. Neutral pH paper enclosures and folders are preferable.

Very rare or fragile books should be placed in boxes of their own and handled little as possible. If stored in a box, store flat on their backs or in their normal upright position, or on the book's spine. Do not store books on their foredge.

If mould growth or insect damage is evident on archival material or in books the items should not join the rest of the collection until treated or until it is certain that there is no longer any active life. Questionable material should be isolated in sealed transparent plastic bags for about two months in a separate room and checked periodically for such things as insect or mould and fungi activity.

A2 IDEAL ENVIRONMENTAL CONDITIONS FOR STACK STORAGE FOR ITEMS LOANED.

The greatest concerns next to handling are environmental conditions in storage, in the reading room or on exhibit, and during shipping to and from borrowing institutions.

A2.1 Magnetic Tapes, Video Tape and Records

(a) Temperature should be 21C (70F);

(b) Humidity should be 50% RH (60% maximum upper limit);

(Note: between 16 and 25C (60 and 75F), 68% RH is the absolute danger point. Above this there is an extremely high risk of mould growth.)

(c) Dust and dirt controls should keep dust particles to 50 microns; and

(d) Tapes should be protected from static electricity and from magnetic or electrical fields.

A2.2 Films, Colour Photographs, Slides and Negatives

(a) Temperatures should be 2C (35F) and 35% RH (cold storage); and

(b) Otherwise, humidity range should be between 30 - 40% RH.

A2.3 Microfilm

(a) Silver film temperature should be 18C (65F) or below; and (b) RH should fall in the 30 - 40% range.

A2.4 **Photographs**

(a) Temperature of between 15 - 21C (68 - 70F) and a RH of between 40 - 50% (emulsion layers soften at 60% RH+); and

(b) Most effective conditions for preserving original photographs are a low temperature of -17C(0.F) with an RH factor of 25 - 35%.

(* Note: During the summer of 1998 the relative humidity in vault #3 reached 60% RH according to the hygrothermograph placed in the vault. This high RH caused absorption of moisture in the storage mats causing them to cockle, and caused softening of a number of photographs' emulsion layers, resulting in the two sticking to one another. A portable air conditioner and dehumidifier could be used to prevent this from occurring in the future if the RH reaches high levels again.)

A2.5 Works of Art

(a) Temperature should be 15 C (60F) and RH of 50% + or -5%;

- (b) All lights should be turned off when not required;
- (c) All lights should be UV shielded; and
- (d) 30 Lux to 50 Lux is the maximum level allowable for exhibit.

A2.6 Maps and Black and White Duplicate Photographs

Temperature should be kept as low as possible but in this case human comfort might be a contributing factor with 20C (68F) and an RH of 50% + or - 5% being acceptable.

A2.7 Paper Documents, Rare Books and Architectural Drawings

Temperature should be kept at 15C (60F) and RH should be in the 45% range + or - 5%

A2.8 Artifacts

Temperature should be kept at 15C (60F) with an RH within the 50% range + or - 5%

A2.9 Tape to Seal Microfilm Canisters:

[Source: Greg Hill, National Archives, 1984]

3M # 850 Metallized Polyester Tape — Specifications:

- (a) dimensionally stable up to 177C;
- (b) flexible down to -50C;
- (c) moisture permeability .78gm H20/M3 over a 24 hour period (extremely low);
- (d) lengths 72 yards /role;
- (e) widths 1/2" and 1" available.

(*More in depth information on environmental norms and standards for museums and archives can be found in Canadian Conservation Institute Technical Bulletins #'s 1,2,3,5, and 7.)

A3 WHEN PREVENTATIVE CONSERVATION FAILS

While preventative conservation on a global level is the best means of ensuring the integrity of a collection, individual items may need special treatment, either because of

damage received before being acquired by the Archives, or improper storage or environmental conditions. A list of items needing special attention will be compiled by the archivist. Those needing encapsulation or surface cleaning will be dealt with by the archival staff or volunteers. Those needing more intensive treatment will be dealt with by a professional conservator as funds permit. Decisions on priorities will be based on historical and aesthetic values of the work. Informational value and potential exhibition will also be considered. (See Appendix "B" to obtain the services of a conservator.)

A4 WORKSHOPS

From time to time, as the need arises, workshops of up to a day in length will be given to volunteers and staff to provide them with a basic practical knowledge of conservation treatments. Topics may include surface drycleaning of documents, spot-testing inks for water solubility, humidifying, relaxing and flattening documents, minor repairs, and Mylar encapsulation. More advanced treatments must be left for a trained conservator.

A5 FORMS

Loan forms should contain a statement committing the borrowing institution or agency to meeting the guidelines and standards stated on the loan form. These conditions relate to such things as the visible light spectrum levels, referred to as lux levels*, exposure to damaging non-visible ultra-violet light, temperature, relative humidity**, and security, along with an examination/ condition report prepared by the archivist or conservator:

- (a) before sending the object out;
- (b) by the borrowing institution upon receiving the object;
- (c) by the borrowing institution before sending the object back; and
- (d) by the Archivist upon receiving the object back and returning it to its storage place.

This should all be done on a form that travels with the object. If it is determined that the borrowing institution is unable to meet the guidelines the object should not be lent out. A high-quality colour photograph might serve as a suitable alternative in such a situation. Obviously, this would have to be established well in advance of the date the client desires the item.

* LUX LEVEL: Is a measure of the light level as perceived by the human eye.

** RELATIVE HUMIDITY: Is the ratio, expressed as a percent, of the absolute humidity of sampled air to that of air saturated with water at the same temperature.

A6 REFORMATTING AND DIGITAL TECHNOLOGY

As the use of optical digital disc and other similar technology grows in museums and archives much of the information on more conventional media will likely be stored in digital form. Obsolescence too will make this inevitable. Conservation concerns will soon arise for this new media as well.
Nancy Marelli, Archives of Quebec, in her book *Implementing Preservation Management*, (copyright 1996) states with regard to digitization that "It is not altogether clear what the long-term stability of digital information may be...", and asks us to ask ourselves the question "Does this kind of project fit into the current priorities for our long-term Preservation Management Program, or is there other business we have to take care of first?"

Digitization should be considered as an accessing tool and not a substitute for conservation.

APPENDIX "A"

A.A CONSERVATION AND RESTORATION Extract from The Code of Ethics for Conservators in Canada

A.A.1 Preventative Conservation

Preventative conservation is a primary objective of the conservator and must be considered prior to other forms of intervention. The conservator shall strive to establish and maintain a high standard in conditions of storage, display, use, and handling of cultural property.

A.A.2 Conservation

All actions aimed at the safeguarding of cultural property for the future. The purpose of conservation is to study, record, retain, and restore the culturally significant qualities of the object with the least possible intervention.

A.A.3 **Restoration**

All actions taken to modify the existing materials and structure of a cultural property to represent a known earlier state. The aim of restoration is to preserve and reveal the aesthetic and historical value of a cultural property. Restoration is based on respect for the remaining original material and a clear evidence of the earlier state.

A.A.4 **<u>Restoration and Reconstruction</u>**

Restoration and reconstruction are means of re-establishing the cultural values of a cultural property. If undertaken, they shall be fully documented and shall be carried out without fraudulent intent and to the minimum extent necessary. The conservator shall use techniques which affect the cultural property least, and shall use materials which can be most easily and completely removed without hazard to any original part. The presence and extent of any restoration or reconstruction must be detectable, though they need not be conspicuous.

Before the treatment of a cultural property is undertaken, the conservator shall establish the necessity for such intervention.

APPENDIX "B"

For selecting and employing a conservator in Canada or in British Columbia contact any of the following:

Archives Association of British Columbia, Box 78530, University Post Office, Vancouver, British Columbia V6T 1Z4.

The Canadian Association of Professional Conservators (CAPC) c/o The Canadian Museums Association 280 Metcalfe Street, Suite 400 Ottawa, Ontario K2P 1R7

The Provincial Archives of British Columbia 865 Yates Street Victoria, British Columbia V8V 1X4

Appendix 3: Maintaining Your Digital Records

Maintaining Your Digital Records

These guidelines have been developed to help individuals and small volunteer organizations understand and preserve their digital records. The preservation of digital records requires more planning and periodic intervention than is necessary for traditional records.

This guide offers practical advice and tips that can be applied with minimal resources. If your well-cared-for records find their way into an archival repository, the community as a whole will also benefit, and so will posterity.

Step 1: Appoint a trusted custodian

This person will take responsibility for the overall care of all your records after you are no longer able to, particularly those that you identify as vital. This can be a family member, the secretary of your organization or the community archivist. In some cases, the trusted custodian could be the records creator.

Trusted custodian

A preserver who can be trusted not to alter the records or allow others to alter them. This person is responsible for ensuring the preservation of the records over time.

Step 2: Take charge of your records

- Create a document that explains how they are organized. This may be a document that outlines how you label your family photos and explains how your documents are filed in named folders. Make sure this document is updated and known to your trusted custodian.
- Create another document outlining how your records are stored. List the digital records formats you use (such as, DOCX, JPEG, MP3, and PDF), and for what purposes you use them.
 - Do you have important information on floppy disks? How old are they? Are you still able to access that information?
 - Do you have CDs? Are they gold standard?
- List details of the software and hardware you are using, and keep the original documentation or manuals.
- Make a plan for changes that should be made within the next few years (see Step 4 Preventing loss for more information).

Warning!

Heat, light, and moisture are all enemies of long-term digital storage media. Store you digital media in a cool, dark dry area to prolong their lifespan.

Step 3: Plan for hardware and software obsolescence

Software and hardware typically become obsolete after five years. To avoid losing your records it is important to:

- Frequently upgrade the technology you use to create and maintain your records.
- Keep the document outlining the storage of your digital records up-to-date.

Avoid obscure formats! Using obscure (non-standard) formats increases preservation risks, as their technical support may quickly disappear. As part of knowing your records, plan to move from non-standard to standards or well known and widely used computer file formats, such as PDF, TIFF, DOCX, .WAV/.AIFF.

Step 4: Preventing loss

If your hard drive crashes you could lose all your family photographs or records vital to you as an individual and/or for the daily operations of your organization.

Preventing the loss of digital records may be avoided by ensuring you have a safety copy of your computer files. There are several ways to do this:

- Purchase an external hard drive (\$100-\$200) and copy all of your important documents.
- Use a USB Key (\$20-\$50) to make and keep copies of your most valuable documents.
- Back up regularly! Have a schedule.

More things to consider!

Location of safety copy: Consider pairing up with a friend; update regularly together and swap safety copies in case of fire. You may want to have two safety copies: one on an external hard drive or one on a USB key stored in a safe location, like a safety deposit box, or fire proof safe.

Life of safety copy: Technology does not remain stable. It is important to keep updating your safety devices. USB keys and other storage devices may break and the information on them will degrade overtime.

Security: Digital records are very susceptible to accidental, unauthorized or malicious alteration. To help safeguard your records against these hazards, consider saving your finalized documents in widely used stable, hard to modify, file formats like PDF, so they remain accessible over time and cannot be accidentally changed.

Avoid lossy compression: Some file formats use lossy compression to store items at a smaller file size than the original in the process losing some information, such as .JPEG. Instead, consider saving your photographs using TIFF.

E-Mail: In pre-digital times bundles of letters were treasured and handed down to future generations; currently there is a different attitude towards correspondence and e-mails are not kept in the same way. Consider printing, or saving outside your e-mail host, correspondence of special significance (tales of a daughter's travels or letters from the cousin in Afghanistan). It is important to develop criteria for keeping and maintaining e-mail over time. Please see the other brochure in this series titled "Managing E-mail" for more detailed information.

Facebook, Flickr and other social networks and e-mail service providers (gmail, yahoo): Do not rely on social networking sites for preservation! When you post your photographs on these sites you are giving up control; your photographs and other documents become property of these businesses. If these companies go out of business or have poor preservation practices you are likely to lose access to your records.

Not all documents need to be kept forever: Think about which of your documents can be discarded. Delete those files that have no long-term value to you or your organization.

Creating paper copies: You need not leave all your materials in digital form. A simpler preservation practice may be to print important records and file them with your paper records. For example, you may wish to have your photographs or the minutes of your organization's meetings printed.

Additional resources

InterPARES 2 Project. Creator Guidelines: Making and Maintaining Digital Materials: Guidelines for Individuals. http://www.interpares.org

InterPARES 2 Project. *Preserver Guidelines: Preserving Digital Records: Guidelines for Organizations*. http://www.interpares.org InterPARES 3 Project. *Managing E-Mail*. North Vancouver Museum & Archives brochure series. InterPARES 3 Project. *Consider Donating Your Records to North Vancouver Museum & Archives*. North Vancouver Museum & Archives brochure series.

North Vancouver Museum & Archives

http://www.northvanmuseum.ca/

Community History Centre 3203 Institute Rd, Lynn Valley North Vancouver, BC V7K 3E5

Public hours: Tuesday to Saturday Noon to 5 p.m. or by appointment; phone 604.990.3700

Janet Turner, Archivist 604.990.3700 ext. 8011 turnerj@dnv.org



Appendix 4: Maintaining Digital Records: Business Edition

Maintaining Digital Records: Business Edition

These guidelines have been developed to help businesses and small organizations with formalized structures understand and preserve their digital records. Keeping good records is an important part of being accountable to customers, government, members, and the public. The preservation of digital records requires more planning and periodic intervention than is necessary for traditional records. This guide offers practical advice and tips for preserving digital information that can be applied with minimal resources.

By following the steps outlined below, you are increasing the possibility that you will have accessible, authentic, usable digital records in the future. That is the immediate benefit. If your well-cared-for records find their way into an archival repository the community as a whole benefits.

Practical steps

Step 1: Appoint a trusted custodian

Depending on the size of the organization, this may be one person (secretary or records clerk) or a team of people (records department). The trusted custodian is responsible for the maintenance and care of essential records (for example, meeting minutes and financial records). It is necessary for the trusted custodian to build a good relationship with whomever you rely upon for IT expertise. The trusted custodian should communicate software and hardware needs and recordkeeping concerns to this individual.

Depending on the structure of the organization, it may be appropriate to add a clause requiring digital records preservation to its by-laws and/or policy and procedure documents.

Step 2: Understand the records

- Inventory the digital records and take note of how they are organized;
- Create a document explaining the record keeping system (this will most likely be a complex document detailing the hierarchical structure of how the documents are filed in folders, or how e-mails are distributed in directories);
 - Make sure this document is updated and known to at least one other trusted individual, and that it is formally approved by the top management.
 - Include information about retention schedules in this document.

- Know what legislation applies to the records you create. For some organizations the *Societies Act [R.S.B.C. 1996]*, and/or *Personal Information Protection Act* will apply.
- Manage e-mail; it is necessary to develop criteria for keeping and maintaining e-mail over time. Records important to the operation of your organization may arise out of e-mail threads and need to be treated as such.
 - The nature of e-mail has blurred the boundaries between private correspondence and business records.
 - The management of e-mail requires unique solutions based on your specific business or organization. Effective and efficient e-mail management is part of good record keeping practices. Please refer to the brochure "Managing E-mail" for more information.

Step 3: Understand the technological properties of the records

- List the digital records formats you use and the media on which they are stored. Keep this document up to date.
- Keep the original documentation or manuals related to the software and hardware used.
- Make a plan for changes that should be made within the next few years (see *Step 5a: Preventing loss* for more information).
- If the business requires specialized software and/or hardware, be aware of changes in the industry.
- Think about where important digital records are stored:
 - Is there important information on floppy disks? How old are they? Is the information still accessible?
 - Is there important information stored on CDs? Are they gold standard?

Step 4: Plan for hardware and software obsolescence

Software and hardware typically become obsolete after five years. To avoid losing your records it is important to:

- Frequently upgrade the technology you use to create and maintain your records
 - This is necessary because backward compatibilities have limits. For example, the latest version of MS Word is only compatible back to 1997.
- Migrate files from obsolete media to current media
 - If your organization uses older storage media (such as 3.5 inch floppy disks), it is time to update these practices as the ability to move this information to current media storage is rapidly decreasing. As 3.5 inch floppy disks have become obsolete so will CDs.
- Consider saving records in a fixed form, which will help ensure stable content.

Avoid obscure formats!

If you currently use obscure (non-standard) formats be aware that this can be a preservation risk. Support for non-standard formats could disappear rapidly. As part of knowing your records make plans to move to standards or to well known and widely used computer file formats that are considered de facto standards, such as PDF, TIFF, DOCX, WAV, and AIFF.

Warning!

Heat, light, and moisture are all enemies of long-term digital storage media. Find a cool, dark, secure place to keep all your floppies, CD's, and other storage media, until you have a plan in place to deal with their contents.

Step 5: Preventing loss

If your hard drive crashes you could lose all of your records.

- Develop a back up strategy based on your organization's size and budget.
- Educate yourself on the best practices for your organization's records.

There are two main strategies for preserving digital records.

Strategy 1: Backup copy

A backup copy is a copy of all the systems, applications and records on your computer's hard drive. Back up is typically done using an external hard drive or a mirroring system. The purpose of this copy is to enable you to reconstruct the entire configuration of your computer.

• Use a RAID (Redundant Array of Inexpensive Disks), or a mirroring hard drive technology (\$500-\$800).

Strategy 2: Safety Copy

A safety copy is the copy of the records vital to the daily operations of the business organization. The purpose of the safety copy is to ensure the survival of the records that you deem to be the most important.

- Use one or more external hard drives (\$150-\$300)
- Use one or more USB keys (\$20-\$50)

Things to consider

Location of backup copy and safety copy: It may be appropriate to have two safety copies, one on an external hard drive and one on a USB key stored in two separate locations, such as in a safe deposit box or fire-proof safe.

Life of backup copy and safety copy: Technology does not remain stable. It is important to keep updating the backup and safety devices. USB Keys, CDs, and other storage devices may break and the information on them will degrade overtime.

Security: Digital records are very susceptible to accidental, unauthorized or malicious alteration. To help safeguard records against these concerns consider saving finalized documents in widely used stable, hard to modify, file formats like PDF, so they remain accessible over time and cannot be accidentally or intentionally changed.

Password protect all business computers and enforce security to protect the records of the business. Mobile devices, such as personal data devices (PDAs) and laptops, which often leave company facilities, are particularly susceptible to theft and accidental loss. Employee awareness and adherence to company policies will help mitigate this risk.

Avoid lossy compression: Some file formats use lossy compression to store items at a smaller file size than the original in the process losing some information, such as JPEG. Instead, consider saving your photographs using TIFF.

Definitions

Backward compatibility: The ability of some software to correctly interpret and present digital components of records created with previous versions of the same software.

Fixed form: A file type that ensures the documentary appearance or presentation of the record is the same each time the record is retrieved. For example, PDF and TIFF.

Retention schedules: A timetable that specifies the length of time certain records are to be kept. Please see ARCS and ORCS, under "Additional resources" at the end of this guide, for more information.

Stable content: The quality of a record that makes the information and data contained in it immutable (it cannot be overwritten, deleted, added to or changed), and allows for changes to be made only by appending an update or creating a new version.

Trusted custodian: A preserver who will not alter the records or allow others to alter them. This person is responsible for ensuring the preservation of the records over time.

Additional resources

InterPARES 2 Project. Creator Guidelines: Making and Maintaining Digital Materials: Guidelines for Individuals. http://www.interpares.org

InterPARES 2 Project. *Preserver Guidelines: Preserving Digital Records: Guidelines for Organizations*. http://www.interpares.org

A copy of the Society Act [RSBC 1996] can be found by visiting http://www.bclaws.ca

For information about PIPA (Personal Information Protection Act) (in BC) visit the Web site of the Office of the Information & Privacy Commissioner, http://www.oipc.bc.ca/

Administrative Records Classification System (ARCS) http://www.lcs.gov.bc.ca/CIMB/arcs/admin/main.asp

Operational Records Classification Systems (ORCS) http://www.cio.gov.bc.ca/services/records/ORCS/default.asp

InterPARES 3 Project. Consider Donating Your Records to North Vancouver Museum & Archives. North Vancouver Museum & Archives brochure series.

InterPARES 3 Project. *Managing E-mail*. North Vancouver Museum & Archives brochure series.

North Vancouver Museum & Archives

http://www.northvanmuseum.ca/

Community History Centre 3203 Institute Rd, Lynn Valley North Vancouver, BC V7K 3E5

Public hours: Tuesday to Saturday Noon to 5 p.m. or by appointment; phone 604.990.3700

Janet Turner, Archivist 604.990.3700 ext. 8011 turnerj@dnv.org



Appendix 5: Managing E-mail

Managing E-mail

Many factors have contributed to e-mail becoming a key issue in business environments. The vast bulk of e-mails arriving in inboxes is an overwhelming reality for everyone. In many cases, e-mail has replaced traditional letter writing and increasingly contains records important to business functions. Binding contracts are created within e-mail threads and recorded nowhere else. In addition, the nature of e-mail has blurred the boundaries between private correspondence and business records. Developing criteria for handling, keeping and maintaining e-mail over time will ensure that important records can be efficiently retrieved and ephemera minimized.

These guidelines have been developed to help businesses and volunteer organizations understand and preserve their e-mail records. A proper records management plan includes making considerations for e-mail; every organization needs to have a policy regarding the retention and disposition of e-mail. This guide, while not comprehensive, offers practical advice and tips from the experts that can be applied with minimal resources.

There are four broad types of e-mail:

- 1. **Executive or decision-making e-mails:** Since there is an expectation of action related to these e-mails, they should be retained for a minimum of five years, unless you are legally required to keep them longer. Please note that some records may have long-term value and should be retained permanently.
- 2. **Routine administrative e-mails:** These e-mails should be retained for a minimum of one year, unless you are legally required to keep them longer.
- 3. **Ephemeral:** These e-mails have no connection to the work of the unit and the records have no retention requirement. These e-mails may be destroyed at the discretion of the user. It is recommended that they be deleted as soon as their purpose is fulfilled.
- 4. **Personal e-mails:** These e-mails are related to the personal life of an individual. Because of their variety, it is necessary to evaluate personal e-mails on an individual basis. Ideally these e-mails should be kept separately from business e-mails.

Businesses should have an e-mail policy that identifies and defines the above mentioned types of e-mails and specifies how long they should be kept.

To help determine whether an e-mail needs to be retained the following questions should be considered:

• Could the e-mail be used as evidence of an action or a decision about an individual, a program, project, etc.?

- Does the e-mail contain information that will be used as a basis for future decisions?
- Does the e-mail require or authorize an important course of action?
- Does the e-mail approve formal policy or set a precedent?
- Does the e-mail detail any obligations or responsibilities?
- Does the e-mail protect the rights or assets of your family or organization?
- Does the e-mail provide evidence of important ongoing relationships, and exchanges of ideas and information, between family or friends? Such personal e-mail is likely to replace the letters we treasured in pre-digital times.

If the answer to all these questions is 'no,' then the e-mail is ephemeral and should be deleted as soon as it is no longer useful. Examples might be e-mails which contain information about upcoming events, meeting arrangements, working drafts, company-wide memos etc.

Preserving e-mail

If the answer to any of the above questions is 'yes,' the e-mail and its attachments should be kept. There are three options for preserving e-mail over the long term:

- 1. Converting messages into PDF files. It is possible to convert e-mails (with attachments embedded), either one at a time or in groups;
- 2. Performing regular e-mail backups and maintaining them;
- 3. Printing and filing e-mails in corresponding folders (especially for personal and routine administrative e-mails).

Dealing with attachments

Attachments present unique challenges for retention and disposition. Many e-mail management systems have a limited storage capacity which is often taxed by excessive attachments.

For ephemeral and personal e-mails, attachments can be evaluated on a case by case basis.

For executive or decision making e-mails:

- Do not delete or remove an attachment from its original e-mail!
- If you save a copy of the attachment to a location other than your e-mail program (e.g., your local hard drive or a network drive), link it to its corresponding e-mail by using a consistent naming convention, for example, naming all attachments using the date and subject-line of the e-mail.
- When possible, e-mails with their attachments should be kept in the original e-mail environment, especially when the e-mail expresses a decision or an action related to the attachment, such as: "Yes, I approve of the attached document."
- Converting e-mails with their attachments into PDF is an accepted practice.

Organizing e-mail

E-mail should be managed according to your business functions. Create folders based on the activity or project which generated the e-mail. When naming these folders look to the file plan you use for your other records to maintain consistency among paper, electronic and e-mail records!

If a file plan does not exist consider creating one. If necessary, consult local records management experts.

The folder method of organization also facilitates searching and retrieval, and allows for easier destruction. Managing e-mail in this way is recommended over using only the inbox and sent folders or organizing them solely by date.

Some things to consider!

- Forwarded messages may be easily modified by the sender; therefore, they should not be used as official records.
- E-mail is an insecure means of communication. You are the responsible party for the email account. Password protecting all computers in your office is a good first step towards ensuring the security of your e-mail system.

E-mail housekeeping and etiquette guidelines

Handling all business e-mail in a professional manner makes them retrievable, accessible and understandable. Requiring staff to follow certain housekeeping and etiquette guidelines is an important part of proper e-mail management. Listed below are a series of useful guidelines.

Delete drafts of e-mail messages after the final version has been completed and sent.

E-mail threads

- Only keep the last e-mail containing all previous messages on the topic.
- If messages in the e-mail thread have been modified, all copies need to be retained.
- Start a new e-mail message when the subject of the thread changes.

Subject line

- Never leave the subject line blank.
- Never alter the subject line of an already transmitted message.

Message body

- The body of the message you write should build from the subject line.
- Use a proper greeting.
- Be professional. Your message could be read by a third party. Remember, e-mail is *not* a private or secure communication tool.

- Be aware that what you write may be interpreted differently than what you intend, especially since body language is not present.
- Create separate e-mails for separate subjects.
- If multiple issues need to be addressed in a message pertaining to the subject, address each issue in a new paragraph (use bullet points if necessary).
- Use proper punctuation. Do not use all capital letters; do not use all lower case letters.
- Avoid including personal information.
- Never include passwords, social insurance or credit card numbers in an e-mail message.
- Avoid using emoticons (e.g., :-))

Replying to a message

- Ensure that a reply is necessary.
- Be specific in your response if you do not understand the original message. In other words, if you receive an e-mail that is confusing, do not simply write back "What?" or "Please clarify." Provide a brief explanation as to what you do not understand.

Sending messages

- Before sending, check the message for spelling and grammar mistakes.
- When copying other people in a message, make sure only to include the necessary people.
- Always verify the address when replying to a message (be sure you are not sending it to an unintended person, group of people, or listserv).

Attachments

- Ensure that the attachment is necessary.
- Attach first, write second. When sending, double check the message to make sure you attached the document.
- Be sure that the file name of the attachment is clearly identified.
- If your organization or office uses an established and reliable recordkeeping system, you should create links to files instead of sending attachments when sending internal e-mails. This will reduce the number of copies of the document, limit use of storage space, and simplify the management and long-term preservation of the document. When sending links, be sure that the recipient has access to the location.

Additional resources

Administrative Records Classification System (ARCS) http://www.lcs.gov.bc.ca/CIMB/arcs/admin/main.asp

Operational Records Classification Systems (ORCS) http://www.cio.gov.bc.ca/services/records/ORCS/default.asp

InterPARES 3 Project. *Consider Donating Your Records to North Vancouver Museum & Archives*. North Vancouver Museum & Archives brochure series.

InterPARES 3 Project. *Maintaining Digital Records: Business Edition*. North Vancouver Museum & Archives brochure series.

InterPARES 3 Project. *Maintaining Your Digital Records*. North Vancouver Museum & Archives brochure series.

North Vancouver Museum & Archives

http://www.northvanmuseum.ca/

Community History Centre 3203 Institute Rd, Lynn Valley North Vancouver, BC V7K 3E5

Public hours: Tuesday to Saturday Noon to 5 p.m. or by appointment; phone 604.990.3700

Janet Turner, Archivist 604.990.3700 ext. 8011 turnerj@dnv.org



Appendix 6: Consider Donating Your Records to North Vancouver Museum & Archives

Consider Donating Your Records to North Vancouver Museum & Archives

Archives exist to serve and preserve the documented memory of the community to which they belong. They do so by acquiring and caring for the records of individuals and organizations active in the community. These records include paper records, photographs, maps, plans, videos, and digital records.

The North Vancouver Museum and Archives (NVMA) is responsible for acquiring and preserving community records for The City and The District of North Vancouver. The collection consists of over 40,000 historic photographs, and over 700 m of textual records reflecting the history of this community. NVMA also operates a small reference library consisting mainly of books pertaining to the North Shore and an extensive collection of pamphlets, magazines, newspapers, and booklets.

NVMA is making preservation of digital records created by North Vancouver community groups and residents a priority. The Archives is supported financially and technically in this endeavour by both the City and the District of North Vancouver.

Why donate?

- Make a lasting contribution to the historical narrative of North Vancouver.
- Contribute to passing knowledge from one generation to the next.
- Be recognized as a part of our cultural memory.
- Ensure the preservation of your papers by placing them in a controlled environment.
- Receive a tax receipt for their fair market value.

What to donate?

NVMA collects materials which document the life and times of North Vancouver, its business and people. Welcome donations include records such as: minutes, correspondence and reports of organizations and societies that are part of North Vancouver, as well as personal papers, diaries, photographs, neighbourhood oral histories, films of events and similar unpublished records.

NVMA is able to accept material in a wide range of formats including paper, audio visual and digital materials.

NVMA evaluates each potential donation and takes into consideration:

- Significance to the history and culture of North Vancouver;
- Relationship to existing collections (does it fill a gap?);
- Availability of storage space; and
- Resources required to provide appropriate care and documentation.

When to donate?

Events such as a death of a family member or the dissolution of an organization may open the way to such a donation. You may also consider donating records you can no longer care for, such as old photographs.

- Sooner is better with regard to preservation, especially when considering donating digital records.
- If you are still using the records—for instance, recent minutes of an existing society—we can discuss a schedule of regular transfers.

Prepare your records for donation

You should contact your local archives if you think you have materials that may be of interest. It is important to meet with the archivist and discuss the details of any donation.

As a general rule archives do not acquire published materials.

Please do not reorganize, repair or clean your records (tape and cleaning products may damage the materials). We prefer to keep the original order, and the archivist can carry out conservation activities on the materials if necessary.

Donating digital records

The preservation of digital records requires more planning and regular intervention than is necessary for traditional records. For recordkeeping advice consult the local archives, and see the additional brochures in this series:

- Maintaining Your Digital Records
- Maintaining Digital Records: Business Edition
- Managing E-mail

To preserve the ability to access digital records it is essential that these records are migrated to standard file formats, such as PDF, DOCX, TIFF.

If you keep your records on floppy disks, CDs, VHS tapes or other media that are quickly becoming obsolete, please transfer these records to more current storage media, such as USB keys, DVDs and external hard drives. If you are not able to do the transfer yourself, please contact the archives sooner than later to help ensure your records can be properly preserved.

Other considerations

Copyright

We prefer to have copyright transferred to NVMA when the donation is made. Each donation is considered on a case-by-case basis. Consult with the archivist.

Privacy

It is possible to restrict access to all or some records for a period of time. Restrictions can be placed on sensitive material after discussion with the archivist.

Security

NVMA considers the security of its materials a priority. Paper and other physical archives are kept in a secure storage vault in the archives. Digital records are kept on secured server space and maintained by the District of North Vancouver's Information Technology department.

More information

The wealth of our collections depends on the generosity of our donors! Please contact the NVMA and ask to speak to the archivist about donating your materials.

Additional resources

InterPARES 3 Project. *Maintaining Your Digital Records*. North Vancouver Museum & Archives brochure series.

InterPARES 3 Project. *Maintaining Digital Records: Business Edition*. North Vancouver Museum & Archives brochure series.

InterPARES 3 Project. *Managing E-mail*. North Vancouver Museum & Archives brochure series.

North Vancouver Museum & Archives

http://www.northvanmuseum.ca/

Community History Centre 3203 Institute Rd, Lynn Valley North Vancouver, BC V7K 3E5

Public hours: Tuesday to Saturday Noon to 5 p.m. or by appointment; phone 604.990.3700

Janet Turner, Archivist 604.990.3700 ext. 8011 turnerj@dnv.org



Appendix 7: Digital Records Acquisition Policy

Digital records acquisition policy

The mandate of the North Vancouver Museum & Archives (NVMA), is to acquire, maintain, and provide access to the records of organizations and individuals whose activities document the historical, social, economic, political and cultural development of North Vancouver. This mandate includes the preservation of records in all media include digital records. To ensure the digital heritage of North Vancouver is not lost, NVMA is beginning to set up the necessary prerequisites for collecting digital records.

Recently NVMA was allotted space on the District of North Vancouver's server. The server is a RAID 5 configuration which has the support of the IT department and enjoys the security and back up that the District of North Vancouver provides all its digital records. This enables the archives to receive and safely store donations of digital materials. Long-term preservation of digital records is an ongoing commitment for NVMA. The chosen method for extending the life of and ensuring access to digital records is to migrate digital objects to currently accessible and open formats. Migration is a technique which is applied regularly in archives to extend the life of unstable media. For example, the paper used to make newsprint, is highly acidic and quickly degrades. Creating microform copies was a common practice used to extend the life of newspapers. Similarly, digital records are inherently unstable; technology changes rapidly, and new software is only backwards compatible to a certain version (for example older versions of Microsoft Works, previous to Works 4.5, cannot be run on Windows 2000 or later). Digital obsolescence is one of the major barriers facing anyone wishing to preserve accessible and readable digital records over the long term.

The expertise and technology required to successfully guarantee the ability to provide access to, and assure the long-term maintenance of, digital records does not yet exist at the North Vancouver Archives. Such long-term preservation requires special software, expertise, and hardware that are not yet all in place. This policy, along with educational initiatives, are a first step towards being able to fulfill the Archive's responsibility to the community of North Vancouver.

Assuming that the material complies with NVMA's overall acquisition guidelines as expressed in the Collection Policy, for the purposes of permanent preservation and access, the North Vancouver Archives has developed the following deposit guidelines and policies:

• All files accepted by the North Vancouver Archives, regardless of file type or format, will be preserved in their original, unaltered state. For all original files, including those that are not considered supported or preservation formats, the Archives will:

- Ensure bit level preservation through a passive management program, ensuring that the original files remain unaltered.
- Generate an MDS5 checksum upon receipt, store checksums permanently, and provide a mechanism to monitor checksums through manual means.
- Provide copies of files to users in their unaltered state.

We cannot guarantee the availability of hardware or software to view original files that are not included in the list of supported or preferred formats. Those who wish to use such records may be required to find their own hardware or software.

- For each file format listed as a supported format the archives will:
 - Accept files in their original state and provide the services listed above.
 - Provide advice and assistance to help you convert supported file formats to a preservation format.
 - Attempt to maintain in-house access tools to render files in their original format. However, we cannot guarantee the permanent accessibility of in-house access tools, and reserve the right to remove file formats from the list of supported formats.
 - If we remove a file from the list of supported formats, we will attempt to migrate such files to a target format, but we cannot guarantee that such a migration will take place.
 - Donors are encouraged to migrate material to supported formats and current media. Please see list of supported formats at the end of this document.
- For each file format listed as a preservation format the archives will:
 - Maintain hardware and software that can render the files in the target format state. Such hardware and software may be available on site or online.
 - If software to render a particular target format is no longer available, we will migrate the files to a new target format.
 - As online access tools become easily available the Archives will endeavour to utilize them.

If a format is not listed in the Preservation and Access Plan, please consult the archivist concerning steps that could be taken to ensure long-term access to the file or the information contained in it. The archivist may be able to provide guidance with regard to migration.

Preservation & Access Plan

Genre	Supported Formats	Preservation Formats	Supported Access Formats	Notes
Text, source code	.txt files		.txt	
Word Processed Documents	.doc, .wpd, .odt	.odt	PDF/A	Use Adobe Acrobat or Open Office to migrate doc, wpd, and odt to PDF/A, where appropriate.
Raster Images	.jpg, .png	.tif	.jpg	Use Adobe to migrate
Audio	.mp3	.wav	.mp3	Convert using ffmpeg http://www.ffmpeg.org/
E-mail accounts	None*	PDF, PDF/A	PDF, PDF/A	Use Adobe Acrobat or Open Office to migrate doc, wpd, and odt to PDF/A, where appropriate.
Video	.avi, .mov, .wmv	.mpeg2	.ogv	Convert using ffmpeg
Databases	.mdb	Original format	Original format	
Spreadsheets	.xls, .ods	.ods	.ods	Use Open Office to migrate. Some properties may be lost.
Application files/Executables	None	Original format	Original format	

* At this time, preserving e-mail in its creating environment is currently beyond the technical capabilities of the North Vancouver Archives. The North Vancouver Archives will accept e-mail records (which often contain important correspondence and decision making information) in two formats: either as print copies of e-mails, or as digital copies of e-mail in PDF/A format. When technological change provides the archives with a solution that meets it requirements the policy will be changed accordingly.

Appendix 8: Customizable Versions of Products

Maintaining Your Digital Records

These guidelines have been developed to help individuals and small volunteer organizations understand and preserve their digital records. The preservation of digital records requires more planning and periodic intervention than is necessary for traditional records.

This guide offers practical advice and tips that can be applied with minimal resources. If your well-cared-for records find their way into an archival repository, the community as a whole will also benefit, and so will posterity.

Step 1: Appoint a trusted custodian

This person will take responsibility for the overall care of all your records after you are no longer able to, particularly those that you identify as vital. This can be a family member, the secretary of your organization or the community archivist. In some cases, the trusted custodian could be the records creator.

Trusted custodian

A preserver who can be trusted not to alter the records or allow others to alter them. This person is responsible for ensuring the preservation of the records over time.

Step 2: Take charge of your records

- Create a document that explains how they are organized. This may be a document that outlines how you label your family photos and explains how your documents are filed in named folders. Make sure this document is updated and known to your trusted custodian.
- Create another document outlining how your records are stored. List the digital records formats you use (such as, DOCX, JPEG, MP3, and PDF), and for what purposes you use them.
 - Do you have important information on floppy disks? How old are they? Are you still able to access that information?
 - Do you have CDs? Are they gold standard?
- List details of the software and hardware you are using, and keep the original documentation or manuals.
- Make a plan for changes that should be made within the next few years (see Step 4 Preventing loss for more information).

Warning!

Heat, light, and moisture are all enemies of long-term digital storage media. Store you digital media in a cool, dark dry area to prolong their lifespan.

Step 3: Plan for hardware and software obsolescence

Software and hardware typically become obsolete after five years. To avoid losing your records it is important to:

- Frequently upgrade the technology you use to create and maintain your records.
- Keep the document outlining the storage of your digital records up-to-date.

Avoid obscure formats! Using obscure (non-standard) formats increases preservation risks, as their technical support may quickly disappear. As part of knowing your records, plan to move from non-standard to standards or well known and widely used computer file formats, such as PDF, TIFF, DOCX, .WAV/.AIFF.

Step 4: Preventing loss

If your hard drive crashes you could lose all your family photographs or records vital to you as an individual and/or for the daily operations of your organization.

Preventing the loss of digital records may be avoided by ensuring you have a safety copy of your computer files. There are several ways to do this:

- Purchase an external hard drive (\$100-\$200) and copy all of your important documents.
- Use a USB Key (\$20-\$50) to make and keep copies of your most valuable documents.
- Back up regularly! Have a schedule.

More things to consider!

Location of safety copy: Consider pairing up with a friend; update regularly together and swap safety copies in case of fire. You may want to have two safety copies: one on an external hard drive or one on a USB key stored in a safe location, like a safety deposit box, or fire proof safe.

Life of safety copy: Technology does not remain stable. It is important to keep updating your safety devices. USB keys and other storage devices may break and the information on them will degrade overtime.

Security: Digital records are very susceptible to accidental, unauthorized or malicious alteration. To help safeguard your records against these hazards, consider saving your finalized documents in widely used stable, hard to modify, file formats like PDF, so they remain accessible over time and cannot be accidentally changed.

Avoid lossy compression: Some file formats use lossy compression to store items at a smaller file size than the original in the process losing some information, such as .JPEG. Instead, consider saving your photographs using TIFF.

E-Mail: In pre-digital times bundles of letters were treasured and handed down to future generations; currently there is a different attitude towards correspondence and e-mails are not kept in the same way. Consider printing, or saving outside your e-mail host, correspondence of special significance (tales of a daughter's travels or letters from the cousin in Afghanistan). It is important to develop criteria for keeping and maintaining e-mail over time. Please see the other brochure in this series titled "Managing E-mail" for more detailed information.

Facebook, Flickr and other social networks and e-mail service providers (gmail, yahoo): Do not rely on social networking sites for preservation! When you post your photographs on these sites you are giving up control; your photographs and other documents become property of these businesses. If these companies go out of business or have poor preservation practices you are likely to lose access to your records.

Not all documents need to be kept forever: Think about which of your documents can be discarded. Delete those files that have no long-term value to you or your organization.

Creating paper copies: You need not leave all your materials in digital form. A simpler preservation practice may be to print important records and file them with your paper records. For example, you may wish to have your photographs or the minutes of your organization's meetings printed.

Additional resources

InterPARES 2 Project. Creator Guidelines: Making and Maintaining Digital Materials: Guidelines for Individuals. http://www.interpares.org

InterPARES 2 Project. *Preserver Guidelines: Preserving Digital Records: Guidelines for Organizations*. http://www.interpares.org

InterPARES 3 Project. Managing E-Mail. [Institution name] brochure series.

InterPARES 3 Project. *Consider Donating Your Records to your local Archives*. [Institution name] brochure series.

[Institution contact information]



Maintaining Digital Records: Business Edition

These guidelines have been developed to help businesses and small organizations with formalized structures understand and preserve their digital records. Keeping good records is an important part of being accountable to customers, government, members, and the public. The preservation of digital records requires more planning and periodic intervention than is necessary for traditional records. This guide offers practical advice and tips for preserving digital information that can be applied with minimal resources.

By following the steps outlined below, you are increasing the possibility that you will have accessible, authentic, usable digital records in the future. That is the immediate benefit. If your well-cared-for records find their way into an archival repository the community as a whole benefits.

Practical steps

Step 1: Appoint a trusted custodian

Depending on the size of the organization, this may be one person (secretary or records clerk) or a team of people (records department). The trusted custodian is responsible for the maintenance and care of essential records (for example, meeting minutes and financial records). It is necessary for the trusted custodian to build a good relationship with whomever you rely upon for IT expertise. The trusted custodian should communicate software and hardware needs and recordkeeping concerns to this individual.

Depending on the structure of the organization, it may be appropriate to add a clause requiring digital records preservation to its by-laws and/or policy and procedure documents. **Step 2: Understand the records**

- Inventory the digital records and take note of how they are organized;
- Create a document explaining the record keeping system (this will most likely be a complex document detailing the hierarchical structure of how the documents are filed in folders, or how e-mails are distributed in directories);
 - Make sure this document is updated and known to at least one other trusted individual, and that it is formally approved by the top management.
 - Include information about retention schedules in this document.
- Know what legislation applies to the records you create. For some organizations the *Societies Act [R.S.B.C. 1996]*, and/or *Personal Information Protection Act* will apply.

- Manage e-mail; it is necessary to develop criteria for keeping and maintaining e-mail over time. Records important to the operation of your organization may arise out of e-mail threads and need to be treated as such.
 - The nature of e-mail has blurred the boundaries between private correspondence and business records.
 - The management of e-mail requires unique solutions based on your specific business or organization. Effective and efficient e-mail management is part of good record keeping practices. Please refer to the brochure "Managing E-mail" for more information.

Step 3: Understand the technological properties of the records

- List the digital records formats you use and the media on which they are stored. Keep this document up to date.
- Keep the original documentation or manuals related to the software and hardware used.
- Make a plan for changes that should be made within the next few years (see *Step 5a: Preventing loss* for more information).
- If the business requires specialized software and/or hardware, be aware of changes in the industry.
- Think about where important digital records are stored:
 - Is there important information on floppy disks? How old are they? Is the information still accessible?
 - Is there important information stored on CDs? Are they gold standard?

Step 4: Plan for hardware and software obsolescence

Software and hardware typically become obsolete after five years. To avoid losing your records it is important to:

- Frequently upgrade the technology you use to create and maintain your records
 - This is necessary because backward compatibilities have limits. For example, the latest version of MS Word is only compatible back to 1997.
- Migrate files from obsolete media to current media
 - If your organization uses older storage media (such as 3.5 inch floppy disks), it is time to update these practices as the ability to move this information to current media storage is rapidly decreasing. As 3.5 inch floppy disks have become obsolete so will CDs.
- Consider saving records in a fixed form, which will help ensure stable content.

Avoid obscure formats!

If you currently use obscure (non-standard) formats be aware that this can be a preservation risk. Support for non-standard formats could disappear rapidly. As part of knowing your records make plans to move to standards or to well known and widely used computer file formats that are considered de facto standards, such as PDF, TIFF, DOCX, WAV, and AIFF.

Warning!

Heat, light, and moisture are all enemies of long-term digital storage media. Find a cool, dark, secure place to keep all your floppies, CD's, and other storage media, until you have a plan in place to deal with their contents.

Step 5: Preventing loss

If your hard drive crashes you could lose all of your records.

- Develop a back up strategy based on your organization's size and budget.
- Educate yourself on the best practices for your organization's records.

There are two main strategies for preserving digital records.

Strategy 1: Backup copy

A backup copy is a copy of all the systems, applications and records on your computer's hard drive. Backup is typically done using an external hard-drive or a mirroring system. The purpose of this copy is to enable you to reconstruct the entire configuration of your computer.

• Use a RAID (Redundant Array of Inexpensive Disks), or a mirroring hard-drive technology (\$500-\$800).

Strategy 2: Safety Copy

A safety copy is the copy of the records vital to the daily operations of the business organization. The purpose of the safety copy is to ensure the survival of the records that you deem to be the most important.

- Use one or more external hard drives (\$150-\$300)
- Use one or more USB keys (\$20-\$50)

Things to consider

Location of backup copy and safety copy: It may be appropriate to have two safety copies, one on an external hard drive and one on a USB key stored in two separate locations, such as in a safe deposit box or fire-proof safe.

Life of backup copy and safety copy: Technology does not remain stable. It is important to keep updating the back up and safety devices. USB Keys, CDs, and other storage devices may break and the information on them will degrade overtime.

Security: Digital records are very susceptible to accidental, unauthorized or malicious alteration. To help safeguard records against these concerns consider saving finalized documents in widely used stable, hard to modify, file formats like PDF, so they remain accessible over time and cannot be accidentally or intentionally changed.

Password protect all business computers and enforce security to protect the records of the business. Mobile devices, such as personal data devices (PDAs) and laptops, which often leave company facilities, are particularly susceptible to theft and accidental loss. Employee awareness and adherence to company policies will help mitigate this risk.

Avoid lossy compression: Some file formats use lossy compression to store items at a smaller file size than the original in the process losing some information, such as .JPEG. Instead, consider saving your photographs using TIFF.

Definitions

Backward compatibility: The ability of some software to correctly interpret and present digital components of records created with previous versions of the same software.

Fixed form: A file type that ensures the documentary appearance or presentation of the record is the same each time the record is retrieved. For example, PDF and TIFF.

Retention schedules: A timetable that specifies the length of time certain records are to be kept. Please see ARCS and ORCS, under "Additional resources" at the end of this guide, for more information.

Stable content: The quality of a record that makes the information and data contained in it immutable (it cannot be overwritten, deleted, added to or changed), and allows for changes to be made only by appending an update or creating a new version.

Trusted custodian: A preserver who will not alter the records or allow others to alter them. This person is responsible for ensuring the preservation of the records over time.

Additional resources

InterPARES 2 Project. Creator Guidelines: Making and Maintaining Digital Materials: Guidelines for Individuals. http://www.interpares.org

InterPARES 2 Project. *Preserver Guidelines: Preserving Digital Records: Guidelines for Organizations*. http://www.interpares.org

A copy of the Society Act [RSBC 1996] can be found by visiting http://www.bclaws.ca

For information about PIPA (Personal Information Protection Act) (in BC) visit the Web site of the Office of the Information & Privacy Commissioner, http://www.oipc.bc.ca/

Administrative Records Classification System (ARCS) http://www.lcs.gov.bc.ca/CIMB/arcs/admin/main.asp

Operational Records Classification Systems (ORCS) http://www.cio.gov.bc.ca/services/records/ORCS/default.asp

InterPARES 3 Project. *Consider Donating Your Records to* [Institution name]. [Institution name] brochure series.

InterPARES 3 Project. *Managing E-mail*. [Institution name] brochure series.

InterPARES 3 Project http://www.interpares.org

[Institution contact information]



Managing E-mail

Many factors have contributed to e-mail becoming a key issue in business environments. The vast bulk of e-mails arriving in inboxes is an overwhelming reality for everyone. In many cases, e-mail has replaced traditional letter writing and increasingly contains records important to business functions. Binding contracts are created within e-mail threads and recorded nowhere else. In addition, the nature of e-mail has blurred the boundaries between private correspondence and business records. Developing criteria for handling, keeping and maintaining e-mail over time will ensure that important records can be efficiently retrieved and ephemera minimized.

These guidelines have been developed to help businesses and volunteer organizations understand and preserve their e-mail records. A proper records management plan includes making considerations for e-mail; every organization needs to have a policy regarding the retention and disposition of e-mail. This guide, while not comprehensive, offers practical advice and tips from the experts that can be applied with minimal resources.

There are four broad types of e-mail:

- 1. **Executive or decision-making e-mails:** Since there is an expectation of action related to these e-mails, they should be retained for a minimum of five years, unless you are legally required to keep them longer. Please note that some records may have long-term value and should be retained permanently.
- 2. **Routine administrative e-mails:** These e-mails should be retained for a minimum of one year, unless you are legally required to keep them longer.
- 3. **Ephemeral:** These e-mails have no connection to the work of the unit and the records have no retention requirement. These e-mails may be destroyed at the discretion of the user. It is recommended that they be deleted as soon as their purpose is fulfilled.
- 4. **Personal e-mails:** These e-mails are related to the personal life of an individual. Because of their variety, it is necessary to evaluate personal e-mails on an individual basis. Ideally these e-mails should be kept separately from business e-mails.

Businesses should have an e-mail policy that identifies and defines the above mentioned types of e-mails and specifies how long they should be kept.

To help determine whether an e-mail needs to be retained the following questions should be considered:

- Could the e-mail be used as evidence of an action or a decision about an individual, a program, project, etc.?
- Does the e-mail contain information that will be used as a basis for future decisions?
- Does the e-mail require or authorize an important course of action?
- Does the e-mail approve formal policy or set a precedent?
- Does the e-mail detail any obligations or responsibilities?
- Does the e-mail protect the rights or assets of your family or organization?
- Does the e-mail provide evidence of important ongoing relationships, and exchanges of ideas and information, between family or friends? Such personal e-mail is likely to replace the letters we treasured in pre-digital times.

If the answer to all these questions is 'no,' then the e-mail is ephemeral and should be deleted as soon as it is no longer useful. Examples might be e-mails which contain information about upcoming events, meeting arrangements, working drafts, company-wide memos etc.

Preserving e-mail

If the answer to any of the above questions is 'yes,' the e-mail and its attachments should be kept. There are three options for preserving e-mail over the long term:

- 5. Converting messages into PDF files. It is possible to convert e-mails (with attachments embedded), either one at a time or in groups;
- 6. Performing regular e-mail backups and maintaining them;
- 7. Printing and filing e-mails in corresponding folders (especially for personal and routine administrative e-mails).

Dealing with attachments

Attachments present unique challenges for retention and disposition. Many e-mail management systems have a limited storage capacity which is often taxed by excessive attachments. For ephemeral and personal e-mails, attachments can be evaluated on a case by case basis. For executive or decision making e-mails:

- Do not delete or remove an attachment from its original e-mail!
- If you save a copy of the attachment to a location other than your e-mail program (e.g., your local hard drive or a network drive), link it to its corresponding e-mail by using a consistent naming convention, for example, naming all attachments using the date and subject-line of the e-mail.
- When possible, e-mails with their attachments should be kept in the original e-mail environment, especially when the e-mail expresses a decision or an action related to the attachment, such as: "Yes, I approve of the attached document."
- Converting e-mails with their attachments into PDF is an accepted practice.

Organizing e-mail

E-mail should be managed according to your business functions. Create folders based on the activity or project which generated the e-mail. When naming these folders look to the file plan you use for your other records to maintain consistency among paper, electronic and e-mail records!

If a file plan does not exist consider creating one. If necessary, consult local records management experts.

The folder method of organization also facilitates searching and retrieval, and allows for easier destruction. Managing e-mail in this way is recommended over using only the inbox and sent folders or organizing them solely by date.

Some things to consider!

- Forwarded messages may be easily modified by the sender; therefore, they should not be used as official records.
- E-mail is an insecure means of communication. You are the responsible party for the email account. Password protecting all computers in your office is a good first step towards ensuring the security of your e-mail system.

E-mail housekeeping and etiquette guidelines

Handling all business e-mail in a professional manner makes them retrievable, accessible and understandable. Requiring staff to follow certain housekeeping and etiquette guidelines is an important part of proper e-mail management. Listed below are a series of useful guidelines.

Delete drafts of e-mail messages after the final version has been completed and sent.

E-mail threads

- Only keep the last e-mail containing all previous messages on the topic.
- If messages in the e-mail thread have been modified, all copies need to be retained.
- Start a new e-mail message when the subject of the thread changes.

Subject line

- Never leave the subject line blank.
- Never alter the subject line of an already transmitted message.

Message body

- The body of the message you write should build from the subject line.
- Use a proper greeting.
- Be professional. Your message could be read by a third party. Remember, e-mail is *not* a private or secure communication tool.
- Be aware that what you write may be interpreted differently than what you intend, especially since body language is not present.
- Create separate e-mails for separate subjects.
- If multiple issues need to be addressed in a message pertaining to the subject, address each issue in a new paragraph (use bullet points if necessary).
- Use proper punctuation. Do not use all capital letters; do not use all lower case letters.
- Avoid including personal information.
- Never include passwords, social insurance or credit card numbers in an e-mail message.
- Avoid using emoticons (e.g., :-))

Replying to a message

- Ensure that a reply is necessary.
- Be specific in your response if you do not understand the original message. In other words, if you receive an e-mail that is confusing, do not simply write back "What?" or "Please clarify." Provide a brief explanation as to what you do not understand.

Sending messages

- Before sending, check the message for spelling and grammar mistakes.
- When copying other people in a message, make sure only to include the necessary people.

• Always verify the address when replying to a message (be sure you are not sending it to an unintended person, group of people, or listserv).

Attachments

- Ensure that the attachment is necessary.
- Attach first, write second. When sending, double check the message to make sure you attached the document.
- Be sure that the file name of the attachment is clearly identified.
- If your organization or office uses an established and reliable recordkeeping system, you should create links to files instead of sending attachments when sending internal e-mails. This will reduce the number of copies of the document, limit use of storage space, and simplify the management and long-term preservation of the document. When sending links, be sure that the recipient has access to the location.

Additional resources

Administrative Records Classification System (ARCS) http://www.lcs.gov.bc.ca/CIMB/arcs/admin/main.asp

Operational Records Classification Systems (ORCS) http://www.cio.gov.bc.ca/services/records/ORCS/default.asp

InterPARES 3 Project. *Consider Donating Your Records to* [Institution name]. [Institution name] brochure series.

InterPARES 3 Project. *Maintaining Digital Records: Business Edition*. [Institution name] brochure series.

InterPARES 3 Project. Maintaining Your Digital Records. [Institution name] brochure series.

[Institution contact information]



Consider Donating Your Records to [institution name]

Archives exist to serve and preserve the documented memory of the community to which they belong. They do so by acquiring and caring for the records of individuals and organizations active in the community. These records include paper records, photographs, maps, plans, videos, and digital records.

[Institution name] is responsible for acquiring and preserving community records for **[geographical, political and/or other entity to which your institution is accountable**]. The collection consists of **[information about your institutions holdings**].

[Institution name] is making preservation of digital records created by [geographical, political and/or other entity to which your institution is accountable] a priority. The archives is supported financially and technically in this endeavour [information about the financial supporting body or parent institution responsible for funding the archives].

Why donate?

- Make a lasting contribution to the historical narrative of [geographical, political and/or other entity to which your institution is accountable].
- Contribute to passing knowledge from one generation to the next.
- Be recognized as a part of our cultural memory.
- Ensure the preservation of your papers by placing them in a controlled environment.
- Receive a tax receipt for their fair market value.

What to donate?

[Institution name] collects materials which document the life and times of **[geographical, political and/or other entity to which your institution is accountable]**, its business and people. Welcome donations include records such as: minutes, correspondence and reports of organizations and societies that are part of **[geographical, political and/or other entity to which your institution is accountable]**, as well as personal papers, diaries, photographs, neighbourhood oral histories, films of events and similar unpublished records.

[Institution name] is able to accept material in a wide range of formats including paper, audio visual and digital materials.

[Institution name] evaluates each potential donation and takes into consideration:

- Significance to the history and culture of [geographical, political and/or other entity to which your institution is accountable];
- Relationship to existing collections (does it fill a gap?);
- Availability of storage space; and
- Resources required to provide appropriate care and documentation.

When to donate?

Events such as a death of a family member or the dissolution of an organization may open the way to such a donation. You may also consider donating records you can no longer care for, such as old photographs.

- Sooner is better with regard to preservation, especially when considering donating digital records.
- If you are still using the records—for instance, recent minutes of an existing society—we can discuss a schedule of regular transfers.

Prepare your records for donation

You should contact your local archives if you think you have materials that may be of interest. It is important to meet with the archivist and discuss the details of any donation.

As a general rule archives do not acquire published materials.

Please do not reorganize, repair or clean your records (tape and cleaning products may damage the materials). We prefer to keep the original order, and the archivist can carry out conservation activities on the materials if necessary.

Donating digital records

The preservation of digital records requires more planning and regular intervention than is necessary for traditional records. For recordkeeping advice consult the local archives, and see the additional brochures in this series:

- Maintaining Your Digital Records
- Maintaining Digital Records: Business Edition
- Managing E-mail

To preserve the ability to access digital records it is essential that these records are migrated to standard file formats, such as PDF, DOCX, TIFF.

If you keep your records on floppy disks, CDs, VHS tapes or other media that are quickly becoming obsolete, please transfer these records to more current storage media, such as USB keys, DVDs and external hard drives. If you are not able to do the transfer yourself, please contact the archives sooner than later to help ensure your records can be properly preserved.

Other considerations

Copyright

We prefer to have copyright transferred to **[Institution name]** when the donation is made. Each donation is considered on a case-by-case basis. Consult with the archivist.

Privacy

It is possible to restrict access to all or some records for a period of time. Restrictions can be placed on sensitive material after discussion with the archivist.

Security

[Institution name] considers the security of its materials a priority. Paper and other physical archives are kept in a secure storage vault in the archives. [Information about the security measures your institution is taking to ensure the security of digital records, such as server space, backups, etc.].

More information

The wealth of our collections depends on the generosity of our donors! Please contact the **[Institution name]** and ask to speak to the archivist about donating your materials.

Additional resources

InterPARES 3 Project. Maintaining Your Digital Records. [Institution name] brochure series.

InterPARES 3 Project. *Maintaining Digital Records: Business Edition*. [Institution name] brochure series.

InterPARES 3 Project. *Managing E-mail*. [Institution name] brochure series.

InterPARES 3 Project http://www.interpares.org

[Institution contact information]



Digital Records Acquisition Policy

The mandate of the **[Institution name]** is to acquire, maintain, and provide access to the records of organizations and individuals whose activities document the historical, social, economic, political and cultural development of **[Institution name]**. This mandate includes the preservation of records in all media include digital records. To ensure the digital heritage of **[Institution name]** is not lost, **[Institution name]** is beginning to set up the necessary prerequisites for collecting digital records.

Long-term preservation of digital records is an ongoing commitment for the **[Institution name]**. The chosen method for extending the life of and ensuring access to digital records is to migrate digital objects to currently accessible and open formats. Migration is a technique which is applied regularly in archives to extend the life of unstable media. For example, the paper used to make newsprint, is highly acidic and quickly degrades. Creating microform copies was a common practice used to extend the life of newspapers. Similarly, digital records are inherently unstable; technology changes rapidly, and new software is only backwards compatible to a certain version (for example older versions of Microsoft Works, previous to Works 4.5, cannot be run on Windows 2000 or later). Digital obsolescence is one of the major barriers facing anyone wishing to preserve accessible and readable digital records over the long term.

Assuming that the material complies with **[Institution name]** overall acquisition guidelines as expressed in the Collection Policy, for the purposes of permanent preservation and access, the **[Institution name]** has developed the following deposit guidelines and policies:

- All files accepted by the **[Institution name]**, regardless of file type or format, will be preserved in their original, unaltered state. For all original files, including those that are not considered supported or preservation formats, the Archives will:
 - Ensure bit level preservation through a passive management program, ensuring that the original files remain unaltered.
 - Generate an MDS5 checksum upon receipt, store checksums permanently, and provide a mechanism to monitor checksums through manual means.
 - Provide copies of files to users in their unaltered state.

We cannot guarantee the availability of hardware or software to view original files that are not included in the list of supported or preferred formats. Those who wish to use such records may be required to find their own hardware or software.

- For each file format listed as a supported format the [Institution name] will:
 - Accept files in their original state and provide the services listed above.
 - Provide advice and assistance to help you convert supported file formats to a preservation format.

- Attempt to maintain in-house access tools to render files in their original format. However, we cannot guarantee the permanent accessibility of in-house access tools, and reserve the right to remove file formats from the list of supported formats.
- If we remove a file from the list of supported formats, we will attempt to migrate such files to a target format, but we cannot guarantee that such a migration will take place.
- Donors are encouraged to migrate material to supported formats and current media. Please see list of supported formats at the end of this document.
- For each file format listed as a preservation format the [Institution name] will:
 - Maintain hardware and software that can render the files in the target format state. Such hardware and software may be available on site or online.
 - If software to render a particular target format is no longer available, we will migrate the files to a new target format.
 - As online access tools become easily available the Archives will endeavour to utilize them.

If a format is not listed in the Preservation and Access Plan, please consult the **[Institution name]** concerning steps that could be taken to ensure long-term access to the file or the information contained in it. The archivist may be able to provide guidance with regard to migration.

Genre	Supported Formats	Preservation Formats	Supported Access Formats	Notes
Text, source code	.txt files		.txt	
Word Processed Documents	.doc, .wpd, .odt	.odt	PDF/A	Use Adobe Acrobat or Open Office to migrate doc, wpd, and odt to PDF/A, where appropriate.
Raster Images	.jpg, .png	.tif	.jpg	Use Adobe to migrate
Audio	.mp3	.wav	.mp3	Convert using ffmpeg http://www.ffmpeg.org/

Preservation & Access Plan

E-mail accounts	None*	PDF, PDF/A	PDF, PDF/A	Use Adobe Acrobat or Open Office to migrate doc, wpd, and odt to PDF/A, where appropriate.
Video	.avi, .mov, .wmv	.mpeg2	.ogv	Convert using ffmpeg
Databases	.mdb	Original format	Original format	
Spreadsheets	.xls, .ods	.ods	.ods	Use Open Office to migrate. Some properties may be lost.
Application files/Executables	None	Original format	Original format	

* At this time, preserving e-mail in its creating environment is currently beyond the technical capabilities of the **[Institution name]**. The **[Institution name]** will accept e-mail records (which often contain important correspondence and decision making information) in two formats: either as print copies of e-mails, or as digital copies of e-mail in PDF/A format. When technological change provides the archives with a solution that meets it requirements the policy will be changed accordingly.