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Policies and Procedures for Scheduling Digital

Legacy Files

Case Study Report

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Case Study Report

A. Overview

Established in 1967, the City of Victoria Archives documents the City's history while identifying, selecting, preserving and providing access to its civic and private records. As a unit within the City's government, the Archives caters to City Council as much as it does to the general public.

This case study examined the local area network (LAN) used by City Hall employees. Specifically, the case study considered the files produced and maintained by the Legislative Services Division (LSD). For various reasons, traditional paper records have followed retention schedules but their corresponding digital records have not. For the past twenty years, use and maintenance of the LAN by City Hall employees has gone unregulated and has accumulated over 1.5 terabytes of information.

The main objectives of the City of Victoria case study were to:

- establish policies for having City units apply retention schedules to their digital records located on the LAN; and
- devise methods for identifying files on the LAN that either need to be disposed of or that have long-term value and need to be preserved by the Archives.

B. Statement of Methodology

The methodology used in conducting research for the City of Victoria case study is known as Action Research. Action research is a collection of participative and iterative methods, which pursue action (in this case, the preservation of digital files on the City's LAN) and research at the same time. As a matter of course, action research forges collaborations between community members and researchers in a program of action and reflection toward positive change. Action research makes extensive use of case study methodology and of direct communication and interaction with subjects of the research, who are at the same time participants and contributors in the research activity.

¹ Greenwood, David J. and Morten Levin, "Reconstructing the Relationships between Universities and Society through Action Research," in Norman K. Denzin and Yvonna S. Lincoln, eds. *The Landscape of Qualitative Research: Theories and Issues*, 2nd (Thousand Oaks: SAGE Publications, 2003), 131-166.

The City of Victoria's local area network (LAN) was identified for its challenges regarding the retention, disposition, and preservation of digital records. Data was collected about the institution's context, specifically the City of Victoria's Archives (hereinafter "the Archives") and the Legislative Services Division. The Graduate Research Assistant (GRA) also gathered information about the digital records on the LAN, their documentary forms, technological constrains, and the functional and cultural meaning of the materials.

The GRA worked closely with the City of Victoria's head archivist (hereinafter "the Archivist") to complete this study. As required by the procedures of the InterPARES 3 Project (IP3), information regarding the City of Victoria's archives, its records and its operations were compiled through semi-structured interviews with the archivist and employees in the Legislative Services Division (hereinafter "Legislative Services"), Finance Department and Planning Department. In the Spring of 2008, the GRA completed the contextual analysis of the Archives and the Policy Research Questions that applied to the City. Between November 2008 and November 2009, the GRA conducted 18 semi-structured interviews with City staff, each lasting approximately one hour. Prior to the first interview, it was decided not to record the interviews in order to create as relaxed a situation as possible for the interviewee (it was important for the interviewee to understand that this was not an audit of his/her duties). The GRA took handwritten notes during each interview.

A preliminary analysis of the LAN was also done by conducting semi-structured with several employees from Legislative Services. The information gleaned from these interviews started to paint the picture of the size and scope of the LAN as well as how City staff create, name and store their documents on the LAN.² At the May 2008 IP3 TEAM Canada Plenary Workshop, the GRA presented an overview of the case study based on the first phase of data collection.

In May 2008, the LAN consisted of approximately two million files and nearly 1.5 terabytes of information. Since its inception nearly twenty years ago, there have been no formal controls on how City employees create, name or organize their folders or documents. The LAN

² The information obtained from these interviews was incorporated into the contextual analysis pertaining to Legislative Services. See Donald Force, "Case Study 05 Contextual Analysis: Legislative Services Division," InterPARES 3 Project, TEAM Canada (v3.1, May 2008). Available at http://www.interpares.org/rws/display_file.cfm?doc=ip3_canada_cs05_contextual_analysis_v3-1 RESTRICTED.doc.

may thus be considered the "Wild West" of digital information.³ Not only does the LAN contain active and semi-active files, but it also contains "Legacy Files," digital documents residing in an organization's structured or unstructured recordkeeping system after retention and disposition schedules have been applied to their paper counterparts. These files lie at the heart of this case study. On the LAN, Legacy Files are intermixed with other files, inhibiting the productivity of certain City functions that require the regular use of the LAN.

The workshop participants proposed two action items to address the "Legacy File" situation:

- 1) draft a directive for what to do with the City's legacy files and why, up to a specified cut-off date, and
- 2) draft a policy for what to do with born digital records from this point forward.⁴

The GRA and the Archivist spent the next several months discussing the best means to approach these action items. These talks and e-mail exchanges culminated in the report "Workshop 02 Action Item 07 – Legacy File Directive/Action Item 08 – Born Digital Records Policy," which argued that this case study was not, at that time, prepared to create the aforementioned documents for two reasons:

- 1) the City "lacks the infrastructure or culture" for such directives or policies to be successfully implemented, and
- 2) the true nature of the Legacy Files is not as well understood as it should be, given the intentions of the directive and policy.⁵

The GRA and Archivist decided that additional interviews should be conducted to help gain better insight into the LAN's use and structure. In March 2009, the GRA returned to City Hall and interviewed five employees from Legislative Services (three of whom he had interviewed the previous year). After the May 2009 IP3 TEAM Canada Plenary Workshop, the participants agreed that the findings from the interviews at Legislative Services should be augmented by conducting interviews with employees in other departments. In October and November of that

³ The "wild west" metaphor is borrowed from John McDonald, "Managing Records in the Modern Office: Taming the Wild Frontier," *Archivaria* 39 (Spring 1995): 70-79.

⁴ InterPARES 3 Project, "TEAM Canada Plenary Workshop #02: Action Items and Decision," (v1.1, May 2008), 2.

⁵ Donald C. Force, "Case Study 05 – City of Victoria - Policies and Procedures for Scheduling Digital Legacy Files: Workshop 02 Action Item 07 – Legacy File Directive / Action Item 08 – Born Digital Records Policy," InterPARES 3 Project, TEAM Canada (v2.1, January 2009).

year, the GRA conducted eight more interviews with staff from Finance (2 employees) and Planning (6 employees).⁶

In addition to the interviews, the Archivist and the GRA determined it would be a good exercise to create a workflow diagram depicting how City of Victoria employees use the LAN (see Appendix A). Devised from information obtained during the interviews and e-mails, this visual representation serves to provide better insight into where "Legacy Files" fall in the grand scheme of the general workflow processes of City staff. The diagram provides a better understanding of the relationships between printing, editing, and keeping documents on the LAN, as well as how other databases interact with the LAN. Overall, the diagram shows that the conversion of files from their "semi-active" state to Legacy Files is an intellectual process occurring once a digital file's paper counterpart has been destroyed or preserved according to the disposition/retention schedules.

Following the creation of the LAN diagram and the interviews, the next step was to devise a policy or set of procedures that would inform City employees how they should manage born-digital records and/or address Legacy Files. This documentation would be created in collaboration with Legislative Services to make it as an effective document as possible. Ongoing developments at the City prevented this documentation from materializing as part of this research project. In the Spring of 2010, the Archives unexpectedly became short-staffed when the assistant archivist resigned her position. This left the two remaining archivists to fill the void until a replacement could be hired and trained. As a result, the archivist needed to balance his time between the day-to-day duties of the archives and the development of the City's records management program, obligations which left little room for the time commitments necessary for the ongoing work of this case study. Soon thereafter, it was decided best to bring closure to the case study.

C. Description of Context

Note: This case study conducted two contextual analysis assessments—one for the City of Victoria Archives and one for the Legislative Services Division. Since the Legislative Services Division was the primary focus of this case study only its contextual information is provided in the following

⁶ This report does not discuss in detail the findings from these interviews, which are documented in the following restricted report: Donald C. Force, "Case Study 05 – City of Victoria - Policies and Procedures for Scheduling Digital Legacy Files: Workshop 04 Action Item 46 – Examination of a Second City Unit (and Case Study Update)," InterPARES 3 Project, TEAM Canada (v2.0, January 2010).

pages.⁷ Due to time constraints, it was decided not to conduct formal contextual analysis assessments for the Finance and Planning Departments.

Provenancial

Formally, the Legislative Services Division (hereinafter "Legislative Services") dates from 2008, although its primary function as Council secretariat dates from the City's founding in 1862. The first act of the first City Council meeting was to appoint a City Clerk, which has traditionally been the officer in charge of this function.

Legislative Services operates as a division within the Legislative and Regulatory Services Department of the City of Victoria. The department, which also includes the Regulatory Services Division, Administration and Protocol Division, and Corporate Planning and Policy Division, reports to the Assistant City Manager. The purpose of Legislative Services is to manage the flow of reports, agendas and minutes for Council and Committee of the Whole (COTW), provide secretarial support to Council and COTW, prepare and distribute official communications on behalf of Council, administer the City Advisory Committee selection and appointment process and administer civic elections.

In broad terms, the mission of Legislative and Regulatory Services is to support transparent civic government, sustain public safety in the built environment and enhance the quality of life in the community by providing timely service, accurate information and advice, and the equitable enforcement of bylaws and regulations. More specifically, the mission of Legislative Services is to provide accurate and concise administrative and management support to Council, and to make the records of the City available for inspection to ensure public accountability.

The mandate of Legislative Services is to provide legislative, policy, administrative and regulatory expertise and services to support Council's goals and community needs. More specifically, the mandate of Legislative Services is to:

- Provide support and advice to Council and communicate its decisions to ensure good government;
- Manage the flow of reports, agendas and minutes for Council and Committee of the Whole:
- Prepare and distribute official communications on behalf of Council;

⁷ Donald C. Force, "Case Study 05 – Contextual Analysis: City of Victoria Archives," InterPARES 3 Project, TEAM Canada (v3.1, May 2008); Donald C. Force, "Case Study 05 – Contextual Analysis: Legislative Services Division at the City of Victoria, BC," InterPARES 3 Project, TEAM Canada (v1.2, May 2009).

- Administer City Advisory Committee selection and appointment processes;
- Provide secretariat support to Council and Committee of the Whole; and
- Administer civic elections.

Juridical-Administrative

The City of Victoria was incorporated on 2 August 1862. It operates under the provisions of the Local Government Act and the Community Charter of British Columbia. The Community Charter came into force on 1 January 2004.

Legislative Services is part of the Legislative and Regulatory Services Department, one of nine departments of the City of Victoria. In its current configuration, Legislative Services dates from July 2008, when it was established by directive of the Director of Legislative and Regulatory Services. Legislative Services follows the statutes of Canada and British Columbia and the bylaws of the City of Victoria.

Legislative Services is governed by the Community Charter [SBC 2003], c. 26, *Local Government Act* [RSBC 1996], c. 323, and regulations set forth by Victoria's City Council. Employees are aware that, under the *Freedom of Information and Protection of Privacy Act* [RSBC 1996], c. 165, documents that they create may be viewed by other, initially unintended, parties. The organization also adheres to a number of internal policies and procedures that guide its day-to-day activities.

The only non-legal requirement to which Legislative Services adheres to is "an internally developed" modification of the classification scheme found in the Local Government Management Association of British Columbia's *Records Management Manual for Local Government*. 8 This scheme is used for the management of their paper records.

Procedural and Documentary

Legislative Services manages the flow of reports, agendas and minutes for Council and Committee of the Whole (COTW), provides secretarial support to Council and COTW, prepares and distributes official communications on behalf of Council, administers the City Advisory Committee selection and appointment process and administers civic elections.

At the time of this case study, the City of Victoria has not implemented an Electronic Document/Records Management System and there are no corporate-wide policies governing how

⁸ Local Government Management Association, *Records Management Manual for Local Government*, 3rd ed. (Victoria, BC: LGMA, 2007). Available online http://www.civicinfo.bc.ca/conference/rmanual.asp (last accessed 19 February 2008).

employees manage their records. Historically, the departments have managed their records relatively independently of each other, although the City uses a couple of corporate applications, such as Peoplesoft/JD Edwards and Tempest, which require a broader approach to records management. Additionally, there are some areas where business processes overlap and cause cooperative records management between the departments. Legislative Services uses "an internally developed" modification of the classification scheme found in the Local Government Management Association of British Columbia's *Records Management Manual for Local Government*.

The responsibility for records maintenance is divided between the departments and their staff, which take care of the paper records, and the Information Technology department, which maintains the servers on which the digital records reside. Legislative and Regulatory Services Department has approximately forty employees, with Legislative Services consisting of four staff (1 managerial, 3 administrative) and the Information Technology Division has twelve staff members.

City employees do not rely on or use any formal maintenance strategies to maintain their records. As such, the records are kept in various locations and, although the original documents are typically created electronically, employees print nearly all their records. Hardcopies of the records may exist in on-site file cabinets or may be stored off-site. In most departments, the paper document usually has an original "digital" equivalent (i.e., the digital document is created first and then printed). When the digital document is no longer being amended, the digital copy of the document is placed in a folder on the City's local area network (LAN). This digital "copy" is considered by most staff primarily as a "backup" and thus not subject to the retention and disposal rules that are applied to paper records. Digital documents are generally kept for an indefinite period of time and are only rarely deleted or cleaned up. Only in instances where a document has been created on a computer that is not the staff person's primary office computer (i.e., a laptop that is used to record meeting minutes) are documents deleted once they have been transferred to the main computer.

Digital copies of the hardcopy records are kept on the network drives. These drives connect to the City's servers and are maintained by the IT Division. As previously noted, the City does not have a corporate records management policy that applies to all departments. The IT Division has implemented Symantec Enterprise Vault (SEV) but only to archive e-mail. The

purpose of the vault is to have an "archived" version of the records and it is the Division's hope that in the near future SEV will be able to automatically archive the records (currently, this is difficult because there is no global file structure that indicates which files may be archived).

The SEV mirrors the network in real-time, providing a complete back-up of the system. Back-up tapes are kept off-site in multiple locations throughout the City. Additionally, the software makes HTML copies of all documents, meaning that, once converted to HTML, a .pdf version is available. It is realized that if just the HTML version was used, depending on the type of document, formatting may be altered and the document may not render properly. Although removable or portable media are not widely used by City employees, it cannot be entirely dismissed that some of the digital records are placed on an employee's personal network drive, kept on a computer desktop or transferred to a CD, Zip or thumb drive.

Technological

The City uses a variety of hardware and software to accomplish its everyday tasks and operations. It recently upgraded all computers to be compatible with its Windows 2003/XP server and is also moving away from desktop hard drives, shifting to Thin Clients that prevent employees from saving information on CDs, USB sticks or other "loose" media. Instead, City workers must save their work to either their department's network drive or the shared drive on the server. This is not to say that hard drive towers are obsolete as some employees still use them because their positions require them to access information received on CDs, 3.5" floppy disks or USB drives.

Depending on the division and the needs of the records creators, there are a variety of software, electronic and digital tools being implemented by the City. For example, the Archives includes standard office equipment plus five computers, a laser printer, an inkjet photograph printer, a desktop scanner, a Nikon film scanner, a VHS video player, a Sony Betacam SP video player, a microfiche reader, a microfilm reader/printer/scanner and three data logger digital RH/temperature monitors.

The Legislative and Regulatory Services Department produces primarily textual documentation using Microsoft applications, such as Word and Excel, but occasionally creates

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⁹ However, it is noted that the new IT manager has expressed an interest in returning to a more PC-based network model, moving away from the Thin Client system.

graphic and database documents. The primary file formats found on the Department's network drive include: .doc, .txt, .xls, .tiff, .jpg, .mdb and .pdf.

D. Narrative Answers to the Applicable Set of Questions for Researchers

Of the three sets of IP3 case study research questions (policy, records, and recordkeeping systems¹⁰), this case study only formally answered questions from the policy set.¹¹ Since this case study did not result in policy creation, only the questions applicable to records creation, maintenance and preservation are discussed in this section.

At the time of this case study, the City had no global policies, procedures, or standards that applied to all City employees across all departments governing the creation of records, their maintenance, preservation or use. Moreover, any policies existing at the division level function simply as "guide posts" and are not strictly binding. Any implementation of a global policy for records management would be "uncharted territory" for the City.

Legislative Services uses "an internally developed" modification of the classification scheme found in the Local Government Management Association of British Columbia's *Records Management Manual* for the maintenance of its paper records. Electronic records are named and filed according to information conventions that have developed over the years in order to suit the needs and functions of each individual office. For example, the Archives may place "DON" or "REF" in a file name to represent that it is a document pertaining to either a donation or reference question, respectively. Similarly, in Legislative Services, Council Minutes contain the date of the minutes in the file name and the file names for Hearing Notices contain the LGMA numeric code (005) plus a small description (e.g., "005.DocumentName"), while other documents' filenames, such as letters, may consist of a very short description of its contents.

In the rare circumstances where a creator creates a document that falls outside the scope of his/her regular activities, little if any collaboration occurs with co-workers to determine a naming or filing convention for it; thus, it is up to the creator to provide an appropriate name and file it to ensure that it may be found at a later date. Currently, no system is in place for the maintenance of the records found on the network drives.

¹⁰ See http://www.interpares.org/ip3/display file.cfm?doc=ip3 policy case study questions.pdf, http://www.interpares.org/ip3/display file.cfm?doc=ip3 records case study questions.pdf, http://www.interpares.org/ip3/display file.cfm?doc=ip3 rksystems case study questions.pdf.

¹¹ Donald C. Force, "Case Study 05 – City of Victoria Archives: Policy Research Questions," InterPARES 3 Project, TEAM Canada (v2.0, May 2008).

The Archives has a set of retentions schedules for the records of the departments and divisions it controls. The retention schedules were implemented in 1997 and recently revised in 2004, though it is continually updated as new records are created and need to be addressed (e.g., as a result of some of the work with InterPARES, the Archives updated the schedules for Legislative Services as recently as 2010). The Archives is aware that not all the divisions fully adhere to the schedules but the documents serve as good benchmarks even though additional schedules are needed for improved control.

Departments may transfer records to the Archives as either one-time transfers or in accordance to the retention schedule. One-time transfers are handled through the Archives' accessioning system. For scheduled records, Departments notify Archives of their intent to transfer and then enter data as required into a database administered by the Archives. Once this information has been entered, Archives adds accessioning and control data to the database, has barcodes placed on boxes and sends them to the Records Centre.

Overall, 60% of the Archives' holdings are city-related records, while the remaining 40% of the records are from private donors. Though the records vary in material, the Archives rarely receives any digital material. This is due to the simple fact that City offices, with the occasional exception, have not sent digital material and, due to preservation and maintenance concerns, the Archives has not actively sought digital records. This said, the Archives does occasionally "snatch" copies of records located on the network. Typically, these are records that the head archivist deems as highly valuable and does not want to risk being revised from their original state, moved or deleted. These records would not be the originals and would only serve as backups.

The City uses a variety of hardware and software to accomplish its everyday tasks and operations. The City has recently upgraded all computers to be compatible with their Windows 2003/XP server. Currently, the City stores nearly 1.5 terabytes of information equating to nearly 2 million files on the network. City employees primarily create and manage documents in Word and PDF formats. To a lesser extent, Excel and Access formats may also be used. On a rare occasion, employees may encounter image files in varying formats such as .TIFF and .jpeg.

The City is also moving away from desktop hard drives, shifting to Thin Clients that prevent employees from saving information on CDs, USB sticks, or other "loose" media, requiring them to save information to either their personal network space or the appropriate

departmental network or shared drives. This is not to say that hard drive towers are obsolete as some employees still use them because their positions require them to access information received on CDs, 3.5" floppy disks, or USB drives. Additionally, depending on the division and the needs of the records creators, there is a variety of software, electronic, and digital tools being implemented by the City.

At the time of this case study, the City had started to consider using an electronic document and records management system (EDRMS) system but only informally and nothing is likely to be in place for the next few years.

E. Narrative Answers to the Project's Applicable Research Questions

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

At the time of this case study, the City of Victoria's Archives did not have the capabilities to preserve digital records. However, this case study indicates that archives with limited resources need to start preparing for digital preservation as soon as possible. These organizations need to develop policies and procedures that help govern the management of digital records during their active and semi-active stages—actions that may help ensure that recordkeeping principles and controls are in place in the event that the archives gains the ability to preserve digital records. Moreover, as was the situation with the City of Victoria, even in circumstances where recordkeeping practices are largely decentralized, every effort needs to be made to apply retention and disposition schedules to digital records. This process will initiative better recordkeeping practices among creators and users of electronic documents and facilitate the eventual transfer of electronic records to the Archives for either their destruction or preservation.

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?

As the City of Victoria case study indicates, it is imperative to have a positive working relationship with records creators, as well as, executive support. The processes, outcomes, and responsibilities necessary for the long-term preservation of digital records must constantly be articulated and communicated to these stakeholders. Unfortunately, there is a limit to which an organization's records professionals can stress the importance of better management of digital

records, especially in an environment historically/traditionally unaccustomed to following policies and procedures pertaining to recordkeeping practices. Developing and implementing a coordinated records management programme that requires record creators to subscribe to standardised procedures and protocols present their own set of challenges. Even in the best of working relationships, if the creator does not foresee a problem or has the capability of remaining relatively independent of the archives, then digital preservation of those records will be haphazard at best.

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)?

As indicated with the City of Victoria, the Archives had retention and disposition schedules, though no policies or procedures that required employees to apply these schedules to digital records because, at the time, the cultural climate of the City did not warrant such documentation. The issues involving the retention and disposition of digital records may have been facilitated by documentation that addressed records creation and recordkeeping responsibilities. No one policy, guideline, or set of procedures would suffice to convince employees to treat their digital records differently. Any records management program needs a framework of documentation that reflects its intentions and objectives, thereby helping to increase its visibility and influence within the organization. This set of documentation may include, but be not limited to policies, guidelines, or procedures pertaining to electronic mail (e-mail), social networking tools, vital records, and a glossary that provides definitions for terms that employees typically do not encounter or use.

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?

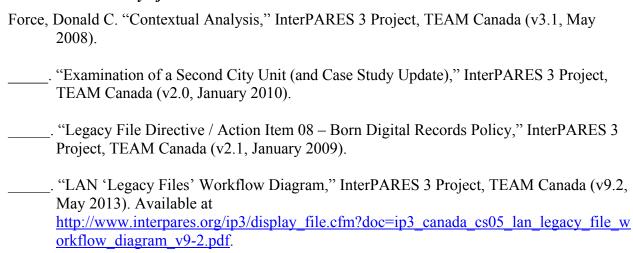
It is essential that individuals responsible for the preservation of digital records be familiar with the technology involved in the creation and management of the digital records. Archivists need to be aware of the different file types that records may be saved in, as well as the different computer programs and hardware that will allow access to the records. Archivists need to be cognizant of organizational culture issues within their organizations—square pegs of

archival practices cannot be forced into round holes of organizational reality. While the records professional may understand the value of classification schemes, retention and disposition schedules, it must be acknowledged that not everyone in the organization will accept this body of knowledge or see its importance. To overcome this resistance, recordkeeping practices must, to a certain extent, be flexible. The difficulty is striking a balance between helpful but simplified guidelines and rigid procedures which accomplish benchmark objectives. Recordkeeping should be as unobtrusive as possible. It may also be beneficial if clearly articulated procedures are created to help employees make new transitions between old and new recordkeeping management practices. Moreover, archivists need to be sensitive that different professional groups and record creators may understand, internalise and interpret records management concepts differently from the archival science discipline. In some cases, archivists have to adopt multiple lines of communication strategies with different groups of stakeholders including senior management and pitch records management messages priorities differently to specific groups.

F. Bibliography of Relevant Material

Note: To facilitate access and readability, the following prefix has been omitted from the title for each entry below: "Case Study 05 – City of Victoria - Policies and Procedures for Scheduling Digital Legacy Files." In some instances, the entry's full title may also contain the TEAM Canada workshop number and action item that resulted in its creation (e.g., Workshop 04 Action Item 46); this information has also been omitted.

InterPARES 3—City of Victoria



. "Policy Research Questions," InterPARES 3 Project, TEAM Canada (v2.0, May 2008).

Additional Resources

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- Stephens, David O. and Roderick C. Wallace, "Electronic Records Retention: Fourteen Basic Principles," *Information Management Journal* 34, no. 4 (October, 2000): 38-52.
- Stephens, David O. and Roderick C. Wallace. *Electronic Records Retention: New Strategies for Data Life Cycle Management*. Lenexa, KS: ARMA International, 2003.

G. Glossary

Disposition: The range of processes associated with implementing records retention, destruction or transfer decisions which are documented in disposition authorities and other instruments.

Legacy File: A digital document residing in an organization's structured or unstructured recordkeeping system after retention and disposition schedules have been applied to their paper counterparts.

Local Area Network (LAN): A collection of computers, printers, storage devices, and other devices connected to allow resource sharing within a particular organization.

Retention Schedule: A set of information that provides a timetable and consistent procedures for maintaining the organizations records, moving the records to inactive storage when appropriate and destroying records when they are no longer valuable to the organization.

H. Findings, Recommendations and Products

This case study sought to create policies for having City units apply retention schedules to their digital records located on the LAN and devise methods for identifying files on the LAN that either need to be disposed of or that have long-term value and need to be preserved by the Archives. Creating this documentation and formulating these methods was predicated on needing to better understand the dynamic nature of the LAN where active, semi-active, inactive, and Legacy Files resided. The first part of this case study

involved learning how employees interacted with the LAN. In the course of conducting the semi-structured interviews, the GRA devised documentation to facilitate this process, which included a pre-interview survey (see Appendix B), a set of interview questions (see Appendix C: Interview Questions

), and a "Quick Reference Guide" (see Appendix D) to facilitate the GRA's note-taking process. While the interviews resulted in documenting the complex nature of the LAN (see Appendix A), the research also helped draw the attention of senior management.

In the Fall of 2007, the inception period of this case study, there was no real commitment on senior management's part for actively developing the records management component of the Archives' mandate. The case study strictly focused on why the retention schedules were not acted on for the digital versions of the records and what could be done about it. There were complexities, of course, but also an apparent simplicity and intention.

Over the next year there were some stirrings from senior management and a sign of real promise—the City hired a consultant to perform a records management needs assessment study. This period also coincided with the Archivist and the GRA agreeing that they lacked the necessary knowledge about the LAN. Both of these factors led to the realization that the GRA and the Archivist could not draft a directive or policy, at least nothing that would have any real effect. 12

Although the infrastructure or culture of the City did not drastically change in the first two years of the case study, there was a noticeable shift in the "climate." A steadily growing interest in records management among senior management emerged as corporate recordkeeping was, for the first time, recognized as a strategic priority for the City. Additionally, in 2008, a records management situation report was competed (by an independent consultant) with the development of a comprehensive corporate records management program initiated by early 2010. This was radically different from the situation the Archives found itself in when this case study started, a point at which there was very little tangible support for development of an overall corporate program.

In 2008 and 2009, the Archives received increasing commitment from senior management. The Archives hired an extra staff member at the end of 2008 (about a 50% increase in staff resources devoted to records management) and received additional financial support to help the development of records management projects. In addition, the Archives found itself on

¹² E-mail from the Archivist to the GRA, sent on 4 June 2009.

the City's "Strategic Priorities Chart"—one of three items highlighted for the Archives as operational strategies that support the priorities of City Council.¹³

The groundwork done in conjunction with the InterPARES case study and the discussions that the GRA had with staff had positive results. In early 2009, the Archivist worked with the Legislative Services Division to develop consistent naming conventions for files and folders on the LAN, as well as coordinating those files and folders with the departmental classification scheme. In the early summer of 2009, the City implemented a new governance structure, which was reflected structurally in a new set of Council committees. Since new committees create new records, the Archives took the opportunity to classify and schedule the new committee records that would be created and work out a strategy with staff and management to introduce consistency in naming and locating some thirty new records series. Archives continues to monitor implementation as the committees are now underway and beginning to create records, both hardcopy and digital.

These experiences and the dynamic nature of the organizational structure and support indicate that several different approaches to the Legacy Files were needed, "depending on the overall culture of the City at any given time, as well in the different departments [and ...] their understanding, readiness, interest, independence, etc." Further discussions involving Legacy Files will only benefit from "flexible solutions, not flexible principles." Moreover, any documentation that staff need to follow with regards to the management of digital records needs to be preceded by the Archivist establishing "clear goals based on reasoned principles deriving from the nature of the records and their needs, and flexible strategies based on the natural and inevitable differences among and within organizations," and accounting for their change over time. The research allowed for a more thorough examination of the nature of the Legacy Files, leading to a number of potential solutions, and, more importantly, providing a better understanding of how they may or may not suffice in the various working environments.

Aside from a preliminary annotated bibliography on the relevant sections of standards as they apply to policy creation (see Appendix E), developments at the City prevented additional documentation from materializing. In early 2010, the Archives unexpectedly became short-staffed when the assistant archivist resigned her position. This left the two remaining archivists

13 Ibid.

¹⁴ E-mail from the Archivist to the GRA, sent on 9 June 2009.

to fill the void until a replacement could be hired and trained. As a result, the head archivist needed to balance his time between the day-to-day duties of the archives and the development of the City's records management program. This was further complicated by the GRA's own academic obligations; combined, there was little room left for the time commitment necessary to pursue the intended objectives of the case study. In early 2011, it was agreed to bring closure to the case study.

Despite not researching the goals set out at the beginning of this case study, it would be incorrect to label this case study as a failure. On the contrary, the interviews the GRA conducted helped establish better lines of communication between the Archives and the Legislative Services Division, Finance Department and Planning Department. Moreover, the interviews contributed to employees' awareness that the "Wild West" of the LAN was on the Archives' radar as an issue to address and improve. The presence of InterPARES in the City contributed to some of the attention received by senior management regarding the importance of properly maintaining and preserving digital records, especially those on the LAN. Moreover, since the conclusion of the research, the City has made significant strides in developing a records management program. The City has followed up, and built upon the work conducted as part of this case study by incorporating the research and documentation into a suite of corporate policy documents (nearly 50 in total) on recordkeeping. Although no documentation was created for how employees or the Archives should manage Legacy Files or born-digital records, the case study strengthened in-roads that will facilitate the implementation of this documentation as it is developed by the Archives and its records management program.

Acknowledgements

The InterPARES Project would like to thank the test-bed partners, researchers, and graduate research assistants who participated in this case study:

Test-bed Partners:

Trevor Livelton, Archivist

Researchers:

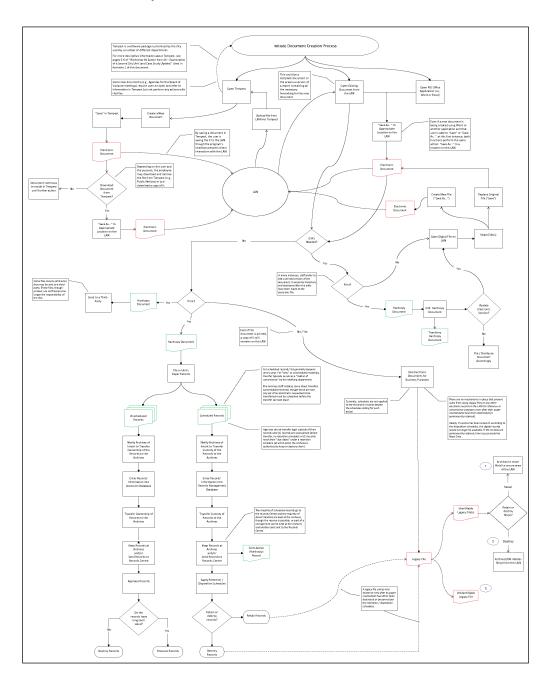
Luciana Duranti, Project Director, TEAM Canada Randy Preston, Project Coordinator, TEAM Canada

Graduate Research Assistants:

Donald Force, 2007-2011

Appendix A: Local Area Network (LAN) Diagram

Due to the size of the diagram, only a screen shot may be provided in this report. The diagram may be accessed in its entirety on the InterPARES website. 15



¹⁵ Donald C. Force, "Case Study 05 – City of Victoria – Policies and Procedures for Scheduling Digital Legacy Files: LAN "Legacy Files" Workflow Diagram," InterPARES 3 Project, TEAM Canada (v9.2, May 2013). Available at http://www.interpares.org/ip3/display file.cfm?doc=ip3 canada cs05 lan legacy file workflow diagram v9-2.pdf.

Appendix B: Local Area Network Preliminary Survey

Local Area Network Preliminary Survey

The City of Victoria Archives, in collaboration with the InterPARES (International Research on Permanent Authentic Records in Electronic Systems) project, is examining how the corporation uses and manages information on the City's Local Area Network (LAN). In preparation for subsequent interviews, we are asking you to complete this "short" survey and email it to John Doe (xxx@xxx.xxx). John Doe is a graduate research assistant for InterPARES 3 working with the Archives.

N	a	m	e	:
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Position:

- 1. Please indicate the primary functions that you perform that result in the creation and management of electronic documents (for example, the handling of zoning and rezoning applications). There could be up to 5 or 6 of these, depending on your job.
- 2. Please place an "X" next to the function(s) that you create and manage electronic documents for: • Zoning & Rezoning Applications ___ Operational Files • Committee of the Whole Agendas ___ Weekly Meeting Schedules ___ Council Meeting Agendas ____ Task Force On Public Participation Reader File - Departmental ___ Agreements ___ Bylaws Reader File - Council Letters Liquor Licences ___ Council Meeting Minutes • Committee of the Whole Minutes ___ Liquor Licencing Advisory Committee Council Committee Applications Files • Council Committee Orientation ___ Financial Disclosure Statements -Unelected Nominees ___ • Council Committee Terms of Reference ___ Councillors' General Files • Financial Disclosure Statements ___

Job Slips (Print Shop) ___ Nomination Papers ___

Disposition of Communications ___
 Intermunicipal Committee Files ___
 Information and Privacy Files ___

3.	Which LAN folder(s) do you most frequently access to retrieve and save files? For example: W:\XXXX\XXX_XXX\Delegations
4.	Do you ever save work-related electronic files in locations on the LAN other than in the XXXX directory? If yes, please identify these areas and the types of documents you place in them.
5.	Using your best guess, what percentage of the electronic documents that you create and save to the LAN do you print (do not count e-mail)?

Appendix C: Interview Questions

Na	ime:	Date:
Fu	nction:	
Do	cumen	t:
•	What	triggers you to create the document?
•	How o	lo you create the document? Copy from an old one (Save As)
	0	Create a brand new document/template
•	Is the	document sent to anyone for: Edits –
	0	Feedback –
	0	Approval –
•	How c	loes the person(s) receive the document? LAN / E-mail / Paper
•	If edit	s are made, how are they indicated? Track Changes / Pen or Pencil
•	Are di	fferent versions of the document ever saved? Yes / No Where is the document saved during each step?
	0	Where is the final document saved on the LAN?
	0	Is the final version printed? Yes / No
•	Are su Don't	absequent edits ever made to the electronic document? Yes / No / Sometimes / Know
•	Which	document is accessed for reference purposes? Printed / Electronic / Depends /

It's Not

Appendix D: Interview Quick Reference Guide

[Employee Name & Position]

[Date of Interview]

[Function to Question (e.g., Committee of the Whole (COTW)]

Location on LAN:

 $W:\langle xxxx \rangle Agendas$

W:\xxxx\xxxx\Minutes

Document #1: COTW Agenda

Document #2: COTW Minutes

Appendix E: Resources for Policy and Directive Creation & Implementation

Following the TEAM Canada Plenary Workshop in November 2009, it was decided that the next steps to take for this case study would be to, among other things, draft a policy and directive that address the management of information on the City's local area network (LAN). Following the workshop, the GRA and the Archivist discussed how best to proceed toward these goals. It was agreed that prior to initiating either of the two documents a variety of resources should be consulted that might facilitate the drafting process. Yet, even before these resources could be examined, such a list needed to be created. This list would include relevant reports and products of the InterPARES 2 & 3 projects, as well as standards, guidelines, and deliverables created by other research projects devoted to the better management and preservation of electronic records. Soon after this conversation, the GRA compiled the following list of documents.

The following resources are listed alphabetically.

Resources

"Electronic Records as Documentary Evidence," CAN/CGSB-72.34-2005. Canadian General Standards Board (2005).

http://publications.gc.ca/site/eng/287649/publication.html

As stated in the document's forward, this standard "specifies principles and procedures for creating all forms of electronic records ... to enhance their admissibility as evidence in legal proceedings." While it does not deal specifically with policy creation, it may be useful to consult when formulating the directive (and policy, for that matter) to augment the work and findings of InterPARES.

The University of Victoria case study, CS10(3), based its "Framework for Trusted Digital Environment" (2009) report on this standard and may be used as a quick and dirty overview to the standard's various components. The report may be found on the InterPARES 3 website at:

http://www.interpares.org/ip3/display_file.cfm?doc=ip3_canada_cs10-3 wks03 action 24 v1-3.pdf.

InterPARES 2, "Chain of Preservation Model" (2007).

http://www.interpares.org/ip2/display_file.cfm?doc=ip2_book_part_5_modeling_task_force.pdf, see also http://www.interpares.org/ip2/ip2_model_display.cfm?model=cop

According to the document's introduction, this is a "model of the activities conducted during the management of records throughout their 'lifecycle' integrates three pre-existing models: the model, produced by the UBC Project during 1994-97, of the activities in managing current records and the two models of the functions of selection and preservation of electronic records produced during the first phase of the InterPARES Project, 1998-2001." For the purposes of creating policy or directives, this model may help identify areas of records creation and management that went unobserved during the three rounds of interviews the GRA conducted with City staff in Legislative Services, Finance, and Planning.

InterPARES 2, "Creator Guidelines: Making and Maintaining Digital Materials: Guidelines for Individuals" (2008).

http://www.interpares.org/ip2/display_file.cfm?doc=ip2(pub)creator_guidelines_booklet.pdf

InterPARES 2, "Preserver Guidelines: Preserving Digital Records: Guidelines for Organizations" (2008).

http://www.interpares.org/ip2/display file.cfm?doc=ip2(pub)preserver guidelines booklet.pdf

These are two products of the InterPARES 2 Project. The *Creator Guidelines* focus on individual creators and may be useful for considering some aspects of personal information management. The *Preserver Guidelines* are designed for organizations/archives/preservers interested in maintain digital records over an extended period of time. The guidelines "are organized according to the sequence of preservation activities presented in the InterPARES Chain of Preservation Model...."

InterPARES 2, "A Framework of Principles for the Development of Policies, Strategies and Standards for the Long-term Preservation of Digital Records" (2008).

http://www.interpares.org/ip2/display file.cfm?doc=ip2 book appendix 19.pdf

This document serves as the base for the creator and preserver guidelines. It is a "framework of principles to support record creation, maintenance and preservation, regardless of jurisdiction. This document, in combination with other products of the Project, especially the Chain of Preservation (COP) model, reflects this conclusion, while emphasizing the need to make explicit the nature of the relationship between records creators and preservers."

InterPARES 3, City of Surrey (CS14), "Share Drive Migration Guide Toolkit" (2009). http://www.interpares.org/ip3/ip3 cs14 report.cfm

This comprehensive document is the "primary deliverable" for the City of Surrey case study, which is currently in the process of implementing InfoShare, an EDRMS system. The tool kit is a comprehensive examination of the steps and procedures undertaken by the City as it analyzed and prepared its shared network for its migration to the new system.

International Records Management Trust, "Training in Electronic Records Management" (2009). http://www.irmt.org/educationTrainMaterials.html

This is a series of five modules designed to help organizations plan, implement, and monitor a records management programme especially with electronic records in mind. The different modules cover all facets of electronic records while addressing the key issues that a records manager needs to be aware of when managing this type of information.

ISO 15489, Information and Documentation—Records Management (2001). http://www.iso.org/iso/catalogue_detail?csnumber=31908

The scope of this international standard "applies to the management of records, in all formats or media, created or received by any public or private organization in the conduct of its activities, or any individual with a duty to create and maintain records ... provides guidance on determining the responsibilities of organizations for records and records

policies, procedures, systems and processes ... provides guidance on records management in support of a quality process framework to comply with ISO 9001 and ISO 14001 ... [and] provides guidance on the design and implementation of a records system."

ISO 15489-2, Information and Documentation—Records Management, Part 2: Guidelines (2001).

http://www.iso.org/iso/catalogue_detail.htm?csnumber=35845

This technical report supplements and provides a methodology to the first part of ISO 15489 for implementation purposes.

"Requirements for Managing Electronic Messages as Records." ANSI/ARMA 9-2004. ARMA International, 2004.

According to this document's forward, the "purpose of this standard is to define requirements for developing a corporate policy for managing information content in electronic messages. It includes suggestions for formulating a records management policy for electronic messages that will be useful throughout the life cycle of such messages...." While focusing on e-mail, this standard may be useful to identify areas of an electronic record's life cycle that went unobserved during the interviews with City staff and thus may be broadened for larger policy and directive creation.

Vancouver School of Theology (VST) (CS13), Policies and Procedures for Creation, Management and Preservation of Administrative Digital Records: Workshop 03 Action Item 40 – Records Management Policy (2009).

http://www.interpares.org/ip3/display_file.cfm?doc=ip3_canada_cs13_wks04_action_40_v2-2.pdf

This is a broad policy that sets in motion the role of records management within the School of Theology. The policy outlines the purpose of the programme and clarifies the roles and responsibilities of most of the parties involved. The policy applies to both paper and digital records.