



In the Vault...

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A periodic newsletter about archives and records management in the Town of Burlington.

What is she doing in there?

During the last month I finished sorting and boxing all but approximately 10 cubic feet of records and the Building Department architectural plans. If a series had a department-specific original order e.g., street name or permit number, that order was retained. Otherwise the series was arranged chronologically or alphabetically, as appropriate. Non-archival material i.e., the records that are eligible for destruction after a certain period of time were just reboxed.

The current arrangement and level of control is at the box and series-level i.e., the description does not reveal information at the folder or item level. Originally I estimated that in order to arrange and describe the material in the vault, it would take the better part of the fiscal year. For now, box-level and series-level control and description will have to suffice. The next priority is to begin record surveys in the Town Hall offices and Meadowbrook School, determine what records are eligible for microfilming and destruction and to draft a plan for the architectural records.

How do I find things?

Right now the records are divided into permanent and non-permanent records; within those groupings, the records are grouped by department. I am in the process of updating the database, so that it will provide a box and series level listing of the records in the vault. When it is finished, I will post this list in the vault. The database should be completed within the next two weeks and box labels should be printed within the next two weeks. The labels will look like:

A 2.069

BOX 1

Clerk.
Town meeting records, 1959-1965

Box 1 of 5

Town of Burlington
Burlington, Massachusetts

The A indicates that the records are archival and permanent records. R indicates that the records are part of the records center and will be eligible for destruction at a certain point in time. The number to the right of the A indicates the record group (record group 2 for town clerk) and the series number, the number that corresponds to the state retention schedule. Box 1 is a unique and identifying number: no two boxes will have the same number. The next two text lines define what 2.069 means. Including the institutional name on the box makes disaster recovery a little less chaotic in case the records of multiple institutions must be evacuated and treated at a shared location.

When may I start transferring records to the vault?

Attached are transfer procedures and a *Records Transmittal Form*; ideally we should wait until the office record series are completed, but I realize that folks want to start preparing for the move. I apologize for the paperwork, but it is essential that we have a tracking process and accountability: it is essential that every one knows where the records are at all steps in the transfer. As for the preparation work, remember there is just one part-time archivist/records manager. A little preparation on the department end ensures orderly long-term record care and will help us move more quickly. Right now the procedures only cover standard-

size paper records—we will deal with the exceptions on a case-by-case basis.

When can you come to my office and look at my records?

After Thanksgiving I will begin contacting Town Hall departments to schedule record surveys: this survey will include paper and electronic records in your office. Departmental staff time will depend on the arrangement and volume of the records. I will be able to work independently on some of the survey, but will need a designated staff person to show me where records are kept, how they are used and how frequently they are accessed. I will send out a memo within the next two weeks outlining what to expect from the process. For the departments located outside of Town Hall: do not worry, you are not being left out of the process! I will eventually meet with you, but must attend to the offices that will be moving in the near future.

When can we microfilm the permanent records?

Once the database is updated to reflect the new vault arrangement, I will identify the records that can be microfilmed.

When is optical the answer?

There is no question that optical media systems promise to revolutionize the world of record keeping. Electronic access means rapid retrieval and high-density storage. Yet, the Commonwealth of Massachusetts requires that records with a retention period exceeding 10 years may not be recorded solely on optical media: a paper or microform copy is allowed, but not optical media. Why?

Legal admissibility. While case and statutory law do make provision for the use of electronic technologies, there are statutory obstacles to their acceptance. In some cases, the obstacles exist simply because statutes have not been revised in light of current technology. Statutes may require information or records to be “in writing” or to bear “a writing”; others specify the means a record may be recorded and electronic systems are not listed as one of those means. Besides the statutory obstacles, there is legal and cultural resistance to the acceptance of accepting electronic record keeping systems.

Much work has been done in the federal statutes to address these issues: the Uniform Records Retention Act, Uniform Preservation of Private Business Act, Uniform Records Retention Act, Uniform Photographic Copies of Business and Public Record as Evidence Act, Federal Rules of Evidence and state guidelines, such as the State of New York’s *Guidelines for the Legal Acceptance of Public Records in an Emerging Electronic Environment*. State statutes however must be revised to address the definition of original, copy, attestation and certification

Rapid development of technology. The methodologies for capturing, storing and compressing data have grown and continue to grow rapidly. Although national and internal standards for manufacturing and capturing data exist, manufacturers are not necessarily adopting standard components and compatible systems. Let’s face it, proprietary systems are opposite the concept of free and democratic access of information. Technology doubles every eighteen months—with the average municipality upgrading or purchasing new systems every four years, there is no assurance of backwards compatibility across multiple generations of computers.

Compatibility. Survival of information depends on compatibility: If systems are compatible, data can be migrated from an old system to a new one as components are upgraded and to share information within and outside an organization. Since upgrades are likely within a few years of

installation, compatibility also has a huge impact on the cost-effectiveness of the system. Compatibility is also a productivity issue, as lack of compatibility can hinder communication and data sharing within and among town offices.

The International Standards Organization has developed the Open Systems Interconnection (OSI) model to be used as the basis for the construction of systems designed for the transfer of data. Because it is an open, non-proprietary architecture, it allows for consistency across generations of hardware and software. It is not necessarily a part of all imaging systems.

Longevity. Vendors estimate a lifespan of 10-100 years for optical media. Besides the physical longevity of the data, preserving the record also means preserving the informational content, its structure (the unique format of the certificate, license or correspondence) and context (the identity of its authoring office or official and circumstances of its creation) for use, both currently and over time.

Hidden costs. Document conversion costs for optical systems are approximately four times that for microfilm. Indexing is the most time-consuming part of the conversion process, since retrieving the data in a fast and accurate manner may take 3-5 times longer than scanning the document and averages 30% of the operating budget. Hardware and software systems become obsolete and media is improved, making upgrades a critical part of the conversion process. It is estimated that 10-30% of the start-up costs must be budgeted annually for systems upgrade.

So, when is it a good time to go electronic? For me, the main reason is access and retrieval. The end-user can search an index and pull up a copy of the document within seconds. To provide quality access, it is essential to provide quality indexing: anyone that has ever done a free-text search through 600 MB of a CD-ROM database knows how frustrating it can be. Let’s face it, an optical disk without an index is simply a Frisbee.

Once must also look at the rate of data access. If the records are only accessed once every six months, it simply may not be cost-effective to purchase a system at this point in time—or it just may be worth waiting until the compatibility and legal issues are sorted out. As with any information system, it is crucial to know what one wants from a system before it is designed: if it is simply access and a system that needs to last for four years, it may be worth scanning 300 cubic feet of records. There is a reason that legacy data is sometimes just that: an unaccessed legacy along with media that was cutting-edge in its day: laser disks, beta cam, low density disks, etc.

This does not mean that archivists are antiquarians: on the contrary, the archival and records management world is dealing with how to read the records we are creating in this millennium in another millennium. Electronic and democratic access to information is what led me to the field of information, library and archival science—I know the power it has. I just want to be sure that what we are creating will be accessible and usable down the road.

Excerpted from: *Use of Optical Media*, Commonwealth of Massachusetts, Secretary of State, Supervisor of Public Records, SPR Bulletin No. 1-93 (<http://www.magnet.state.us/sec/arc/arcmu/bull/re1b.htm>) and *Electronic Records Working Group Report, June 1995*, a joint project of the office of the Secretary of the Commonwealth, the Massachusetts City Clerks Association and the Massachusetts Town Clerks Association (<http://www.magnet.state.ma.us/sec/arc/arcmu/pr2.htm>).

Electronic Records: What Happens When You Want to Read that Data from the Mainframe in 50 Years?

Preservation, legality, compatibility and access are all major issues for electronic records management—the records that are created in information systems and only exist in electronic format. Although

there is some overlap with the issues of optical media storage and access, there are additional concerns. Some argue that to preserve electronic records, we must preserve:

- Media on which the record is inscribed
- Software with which the record was written
- Hardware on which the software was run
- Operating system controlling the hardware
- Documentation that shows users how to operate the hardware, use the software and interpret the records
- Metadata, the data about the data

Issues that affect the reliability of the records and user confidence include:

- Record source and structure of the record must be known to be authentic
- Record authenticity must be preserved
- Standard procedures must be followed in the creation, use and reproduction of the record
- System producing the record must be used in the routine operation of the office
- Quality control procedures must ensure record accuracy
- Legal mandate must exist for the acceptance of the electronic record
- Process for verification and unique identification of each record must exist
- Audit trails to document the integrity of the record content and access to the data must be maintained
- External, neutral third-party audit control must be maintained to ensure the integrity of the system

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For more information on electronic records

National Association of Government Archives and Records Administrators' quarterly bulletin on electronic records issues.
<http://www.nagara.org/crossroads.html>

National Media Lab reports and research on the preservation and use of magnetic media
http://www.nml.org/nml_tasks/ops_support/resources_for_archivists.html

University of Pittsburgh NHPRC-funded project to establish functional requirements for the long-term retention of electronic records, led by Richard Cox and David Bearman
<http://www.lis.pitt.edu/~nhprc/>

University of British Columbia's project on long-term retention of electronic records
<http://www.slais.ubc.ca/users/duranti>

Documenting the Digital Age conference papers
<http://dtda.mci.com>

Internet Archive, Brewster Kahle's project to copy and preserve the Internet,
<http://www.archive.org/index.html>

Massachusetts Historical Records Advisory Board (MHRAB) Information Resources and Tools, which is in the process of compiling resources such as these. Promises to be an information clearing house!
<http://www.magnet.state.ma.us/sec/arc/arcaac/aacinfo.htm>