

Digitization Procedure

Procedure number:	G-GEN-004-007
Parent policy number:	G-GEN-004
Section:	Governance
Sub-section:	General
Author(s):	Clerk's Department []
Authority:	CAO
Effective date:	2023-12-18
Review by date:	2028

Preamble

All town departments now manage records in both physical and digital formats. Many departments are reviewing the benefits of digitizing physical records to create one consistent medium in which to conduct their business and improve services to the public.

Two types of digitization take place in the Town:

- **Convenience Digitization** is the digitization of a physical record for convenience purposes only, such as digitizing documents for a quick reference to send to colleagues while retaining the physical record. These digitized records are not an integral part of, nor considered a town record.
- **Town Record Digitization** is the digitization process of creating a town record by replacing the physical records with digitized records. The digitized record then becomes the authoritative record for purposes of the town's administration or delivery of town services.

Digitized records must be compliant with the Evidence Act, R.S.O. 1990 and, therefore, admissible in the legal proceedings. Procedures, standards, and guidelines must be documented and adhered to in the regular course of business. This procedure aligns with the National Standard of Canada's [Electronic Documents as Documentary Evidence \(CAN/CGSB-72.34-2017\)](#).

Purpose statement

The purpose of this procedure is to establish a reliable process for creating and managing digitized records that are authentic, trustworthy, and reliable to serve as town records according to the Evidence Act, R.S.O. 1990.

Scope

This procedure applies to all Town employees, agents, contractors, third-party or any individual representing or acting on behalf of the Corporation of the Town of Oakville in any manner that plan to digitize town records in order to:

- 1) Allow the disposal of physical records, subject to governance requirements review and established records retention periods; and
- 2) Permit the physical records to be replaced with a digitized record as the town record.

This procedure does not apply to departments digitizing documents for convenience purposes; however, it is advisable that digitized records resulting from convenience digitization meet the same quality and integrity standards established by this procedure for town record digitization.

Procedure

1. Digitization Process Requirements

Before initiating a digitization project, departments must complete the following steps:

1.1. Business Justifications for Digitizing Town Records

Town departments may digitize records for the following business reasons:

- Improve searchability, retrievability, and accessibility to town records
- Make town records available in electronic form (e.g., to facilitate routine disclosure)
- Accommodate an accessibility request (a requirement of the [Accessibility of Ontarians with Disabilities Act](#))

Note: Digitization may not be recommended for records with retention under nine years and/or those infrequently accessed, considering the associated costs and short-term retention.

1.2. Governance Requirements

Before initiating any digitization projects, departments must contact the Records and Information Management Services – Clerk's department (Clerk's department) for an initial assessment and record-keeping review, utilizing the Initial Assessment Form (Appendix A).

This review aims to:

- Determine the authoritative records once they have been digitized (physical or digitized records) based on the business purposes for digitization
 - Identify records that need to be retained in their original physical record format due to their historical significance or other value (see 1.3.1)
- Assign the appropriate disposition to the physical record after digitization
- Recommend how physical and digitized records are organized, managed and stored before they are disposed of and/or retained as archives.

Notes: No digitization project will proceed until the Clerk's department, in consultation with the Legal department, confirms compliance with governance and record-keeping requirements.

1.3. Record-Keeping Requirements

1.3.1. Disposing of Physical Records Post-Digitization

- Physical records can only be disposed of after digitization once the Clerk's department reviews and approves the governance and record-keeping requirements.
- As part of this approval, departments are required to complete the requirements set out in the 1) Digitization Process Assessment (Appendix B) and 2) Inventory & Quality Control and Assurance Sheet (Appendix C-1).

Exceptions:

- Some records must be retained in their original physical record format and cannot be destroyed due to, but not limited to:
 - Archival and historical significance (e.g., original signatures, seals, or stamps are significant)
 - Inability to produce a legible digital record
 - Detection of fraud or ongoing litigation
 - Active Freedom of Information requests or appeals

1.3.2. Retaining Physical Records Post-Digitization

- The details of the retention process for physical records retained for historical or other purposes are established between the department and the Clerk's department.
- The historical significance of a record is determined on a case by case, as is the need to retain records for other reasons (e.g., legal purposes).

1.3.3. Digital Records Storage

- According to the Records Retention By-law, digitized town records should be stored in an approved recordkeeping repository to maintain their accessibility, authenticity, and integrity for evidentiary purposes.

1.4. Third-Party Vendor Requirements

If departments choose to outsource, external third-party vendors (the vendor) must meet the town requirements as outlined in this procedure:

- Contracts must include language to ensure the proper management, storage, protection, and transfer of town information while under their control.
 - A Privacy Impact Assessment may be necessary for certain digitization projects to meet privacy requirements. Before approaching a vendor, consult with the Clerk's department to discuss possible privacy implications.

- When departments dispose of town records with a third-party vendor, the department must first obtain approval from the Clerk's department (see 1.2). Once authorized, vendors must:
 - Provide the department and Clerk's department with a quality control and assurance certification based on the sampling and verification details in the contract (at a minimum sampling of 5% of the total digitized records);
 - Retain physical records for a minimum of three months for the department to complete quality assurance or until the Town Clerk authorizes their destruction;
 - Proceed with the destruction of physical records only receiving formal authorization in the form of a memorandum from the Clerk's department, co-signed by the Town Clerk and the department director, and
 - Submit an official destruction certificate confirming the records' secure destruction to the department and Clerk's department after destruction.

1.5. Admissibility of Digitized Records in Legal Proceedings

To justify the trustworthiness of digitized records as evidence, whether in a court of law or for public use, departments must be able to demonstrate the accuracy, completeness, and reliability of their records, comparable or superior to that of the physical records. All aspects of the digitization process should be comprehensively documented following [CAN/CGSB-72.34-2017 \(R2022\)](#).

Departments must conduct the Digitization Process Assessment (Appendix B) throughout the digitization and submit it to the Clerk's department at the end of the digitization project in order to establish a baseline, acknowledge the level of accountability, ensure operational integration into business practices, record maintenance, and reliability of the digitized records.

1.6. Quality Assurance

Departments are required to monitor systematically and review their digitized records and processes for quality control and assurance, ensuring that the quality of digitized records is equal to or greater than that of the physical records to function as town records.

- All necessary details should be documented in the Inventory & Quality Control and Assurance Sheet (Appendix C-1):
 - Which records will be digitized, retained as archives, or disposed of, in accordance with the Records Retention By-law;
 - Quality control and quality assurance measures that are being applied;
 - Annotation and other editing techniques that will be used and when they are allowable;
 - Where the digitized records will be stored; and
 - File formats the digitized records will be stored.

If necessary, the Clerk's department may audit the quality control and assurance of both in-house and outsourced town records digitized projects to ensure they meet the requirements outlined in this Procedure.

2. Digitization Technical Requirements

The following describes the digitization technical requirements. Refer to the Digitization Guideline for more details on digitization steps.

2.1. Accessibility for Ontarians with Disabilities Act (AODA)

Departments that provide public-facing services or post digitized records to the Town's external website must comply with AODA.

2.2. Metadata

- Metadata that are captured and managed are necessary to prove that digitized records are complete, accurate, and trustworthy.
- Technical Metadata Requirements (Appendix D) describes technical metadata for configuring scanner software and dealing with third-party vendors.

2.3. Optical Character Recognition (OCR)

- Optical Character Recognition is required when digitizing textual documents as a means of making digitized records accessible.
- OCR allows digitized records to be searched using keywords, enables electronic editing, captures handwritten text, and permits metadata extraction for auto-population purposes.

2.4. File Format and Compression Type

- The file format of the digitized records is determined on the basis of business needs and legal requirements. Digitization File Formats and Scanner Settings Standard (Appendix E) provides a standard of recommended technical requirements, including best practice options for format.

- Departments determine the appropriate compression types (lossless or lossy compression) based on their business needs.

References and related documents

The content of this procedure is consistent with national and international standards for making digitized records admissible in court:

- [Canada Evidence Act](#) (RSC 1985, c. C-5)
- [Ontario Evidence Act](#) (RSO 1990, c. E.23)
- [Electronic Documents as Documentary Evidence](#) (CAN/CGSB-72.34-2017)

Records Retention By-law

Municipal Freedom of Information and Protection of Privacy Act

Definitions

Authoritative Record: the record that is considered the official town record for evidentiary purposes.

Compression Type: reduces the size of the digitized record to enable efficient storage and easier transmission. Digitized records may be lossy or lossless.

Digitization: the action by which a device, such as a scanner or camera, is used to convert a physical record to a digitized record for use in a computer.

Digitized Record: a record that has been converted from a physical record, to a digitized record, via a digitization (scanning) process.

Digitization Process: includes the planning, prioritization, preparation, metadata creation and collection, digitization, quality management, storage, and the assessment and evaluation of the digitization process itself.

Lossless compression: is suitable for digitized records that don't require a high-quality reproduction, such as photographs where minor (sometimes imperceptible) loss of accuracy is acceptable to achieve a substantial reduction in size. For example, a digitized record compressed using lossy compression may be one tenth the size of the original.

Lossy compression: reduces the size of the digitized record, to approximately half its original size, with no loss of quality and is preferred for high quality reproduction purposes e.g. technical drawings, photographs, or clip art where detail in the digitized record is important.

Metadata: data describing context, content and structure of records and their management through time. Metadata can describe the properties of a document. For example, the following information about a document is typically recorded: Title (or name of the document), Date (the document was created), and Created By (document creator). These descriptors are known as 'metadata'. Metadata facilitates search, identification, and the management of information.

Optical Character Recognition (OCR): is the mechanical or electronic conversion of digitized records containing typewritten or printed text, into machine-encoded/computer-readable text.

Official Record: the version of a town record deemed as the authoritative record, which is not a convenience or duplicate copy, but rather the final complete version, as determined by the proper authority, and is the single source of truth.

Physical Record: the original physical record that was used to create the digitized record. Examples of physical records include microfilm, microfiche, paper documents, photographs, drawings, plans, etc.

Pixels Per Inch (ppi): a measurement of the resolution of devices such as computer displays, scanners, and camera image sensors.

Town Record: A record created or received in the course of town administration or delivery of town services.

Quality Control (QC): is the process by which the quality of all factors involved in production are reviewed.

Quality Assurance (QA): refers to a program for the systematic monitoring and evaluation of the various aspects of a project or service to ensure that standards of quality are being met.

Scanning: the action by which a device, such as a scanner or camera, is used to convert a physical record to a digitized record for use in a computer.

Responsibilities

Executive Leadership Team

- Support adherence to this procedure by advocating for responsible digitization practices.

Department Director

- Is accountable for ensuring the town record digitization process meets the requirements described within this procedure and standards.
- Consult with the Clerk's department throughout the digitization process as required by this procedure.

Town Clerk

- Is accountable for signing off the disposition of physical records resulting from town record digitization projects.

Records and Information Services, Clerk's Department

- Oversee and provide guidance on digitization projects, including the proper control of digitized records.
- Work with departments on their digitization projects and initiatives, ensuring quality control and audit practices are in place to preserve the integrity of records.

Legal Department

- Review and provide guidance on the legal admissibility of records and any known requirements related to digitization.

Appendices

Appendix A Initial Assessment Form

Appendix B Digitization Process Assessment Form

Appendix C-1 Inventory & Quality Control and Assurance Sheet

Appendix C-2 Quality Control Checklist

Appendix D Technical Metadata Standard

Appendix E Digitization File Formats and Scanner Settings Standard