POLICY AND GUIDELINES FOR THE MANAGEMENT OF ELECTRONIC RECORDS
INCLUDING ELECTRONIC MAIL (E-MAIL) SYSTEMS

1. Purpose

Establish and clarify a records management policy for municipal officers with respect to the creation, use, maintenance, scheduling and disposition of electronic records including those created on e-mail systems.

2. Objectives

2.1 To ensure the efficient administration and management of electronic records and the preservation of those having long-term or permanent value.

2.2 To help ensure the accuracy, usability, longevity and legal acceptance of electronic records maintained by municipal offices.

2.3 To ensure the accessibility of electronic records in conformance with schedules approved by the Local Government Records Committee.

3. Scope

Applies to all municipal officers covered by the Municipal Records Act.

4. Definitions

**Analog:** Information in human readable form. It may be a duplicate, enlarged or reduced in size from the original.

**AIIM:** The Association for Information and Image Management, a standards setting body affiliated with the American National Standards Institute (ANSI), which is the principal developer of standards for microform and information storage technologies involving images.

**ANSI:** The American National Standards Institute, a private standards organization in the United States which coordinates the development and maintenance of various industry standards.

**Binary Digit (bit):** represents the binary code (0 or 1) with which the computer works. A number of bits together are used to represent a character in the computer.

**Computer-Output Microfilm (COM):** Microforms containing data produced by a recorder from computer-generated signals.

**Converting Electronic Records:** The export or import of electronic records from one software to another without the loss of structure, content and context even though the underlying bit stream pattern or code is likely to be altered.

**Copying Electronic Records:** The transfer of records from old storage media to new storage media with the same format specifications without any loss in structure, content and context. In copying electronic records, the underlying bit stream pattern or code on one storage medium is replicated on a new storage medium.

**Data:** Symbols or representations of facts or ideas that can be communicated, interpreted, or processed by manual or automated means. Often associated with electronic data or with statistics or measurements.

**Data Base:** A set of data, consisting of at least one file or a group of integrated files, usually stored in one location and made available to several users at the same time for various applications.
Density: The number of bits in a single linear track measured per unit of length of the recording medium.

Disposition of Records: The changing of custody, location or existence of records including destruction.

Electronic: Relating to technology having electronic, digital, magnetic, wireless, optical, electromagnetic or similar capabilities.

Electronic Mail (e-mail) Messages: Documents that are created, stored and delivered in an electronic format. E-mail messages and their attachments are similar to other forms of communicated messages such as correspondence, memoranda, and circular letters. E-mail messages also contain features commonly associated with traditional records systems, including calendars, directories, distribution lists, and attachments such as word processing documents, spreadsheets, or images that are incorporated into an e-mail message.

Electronic Mail (e-mail) System: A system that enables users to compose, transmit, receive, and manage text and/or graphic electronic messages and images across local area networks and through gateways connecting other networks. This information consists primarily of messages, but may include attachments such as calendars, directories, distribution lists, word processing documents, spreadsheets, and other electronic documents.

Electronic Record: A record created, generated, sent, communicated, received or stored by electronic means, including numeric, graphic, and text information recorded on any medium capable of being read by a computer which satisfies the definition of a record as defined in the Municipal Records Act.

Human Readable Format: Refers to the representation of information that can be read with the human eye and does not require machine (computer) assistance. Printed material, microfilm and microfiche are examples of human readable format.

Image: (1) A representation of information produced by light/radiant energy. (2) In electronic imaging, a digital representation of a document.

Information: Data and documents that have been given value through analysis, interpretation or compilation in a meaningful form.

Information System: The organized collection, processing, transmission and dissemination of information in accordance with defined procedures, whether automated or manual.

Magnetic Media: Variety of magnetically coated materials used by computers in electronic systems for data and program storage. This includes, but is not limited to: computer tapes, disks, diskettes and other electronic storage devices containing records.

Microfilm: (1) A fine-grain, high-resolution film used to record images reduced in size from the original. (2) A microform consisting of strips of film on rolls that contain multiple microimages. (3) To record microphotographs on film.

Microform: A form, usually film that contains microimages.

Migrating Electronic Records: Involves moving records from a currently used system or platform to a new one. Usually programs must be written and significant staff time must be allocated to accomplish a successful migration.
be given to assuring that all records are migrated and meet applicable standards.

**Official Record Copy:** A single copy of a record designated as the official record of a government transaction retained by its custodian in accordance with the appropriate records schedule.

**Offline:** Logically or physically disconnected from the computer. For example a reel of tape is offline storage.

**Pixel:** Smallest element of a display surface that can be independently assigned color or intensity.

**Raster Computer Output Microfilm (R-COM):** Device that produces microforms from any computer-managed pixel image storage device.

**Receipt Data:** Information in e-mail systems regarding date and time of receipt of a message and/or acknowledgment of receipt or access by addressee(s).

**Record-keeping System:** A system (manual or electronic) for organizing and identifying records to speed their retrieval, use and disposition and to provide adequate documentation of the municipality’s functions and business transactions.

**Records, Permanent:** Records appraised by the Local Government Records Committee as having sufficient historical, administrative or legal value to warrant continued preservation.

**Records, Vital:** Records regardless of archival value that are essential to functions of government during and after an emergency. Also those records essential to protect the rights and interests of that organization and of the individuals for whose rights and interests it has responsibility.

**Records Management System:** Organized collection of hardware, software, supplies, people, maintenance, training and policies to accomplish a set of specific functions.

**Records Retention and Disposition Schedules:** A comprehensive statement approved by the Local Government Records Committee showing retention periods and all actions to be taken with the respect to disposition of records.

**Transmission Data:** Information in e-mail systems regarding the identification of sender and addressee(s), and the date and time messages were sent.

### 5. Policy

5.1 Electronic records may be disposed of only in accordance with schedules approved by the Local Government Records Committee.

5.2 Permanent records are those records which have been scheduled for permanent retention either in the original or microform copy by the Local Government Records Committee or by applicable statute and regulation. Long-term records are any records that need to be retained for more than ten years.

5.3 Municipal officers are responsible for making provisions to retain either paper copies of permanently valuable electronic records, or making archival security microform copies to serve as a substitute. Archival security microform copies must be created and maintained in conformance with applicable standards approved by the Local Government Records Committee.

5.4 In those instances where an electronic record is the original medium for records scheduled for permanent retention, such as the
official recording of minutes, provisions must be made to provide paper copies of such records or to create archival security microfilm copies of the records. Provisions shall be made to protect permanently valuable databases such as indexes by converting the information to paper copy or archival security microfilm when the databases are moved offline. The use of raster computer output microfilm meeting appropriate standards is acceptable as the security copy (see ANSI/AIIM MS48).

5.5 Offices that receive and use confidential information, as defined by applicable laws, shall take appropriate measures to maintain the confidentiality of the records in order to protect the privacy of individuals, employees, taxpayers, clients or service recipients.

5.6 Municipal officers do not have to make provisions to retain non-permanent records in electronic format in a human readable form. However, municipal officers are strongly encouraged to consider the advantages of generating a microform copy of certain nonpermanent electronic records if they are of sufficient vital importance or when reformatting provides a more cost effective approach to the long-term maintenance of the records.

5.7 All records, whether created or stored on electronic systems must be retrievable and available for the retention period listed on records retention and disposition schedules approved by the Local Government Records Committee.

5.8 Municipal officers shall retain and dispose of e-mail messages and attachments that meet the definition of records in conformance with retention schedules approved by the Local Government Records Committee. E-mail messages and attachments that do not meet the definition of records and are not subject to litigation and other legal proceedings should be deleted immediately after they are read.

5.9 Records may be deleted from an e-mail system if their required retention period has expired or after they have been copied to a records keeping system. Records may be maintained on a manual or electronic record-keeping system. Records shall include transmission or receipt data.

5.10 When duplicate copies of e-mail messages are sent internally, the sender should be responsible for maintaining the official record copy for the full applicable retention period. Duplicate copies should be retained as long as they have administrative value and then deleted from the system.

5.11 E-mail messaging systems may be used as a document storage or records management system. Storing e-mail messages within an E-mail system including personal folders can be sufficient to meet required retention and disposition schedules, as long as adequate and appropriate backup procedures are in place. Electronic messages with retention periods that are permanent or which may be considered vital, shall be printed.

5.12 All copyright laws apply equally to e-mail (including attachments) or other electronic systems. Protection of copyrights requires the user to make to the greatest degree possible, a determination of authorship of any data utilized.

5.13 If a municipal government ceases to maintain the hardware and software necessary to satisfy the conditions of the policy and guidelines, records that are contained in the system will be deemed destroyed by the municipal government unless the existing records are converted to a human readable format or a format compatible with an electronic system that the municipality implements or continues to maintain.

5.14 The implementation and use of an electronic records-keeping system should not limit or hinder public access to public records.
6. Procedures

6.1 Municipal officers must maintain proper, up-to-date technical and system documentation for each information system that produces, uses, or stores electronic records. Minimum documentation required is: a narrative description of the system; physical and technical characteristics of the records; and any other technical information needed to read or process the records.

6.1.1 A municipal officer who maintains government records on electronic records-keeping systems must provide for the usability of image and index data over time by:

6.1.1a Providing a method for all authorized users of the system to retrieve desired records.

6.1.1b Provide an appropriate level of security to ensure integrity of the records.

6.1.1c Provide a standard interchange format when necessary to permit the exchange of records on electronic media using different software/operating systems and allow for the conversion or migration of records from one system to another.

6.1.1d Provide for the disposition of the records according to retention requirements approved by the Local Government Records Committee.

6.1.1e Establish procedures for regular copying, reformatting, and other necessary maintenance to ensure the retention and usability of electronic records throughout their required retention period.

6.1.1f Similar security precautions required of paper records must be employed when destroying or reusing electronic media that contain privacy-protected or confidential information. Electronic storage media containing such information must be electronically wiped clean or physically destroyed in such a manner that the information cannot be reconstructed.

6.2 Before a record that will serve as the official copy is created and maintained on electronic systems, records must be identified sufficiently to enable authorized personnel to retrieve, protect, and carry out the disposition of records in the system. Municipal officers should ensure that records maintained in such systems can be correlated with related records on paper, microfilm, or other media.

6.3 Municipal governments that do not have the technical capability to manage e-mail messages for the full retention period in an electronic format shall create an analog copy (paper or microfilm). In addition to the content, the following information shall also be retained: name of sender, name of recipient, date and time of transmission and/or receipt. Records printed from e-mail systems shall be filed in accordance with standard office procedures.

6.4 Municipal governments shall establish standards/procedures to manage the storage of records on e-mail and shall not rely on e-mail server backup procedures to manage the retention and disposition of records created in e-mail systems.

7. Legal Admissibility of Electronic Records

To enhance legal admissibility of records in electronic format and help ensure municipal records may be used as evidence in court proceedings, trustworthiness must be established by thoroughly documenting the record-keeping system’s operation and the controls imposed on it. To implement procedures to enhance the legal admissibility of electronic records, municipal officers should:

7.1 Document that similar kinds of records generated and stored electronically are
created by the same processes each time and have a standardized retrieval approach.

7.2 Substantiate that security procedures prevent unauthorized addition, modification or deletion of a record and ensure system protection against such problems as power interruptions.

7.3 Identify the electronic media on which records are stored throughout their lifecycle and the maximum time span that records must remain on each storage medium in order to comply with minimum retention periods as cited in the Municipal Records Manual.

7.4 Coordinate all of the above with legal counsel, information managers, and records management staff.

8. Security of Electronic Records

Municipal officers shall implement and maintain an effective records security program that incorporates the following to:

8.1 Ensure that only authorized personnel have access to electronic records.

8.2 Provide for backup and recovery of records to protect against information loss. Documented disaster recovery plans and procedures shall be established for all electronic records systems. Disaster recovery plans and procedures should be reviewed and updated at least annually.

8.3 Ensure that municipal personnel are trained to safeguard sensitive or classified electronic information.

8.4 Minimize the risk of unauthorized alteration or erasure of electronic records.

8.5 Ensure that electronic records security is included in a computer systems security plan.

9. Selection and Maintenance of Electronic Records Storage Media

Municipal officers shall select appropriate media and systems for storing records throughout their life which meet the following requirements:

9.1 Specific requirements in selecting storage media.

9.1.1 Permit easy retrieval in a timely fashion.

9.1.2 Retain the records in a usable format for the length of their required retention period.

9.1.3 When appropriate, meet requirements for transferring electronic records to the State Archives.

9.2 The following factors shall be considered before selecting a storage media or when converting from one medium to another:

9.2.1 The required retention period of the records.

9.2.2 The maintenance necessary to retain the records in that format.

9.2.3 The costs of storing and retrieving the records maintained in that format.

9.2.4 The density of the record.

9.2.5 The access time necessary to retrieve stored records.

9.2.6 The portability of the medium (selecting a medium that will run on equipment produced by multiple manufacturers) and the ability to transfer information from one medium
to another as well as the flexibility of the software to be migrated into a different medium if desirable or necessary.

9.2.7 Compliance of the storage medium with current industry and/or Federal standards if applicable.

9.3 Municipal officers shall ensure that all authorized users can identify and retrieve information stored on removable disks or tapes by establishing or by adopting procedures for external labeling as well as procedures for computer library subsystems for storage media identification.

9.4 Municipal officers shall ensure that information is not lost because of changing technology or deterioration by converting storage media to provide compatibility with the municipality’s current hardware and software. Before conversion to a different medium, municipal officers shall determine that the authorized dispositions of the electronic records can be implemented after conversion.

9.5 Municipal officers should back up electronic records on a regular basis to safeguard against the loss of information due to equipment malfunctions or human error. Duplicate copies of permanent records should be maintained in separate buildings. All security copies of vital electronic records, regardless of retention period, should be stored in a separate building.

9.6 For the maintenance of magnetic computer medium, municipal officers shall follow industry and national standards for safeguarding information.

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