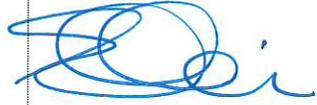


	Town of Chapel Hill, NC	Policy Number: XXX	I. <u>POLICY</u> II. <u>PURPOSE</u> III. <u>PROCEDURE</u> IV. <u>FORMS/INSTRUCTIONS</u> V. <u>ADDITIONAL CONTACTS</u> VI. <u>DEFINITIONS</u> VII. <u>RESPONSIBILITIES</u> VIII. <u>APPENDICES</u> IX. <u>FAQ</u> X. <u>SCOPE</u> XI. <u>RELATED INFORMATION</u> XII. <u>POLICY HISTORY</u>	Approved By:  Town Manager
	Records Management and Imaging Policy	Reissue Date: xxxxx		

III. PROCEDURES:

1. Overview
2. Application
3. Municipal Records Retention and Disposal
4. E-Mail and Electronic Records
5. Electronic and Digital Imaging
6. Public Records Requests

1. Overview

A. Which records are covered?

These procedures cover records in the custody of the Town of Chapel Hill for delivering services and documenting Town operations.

Records may be stored by electronic as well as non-electronic means.

Maintenance of local government records is an important custodial responsibility. Records document the conduct of the Town's business, help control and monitor operations, and help ensure and measure performance. An effective records management program can save money, time, and space by preventing the creation of unnecessary records, removing inactive records from crowded office spaces and servers, and ensuring that records are well organized and easily accessible.

B. Effective records management supports the following:

- Preservation of the integrity of and accessibility to public records.

- Preservation and clear identification of authoritative records (most up-to-date, official copy, etc.)
 - Reduced reliance on paper records, where feasible.
 - Reduced need for storage space for paper records.
 - Elimination of duplicate records.
 - Conversion of paper and non-digital records into digital format while preserving the authenticity of records.
 - Centralized storage and retrieval of records in a centralized enterprise content management (ECM) system.
- Efficient retrieval of active and stored records, regardless of format.
 - Easier information sharing within the organization and with the public.
 - Easy availability for public inspection under the State's Public Records Law
 - Easy access to public records unless prohibited by law or court order.
- Retention of public records as described in the Municipal Records Retention and Disposition Schedule and for audit or legal purposes.
 - Protection of confidential, proprietary and other protected information in accordance with the law.
 - Retrieval of appropriate records for audit and legal purposes.
 - Disposal of converted records after proper conversion and approval by NCDNCR.
 - Disposal of public records at the end of their retention periods using approved disposal methods (07 NCAC 04M.0510).

C. Reevaluation of Record Management and Imaging Procedures

Procedures will be reevaluated every 5 years or upon implementation of a new information technology system, whichever comes first. They will be updated as required by changes in applicable laws and regulations.

A copy of this policy will remain on file at the North Carolina Department of Natural and Cultural Resources.

2. Application

A. Intent

This policy and associated procedures serve as basic documentation of the procedures followed by the Town in imaging, indexing, auditing, backing up, and purging electronic records in accordance with the disposition schedule, and in handling the original paper record, if applicable.

B. Who must comply?

Town employees and elected and appointed officials who generate records as part of or in support of transacting Town business.

C. Which records are included?

These procedures apply to all public records as defined by North Carolina G.S. § 132-1, in addition to other statutes and federal laws and regulations, regardless of the format of those records, that are in the custody of the Town of Chapel Hill and are maintained for the benefit of Town use in delivering services and in documenting Town operations.

This includes permanent and non-permanent records, and confidential and non-confidential records.

These classifications may warrant different treatment when processing the records.

The Town has entered into an agreement with the North Carolina Department of Natural and Cultural Resources for both a Municipal Records Retention and Disposition Schedule and a Public Libraries Records Retention and Disposition Schedule affecting all records created within the Town.

This schedule sets the minimum retention periods for which all records must be maintained. A copy of this Municipal Schedule¹ and the accompanying Public Libraries Schedule² are kept in the Communications and Public Affairs Department.

D. Are private computers exempt?

No. Records governed by these procedures may be produced on Town-owned and/or issued equipment and/or software, or privately-owned equipment and/or software.

3. Municipal Records Retention and Disposal

These procedures help us maintain useful records and to dispose of them after their purpose has been served.

Only a small percentage of all records, generally five percent or less, possess lasting value (one year or more).

A. Conducting a records inventory

¹ http://chapelhill.granicus.com/MetaViewer.php?view_id=7&clip_id=2037&meta_id=86029

² <https://chapelhill.legistar.com/View.ashx?M=F&ID=7329652&GUID=C7B716FE-D6D7-41FC-BD67-E2263C4891F3>

The records inventory conducted by each department will provide most of the information necessary to appraise the records to establish a records retention and disposition schedule specific to the Town of Chapel Hill. The appraisal should involve determining the function and purpose, the informational content, the use, and the uniqueness of the record.

B. Active Records

Active records are those that are referred to at least once per month per file drawer. Correspondence generally comprises the majority of active records in an office.

Effective management of active files and an efficient filing system will reduce the amount of space required for the maintenance of these records.

- Create letters and memoranda when needed to convey information or to create a tangible record.
- When a written record is not needed, rely on face-to-face conversations or the telephone.
- Produce only as many copies when necessary to ensure quick and accurate filing.
- Annotate file copies where necessary to ensure quick and accurate filing.

C. Inactive Records

Records referred to less than once per month per file drawer are inactive and may not need to be maintained in the office of origin.

- Review records with the Communications and Public Affairs Director or Records Manager to identify archival records.
- Transfer any record of an historical nature that should be retained forever to the Communications and Public Affairs Department for permanent storage.
- Inactive records that must be retained according to the State retention schedule may not need to be maintained in the office of origin.
- During the annual inventory, inactive records should be purged from files in each department.
- Inactive records that need to be retained may also be microfilmed or scanned into the computer network.
- Each department is responsible for storing these files and providing an inventory to the Communications and Public Affairs Director listing the types of records, storage locations, and retention schedules.

D. Filing Systems

The purpose of a filing system is to make it easier to rapidly retrieve information when needed, and to dispose of it when it is no longer needed.

- The filing system in each department should be known by all employees who normally access the files

- The filing system should relate closely to the Town’s retention and disposition schedule so that records can be easily transferred from active to inactive storage.
- Types of filing systems:
 - Alphabetical filing system maintains the records in alphabetical order by subject.
 - A numeric system arranges records by a numbered scheme.
 - An alphanumeric system classifies records by codes, either alphabetical or numerical, or in combination.
 - A chronological filing system arranges records by date.
- A centralized file location puts the records in one place, eliminates the need for duplicate files and equipment, and helps ensure that the staff is familiar with the entire filing operations.

E. Machine Readable and Portable Records

Machine readable and data automation records are records that require equipment to read the information they hold. They should be viewed in the same manner as paper records (see Records Retention and Disposition schedule).

Data Storage technologies evolves over time. The Town is taking a proactive approach to the long-term preservation of digital records. To ensure that digital information survives into the future, the Town will implement storage solutions that are specialized for long-term retention and adaptable to future advances in technology.

Portable or removable storage devices including memory sticks, micro storage cards and external USB/Firewire attached disk drives, DVDs, CDs, audio/video tapes, magnetic backup tapes, etc.,

- These records should be “backed up” and stored off site, especially if the information contained within is not available elsewhere.
- Labeling: It’s imperative that portable media is labeled adequately enough so that the information stored is readily apparent. Important pieces of information to include are: what the records are, their dates, and if there are any restrictions. In the case of a USB drive that may be too small for that, creating a .txt file or index with this information is acceptable.
- Access: Technology purchased, leased, created, or otherwise acquired by the Town containing public records shall be designed and maintained in a manner that does not impair or impede the Town’s ability to permit the public inspection and examination of public records and provides a means of obtaining copies of such records. Nothing in this subsection shall be construed to require the retention by the Town of obsolete hardware or software.
- Outdated Media: USB flash drives and portable hard drives that connect via USB are the most current, widely available external storage media that’s used by the Town.
- If CDs and DVDs have met their record retention, then destroy them; if they haven’t, then the data within should be moved to a more stable environment, like a USB drive.

Please contact the Records Manager or Technology Solutions for any older media.

F. Cloud File Storage, File Sharing and Computing

The National Institute of Standards and Technology (NIST) defines cloud computing as a “model for enabling convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction.” Some example of popular cloud-computing services are Google Drive, Dropbox, Asana, Microsoft Azure, and Apple’s iCloud.

The purpose of these procedures is to ensure that the Town of Chapel Hill is not inappropriately storing or sharing information using public cloud computing and/or file sharing services.

- **Cloud Storage and File Sharing Services**

Cloud storage and file sharing present significant data management risks and are subject to changes in service with or without notice. Data management risks include cybersecurity, legal compliance, access for audits and record requests and Town ownership. The agreements that users are required to accept typically do not allow users to negotiate or clarify terms (which can change without notice), and often provide unclear descriptions of services.

Therefore, cloud-based services and file sharing should be used only to temporarily store copies of non-confidential documents

These services should not be used to store or transfer the original copy of any document.

The following procedures concerns cloud computing resources:

Type of Record	Description	Procedure
Regulated or Confidential Records	Data that is governed by privacy or information protection mandates required by law, regulation, contract, binding agreement, or industry requirements.	Town employees cannot use self-provisioned cloud services to store, process, share or otherwise manage regulated records without coordinating with Technology Solutions to develop the appropriate contractual safeguards.
Administrative Records	Institutional data that is meant for a limited distribution; available only to employees of the Town of Chapel Hill that need the data to support their work. This data derives its value for the	Should only use a centrally or locally provisioned cloud service once you have confirmed with Technology Solutions that the service is appropriate for administrative institutional data. Not all

	Town in part from not being publicly disclosed.	contractually provisioned services are designed to handle administrative data.
Public Records	Institutional data that is meant for all employees of the Town of Chapel Hill and in some cases wide and open distribution to the public at large. This institutional data does not contain confidential information.	May use self-provisioned cloud services to store or manage public institutional data with caution. Should ensure that using these cloud services does not violate any licensing agreements.

- **Software as a Service (SaaS)**

Software as a Service, or SaaS, is a subscription based and centrally hosted software licensing model. Usually delivered via browser, a SaaS service doesn't require any special software installation or hardware to run. Some examples are Basecamp, Slack, Citrix GoToMeeting, and Cisco WebEx. These types of services promote collaboration within our Town and Community, without the costs associated with buying and maintaining software. Departments are ultimately responsible and accountable for managing their records wherever they are held. Records of value used in any subscription-based service still need to retain their integrity, authenticity and reliability, be accessible and retrievable, and be securely destroyed when authorized, or retained if they have a permanent value. As with Cloud file storage and sharing, there are data management risks including cybersecurity, legal compliance, access for audits and record requests and Town ownership. Town of Chapel Hill employees who use Software as a Service should:

- Work with Technology Solutions to ensure there's a viable disaster recovery plan in place
- Confirm that access to these systems and information includes those who need to recover said data; either for work, public records requests, etc.
- Train others in your department on how to safely and securely use the service
- Be thoughtful about moving files to online computing. Some programs and files may need to be retained outside of the cloud for efficiency or security reasons.

Town of Chapel Hill employees should not begin using a cloud-service without coordinating with Technology Solutions and CAPA Records Management to process, distribute, collect, or otherwise manage records and documents.

4.E-Mail and Electronic Records

A. Who is subject to email procedures?

These guidelines apply to all users of Town of Chapel Hill networks or computer equipment. For the purposes of these guidelines, a "user" is defined as a permanent or temporary employee, full or part time, a consultant, a contractor or a volunteer. "E-mail" is defined as Microsoft Outlook or any other electronic mail system used for internal or external Town communication. This includes all e-mail information sent, received or stored with Microsoft Outlook/Exchange.

B. Email is a public record

Town of Chapel Hill e-mail users should use sanctioned e-mail accounts to conduct all Town of Chapel Hill business.

Communications sent to or received by personal e-mail, instant messaging, and text messaging services regarding Town of Chapel Hill business are considered public records as defined by N.C.G.S. §132.1, et seq., and shall be managed according to the requirements set forth here and in the General Schedule for Electronic Records published by the Department of Natural and Cultural Resources.

E-mail is subject to the same retention requirements as paper correspondence.

C. Best Practices

- Address e-mail correspondence correctly and only share information that the intended recipient is authorized to view (e-mails and attachments).
- Users shall use Town e-mail only for Town purposes except that occasional personal incidental use for research, training or communication may be acceptable if the operation of the network, activities of other users and department operations are not negatively affected.
- Users shall not mislead others of the source of the e-mail and/or to pretend to be via e-mail someone other than who they are.
- E-mail shall not contain language that could reasonably be interpreted as demeaning, offensive, intemperate, rude, abusive or unprofessional.
- E-mail should not deal with matters of a confidential, sensitive or controversial nature.
- E-mail shall not imply by its words or context any contractual obligations for the Town except as specifically authorized and/or delegated by the Town Manager.
- There will be no use of e-mail for commercial purposes or personal gain.
- Users should take appropriate action to reduce or eliminate the volume of e-mail received not necessary to their assigned work.
- Users should only subscribe to listservs that are strictly necessary to their job function.
- Because e-mail is backed up every workday evening, users should ensure that e-mail not appropriate for backup (including but not limited to unsolicited commercial e-mail and confidential and/or sensitive e-mail) be deleted before close of business.
- E-mail pertaining to Town business shall be retained pursuant to applicable law.

Departments are charged with monitoring and enforcing workplace rules and may choose to establish and enforce standards that are more restrictive than the standards defined here.

No one shall use other e-mail or similar software, including instant messaging, on the Town network without prior approval in writing from the Technology Solutions Department. All e-mail sent from or directed to Town equipment is the sole property of the Town and subject to examination by authorized Town management, staff and the inquiring public except as otherwise protected by law, without notice to either the sender or recipient. As such, users should have no expectation of privacy of e-mail.

D. E-mail Signatures

Employees and officials may not send anonymous electronic messages pertaining to Town business. Employees and officials must include a signature line on all Town business related electronic messages they send from Town or personally owned technology that includes the following information to appropriately identify their official capacity with the Town.

- Employee's Name
- Employee's Title
- Department's phone number
- Public records statement so that anyone who receives an e-mail from an employee or official understands that the e-mail is public and not private or confidential (i.e., "In keeping with the NC Public Records Act, e-mails, and all attachments, may be released to others upon request for inspection and copying without prior notification.")

E. Filing Electronic Records

Any electronic record (word processing document, spreadsheet, e-mail message, text message, etc.) that requires retention and filing, should be stored in a properly named directory/subdirectory.

Per the NC Department of Natural and Cultural Resources, "an e-mail message is considered to be a public record when made or received pursuant to law or ordinance in connection with the transaction of public business by any agency of North Carolina government or its subdivisions." Some examples of e-mail/text messages (whether created with personal accounts or with work sanctioned accounts) that are public records and therefore covered by this policy include:

- Policies or directives;
- Final drafts or reports and recommendations;
- Correspondence and memos related to official business;
- Work schedules and assignments;
- Meeting agendas or minutes;
- Any document or message that initiates, facilitates, authorizes, or completes a business transaction; and
- Messages that create a precedent, such as issuing instructions or advice.

If an e-mail message is not created or received as part of the business of government, it is non-record material. Examples include:

- *Personal messages* received from family, friends, or work colleagues which have nothing to do with conducting daily Town business. These should be deleted in a timely manner. Please see the Town of Chapel Hill Appropriate Use of Technology Policy for additional information.
- *Spam* is electronic junk mail and is similar to the advertising mail received at home. It is completely unsolicited and unwanted and is clearly not related to the transaction of Town business, therefore it is considered to be non-record material.
- *Unsolicited e-mails* are messages that may be unwanted, but are somewhat business related. These could include non work-related e-mail messages from coworkers such as miscellaneous news articles, announcements, etc. These should be deleted in a timely manner.

Inquiries regarding policy deviations should originate from a Department head and be directed to the Chief Information Officer.

Employees should use caution when preserving work-related text/IM messages to file alongside paper records. Electronic files may contain data not normally displayed, relating to their creation or other aspects of the file, known as 'metadata'. This data may not be retained if the file is printed. To preserve text messages, please screenshot the message, forward to your work e-mail, and file alongside the rest of your e-mail.

5. Electronic Records and Digital Imaging

The North Carolina Department of Natural and Cultural Resources requires any agency that creates digital images of records or maintains electronic records for ten years or more to adopt electronic records and imaging policies.

A detailed procedures/process guide (Appendix B) outlines the steps for creating an electronic record. This guide will also make sure the most current steps are followed to ensure reliable system documentation will be available if needed for any judicial proceedings.

The document/image scanner used by all departments will be approved for use by Technology Solutions.

Documents in a Word format will not need to process through the document/image scanner and will be transferred to the media storage directly from a computer station.

Training will be provided to each record creator on the use of proper imaging, transfer of scanned documents to the media storage device, file naming process, metadata inclusion in file name and indexing.

The Records Manager will conduct a quality control audit monthly to ensure the imaged records are legible. This audit will be done prior to any destruction of paper copies. Once an audit has been completed, the activity log will be signed giving approval for records to be prepared for disposal.

Prior to any disposal of original records which have been imaged, the Town of Chapel Hill will complete a Request for Disposal of Original Records Duplicated by Electronic Means and send it to the Department of Natural and Cultural Resources for approval. Once an approval has been received, the original records can be destroyed.

Digital images of scanned records are maintained for the specified retention periods according to the records retention and disposition schedule.

The retention period is considered to have begun when the original document was created and not when the electronic reproduction was created. Any permanent records maintained in electronic form also exist as a paper or microfilm preservation duplicate copy in compliance with the Department of Natural and Cultural Resources' Human Readable Preservation Duplicates policy.

Electronic and digital images of scanned records in a document management system will be considered the "official" Town record.

Any hard copy generated from the imaged records will be considered the Town's duplicate "working" record. Please notify the Records Manager prior to submitting any forms to NCDNCR.

Any department within the Town whose methods for imaging records deviates from this process will detail this practice in writing, for approval by the Town Manager and the practice will be attached to this procedure as an Appendix.

A. Records Custodian

The records custodian is the person responsible for creating records or managing the staff who creates records. The records custodian certifies that the records created or duplicated by electronic means in their office are prepared in accordance with these guidelines as indicated by the following statements:

- Quality - records are legible, accurate, and complete.
- The records are produced or reproduced as part of a regularly conducted activity.
- The records conform to NCDNCR guidance regarding file formats, file naming, and if applicable digital preservation guidance produced by NCDNCR.
- Detailed, documented procedures are in place and followed when the records are created, copied, modified, or duplicated.
- The person(s) who creates, copies, modifies, or duplicates the records receives formal training on detailed system procedures prior to records preparation.
- Details of the training received are adequately documented through written policies and procedures.

- Training records are signed by employee after receiving training.

The Town will comply with the best practices and standards established by the Department of Natural and Cultural Resources as published on its website.

The Town of Chapel Hill will submit the “Request for Disposal of Original Records Duplicated by Electronic Means” form to the Department of Natural and Cultural Resources to seek approval for the destruction of original records that have been converted from paper to electronic record.

B. IT Professional or other Project Supervisor

An IT Professional is responsible for providing technical support to records custodians and who may be involved in infrastructure and system maintenance. The IT Professional certifies that:

Audit trails document the identity of the individual(s) who creates, duplicates, modifies, or otherwise prepares the records, what actions are taken by the individual during the course of the process, when these actions are taken, and what the results of these actions are. Audits:

- Are performed periodically to confirm that the process or system produces accurate results.
- Confirm that procedures actually followed are in accordance with procedure stated in the system's documentation.
- Are performed routinely on documents to ensure no information has been lost.
- Are performed by an independent source (i.e., persons other than those who create the records or persons without an interest in the content of the records. Acceptable source may include different department or authorized auditing authority).
- Are adequately documented. Ensures that the process and system hardware/software are adequately documented and that permanent records conform to all file formats, file naming, and digital preservation guidance produced by the Department of Natural and Cultural Resources.

Back up procedures are in place and comply with best practices, as established by the Department of Natural and Cultural Resources. Successful disaster recovery back up will be completed regularly and in a timely manner.

If digital images replace the original records and assume all legal authorities, these scanned records shall be considered the authoritative record copy and must be maintained for the specified retention period defined in the appropriate records retention and disposition schedule. The retention period is considered to have begun when the original document was created, not when the electronic version was produced. Any hard copy generated from the imaged records shall be considered a duplicate “working” record or reference copy.

All cloud-based storage and other contracted services will adhere to the standards issued by the North Carolina Department of Natural and Cultural Resources, including: developing organizational controls for cloud computing that align with in-house technology practices,

develop policies and best practices for implementing and testing contracted services, and regularly deploy a comprehensive audit system and workflow process to ensure that data is stored, protected, and used in accordance with office practices. Vendors will acknowledge in the Service Level Agreement that data is still in the legal custody of the Town, and will negotiate reasonable terms for the timely migration of all data and metadata in the event that services are discontinued. Where scanning is contracted/outsourced, a copy of the purchase order and a detailed service level agreement with the named third-party organization is maintained.

If departments carry out scanning of paper records in order to dispose of the paper originals where allowed, the department managerial staff or Records Manager must also periodically audit such imaged records for accuracy, readability, and reproduction capabilities before the original documents are destroyed.

C. Digital Imaging Program Documentation and Procedures

Please see Appendix B for Electronic and Digital Imaging Documentation and Procedures

D. Request for Disposal of Original Records Duplicated by Electronic Means

This form is used to request approval from the Department of Natural and Cultural Resources to dispose of non-permanent paper records which have been scanned, entered into databases, or otherwise duplicated through digital imaging or other conversion to a digital environment. This form does not apply to records which have been microfilmed or photocopied, or to records with a permanent retention. The most up-to-date version of the form can be found here: <https://archives.ncdcr.gov/documents/request-destruction-records-reproduced-electronic-means>

E. Maintenance of Trustworthy Electronic Records

Trustworthy electronic records are:

- Produced by Methods that Ensure Accuracy: All platforms used by the Town of Chapel Hill to create and manage electronic records, including e-mail clients, social media platforms, and cloud computing platforms conform to all Department of Natural and Cultural Resources' policies and all applicable security policies.
- Maintained in a secured environment
- Associated and Linked with Appropriate Meta Data
- Stored on Media That are Regularly Assessed and Refreshed

Electronic files are named in accordance with the Best Practices for File-Naming published by the Department of Natural and Cultural Resources. Electronic files are saved in formats that comply with DNCR's [File Format Guidelines for Management and Long-Term Retention of Electronic Records](#)³. *Also see Appendix B for more information.* File formats used by the Town are adopted as standard by the state, and are well-supported, are backwards compatible, and have robust metadata support.

³ https://files.nc.gov/dncr-archives/documents/files/file_formats_in-house_preservation.pdf

Records are organized in logical file structure and have folder names or electronic folder structure that ensure they are expediently retrievable. The consistency and coherence with which record copies are stored within these folder structures also guarantees that these records remain trustworthy. Records (both electronic and physical) are maintained in a secure environment where access rights in IT systems are managed by Technology Solutions and physical storage are controlled. Access rights are assigned by a supervising authority to prevent unauthorized viewing of documents.

F. Maintained in a Secure Environment

Security of the system and the records it holds is maintained in the following ways:

- Access rights are managed by the Records Manager and Technology Solutions and are assigned by a supervising authority to prevent unauthorized viewing of documents.
- The information technology system is able to separate confidential from non-confidential information
- Folders with confidential information are restricted, and access rights to confidential data are carefully managed.
- Physical access to computers, disks, and external hard drives is restricted.
- All system password and operating procedure manuals are kept in secure storage.

G. Associated and Linked with Appropriate Metadata

Metadata is maintained alongside the record. At a minimum, metadata retained includes file creator, date created, title (stored as the file name), and when appropriate, cell formulae and e-mail header information. Employees are not instructed to create metadata other than metadata that is essential for a file's current use and/or retention.

H. Stored on Media that are Regularly Assessed and Refreshed

Data is converted to new usable file types as old ones become obsolete. The following steps are taken to ensure the continued accessibility of records kept in electronic formats:

- Data is audited and assessed annually. If there is evidence of file corruption, data should be migrated to new media.
- Records are periodically verified through hash algorithms. This is required before and after transfer to new media to ensure the records were not altered.
- Media is refreshed every three to five years. The agency documents when and how records are transferred from one storage medium to another. Once the new media has been sampled to assure the quality of the transfer, the original media may be destroyed according to the guidelines of 07 NCAC 04M .0510.
- Records are periodically migrated to new file types, particularly when a new information technology system requires that they be brought forward in order to render the file properly.
- Metadata is maintained during transfers and migrations.

- Storage media are maintained in a manner and in an environment that promotes bit-level preservation. Humidity does not exceed 50% and should not fall below 30%. Room temperature is set between 65° F to 75° F. The agency adheres to the media manufacturer’s recommendations for specific environmental conditions in which the media should be stored.
- Whatever media is used to store data is clearly labeled with enough information that its contents can be determined (e.g., optical media should have a physical label; data stored on a server should be indexed).

I. Maintenance and Retention of System Documentation

In order to lay a proper foundation for the purposes of admitting Town electronic records into evidence, the Town shall be able to provide up-to-date, detailed documentation that describes the procedural controls employed in producing records; procedures for input control including tests used to assure accuracy and reliability; and evidence of the records’ chain of custody.

The Town of Chapel Hill maintains documentation that describes system procedures, practices, and workflows. This documentation also identifies system software and hardware and captures the system environment in terms of the organizational structure, functions and responsibilities, and system processes. It explains how the system operates from a functional user and data processing point of view. Documentation is reviewed and updated by Technology Solutions staff annually or upon implementation of a new information technology system. Such documentation maintained by the agency includes:

- Procedural manuals
- System documentation
- Security backup and disaster recovery procedures as a part of the Continuity of Operations Plan
- Service level agreements for contracted information technology services

One set of all system documentation will be maintained during the period for which the records produced by the process or system could likely be subject to court review and until all data created by every system instance has been destroyed or transferred to a new operating environment. All such documentation is listed in this records retention schedule.

6. Public Records Requests

With few exceptions, all records created or received by officials and employees while transacting official Town business are public records and must be retained, stored, disposed of, and made available for inspection and copying in accordance with the law (NCGS § 132-1). This applies to records pertaining to any Town business, including records located in officials’ and employees’ homes, on personal computers and phones.

A. Receipt of the Request:

Any employee who receives a Public Records Request will, through their immediate supervisor, notify their Department Head of the request. The employee will also forward the request to the Communication and Public Affairs (CaPA) Director as soon as possible, but no later than 48 hours after receipt.

Upon receipt of Public Records Requests from an employee or the public, CaPA will acknowledge receipt of the request to the requestor no later than 48 hours from receipt of the request by CaPA. If the request is from the public, CaPA will also notify the Department Head that the request has been made.

If an employee should receive an in-person request, it may be reasonable to fulfill the request at that time, depending on:

- If it is a reasonable request (a single copy of an accessible permit, report, etc.)
- Whether your department is staffed to accommodate the request

If your department is not adequately staffed to handle the request, or if the scope of request is too large (requests for emails, multiple permits or reports, etc.), then please refer the requestor to the [Public Records Request form](#).

B. Processing the Request:

Upon receipt of any Public Records Request, CaPA will determine the following:

- Whether any additional information is needed to complete the request
- The scope of the request
- Whether the request is subject to public disclosure or seeks confidential records or information
- The approximate amount of time required to gather and review the information

CaPA will seek input from the department(s) and/or legal staff as necessary in order to process these requests.

Once CaPA has made an initial determination on the above items, they will follow up with the requestor and advise:

- Whether their request can be processed (i.e. does not include items that are confidential and not subject to public disclosure); and
- An estimated response time, based on the above information.
- Whether there is expected to be any charge (see E below)

C. Preparing Responsive Documents:

After gathering all of the responsive documents, CaPA and the department(s) will review the results and remove items or redact words that are:

- Confidential / Protected (Attorney/Client info; state/local tax information; criminal investigations)
- Not relevant to the request (personal information, or any Town info that doesn't fall within the scope of the request)
- Not a public record (Constitutes a "trade secret"; property of a "private" person; account number for electronic payment; the electronically captured image of an individual's signature, date of birth, driver's license number, or a portion of an individual's social security number)

When CaPA and the department(s) have the complete records and screened appropriately, CaPA will provide the results to the requestor

D. E-mail Records/Database Inquiries/Texts/Voicemail

If the requests involves e-mails or information contained in the Town's various databases or servers, CaPA will also follow these additional steps:

- Work with Technology Solutions (TS) to determine who should conduct the search for responsive records. Requests for e-mail records from a small number of people can be done by department staff.
- Work with TS and/or the Department(s) to determine the appropriate search criteria

The results will likely include more records than are necessary for the response and may include documents that are not public records. Therefore, after conducting the electronic search, CaPA and the department(s) will review the results and remove items or redact words that are confidential/protected, not relevant to the request, and/or not a public record. Please consult [NCGS § 132-1.1](#) and [NCGS § 132-1.2](#) for more details on what is considered a confidential public record.

When CaPA and the department(s) have completed their reviews and screening of the records, CaPA will provide the results to the requestor.

The retention of text messages/instant messages is governed by the existing Town records retention and disposition schedules. Records retention schedules identify and describe an organization's records usually at the series level and provide instruction on how to handle them throughout their lifecycle. Sometimes the records retention schedule item (also called a record series) will include terms such as "correspondence" or "communications" that include recorded communications like text message or IM conversations. Sometimes, though, the item will not be so explicit, and will otherwise describe the types of records to which the item applies. IM and text messaging may also fall under these items, depending on the content of the message and the record series to which the item applies. Some records retention schedules specify how the records are maintained while others are media and format neutral.

Employees should use caution if printing text/IM messages to file alongside paper records. Electronic files may contain data not normally displayed, relating to their creation or other aspects of the file, known as 'metadata'. This data may not be retained if the file is printed. Employees

may need to retain electronic records in a particular format. Please consult the records retention schedule or Records Manager for guidance on what format you need to retain text messages.

In the event that a voicemail needs to be retained according to the disposition schedule, please use the email copy of that voicemail to preserve the message by physically moving the voicemail email to the appropriate folder in Outlook.

E. Public Records Fee Policy

In order to maintain budgetary control and to prevent unnecessary expenditure of funds, large volume public records requests should not be completed until the requestor has paid all fees associated with the request. All fees established shall apply to any person who requests copies of Town records, other than persons acting on behalf of the Town.

Requesters will be notified in advance of any service fees that will be assessed for cases involving extensive information technology resources or extensive clerical or supervisory assistance. The hourly rate is \$25. A deposit sum equal to 50 percent of the estimated cost prior to duplication and delivery of the records may be required for any request where the estimated total of fees is higher than \$25 or for any records requests that require extensive staff time of over one hour. Per North Carolina G.S. 132-6.2(b): "... if the request is such as to require extensive use of information technology resources or extensive clerical or supervisory assistance by personnel of the Town involved, or if producing the record in the medium requested results in a greater use of information technology resources than that established by the Town for reproduction of the volume of information requested, then the Town may charge, in addition to the actual cost of duplication, a special service charge, which shall be reasonable and shall be based on the actual cost incurred for such extensive use of information technology resources or the labor costs of the personnel providing the services, or for a greater use of information technology resources that is actually incurred by the Town or attributable to the Town." Employees who are tasked with fulfilling large volume public record requests that exceed 1 hour must log their time and progress in coordination with the Communications and Public Affairs Director.

The response time will vary on a case-by-case basis. The Town will respond as systematically as possible based on factors including the availability of records, the complexity of the request, the volume of materials involved, the number of requests ahead of it in the queue, the priority order of the request in cases in which a requester has submitted multiple requests, and the time required to review the materials for possible redactions.

If the Town receives multiple requests for the same information or that are of interest to a wider audience, the Town may respond in a public forum rather than charge for the data or provide it to the requestors. Requestors will be referred to the public forum where the information is posted.

IV. FORMS/INSTRUCTIONS:

File Format Guidelines for Management and Long-Term Retention of Electronic Records
Adopted Retention Schedule
Request for Disposal of Original Records Duplicated by Electronic Means

V. ADDITIONAL CONTACTS:

Communications and Public Affairs Director– Public records requests
Records Manager – Records issues
Chief Information Officer – Scanning, information technology issues

VI. DEFINITIONS

Administrative Value – The usefulness of records to support ancillary operations and the routine management of an organization.

Backwards Compatible – a hardware or software system that can use the interface of an older version of the same product. A new standard product or model is considered **backward compatible** when it is able to read, write or view older formats.

ECM – Enterprise Content Management

Imaging – a process by which a document (primarily on paper, although any medium can be used) is converted from a human-readable format to a computer-readable digital image file (archives.gov)

NCDNCR – North Carolina Department of Natural and Cultural Resources

Public Records – Under State law public records are documents, maps, photographs, recordings and other items in various media that are made or received in connection with the transaction of public business.

§ 132-1 – “Public records” defined: (a) "Public record" or "public records" shall mean all documents, papers, letters, maps, books, photographs, films, sound recordings, magnetic or other tapes, electronic data-processing records, artifacts, or other documentary material, regardless of physical form or characteristics, made or received pursuant to law or ordinance in connection with the transaction of public business by any agency of North Carolina government or its subdivisions. Agency of North Carolina government or its subdivisions shall mean and include every public office, public officer or official (State or local, elected or appointed), institution, board, commission, bureau, council, department, authority or other unit of government of the State or of any Town, unit, special district or other political subdivision of government.

(b) The public records and public information compiled by the agencies of North Carolina government or its subdivisions are the property of the people. Therefore, it is the policy of this State that the people may obtain copies of their public records and public information free or at minimal cost unless otherwise specifically provided by law. As used herein, "minimal cost" shall mean the actual cost of reproducing the public record or public information. (1935, c. 265, s. 1; 1975, c. 787, s. 1; 1995, c. 388, s. 1.)

Record Copy – The single copy of a document, often the original that is designated as the official copy for reference and preservation.

Records Retention and Disposal Schedule (Municipal Records Retention and Disposal Schedule) – The Municipal Records Retention and Disposition Schedule issued by the North Carolina Department of Natural and Cultural Resources (NCDNCR) identifies how long defined categories of records must be retained in accordance with state and federal laws, rules, and regulations.

Municipalities that adopt the Schedule may lawfully dispose of certain records at the end of those records' retention periods, so long as those records are not needed for audit or legal purposes or in support of Town business.

Transitory (or Transient) Records – The Society of American Archivists defines transitory records as “records that have little or no documentary or evidential value and that need not be set aside for future use.” Examples include:

- Information copies of correspondence, directives, forms, and other documents on which no administrative action is recorded or taken.
- Routing slips and transmittal sheets adding no information to that contained in the transmitted material.
- Requests for follow-up action, including voice-mails and calendar invites.
- Tickler, follow up, or suspense copies of correspondence, provided they are extra copies of the originals.
- Duplicate copies of documents maintained in the same file.
- Extra copies of printed or processed materials for which complete record sets exist, such as current and superseded manuals maintained outside the office responsible for maintaining the record set.
- Catalogs, trade journals, and other publications that are received from other government agencies, commercial firms, or private institutions and that require no action and are not part of a case on which action is taken.

VII. RESPONSIBILITIES

CAPA Director/Town Clerk

Responsibilities include:

- Coordinating all Town requests for records assistance, records, and other offered consultative services with the Government Records Section in compliance with North Carolina public records laws.
- Approving business processes that have been designated officially accountable for specific records that are created, stored, or transmitted on a system or systems within the Town of Chapel Hill.
- Promote active adherence to the established records retention and disposition schedule.

Records Manager

The Records Manager shall oversee and advise Town-wide records retention and disposition. The Records Manager shall have the following responsibilities:

- Promote active adherence to the established records retention and disposition schedule.
- Provide training in records survey and inventory to relevant staff.
- Identify, along with departmental input, archival records.
- Maintain an inventory of records retained Town-wide, to be updated annually and provided to the Communications and Public Affairs Director.
- Determining access rights to any Records Management system.
- Approving system as configured by Technology Solutions.
- Performing quality assurance checks by sampling the Town's/division's imaged records before the original documents are destroyed.
- Coordinating interactions between Town business units and the Department of Natural and Cultural Resources in preparing an inclusive inventory of the schedule for records in Town custody and in establishing a time period for the retention and disposal of each record series.
- Assuring that public records are kept in safe but accessible places.
- In cooperation with the Department of Natural and Cultural Resources, establishing and maintaining a program for the selection and preservation of Town records considered essential to the operation of government and to the protection of the rights and interests of citizens.
- Creating and updating detailed procedural manuals describing the imaging process and equipment
- With input from Departmental Records Custodians, identifies records to be retained for archival and/or historical purposes.

Technology Solutions Department

Responsibilities include:

- Approving the purchase and installation of software and cloud services, including the maintenance of equipment and software
- Configuring the system according to department needs, including creating and testing applications and indexes.
- Controlling access rights to the system.
- Maintaining documentation of system hardware and software.
- Establishing audit trails that document actions taken on records stored by the information technology system.
- Providing backups for system records, and recovering deleted imaged records when necessary
- Completing disaster recovery backup daily. Reevaluating and updating backup procedures *at least* once every two years.
- Establishing and providing training on equipment and software, documenting such training, and providing remedial training as needed.

Record Creators

Each department shall work with the Records Manager to establish and maintain an effective records management program by periodically inventorying all records. Each department head or his/her designee acts as a "records officer" and coordinates record retention and disposition with the Records Manager. An inventory of records retained and destroyed should be forwarded to the Communications and Public Affairs Director once a year.

A records inventory is an in-depth review of the records and storage equipment in each office. It is used to gather information on the types, quantities, locations, and condition of all records and storage equipment.

The inventory should not describe the contents of every file folder, but should designate a record series which groups documents together by subject, function, activity, etc.. The inventory should start with the active office files before going to the storage areas. All records should be covered by the inventory.

Responsibilities include:

- Attending and signing off on training conducted by Technology Solutions staff, the Records Manager or by the NC Department of Natural and Cultural Resources.
- Creating passwords for computers that are long, complex, and frequently changed.
- Creating and managing electronic records in their purview in accordance with these policies and other guidance issued by the Department of Natural and Cultural Resources, and complying with all TS security policies.
- Reviewing the system records annually and purging records in accordance with the adopted retention schedule.
- Carrying out day-to-day processes associated with the Town's imaging program, including:
 - Designating records to be entered into the imaging system
 - Noting confidential information or otherwise protected records and fields
 - Removing transient records
 - Completing indexing guide form for each record being scanned
 - Reviewing images and indexing for quality assurance
 - Naming and storing the scanned images in designated folders
 - Once approved, destroying or otherwise disposing of original records in accordance with guidance issued by the Department of Natural and Cultural Resources
 - Conducting any necessary batch conversions or batch renaming of imaged records
- Public employees who have been approved to telecommute or use mobile computing devices must:
 - Comply with all Technology Solutions security policies, including Town and statewide acceptable use policies, as well as all statutes and policies governing public records
 - Follow backup procedures provided by Technology Solutions

VIII. APPENDICES

Appendix A – Signature Page (submit to NCDNCR)

Appendix B – Town of Chapel Hill Electronic and Digital Imaging Procedures

Appendix C – Electronic and Digital Imaging Sign-Off Page

IX. FREQUENTLY ASKED QUESTIONS:

What is a public record?

A “public record” refers to any record created or received in conducting Town business, in whatever format, including but not limited to paper, photographs, recordings, e-mails, texts or digital images, unless an exception applies under federal or state law.

How should I respond if I receive a public records request?

Town employees who receive a public records request from an individual should forward the request to the Town Clerk, Sabrina Oliver (soliver@townofchapelhill.org). She will then respond to the requester and forward said request to the appropriate department for fulfillment.

When can I destroy a particular document or record?

Please consult the [NC Department of Natural and Cultural Resources’ Record Retention Schedule⁴](#) or the [NC Department of Natural and Cultural Resources’ Public Libraries Records Retention Schedule⁵](#). If there is any question as to when or if you can destroy a particular document, please contact Matt DeBellis, Records Manager at mdebellis@townofchapelhill.org or 919-969-5016.

How can I destroy a particular document or record?

Paper records should be destroyed in one of the following ways:

- Shredded or torn so as to destroy the record content of the documents or materials concerned;
- Placed in acid vats so as to reduce the paper to pulp and to terminate the existence of the document or materials concerned; or
- Sold as waste paper, provided that the purchaser agrees in writing that the documents or materials concerned will not be resold without pulverizing or shredding the documents so that the information contained within cannot be practicably read or reconstructed.

To destroy electronic records and confidential records or records containing confidential information, whether paper or electronic, please consult to consult with Technology Solutions. TS will use standard security procedures to “wipe” data from systems.

For more information, please see [N.C. Administrative Code, Title 7, Chapter 4, Subchapter M, Section .0510](#).

How can I locate an original copy of a particular document or record?

⁴ <https://www.townofchapelhill.org/home/showdocument?id=42603>

⁵ <https://chapelhill.legistar.com/View.ashx?M=F&ID=7329652&GUID=C7B716FE-D6D7-41FC-BD67-E2263C4891F3>

The Town is currently compiling an inventory of all Town records and their location. That inventory will be accessible to all Town Staff once assembled. In the meantime, please consult with the Records Manager or your Department Head.

Can I scan a paper copy of a document and replace the original copy with an electronic version?

The Request for Disposal of Original Records Duplicated by Electronic Means⁶ form is used by local governments to request approval from the Department of Natural and Cultural Resources to dispose of non-permanent paper records which have been scanned, entered into databases, or otherwise duplicated through digital imaging or other conversion to a digital environment. *This form does not apply to records which have been microfilmed or photocopied, or to records with a permanent retention.* Please notify the Records Manager prior to submitting any forms to NCDNCR.

Are business transactions done via text/e-mail on my personal device considered “public records”?

A text or e-mail message that relates to public business is subject to public access unless it is statutorily exempted. See *G.S. 132-6*. The Town should treat text messages as equivalent to e-mails in responding to requests for electronic records or electronic communications.

X. SCOPE:

XI. RELATED INFORMATION

North Carolina’s Public Records Law – North Carolina General Statutes Chapter 132

Authority of North Carolina Department of Natural and Cultural Resources – North Carolina General Statute 121-5, Public Records and Archives

Methods of Destruction of Records – North Carolina Administrative Code – 07 NCAC 04M.0510 Methods of Destruction

Municipal Records Retention and Disposal Schedule - Adopted by Town Council, February 24, 2014

Request for Disposal of Original Records Duplicated by Electronic Means - Available from the North Carolina Department of Natural and Cultural Resources here.

XII: POLICY HISTORY:

This policy replaces and supersedes any previous Town policies, departmental policies, handbooks, or unwritten policies or practices covering the same subject. Departmental policies in compliance with this policy are referenced in Section XI above, **Related Information**. In the event of any disparity between this policy and the Town’s Code of Ordinances and/or applicable local, state, or federal laws, the Town’s Ordinance and/or applicable laws shall prevail.

⁶ https://files.nc.gov/dncr-archives/documents/files/records_duplicated_electronic_means.pdf

APPENDIX A
Signature Page

The North Carolina Department of Natural and Cultural Resources (NC NDCR) requires that any agency that images its records as part of its records retention practices as well as maintains electronic records which have retention periods of ten or more years to adopt electronic records and imaging policies. This policy incorporates NCDNCR's Sample Electronic Records Imaging Policy for Use by Local and State Agencies updated September 2013. Complying with this policy will increase the reliability and accuracy of records stored in information technology systems, and will ensure that they remain accessible over time. Exhibiting compliance with this policy will enhance records' admissibility and acceptance by the judicial system as being trustworthy.

This policy also serves to protect those record digitized by the Town's imaging system, which reduces required storage space for original documents as the Town transitions to a "paperless" digital system, and provides instant and simultaneous access to documents as needed.

Subject: _____ Policy Number: _____

Effective date: _____ Modified date: _____

Type of Government Office: Town Municipal State Agency Other*

For Other, enter name of "parent" agency
unless unassigned: _____

Town/Municipality/Agency: _____

Name of Office: _____

Office Address: _____

Phone: _____ Fax: _____ E-mail: _____

APPENDIX B

Town of Chapel Hill Electronic and Digital Imaging Procedures Manual

The Records Manager and Technology Solutions is responsible for preparing and updating detailed procedures that describe the process followed to create and manage imaged electronic records. This documentation will include a description of the system hardware and software. A current procedural manual will be maintained to ensure the most current steps are followed and to ensure reliable system documentation will be available for judicial or similar proceedings.

Each workstation designated as a scanning station will have, at a minimum, the following hardware and software, unless the scanner is collocated by means of a network interface:

- Document/image scanners authorized by Technology Solutions: Sharp MX-3570N, Sharp MX-7500N, Sharp MX-5141N, Sharp MX-8090N, Fujitsu fi-7160, Xerox Documate 152, HP Scanjet Professional 3000, Sharp MX-S070V
- Imaging Software:
 - OnBase
 - Munis
 - NeoGov

An instructions manual will be maintained by the Records Manager and Technology Solutions staff, describing in detail the steps required in the scanning process. This manual will also define:

- The resolution of scanned images, as well as any compression standard used
- The file formats of scanned images
- The file naming conventions used for scanned images
- Whether batch conversion or batch file re-naming will be necessary, and what tool is used for such conversions
- Whether any image enhancement techniques should be conducted after imaging

Training

Only designated staff that have been formally trained by Technology Solutions staff and have signed off on training documentation on the use of the imaging software and equipment will be allowed to scan records. Components of the training will include basic techniques for image capture, indexing, quality control, security configuration, auditing, use of equipment, and general system maintenance. Permissions to image and index records will not be assigned until the user has been trained. If a user improperly indexes or scans a document, an auditor will address this occurrence with the user, and remedial training will be required.

Indexing and Metadata

All imaged records must be indexed in order to facilitate efficient retrieval, ease of use, and up-to-date information about the images stored. This index should capture the content, structure,

and context of the imaged records and will be developed by Technology Solutions staff prior to the implementation of any imaging system. Metadata will be maintained in accordance with the guidelines provided on page 12, *Maintenance of Trustworthy Electronic Records*.

Auditing and Audit Trails

Staff trained to conduct imaging will conduct a quality control audit following the imaging of a record to ensure that the following features of the imaged record are legible:

- Individual letters, numbers, and symbols
- Combinations of letters, numbers, and symbols forming words or sentences
- Graphics such as signatures, logos, and pictures
- Other features of records such as color, shape, texture, etc., that relate to the content of the information

Managerial staff for the various units of the agency will also periodically audit imaged records for accuracy, readability, and reproduction capabilities. Written quality control documentation will be prepared indicating the sampling of records and what remedial procedures were followed if the expected level of accuracy was not achieved.

Audit trails should be built into the imaging system that will automatically document who creates, duplicates, modifies, or otherwise accesses records and what procedures were taken. Audit trails include the success or failure, date, time, and user of the following events:

- Add/Edit electronic document
- Assign index template
- Copy document
- Copy pages
- Create document/folder
- Delete entry
- Delete pages
- Delete volume
- Edit image
- E-mail document
- Export document
- Index creation/deletion/modification
- Insert page
- Log in/out
- Move document
- Move pages
- Print document

Managerial staff will document by position title employees that have the authority to complete each of the tasks listed.

File Naming:

- **Rule #1: Avoid using special characters in a file name:** \ / : * ? " < > | [] & \$, .
- **Rule #2: Use underscores instead of periods or spaces.**
- **Rule #3: Err on the side of brevity.** Generally about 25 characters is a sufficient length to capture enough descriptive information for naming a record

File Formats: *(See next page)*

Type of record	Recommended for long-term retention	Acceptable for long-term retention	Not recommended for long-term retention
Word Processing documents	PDF/A-1 a (.pdf) (ISO 19005-1 compliant PDF/A) OpenDocument Text (.odt)	PDF/A-1 b (.pdf) (ISO 19005-1 minimally compliant PDF/A) Microsoft® Word Document (.doc) Microsoft® Open XML Document (.docx) Rich Text Format (.rtf)	Corel® WordPerfect® (.wpd) Lotus® WordPro (.lwp) PDF (.pdf)
Plain text documents	Plain Text (.txt) <i>US-ASCII or UTF-8 encoding</i> Comma-separated file (.csv) <i>US-ASCII or UTF-8 encoding</i> Tab-delimited file (.txt) <i>US-ASCII or UTF-8 encoding</i>	Other delimited text files (space-delimited, colon-delimited, etc.) <i>where the delimiting character is not present in the data</i>	
Structural markup text documents	SGML with DTD/Schema XML (.xml) with DTD/Schema		XML without DTD/Schema SGML without DTD/Schema
Spreadsheets	OpenDocument Spreadsheet (.ods) Comma-separated file (.csv) Tab-delimited file (.txt) PDF/A-1 a (.pdf) (ISO 19005-1 compliant PDF/A)	Microsoft® Excel® Spreadsheet (.xls) Microsoft® Excel® Open XML Spreadsheet (.xlsx) Other delimited text files (space-delimited, colon-delimited, etc.) <i>where the delimiting character is not present in the data</i>	
Audio	Broadcast WAVE Format LPCM (.wav) WAVE Format LPCM (.wav)	AIFF (uncompressed) (.aif, .aiff) Standard MIDI (.mid, .midi) Windows® Media Audio WMA (.wma) MPEG3 (.mp3) MP4 AAC (.m4a)	Audio CD (Compact Disc Digital Audio system, CDDA, CD-DA) DVD-Audio QuickTime® MP4 AAC Protected (.m4p, .m4b) QuickTime® MP3, iTunes (.mp3) RealAudio® (.rm, .ra) Shorten® (.shn) RIFF-RMID (.rmi) Extended MIDI (.xmi) Module Music Formats, Mods (.mod) SUN Audio, uncompressed (.au) Ogg FLAC (.ogg)
Type of record	Recommended for long-term retention	Acceptable for long-term retention	Not recommended for long-term retention
Digital Video	AVI, full frame (uncompressed), WAVE PCM audio (.avi)	AVI, containing H.264/MPEG-4 AVC (lossy)¹ (.avi) MPEG-4, containing H.264/MPEG-4 AVC (lossy) (.mp4) MPEG-2, containing H.262/MPEG-2 (lossy) (.mp2) MOV, containing H.264/MPEG-4 AVC (lossy) (.mov) ASF, containing WMV (lossy) (.wmv) MXF, containing Motion JPG 2000² (lossless) (.mxf) Ogg, containing Theora (lossy) (.ogg)	DVD-Video VOB (VIDEO_TS, AUDIO_TS) Blu-ray Disc™ HCAM® Digital VHS (D-VHS) DVCam®
Raster Images	TIFF (.tif, .tiff) <i>uncompressed</i> JPG 2000 (.jp2)	JPEG (.jpg, .jpeg) PNG (.png) PDF/A-1 a (.pdf) (ISO 19005-1 compliant PDF/A) GIF (.gif)	RAW (.raw, various) Adobe® Photoshop® (.psd) Kodak PhotoCD Encapsulated PostScript (.eps) FlashPix™ (.fpx) PDF (.pdf)
Vector Images (*See below for geospatial vector sets.)	Scalable Vector Graphics 1.1 (.svg) AutoCAD® Drawing Interchange Format (.dxf) PDF/A-1 a (.pdf) (ISO 19005-1 compliant PDF/A)	AutoCAD® Drawing Format (.dwg)	Adobe® Illustrator (.ai) Corel®Draw CDR (.cdr) Micrografx Draw DRW (.dwr) Windows® Metafile WMF (.wmf, .emf) Standard for the Exchange of Product Model Data STEP (.stp) Computer Graphics Metafile DXF (.dxf)
Databases	Software Independent Archiving of Relational Databases (SIARD) Delimited Flat File (Plain Text) with DDL	Microsoft® Access® (.accdb) Microsoft® Access® (.mdb) dBase Format (.dbf)	
Presentations	OpenDocument Presentation (.odp) PDF/A-1 a (.pdf) (ISO 19005-1 compliant PDF/A) <i>for presentations without animation</i>		Microsoft® PowerPoint Presentation (.ppt) Microsoft® Open XML PowerPoint® Presentation (.pptx)

APPENDIX C

Electronic and Digital Imaging Sign-Off Page

Note: The person who creates, copies, modifies, or duplicates records receives formal training on detailed system procedures prior to records preparation. Training will be provided on the use of the imaging station, transfer of scanned documents to the media storage device, file naming process, metadata inclusion in file name and indexing. Employees will sign this training manual after receiving training.

The records created or duplicated by electronic means in this office were prepared in accordance with these guidelines (please initial):

_____ I have been trained on the proper creation and maintenance of electronic records.

_____ Records are legible, accurate, and complete. The scanners used by each department were approved by the Technology Solutions department.

_____ The records conform to North Carolina Department of Natural and Cultural Resources guidance regarding file formats and file naming (see below for file naming and format standards).

_____ A Request for Disposal of Original Records Duplicated by Electronic Means has been completed prior to destruction of the original documents and approved by the N.C. Department of Natural and Cultural Resources; once an approval has been received, the original records can be destroyed.

Notes:

- Digital images of scanned records are maintained for the specified retention periods according to the records and retention and disposition schedule. The retention period is considered to have begun when the original document was created and not when the electronic reproduction was created.
- Any permanent records maintained in electronic form also must exist as a paper or microfilm preservation duplicate copy in compliance with the N.C. Department of Natural and Cultural Resources' Human Readable Preservation Duplicates policy (the original documents may not be destroyed unless an analog copy exists prior to the records' destruction).