

OFFICE OF THE MISSOURI SECRETARY OF STATE
LOCAL RECORDS PRESERVATION PROGRAM, MISSOURI STATE ARCHIVES

Missouri Local Government Records Management Guidelines

CONTENTS

Introduction.....	1
Local Government Records Management—the Life Cycle of Records.....	2
Records Management—Bad Practices.....	3
Records Management—Good Practices.....	4
Using the Retention Schedules.....	5
Creating a Records Management Policy.....	6
Records Disposition.....	9
Disaster Planning.....	13
Disaster Prevention.....	13
Disaster Preparedness.....	14
Electronic Records.....	15
E-Mail.....	17
Electronic Records Management (ERM).....	18
ERM Systems and Standards.....	19
ECM—Enterprise Content Management.....	20
Definitions.....	22
Resources.....	23
Local Records Web Resources.....	23
Missouri Revised Statutes—Records.....	23
Electronic Records Standards.....	23
Other Resources.....	23

INTRODUCTION

Modern society operates on records. A person is born; a record is generated. That person goes to school; more records are generated. You get a job; records are generated. When you die; records are generated. Records are ubiquitous: visit a doctor, apply for a permit/license, get married, buy property, go to court, vote—records are generated. Just imagine if you could not prove your identity, that you own your car/house/property, or that you attended school— chaos would ensue. If this occurred on a large scale, society would grind to a halt. Modern society relies on records to function. Rather than hyperbole, this is actually an understatement, and it is not well understood by the citizenry and many public officials. The cost of maintaining this order is enormous; one study found that 58 percent of government and education workers spend half of each working day filing, deleting or sorting (i.e., managing) paper and electronic records at an estimated cost of over \$30 billion annually. This is just for public records; it does not include the records of private employers and other organizations. It should be readily apparent that creating and following a good records management policy is essential to the administration of any public office. Inefficiencies lead to wasted work time, space (i.e., wasted money), and hinder public access to records.

In Missouri, public records are governed under two statutes—[RSMo 109](#) and [RSMo 610](#). “The State and Local Records Law”—Revised Statutes of the State of Missouri (RSMo) Chapter 109.200 - 109.310—established the Missouri State Archives and State Records Management (1965), within the Office of the Secretary of State, to manage the official records of the State of Missouri. In 1972, RSMo 109.255 authorized the creation of the Local Records Board, to determine what local records should be retained, preserved, or destroyed and to provide records management guidance to local officials. This law forms the basis for the management of all public records in the State of Missouri. Unlike RSMo 610, the “Sunshine Law,” RSMo 109 does not deal with public access to records; its provisions authorize the Secretary of State’s office to set minimum retention and reproduction standards for public records.

In 1989, the General Assembly authorized the Local Records Preservation Program to assist local governments in preserving historical and vital records and recommend techniques for the efficient management of current records. To that end, Local Records staff works with local governments to:

- dispose of records based on retention schedules
- create electronic record inventories
- reclaim office space through preservation microfilming
- conduct workshops in records and archival management practices
- co-sponsor grant projects
- facilitate disaster planning

These activities promote long-term public records management, improve public access to the records, preserve the social compact and ensure transparency of government activity.

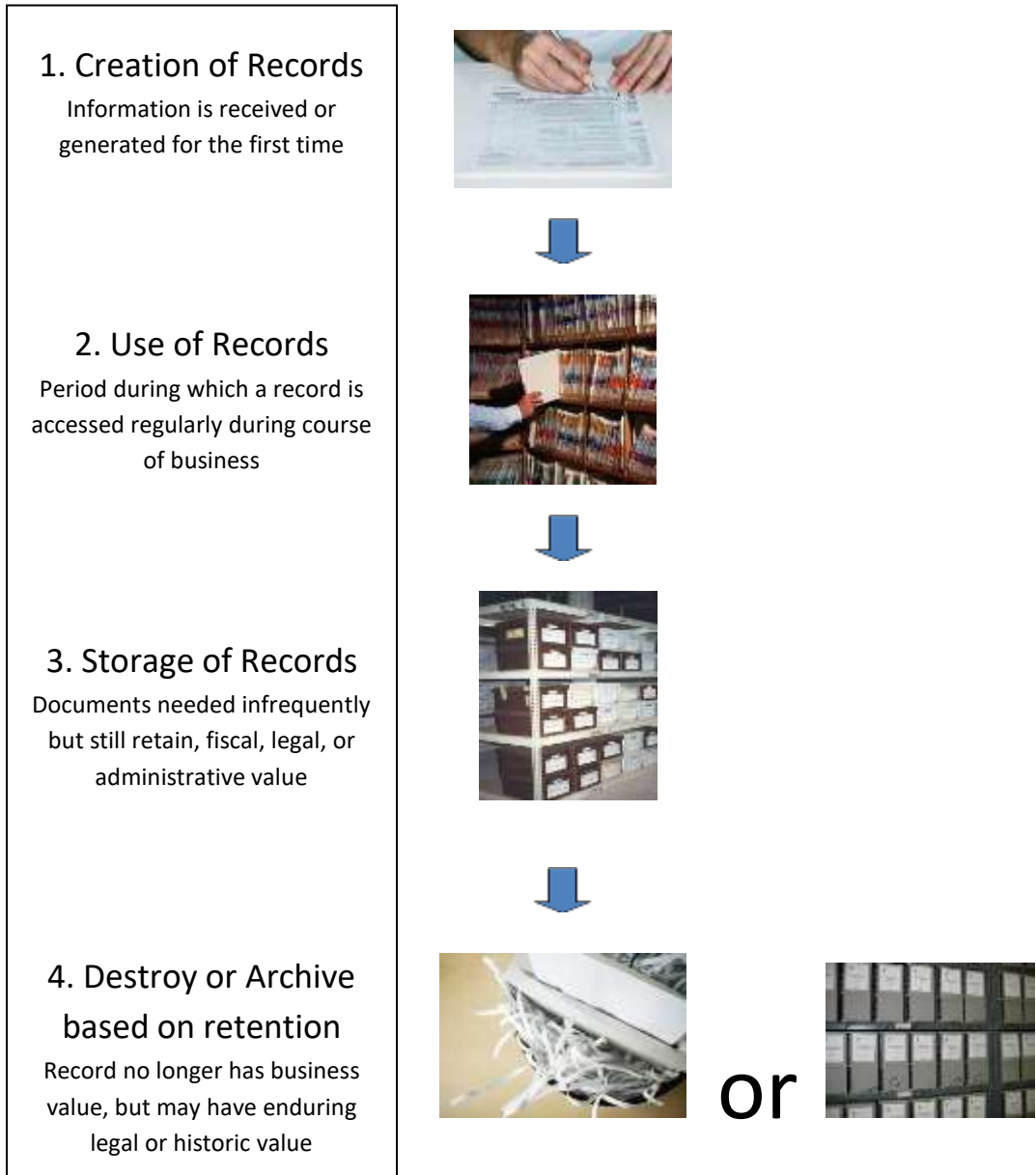
Since 1990, Local Records has accounted for the creation of over 53,000 reels of microfilm, more than 20,000 through its highly successful grant program that has provided more than \$6.5 million to preserve the long-term and permanent records of Missouri’s local governments and local tax supported entities. Local Records staff have produced record inventories for 773 offices throughout the state and performed thousands of onsite records consultations.

LOCAL GOVERNMENT RECORDS MANAGEMENT—THE LIFE CYCLE OF RECORDS

Missouri local governments generate [records](#) documenting the rights of citizens, government actions, and the history of the community. They are essential to the operation of local government, providing information to public servants in their official capacities and as proof of efficient use of public resources. Local government records are a public trust, and constitute an important cultural and historical asset.

Proper management of these records is an inherent, though often poorly understood, duty of every public official. To that end, Missouri's Local Records Preservation Program works to improve long-term local public records management by advising, educating, and encouraging the custodians of those records in the use of sound records management and archival practices.

The core of proper records management is to understand the 4-part “Life Cycle” of records.



RECORDS MANAGEMENT—BAD PRACTICES

Typically, offices do a good job of managing the creation and use of records. However, when records become semi-active or inactive offices sometimes stray from good records management. It becomes a case of “out of sight, out of mind” until there is no place to store new records; then it becomes a crisis.

The storage of records serves not just to create space for current records; the stored records must remain accessible—they are being stored because they still have some business/legal value. After a given time, 95-99% of records lose all of their legal/business value and should be destroyed. The remaining 1-5% retain some enduring legal, business, or historical value and must be preserved. The [Local Records retention schedules](#) define how long a given record should be kept. There are no legal consequences for destroying records that have met their retention period, unless there is pending litigation.

Often, local officials and office managers adopt more stringent retention schedules. This is fine; the Local Records schedules present the minimum retention. However, it is common to keep records beyond their minimum retention, “just in case.” “Just in case” is not a retention; it is bad records management and bad policy. If a record is kept beyond its retention period, it must still be managed. Any record that is kept past its retention date remains a public record and is subject to public inspection and/or legal discovery during litigation. By keeping a record beyond its retention period, the only thing accomplished is increased expense for storage space and staff time—two items that are rarely abundant in public offices.

Other bad practices include not having a record storage area, not devoting enough space to record storage, “maintaining” a disorderly records area, and not having a written records management policy.

So, what does bad records management look like?



Figure 1: Poorly organized and/or unidentified records haphazardly thrown into a room and on shelves. How long would it take to find a given record in these circumstances? Records management should be an integral part of the daily routine of the office, conducted as a normal part of business.

RECORDS MANAGEMENT—GOOD PRACTICES

There are a number of steps to follow in establishing a records management program.

1. Inventory and appraise records
2. Create retention schedules
3. Manage active and inactive records
4. Identify and protect vital records
5. Store permanent records/create preservation copies (e.g., microfilm)
6. Develop and maintain a disaster preparedness program

The first two steps have been done for Missouri's local government entities. The Secretary of State's office has been charged with establishing minimum retention periods for local government records for nearly forty years. For over twenty years, the Local Records Program has performed records inventories in a variety of offices. Record series and titles have been identified in nearly 800 local government offices. These inventories can be found in the [Local Records Inventory Database](#) and form the basis for the [Local Records retention schedules](#) adopted by the [Local Records Board](#). When new record series are created or discovered, they are appraised and scheduled. You will still need to determine what records are in your possession, but much of the record identification and retention work has already been done.

The screenshot shows the Missouri Secretary of State's website for Local Government Records Retention Schedules. The page features a navigation menu on the left with links to Retention Schedules, Grant Program, Conservation Lab, Local Records Board, Guidelines & Publications, Local Records Inventory Database, Contact Information, and About Local Records. The main content area is titled 'LOCAL GOVERNMENT RECORDS RETENTION SCHEDULES' and includes a brief overview of the program's purpose and a list of various local government entities with their respective retention schedule revision dates. The entities listed include Ambulance District, Assessor, Auditor, Collector, Community College, County Board, County Clerk, Election Authority, Fire District, Highway Engineer, Health District and Hospital, Medical Examiner/Coroner, Municipal Government, Police Clerk, Prosecutor, Public Administrator, Public Housing Authority, Public Libraries, Public Safety Answering Point (911), Public School District, Recorder, Sheriff, Surveyor, Treasurer, Water District, and Zoo.

Local Records - Records Schedules

LOCAL GOVERNMENT RECORDS RETENTION SCHEDULES

Missouri Revised Statutes Chapter 109 (Public and Business Records) Section 256 authorizes the Local Records Board to establish minimum retention periods for the administrative, fiscal and legal records created by local governments.

Retention and disposition of records that are common to many offices are included in the General Schedule. Records unique to particular offices are addressed in individual office schedules.

The Local Records Program welcomes all comments and suggestions concerned with improvement of record retention schedules.

- General Records Retention Schedule (Revised: 08/2018)
 - Ambulance District (Revised: 08/2012)
 - Assessor (Revised: 08/2012)
 - Auditor (Revised: 08/2012)
 - Collector (Revised: 08/2012)
 - Community College (Revised: 08/2018)
 - County Board (Senate Bill 40) (Revised: 08/2012)
 - County Clerk (Revised: 08/2012)
 - Election Authority (Revised: 01/2018)
 - Fire District (Revised: 08/2018)
 - Highway Engineer (Revised: 08/2012)
 - Health District and Hospital (Revised: 08/2018)
 - Medical Examiner/Coroner (Revised: 08/2012)
 - Municipal Government (Revised: 08/2018)
 - Police Clerk (Revised: 08/2017)
 - Prosecutor (Revised: 08/2014)
 - Public Administrator (Revised: 08/2012)
 - Public Housing Authority (Revised: 08/2018)
 - Public Libraries (Revised: 08/2012)
 - Public Safety Answering Point (911) (Revised: 08/2018)
 - Public School District (Revised: 08/2018)
 - Recorder (Revised: 08/2012)
 - Sheriff (Revised: 08/2017)
 - Surveyor (Revised: 08/2012)
 - Treasurer (Revised: 08/2012)
 - Water District (Revised: 08/2013)
 - Zoo (Revised: 08/2018)

Figure 2: Local Records Retention Schedule webpage

“That is all great,” you say, “but where does that leave me,” an official/manager/clerk, “in my official capacity?” Well, it positions you to take control of your office’s records. By reading this guide you are taking the first steps toward sound records management practices. The [Local Records](#) webpage is a good source for more information. Local Records archivists are located around the state and are available for no cost, on-site records management consultations. While their limited number restrict how much work they can perform for an individual office (i.e., they will not go through and apply the retention schedules to your records and throw them away for you), they can provide guidance on records management practices, and they can work with your staff to better manage records. Using the Retention Schedules

Every office will use at least two retention schedules: the **General Schedule**, which covers Administrative, Building, Financial, Legal and Personnel records common to all offices; and, an office specific schedule(s). The schedules can be found at www.sos.mo.gov/archives/localrecs/schedules.

The retention schedules are arranged alphabetically by record series and subseries—providing an easy way to find records and, possibly, a new way to file records. The current schedules are organized like the selection below: series title, followed by a listing of other names for the record, and descriptions of its function and content. Older schedules that have not been fully revised and reformatted will only have the name of the record series and the retention period. By adopting retention schedule headings as file headings you will have already separated record series and differing retentions.

Here is an example from the General Record Retention Schedule:

GS 001 Annual and Special Reports

Also Called:

Function: Reports documenting the program or primary activities and accomplishments of the local government unit for the previous year. Often compiled from monthly, quarterly or other subsidiary activity reports.

Content: May include: statistics, narratives, graphs, diagrams, and similar information.

Minimum Retention: Permanent

Disposition: Archive. Microfilm for preservation

Note: Provides administrative history of the office.

Approval Date: August 15, 2001

GS 012 Correspondence - General

Also Called: Letters, Memoranda

Function: Correspondence that pertains to routine matters handled in accordance with existing policies and procedures. Does not contain significant information about office policies or programs.

Content: May include: incoming and outgoing letters, memoranda, notes, acknowledgements, notices, requests for information or publications, enclosures, and attachments.

Minimum Retention: 1 year

Disposition: Destroy

Note: See also Correspondence - Policy

Approval Date: August 15, 2001

GS 013 Correspondence - Policy

Also Called: Letters, Memoranda

Function: Correspondence which state or form the basis of policy, set important precedents or record important events in the operational and organizational history of the governmental body.

Content: May include: incoming and outgoing letters, memoranda, notes, reports studies, and other records.

Minimum Retention: Permanent

Disposition: Archive. Microfilm for preservation

Note: See also Correspondence - General

Approval Date: August 15, 2001

GS 014 Mailing Lists

Function: Lists compiled to facilitate billing, official notification, etc.

Content: May include: name of individual, group or business, address, name and title of contact person, telephone number, comments and similar data.

Minimum Retention: Destroy when superseded or obsolete

Disposition: Destroy

Retentions vary greatly—annual reports are permanent records, while mailing lists can be destroyed when no longer of use. Note: there are multiple entries for correspondence, based on what information

that correspondence contains. Correspondence should be categorized upon creation to avoid creating a situation where everything becomes a “permanent” record because it is easier than sorting the material after it is filed.

In addition to separating records by series, record the retention period/destruction date on the outside of the folder—preferably high on the front, or on the tab, so as to facilitate quick retrieval from file drawers. Once a record has become “inactive” and placed in storage, it should be stored with like records, with the destruction date written on the outside of the box—do not mix record series/retentions within a box. For example, if a box has General Correspondence, all one year records, then all of the records in the box should be General Correspondence. If mixing series absolutely cannot be helped, then all of the records in the box should have the same retention period/destruction date to facilitate destruction.

CREATING A RECORDS MANAGEMENT POLICY

The [Local Records Retention Schedules](#), [RSMo 109](#) and [RSMo 610](#) provide valuable information for establishing a records management policy. The retention schedules provide the minimum retention for the records, RSMo 109 outlines the statutory obligations associated with public records, and RSMo 610, the Sunshine Law, deals with public access to information. The three are intertwined—each important in its own right. None supersedes another—if a record has met its retention period and is destroyed, RSMo 610 does not apply. If, however, a record has met its retention and is not destroyed, RSMo 610 remains in force.

It is important that each office adopt a records management policy and follow it as a regular part of business. Managing the records generated by an office is just as important as any of the other duties assigned to an office. It is not “extra” work. It is part of the job.

To this end, an office should have written guidelines. If none currently exist, guidelines should be formulated and everyone associated with generating and accessing records should be familiar with them.

Records Management Policy: This document will outline the official policy of the office. It should:

1. State the purpose of the policy—i.e., provide all employees with the information necessary to carry out their duties regarding public records.
2. State the scope of the policy—every official and employee is responsible for properly managing records that they generate in the course of their duties, regardless of format (paper or electronic).
3. State the policy for managing records and complying with open records law.
4. Cite the authority—RSMo 109, RSMo 610 and the appropriate Local Records Retention Schedules.
5. Define any specialized terminology used in the policy.
6. Outline the procedures for managing the records:
 - a. Establish a procedure for removal and retrieval of records from office storage space to long-term storage. Long-term storage should be environmentally appropriate to media format.
 - b. Detail when/how records will be destroyed. It is recommended that records be reviewed for destruction at least annually. Specify the process used to record what records are destroyed and the method of destruction. You should create a permanent

- list of the records you destroy; this may include record series, dates of records, date destroyed, and retention schedule reference.
- c. Outline the procedure for dealing with public record requests. Much of this can be found on the Missouri Attorney General's website (<https://www.ago.mo.gov/missouri-law/sunshine-law>).
 7. Identify the records manager, or responsible position, and, if necessary, authorize the appointment of department/division record coordinators who will have responsibility for enforcing this policy within their respective areas.
 8. Detail the consequences for violation of the policy.

Standardization of the filing system for records will make it easier to manage them. This can be done in addition to or as a part of the Records Management Policy.

Filing system: There are no set rules, but ease of retrieval and ease of disposal/retention should be paramount. Each year inactive office files should be boxed and moved to storage. Keep in mind, especially once records are inactive and boxed, that minimal handling is preferable. Boxes and folders should be clearly marked.

Some points to keep in mind:

1. **Avoid unnecessary filing.** Filing unnecessary papers is a waste of labor, space, and equipment.
2. **Arrange folders, guides and labels correctly.** Orderly appearance and efficiency depends upon the careful preparation, use, and arrangement of folders and guides in the file drawer or shelf. Folders are necessary to keep the papers together and in order. Guides serve as "sign posts" to help speed up filing and retrieving.
3. **Receiving and preparing papers for filing.** The following steps should be taken in preparing documents for filing:
 - a. Remove sticky notes, rubber bands, paper clips, and other temporary fasteners.
 - b. Determine if the file is complete and all necessary enclosures and attachments are present.
4. **Extra copies.** File only one copy in the official file. Destroy extra copies immediately unless there is a requirement to retain them. When extra copies must be retained, file them separately from the official copy—in a folder labeled as "Copy."
5. **Placing materials in file folders.** The material should be filed with the top of the sheet toward the left of the file drawer as the reader faces it. Filing should be done uniformly with the most recent documents placed either at the front or at the back of the folder.
6. **Checking out material from the files.** When records are removed from a file and forwarded to an individual or office, generate a record of this action. Proper and consistent use of a file "charge-out" record (also known as "check-out" or "out" cards) will eliminate wasted effort in searching for documents. A file charge-out record should be filled out (name of person borrowing file, date, and contact information) and put in the folder, file drawer or shelf in place of the withdrawn material. Place it in the exact location of the withdrawn material with the "OUT" portion clearly visible. The record custodian should review the charge-out forms periodically and request the return of files that have been out for a long time.
7. **Maintaining the files.** Neatness counts! File drawers/boxes should be clearly identified. Drawers and boxes should not be overfilled. Drawers should have 3-4 inches of working space. Boxes should not be tightly packed; a hand should slip easily between folders and touch the bottom of the box. Keep papers straight within the folders—do not have

documents extending beyond the end of folders. Do not overfill file folders—an individual standard folder should be no more than ¾ of an inch thick. Create a new folder when previous folders are full.

Adopting, implementing, and actually following these guidelines will make managing records easier, especially in the years to come, and will provide some protection from legal challenge. If it can be demonstrated that records were destroyed properly, during the normal course of business, there is no recourse under the Sunshine Law. **Records subject to pending litigation should not be destroyed, even if they have met retention.**

A note on storage boxes: It is recommended that standard 10" x 12" x 15" boxes (i.e., cubic foot boxes) be used for record storage. These have fold-in flaps on the top and bottom and may have hand holes. The boxes require tape along the mid-line seam and can handle considerable weight. This style is the most economical option. They also save space and are easier to shelve in comparison to lidded, or banker's boxes. Banker's boxes with lids are much more expensive, the lids take up space—i.e., fewer boxes can be stored on a shelf, and it is inevitable that the lid will become dislodged and will be caught on shelves. In addition, boxes larger than one cubic foot are difficult to move when filled because of their weight and often buckle and collapse in the middle.



Figure 3: Example of cubic foot record storage box. The box is typically stored flat. From left: open box, tape bottom of box, ready to fill

Box labeling should be uniform, on both ends (for visibility), and should include:

Department /office	example:	City Clerk
Record Series		Accounts Payable
Inclusive Dates		1988/01-1988/12
Retention		Completion of Audit
Disposal Date		[date records eligible for destruction]
Box Number		[numerical identifier: Box 1, 2, etc.; Box 1 of 2, etc.]

If labeling boxes by hand, use a dark marker. Often people write the information in pencil or pen—this makes the boxes very hard to read, especially in areas with poor lighting.

Why go to the trouble of writing the name of the department/office on the box? Because more often than not, record storage areas house the records of multiple offices. Even when areas are designated for a particular office, it is not uncommon for boxes from other offices to “migrate” into that space. Let’s face it: people are more likely to look for an empty shelf than to rearrange boxes in a designated area. The

practice of putting records in another office's area should be strongly discouraged, but by identifying the originating office on the box, the records can be located without having to look inside the boxes.

Computer-generated labels can be used to create a quick and easy labeling template. Uniform labeling also makes record disposition easier. Staff can just walk along the aisle and mark boxes ready for destruction, transferring the information from the box label onto a records disposal list.

RECORDS DISPOSITION

Destruction of Records

As stated above, records disposal should be done as part of the normal course of business. Be sure to create a list of records destroyed. This list and the authorization to destroy the records become a permanent record. This may be maintained in the office or, preferably, in the official minutes of the county/city/board.

The method of destruction is left up to the office—there is no statutory mandate outlining the method of destruction. Confidential records must be destroyed in a manner that makes the information unrecoverable. Typical methods of destruction include shredding, burning, and pulping/chemical destruction. A list of vendors that offer destruction services can be found on the [Local Records website](#).

Preserving/Archiving Records

For most offices, a very small percentage of records must be kept long-term (50, 75, or more years) or permanently because of legal, administrative, or historical value. This is another reason for adopting and following a sound records management policy. Every office will have records from preceding administrations that must continue to be managed and succeeding administrations will be charged with managing records generated today. The responsibility of managing long-term and permanent records lies with the current administration. It is strongly recommended that long-term and permanent records be microfilmed for preservation. Once a record has been microfilmed, the paper record may be destroyed. Microfilm is the most cost efficient means of preserving long term and permanent records, especially considering the cost of storage space.

“Microfilm? But this is the twenty-first century!” This is a common response; it seems everyone wants to scan their records and have them instantly available on the computer. This is reasonable, but there is a difference between preserving records and providing access to records. The former ensures that a record is maintained for the future (i.e., properly storing paper/tapes/etc., or creating microfilm); the latter refers to actually using the record (i.e., pulling up the record on a computer for quick, immediate review). The Local Records Program does not recommend scanning paper records for long-term preservation—even “born” electronic records (i.e., records that are never put to paper) can be written to microfilm. Scanning takes at least as much time as microfilming and preservation quality image formats—TIFFs—are large files that quickly take up a great deal of server space.

The basic prep required for scanning and microfilming is the same—the records being imaged must be organized and an index created in order to find the documents later. The benefit of microfilm is permanency—properly stored, silver-microfilm masters will last for 500 years and, from that master,

many duplicate rolls of film can be produced. It can be scanned to create a digital file to replace lost or destroyed files. Microfilm is very low tech—in an emergency, if the power is out, microfilm can be accessed with a flashlight and magnifying glass. If microfilm is caught in a flood, it can be washed and salvaged. Without power, or in a flood, a computer is just a box. Once a document is on microfilm, it can be accessed for as long as that microfilm exists. Electronic records are subject to media and software changes (i.e., there will be continuing costs as electronic images have to be migrated to new media) and the file might become unusable in a few years if the data is not migrated to new storage media (and possibly software). For example, how many 8”, 5.25” or 3.5” floppy disks are currently being used? Do the computers in the office even have the appropriate drives or software to look at the data stored on these devices?

Scanning/Capture: Ease of Access

Everyone wants to be able to pull all of their documents up on their computers—it is quick and convenient. However, Local Records does not recommend that local government agencies purchase scanning equipment and start digitizing all of their old records as a means of preservation.

Why not? First, while the equipment may be relatively inexpensive, large-scale storage of digital images can become very expensive. Most local governments cannot afford this solution. The cost of imaging includes employee time used to scan the records, check image quality, and index the records in a spreadsheet/database. Employees would have to do this in addition to keeping up with their current workload. The retention schedules still apply to digital documents, so the scanned records will still need to be managed as if they were paper records. The Sunshine Law applies to digital records as well as paper records, and if the records are not being disposed of at the end of retention, the office will be responsible for maintaining and producing those records.

The preferred approach to establishing a paperless office is to convert business operations to electronic records and maintain the “born” electronic records without using paper. Older long-term and permanent records should be microfilmed. For digital access, many vendors can scan microfilm to produce access images—it is still necessary to index the images, but the vendor does most of the work. The added benefits of security and ease of access to the records are a bonus. Some vendors do offer conversion of digital images to microfilm if the original documents have already been scanned. It is important to keep in mind that microfilm is preferred for long-term/permanent records.



Figure 4: Metis scanner, microfilm scanner, large flatbed scanner, and a computer workstation with small scanner

If the records are going to be scanned in-house, there are file format standards that should be observed.

Tagged Image File Format, or TIFF. TIFF is a respected standard, a lossless format (i.e., when the file is compressed, no data is lost). TIFF can be used for black and white or color images, and can accommodate a multipage document in a single file.

Portable Document Format (PDF). Because of its flexibility, PDF has been a de facto standard for many years. PDFs can be generated from original electronic documents, JPEGs or TIFFs.

Portable Document Format/A (PDF/A). PDF/A is an archival standard that captures all of the original document data, down to the font, and, like the PDF files can be opened on any computer with the reader, which is free, regardless of whether or not the computer supports the source document. PDF/A is essentially a more robust PDF—ensuring that the document will always be rendered in its original formatting—through the capture of all the document metadata. For most office documents, this is unnecessary. The primary benefit of PDF/A is that a document will present with the same appearance as the original source document.

Storage of Paper and Microfilm Records-Environment

Two things to keep in mind for long-term record storage are temperature and relative humidity. The most important factor in record storage areas is consistency of temperature and humidity, as all record media are damaged by great fluctuations of temperature and humidity. Excessive heat can cause paper and microfilm to become brittle, while high humidity promotes mold growth, which can rot paper and leather and breakdown the composition of microfilm. In addition, mold is a health risk. Therefore, it is best to avoid storing records in attics, basements, garages, and warehouses that lack climate control.

All heat increases media degradation, so the lower the temperature, the better. Since most record storage areas are “mixed-use,”—meaning they also serve as work areas—the temperature should be set at 70° Fahrenheit and the relative humidity should be between 30% and 50% (20% to 30% for master microfilm). Temperature and humidity variation should be with $\pm 2\%$ and $\pm 3\%$ a day. For restricted storage areas, lower temperatures will increase the longevity of the media.

Avoid storing records in direct sunlight. All light is damaging to media, and this damage is cumulative and irreversible. Ultraviolet (UV) light is especially harmful and is strongest in sunlight and fluorescent light. Blinds and UV filters will mitigate the effects of UV light, to an extent.

For more information about environmental concerns in record storage areas/facilities, please see [*Preservation Concerns in Planning a Record Center*](#), available from the [Local Records](#) website.

DISASTER PLANNING

The protection and preservation of local government records is essential to the maintenance of government functions. Remember: the best disaster is the one that does not happen. Therefore, disaster prevention should be a high priority for every office. Recognition of potential hazards can help prevent a disaster from damaging records. These threats include damage caused by fire, water, and theft. With these in mind, here are some things to consider.

DISASTER PREVENTION

Fire. The prevention of fire is probably the single most important factor in safeguarding records. Approach the problem by (1) minimizing the chances that a fire will start and (2) maximizing the chances of extinguishing it. The first approach is the easiest and least expensive. The best fire is the one that does not start. If a fire does occur, then the fire suppression system/fire department will put out the fire. Be aware, however, that the water used to put out the fire will add to the disaster. Basic fire protection tips include:

- ♦No smoking in the record storage area.
- ♦Do not store records with chemicals, cleaning supplies, or other combustible materials.
- ♦Keep the record storage area neat and police it regularly.
- ♦Do not store records by the furnace, radiator, or heater.
- ♦Have regular safety inspections: make sure wiring is safe, follow all local fire, electrical, plumbing, heating and construction codes.
- ♦Do not rely on fireproof cabinets. These cabinets will survive the fire, but they get so hot the records inside will burn anyway.
- ♦Install fire detection systems wired to a central monitoring station. 77% of fires are attributed to arson, 88% of fires occur between 5 p.m. and 9 a.m., so basic smoke detectors and manually operated fire alarms are not sufficient.
- ♦Install automatic sprinklers
- ♦Have fire extinguishers checked at regular intervals. Show staff where they are located and train staff to use them.



Figure 5: Mississippi County Courthouse, destroyed by arson, 1997

Water. Most record disasters involve water. Water damage to records occurs when storage areas flood, sewers back up, overhead water pipes break, or sprinkler systems or hoses are used to extinguish fires. When possible, do not store records under water pipes, and keep records at least 4 inches off the floor.



Figure 6: Record damaged during a flood

Theft. Lock record storage areas and limit access to staff. Change locks as necessary. Check the building to make sure it is empty before locking up for the night.

DISASTER PREPAREDNESS

A disaster can be any event of unexpected timing that produces destructive results. In order to be prepared for the unexpected:

- a. Determine what records are stored in the office.
- b. Identify the location of each record series
- c. Decide which records have priority, being “vital” or “essential” to continuing operations
- d. Know whom to contact for emergency help or supplies in order to restore operations and provide normal services. The Local Records Preservation Program can provide some advice, especially if contacted early in the event—i.e., don’t wait three days after the flood to call; the records will be a wreck and mold will be growing. For assistance, please call 573.751.9047. In addition, Local Records has compiled a [Vendor list](#) which includes listings for Disaster Planning and Disaster Recovery vendors
- e. Decide who will have what responsibilities in any given emergency and develop a contact list that includes work, home, and cell phone numbers. A good [template](#) is available from the Northeast Document Conservation Center (NEDCC).

Each agency should tailor a vital records plan that fits its individual needs and function. Local officials should consider duplicating information which is deemed vital and which cannot be recreated from any other source. A security copy of these records (microfilm, paper, computer files) should be stored off-site. Arrangements can often be made to store information in local bank vaults. Local agencies are also encouraged to store security copies of microfilmed records in the Missouri State Archives.

ELECTRONIC RECORDS

In recent years, the Local Records Program has seen the number of inquiries involving electronic records increase dramatically. A key principle to remember is that records management is the same for electronic and paper records. The number one electronic records question is always about e-mail, and it is answered below. The remaining sections deal with Electronic Record Management (ERM) systems and standards and Enterprise Content Management (ECM). These sections are meant to provide information about these topics to establish a knowledge baseline when dealing with an IT Department and vendors.

Records are records, regardless of format. There should be no difference between managing paper and electronic records. The same policies, procedures, and retentions apply. In many ways, however, electronic records are more difficult to manage. With paper records, the primary issue is physical space. Physical space is much less of an issue for electronic records, but scanned paper records will rapidly consume electronic storage space. With electronic records, there are a number of things to consider:

1. **Proper identification of the record:** The record will need to be properly categorized to ensure it can be found when needed. With electronic records, there is no filing cabinet or box to check when the record is lost. If the record has been misidentified/misfiled, how will it be located?
2. **Authentication of the record:** Is it trustworthy (i.e., is it authentic, is it original, is it reliable, and is it secure)? The versions and changes made to documents need to be tracked in order to verify the authenticity of the document. Electronic records need to be secured, to avoid accidental or purposeful changes to the official document.
3. **Cost of electronic storage:** How much ongoing funding is available for service contracts, hardware, and ongoing data migration? The cost for electronic storage can equal or surpass the cost of physical storage, and it is not a one-time purchase.

RSMo 109.280 grants agency heads the authority to determine the nature and form of their agency records -- maintaining a "paperless" office is the prerogative of the local official. Local Records has discouraged reliance solely on electronic records over the years because the vast majority of its clients lacked the IT infrastructure to successfully manage electronic records; storing records on a local computer, CDs, or floppy disks invites disaster. Local computers (i.e., stand-alone units), though relatively stable, are subject to "crashes" and viruses that can threaten electronic records. In addition, if something happens to that particular computer during a disaster, all of the records it stored may be lost. Even if the records can be recovered from the hard drive, it may be days or weeks before the records are accessible. Static storage media such as floppy disks, CDs, and DVDs used to temporarily back-up data, or worse, for long-term storage present other problems:

1. **Media decay/"bit-rot"**—Old magnetic storage media, such as floppy disks, are impacted over time and data is compromised. Optical media that information is "burned" to, such as CDs/DVDs, are subject to degradation as the metallic ink in the media breaks down over time. The typical lifespan of CD/DVDs is about 10 years under optimal storage conditions. Note: the commercial music and movie CD/DVDs purchased in stores are not produced by "burning;" rather, they are pressed, like vinyl records, and are not subject to the same instability.

2. **Hardware obsolescence**—Floppy disks have been mentioned numerous times in this manual, but how many people actually have a working 3.5” floppy disk drive in their computer? How about 5.25”? DVDs have replaced CDs, and USB drives and external hard drives have become commonplace. What’s next?



Figure 7: Typical office computer storage media

Modern IT operations of networked computers—where the electronic records are maintained on active servers and regularly backed-up—have mitigated many of the hardware and storage issues of electronic records. Records kept online, not on local computers, provide greater stability and security for record storage. Software obsolescence has not materialized as a major obstacle to maintaining electronic records, though it is something to keep in mind (avoid proprietary software). Have a plan in place to migrate data to updated software as it becomes available.

If CDs/DVDs have been used for record storage, consider moving the data to another format (USB drive or external hard drive). If electronic records are not maintained online, and an external hard drive or thumb drive is used to back up data, consider the following:

1. Make multiple backups and store one copy offsite, at a minimum in a different building—preferably 10 or more miles away.
2. Develop a migration plan to ensure data is kept current with hardware and software changes. Be sure to include offsite copies in the migration plan.

Electronic records are not a remedy for records management issues. The records management principles are the same, and the retention periods are the same. Electronic records systems are actually more complicated to set up than dealing with boxes, paper, and shelves, primarily because the records require hardware and software to access them. Electronic records will need to be classified and indexed. Will they serve as the official record? When do they become inactive? How will long-term and permanent records be archived? How will they be destroyed/purged? If CDs/DVDs have been used as the primary means of storage, the retention of the records stored on them should be considered. If you have records with different retentions stored on the same CD, the media must be retained for the longer period, so some records will be kept well beyond their retention—records which can continue to be requested.

E-MAIL

One of the most common questions Local Records receives is “What is the retention for e-mail?” Our reply is that e-mail is a system that delivers messages—no different than paper. If a message is not a record when it is delivered on paper, it is not a record when it is delivered electronically. The content of the message determines whether or not it is a record. E-mail is categorized as a record/non-record in the same way as every other document: someone consciously categorizes it. Permanent correspondence (i.e., e-mail) is defined in the retention schedule as: *“Correspondence which state or form the basis of policy, set important precedents or record important events in the operational and organizational history of the governmental body.”* Given this definition, any e-mails that would need to be retained permanently would most likely run through the managers of a given organization. Therefore, if it comes down to a question of whose e-mail should definitely be captured by an e-mail management system; it should be those of the elected officials, administrators, and other policy makers.

Occasionally the question is raised: “How can we allow an individual to determine if an e-mail is a record?” This is a naïve question. We entrust individual employees to make that exact same determination with paper documents every day. We also entrust them to conduct official business in person, over the phone and by computer. Employees operate cars, trucks, and heavy equipment in the course of their employment. They keep the electricity running and the water flowing. A tremendous amount of trust is placed in employees. The key is that they are trained to perform these job functions. Employees must be trained to classify e-mails under the appropriate retention.

Please see the guidelines for [Electronic Communications](#) for further information on this topic.

SOCIAL MEDIA

Social media, also known as Web 2.0 is a blanket term for a variety of interactive communication forums (Facebook, Twitter, Instagram, etc.). Social media also describes internal collaborative business tools such as Google Docs, wikis, SharePoint and GoToMeeting. New social media products appear regularly and it is difficult to predict what may come next, but the basic definition will remain: Social media is a web/network-based means of creating communities for sharing information.

Please see the guidelines for [creating a social media policy](#) for further information on this topic.

Let it be stated up-front:

IF YOU CANNOT MANAGE PAPER RECORDS, YOU CANNOT MANAGE ELECTRONIC RECORDS!

The principles governing electronic records are the same as for paper records—the rules do not change based on media type. It is important that the responsibility for managing electronic records not be passed off to the local IT department—whoever is responsible for the paper records should be held responsible for the electronic records (preferably a manager). It is important to collaborate with IT on electronic records issues, but managing records is not their purpose. IT's role is to collaborate on network infrastructure, not content or access. If the county/city/agency does not have an IT specialist or department, then it will be up to the individual to learn the basics. A basic understanding of computers is necessary to work effectively and competently with vendors.

In dealing with IT, it is also important to understand that there is a vocabulary disconnect. "Archive" means one thing to an IT person and something significantly different to a records manager. More often than not, there is no "permanent" in the IT-world, so it is important for everyone to be on the same page from the beginning of implementation; for instance, there must be a common understanding of the concepts of the Electronic Backup and the Electronic Record Archive. These are two distinct operations. At the very basic level, the Backup is for disaster recovery in order to restore business operations and the Archive is for long-term data storage.

1. The Backup is a copy of the entire system—both data and operating system. In case of disaster, the backup is used to restart the system—so it does not need to be indexed because it is never used for access. It is meant to provide a restart point. Because of this, backups should be generated on a regular schedule and old backups do not need to be retained.
2. The Archive consists only of copies of data and metadata, not the entire system, and must be indexed in order to be accessible. Use the data archive, not the system backup, to fulfill records requests. Essentially the electronic record archive is a filing cabinet—the records are needed, but not on an everyday basis. Archives are meant to be holding areas, near- or off-line for the long-term/permanent storage of records (data and metadata), based on assigned retention periods. By archiving records, and removing them from the "production" environment (i.e., the desktop computer) security increases and the cost of back-ups decreases (i.e., there is less data to copy for the backup when it only has to reproduce the entire system going back a week, month, or whatever amount of time is deemed appropriate).

The vocabulary must be shared with all system users, as it will form the basis for indexing the electronic records (think box labels from the previous section). The metadata used may be as simple as record series and date, or it may include information about the creator, version, editing, disposal, format, language, or title of the record. However, if the metadata scheme is too complex, it becomes a serious burden to the employees. The longer a record must be maintained, the more detailed the metadata must

become. Long-term records should include information on the software (including the version of software) used to create the record.

Trustworthy Electronic Records

It is vitally important that your ERM system is trustworthy (i.e., the records are authentic and reliable). Unlike paper records, unsecured electronic records are very simple to alter. When looking at an ERM system, it should provide:

Authenticity—Who created the record? Is it what it purports to be? Was it created or sent when it appears to have been?

Integrity—Have records been altered?

Reliability—Is the record complete?

Confidentiality—Can access be restricted?

Usability—Can the records be found and presented?

Therefore, the electronic record system will preserve:

Context—who, what, when, where, why of the record

Content—the information within the record

Structure—relationship between parts of the record

ERM SYSTEMS AND STANDARDS

As far as records management software goes, there are a variety of stand-alone and bundled systems available. There are no recommendations for specific systems, but a few things to keep in mind:

1. One comprehensive system will make it easier to track the records.
2. The best system available might not be the best system for the records. Find the system that addresses the specific needs of the office.
3. Regardless of what else a system may offer, if it does not have a retention and disposition management component, do not even consider it. Without this component, it is of no use as a records management tool.

A number of industry standards have been established, and should be used when discussing the systems with a vendor. The primary source for standards is the International Organization for Standardization (ISO). Be aware of the existence of these standards (and be sure the vendor is) even if the office does not own a copy.

ISO 15489, *Information and documentation—Records management, Parts 1-2*

ISO 23081, *Records Management Metadata Standard*

The ISO standards are available for purchase through ISO.org or from the professional records management organization, ARMA International at ARMA.org—**these are not available through the Local Records Program.**

A couple of de facto standards have emerged from the United States Department of Defense and the European Union. Employees involved with maintaining electronic records should be familiar with these standards. Because they are de facto standards, if an ERM-system is DoD 5015.2 compliant, it will more than meet the record storage and management needs of the office. These standards are freely available online:

DoD 5015.2, *Electronic Records Management Software Applications Design Criteria Standard*.

Freely available online from multiple sources, including

<http://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodm/501502std.pdf>

MoReq2, *Model Requirements for the Management of Electronic Records, second version*.

Developed in 2008 by the European Commission for use in the European Union, it is freely available online from multiple sources, including:

<https://www.moreq.info/>

More online information about electronic records and electronic records systems can be found on the websites of ARMA International (<http://www.arma.org>) and the Association for Information and Image Management (AIIM) (<http://www.aiim.org>).

ECM—ENTERPRISE CONTENT MANAGEMENT

Enterprise Content Management (ECM) is often seen as a remedy for an organization's records problems. The issue, however, that when people speak of ECM, they rarely define just what it is. How is it different from Electronic Records Management (ERM)? The Association for Information and Image Management (AIIM) defines it as:

"Enterprise Content Management is the systematic collection and organization of information that is to be used by a designated audience – business executives, customers, etc. Neither a single technology nor a methodology nor a process, it is a dynamic combination of strategies, methods, and tools used to capture, manage, store, preserve, and deliver information supporting key organizational processes through its entire lifecycle."

Essentially, ECM is the amalgamation of several disciplines: Records Management, Document Management, and Digital Imaging and Conversion. ECM is truly an enterprise-wide undertaking, governing both paper and electronic records and information. Numerous vendors offer ECM systems and there are open-source options available. It is important to make sure that any ECM system you choose includes a records management component. For this system to manage electronic records, retention schedules must be incorporated so the system knows how to categorize and when to delete/purge records.

When you are looking for an ECM system, there are five basic components: Capture, Manage, Store, Preserve, and Deliver.

Capture: allows the system to generate, prepare and process information.

Manage: controls access and retrieval through databases—will provide version control of documents, collaboration on records, records management through indexing and retention schedules,

Store: temporary storage components—not an archive for permanent records

Preserve: long-term, safe, stable storage for unchanging documents

Deliver: component used to present the data from Manage, Store and Preserve components

ECM is not the proverbial “silver bullet.” One thing that should be clear is that managing electronic records requires significant planning and devotion of resources. When it is fully implemented, it is a tremendous asset—but this is not merely purchasing a scanner and thinking that the record problems are over. If possible, plan to implement the system incrementally so adjustments can be made without too great a disruption to daily business. It is better to have problems with one area than to have everything come to a crashing halt when nothing works.

DEFINITIONS

Active Records—Records used with sufficient frequency to warrant storing them in the office of origin

COA—Completion of Audit, a record retention requiring the record be kept until after an official audit

DCA—Destroy in Current area, a record retention. Series with these retentions are considered “reference” records and may be destroyed when they are no longer of use

ECM—Enterprise Content Management, the strategies, methods and tools used to capture, manage, store, preserve, and deliver content and documents related to organizational processes

Electronic Backup—A copy of the entire Information Technology (IT) system—data, operating system and applications—used for disaster recovery

Electronic Record Archive—Near- or off-line storage of electronic data and metadata only, used for long-term storage of electronic records

Inactive Records—Records used infrequently that retain legal, historical, or business value

Inventory—The process of surveying the records in a given office, typically at the record series level

Life Cycle—Phases of a record’s existence: creation, use, and disposition

Local Record—Any governmental record not created by state or federal offices/agencies

Metadata—Data about data—used to locate or manage information stored electronically. May include information on the creation of a record (who created it, when, file format), subject of the record, keywords, etc.

Non-Record—Per RSMO 109.210(5), material made or acquired and preserved solely for reference or exhibition purposes, extra copies of documents preserved only for convenience of reference, and stocks of publications and blank documents. These do not require retention scheduling or destruction authorization or reporting

Permanent—A record retention. Records with this retention must be kept forever in either their original format or on another medium (such as microfilm) that can be maintained forever

Public Record—Per RSMO 610.010(6), any record, whether written or electronically stored, retained by or of any public governmental body including any report, survey, memorandum, or other document prepared for the public governmental body by a consultant paid for in whole or in part by public funds. The term "public record" shall not include any internal memorandum or letter consisting of advice, opinions and recommendations unless such records are retained by the public governmental body or presented at a public meeting

Record—Per RSMO 109.210(5), any document, book, paper, photograph, map, sound recording or other material, regardless of physical form or characteristics, made or received pursuant to law or in connection with the transaction of official business

Records Management—The systematic control of records to ensure efficiency and economy during the life cycle

Record Series—A group of records that are related as the result of being created, received, or used in the same activity

Retention Period—Length of time records must be kept

Retention Schedule—Document that identifies and describes an organization’s records and indicates how long records must be kept

RSMo 109—Missouri Revised Statutes, Chapter 109: Missouri’s Public Records Law

RSMo 610—Missouri Revised Statutes, Chapter 610: Missouri’s Sunshine Law

Vital Records—Records essential to the continued functioning or reconstitution of an organization during and after an emergency (emergency operating records). Also those records essential to protecting the legal and financial rights of the organization and of the individuals directly affected by its activities (rights and interest records). Also called Essential Records.

RESOURCES

LOCAL RECORDS WEB RESOURCES

Local Records Preservation Program:

<http://www.sos.mo.gov/archives/localrecs>

Local Records Board:

<http://www.sos.mo.gov/archives/localrecs/lrboard.asp>

Local Records Retention Schedules:

<http://www.sos.mo.gov/archives/localrecs/schedules>

Local Records Inventory Database:

<http://www.sos.mo.gov/CountyInventory>

Local Records Grant Program:

<http://www.sos.mo.gov/archives/localrecs/grants>

Local Records Vendor List

https://www.sos.mo.gov/CMSImages/LocalRecords/Vendors_Information.pdf

Guidelines for Microfilming Public Records

<http://www.sos.mo.gov/archives/pubs/mfmg>

Guidelines for Creating an Agency Social Media Policy

<https://www.sos.mo.gov/CMSImages/LocalRecords/SocialMedia.pdf>

Preservation Concerns in Planning a Record Center

<http://www.sos.mo.gov/archives/localrecs/conservation/concerns.asp>

Missouri Electronic Records Education and Training Initiative (MERETI)

<http://www.sos.mo.gov/records/mereti>

MISSOURI REVISED STATUTES—RECORDS

RSMO 109 Public and Business Records

<http://revisor.mo.gov/main/OneChapter.aspx?chapter=109>

RSMO 610 Governmental Bodies and Records (Sunshine Law)

<http://revisor.mo.gov/main/OneChapter.aspx?chapter=610>

ELECTRONIC RECORDS STANDARDS

DoD 5015.2, *Electronic Records Management Software Applications Design Criteria Standard*:

<http://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodm/501502std.pdf>

MoReq2, *Model Requirements for the Management of Electronic Records, second version*:

<https://www.moreq.info/>

OTHER RESOURCES

ARMA International

<http://www.arma.org>

AIIM International

<http://www.aiim.org>

DPlan—online disaster planning tool

<http://www.dplan.org>

Missouri Attorney General Sunshine Law

<https://ago.mo.gov/missouri-law/sunshine-law>

Northeast Document Conservation Center (NEDCC)

<http://www.nedcc.org/home.php>

NEDCC leaflets (includes emergency disaster information)

<http://www.nedcc.org/resources/leaflets.list.php>