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Records Management Overview

A records management program manages records from their creation, throughout their useful life, and until their final disposition. The main tool for accomplishing these tasks is the records retention and disposition schedule. This schedule describes every record created and maintained in an office. Each record is evaluated in terms of its administrative, legal, and historical importance. Based on the evaluation, each record is assigned a period for retention in an office. The retention schedule specifies how to dispose of the record once the retention period has expired. The records retention and disposition schedule is your only source of authority for disposing of records.

The State Records Management Division is responsible for writing records retention and disposition schedules for every state and local government agency. You may contact them for a copy of the schedules that apply to your office.

The responsibility for maintaining a record during its retention period falls upon the official in charge of the office that generates the record. The record may exist in paper, microfilm, or electronic formats. Choosing the correct format depends on how the record is used and on the nature of its final disposition. The enclosed fact sheets about microfilm and automated records should be used together with your records retention schedule to make this decision. The State Records Management Division can offer further advice on record formats.

Maintaining a record during its retention period may prove challenging. Records with long retention periods must be stored somewhere and they must be protected. The enclosed fact sheets about records preservation and disaster planning should help you with this task. Staff at the State Archives and the Gerald R. Ford Conservation Center is available to answer any questions you may have.

The final disposition of a record involves destroying the record, keeping the record in your office permanently, or transferring the record to the State Archives. The State Archives reviews every records retention and disposition schedule before it is approved and identifies those records that have historical value. The records so designated must be transferred to the Archives if they are not kept in your office; they may not be given to any other organization.

The State Archives maintains original records from many state and local agencies. The Archives also acts as a security repository for microfilm negatives produced when agencies microfilm their records. You may contact the State Archives to obtain a list of records transferred from your office.

Records that may be destroyed require filing a records disposition report with the State Records Management Division. Destruction options include burning, shredding, burying at a landfill, or giving them to a local historical organization. Records given to a local historical organization should first be screened to weed out confidential information. Staff at the State Records Management Division can answer questions about records destruction.

A good records management program will allow your office to run more efficiently by eliminating or transferring records you do not need to keep. The program will help you identify redundancies in records creation. It will also help you identify and protect the important records in your office. If you have any questions about the records in your office, please contact either the State Records Management Division or the State Archives.

Microfilm

Microfilm is a stable storage medium for preserving records. It can serve as the original record and is acceptable in courts of law. Its longevity is about five hundred years if the microfilm is stored and handled properly. A microfilm application normally produces a master negative that should be stored in a secure, off-site facility for protection. A second copy, usually a positive image, is used as a working copy. Ideally, a second negative should be produced that serves as the print master for making copies, although doing so will increase the costs of a project; this copy should be stored off-site. The State Archives will store the master negative for any local government agency that requires a secure storage facility. The microfilm must pass the State Records Management technical inspection before the Archives will accept microfilm for storage.

- Advantages**
- Shelf life up to five hundred years if stored properly.
 - Easy to produce multiple copies for distribution to remote sites and for anyone who wants a copy.
 - Does not depend on technology. It requires only a light source and a magnifying lens to read the documents.
 - It is not possible to remove or edit important documents from a roll of microfilm without leaving evidence of tampering.
 - Offers best guarantee that documents will not be lost or misfiled, providing the microfilming was adequately supervised.
 - Does not require very much storage space.
 - Microfilm must adhere to standards in order to be considered a legal substitute for the original paper record. These standards are set forth in Nebraska Micrographics Manual, published by the State Records Management Division.

- Disadvantages**
- It takes longer to locate desired documents on microfilm than it does for paper or electronic records because of the need to advance sequentially through a roll of microfilm. One solution to slow retrieval is to develop a computer-assisted retrieval system. This system uses blips on the microfilm to locate documents that have been indexed on a computer. The State Records Management Division uses such a system.
 - Improper microfilm practices may produce illegible images. Producing good microfilm requires using skilled operators, properly functioning and calibrated equipment, and a room with controlled lighting.
 - Requires a microfilm reader/printer to produce copies.
 - Requires hiring a vendor to perform microfilming or purchasing equipment and training staff.
 - If records are out of order, they will be filmed out of order, making it difficult to locate them on microfilm.

Microfilm Preservation

- The security microfilm negative should be stored in a dark room with a stable environment with a temperature of about sixty degrees and a relative humidity of ten to thirty percent. The working copy can be kept in an office environment.
- Microfilm should not be exposed to dust or used on dirty equipment because the film will get scratched.
- The security microfilm negative should be stored in boxes that are acid-free and should not be exposed to air pollutants or acidic records.
- The security microfilm negative should not be handled without using gloves and should never be used for reference.

For more information about microfilm standards and to obtain a copy of the *Nebraska Micrographics Manual* contact the
State Records Management Division
P.O. Box 94921
Lincoln, NE 68509-4921

Electronic Records

Records maintained or created in an electronic format are becoming more commonplace. Proponents emphasize how easy it is to use these records, while opponents stress how easy it is to lose these records. One must remember that electronic records are still subject to state records retention requirements. State statute requires that a record must be in a durable medium before it can be considered suitable as a preservation copy. Electronic records are not considered durable, but they do have their place in a comprehensive records management program. It is important to understand the advantages and disadvantages before deciding to implement an electronic records system.

There are two types of electronic storage media. Magnetic is the most common. Magnetic storage uses an electrical charge to record data on a surface covered with particles that will hold a charge. Optical storage uses a laser to burn pits into a storage surface.

- Advantages**
- Eliminates the need to handle paper documents. Once a document is scanned, the originals can be stored safely away.
 - Documents can be indexed to greatly quicken and simplify retrieval.
 - Documents can be retrieved from remote locations without the need to produce a copy.
 - Document images can be edited to remove blemishes and to enhance faded print. This is a valuable capability if the original records are yellowed or faded.
 - Electronic documents can be printed accurately and legibly. Poorly filmed records can be difficult to read or copy, and paper records may have been allowed to deteriorate.
 - Electronic records do not require as much storage space as paper or microfilm.

- Disadvantages**
- The automated record may be the only copy. This can result in loss of records if there is a computer malfunction. Backup disks or tapes may be corrupted or be in a format other computers may not be able to read.
 - Automated documents can be read only with a computer. There is no guarantee that newer technologies will be able to read older storage media. Microfilm and paper records are not dependent on technology to be read.
 - The life span of magnetic and optical storage media is less than one hundred years, while paper and microfilm can last for more than five hundred years. In addition, magnetically stored data will deteriorate as the electric charge forming the data bits dissipates, unless the data is refreshed by copying it to a new tape or disk every year. This data deterioration can occur in fewer than five years. Even if the storage media were to last one hundred years, one must consider whether the necessary computer equipment and software will still be available to read the media.

- Optical disk systems are proprietary, meaning that one standard does not exist to dictate how optical data is recorded. A system from one vendor probably will not be able to read data produced on a system from another vendor.
- Document images can be edited to change or falsify important information.
- Requires purchasing equipment and providing staff to operate it.
- Computer viruses can destroy data.
- There must be a migration strategy to move data as computers and equipment become obsolete. This strategy includes converting data to function within new software and moving data onto new storage media. Planning for this necessity is usually overlooked and is a major weakness in most automated systems. That is why NASA has lost the data from its Viking Mars missions and the 1960 census data cannot be read.

Recommendations

While automated records possess many benefits over paper and microfilm, there are also many disadvantages, the chief one being that automated records cannot serve as a preservation copy the way paper and microfilm can. The best solution is to use automated systems to enhance access to and reduce the handling of original records. If the automated record is going to serve as the only copy, arrangements must be made to ensure the record is available throughout the period mandated in the records retention and disposition schedule.

Storage Considerations

- Dust and dirt will cause removable storage media to become unreadable and they will cause premature failure of computers as they accumulate inside the components. Store removable storage media inside boxes to protect them from dirt. Keep the room in which the computer is used clean. Have the inside of the computer cleaned periodically.
- Magnetic sources will erase or scramble data on magnetic storage media. These media include tapes, floppy disks, hard drives, and zip drives. To protect these media be sure to keep magnetic sources several feet away. Magnetic sources include magnets, fans, electric generators, and radio and television speakers.
- Direct exposure to sunlight and other heat sources can melt or warp data disks.
- Create backup disks or tapes and store them off-site.
- Liquids can destroy equipment and storage media. Do not allow eating and drinking around computer equipment.
- Use surge suppressers and line conditioners to protect the computer from electrical spikes and brownouts.

To find out more about electronic records and how they can fit into your agency's records program contact the
 State Records Management Division
 P.O. Box 94921
 Lincoln, NE 68509-4921

Records Preservation

Paper and microfilm are stable media that can remain usable for several hundred years. A person does not have to depend on technology to read records in these formats. Paper and microfilm are the only media adequate for long-term or permanent retention records. Improper storage will shorten their longevity.

Too often the oldest yet most valuable records are stored in the least desirable and most inaccessible spaces, while records of transitory importance occupy the highest quality storage areas. The following list identifies conditions that can destroy historically valuable documents and provides information about the ideal conditions. As you review the list, ask yourself whether you are providing the best care for the most important records of your office. If you are unable to do what is best for the records, contact the State Archives and discuss the feasibility of transferring records there.

Hazards to Records Preservation

- High temperatures will cause records to yellow and become brittle. The ideal temperature is between fifty-five to seventy degrees.
- High humidity will encourage mold growth in paper, create a chemical degradation in microfilm, and cause photographs to stick together. The ideal humidity for paper and photographs is between forty-five to fifty-five percent and for microfilm between ten to thirty percent.
- Low humidity will cause paper to become brittle, photographs to curl and crack, and the glues in bindings to give way.
- Fluctuations in temperature and humidity will put stress on records and cause them to deteriorate more quickly than if they were stored consistently at a less than ideal temperature or humidity. It is important to maintain a stable environment.
- Dirt and dust will abrade paper fibers and scratch microfilm and photographs. They will cause magnetic media to become unreadable. Dirt and dust will also encourage insect infestation. It is important to keep storage areas clean.
- Food particles in the storage area will attract pests. Pests will chew on paper and photographic images. Do not allow eating and drinking around records.
- The sun and fluorescent light emits large amounts of ultraviolet rays that will make records yellow and brittle and will cause writing to fade. Store records in boxes and in a dark room.
- Air that does not circulate encourages mold growth. Use fans or a ventilating system to create air movement.
- Airborne pollutants, such as smoke, smog, and chemical fumes, can react with humidity to create acids that can destroy records. Do not allow smoking or the storing or use of chemicals in the storage area.
- Acidic paper, such as newsprint, will cause non-acidic paper, such as bonded letterhead, to deteriorate if they are stored in contact with

one another. Store acidic paper away from non-acidic records. Use acid-free and lignin-free folders to separate these records if they must be stored together in a box.

- Excessive handling will damage records. Make a duplicate copy for patron and staff use and retire the originals. A duplicate may take the form of a photocopy, microfilm, or digital image. Another solution is to organize the records so that it is easy to locate a specific record. This minimizes the amount of handling the other records must endure.
- Basement walls and floors that are not sealed will cause records that are stored in contact with these surfaces to wick moisture and become moldy. Records should be placed at least four inches from the untreated surface.
- Basements are undesirable places to store records under any circumstances. Should a fire occur, the water used to extinguish the fire will collect in the basement. This water will be polluted with burned building materials and other chemical residues. Salvaging records that are exposed to this sludge will be costly.
- Attics are undesirable places to store records under any circumstances. Heat from the sun, the possibility of leaks, and insect, bird, and animal infestations are constant threats. Attics are seldom monitored, so any problems will most likely go unnoticed until it is too late.

For more information about records preservation contact the
Gerald R. Ford Conservation Center
1326 South 32 Street
Omaha, NE 68105-2044

Disaster Planning

Disasters strike without warning and come in many forms. The most long-lasting damage from a disaster is the loss of an agency's vital records. These are records that offer evidence of a local government's legal status, ownership, finances, and contracts and obligations. These records also protect the rights and entitlements of the citizenry. Imagine the chaos if no one could prove property ownership, an agency lost its budget data, the courts could not prove the validity of a sentence or decision, or a local governing board could not prove that an ordinance had been enacted.

Disasters may strike without warning, but it is possible to lessen their destructive impact through prior planning and preparation. The following checklist should help you develop a basic disaster plan for your important records.

Basic Disaster Planning Checklist

1. Identify the disaster scenarios most likely to occur to your facility, such as fire, flood, or tornado. Do not forget to consider freak accidents, such as train derailments, ruptured pipes or sewage lines, pest infestation, arson, or other potential hazards.
2. Assess each storage area in terms of how well it can survive each type of disaster. For example:
 - A basement is not a good choice for storage if flooding is a concern or old plumbing runs through the area. In addition, if there were a fire, the water used to extinguish the fire will collect in the basement.
 - The top floor is not a good choice if the roof is in disrepair, tornadoes are common, or birds, insects, or squirrels can gain entry.
 - Exterior walls with windows can pose problems in stormy weather. Flying debris or falling branches can break windows. Tornadoes can suck records through any opening they make in the wall.
 - Areas without fire and smoke alarms, sprinklers, fire rated doors and walls, and extinguishers are not advisable if smoking is permitted or there is old wiring. Also consider the possibility of lightning strikes or fires that might start in another room or building.
 - Consider how resistant an area is to insect and animal pest infestation.
3. Analyze how your records are stored and determine whether the most important records occupy the most ideal storage spaces.
4. Try to relocate the most important records into safer storage.
5. Alert the office staff, building custodians, police and fire departments, and civil defense personnel of the location and importance of your vital records so they can be rescued promptly.
6. Develop a phone list of staff, volunteers, emergency personnel, and companies, such as recovery services and companies with the ability to freeze large amounts of paper records, who are willing to respond

to a disaster. Give a copy to everyone who would be in a position to give an alarm and keep the list up-to-date.

7. Try to acquire knowledge about how to salvage damaged records. The Nebraska State Historical Society's Gerald R. Ford Conservation Center in Omaha can offer guidelines on salvaging records and can recommend sources for published information.

8. Whenever possible, produce security copies of your records.

- Use photocopies as a working copy and store the originals off-site.
- Microfilm the records and store the master negative with the State Archives or other suitable off-site facility.
- Digitize the records and store the originals off-site.

Remember, if you possess the only copy, it takes only one disaster to lose that record.

If you believe you are unable to provide adequate protection for your records, another option is to contact the State Archives and arrange to transfer records into its custody.

Nebraska State Historical Society
State Archives Division
P.O. Box 82554
Lincoln, NE 68501-2554

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Gerald R. Ford Conservation Center
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Omaha, NE 68105-2044