On choosing records for microfilming

South Carolina Department of Archives and History
Archives and Records Management Division

**Introduction**

To film or not to film records is a decision that you, as a government official, must often make. It's a decision you cannot take lightly, for microfilming is expensive. Film wisely, and you will be able to manage your records cost-effectively; film unwisely, and you will waste your money and resources. This leaflet explains the factors you must weigh as you select records for filming. Do keep in mind that any program you initiate must comply with the Department of Archives and History's regulations concerning quality standards for microfilming records; these regulations are set out in the Code of Laws of South Carolina, 1976, Regulation 12-200 et. seq.

**Preliminaries**

*Inventories and records retention schedules*

Before you begin to explore options, contact the Department's Records Services Branch to get information on inventorying records and preparing records retention schedules. The schedules, because they establish the length of time your records must be held, will tell you which microfilm standard to use—permanent, long-term, or short-term.

**The analysis**

Carefully analyze the records you propose to film and the reasons for doing so. Ask yourself:

- What are the problems with the system I use now?
- Can I save the expense of filming by storing the records in a records center, or do I have other alternatives?
- How many people will use the microfilm?
- How many microfilm images must be made?
- Do the records have permanent, long-term, or short-term retention value?
- What technical information must I have in advance to ensure satisfactory microfilm copies?
- What will the microfilming program cost?

This analysis is imperative. Without it, you could waste money and staff time and lose valuable information; with it, you will know which records to microfilm, what the scope and the cost of the project will be, and what type of microform to use. If you conduct it thoroughly, it can lead to a microfilm program that improves efficiency and cuts costs.

**Identifying the problem**
Most government officials microfilm for a specific reason—usually to solve a problem of space, retrieval, distribution, or security. Identify your problem before you consider filming.

**Storage space**
Ask yourself:
- Is the office running out of space to store records?
- Am I renting office space solely to store records?
- Am I moving records prematurely to inactive storage because the office space is limited?
- Is the space occupied by inactive records better suited for other purposes?

**Retrieval and loss**
Ask yourself:
- Can the staff locate all their records?
- Are documents lost?
- Does it take a long time to retrieve a record?

**Distributing information**
Ask yourself:
- Are copies of the records needed in multiple locations?
• Do users have difficulty accessing the information?

• Is distributing the information a major expense?

Security  Ask yourself:
• Are the records permanently valuable?

• Are they vital records?

• Would it be difficult or even impossible to conduct business without them?

• Do the records have permanent, long-term (10–100 years), or short-term value? Because microfilm is a proven method of preservation, you should consider filming all records of permanent value, but those of short-term value generally only when you have a large volume—30 cubic feet or more—or when you have monthly or daily requests for them.

Identifying objectives  By asking questions and analyzing your problems, you should be able to identify your objective and select the microform best suited to your needs. Your objective may be to:
• save space

• retrieve information more quickly

• distribute information more easily and economically

• protect information

Exploring alternatives  Microfilming is expensive. By exploring alternatives, you might find a cheaper way to solve your problem.

Space  If you are running out of space, establish a records management program centered around the systematic use of records retention schedules. You may find that obsolete records, which could be destroyed, are taking up space unnecessarily.

Retrieval and loss  Review the filing system. Records in poorly organized files are often difficult to find and easily lost. You could speed retrieval and prevent loss by reorganizing the filing system.

Security  Find out if the information in the records you want to secure is
recorded elsewhere. If it is, you may find it cheaper to reconstruct the information from the other copy than to microfilm.

**Information distribution**  
Make sure you need to distribute information. Do the people who receive a copy of a record really need it?

**Establishing value**  
Once you have decided that microfilm is a viable option, you must decide what records should be filmed. Records should have enough continuing administrative, legal, fiscal, or research value to warrant filming. If they do not, they should not be microfilmed. You can often justify filming if:
- you need more than one copy
- the record will be referenced continually
- you need to make copies continually
- you are already microfilming records as part of your daily routine
- you need a security copy of the record because the information in it is valuable and needs to be safeguarded against the loss, destruction, or deterioration of the original record.

**Candidates for filming**  
Candidates for microfilming include (but are not limited to) those records from local government offices and from state government offices, universities, colleges and technical colleges that are listed in the Appendix beginning on page 11.

**Filming**  
If you decide to film, your prime objective should be quality. The records should be photographed properly to make the images legible, and they should be identified, indexed, and maintained in ways that will make them easy to locate. Microfilmed records are of little value if they are difficult to locate, barely legible on a screen, or copy poorly on paper.

**Establish use**  
Before you begin to film, you must decide what you will be using the film for now, its possible use in the future, and the type of
microform you want. Once you establish use, you will be able to calculate the number of copies of negative and positive film you will require, the method and scope of the indexing, the way you will store the processed film, and the type and amount of viewing equipment you will need. Your choice of microform will depend on use and will dictate the way the records will be filmed, the way the camera will be adjusted, and the way images will be arranged on film.

To establish use, answer the following questions:

- Will the film be used (a) for security only, (b) for reading only, (c) for reading and making paper prints, or (d) for all of the above?

- Will users be willing to use microfilm?

- Will an entire file be retrieved or just individual documents from the file?

- How often will the file be retrieved?

- Where are the users located?

- Will the microfilm be used by office personnel, the public, or both?

- Will the microfilm replace active or inactive records?

- What information from the records is in the computer? Will you reference the computer before you look at the record? Can you enter into the computer the location (roll and frame number, for example) of the records on the film?

**Count images**

To assess costs, you should estimate the number of microfilm images you will need to reproduce. You can do this by calculating the number of records to be filmed—allowing for two-sided documents and documents that will need to be microfilmed in sections. You will probably find it unnecessary to microfilm every record in a file. You could, for example, film primary documents and leave the remaining documents unfiled, and you need not film duplicate copies and blank forms. Before you film you should withdraw from the file records that are not to be microfilmed or carefully mark them so that the camera operator will not film them.
Assess physical characteristics

The physical characteristics of the records to be microfilmed will have an important bearing on costs, on the way the records should be filmed, and on the usability of the records once they are on microform. You should consider the following characteristics:

- average size of the documents
- percentage of documents that are not average in size
- the way the documents are bound
- condition of the documents
- color and weight of the paper
- color of the ink
- degree of contrast between the documents and the ink
- the legibility of the documents
- which documents must be filmed both sides

Once you assess the records in terms of their physical characteristics, you will be able to decide on:

- the best type of camera and film to use
- the best reduction ratio
- the time it will take to prepare records
- the percentage of documents that will require special handling or special filming techniques
- possible restrictions on the usability of the microform.

Prepare the records

To make your microform a complete and useful record, you must prepare the records for filming carefully. The preparation of the records can account for one-half or more of your total costs—records in poor condition and files that have to be reorganized to be usable can make preparation the most expensive part of a microfilm program. Keep this in mind when you are making your
calculations, and to make the best use of your resources, be sure your schedule for preparation will keep up with the pace of filming.

**Physical preparation** If your records are unbound you will:
- remove staples, clips, bands, and anything else that binds or attaches one document to another
- arrange documents into the sequence in which they will be filmed
- unfold and flatten all folded documents
- repair torn or mutilated documents
- return misfiled documents to the correct files
- note missing documents
- prepare certificates, quality control targets, and identification targets and place them in the proper location
- identify the location of roll breaks

**Indexing** To make your film easy to use, you must index the records carefully. Prepare finding aids and roll identifications and give full descriptions. If an index already exists for the records, you would be wise to film it with the records and to enter it into the computer as well if you can.

**Updating** Updating records on film can be difficult, particularly if the film is to be used in roll or cartridge form. If you will be filming records that may require updating later, you should select the method for updating before you film. You may be able to enter the location of updates into the computer.

**Technical considerations** You must make certain decisions about the technicalities of microfilming before you begin the operation.

**Camera** You can use a rotary camera (documents are fed into the camera) or a planetary or a step-and-repeat camera (documents are placed on a flat surface for filming). To make your selection, consider:
- the size, condition, and make-up (bound or unbound) of the documents
• the type of microform you want (microfiche requires a step-and-repeat camera)
• the number of documents
• the reduction ratio

Film
You can choose 16mm, 35mm, or 105mm film; the original negative should be silver gelatin, safety, high resolution, daylight loading, panchromatic film, and it should have anti-halation protection.

Reduction ratio
The reduction ratio gives the size of the original document and the size of the image on film in ratios like 24 to 1, or 24:1, or 24x. The reduction you will use depends on the size of your original document and the microform you choose. You should at least choose a reduction that will produce an image that is as large or larger than the original.

Image placement
The way documents are positioned when they are filmed will dictate the number of images that a roll of film can carry. Positioning should be governed by:
• the size of the documents
• the width of the film
• the reduction ratio
• whether the image will run parallel or perpendicular to the edge of the film edge

For more information on technical considerations see Public Records Information Leaflet No. 4, Targeting and certification of microfilm.

After processing
When you plan your microfilm program, you must consider the inspection and storage of the processed film.

Inspection
Use qualified personnel to inspect the film before the original records are destroyed—ideally as soon as it is processed—and refilm if it is unsatisfactory. Make sure all documents are photographed in the correct order, that each image meets the required degree of legibility, and that the way the film is indexed makes it usable. Test the film to make sure it was properly washed during
processing as well. For more information on inspection see Public Records Information Leaflet No. 6, *Quality testing of microfilm.*

**Storage** The way you store your film will depend on the type of film you produce. Archival film must be stored under rigid environmental controls. It must be secure from theft, fire, and water; the temperature and humidity must be constant within specific guidelines; and solid and gaseous pollutants should be filtered from the air. If you fail to store film properly it will deteriorate, and you will lose valuable information. For more information on storage see Public Records Information Leaflet No. 11, *Microfilm storage.*

The Department stores film for state and local government. If the records you film are permanently valuable, you are required by statute to store security copies in the Department’s vault. If they have long-term retention value (10–100 years), the Department will store the film if space is available.

**Cost** Cost will be an important, even dominant, factor in any decision to microfilm records. The film itself is inexpensive, but certain programs can be extremely costly. Calculate cost on the basis of:

- the volume of records
- the percentage of records that require special filming
- the personnel time it will take to prepare records properly
- the personnel time it will take to inspect film properly
- the cost to purchase or rent a camera, a processor, a duplicator, and testing equipment, and the cost of the operator’s time if you will not be contracting with a commercial vendor
- the cost of microfilming by contracting with a vendor
- the cost of viewing and printing equipment
- the cost of storage
- the cost of preparing either a computerized or non-computerized index

If you have a large volume of records to film, they may merit the purchase of a camera, a processor, a duplicator, testing equipment, a reader or viewer, and storage equipment even
though the initial outlay could be high. If your volume is small, or if you will be filming only occasionally, you may find it more economical to enter into a contract with a commercial vendor. Just remember that the time your personnel spend preparing and filming records and processing, duplicating, testing, and inspecting the processed film may be the most costly part of your operation.

For more information see Public Information Leaflet No. 1, *Legal requirements for microfilming public records*, Leaflet No. 3, *Service bureau or in-house microfilming*, and Leaflet No. 8 *Choosing a micrographics service bureau*. This leaflet is one of a series of leaflets issued by the South Carolina Department of Archives and History, Archives and Records Management Division. The Archives and Records Management Division has statutory responsibility for establishing and administering records management programs in state and local government. The division provides training, produces publications, and gives advice and help on all aspects of records management and archives administration.

Please contact the South Carolina Department of Archives and History, Archives and Records Management Division, State Record Center, 1919 Blanding St., Columbia, SC 29201 (803) 734-7914.
Appendix

Local government records

Assessor
Appraisal Files
Aerial Photographs
Property Records Cards
Tax Maps

Auditor
Conveyance Books
Treasurer's Closed Account Book
Auditor's Monthly Report
Return to the Auditor of Fines and Licences
Auditor's Return of Taxable Personal Property
Abatement Books
Forfeited Land List
Index to Conveyance Books
Tax Duplicate Books (Real Property)

Building Inspection Services
Applications
Building Permits
Mobile Home Permits
Plans and Specifications
Zoning Permits

Business Licenses
Licenses
Index to Business Licenses

Clerk of Court
Judgment Rolls
Civil Case Files
Criminal Case Files
Common Pleas Calendars
Docket
Journals
Indexes
Registers of Public Officials
Bonds of County and State Officials
Registers of Physicians and Surgeons
Articles of Association
Military Discharge Records
Record of Public Bond Issues
Financial Journals

City/County Council
Audits
Annexations
General Ledger
Budget
Ordinances
Minutes
Resolutions
Scrapbooks

Family Court
Case Files
Dockets
Indexes

Finance
Audits
Budget
General Ledger

Fire
Annual Report to State Fire Marshall
Fire Reports
Identifications File
Incident Report
Meeting Minutes
Photographs
Statistical Report
Street Indexes

Hospital
Board Minutes
Register of Deaths
Delivery Room Records
Emergency Room Records
Patient Records

Personnel
Personnel Files

Planning
Minutes
Maps/Plats
Subdivision and Zoning Files

Police
Annual Report
Arrest Dockets
Complaint Card

Criminal History File
Booking Reports
Prisoner's Jail Record

Probate Court
Estate Files
Bond and Letter Books
Inventory, Appraisal, and Sale Book
Return Book
Will Book
Marriage Licenses
Marriage Registers
Patient Files (Commitments to State Hospital)
Indexes

Public Works
Maps and Plats

Register of Mesne Conveyance
Deeds
Mortgages
Plats
Miscellaneous Records
Indexes

Sheriff
Criminal History Records
Execution Book
Jail Book
Sale Book
Tax Execution Book
Writ Book

School District
Audits
Board Minutes
Budgets
Deeds
General Ledger
Teachers Certification Register
Superintendent of Education Ledger

Tax Collector
Delinquent Tax Sales Book
Tax Execution Book
Treasurer
Tax Duplicate Book (Real Property)
Annual Budget
Audit Report
General Ledger
General Cash Book

Veterans Affairs
Veterans Files
Indexes

Representative state agency, university/college, and technical college records
Administrative and correspondence files (executive level)
Case/legal files
Engineering drawings/plans and specifications
Fiscal records (general audits, budgets, and revenue ledgers and payroll warrant registers).
Licensing/registering records.
Maps/surveys
Medical/patient files
Minutes (governing board/commission)
Newspaper files
Personnel files
Student files
Vital records